PALEOENVIRONMENTAL RECONSTRUCTION OF THE CHANGING WATER QUALITY OF THE TIDAL CHRISTINA RIVER WILMINGTON, DE, USA

by

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A dissertation submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Geology

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ABSTRACT

The Mid-Atlantic Region of the United States has been altered by a variety of land-use changes imposed since European settlers arrived in the mid-17th Century. The commencement of agriculture increased the sediment and nutrient loads within watersheds. Later, urbanization and industrialization increased metals and other pollutants that had previously been absent or present only in low concentrations. This study aims to better understand the impacts of European Settlement and successive changes in land-use strategies on the water quality of the tidal Christina River, located near Wilmington, DE, USA. Cores were taken in the marshes adjacent to the river and dated using ^{137}Cs, ^{210}Pb, ^{14}C, and changes in pollen ratios which indicate deforestation. Sediment cores included samples which were at least 1000 years old so that conditions prior to European settlement could be reconstructed. Changes in the percent of eutraphentic and mesotrophentic diatoms were determined in order to estimate the timing and impact of nutrients. A transfer function constructed using modern diatom abundances and chemistry data estimated total phosphorus (TP) concentrations related to agriculture, wastewater, and detergents. Sediment metal concentrations were used to identify industrialization. Trophic levels began increasing about 200 years before present and were highest in the most recent samples. TP, based on the transfer function, had good agreement with the trophic indices. Metals, increased in concentration around 1900 and decreased due to the closure of factories and environmental legislation in the 1950s through the 1990s.

Chapter 1

INTRODUCTION

1.1 Project Summary

The mid-Atlantic region of the United States has been strongly impacted by land-use changes following European settlement in the mid-17th Century. Specifically, following European settlement, land was cleared for agriculture and lumber. By the 19th Century, cities were expanding and industrialization was becoming widespread. The 20th Century brought industry associated with two world wars, manufacture of products like industrial fertilizer, and increasing suburban sprawl. In the 1970s, the Clean Water Act and other environmental regulation began to improve conditions in the region by creating monitoring efforts and enforcing total maximum daily loads (TMDLs).

There have been several studies on the historical water quality of the Christina and Delaware Rivers. In the Delaware River, Sharp (2010) found that nitrogen increased six times from about 0.93 mg/L in 1910 to a peak of about 5.58 mg/L in the 1980s. In the early 21th Century, it decreased to just over 3.72 mg/L (Sharp 2010). Similarly, the concentration of ammonium nitrogen was about 0.49 mg/L in 1910 and increased to nearly 1.82 mg/L by the mid-1960s before decreasing to 0.84 mg/L by the early 21st century (Sharp 2010). As nitrogen increased, dissolved oxygen declined from about 7.20 mg/L in 1880 to as low as 0 mg/L between the mid-1950s and 60s (Sharp 2010). As the nitrogen concentration decreased, dissolved oxygen increased to

about 5.60 mg/L at the turn of the 21st Century (Sharp 2010). Phosphorus concentrations in the Delaware River varied between about 0.15 and 0.87 µg/L in the late 1960s, but have decreased to between 0.15 and 0.37 µg/L since the mid-1980s follow decreases in the use of phosphorus detergents (Sharp, 1994).

Figure 1: Map of sites used in Velinsky *et al.* (2010). Sites referenced in this document are DM-1 (Dravo's Marsh) and CM-1A (Churchman's Marsh).

In the Christina River, a study by Velinsky *et al.* (2010), reconstructed nutrients and contaminants from the late 19th century though the present. In a core from Churchman's Marsh, labelled in Figure 1, nitrogen and carbon were found to gradually increase from about 0.15 and 1.17% to 0.79 and 7.52%, respectively, in sediment samples over the study interval (Velinsky, *et al.*, 2010). In a second core, collected from Dravo's Marsh, sediment nitrogen and carbon increased from 0.12 and 1.04% to 1.17 and 18.19%, respectively (Velinsky, *et al.*, 2010). In both cores, phosphorus was found to increase in the mid 20th Century and then decline following banning of phosphorus detergents and better monitoring of nutrients in runoff from agriculture (Velinsky, *et al.*, 2010). Velinsky *et al.* (2010) also used a diatom index designed by van Dam *et al.* (1994). The percent of eutraphentic diatoms, which prefer high nutrient environments, in sediment increases in the 1950s in the Churchman's Marsh core and in the 1970s in the Dravo's Marsh Core (Velinsky, *et al.*, 2010). This percentage remained high through the modern samples (Velinsky, *et al.*, 2010). This indicates that the trophic level of the river increased during and after these times.

Figure 2: Christina River Watershed with subwatersheds indicated (Bryant, 2009)

Velinsky *et al.* (2010) also observed the concentration of zinc in sediments from the late 19th Century through the present. Zinc peaked in the Churchman's Marsh site at 1910 and 1945 (Velinsky, *et al.*, 2010). In the Dravo's Marsh site, zinc peaked at about 1950 (Velinsky, *et al.*, 2010). These peaks are consistant with the construction and closure of factories owned by Nation Vulcanized Fiber on two tributaries to the Christina River and a pigment plant owned by DuPont between the coring sites on the

Christina River (Delaware Department of Natural Resources and Environmental Control, 2008; United States Environmental Protection Agency, 2017).

This study expands upon the work by Velinsky *et al.* (2010) by extending the time period studied. Because Velinsky *et al.* (2010) focused on 20th Century impacts to water quality, such as industrialization, it did not include sediments that are older than that, and thus cannot compare changes before and during early European settlement. This study looked at the impacts that humans have had on water quality, specifically related to the input of nutrients and metals, in the Christina River from pre-European Settlement through the present. By going back more than 1000 years, a baseline condition can be established and post-settlement changes better understood. Additionally, by going to the start of European settlement, the earliest impacts can be better understood. By understanding both the baseline conditions, as well as the impacts of different land-uses, monitoring and restoration guidelines, for example, could be made more useful.

In addition to a longer timeline, additional diatom methods were used to quantitatively reconstruct the amount of phosphorus present in the water through time. Specifically, this research involved the construction of a transfer function which relates the diatom assemblage present in a sample to the concentration of phosphorus present in the water column when the diatoms were alive. By reconstructing the concentration of phosphorus, the amount of phosphorus present in the water, rather than the sediment can be estimated, allowing more precise comparisons to modern water quality conditions.

The goal of this research is to better understand the impacts of European settlement and successive changes in land-use strategies on the water quality of the

tidal Christina River near Wilmington, DE (Figure 2). A general timeline of the region can be found in Figure 3. Nutrients are reconstructed to better understand the impacts of agriculture following initial European settlement through the present. In order to understand the impacts of industrialization, the concentrations of metals known to be associated with local industry were measured throughout the cores. The hypotheses are:

1. Prior to European settlement, waterborne concentrations of nutrients and metals were lower than they were following settlement through the present;
2. Nitrogen and phosphorus increased as agricultural use increased, with highest concentrations in the 20th Century resulting from use of industrial fertilizers and phosphorus detergents, and decreased as detergents were banned and wastewater entering the waterways were better managed;
3. Metals, specifically Zn, Pb, Cu, Cr, As, Cd, and Cu, increased following industrialization and urbanization of the area, but decreased late in the 20th Century following implementation of environmental laws, such as the Clean Water Act.

The water quality history was reconstructed using sediment cores collected from the marshes adjacent to the river. At least 1000 years was reconstructed so that a long-term history could be developed. Sediment chemical analysis was performed for metals, phosphorus, nitrogen, and carbon. In order to get a more detailed look at changes in water quality and how the ecosystem was impacted, diatom indices were used. Diatom are very sensitive to changes in environment, such as increases and

decreases of nutrient availability and salinity. Their assemblages, therefore, can be used to reconstruct the environment in which they lived. In the case of this project, a combination of autecological groupings for trophic preferences from Porter (2008) and Van Dam *et al.* (1994) were used to analyze nutrients. Diatom habitat preferences, such as open fresh water, marsh, or estuarine, were determined in order to reconstruct changes through time. Finally, a transfer function based on modern diatom assemblages was used to reconstruct changes in total phosphorus (TP) in a more quantitative manner.

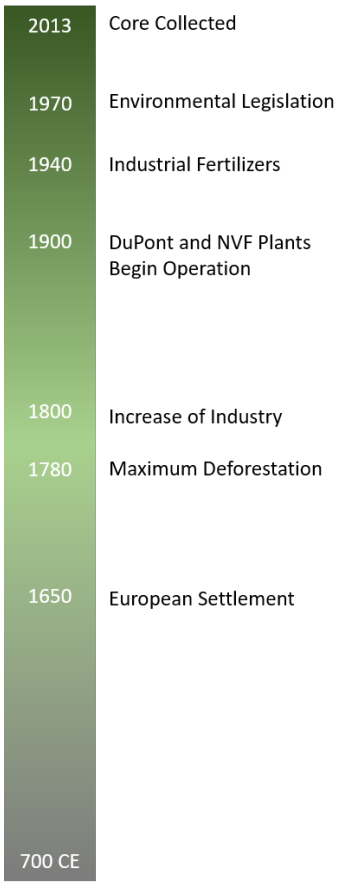

Figure 3: General time line of known human activities for the region.

Overall, it was found that metals increased in the late 19th to early 20th Centuries and declined in the late 20th Century. The autecological trophic analysis indicated an increase in nutrients around 1800, with further increases around the middle of the 20th Century. Transfer function results indicated that TP was fairly variable throughout the study period, but an increase in the most recent samples may be present. Salinity was variable throughout the study period. Diatoms indicating estuarine environments increased about 150 years ago. Fresh-water species, particularly those preferring lentic (still water) environments, tended to be dominant but variable in abundance throughout the study period, while marsh species tended to have low abundance. This helps to understand how fresh tributaries versus the Delaware River contributed to the Christina River through time.

1.2 Impacts of Land-Use Changes on Water Quality

Changes in land-use practices often have large impacts on nearby waterbodies. In the case of rivers, tidal rivers, and estuaries, specific impacts include changes in sedimentation rates, nutrient concentration, metal concentration, and carbon storage. The focus of this research is on comparing changes following European settlement to pre-settlement conditions, with a particular emphasis on nutrients and metals. This allows a baseline condition to be determined so that, if remediation or restoration is to take place, a goal can be set and/or success can be identified.

Increased nutrients resulting from human activities are often associated with increased eutrophication in tidal areas, such as estuaries, bays, and rivers (Bratton *et al.,* 2003; Cooper & Brush 1993; Boesch *et al.*, 2001). Increased nutrients can stimulate widespread algae blooms, contributing to anoxic or hypoxic “dead-zones”,

such as those in the Chesapeake Bay. In the case of the Chesapeake Bay, a 6 to 18-fold increase in nitrogen and a 13 to 24-fold increase in phosphorus since the conversion of land to agricultural uses in the 18th Century has resulted in increased eutrophication (Boesch *et al.*, 2001). The inputs of nutrients to the bay led to a large increase of macrophytes, which were later replaced by plankton in response to increased turbidity (Brush and Hilgartner, 2000). Diatom taxa are also impacted by nutrient changes. In the Chesapeake, benthic taxa were replaced by planktonic taxa and species diversity decreased as a result of increased nutrients and sedimentation (Cooper, 1995). In the case of the Delaware and Christina Rivers, the abundance of cities and industry along the river may have also contributed nutrients, specifically phosphorus from wastewater. The abundance of detergents used in the region likely contributed significantly, as the amount of phosphorus in the Delaware River decreased dramatically when detergents containing phosphorus were banned (Church*, et al*., 2006). Thus, multiple contributing factors for changes in nutrients can be expected.

Metals are useful for understanding the timing and impact of urbanization- and industrialization-related changes to water quality. In particular, concentrations of heavy metals, such as zinc, copper, lead, cadmium, and mercury have been found to increase in response to industrialization (Cabrera, Conde, & Flores, 1992). This is because of the use of substances containing these elements in manufacturing processes and their release into the environment, such as zinc in vulcanization at National Vulcanized Fiber Co. (NVF) plants. In addition, lead was a common additive to gasoline from the 1920s until the mid-1990s. The abundance of vehicles in the area, because of the proximity of urban areas and highways, likely contributed lead to the

watershed. Thus, lead, zinc, and other metals are useful markers for industrial activity and urbanization.

While this project does not specifically focus on sedimentation, changes in sedimentation are commonly noted impacts resulting from agriculture and urbanization. Particularly, agriculture, clear cutting, grazing, and construction are generally found to increase sediment inputs (Kirwan *et al.*, 2011; Orson *et al.*, 1990). In the Chesapeake Bay, increased sedimentation rate led to an initial proliferation of macrophytes, which eventually disappeared when sedimentation increased from 0.05 cm/yr to 0.60 cm/year between 1730 and 1750, reducing light availability (Hilgartner & Brush, 2006). In the same study, sedimentation rates between 1840 and 1880 led to an increase of accretion rates to a peak of 3.9 cm/yr, with one instance of rates reaching 48 cm/year, resulting in subtidal marshes converting to forest in only 75 years (Hilgartner & Brush, 2006). Changes in sedimentation also impacted diatoms by causing benthic forms to replace planktonic forms because of decreases in light availability related to increased sedimentation in the mid-18th Century.

Though many of the studies describing the changes to a watershed imposed by alterations of land-use practices took place in different locations, they are potentially applicable to the Christina River as well. The Christina River is an ideal location for studying the impacts of human-induced land-use changes because it has a long and well-documented history of such changes. Based on ^{210}Pb activity by depth and other dating methods, sediment is well-preserved in this marsh. The regular flooding and deposition of sediment here also provides a consistent record of environmental conditions through time. Additionally, the changes which have impacted Christina River are varied and include clearcutting, agriculture, industrialization, and

urbanization. Finally, because it is an oligohaline tidal river, the Christina River and its marshes offer a buffer to areas used for human activities by helping to remove contaminants, but is likely to be greatly impacted by climate change (Zedler & Kercher, 2005). Because this sort of environment is understudied, additional research may improve understanding of the threats it faces and help prevent future damage.

Chapter 2

DIATOMS AND THEIR USE AS INDICATORS

2.1 Diatoms: A Description

Diatoms are a type of algae with hydrated silicon dioxide cell walls, referred to as frustules. Each half of the frustule is called a valve, and the valves fit together like two sides of a petri dish. The valves are the part of diatoms that is preserved on slides and typically used for environmental analyses. Diatoms are photosynthetic and produce perhaps 20 to 40% of the Earth's oxygen (Spaulding, *et al.*, 2010). They tend to be golden brown in color.

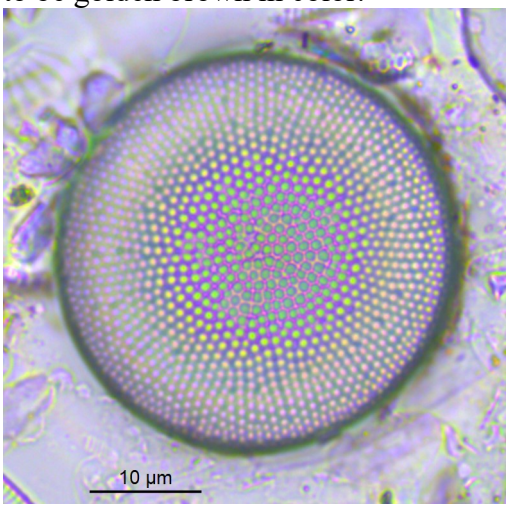

Figure 4: *Actinocyclus normanii,* a centric diatom

A variety of different shapes and ornamentations on the frustules allows different species, of which there may be between 20,000 and 2 million, to be identified (Spaulding, *et al.,* 2010). Several genera of diatoms exist, though diatom genera are groupings based mostly on visual similarities rather than any genetic similarities. Often-times, the shape, or morphological category, of the diatom is considered first. Two main groups of diatoms, based on shape, are centrics and pennates. Centrics are diatoms which are radially symmetrical (Figure 4). They frequently, though not always are round when viewed from overhead. Centrics are not mobile, but typically are part of the plankton. Pennates, which are bilarerally symmetrical, and many have a raphe, which is a structure which allows them to move through sediment (Figure 5). Pennates are often benthic, though some are planktonic.

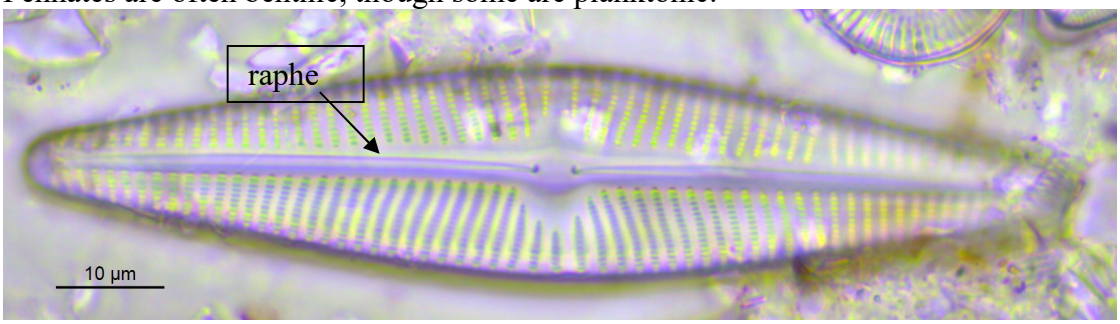

Figure 5: *Navicula brevissima*, a pennate diatom, with raphe labelled.

Diatoms often have a variety of pore types, which allow for the transfer of nutrients through their frustules (Spaulding, *et al.*, 2010). The positioning, orientation, shape, and number of pores can help in identification of species. The position and type of raphe, specifically whether there is a raphe at all, a raphe located on both valves or

only one, or if the raphe located on the center or margin of the valve, is also important in establishing diatoms identifications (Spaulding, *et al.*, 2010).

2.2 Diatoms as Indicators

Using indicator organisms is a well-established method of assessing environmental conditions, such as water quality. Much water quality monitoring can be done with measurements of a variety of parameters of interest, such as pH, temperature, nutrient load, or salinity. These sorts of measurements can be useful because they can provide continuous records of changes in conditions, but do not provide a picture of how the biological system is responding to these changes. In order to understand how changes to the water quality are impacting the environment, studying the response of biological communities is important. Additionally, in historical studies where environmental conditions are being reconstructed, indicator organisms can help establish characteristics of the environment that existed prior to monitoring.

According to Dale and Beyeler (2001), a good indicator organisms should meet several criteria. An indicator organism should be easily measured, sensitive to environmental stress, predictable and well understood in its responses to environmental change, indicative and predictive of impending environmental change, integrative across the environmental system, and limited in its variability of response (Dale and Beyeler, 2001).

Their sensitivity to environmental conditions has lead diatoms to be used frequently to indicate water quality. They community of diatoms in an environment can be used to assess its characteristics. Several factors can influence species density

and variety including sediment type, water velocity, amount of light, and grazing by benthic macroinvertebrates and other organisms, according to Kufka and Richards (1996). Because of this, different diatom communities are found in different environments, such as freshwater rivers or lakes, brackish areas, and marine areas. Additionally, some species live in headwaters, some in marshes, some in areas with high density of aquatic vegetation, and others in sediment. This is predictable, thus allowing past environments to be reconstructed.

Diatoms are also very sensitive to water chemistry, thus changes to land-use practices can impact their communities (Blinn and Bailey 2001). Nutrient load is very influential to species composition. In general, some species are very sensitive, or have small tolerance ranges, to nutrient levels, and if the nutrients exceed their tolerance ranges, they are unable to survive in the environment. They are then replaced by species with either a broader or higher range of tolerance, changing the community. Shifts in diatom community related to changes in nutrients are well-known, with many species having fairly well-understood tolerances and optima. These ranges, as well as known shifts in community structure can be used to assess or reconstruct the nutrient levels in the environment. Similar methods can be used to assess other changes to the environment.

Several methods, often used in combination, are available for diatom analyses. Ecological metrics, such as species richness and diversity indices are often applied to diatoms in order to see have changes to the environment have impacted the community. Species richness refers to the number of species present in an environment while diversity accounts for both richness and evenness, which is the abundance of individuals of each species present. In general, both richness and

diversity decrease when the environment changes as species adapted to a certain set of conditions are unable to cope with the new conditions. Additionally, there are ecological metrics which refer specifically to diatoms. The ratio of araphid pennates (pennate diatoms which lack a raphe) to centrics can be used to qualitatively monitor eutrophication (Stockner 1972). Specifically, this metric increases as the system becomes increasingly eutrophic. Similarly, the ratio of all centrics, which are usually planktonic, to all pennates, which are usually benthic, can show relative changes in the availability of these two habitat types, which may be influenced by turbidity or changing water depth (Pyle, *et al.*, 1998). This is because centrics are planktonic, thus able to obtain light even when the water is deep or turbid, which pennates tend to be benthic and thus turbidity and depth have a greater impact on their light availability. Diatom habitat preferences, such are substrate type, can also be used to infer changes in the environment.

Diatom autecological indices, such as those proposed by Van Dam *et al.* (1994), categorize individual diatom taxa by their preferences for environmental variables such as trophic level, salinity, acidity, etc. Typically, each category has a number. In the case of Van Dam, *et al.*'s (1994) index for trophic state, for example, 1 refers to oligotrophentic species (those which prefer very low levels of nutrients) while 6 refers to hypereutrophentic species (those which prefer very high levels of nutrients). The abundance of taxa in each of these categories can be calculated to understand what the nutrient level (in the case of the trophic index, for example) in a system is and how it is influencing the biota living there. In historical studies, this can be compared through time in order to infer changes to specific aspects of the

environment and make correlations between these changes and alterations to the environment.

Finally, transfer functions are often used to provide quantitative estimates of specific environmental variables through time. Specifically, transfer functions use datasets including species abundances and contemporaneous data for a specific aspect of the environment, such as salinity, pH, or phosphorus for several sites that are similar to the site to be analyzed. The abundance data and chemistry data are used to establish tolerance ranges for the species, often through weighted averaging. The tolerance ranges are then applied to a new species abundance dataset, either for a different location where contemporaneous chemistry data is unavailable or core samples in a historical study. This allows the environmental component for which the transfer function was constructed to be reconstructed in the new sample.

Typically, several methods that use diatoms to understand environmental conditions are applied in order to establish multiple lines of evidence so that a conclusion can be well-understood and strongly supported. This is important, particularly in the case of transfer functions, which must follow a number of rules that can be difficult to establish (see Chapter 5 for more detailed information on transfer functions). If a transfer function result is backed up by similar results from environmental metrics and autecological indices, it is much more likely to be accepted as accurate. Additionally, particularly in the case of core studies, establishing simpler methods first, such as changes in a cluster analysis which correspond to known environmental changes, can help determine if more complicated methods will be useful.

Chapter 3

GAMMA COUNTING: ^{137}Cs AND ^{210}Pb BACKGROUND INFORMATION

3.1 Cesium-137

^{137}Cs is a radionuclide with a half-life of 30.2 years which is present in sediments due to fallout following atmospheric nuclear weapons testing. Prior to 1955, the amount of activity from ^{137}Cs in the atmosphere was very low (He & Walling, 1996). Once nuclear weapons testing commenced in the mid-1950s, the amount of ^{137}Cs in sediments began to increase as it was brought to Earth's surface via atmospheric deposition. The amount of ^{137}Cs in sediments peaked in 1963, the year of the Nuclear Test Ban Treaty, then declined rapidly (He & Walling, 1996). In the environment, ^{137}Cs becomes attached to, and is redistributed with sediment, particularly clay particles, (Walling & He, 1997). Thus, ^{137}Cs in sediment can come from two main sources: fallout from the atmosphere or sediment transported by a river (Walling & He, 1997).

A germanium detector can be used to measure gamma radiation produced from the decay of ^{137}Cs. The peak for ^{137}Cs is located at 661.2 keV. Specifically, the spectrum will show an increase of counts per minute at this energy level if ^{137}Cs is present. Because the energy is above 100 keV, self-absorption can be ignored (Yoo, 2010). Counts per minute can be converted to activity by dividing the number of counts in the peak centered over 661.2 keV by the efficiency of the counter multiplied

by the yield and the weight of the sample. The activity is then graphed vs. the depth of the sample to determine where the peak is located.

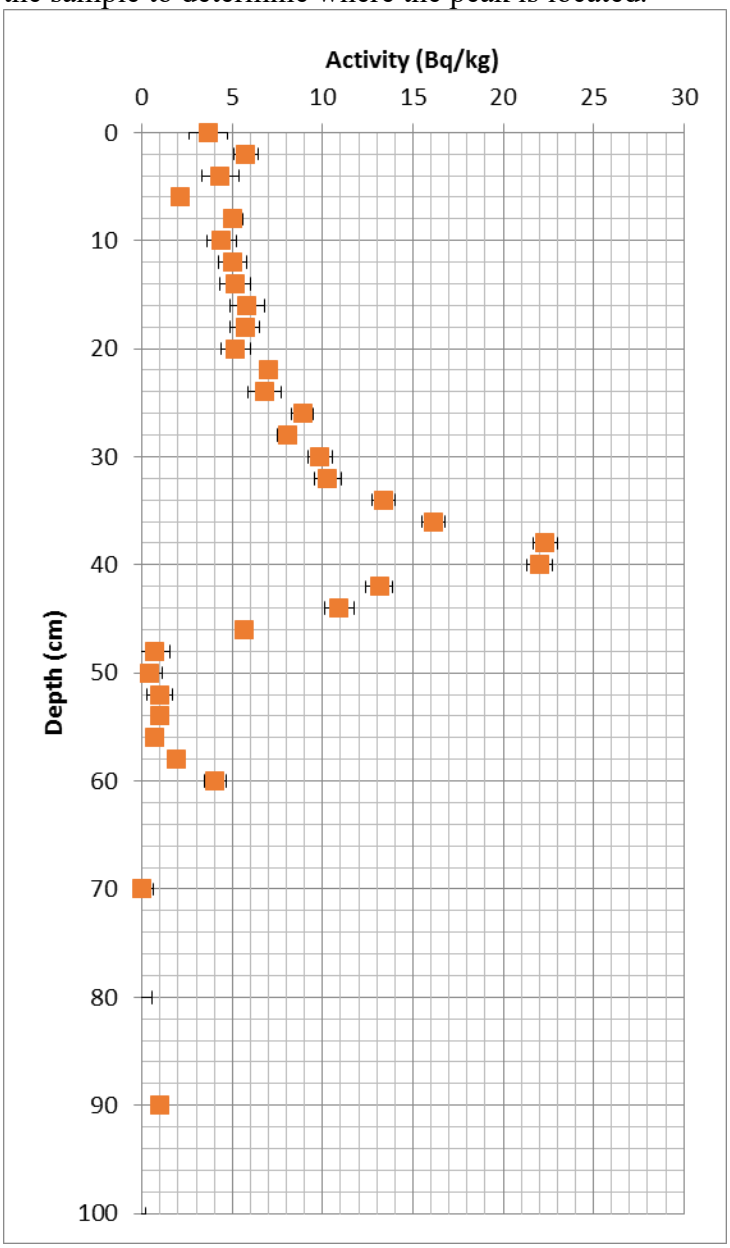

Figure 6: Depth-Activity profile for ^{137}Cs at Site 1 in the Christina River, DE

Typically, the ^{137}Cs profile in floodplain sediment resembles Figure 6. Looking from the bottom to the top of the core, the activity increases gradually before reaching a peak at some depth. The peak then abruptly decreases back to background levels above this depth. In the figure shown, the ^{137}Cs never quite reaches background levels; this may indicative of mixing. The depth at which ^{137}Cs initially increases is often interpreted to correspond to the mid-1950s, when atmospheric weapons testing commenced. The highest part of the peak is considered to have occurred in 1963.

Because in the case of depositional environments, ^{137}Cs is deposited via sediment deposition as well as atmospheric deposition, it is important that a detailed sampling scheme is used so that peaks are not missed or misinterpreted. Additionally, this method assumes that sedimentation has remained constant since the start of ^{137}Cs deposition. If this is assumed, the depth of the peak and the year (1963) are known a sedimentation rate can be determined.

3.2 Lead-210

^{210}Pb (half-life: 22.3 years) enters the sedimentary environment from the atmosphere. As its parent isotope, ^{222}Rn, a gas with a half-life of 3.8 days, decays into ^{210}Pb, the ^{210}Pb sorbs onto particles in the atmosphere. When precipitation occurs, the ^{210}Pb is deposited on Earth's surface via wet deposition and becomes sorbed onto sediment particles (Pizzuto *et al.*, 2016). This is a continuous process, with ^{210}Pb being brought to sedimentary environments during all precipitation events. In the sediment, ^{210}Pb decays into ^{210}Bi (half-life: 5.01 days) and ^{210}Po (half-life: 138.4 days).

When decay of radioactive particles in sediment are measured using a detector with a germanium crystal, ^{210}Pb counts are found at an energy of 46.5 keV. The

number of counts in the peak surrounding this energy are calculated. This count is then divided by the efficiency of the detector multiplied by the yield and the mass of the sample. This gives the total activity of ^{210}Pb in Bq/kg. The activity of ^{214}Pb is calculated similarly. The activity of ^{214}Pb is considered to be equal to supported ^{210}Pb or geogenic activity. The activity of ^{214}Pb is then subtracted from ^{210}Pb activity to get unsupported ^{210}Pb, which comes from deposition rather than being generated in the sediment and trapped there. These activities are then plotted against depth (Figure 7). More detail about determining efficiency and self-absorption for ^{210}Pb can be found in Chapter 4 in the "Methods" section.

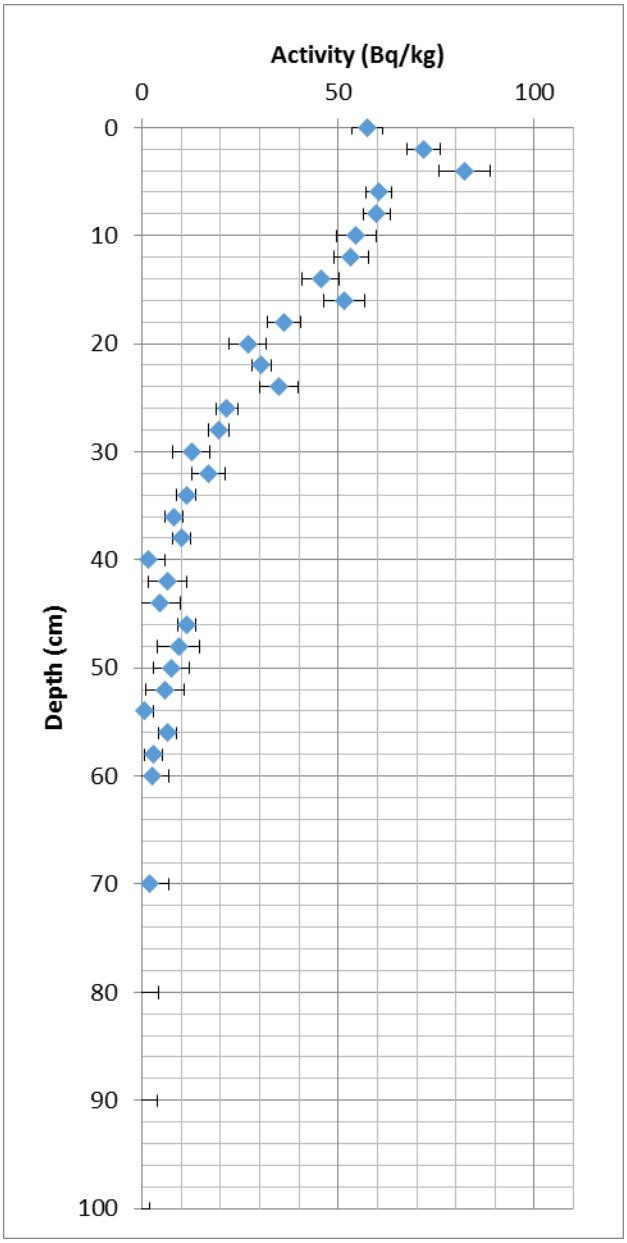

Figure 7: Plot of ^{210}Pb activity vs. depth in a core from Site 1 in the Christina River, DE

The sedimentation rate can be calculated using several different methods. The simplest method, Constant Flux:Constant Sedimentation (CF:CS) assumes that both the flux of ^{210}Pb from the atmosphere and the amount of ^{210}Pb deposited via sedimentation are constant, which leads to an exponential increase in ^{210}Pb activity towards the top of the core (Robbins, 1978). Ages are calculated using the equation: $C=C_0e^{-km/r}$, where C_0 is excess ^{210}Pb, k is the decay constant (0.03114 for ^{210}Pb), m is the dry mass, and r is the dry mass accumulation rate.

The Constant Rate of Supply (CRS) method assumes a constant flux of ^{210}Pb from the atmosphere, but allows the ^{210}Pb from sediment to vary (Pizzuto, 2014). Ages are calculated using the equation: $A=A_0e^{-kt}$ where A is the activity in the sample, A_0 is the initial activity, k is the decay constant, and t is time.

The Constant Initial Concentration (CIC) method uses the equation $T=1/k*\ln(C_0/C)$. It assumes that all particles have the same initial concentration of ^{210}Pb and if the sediment supply changes, the ^{210}Pb concentration must change as well (Pizzuto, 2014). Additionally, if primary production is responsible for the majority of the sediment at the site, increasing production will result in an increase of ^{210}Pb in the water column (Pizzuto, 2014).

Each of these methods requires different assumptions to be met, thus, different environments tend to be better described by each of them. The method which best fits the data given by a sediment core and best describes the environment that the core came from will provide the best results. Once the sedimentation rate has been determined, the age of the sediments in the core can be calculated.

Chapter 4

IMPACTS OF EUROPEAN SETTLEMENT AND LAND-USE CHANGE IN THE CHRISTINA RIVER WATERSHED, DELAWARE, USA

Tidal rivers are vulnerable to changes caused by widespread deforestation, agriculture, urbanization, and industrialization. Sediments deposited over the last 1000-1400 years at three sites along the tidal Christina River were analyzed in order to understand the response of water quality to European settlement in the mid-1600s and subsequent alterations in the landscape. Age-depth relationships were constructed using ^{14}C, ^{210}Pb, ^{137}Cs dating, and pollen-based chronohorizons corresponding to the arrival of Europeans in 1660, partial land clearance in 1730, and total deforestation in 1780. Together, diatom and chemical analyses enabled a detailed reconstruction of water quality changes in this tidal river. Diatom indices show that nutrient concentrations increased concurrently with agricultural land-use following European settlement, then increased further in the 1950s following the introduction of phosphorus detergents and industrial fertilizers. Diatom assemblages cluster into groups which correspond to known ecological transitions such as deforestation and increased use of industrial fertilizers and detergents. Zinc and other heavy metals increased in concentration following industrialization, peaked in the early 1900s, and decreased after factory closures in the 1950s and environmental legislation in the 1970s. Based on the

changes in diatom assemblages and sediment metal concentrations, a conceptual model was constructed to document the timing of changes in land-use practices impacting the tidal Christina River and how they altered water quality. The relative influence of the estuary and tributaries was also analyzed by assessing the percentage of diatoms in the samples which live only in one of these environments. This analysis revealed that the tributaries have become more influential through time, indicating that land-use may have a greater influence than sea-level rise at this site.

4.1 Introduction

The Christina River's watershed is 1463 km^2 in area and includes the Brandywine River, White Clay Creek, Red Clay Creek, and Christina River (Delaware Department of Natural Resources and Environmental Control (DNREC), 2000). Because the Christina River is tidal, it is also influenced by the Delaware River, which has a watershed area of 33,152 km^2 (New York State Department of Enviromental Control Division of Water 2007). The water quality of these watersheds has been heavily impacted by changing inputs of contaminants, sediment, salinity, and other factors, particularly over the past 400 years, following European settlement.

Prior to European settlement, the area was home to indigenous peoples. While there is evidence that the Native Americans made changes to the landscape, particularly by burning, agriculture, and construction of villages, these changes would have caused smaller alterations in the environment than those imposed later by

Europeans (Stinchcomb *et al.,* 2011). Prior to European settlement, the environmental changes would have been caused by a combination of the impacts by Native Americans and non-anthropogenic forcing, such as climate and sea-level.

The natural resources of abundant fish and shellfish and dense forests harboring plentiful animals were resources were a major draw to the area (Kauffman, 2010). Once cities and towns were built along the rivers of the area, water quality began to decline. By the end of the 18th Century, sewage and other refuse being dumped into the river had contributed to a rapid worsening of water quality, leading to increases frequency of human illnesses (Kauffman, 2010). Additionally, many important resources were impacted, such as fish and shellfish, which declined due to decreased oxygen in the water (Kauffman, 2010). Deforestation was also occurring quickly, with a majority of the region's forests cleared by the early 19th Century (Matlack 1997).

In order to combat declining water quality and increasing spread of disease, many cities, such as Philadelphia under the guidance of Benjamin Franklin, began trying to conserve and protect water resources as early as the 1760s (Kauffman, 2010). Programs designed to purchase and protect watersheds, such as the land contained in today's Fairmont Park, were instituted (Kauffman, 2010). Between 1899 and 1911, many protective measures were taken to filter and treat drinking water (Kauffman, 2010). These methods helped control disease and improve water quality until World

War I, during which improvements stopped and restrictions were removed in order to increase production for the war effort (Kauffman, 2010).

Simultaneously, advances in technology and the need for new products led to an increase of industry along the rivers of the area. The Christina River itself is impacted by a superfund site: E.I. DuPont De Nemours & Co., Inc. /Newport Landfill Site, which manufactured zinc-based pigments. Additionally, there are 259 contaminated sites, including 84 brownfields bordering the river (Christina River, 2012). The Christina River is currently considered impaired due to high concentrations of PCBs, dieldrin, and chlorodane (Christina River, 2012). Two tributaries to the Christina River, White Clay and Red Clay Creeks, are contaminated by zinc as a result of activities of plants such as the National Vulcanized Fiber company in Newark and Yorklyn, DE, which began operation in the early 1900s and closed in 1990 and 2009, respectively (Division of Water Resources, DNREC 2008). Both sites have been certified as Brownfields (Certified Brownfields List 2016). The area is also impacted by agricultural, urban, and suburban land uses, which contribute nutrients and other contaminants from runoff.

Since the 1970s, many laws, such as the 1972 Clean Water Act, have been passed to help improve the environment by limiting the amount of pollutants that can escape from industrial complexes, enforcing measures to prevent runoff from contributing contaminants and sediment to waterways, and monitoring the concentrations of various substances in the water. Additionally, phosphate detergents

were banned in the 1970s and wastewater treatment plants were installed to clean water entering the Delaware during the 1980s (Kauffman, 2010). These laws have helped improve the water quality in many areas, including the Christina River.

Several previous studies indicate some of the impacts of anthropogenic activities on the water quality of the Delaware and Christina Rivers. In the Delaware River, Sharp (2010) found increases in nitrogen and concurrent decreases in dissolved oxygen starting around the turn of the 20th century until the 1980s. Later, as nitrogen decreased, dissolved oxygen increased. Sharp (1994) found that phosphorus in the Delaware River increased in the 1960s and decreased again in the 1980s. In the Christina River, a study by Velinsky *et al.* (2010) found that eutraphentic diatoms (diatoms which prefer high nutrient conditions) increased in abundance throughout the 20th century, with the highest percentages occurring in the 1990s and early 2000s. Additionally, Velinsky *et al.* (2010) found peaks in industrial metal concentrations to occur concurrent with the installation and later remediation of manufacturing plants along the Christina River and its tributaries.

While various historical accounts describe impacts on water quality by land-use changes following European settlement, reconstructions based on sediments and the organisms they contain can provide a more detailed and specific view of how ecosystems were altered. This study saught to expand on the findings of previous studies by extending the time period reconstructed to include the past 1000 years. While this study also looked at samples from the past 100 to 150 years, it will also

place these findings in a wider perspective, allowing a look at backround conditions not previously observed. Understanding the full history of changes in the region is important in order to have a baseline for monitoring and remediation efforts, as well as to see how more recent changes have truly impacted the area. Water quality, specifically the impacts of nutrient and metal pollution, over the past 1000 or more years was reconstructed from cores collected from three locations in the marshes along the tidal Christina River so as to compare impacts in pre- and post-European settlement samples. Age-depth models were produced using a combination of ^{14}C, ^{214}Pb, and ^{137}Cs dating and pollen horizons corresponding to the date of the arrival of Europeans in 1660, partial deforestation in 1730, and maximum deforestation in 1780 (Hilgartner & Brush, 2006; Matlack, 1997). Peaks of metals, such as Pb and Zn, associated with anthropogenic activities helped to establish the timing of industrialization and urbanization. The impacts of nutrients were analyzed using autecological diatom categories designed by Porter (2008) and van Dam *et al.* (1994). Finally, the contributions of different environment types, and the Delaware River versus the freshwater tributaries to the Christina were determined using the salinity categories established by van Dam *et al.* (1994) and the environmental preferences of diatom species.

4.2 Study Site

Three sites were selected in the tidal portion of the Christina River near Wilmington, DE (Table 8, Figure 1). Sites were selected by comparing hand auger cores and comparing old and recent maps of the area to identify the least disturbed sites. Specifically, some parts of the river were drastically re-routed to allow construction of Interstate 95. These sections were avoided.

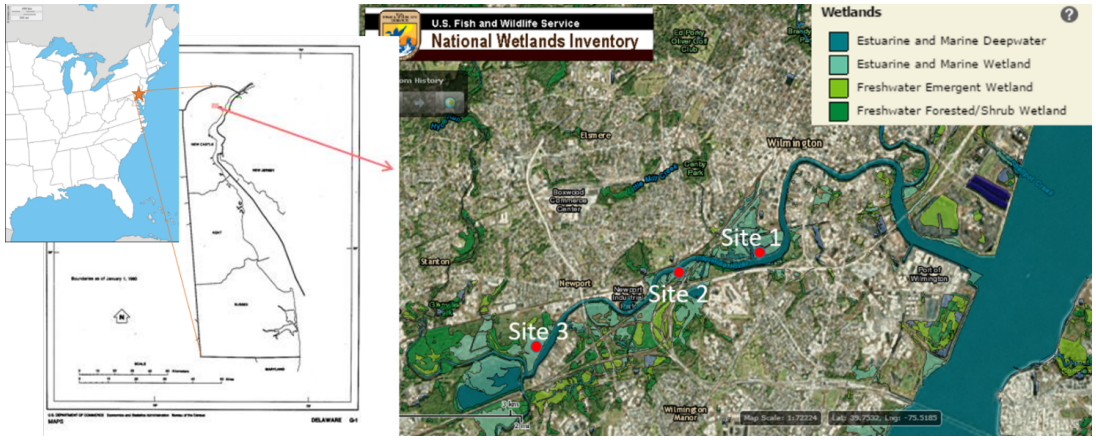

Figure 8: Core locations along the Christina River (Dalet, 2016)

Sites are exposed at low tide and inundated at high tide. Tides occur twice daily and completely inundate the sampling sites (USGS, 2017). The tidal portion of the Christina River is in the Coastal Plain, while its tributaries lie in a combination of Coastal Plain (flat, low-elevation land near the coast) and Piedmont (hilly region between coastal plains and Appalachian Mountains) environments (Christina River,

2012). The mid-Atlantic region of the United States is temperate, with cold winters, mild springs and falls, and hot, humid summers.

Table 1: Coordinates and elevations of sites sampled. Elevations are from the New Castle County, Delaware Geographic Information Systems Map Viewer, based on FEMA (2013) and NAVD88.

Site	Coordinates	Elevations (m)
1	N39°43.173’, W75°34.063’	0.61
2	N39°42.938’, W75°35.324’	1.22
3	N39°42.032’, W75°37.169’	0.91

Salinity of the Christina River is fresh to oligohaline with some estuarine influence from the Delaware River, into which it flows (U. S. Fish and Wildlife Service 2010). Common plants in the marsh include *Nuphar advena*, *Typha sp.*, and *Phragmites australis* (McAvoy 2016). Many of these plants prefer fresh or very low salinity water, indicating that the water has, in general, a very low salinity. Water quality is influenced both by the non-tidal portion of the Christina River Basin and the tidal Delaware River. Water from the Delaware River enters the tidal portion of the

Christina during high tides, allowing pollutants from sites impacting the Delaware River to impact the water quality of the Christina. Waters from upstream, which are impacted by agricultural and urban areas, also flow into the tidal portion of the river and impact the water quality there. It can be difficult to ascertain the proportion of impact from each setting, but an attempt has been made to determine this based on the relative proportion of diatoms which inhabit each area. Additionally, the area sampled is near the E.I. DuPont De Nemours & Co., Inc. /Newport Landfill superfund site and there are several highway crossings over the river near the sampling site.

4.3 Methods

4.3.1 Core Collection and Sampling Strategy

A vibracore apparatus was used to collect cores (Thompson, *et al*. 1991). Two 3.5 inch diameter cores were collected from each site to ensure that enough material was available for sampling. Cores had 85% or greater retention of sediments. Cores were stored in a cold room when not in use.

A rotating saw was used to slice the cores horizontally in half for sampling. Once open, sediments were described by their color and texture. Open cores were stored in tightly-wrapped plastic bags in the cold room. Samples for gamma counting and radiocarbon dating were taken from one core (labelled Core 1) from each site and samples for diatoms and pollen analysis were taken from the other (labelled Core 2).

Samples for total nitrogen, total carbon, total sulfur, and total hydrogen were taken only from Core 2 from Site 3, as it was being used largely as a back-up method to double check the diatom analysis. Samples to be analyzed for total phosphorus, chromium, copper, lead, zinc, and copper were taken from Core 2 from Site 1.

4.3.2 Geochronology

Samples were taken at 2 cm intervals for gamma counting, using the methodology of Pizzuto *et al.* (2016). Samples were dried at 60°C, ground into powder and sealed in plastic jars. The height of the sample in the jar and its mass were measured. An attempt was made to ensure that all samples were of similar weights and depths; however, a few samples near the top of the core included large pieces of organic material, such as wood, that could not be ground and resulted in smaller samples. The samples were held for at least 21 days to allow the ^{214}Bi and ^{214}Pb, daughter products of ^{222}Rn, to reach secular equilibrium so that the amount of supported ^{210}Pb could be determined. Samples were then placed in one of two high energy Canberra low energy germanium detectors (detector model number GL2020R, cryostat model number 7500SL/RDC/ULB, preamplifier model number 2002CSL) for 48 hours. GENIE2000 software was used to run the machine and collect data. Efficiency and sample absorption were determined using a sealed standard with activities certified by Eckhart & Zeigler, Inc. Self-absorption of gamma radiation for each sample was calculated using the methods of Cutshall *et al.* (1983). This method

allows the self-absorption of the samples to be determined for correction. Peaks for ^{137}Cs and ^{210}Pb were analyzed and the gamma activity from these elements per kg of sample was determined. The ^{137}Cs peak indicates that sediments at that depth were deposited at the peak of atmospheric nuclear weapons testing in 1963, causing the amount of ^{137}Cs in sediments to rapidly decrease after this age (He and Walling 1996).

The Constant Flux:Constant Sedimentation (CFCS) method was used to calculate sediment age using ^{210}Pb (Robbins, 1978). Specifically, a regression analysis was applied to the relationship between the sample depth in cm and the natural log of the activity of ^{210}Pb in the sample. The equation for this line was used to calculate the sedimentation rate for the section of core for which gamma counting was performed. Based on this sedimentation rate, ages were estimated based on the depth in the core from which they came.

Samples for radiocarbon dating were taken from 150 cm to the bottom of the core. In each site, two to three samples were taken over this interval. Samples were sent to Beta Analytic in Miami, FL, for AMS ^{14}C dating. Roots and other plant fragments were dated. Dates and error were calculated based on sampling interval and a ^{14}C calibration curve (Talma and Vogel 1993). The calibration curve allows the conventional radiocarbon age, based on the sample analysis, to be converted to calendar age using a graph which charts the variations in the ration $^{14}C/^{12}C$, which has varied over time.

Pollen samples of 1 cm^3 volume were extracted from the core every 5 cm from100 cm to 150 cm. Samples were treated using a modified methodology of the Delaware Geologic Survey (McLaughlin 2016). Samples were first treated with HCl to remove carbonates. Next, samples were exposed to HF followed by HCl to remove silicates. Samples were examined to determine if additional treatments were needed. Some samples were usable at this point and needed no further treatment to clean and concentrate pollen grains, whereas others needed to undergo nitric acid treatment to remove excess debris. Once the pollen grains were sufficiently concentrated and cleaned, they were stained using saffrin stain and mounted on slides. Pollen was analyzed by counting 100 grains and specifically identifying *Ambrosia* and *Quercus* pollen, which reflect deforestation (Hilgartner & Brush, 2006). Dates for various shifts in the abundances of these two genera are known, and thus dates could be assigned (Hilgartner & Brush, 2006; Matlack, 1997). Specifically, if the percent of *Ambrosia* was less than 1%, it is approximately the time of intial settlement, 1660, or earlier; when the ratio of *Quercus* to *Ambrosia* is greater than or equal to 5, the sediments are from between 1660 and 1730, and when the ratio is less than 1, the sediments are from 1780 or later (Hilgartner & Brush, 2006, Matlack, 1997).

Dating methods were combined to create an age-depth curve for each site. An error band was constructed using the depth error and the methodological error associated with each data point. The curve and associated error were used to assess the

age ranges of the various other analyses in the samples to ascertain the approximate age range.

4.3.3 Sediment Chemistry

Twenty milligram samples were taken every 10 cm from a Site 3 core to analyze for nitrogen, carbon, sulfur, and hydrogen. The samples were placed in aluminum weigh boats, crumpled, and placed into ports in an Elementar Cube Analyzer. Samples were incinerated and the elemental concentrations of nitrogen, carbon, oxygen, and sulfur were measured.

Samples were taken every 10 cm from a Site 1 core to analyze for phosphorus, arsenic, cadmium, chromium, copper, nickel, lead, and zinc. Samples were sent to the Soil Testing Program at the University of Delaware Department of Agriculture and Natural Resources. Samples were digested by EPA Method 3051 using a CEM MARs5 microwave digestion system (CEM, Matthews, NC). Digests were analyzed for analytes by inductively coupled plasma optical emission spectroscopy using Thermo Iris Intrepid II XSP Duo View ICP (Thermo Elemental, Madison, WI) (USEPA 1986).

4.3.4 Diatom Extraction and Analysis

Samples were collected for diatom analysis every 10 cm throughout one core from each site. Between 0.2 and 0.5 g of sediment was removed for each sample.

Samples were processed according to the PEARL methodology (Ruhland, *et al*., 1999). Carbonates were first removed by treating samples with 10% HCl. Samples were rinsed repeatedly with distilled water until neutral and then treated with a 50:50 mixture of concentrated H_2SO_4 and HNO_3 at 80°C for one hour and left to cool overnight. Samples were again washed until neutral. One mL of the slurry was diluted in 10 mL of distilled water and 1 mL of the resultant mixture was allowed to dry on the coverslip. Slides were mounted using NAPHRAX and the remaining slurry was preserved with formaldehyde.

Diatoms were counted under 1000x magnification. At least 500 diatoms were identified to species and counted on each slide. If a species identification was not possible, diatoms were identified to genus, then given a number (i.e. *Genus* sp. 1) and photographed in order to maintain consistency among samples. Relative abundances were calculated from the counts. The shifts in species compositions were observed throughout the core so that changes in the diatom community in response to changes in land-use practices could be observed. Trophic autecological categories established by Van Dam *et al.* (1994) and Porter (2008) were used to analyze trends potentially caused by changes in nutrients. The autecological categories, specifically the percent of eutraphentic and mesotraphentic species (taxa preferring high and moderate concentrations of nutrients, respectively), were compared to sediment phosphorus and nitrogen (Velinsky *et al.,* 2010). Mesotraphentic taxa were looked at rather than taxa that prefer lower nutrient conditions as the taxa representing lower nutrient categories

are often absent and are found only and low concentrations at this site. The percentage of diatoms that prefer differing levels of salinity (such as fresh, brackish, or marine) and which inhabit various environments (such as marine, rivers, or marshes) were also calculated. Diatoms were grouped into salinity categories using van Dam *et al.* (1994). A database provided by the Academy of Natural Sciences of Drexel University and Marshall and Alden 1993 were used to assign diatom taxa to estuary and tributary categories. This allowed for the changing salinity of the sites to be determined, as well as the provenance of the majority of diatoms. Specifically, this allowed the influence of the Delaware Estuary versus the tributaries to be analyzed.

4.4 Results

4.4.1 Age-Depth Model

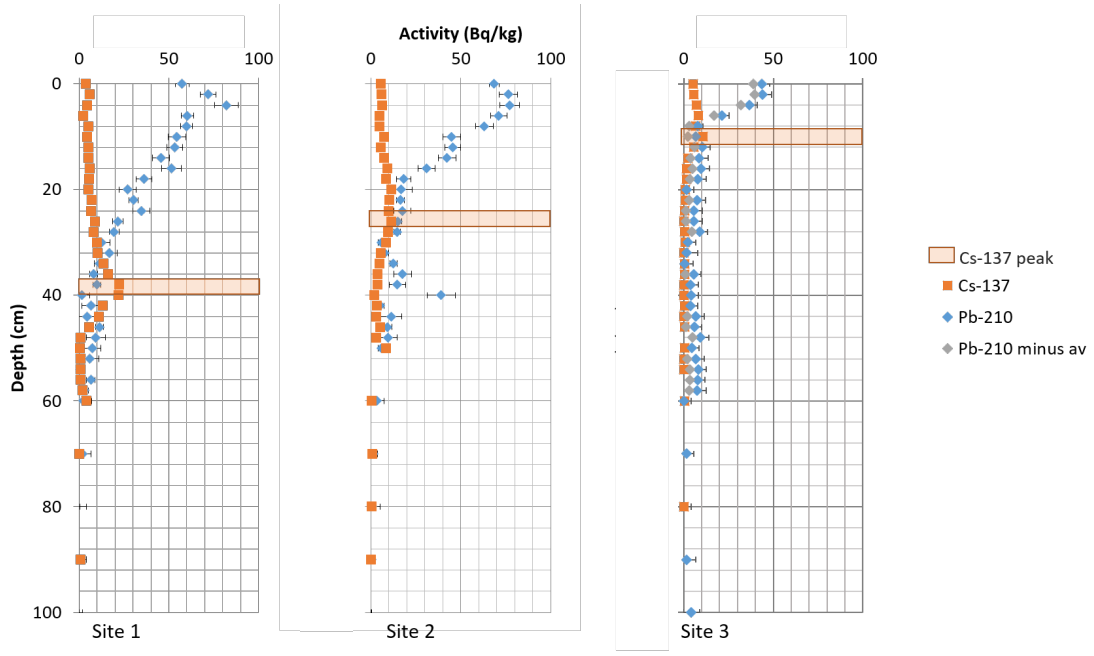

Figure 9: Downcore activity profiles for ^{210}Pb and ^{137}Cs from Core 1 at each of the sites.

Figure 2 shows the activity of ^{210}Pb and ^{137}Cs by depth at all three sites (Raw data can be found in Appendix 2). The depth of the ^{137}Cs activity peak varies among the sites, with the peak occurring at 38 cm at Site 1, 26 cm at Site 2, and 10 cm at Site 3. Similarly, ^{210}Pb activity approaches zero at the deepest depth at Site 1 and the shallowest depth at Site 3. At Site 3, the activity of ^{210}Pb never reaches 0 Bq/kg. In order to correct for this, the average activities of the samples below which ^{210}Pb

plateaus were calculated and this value was subtracted from all samples. The sedimentation rate was then calculated based on the adjusted activities.

All three sites show a somewhat similar relationship between age and depth (Figure 10, Table 2). The top 150 cm from both Site 1 and Site 2 are very similar; however, at Site 1, there is a plateau at 150 cm, where it appears that the same depth is dated at two very different ages, while the same age-depth relationship is not seen at Site 2. Site 2 shows a slower increase in age between 150 cm and the base of the core than Site 1, which indicates that there may be a similar plateau that was missed due to a lack of a relevant radiocarbon date at this site. Site 3 is similar to Site 1 in that it has a similar plateau at 150 cm.

Table 2: Sedimentation rates for sites 1-3

	0-100 cm (gamma counting)	100-150 cm (pollen deforestation horizons)	150 cm-base of core (radiocarbon dating)
Site 1	0.53±0.28 cm/yr Mass accumulation (MA): 0.14-0.51 g/cm^3/yr	0.42 cm/yr	0.13±0.12 cm/yr
Site 2	0.62±0.23 cm/yr (MA): 0.29-0.96 g/cm^3/yr	0.42 cm/yr	0.075±0.075 cm/yr

Site 3	0.20±0.15 cm/yr (0-29cm) (MA): 0.011-0.47 g/cm^3/yr 0.78±0.44 cm/yr (29-100cm) (MA): 0.075-1.6 g/cm^3/yr	0.42 cm/yr	0.31±0.29 cm/yr

Site 3 exhibits a very different age-depth relationship from the other two sites above 100 cm, despite being fairly consistent with the other sites, particularly Site 1, below this depth. Above 100 cm, the sedimentation rate indicated by gamma counting appears to be very rapid, covering approximately the same amount of time covered in 50 cm as the other sites did in 100 cm. In all three sites, there was some variation in the amount of organics downcore, but this was not quantified (Appendix 1).

Because of the change in slope related to the radiocarbon dates, the age of the deeper samples appears to be biased towards greater ages. These dates may be less reliable than the pollen deforestation chronohorizons, ^{210}Pb, ^{137}Cs, and sediment Pb dates. Thus, samples of these ages will be called "pre-European Settlement", rather than listed by their ages. Pollen data can be found in Appendix 3.

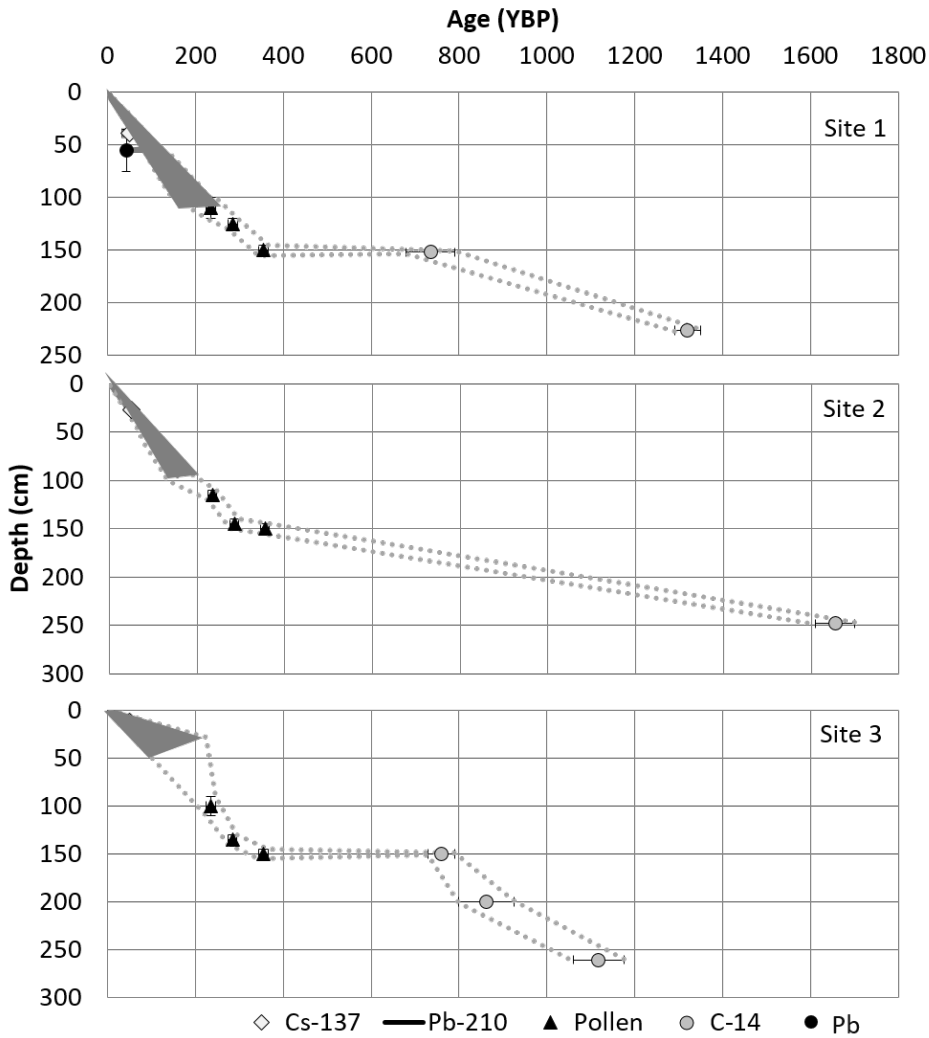

Figure 10: Depth-time data for three sites along the Christina River, DE. Dotted lines represent the error envelope based on depth intervals and methodological errors.

4.4.2 Sediment Chemistry

Total nitrogen, total phosphorus, total carbon, total sulfur, total hydrogen, arsenic, cadmium, chromium, copper, nickel, lead and zinc concentrations were obtained from Core 2 at Site 1 (metals and phosphorus) and Site 3 (nitrogen, carbon, sulfur, and hydrogen) (Figure 11) (Appendix 4). Prior to European settlement, metals were consistently present at very low concentrations (Table 3). All metals peaked at about 100 years before present and decreased afterward. This timing generally coincides with the rapid expansion of industry along the Christina River and its tributaries, as well as the Delaware River (Kauffman, 2010).

Table 3: Concentration of metals prior to European settlement. This amount was determined by averaging the concentrations in sediment prior to 1660.

Metal	Average Concentration Prior to European Settlement (mg/kg)
Arsenic	8.88
Cadmium	0.016
Chromium	46.09
Copper	28.66
Nickel	23.61
Lead	23.24
Zinc	85.48

Phosphorus increased about 200 years before present, though it varied widely throughout older portions of the core from Site 1 (Figure 11D). Clearly, though, phosphorus levels in the last 200 years are at least as high as the highest levels prior to 200 years before present, and frequently higher with both the peaks and valleys appear reaching higher extremes towards the present. Phosphorus can be removed from terrestrial ecosystems via runoff after deforestation; therefore, it is likely that the increase of phosphorus about 200 years before present is related to deforestation and agricultural activities in the area, as well as an increase in pollutants from wastewater and sewage, which was increasing in the region around this time.

Interestingly, nitrogen, carbon, sulfur and hydrogen are all fairly high and consistent prior to European settlement (Figure 11A). Then, they all sharply decrease between 200 and 300 years ago, around the time of deforestation. This is particularly interesting in the case of carbon and nitrogen, as these elements tend to increase their concentrations in water due to deforestation. Sulfur begins trending upward at about 1950.

The carbon-to-nitrogen (C:N) ratio was also calculated based on the mass of carbon and nitrogen found in the core sediments. This ratio remains between about 10 and 15 throughout the core.

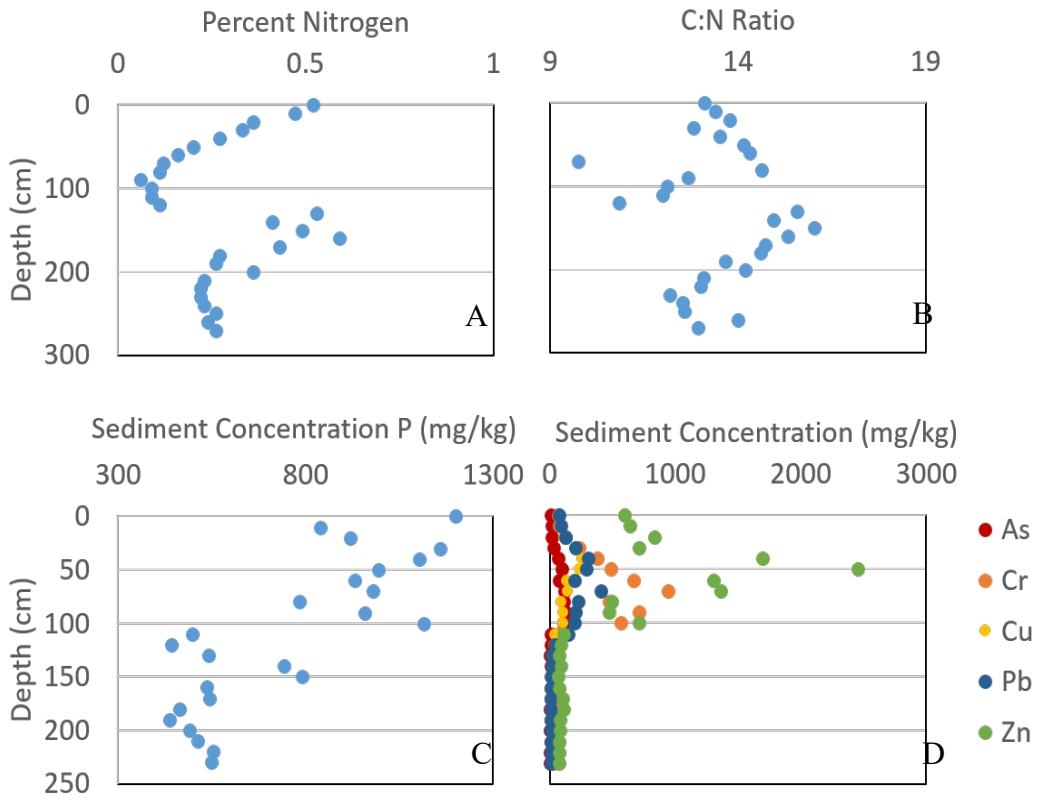

Figure 11: Changes in sediment chemistry with depth at Sites 1 and 3. Subfigures A and B depict the percent of total nitrogen, carbon, and sulfur and the C:N ratio through time at Site 3. Subfigures C and D show the changes in metals and the concentration of total phosphorus through time at Site 1

4.4.3 Diatom Analysis

Diatom counts from samples at the three sites revealed similar species compositions among the cores (Figure 12). Taxa abundance by site and depth is presented in Appendix 5.

Diatom analysis was carried out using autecological categories for trophic state and salinity developed by Porter (2008) and Van Dam *et al.* (1994). Additionally, the abundance of taxa which inhabit the Delaware River was compared the abundance of taxa which inhabit the freshwater tributaries in order to determine the primary drivers of water quality in the study site. The results of the trophic analyses were compared to the sediment phosphorus and nitrogen concentration (Figure 13) Support for the results of the autecological analysis was were corroborated by cluster analysis and stratigraphic abundance curves for diatoms that indicate different trophic levels (Figures 14 and 15).

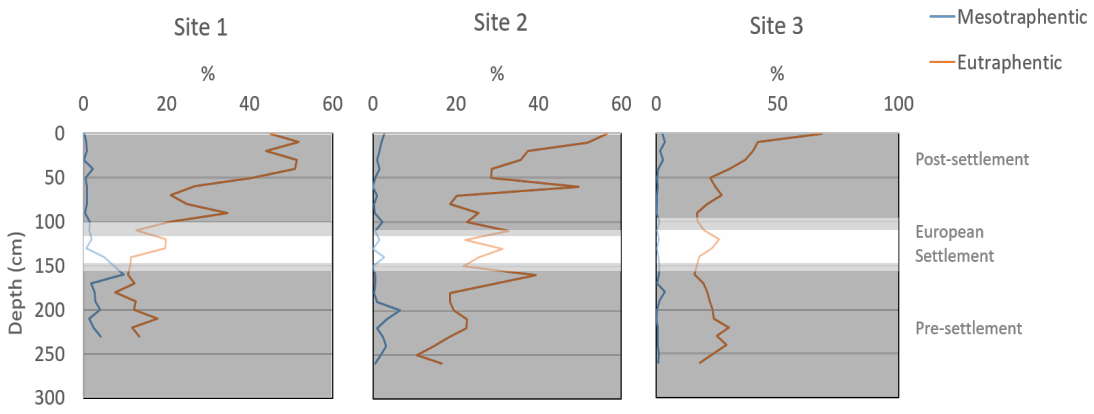

Figure 12: Percent mesotraphentic and eutraphentic diatoms from all three sites versus depth. Shading indicates different time periods. Light grey bands represent uncertainty between intervals.

All sites show an increase in eutraphentic diatoms, such as *Nitzchia brevissima*, *Cyclotella atomus* and *Navicula gregaria*, which prefer higher nutrient levels, beginning about 200 years ago. The core samples also display a decrease in

mesotraphentic species, such as *Diploneis elliptica*, which prefer mid-to-low nutrient conditions during the same interval. The percent of eutraphentic diatoms correlates well with measured phosphorus, but the percent of eutraphentic diatoms did not correlated well with nitrogen (Table 3).

Species which prefer low nutrients were never in high abundance and were often not present at any of the sites, so they were not included. These results suggest that the level of nutrients present in the Christina River may never have been low enough to support a community of the most sensitive species of diatoms.

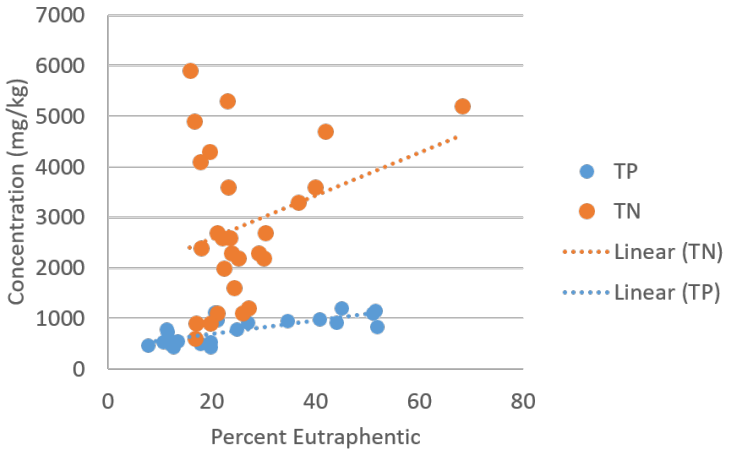

Figure 13: Comparison of %Eutraphentic diatoms with the two nutrients, TP and TN. Phosphorus concentration was analyzed in Site 1 and percent sediment nitogen was analyzed at Site 3.

Table 4: Statistical analysis of percent eutraphentic diatoms versus TP and TN.

	% Eutraphentic vs. Sediment Phosphorus	% Eutraphentic vs. Sediment Nitrogen
r^2	0.57	0.12
T, (p)	5.45 ($p < 0.005$)	1.76 ($p<0.1$)

Diatom results are corroborated by cluster analysis. Changes in diatom community structure concurrent with environmental shifts tend to match changes in the percent of eutraphentic diatoms (Figure 14). Additionally, the abundance of diatom taxa in categories representing eutraphentic and mesotraphentic taxa helps to explain where the percentages in these categories comes from (Figure 15). The cluster analysis shown here for Site 1 (but consistent for all sites) indicates that diatom communities have changed at times when land-use practices were undergoing major alterations. For example, the first cluster from the bottom includes all samples deposited before European settlement, based on the initial settlement chronohorizon designated by the ratio of *Ambrosia* to *Quercus*, as well as those deposited after Europeans had arrived but before large-scale deforestation had occurred. The next cluster corresponds with the mid-settlement period, when deforestation was prevalent. Next, diatom assemblages cluster around the time following maximum deforestation, early industrialization, and increases in nutrients due to sewage and agriculture. The next cluster includes sediments deposited during major industrialization and the increased

use of manufactured fertilizers and phosphorus detergents. Finally, the last cluster includes samples deposited after the environmental movement in the 1970s, and may be influenced by restrictions on factories, but continued nutrient input and additional runoff from the ever-increasing network of roads.

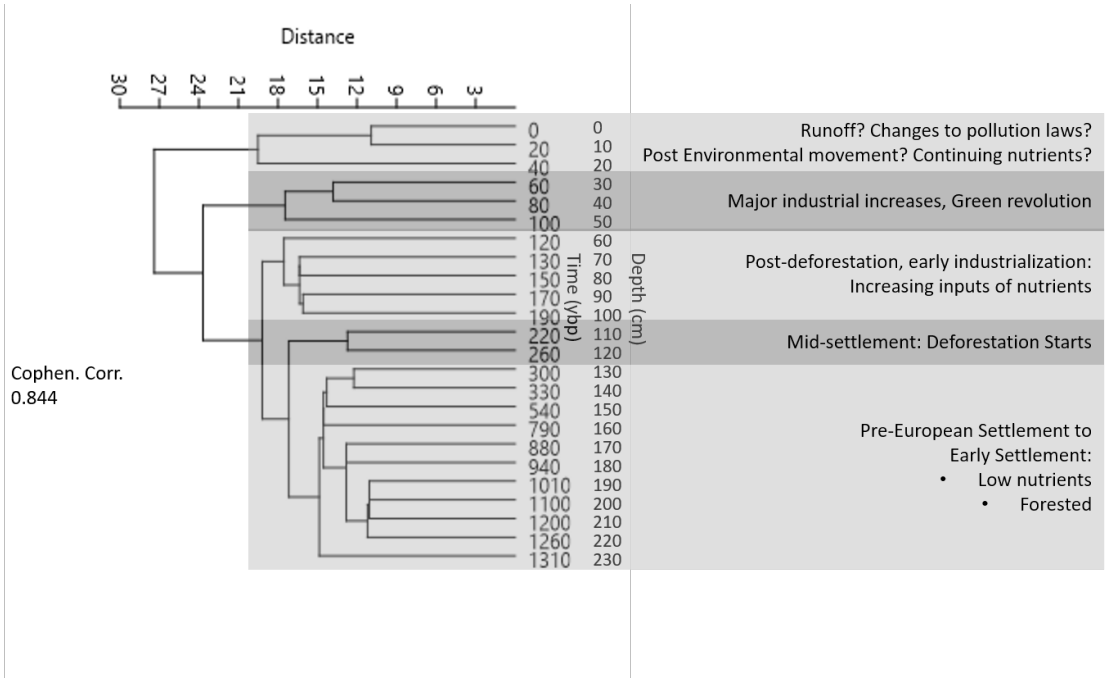

Figure 14: Stratigraphically constrained classical cluster analysis of diatom relative abundances by depth and through time at Site 1. All three sites showed similar clustering.

Using the autecological categories, all sites show an increase in eutraphentic diatoms, such as *Nitzschia brevissima*, *Cyclotella atomus*, and *Navicula gregaria*, which prefer higher nutrient levels, at about 200 years ago, which corresponds to the time that land was being cleared and cultivated for agriculture (Velinsky, *et al.,* 2010,

Hilgartner and Brush, 2006). There appear to be further increases in the percent of eutraphentic taxa after 50 to 100 years before present, which may correspond to the proliferation of industrial fertilizers. The diatom analysis also indicates a decrease in mesotraphentic species, such as *Diploneis elliptica*, which prefer mid-low nutrient conditions, in the same time frame (Velinsky, *et al.,* 2010). Species which prefer low nutrient conditions were never in high abundance, and were often not present, in any of the sites, and so were not used to understand changes over time.

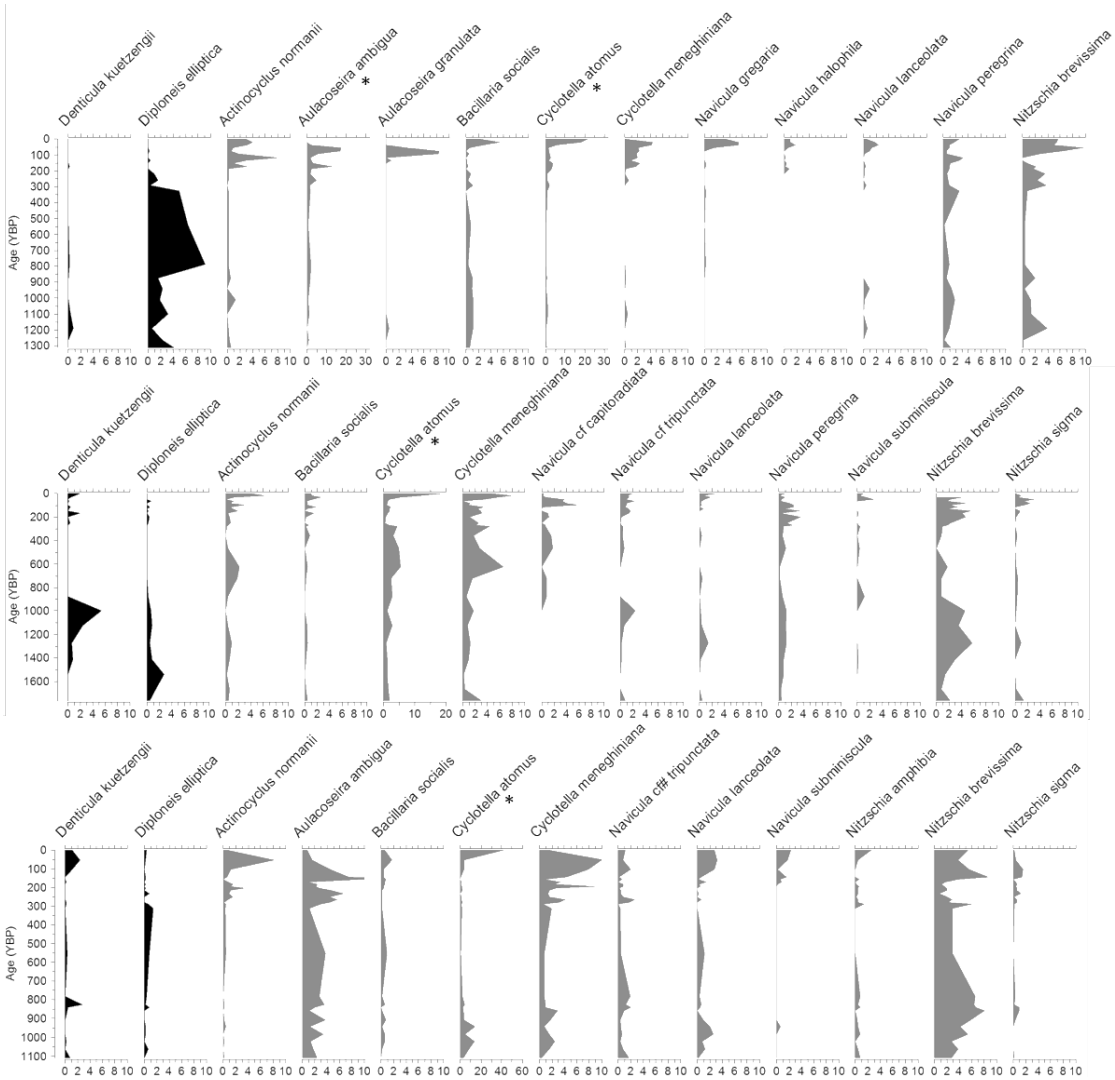

Figure 15: Percent relative abundance of select (based on dominance) diatoms taxa versus time. Taxa shown in black are mesotraphentic and taxa shown in grey are eutraphentic. All taxa are shown using the same x-axis (% abundance scale), with the exception of those marked with and asterisk.

All three sites had higher percentages of diatoms from the tributaries in the top 100 cm of sample, which corresponds to modern samples, specifically, those deposited after about 1800 (Figure 16). In pre-European settlement and European settlement-era

samples, the tributaries and the estuary contributed similar percentages of diatoms at Site 1. At Site 2, the very oldest samples were more influenced by the estuary. The oldest samples had more influence from the tributaries at Site 3. Marine diatoms dominated until the top 50 cm of the cores at all sites, after which freshwater and estuarine diatoms became more abundant (Figure 17). In all three cores, estuarine diatoms, which prefer brackish conditions, dominated in the most recent samples.

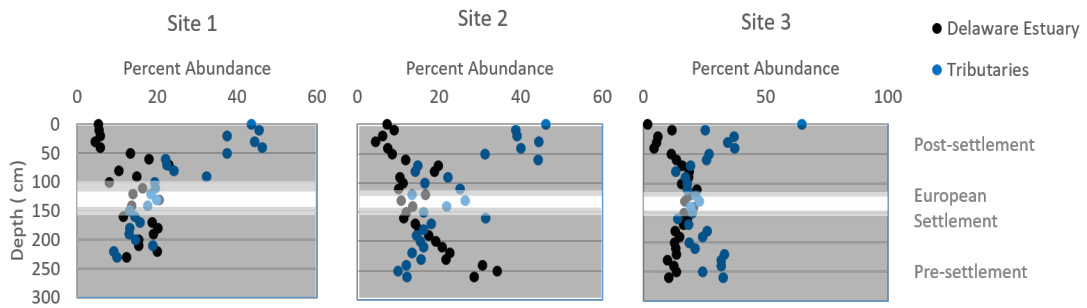

Figure 16: Comparison of the percentage of diatom which inhabit the Delaware Estuary or the freshwater tributaries of the Christina River by depth and through time.

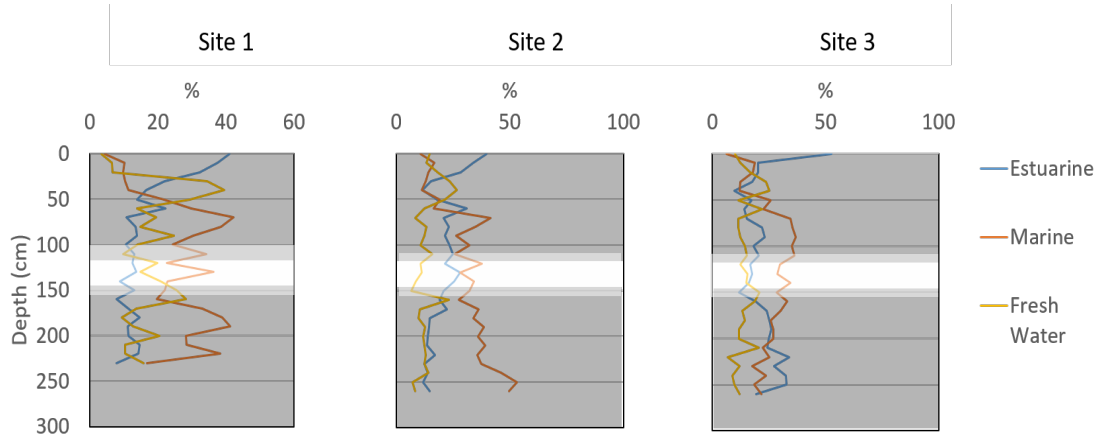

Figure 17: Percent diatoms from different salinity levels: marine, estuarine (brackish), or freshwater by depth and through time.

4.5 Discussion

4.5.1 Sediment-Age Relationship

The age-depth relationship appears to show a plateau in Sites 1 and 3. There are several ways that this could be explained. First, it should be noted that Sites 1 and 3 both have a radiocarbon date at 150 cm, which overlaps with the oldest pollen date. Possibly, the plateau is related to this change in dating methods. Interestingly, all three sites exhibit a change in sediment color near 150 cm, indicating that a change in environment may have occurred and a hiatus or erosion may account for the difficulty in obtaining a clear date around 150 cm. The color change is subtle and different in each site and can be seen in the stratigraphic diagrams included in Appendix 1. Because the change in sediment color is apparent in all three sites, this may indicate that a region environmental change had occurred. Additionally, a study by Mayewski *et al.* (2004) identified hiatuses that occurred globally at this age which coincides with the Little Ice Age.

4.5.2 Sediment Chemistry

Several studies look specifically at water quality in the Delaware Estuary, which contributes a significant portion of water to the Christina River through tidal inputs. In Sharp (2010), the interactions between nutrients and the amount of dissolved oxygen in the water is observed between the late 19th to early 20th Century and the early 21st Century. Nitrate was found to increase from about 0.93 mg/L in 1910 to a peak of about 5.58 mg/L in the 1980s before decreasing to just over 3.72 mg/L in the

early 21st Century (Sharp 2010). In 1910, the concentration of ammonium nitrogen was about 0.49 mg/L and increased to nearly 1.82 mg/L by the mid-1960s (Sharp 2010). By the early 21st Century, ammonium nitrogen had decreased to about 0.84 mg/L (Sharp 2010). Dissolved oxygen declined from about 7.20 mg/L in 1880 to as low as 0 mg/L between the mid-1950s and 60s but has recovered to about 5.60 mg/L at the turn of the 21st Century (Sharp 2010). An additional study by Sharp (1994) shows that phosphorus concentrations in the Delaware River varied between about 150 and 870 µg/L in the late 1960s, but has dropped to between 150 and 370 µg/L since the mid-1980s. Church *et al.* (2006) found that sediment P peaked near 1960. The amount of P in both sediment and water were found to decrease following banning of phosphate detergents and installation of secondary treatment at wastewater treatment plants following the Clear Water Act (Church, *et al.*, 2006). Most of the remaining P in water can be attributed from waterwater treatment plants, with about a third being attributable to agricultural practices (Church, *et al.,* 2006).

In the tidal Christina River was undertaken by Velinsky *et al.* (2010). This study collected and analyzed data from several cores throughout the tidal portion of the Christina River, including sedimentation rates, sediment chemistry, and diatom abundances. Two of the cores used in Velinsky *et al.* (2010) were taken near Site 1 (near Dravo Marsh), and Site 3 (near Churchman's Marsh). In these cores, ^{210}Pb-based sedimentation rates were found to be 0.56 cm/yr and 0.51 cm/yr, respectively (Velinsky, *et al.,* 2010). The C:N ratio ranges from 10 to 15, with a total carbon concentration of 1.17% in 1878, rising to 7.52% in 2005 (Velinsky, *et al.,* 2010). Zinc rose above background levels to peak in the 1910s and again in the 1950s, consistant with the installation and eventual remediation of two National Vulcanized Fiber

facilities on tributaries to the Christina River, and the DuPont Pigment plant in Newport, DE (Velinsky, *et al.,* 2010).

Figure 18 is a conceptual diagram of the changes in nutrients and metals over time inferred from the sediment chemistry and diatom metric. Metals, shown in black, were low or absent prior to the late 1800s. They began increasing around the start of industrialization on the Christina River and its tributaries in the 19th Century. They peaked post WWII and declined following the closure of the pigment plant on the Christina in the 1950s and again after the passage of environmental legislation, such as the Clean Water Act, in the 1970s. In particular, Zn entered the river in large amounts. The National Vulcanized Fiber Company opened two factories in the early 1900s, one on the White Clay Creek and another on the Red Clay Creek, both tributaries to the Christina River (Division of Water Resources, DNREC 2008). The factories used zinc in processing paper until they closed in 1990 and 2009, respectively. Additionally, a DuPont Plant opened on the Christina River in Newport in the early 1900s and produced zinc-based pigments until the 1950s, when it closed (USEPA 2017). Additional reductions in heavy metals would likely have occurred in the 1970s, when environmental legislation restricted the amount of release that could occur. Thus, zinc can be used to identify the sediments deposited in the early 1900s, where the concentrations begin to increase, and the 1950s and 1970s, where the concentrations begins to decrease.

The peak seen in these data differs somewhat from expected. Particularly, based on regional history, the start of the peak should be around the late 1800s, with the highest point occurring near the 1950s, but the data show an initial increase in concentration near the start of the 1800s, with a peak occurring near 1915.

Interestingly, a similar pattern was seen in zinc enrichment in the Churchman's Marsh section of the Christina River in another study (Velinsky *et al.,* 2010). Velinsky *et al*. (2010)'s data, however, shows a second, higher peak near the 1950s, which, while present in this data, is smaller than the 1915 peak. This may indicate that the activities of the DuPont pigment plant, which is much closer to the study sites, was of greater influence than the upstream plants. Additionally, while tidal marshes are good sinks for metals, there is some downward transport of certain heavy metals due to chemical processes in the sediment, plant growth and dieback, and bioturbation, which may have resulted in an alteration of the peak (Dubinski *et al.,* 1986). These processes would also impact ^{210}Pb and ^{137}Cs by transporting them deeper into the sediment cored. Thus, there may be some downward smearing impact the age model, and the age of sediments may appear to be younger than it actually is.

Also of note are the changes in the sediment concentrations of nitrogen and carbon. Deforestation decreases the organic carbon pool in soil (Inamdar 2013). The later increases in both carbon and nitrogen may be indicative of increased agricultural application of manure or other fertilizers as this would increase the amount of carbon available. Similarly, nitrogen is often released as nitrate for several years following deforestation (McGuire and Likens 2011).

Additionally, C:N ratios can be used to identify the source of the organic sediments: whether the organic sediments come from terrestrial or marine sources can be determined. Generally, marine sourced materials are considered to have lower C:N ratios and terrestrially sourced materials higher ratios (Tyson 1995). The results from this study, seen in Figure 11B, are difficult to interpret without additional information,

but generally suggest that the sediments came from terrestrial sources as the C:N ratios for phytoplankton tend to be below 10 (Tyson 1995).

In this study, nutrients, as shown by diatom trophic categories and sediment measurements, were variable prior to European settlement, ranging from 0.22 to 0.49% for TN and 438 to 790g/kg for TP. They remained variable, but increased to be consistently higher than it was previously around the time that the land was at its maximum level of deforestation, based on pollen ratios published by Hilgartner and Brush (2006). Following European settlement,P rose to concentrations similar to the highest peaks in concentrations prior to European settlement until about 1950, when phosphorus detergents and industrial fertilizers came into use and then increased to its highest concentrations. A similar increase in TP was noted in the tidal freshwater marshes of the Delaware River, and is attributable to phosphorus detergents as the levels decreased greatly when detergents were banned, indicating that detergents played a larger role than fertilizers (Church, *et al*., 2006, Velinsky *et al*., 2010). In the Christina River, the concentration of phosphorus increased around 200 years ago. This increase in phosphorus may be indicative of changes in land-use practices following European settlement, particularly wide-spread clearcutting and agriculture. The variations in phosphorus in the older portion of the core could be caused by changing environmental conditions, such as drought or forest fires, or activities by Native Americans, such as agriculture which, while less intensive, was common in the area prior to European settlement and known to impact sediment availability (Stinchcomb, *et al.,* 2011).

Ideally, all sites would have had sediment chemistry done on them. This would allow comparison among the sites and more accurate analyses and comparison to the

diatom data. If budgeting and time allows, additional sites may be run in the future. Additionally, having metals measured at all sites would allow Pb dates to be included in the age-depth data.

4.5.3 Diatom Analyses

Velinsky *et al.* (2010) observed diatom community structure through time to understand changes in trophic state. The percentage of eutraphentic diatoms increased from a range of about 25% to about 45% until the late 1950s and the mid 1970s in Churchman's Marsh and Dravo Marsh, respectively, to 81.46% in Churchman's Marsh in 1999, and 71.75% in Dravos Marsh in 2000, with percentages at both sites decreasing after that (Velinsky, *et al.,* 2010).

In Figure 13, the relationships between the percent of eutraphentic diatoms and the concentration of the two nutrients studies, TN and TP, are shown. The percent of eutraphentic diatoms has a stronger relationship with TP (r2=0.57; $p<0.005$) than with TN ($r^2=0.12$; $p<0.1$). This is likely because denitrification removes nitrogen from the environment by turning it into nitrogen gas, whereas the phosphorus is stored with the sediment. If this is the case, the phosphorus concentration in the samples is reflective of the amount of phosphorus that was found in the water at the time of deposition. The nitrogen concentration extracted from the samples, however, is likely altered, and much lower that it was in the water at the time of deposition.

Generally, the results indicate the environmental changes wrought by changes in land use imposed by European settlers began in the 1780s, more than 100 years after settlement occurred (Figure 18). This is consistent with the timing of maximum deforestation, which would have impacted the diatom communities by changing the

amount of sediment entering the river. Agricultural land-use also increased, which increased the concentration of nutrients in the river. Additionally, as the size of cities increased, sewage overflow would have increased the amount of nutrients discharged to the river. The next big change in the region was increasing contaminants related to industry, which is shown in the increased concentration of metals in the sediments in the 19th Century. Next, the diatom index shows an increase in eutraphentic taxa, which corresponds in timing to both the use of phosphorus-containing detergents and the so-called "green revolution"- when industrial fertilizers began being used around the mid-20th Century. The 1970s brought about environmental legislation, such as bans on phosphorus detergents and the Clean Water Act. This is also seen in the concentration of metals, which decrease around this time as a result of increasing regulation (Figure 18). Future monitoring is essential in ensuring that environmental regulations are working and that the environment continues to recover, as well as determining if additional measures are warranted.

Knowing the relative contributions of the Delaware Estuary versus the freshwater tributaries to the site can assist in determining the sources of water pollution in the tidal Christina River. Figure 16 shows the changes in the percentage of diatom which are found solely in the Delaware or the freshwater tributaries, per data from the Academy of Natural Sciences and previous studies. Prior to European settlement, the three sites differed somewhat, with Site 1 having a similar percentage of diatoms coming from each source, Site 2 being dominated by diatoms from the Delaware Estuary, and Site 3 being dominated by diatoms from the tributaries. This indicates that both sources were important, perhaps with the estuary contributing more at downstream sites (i.e. Site 2), and tributaries exerting more influence at upstream

sites (i.e. Site 3). Site 1 is located near another tributary, so may have more freshwater influence than Site 2.

Near the time of European settlement, both sources contribute evenly to the diatom community found at the site. Following European settlement, all sites have an increase in the influence of the tributaries relative to the influence of the estuary, shown by an increase in the percentage of tributary-dwelling diatoms. This could be indicative of several thing which influence the number of diatoms in tributaries or lowered them in the estuary, as well as a change in the amount of water flowing into the site from each source. For example, deforestation, which increases light, and application of fertilizers could cause higher abundances of diatoms in the tributaries, while decreased DO in the estuary could have cause declines in diatom populations. Additionally, changes in tidal range or rainfall could alter the relative contributions of water from either the estuary or the tributaries.

Figure 17 show the change in percentage of diatoms which prefer different salinities. In all three sites, the highest percentage of diatoms came from marine sources until the top 50 cm of the core. This indicates that the tidal range was likely greater during this period, and more diatoms were carried up from the Atlantic Ocean. After this depth, freshwater and estuarine taxa dominate, indicating a decreased tidal range and an increase in the influence of inland sources, such as brackish parts of the estuary, particularly above 10-25 cm, and the freshwater tributaries, between 50 cm and 10-25 cm.

The results presented here for the tidal Christina River, which represent input from both the Delaware Estuary and the freshwater tributaries to the Christina, are similar to results from the Chesapeake Bay. In a study by Cooper (1995), it was found

that diatom community structure began to change to reflect species which preferred brackish water in the Chesapeake in the mid-1700s and mid-1800s, when land clearance started. In the mid-1800s, further increases in diatoms preferring freshwater and higher nutrient loads (Cooper, 1995). Diatoms from the 1900s reflect high stress conditions, likely related to higher trophic states anoxia (Cooper, 1995). The highest incidence of hypoxia and anoxia occur in the most recent 50 years (Cooper, 1995). As described in Figure 18, these trends are fairly similar to the changes in trophic levels seen in the Christina River. This is expected as the two regions had fairly similar settlement histories.

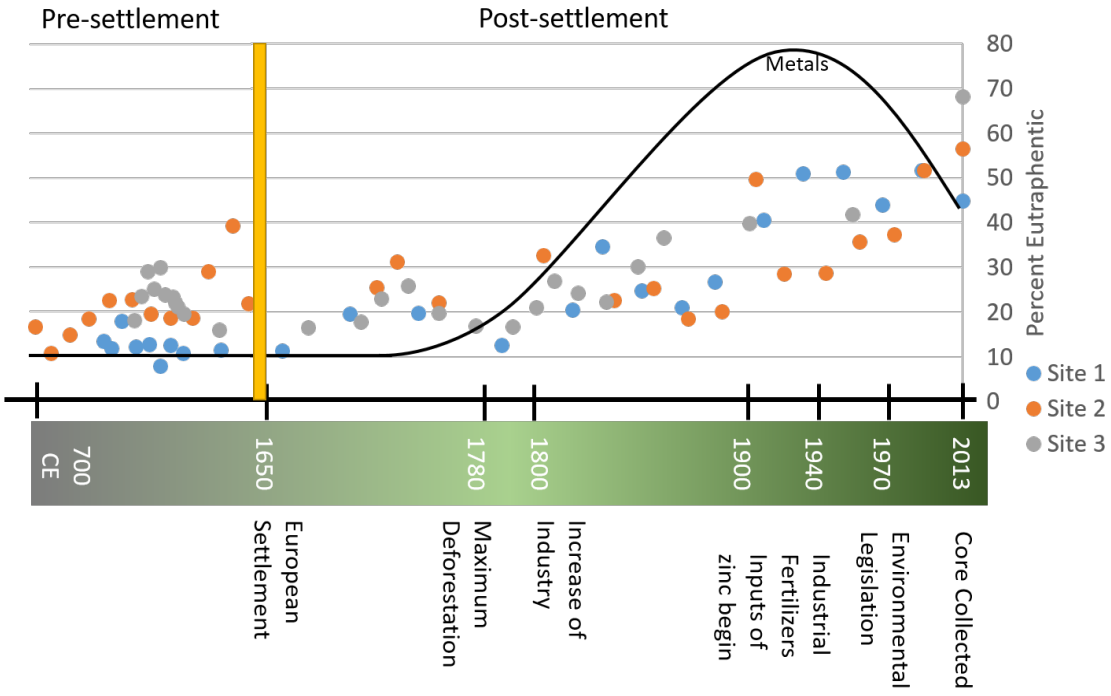

Figure 88: Conceptual diagram of changes in abundance of eutraphentic taxa (dots) and metal concentrations (black line) over the past ~1300 years in the Christina River. Timing of documents historical events is noted at the bottom of the diagram.

4.6 Conclusions

The analysis of diatoms extracted from sediment cores allowed for a historic analysis of water quality in an oligohaline tidal marsh. Specifically, the trophic level was found to increase about 200 years before present, with a second increase about 60 years before present. These changes correspond to known human-induced environmental changes. Specifically, the first increase corresponds with deforestation and increases in the amount of land used in agriculture. The second increase occurs around the time when industrial fertilizers and phosphorus detergents came into use. A possible decrease may have occurred in the samples collected from the most recent times. Additionally, the concentrations of various metals in the cores, including zinc, were measured in the core, increase concurrently with regional industrialization and the building of factories which were known to be significant contributors of zinc. Understanding the impacts human activities have had on tidal fresh and oligohaline marshes and rivers is important because these environments are likely to be impacted by climate change. Specifically, knowledge of the impacts of human activities, such as dredging and agriculture in the system, which influence the ecology of the system by changing the salinity or altering the input of nutrients to the system, can help us understand how the system may function as sea-levels change. Additionally, an understanding of the background levels of metals and how nutrients and trophic levels varied prior to European Settlement is useful in assessing the success of remediation projects and to determine if environmental laws have had the desired impact. Finally, the influence of the tributaries on water quality was found to increase through time. This indicates that land use practices are more important to the water quality of the Christina River than sea level change.

Chapter 5

QUANTITATIVE RECONSTRUCTION OF PHOSPHORUS CONCENTRATIONS IN THE TIDAL CHRISTINA RIVER WATERSHED, DE

The tidal Christina River has been impacted by alterations in land-use practices since the mid-17th Century when European settlers entered the region. These alterations increased the concentration of nutrients in the watershed through deforestation, agriculture, and, later, use of phosphorus-based detergents. In order to reconstruct historical phosphorus concentrations, a transfer function was designed using modern diatom and water chemistry data from similar sites in Delaware and Southern New Jersey. A Weighted-Average Partial-Least-Squares (WAPLS) model allowed the best fit between diatom abundance and phosphorus concentrations. The model was applied to diatom abundance data from three sites along the tidal Christina River to estimate total phosphorus over the past 1000-1700 years. Core samples were dated using a combination of ^{210}Pb, ^{137}Cs, ^{14}C, and deforestation chronohorizons based on the ratio of *Ambrosia* to *Quercus*. Estimates were compared to the percent eutraphentic taxa found at each site based on Porter (2008) and Van Dam *et al.* (1994). In general, phosphorus concentrations were lower prior to European settlement, before gradually increasing to modern levels about 200 years before present. This is comparable to the trend seen in the percent of eutraphentic taxa in the cores studied.

5.1 Introduction

The Christina River is influenced by both its freshwater tributaries and the Delaware estuary. Including its tributaries, the Brandywine River and White Clay and Red Clay Creeks, it has a total watershed area of 1463 km2 (Christina River 2012). The Delaware River, which has a watershed area of 33,152 km2, also influences the water quality of the Christina River tidally (New York State Department of Environmental Control Division of Water 2007). In a previous study (See Chapter 4) it was found that, depending on the site sampled, diatoms came from freshwater tributaries, the estuary, or both prior to European settlement (Figure 19). Around the time of settlement, both environments were represented nearly evenly. Following European settlement, tributaries contributed more diatoms to the assemblages found in the Christina River. This indicates that the influence of both sources has varied, but, though time the tributaries have increased their influence in the tidal portion of the Christina River.

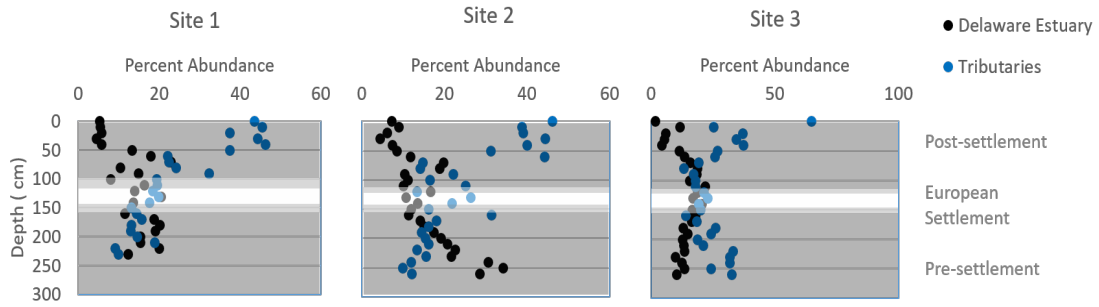

Figure 19: The percent of diatoms which live exclusively in the Delaware Estuary vs. the freshwater tributaries to the Christina River by depth and through time. Light grey regions represent uncertainty between time periods.

European settlement and subsequent changes in land-use strategy have played a large role over the past 400 years in regards to changing the inputs of various contaminants and sediment. Phosphorus is one of the major contaminants in the Christina, largely due to sewage and untreated wastewater entering the river from cities starting in the 18th Century (Kauffman 2010). Additionally, agricultural activities such as the application of fertilizer particularly beginning with the so-called "green revolution" in the 1950s increased the amount of phosphorus entering the watershed. Finally, phosphate detergents have also been a major contributor of phosphorus in the region (Kauffman 2010, Sharp 1994, Church *et al.,* 2006).

The 1972 Clean Water Act and other environmental legislation have helped to restrict the amount of pollutants that can escape industrial complexes and reduce runoff which contributes contaminants and sediments, as well as supporting water quality monitoring. Additionally, the banning of phosphorus-containing detergents in the 1970s helped to reduce the amount of phosphorus in rivers and other waterbodies (Kauffman 2010). Wastewater treatment plants were installed along the Delaware in the 1980s and helped to prevent a variety of contaminants, including phosphorus from entering the river (Kauffman 2010).

In the Delaware River, phosphorus was found to vary in concentration from about 150 to 870 µg/L in the 1960s, but has dropped to between 150 and 370 µg/L since the 1980s following banning of detergents and installation of wastewater treatment facilities (Sharp 1994). This indicates that there should be an increase, or continued increase of phosphorus near the 1960s, but the most recent samples may indicate a decrease. In the Christina River, total phosphorus in increased from slightly less than 0.1µg/g in the early 20th century to just over 0.1µg/g until the mid-1960s in

Churchman's Marsh, located near Site 3 (Figure 20) (Velinsky, *et al.,* 2010). Total phosphorus reached a peak of about 0.2µg/g in Churchman's Marsh in the 1980s, decreased to just above 0.1µg/g in the mid-1990s and then rose again to just below 0.2µg/g by 2005 (Velinsky, *et al.,* 2010). Velinsky *et al.* (2010) also observed the relationship between trophic level and diatom comunities, specifically taxa classified as preferring high nutrient levels (eutraphentic) and moderate nutrient levels (mesotraphentic), in order to better understand changes in trophic level. The percentage of eutraphentic diatoms increased from 25-45% prior to 1950s in Churchman's Marsh, to 81.46% in 1999 (Velinsky, *et al.,* 2010).

This research differs from previous studies of the Christina River both in the length of time studied and the attempt to reconstruct phosphorus concentrations through time. Specifically, this study examines the past thousand or more years in order to establish a pre-settlement baseline level of phosphorus and other contaminants. This is helpful in understanding how phosphorus levels have impacted water quality following initial settlement and through subsequent land-use changes.

A transfer function was used to provide a quantitative estimate of total phosphorus. Transfer functions use calibration sets containing modern diatom species data and site characteristics (total phosphorus, total nitrogen, conductivity, pH, and others) including the one of interest (Bennion, *et al.*, 2001; Bennion, *et al.*, 1996). The changes in the abundance of taxa are observed versus the characteristic of interest, in this case total phosphorus, and a mathematical model is produced relating them. This function is then applied to taxa abundance data in core samples and the total phosphorus for the samples is estimated. Transfer functions assume that the diatom taxa in the core respond in the same way to changes of environmental characteristics

as they do today. Additionally, they assume that the factor to which the taxa are responding is the only, or the strongest, influence on their presence and abundance.

Diatoms are an excellent organism to use for transfer functions, and a good water quality indicator overall, because they tend to respond to environmental changes rapidly in a predictable way. Diatom taxa have differing levels of tolerance and different optima, with some species being more sensitive to certain environmental changes, like variations in phosphorus, than others. Transfer functions use variation in abundance of taxa in the calibration set to identify the tolerance range of the taxa. These tolerance ranges are then applied to species abundance data from cores to reconstruct past environmental conditions.

Core samples tend to have more diversity than samples of living taxa because of time averaging. Death assemblages include multiple years of diatom populations and different species bloom at different times throughout the spring and summer, thus, the presence and/or abundance of each species varies throughout the year (Williams and Scott 1962, Martin 1999). If all modern samples are collected at a similar time of year, then it is likely that many species in the fossil core data will not be represented in the transfer function.

5.1.1 Transfer Functions: What Are the Problems and How Do We Overcome Them?

Transfer functions require several assumptions. The assumptions are (Juggins 2013):

1. Taxa in the calibration set must be related to their environment. This implies that the environment is driving the structure of the assemblage,

and that taxa are reliant on specific environmental conditions being met. If the environment changes, so do the taxa in the assemblage.

2. The environmental variable being reconstructed is important to the ecology of the system (i.e. it influences the assemblages significantly) or is related to another variable that is important to the system's ecology. Specifically, if, as in the case of this study, phosphorus concentrations are to be reconstructed, phosphorus should be of major influence on the assemblage present.
3. The calibration set and the fossil data should contain overlapping taxa and similar environmental characteristics.
4. Other variables do not have much influence over the assemblage or their co-influence with the variable of interest does not change over time.

Transfer functions offer a way to perform quantitative reconstructions of past environmental conditions that are not available using other methods and serve a useful purpose in cases when a quantitative value is helpful, as is frequently the case in establishing pre-disturbance concentrations of pollutants for monitoring efforts.

In order to support the estimates made by transfer functions, a multiple lines of evidence approach is extremely useful in corroborating the output of the transfer function. For example, understanding how assemblages cluster through time can help show how the characteristic of interest has influenced assemblage structure through time. If the characteristic of interest is a nutrient, trophic indices can help support quantitative reconstructions made by the transfer function. For example, if the trophic

index and the transfer function both show an increase nutrient concentration, then the increase is likely real.

5.2 Study Site

The Christina River is described in Paper 1. A map showing the general location of the study area and the three coring locations can be found in Figure 20. Water quality characteristics relevant to this study can be found in Table 5.

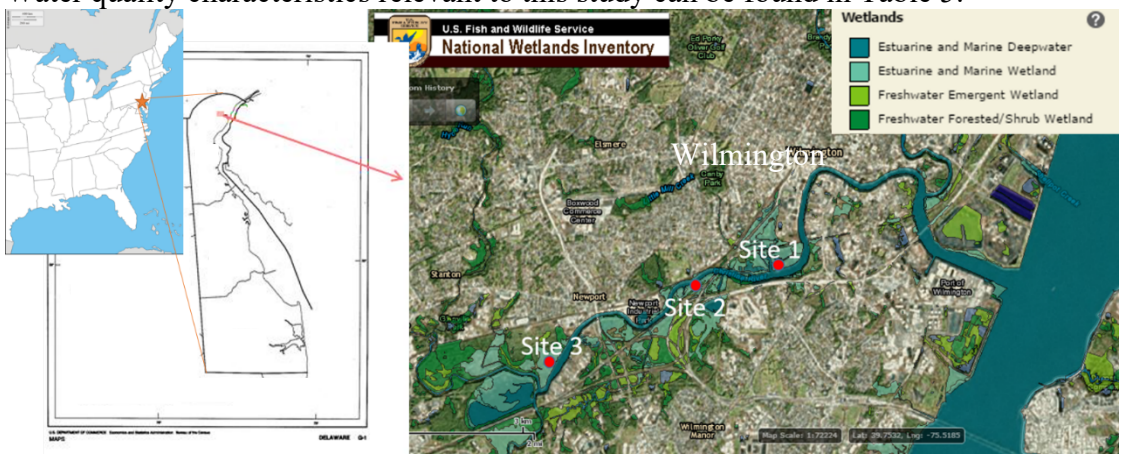

Figure 90: Christina River core locations (U. S. Fish and Wildlife Service, 2010, Dalet, 2016).

Table 5: Water chemistry of the Christina River at the Rt-141 bridge located between sites 2 and 3. Samples were collected between April 1995 and November 2012 (Rt. 141 Boat Ramp, 2008)

	Minimum	Maximum	Mean	Standard Deviation
Alkalinity (mg/L)	0	90	69	11
Water Temperature	0	28.6	15.5	8.7

(°C)				
Conductivity (uS)	0	6000	686	937
pH	6.5	9.0	7.3	0.36

5.2.1 Calibration Set

The modern diatom abundance and chemistry data included in the calibration set were compiled from data at the Academy of Natural Sciences of Drexel University in Philadelphia, PA (ANSP) by Patrick Boylan and Don Charles. This dataset contains data from Delaware and Southern New Jersey. Samples which best matched the Christina River sites, in terms of their pH, conductivity, and other factors were selected. A description of the sites included in the transfer function are shown in Table 6. In many cases, smaller ranges were used in the calibration sets because of limitations in the database.

Table 6: Water chemistry characteristics of the calibration set used for the transfer function

	Minimum	Maximum	Mean	Standard Deviation
Alkalinity (mg/L)	19.7	71.2	43.7	12.7
Water Temperature (°C)	11.5	27.4	18.7	3.9

Conductivity (uS)	149.8	475.5	267.0	67.2
pH	6.34	7.80	7.09	0.38

5.3 Methods

Core collection, geochronology, and diatom extraction were performed as described in (Paper 1).

5.3.1 Diatom Analysis

At least 500 valves were identified to species and counted per slide. Relative abundance was calculated for each species. Valves which could not be identified to species were identified using a combination of their genus and a numerical identifier. Cluster analysis (Hammer, *et al.*, 2001) and a trophic index designed by van Dam *et al.* (1994) and Porter (2008) were used to identify changes in assemblage structure. Specifically, species were grouped by their trophic preference, and two groups, eutraphentic (species which prefer high nutrient concentrations) and mesotraphentic (species which prefer moderate nutrient conditions) were compared in order to understand how the trophic level of the river varied through time.

5.3.2 Development of the Transfer Function

5.3.2.1 Construction of the Calibration Set

The database received from ANSP included thousands of samples from Southern New Jersey and Delaware. Diatom assemblages in many of these samples were not similar to those found in the Christina River and were eliminated from the calibration set. Sites were kept if they met a series of conditions:

1. Samples had to have corresponding diatom and water chemistry data. Not all sites had both components taken contemporaneously. Because water chemistry and diatom composition vary with one another, and both can change rapidly, sites where samples for both components were not taken together were eliminated.
2. Sampling sites had to be from the coastal plain, the low elevation, relatively flat area adjacent to the Atlantic Ocean. Diatoms are sensitive to substrate and flow. By eliminating Piedmont sites, where the landscape is hillier, these factors are more easily constrained.
3. Samples had to have conductivity and pH similar to the Christina River. Diatoms are very sensitive to both pH and salinity. Because salinity data was not available, conductivity was used instead, as the two are related. Diatoms in sites with very different conductivity and pH may be responding to these factors, rather than to the phosphorus concentration at the site; therefore, in order to better model the diatoms' response to total phosphorus, these have to be controlled for. In this case, only samples with conductivity and pH within the range identified in the tidal Christina River were used (Table 3, Table 4).
4. Species at the sites had to be similar. Because transfer functions are constructed using a modern calibration set and applied to fossil data, there may be species that are not in both datasets. To ensure suitable overlap, only samples which had >20% of species in common with the species found in the core samples were included in the calibration set.

A Principle Components Analysis (PCA) was performed on the calibration set to ensure that total phosphorus was an important influence to diatom community structure at these sites. Total phosphorus was included on the 1st axis, indicating it was an important variable and likely very influential to the differences in species seen among the sites.

Species were sometimes removed from the calibration set as well. Species had to occur in at least one site with greater than 1% abundance and be present in more than two samples to be included. Restricting the species in the model to those that are more common prevents the model from basing reconstructions on of the presence of a species in one sample or which appears only at very low abundance. If a species is sufficiently rare as to appear in only one sample, or only in low abundance, it is difficult to tell if it is just chance that allowed it to be found in a particular sample, or if it is responding to environmental conditions.

Data relating to the calibration set, including chemistry data and diatom abundance data can be found in the Appendix 6.

5.3.2.2 Construction of the Transfer Function

The transfer function was constructed in C2 , which analyzes modern and fossil datasets and is designed to create transfer functions (Juggins, 2007). Log-transformed total phosphorus concentrations were used. A Weighted-Average Partial-Least-Squares (WA-PLS) method provided the best results. This method is considered to be best for varied datasets with high standard deviations and can reduce error associated with biases (ter Braak and Juggins 1993). Specifically, in weighted averaging models, which are the most commonly-used models in transfer function

construction, model results must undergo deshrinking so that the entire range of phosphorus concentrations can be accounted for because, as the data are averaged twice in the process of constructing the model, the possible range of outcomes becomes shrinks. Using the WA-PLS method helps to reduce the prediction error. Validity of the model was tested using leave-one-out methodology. This allows a bootstrap R^2 and RMSEP (root mean squared error of prediction) to be calculated. The RMSEP provides prediction error, or by how much the reconstructed concentrations deviate from the known concentrations. Specifically, the RMSEP compares the predicted concentration of phosphorus to the actual concentration, and allows one to identify by how much predictions deviate from real values.

WA-PLS provide components, which are linear combinations of variables which explain variation among the samples. Each component has an associated R^2 and RMSEP value. The component used to calculate past total phosphorus concentrations from fossil data is the last one with an associated decrease in RMSEP.

5.4 Results

5.4.1 Transfer Function Statistics

The statistics for the transfer function used to reconstruct total phosphorus are presented in Table 7. The percent change in RMSEP can be seen in the last column of Table 7. Once the RMSEP begins increasing, the inclusion of additional components becomes less useful in reconstructions as the prediction error is also increasing and thus estimates are becoming accurate.

Table 7: Statistics for the Transfer Function, Component used for estimating TP in the core samples highlighted in grey

	R^2	Bootstrap R^2	RMSEP (log TP units)	+/- %
Component 1	0.71	0.22	0.35	NA
Component 2	0.85	0.33	0.33	3.48
Component 3	0.90	0.35	0.34	-3.07
Component 4	0.93	0.34	0.36	-4.35
Component 5	0.95	0.32	0.38	-5.16

Figure 21 shows a comparison of the transfer function estimates with actual phosphorus concentrations (bottom left) and residuals (actual minus estimates) vs. actual concentrations (bottom right). The top part of Figure 21 depicts estimates from bootstrapping versus actual concentrations (left) and the bootstrapping residuals versus actual values (right). All graphs are for Component 2, the component with the best R^2 and RMSEP. The bottom left figure shows good correlations between actual, observed log total phosphorus (TP) and the estimates provided by the model (R^2=0.85). The graph of residuals compared with logTP indicates, that with the exception of concentrations between about 1.9 and 2.5 logTP units, the model tends to over-predict the concentration of phosphorus. In the bootstrapping figures, the relationship between estimates and observed logTP values is weaker, but still present (R^2=0.33 and RMSEP=0.33). The graph depicting the relationship between residuals and observed logTP indicates that the model tends to overestimate (estimate the concentration to be higher than it actually is) for low values and underestimate (estimate the concentration

to be lower than it actually is) for high values; however, the RMSEP indicates that prediction error will be fairly low.

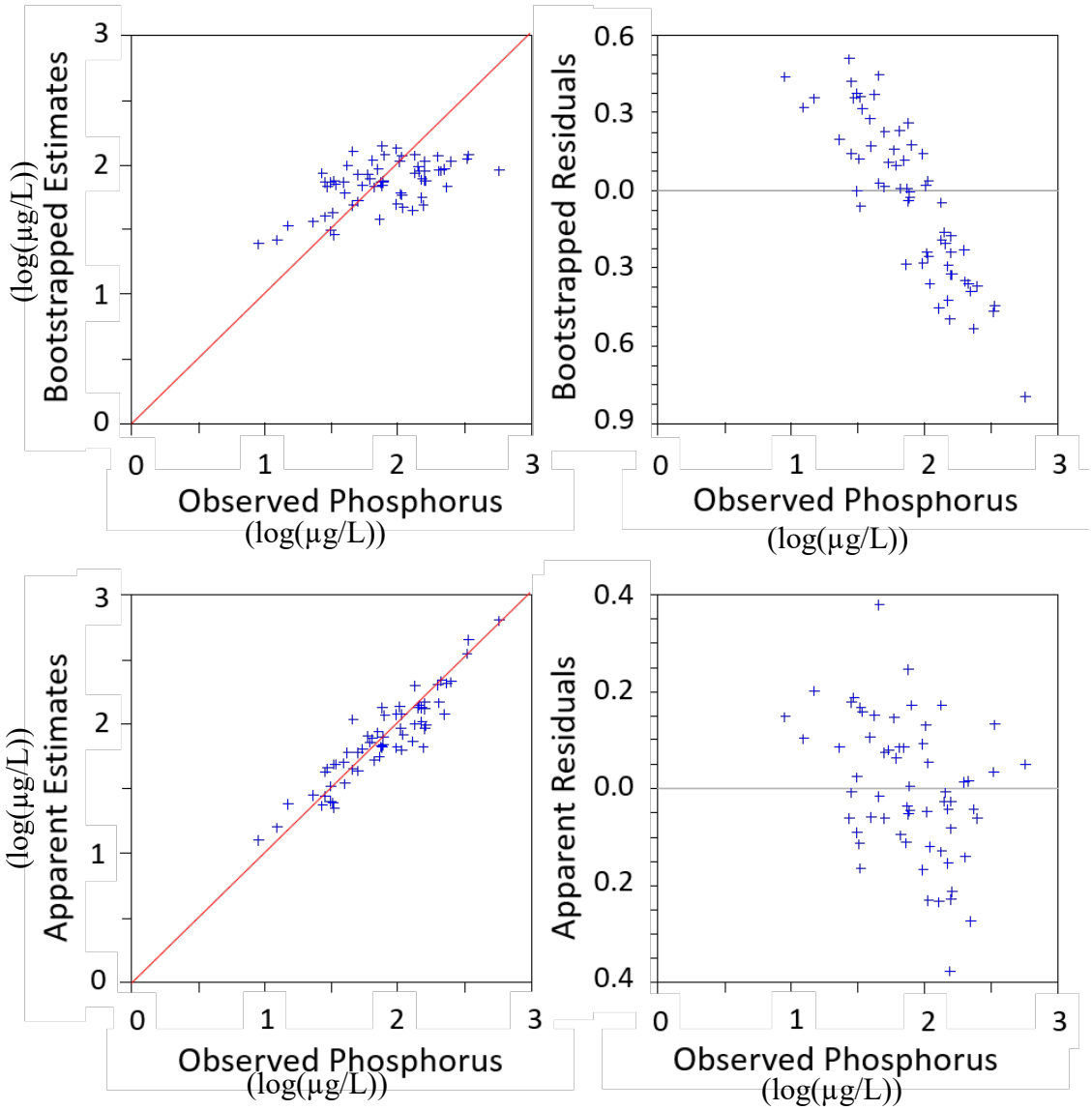

Figure 21: Comparison of estimated phosphorus, actual phosphorus, and residuals for transfer function used to estimate TP in core samples. The top two figures show bootstrapped estimates for TP (left) and bootstrapped residuals (actual minus estimated) (right) compared to observed TP concentrations. The bottom two figures show apparent estimates (left) and apparent residuals (right) for TP compared to observed TP concentrations. Apparent TP is the TP estimate based on the original data used to construct the model. Red line represents perfect agreement between estimates and actual TP concentrations.

5.4.2 Total Phosphorus Reconstructions

Total phosphorus and supporting data can be found in Figures 22 through 24 and is presented in Appendix 7. These figures compare the results of van Dam *et al.* (1994) and Porter (2008) trophic indices with the output of transfer functions for each site. Additionally, the cluster analyses are shown for each site. Clusters are highlighted to indicate where assemblages were expected to be influenced by low to high phosphorus concentration with warmer colors (red) indicating higher concentrations. Generally, total phosphorus increased through time; however, it is not always at its highest concentration in recent samples. In fact, at Site 2, the highest concentration occurred in the oldest sample.

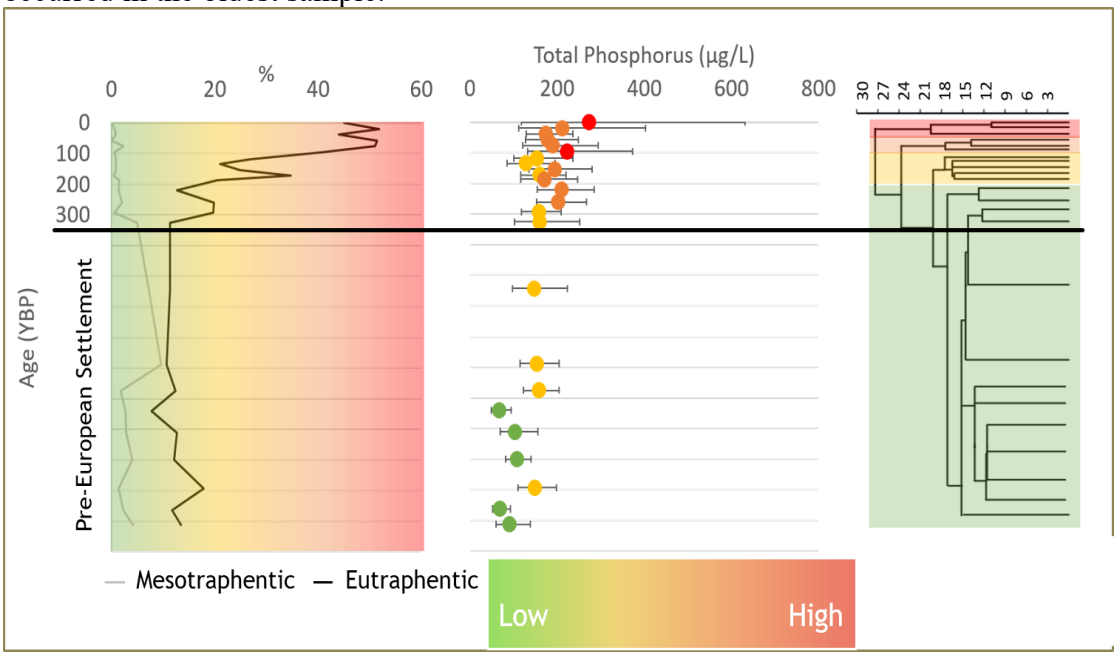

Figure 22: Historic phosphorus reconstruction at Site 1. From left to right, comparison of mesotraphentic and eutraphentic diatoms, reconstruction of total phosphorus based on the transfer function, and stratigraphically constrained cluster analysis. The Age axis shows the ages determined from ^{210}Pb, ^{137}Cs, and pollen chronohorizons through European settlement. Samples prior to European settlement are grouped together.

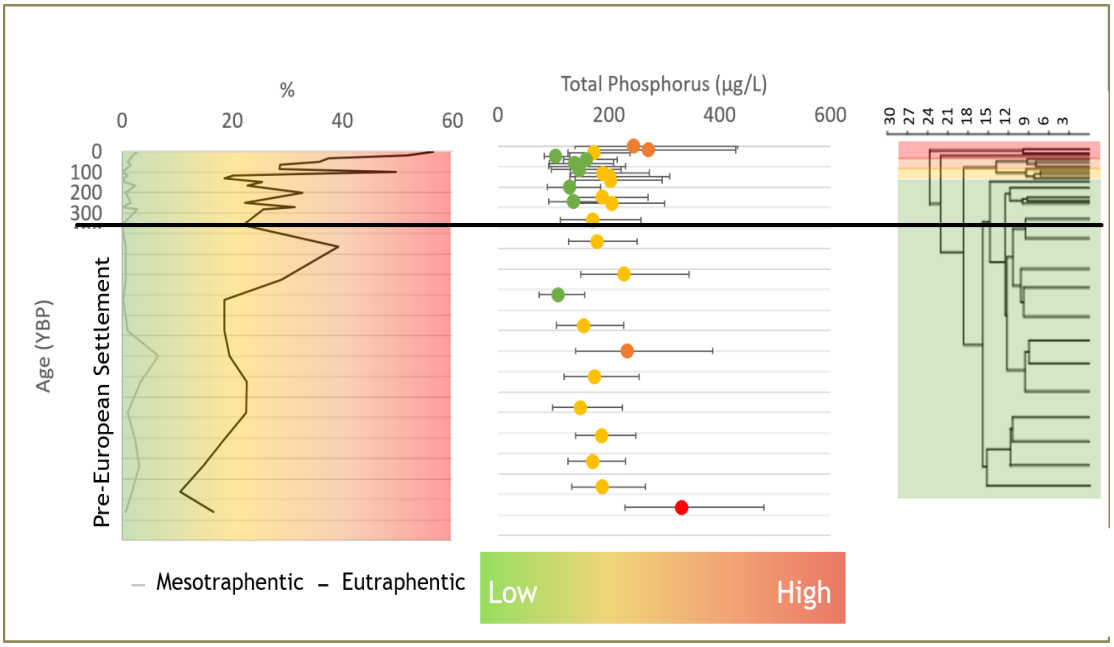

Figure 23: Historic phosphorus reconstruction at Site 2. From left to right, comparison of mesotraphentic and eutraphentic diatoms, reconstruction of total phosphorus based on the transfer function, and stratigraphically constrained cluster analysis.

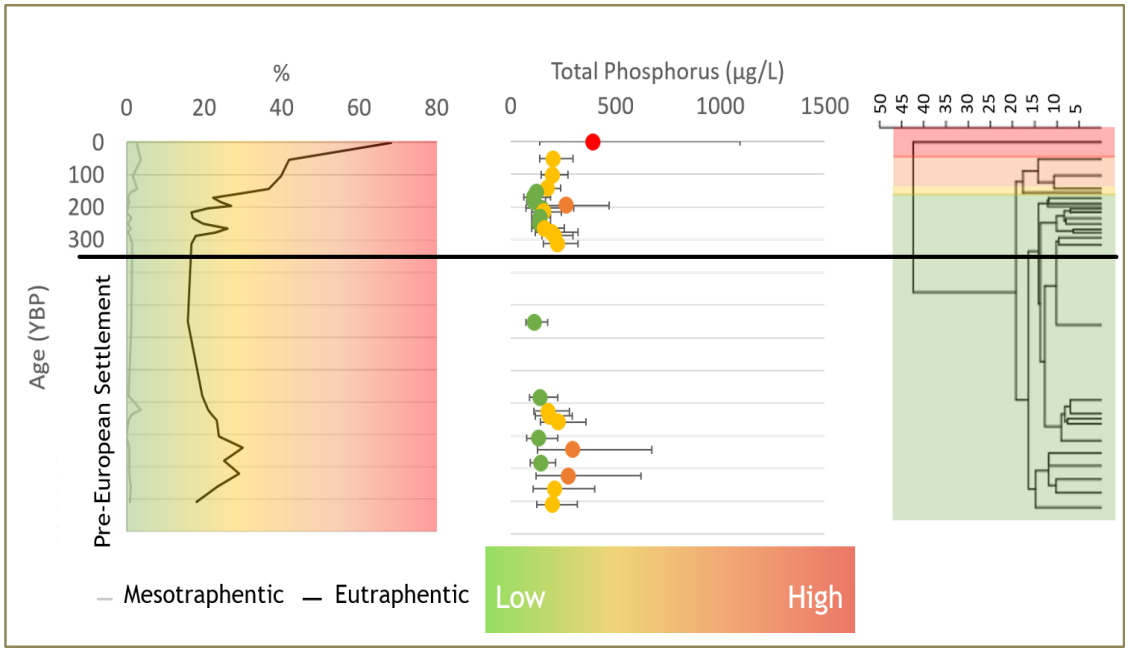

Figure 24: Historic phosphorus reconstruction at Site 3. From left to right, comparison of mesotraphentic and eutraphentic diatoms, reconstruction of total phosphorus based on the transfer function, and stratigraphically constrained cluster analysis.

The percent of eutraphentic and mesotraphentic diatoms in the sites are also shown through time in Figures 22 through 24. Generally, patterns seen in the percent of eutraphentic species and the concentrations of phosphorus through time are visually similar, with peaks and valleys occurring at similar times. However, the validity of these visual relationships is varied among the sites. At Sites 1 and 3, the percent eutraphentic diatoms and the reconstructed phosphorus concentrations are correlated (R^2=0.40 at both sites) (Figure 25). This relationship is not apparent in Site 2. Additionally, the fact that very few low-nutrient diatoms are found in the cores can be explained by the reconstructed total phosphorus concentrations, which are generally

moderate to high (about 67 to 391 µg/L based on the reconstructions from the transfer functions). All three sites have lower total phosphorus concentrations prior to 200 years ago, with the exception of Site 2, where phosphorus reaches its highest concentration nearly 1800 years before present.

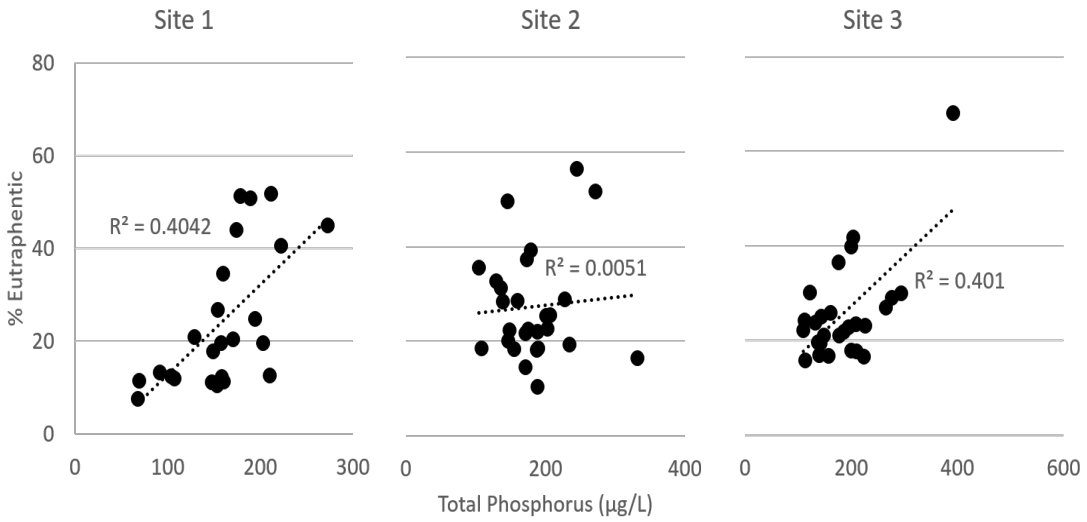

Figure 25: Comparison of % Eutraphentic diatoms based on van Dam *et al.* (1994) trophic index and total phosphorus reconstructions from the transfer function.

5.5 Discussion

5.5.1 Transfer Functions and Phosphorus

Transfer functions which provide total phosphorus estimations are rarely used in tidal systems. In general, these models are more frequently constructed for freshwater lakes and rivers, which generally include fewer conflicting constituents. For example, a transfer function designed for a freshwater lake would not have to control for influences such as salinity. Because the Christina River clearly has marine

and brackish influences, there are more variables to control for. Additionally, lakes typically have fewer species than tidal systems as they only include freshwater species, whereas tidal systems may include freshwater, brackish, and marine species.

Despite the complexity of the tidal oligohaline system that it was built to reconstruct, the prediction errors for this transfer function are only slightly higher than those designed for lakes (Tibby 2004, Reavie, *et al.,* 2006, Bennion, *et al.,* 2001, Bennion, *et al.,* 1996). Most of the lake-based total phosphorus transfer functions had prediction errors of 0.2-0.3 log (µg/L) TP. This transfer function constructed for this study and designed for a oligohaline tidal environment, had a prediction error of 0.33 log (µg/L) TP. While this is somewhat higher than for lacustrian environments, it is not unreasonable for a transfer function designed for a much more complicated system.

5.5.2 Challenges and Usefulness of Transfer Functions

Because it can be difficult to ensure that all of the assumptions required for accurate predictions are valid in a given transfer function, some researchers question the usefulness of transfer functions. For this reason, it is important to back up the results of transfer function analyses with other lines of evidence. In this case, a trophic index was compared to the results of the transfer function. Specifically, when the eutraphentic species increase in abundance, phosphorus should also increase. In this case, a relationship between the eutraphentic species and the total phosphorus as estimated by the transfer function are clearly related in Sites 1 and 3 (R^2=0.40 in Sites 1 and 3). Site 2 did not share this relationship (R^2=0.01). This may be related to the higher past phosphorus concentrations at this site. Additionally, the difference

between the transfer function results and the percent of eutraphentic taxa at Site 2 is visually apparent.

Cluster analysis also help identify how community structure changes overall, and, as phosphorus is one of the most important influences on community structure in this system, many of the community changes likely are related to changes in phosphorus concentrations. In general, while total phosphorus concentrations were variable in modern samples, higher concentrations tended to occur in samples deposited in the past 200 years, with the highest concentrations occurring in the most recent samples.

5.5.3 Nutrient Levels through Time

The Van Dam (1994) and Porter (2008) trophic score groups diatoms by their trophic levels and then the percentage of the assemblage in each group is compared through time. In this study, as in (Paper 1), only taxa in the high nutrient concentration group (eutraphentic) and mid-nutrient concentration group (mesotraphentic) were used. Diatoms with a preference for low-nutrient concentrations were not included as they are absent or present only in very low concentrations in the core samples. This was also observed in the Christina River by Velinsky *et al.* (2010). Therefore, the lowest trophic level which was common in the cores, mesotraphentic, was used to compare to the eutraphentic group in both Velinsky *et al.* (2010) and this study.

This leads to a question about why diatoms which live in low-nutrient conditions are absent or only present in low abundance, even prior to European Settlement. In general, it is expected that before agriculture became prevalent in the region, nutrients would have generally been low. This question can somewhat be

answered by the transfer function-based reconstruction of total phosphorus levels in the river. Based on the reconstructions, total phosphorus has always been relatively high in the tidal Christina River, with the lowest concentrations estimated to be approximately 67 µg/L and most samples having concentrations of over 100 µg/L. Reference conditions (i.e. pre-pollution levels) for total phosphorus in the mid-Atlantic Coastal plain, where the Christina River is located, range from 6.88 to 52.8 µg/L (United States Environmental Protection Agency, 2000). This indicates that the Christina River has historically had higher total phosphorus levels, and likely, therefore, also a higher trophic state, than many of the rivers and streams in this region. Because phosphorus levels were likely fairly high through the period studied, it is unlikely that diatom taxa that require lower nutrient level would be found in this site.

5.6 Conclusion

A phosphorus transfer function was designed that estimated total phosphorus in a tidal river. This transfer function used diatom assemblages in a core to reconstruct TP through time. In the tidal Christina River, TP generally increased through time; however, it appears that TP was always relatively high at this site, with the lowest estimated concentration being 67 µg/L. Prior to European settlement, concentrations of TP tended to be lower. Concentrations began to increase approximately 200 years before present, near the time of maximum deforestation for the region. The highest TP concentrations generally occur in the most recent samples, dated within the last 50 years.

Diatom-based transfer functions are useful in understanding anthropogenic impacts in aquatic systems, particularly those relating to nutrient concentrations. As shown in this study, they can help in understanding how tidal rivers have been impacted by land-use changes in the past and may continue to do so in the future. Additionally, reconstructions created using transfer functions have possible implications in restoration and support for environmental legislation, such as setting realistic goals based on the historic water quality of the site and identifying if a method of restoration is have the desired effect. Caution should be used in interpreting results without other lines of evidence, however, because it can be difficult to ensure that all assumptions are being met and errors associated with estimates may be high. If an additional line of evidence, such as a trophic index or cluster analysis can be used, the confidence in those results increases.

Chapter 6

CONCLUSION

The wetlands associated with tidal rivers, such as the Christina River, provide a variety of useful services, including removing contaminants from water, storing carbon, and flood abatement (Zedler & Kercher, 2005). Because they are incredibly useful and have been variously degraded through human activities, wetland maintenance and restoration are common activities. In order to remediate and monitor tidal rivers and their associated wetlands, it is important to have a goal and a way to determine if the goal has been achieved. By understanding how the environmental has been impacted by anthropogenic activities through time and continues to be impacted in the present, reasonable goals can be set.

The goal of this research was to reconstruct the water quality history of the tidal Christina River from before European settlement to the present. Specifically, the impacts of nutrients and metals were reconstructed so that agriculture and industrial activities, respectively, could be understood.

Trophic indices by Van Dam *et al.* (1994) and Porter (2008) indicated that impacts from nutrients began about 200 years before present, with a second, larger increase about 50 years before present. The initial increase can be considered to be related to increasing deforestation and agriculture in the region, while the second increase likely is related to the use of industrial fertilizers. Phosphorus detergents also likely played a role in increasing the trophic level.

Reconstructions of historical phosphorus concentrations based on a transfer function had good agreement with the trophic indices. Additionally, it indicated that the tidal Christina River has likely had high phosphorus concentrations, over 100 µg/L, even before the start of European settlement. This explains the lack of diatom taxa that prefer low-nutrient conditions.

Sediment metal extraction agrees well with the known timeline of industrialization in the Christina River and its watershed. Specifically, Zn concentrations, which were very low in the past, peaked at about 100 years before present, when two National Vulcanized Fiber Company plants opened on tributaries to the Christina River and a DuPont-owned pigment plant opened on the Christina River near Newport, DE. Regulations and closures of the plants has reduced Zn levels.

Overall, changes wrought by settlement and subsequent uses of the land began about 200 years before present. The impact has changed through time as land uses have changed. In general, nutrient impacts have gotten more prevalent through time, while metals peaked and then decreased in concentration following improved regulations and factory closures. Both should continue to be monitored as restoration efforts continue. A combination of water samples and diatoms would allow both a continuous view of water chemistry, as well as the impacts of water quality conditions on the biota of the river.

Chapter 7

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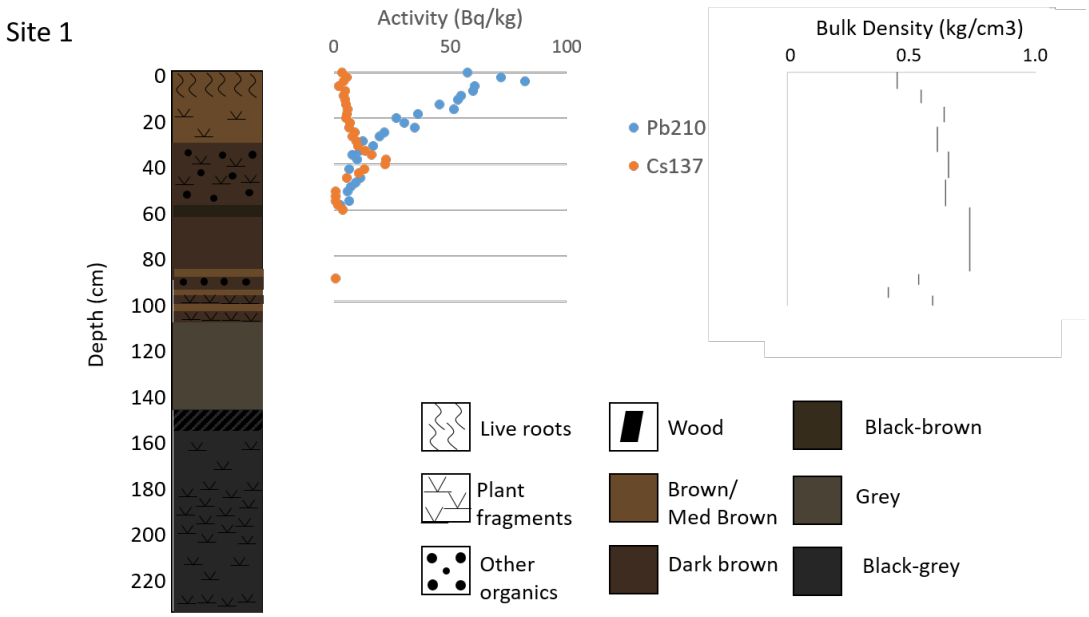
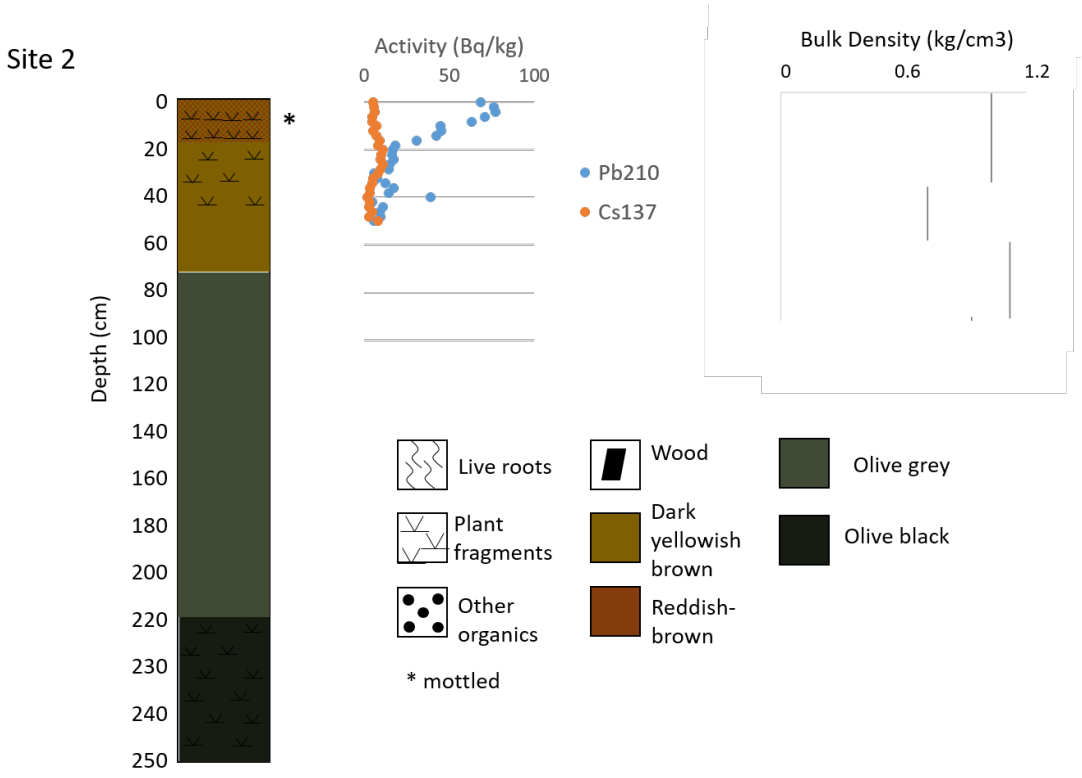
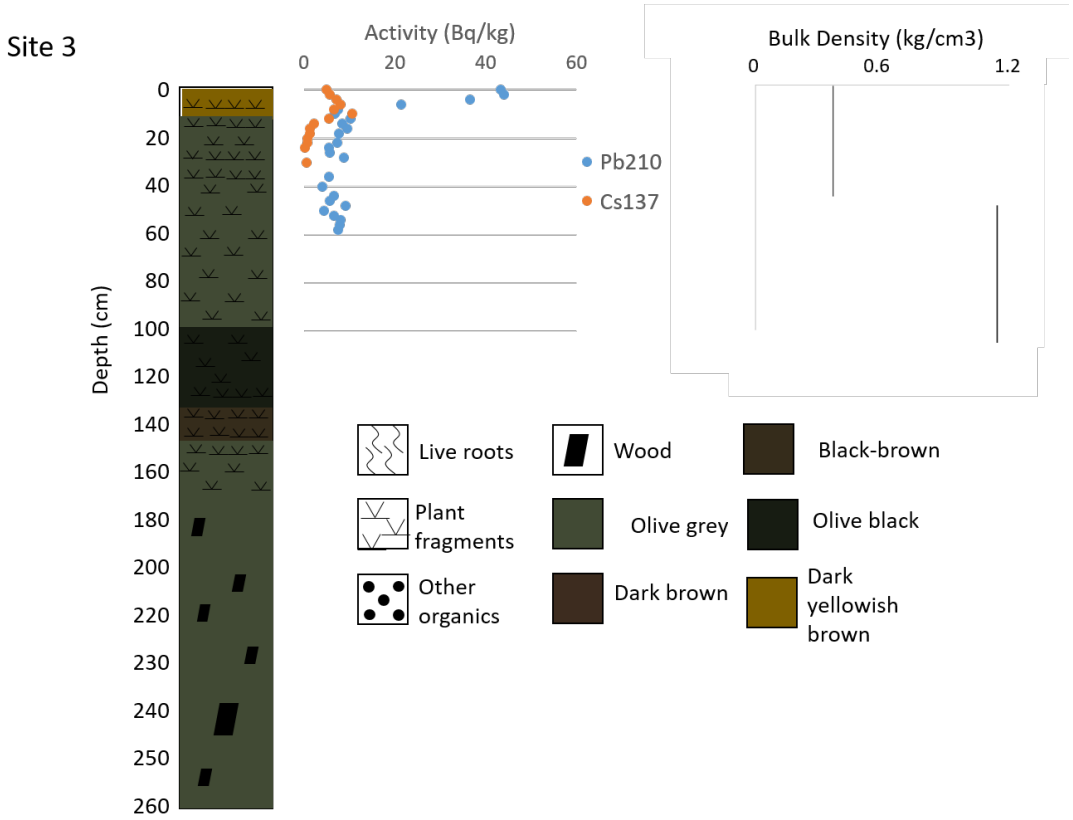
Appendix A

CORE DIAGRAMS




Site 2
Depth (cm)
0
20
40
60
80
100
120
140
160
180
200
220
230
240
250
*
Activity (Bq/kg)
0
50
100
Pb210
Cs137
Bulk Density (kg/cm3)
0
0.6
1.2
Live roots
Plant fragments
Other organics
Wood
Dark yellowish brown
Reddish-brown
Olive grey
Olive black
* mottled


Site 3
Activity (Bq/kg)
0
20
40
60
Pb210
Cs137
Bulk Density (kg/cm3)
0
0.6
1.2
Depth (cm)
0
20
40
60
80
100
120
140
160
180
200
220
230
240
250
260
Live roots
Wood
Black-brown
Plant fragments
Olive grey
Olive black
Other organics
Dark brown
Dark yellowish brown

Appendix B

RAW GAMMA COUNTER DATA

Site 1

Depth (cm)	Cs-137 (Bq/kg)	Uncertainty (Bq/kg)	Excess Pb-210 (Bq/kg)	Uncertainty (Bq/kg)
0-2	3.66	0.42	57.36	3.80
2-4	5.74	0.68	71.89	4.27
4-6	4.33	0.49	82.13	6.54
6-8	2.13	0.56	60.36	3.34
8-10	5.04	0.55	59.78	3.39
10-12	4.40	0.36	54.53	5.01
12-14	5.02	0.34	53.27	4.36
14-16	5.15	0.39	45.54	4.73
16-18	5.82	0.44	51.50	5.35
18-20	5.69	0.37	36.19	4.38
20-22	5.19	0.36	26.97	4.68
22-24	6.98	0.47	30.43	2.53
24-26	6.79	0.42	34.86	4.75
26-28	8.90	0.60	21.62	2.92
28-30	8.04	0.54	19.54	2.64
30-32	9.87	0.42	12.50	4.62
32-34	10.26	0.40	17.00	4.24
34-36	13.38	0.62	11.20	2.57
36-38	16.14	0.61	8.06	2.30
38-40	22.33	0.66	9.96	2.30
40-42	22.01	0.54	ND	ND
42-44	13.13	0.45	6.52	4.85
44-46	10.92	0.45	ND	ND
46-48	5.67	0.42	11.42	2.30
48-50	ND	ND	9.36	5.36
50-52	ND	ND	7.43	4.66

52-54	0.95	0.24	5.93	4.92
54-56	0.95	0.28	ND	ND
56-58	0.67	0.30	6.49	2.40
58-60	1.87	0.30	2.85	2.33
60-62	4.06	0.27	ND	ND
70-72	ND	ND	ND	ND
80-82	ND	ND	ND	ND
90-92	0.96	0.17	ND	ND
100-102	ND	ND	ND	ND

Site 2

Depth (cm)	Cs-137 (Bq/kg)	Uncertainty (Bq/kg)	Excess Pb-210 (Bq/kg)	Uncertainty (Bq/kg)
0-2	5.36	0.44	68.41	2.74
2-4	5.89	0.37	76.42	5.01
4-6	6.14	0.43	77.11	5.33
6-8	4.70	0.33	71.01	4.61
8-10	4.88	0.36	63.00	2.62
10-12	7.23	0.44	44.80	2.50
12-14	5.47	0.35	45.46	4.38
14-16	7.25	0.42	42.27	4.91
16-18	9.23	0.49	30.93	2.36
18-20	8.33	0.31	18.18	4.02
20-22	11.13	0.46	16.91	5.95
22-24	10.34	0.49	16.44	2.10
24-26	9.82	0.37	17.53	4.66
26-28	11.33	0.49	14.92	2.04
28-30	9.61	0.40	14.67	1.84
30-32	8.43	0.46	5.93	1.89
32-34	5.29	0.55	7.51	2.50
34-36	4.71	0.35	12.45	2.00
36-38	3.60	0.32	17.56	4.97
38-40	3.52	0.27	14.67	4.62
40-42	1.94	0.30	39.02	7.84
42-44	3.43	0.43	5.06	2.38
44-46	3.10	0.34	11.25	5.99
46-48	4.96	0.50	9.23	2.31
48-50	2.96	0.26	9.48	5.21

50-52	8.43	0.46	5.93	2.08
60-62	ND	ND	ND	ND
70-72	ND	ND	ND	ND
80-82	ND	ND	ND	ND
90-92	ND	ND	ND	ND
100-102	ND	ND	ND	ND

Site 3

Depth (cm)	Cs-137 (Bq/kg)	Uncertainty (Bq/kg)	Excess Pb-210 (Bq/kg)	Uncertainty (Bq/kg)
0-2	5.07	0.35	43.44	4.54
2-4	5.67	0.42	44.00	5.13
4-6	7.19	0.36	36.60	4.33
6-8	8.16	0.31	21.36	3.93
8-10	6.66	0.26	7.65	3.09
10-12	10.69	0.40	6.84	4.53
12-14	5.51	0.34	10.37	1.87
14-16	2.20	0.22	8.46	4.72
16-18	1.43	0.19	9.56	4.72
18-20	1.40	0.21	7.83	4.76
20-22	0.86	0.20	ND	ND
22-24	0.85	0.18	7.42	4.74
24-26	0.29	0.17	5.64	4.76
26-28	ND	ND	5.74	1.79
28-30	ND	ND	8.91	1.65
30-32	0.66	0.18	ND	ND
32-34	ND	ND	ND	ND
34-36	ND	ND	ND	ND
36-38	ND	ND	5.54	1.59
38-40	ND	ND	ND	ND
40-42	ND	ND	4.19	4.00
42-44	ND	ND	ND	ND
44-46	ND	ND	6.57	4.81
46-48	ND	ND	5.83	1.64
48-50	ND	ND	9.25	1.80
50-52	ND	ND	4.54	4.07
52-54	ND	ND	6.59	4.75
54-56	ND	ND	8.11	4.56

56-58	ND	ND	7.85	1.59
58-60	ND	ND	7.48	4.86
60-62	ND	ND	ND	ND
70-72	ND	ND	ND	ND
80-82	ND	ND	ND	ND
90-92	ND	ND	ND	ND
100-102	ND	ND	ND	ND

Appendix C

RAW POLLEN DATA

Site 1

Sample\Taxa	S1-100	S1-110	S1-120	S1-125	S1-130	S1-135	S1-140	S1-145	S1-150	S1-160
Acer	2		2	1	1	1	2	1	1	
Alnus		2	2	1	1	1				
Ambrosia	15	15	8	5	3	3	3	2	1	
Betula		1	2	2	1	1		1		2
Castaneae	1		2	1	1	1	2		3	2
Carya	8	8	8	7	5	6	1	7	1	7
Chenopodiaceae	1	1		1		1	1	4		1
Composteae		2		3						
Cornus			1	3	2	3	3	5	3	1
Folded Verrucate	14		5	6	10	5	17	8	13	6
Grass	28	23	25	20	25	12	25	11	27	6
Impatiens				1						
Larix				3		2		4	5	
Liquidambar	2							2		
Lycopodium	1									
Nymphaceae			1	2			1	1		
Picea	2				1					
Pinus				8		6		5		3
Polypod	3	20	21	22	30	36	23	28	11	29
Quercus	16	16	21	10	18	16	19	17	15	10
Rubus?				1	1	1	2		2	
Salix		4	2			2		1		
Selaginellacaea	2			2						2
Sphagnum	1			1	1	1	1			2
Tetrad		4				2		1		
Tsuga								2		2

Typha	4	4								
TOTAL	100	100	100	100	100	100	100	100	82	73

Site 2

Sample\Taxa	S2-110	S2-120	S2-125	S2-130	S2-135	S2-140	S2-145	S2-150
Acer	2				1	2	2	
Alnus	2	1	2			2	2	1
Ambrosia	9	7	6	4	6	4	3	1
Betula	2	2	7	2	2	3	2	5
Castaneae	2	1		2	1	4		2
Carya	10	8	12	8	10	6	9	8
Chenopodiaceae			1	1	1		1	
Composteae					1	1	3	
Cornus	4	5	2	2	1	3	2	2
Folded Verrucate	4	9	4	14	6	10	6	7
Grass	21	17	19	18	28	21	22	26
Larix	2	3	2	3	3	2		
Liquidambar				1	1		1	
Lycopodium								
Nymphaceae	7	2		5	1		2	
Picea	8	8	1					
Pinus	13	19	23	19	16	17	21	11
Polypod	5	2	4	7	8	4	11	12
Quercus	8	9	14	12	13	11	12	19
Rubus?				1	1			3
Salix								1
Selaginellacaea						6		
Sphagnum	1	4		1		1	1	1
Tetrad								
Tsuga		1	3			1		1
Typha		2				2		
TOTAL	100	100	100	100	100	100	100	100

Site 3

Sample\Taxa	S3-30	S3-70	S3-90	S3-100	S3-110	S3-130	S3-135	S3-140	S3-145	S3-150
Acer			1	2	3					

Alnus			1	1	6	2	2		2	2
Ambrosia	9	21	16	10	6	5	4	2	2	1
Betula	3	2	5				2			1
Castaneae			1	2	1	3	1	1	3	6
Carya	7	8	7	12	12	7	2	5	12	3
Chenopodiaceae	11	2	2	7	1	2	1	1		1
Composteae		2		3	1	3	3			
Cornus	1			4	2	1	1	3	2	2
Folded Verrucate	14	4	3	3	10	6	16	17	9	16
Grass	19	25	27	27	26	27	24	25	28	27
Larix						1	2		1	
Liquidambar									1	
Lycopodium									1	
Nymphaceae		1						2	1	2
Picea				2	2	2				
Pinus	1	12	16	7	4	3	7	3	8	2
Polypod	15	9	8	6	8	8	12	7	5	2
Quercus	16	10	9	12	15	29	18	23	21	32
Rubus?	1	1	2					9	1	1
Salix										
Selaginellacaea										
Sphagnum	1	3	2	1	1	1	1		2	1
Tetrad										
Tsuga				1	2		1	2	1	1
Typha	2						3			
TOTAL	100	100	100	100	100	100	100	100	100	100

Appendix D

SEDIMENT CHEMISTRY DATA

Data collected from Elementar Cube Analyzer (from Site 3)

Sample Depth	Weight (mg)	Percent N	Percent C	Percent H	Percent S	C/N ratio
0	20.2	0.52	6.81	1.454	1.165	13.09615
10	19.6	0.47	6.29	1.481	0.517	13.38298
20	21.5	0.36	4.96	1.228	0.37	13.77778
30	20.2	0.33	4.23	1.168	0.36	12.81818
40	19.2	0.27	3.65	1.076	0.322	13.51852
50	19	0.2	2.83	0.949	0.367	14.15
60	22.2	0.16	2.29	0.927	0.262	14.3125
70	19	0.12	1.17	0.854	0.22	9.75
80	21.7	0.11	1.61	0.771	0.194	14.63636
90	19.9	0.06	0.76	0.615	0.162	12.66667
100	20.9	0.09	1.09	0.702	0.163	12.11111
110	18.8	0.09	1.08	0.662	0.158	12
120	21.3	0.11	1.19	0.681	0.147	10.81818
130	19.2	0.53	8.25	1.409	0.275	15.56604
140	19.1	0.41	6.13	1.142	0.248	14.95122
150	20.8	0.49	7.86	1.357	0.307	16.04082
160	19.1	0.59	9.04	1.527	0.253	15.32203
170	20.7	0.43	6.33	1.181	0.205	14.72093
180	19.6	0.27	3.94	0.871	0.197	14.59259
190	19.5	0.26	3.55	0.851	0.191	13.65385
200	19.4	0.36	5.11	1.068	0.236	14.19444
210	22.4	0.23	3.01	0.741	0.173	13.08696
220	19.2	0.22	2.86	0.725	0.183	13
230	20.7	0.22	2.68	0.739	0.186	12.18182
240	21	0.23	2.88	0.732	0.169	12.52174
250	22.2	0.26	3.27	0.799	0.173	12.57692
260	19.6	0.24	3.36	0.772	0.197	14
270	22.3	0.26	3.36	0.787	0.172	12.92308

Data collected from Soil Testing Program at the University of Delaware Department of Agriculture and Natural Resources (from Site 1)

Depth (cm)	As (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Cu (mg/kg)	Ni (mg/kg)	Pb (mg/kg)	P (mg/kg)	Zn (mg/kg)
0	11.17	1.52	70.96	79.80	35.54	78.72	1199.10	592.48
10	18.44	0.57	77.21	81.21	33.49	90.50	839.31	642.17
20	19.10	0.47	128.70	111.28	38.37	127.03	919.18	831.53
30	33.40	0.45	232.04	196.91	42.40	206.65	1157.50	709.04
40	65.32	5.12	380.07	254.61	40.16	308.52	1103.70	1695.00
50	94.59	10.14	489.57	232.44	33.23	291.06	994.34	2454.80
60	78.63	3.51	664.63	133.09	31.69	201.24	930.26	1302.00
70	121.47	4.89	944.93	143.80	33.05	405.30	979.01	1365.40
80	108.61	0.00	471.47	87.46	26.45	225.69	782.74	495.92
90	127.96	0.00	708.58	103.94	28.81	204.11	956.90	469.47
100	109.50	0.26	565.67	102.06	32.92	197.64	1115.20	709.00
110	12.56	0.00	67.71	38.92	25.13	145.97	499.04	107.80
120	7.15	0.00	51.67	31.55	21.62	35.96	443.40	86.19
130	4.69	0.00	52.13	28.82	18.95	13.97	542.00	74.77
140	13.29	0.00	57.85	32.17	17.61	16.55	743.42	88.51
150	20.17	0.00	44.60	28.31	18.04	11.96	790.77	64.95
160	8.26	0.00	41.56	24.35	23.34	10.29	537.25	78.09
170	10.60	0.21	45.63	28.59	33.30	10.17	543.60	105.75
180	5.93	0.00	41.85	25.75	32.54	9.28	464.82	112.59
190	10.56	0.00	42.48	30.93	26.97	12.69	437.96	84.77
200	4.88	0.00	44.16	27.67	25.80	9.32	491.03	80.10
210	8.12	0.00	40.65	28.63	23.97	9.92	512.20	76.11
220	4.40	0.00	35.45	25.63	21.51	7.75	553.21	78.44
230	4.86	0.00	33.46	21.20	18.21	8.31	549.92	73.20

Appendix E

RAW DIATOM DATA

This appendix contains raw diatom data from one core at each location. Data include counts and percent abundance. The first table includes the names and abbreviations for the species counted in the Christina River samples as well as the ones used in the transfer function. Sample numbers indicate the Site number (i.e. S1 is Site 1) and depth in centimeters of the sample. Thus, S1-0 is a sample taken at 0 cm from Site 1

Achnanthes brevipes Agardh	ACbrevip
Achnanthes brevipes var. intermedia (Kützing) Cleve	ACbrvint
Achnanthes cf. rupestoides Hohn	ACcfrpst
Achnanthes coarctata (Brébisson ex W. Smith) Grunow	ACcoarct
Achnanthes harveyi Reimer	ACharvey
Achnanthes levanderi Hustedt	AClevand
Achnanthes lutheri Hustedt	ACluther
Achnanthes ploenensis var. gessneri (Hustedt) Lange-Bertalot	ACploges
Achnanthes subhudsonis var. kraeuselii (Cholnoky) Cholnoky	ACsubkra
Achnanthes submarina Hustedt	ACsubmar
Adlafia bryophila (Petersen) Moser, Lange-Bertalot et Metzeltin	ADbryoph
Adlafia minuscula var. muralis (Grunow) Lange-Bertalot	ADminmur
Adlafia minuscula (Grunow) Lange-Bertalot	ADminusc
Aneumastus tuscula (Ehrenberg) Mann et Stickle	AEtuscul
Achnanthidium affine (Grunow) Czarnecki	AHaffine
Achnanthidium altergracillima (Lange-Bertalot) Round et Bukhtiyarova	AHalterg
Achnanthidium atomus (Hustedt) Monnier, Lange-Bertalot et Ector	Ahatomus
Achnanthidium caledonicum (Lange-Bertalot) Lange Bertalot	AHcaledo
Achnanthidium catenatum (Bily et Marvan) Lange-Bertalot	AHcatena
Achnanthidium deflexum (Reimer) Kingston	Ahdeflex
Achnanthidium eutrophilum (Lange-Bertalot) Lange-Bertalot	AHeutro
Achnanthidium exiguum (Grunow) Czarnecki	AHexigum
Achnanthidium exilis (Kützing) Heiberg	AHexilis
Achnanthidium macrocephalum (Hustedt) Round et Bukhtiyarova	AHmacroc
Achnanthidium microcephalum Kützing	AHmicroc

Achnanthidium minutissimum capitate morph (Kützing) Czarnecki	AHmincap
Achnanthidium minutissimum (Kützing) Czarnecki	AHminuti
Achnanthidium reimeri (Camburn) Ponader et Potapova	AHreimer
Achnanthidium rivulare Potapova et Ponader	Ahrivula
Achnanthidium semiapertum (Guermeur) Andresen, Stoermer et Kreis	AHsemia
Achnanthidium minutissimum linear-lanceolate with stauros (Kützing) Czarnecki	AHstauro
Achnanthidium subsalsum (Petersen) Aboal	AHsubsal
Actinella punctata F.W. Lewis	AIpuncta
Amphipleura pellucida (Kützing) Kützing	ALpelluc
Amphora sp. 1 ?	AM1?
Amphora sp. 2 ?	AM2?
Amphora sp. 4 ?	AM4?
Amphora sp. 1 ANS WRC	AM7WRC
Amphora aequalis Krammer	Amaequal
Amphora copulata (Kützing) Schoeman et Archibald	AMcopula
Amphora delicatissima Krasske	Amdeliss
Amphora eximia Carter	AMeximia
Amphora inariensis Krammer	AMinarie
Amphora ovalis (Kützing) Kützing	AMovalis
Amphora pediculus (Kützing) Grunow	AMpedcls
Amphora sp. 1 MUR DME	AMsp1MUR
Amphora sp. 3 ANS NX LR	AMsp3NXR
Amphora subtropica Wachnicka et Gaiser	AMsubtro
Asterionella formosa Hassall	ASformos
Astartiella sp. 1 ?	ASTARSP1
Actinocyclus normanii (Gregory) Hustedt	ATnorman
Actinocyclus normanii fo. subsalsus (Juhlin-Dannfelt) Hustedt	ATnrmsbs
Aulacoseira alpigena (Grunow) Krammer	AUalpige
Aulacoseira ambigua (Grunow) Simonsen	AUambig
Aulacoseira crassipunctata Krammer	AUcrassi
Aulacoseira distans var. nivaloides (Camburn) Haworth	AUdisnoi
Aulacoseira distans (Ehrenberg) Simonsen	AUdistns
Aulacoseira granulata (Ehrenberg) Simonsen	AUgranlt
Aulacoseira granulata var. angustissima (Müller) Simonsen	AUgrnang
Aulacoseira herzogii (Lemmermann) Simonsen	AUherz

Aulacoseira islandica (Müller) Simonsen	AUisland
Aulacoseira italica (Ehrenberg) Simonsen	AUitalic
Aulacoseira lacustris (Grunow) Krammer	AUlacust
Aulacoseira laevissima (Grunow) Krammer	AUlaevis
Aulacoseira lirata (Ehrenberg) Ross	AUlirata
Aulacoseira muzzanensis (Meister) Krammer	AUmuzzan
Aulacoseira nygaardii (Camburn) Camburn et Charles	AUnygaar
Aulacoseira perglabra (Østrup) Haworth	AUpergla
Aulacoseira pfaffiana (Reinsch) Krammer	AUpfaff
Aulacoseira pusilla (Meister) Tuji et Houki	AUpusill
Aulacoseira sp. 1 ?	AUsp1?
Aulacoseira subarctica (Müller) Haworth	AUsubart
Aulacoseira tenella (Nygaard) Simonsen	AUtenell
Aulacoseira tethera Haworth	AUtether
Aulacoseira valida (Grunow) Krammer	AUvalida
Actinoptychus senarius (Ehrenberg) Ehrenberg	AYsen
Bacillaria paradoxa Gmelin	BApardxa
Berkeleya sp. 1 ?	BE1?
Berkeleya rutilans (Trentepohl ex Roth) Grunow	BErutila
Biremis sp. 1 ?	BM1?
Biremis circumtexta (Meister ex Hustedt) Lange-Bertalot et Witkowski	BMcircum
Brachysira garrensis (Lange-Bertalot et Krammer) Lange-Bertalot	BRacgarr
Brachysira brebissonii Ross	BRbrebsn
Brachysira follis (Ehrenberg) Ross	BRfollis
Brachysira microcephala (Kützing) Compère	BRmicroc
Brockmanniella sp. 1 ?	Brocksp1
Brachysira serians (Brébisson) Round et Mann	BRserans
Brachysira sp. 1 ?	BRsp1?
Brachysira styriaca (Grunow) Ross	BRsty
Brachysira vitrea (Grunow) Ross	BRvitrea
Caloneis sp. 1 ?	CA1?
Caloneis alpestris (Grunow) Cleve	CAalpest
Caloneis bacillum (Grunow) Cleve	CAbacill
Caloneis bacillum var. lancettula (Schulz) Hustedt	CAbaclan
Caloneis hyalina Hustedt	CAhyalin
Caloneis limosa (Kützing) Patrick	CAlimosa
Caloneis pulchra Messikommer	CApulchr

Caloneis schumanniana (Grunow) Cleve	CAschuma
Caloneis silicula (Ehrenberg) Cleve	CAsilicu
Caloneis silicula var. peisonis Hustedt	CAsilpei
Caloneis thermalis (Grunow) Krammer	CAtherm
Caloneis ventricosa var. minuta (Grunow) Mills	CAvenmin
Caloneis ventricosa var. truncatula (Grunow) Meister	CAventru
Caloneis westii (Smith) Hendey	CAwestii
Cymbopleura cuspidata (Kützing) Krammer	CBcuspid
Cymbopleura hybrida (Grunow) Krammer	CBhybrid
Cymbopleura inaequalis (Ehrenberg) Krammer	CBinaeql
Cymbopleura incerta (Grunow) Krammer	CBincert
Cymbopleura lapponica (Grunow) Krammer	CBlappon
Cymbopleura naviculiformis (Auerswald) Krammer	CBnavicu
Cymbopleura subcuspidata (Krammer) Krammer	CBsubcus
Cocconeis sp. 1 ?	CC1?
Cocconeis sp. 2 ?	CC2?
Cocconeis disculus (Schumann) Cleve	CCdiscul
Cocconeis fluviatilis Wallace	CCfluvtl
Cocconeis klamathensis Sovereign	CCklamth
Cocconeis neodiminuta Krammer	CCneodim
Cocconeis neothumensis Krammer	CCneothu
Cocconeis pediculus Ehrenberg	CCpedcls
Cocconeis placentula Ehrenberg	CCplacen
Cocconeis placentula var. euglypta (Ehrenberg) Grunow	CCplaeug
Cocconeis placentula var. lineata (Ehrenberg) Van Heurck	CCplalin
Cocconeis pseudothumensis Reichardt	CCpsdthm
Cocconeis pseudolineata (Geitler) Lange-Bertalot	CCpselin
Cocconeis scutellum Ehrenberg	CCscutel
Coscinodiscus sp. 1 ?	CD1?
Ctenophora pulchella var. lacerata (Hustedt) Bukhtiyarova	CEpulace
Ctenophora pulchella (Ralfs ex Kützing) Williams et Round	CEpulch
Campylodiscus clypeus (Ehrenberg) Ehrenberg ex Kützing	CIclypeu
Cosmioneis grossepunctata (Hustedt) Mann	CJgrspta
Cosmioneis pusilla (Smith) Mann et Stickle	CJpusill
Campylostylus normannianus (Greville) Gerloff, Natour et Rivera	CKnorman
Cymbella sp. 1 ?	CM1?
Cymbella sp. 2 ?	CM2?

Cymbella aspera (Ehrenberg) Cleve	CMaera
Cymbella affinis Kützing	CMaffins
Cymbella amphicephala Nägeli	CMamphic
Cymbella cistula (Ehrenberg) Kirchner	CMcistul
Cymbella heteropleura (Ehrenberg) Kützing	CMheterp
Cymbella lanceolata (Agardh) Agardh	CMlanceo
Cymbella naviculacea Grunow	Cmnavicu
Cymbella proxima Reimer	CMproxim
Cymbella schubartoides Camburn et Charles	CMschbro
Cymbella sp. 12 NAWQA HAMSHER	CMsp12
Cymbella subturgidula Krammer	Cmsubtur
Cymbella tumida (Brébisson ex Kützing) Van Heurck	CMtumida
Capartogramma crucicula (Grunow ex Cleve) Ross	CPcrucic
Chamaepinnularia sp. 1 ?	CQ1?
Chamaepinnularia bremensis (Hustedt) Lange-Bertalot	CQbremen
Chamaepinnularia evanida (Hustedt) Lange-Bertalot	CQevanid
Chamaepinnularia krookii (Grunow) Lange-Bertalot et Krammer	CQkrooki
Chamaepinnularia mediocris (Krasske) Lange-Bertalot	CQmedioc
Chamaepinnularia soehrensis var. hassiaca (Krasske) Lange-Bertalot	CQsoehas
Chamaepinnularia soehrensis (Krasske) Lange-Bertalot et Krammer	CQsohere
Cymatosira belgica Grunow	CRbelgic
Cyclostephanos costatilimbus (Kobayasi et Kobayashi) Stoermer, Håkansson et Theriot	CScostat
Cyclostephanos dubius (Fricke) Round	CSdubius
Cyclostephanos invisitatus (Hohn et Hellerman) Theriot, Stoermer et Håkansson	CSinvisi
Cyclostephanos sp. 1 ?	Csspec1?
Cyclostephanos tholiformis Stoermer, Håkansson et Theriot	CStholif
Cymatopleura solea (Brébisson) W. Smith	CTsolea
Cavinula cocconeiformis (Gregory ex Greville) Mann et Stickle	CVcoccon
Cavinula jaernefeltii (Hustedt) Mann et Stickle	CVjaernf
Cavinula lacustris (Gregory) Mann et Stickle	CVlacust
Cavinula lapidosa (Krasske) Lange-Bertalot	CVlapid
Cavinula pseudoscutiformis (Hustedt) Mann et Stickle	CVpsesct
Cavinula scutiformis (Grunow ex Schmidt) Mann et Stickle	CVscuit
Cavinula variostriata (Krasske) Mann	CVvarios
Cavinula vincentii Antoniades et Hamilton	CVvincnt

Cyclotella sp. 1 ?	CY1?
Cyclotella atomus Hustedt	CYatomus
Cyclotella bodanica var. lemanica (Müller) Bachmann	CYbodlem
Cyclotella cf. cryptica UMICH Reimann et Volcani	CYcfcryp
Cyclotella cf. distinguenda Hustedt	CYcfdtga
Cyclotella cryptica Reimann, Lewin et Guillard	CYcrypt
Cyclotella distinguenda Hustedt	CYdistin
Cyclotella gamma Sovereign	CYgamma
Cyclotella hakanssoniae Wendker	CYhakans
Cyclotella meduanae Germain	CYmedu
Cyclotella meneghiniana Kützing	CYmenegh
Cyclotella michiganiana Skvortzow	CYmichig
Cyclotella ocellata Pantocsek	CYocella
Cyclotella sp. 2 NRSA KMM	CYsp2nrs
Cyclotella striata (Kützing) Grunow	CYstriat
Diatoma anceps (Ehrenberg) Kirchner	DAanceps
Diatoma hyemalis (Lyngbye) Heiberg	DAhyemal
Diatoma mesodon (Ehrenberg) Kützing	DAmesodo
Diatoma moniliformis Kützing	DAmonilf
Diatoma tenuis Agardh	DAten
Diatoma vulgaris Bory	DAvulg
Diatoma vulgaris var. linearis Grunow	DAvuline
Decussata placenta (Ehrenberg) Lange-Bertalot	DCplacen
Didymosphenia geminata (Lyngbye) Schmidt	DDgenim
Denticula elegans Kützing	DEelegan
Denticula kuetzingii Grunow	DEkuetzi
Denticula spp.	Despp
Denticula subtilis Grunow	DEsubtil
Denticula tenuis Kützing	DEtenuis
Delphineis sp. 2 ?	DH2?
Delphineis minutissima (Hustedt) Simonsen	DHmin
Delphineis surirella (Ehrenberg) Andrews	DHsurirl
Diadesmis confervacea Kützing	DIconfer
Diadesmis contenta (Grunow ex Van Heurck) Mann	DIconten
Diadesmis gallica Smith	DIgallic
Diadesmis laevissima (Cleve) Mann	DIlaevis
Diadesmis perpusilla (Grunow) Mann	DIperpus

Discostella glomerata (Bachmann) Houk et Klee	DLglome
Diploneis sp. 1 ?	DP1?
Diploneis bombus Ehrenberg	DPbombus
Diploneis elliptica (Kützing) Cleve	DPellipt
Diploneis finnica (Ehrenberg) Cleve	DPfinnic
Diploneis interrupta (Kützing) Cleve	DPinterr
Diploneis modica Hustedt	DPmodica
Diploneis oblongella (Nägeli ex Kützing) Ross	DPoblong
Diploneis parma Cleve	DPparma
Diploneis peterseni Hustedt	DPpeters
Diploneis pseudovalis Hustedt	DPpsudov
Diploneis puella (Schumann) Cleve	DPpuella
Diploneis smithii (Brébisson) Cleve	DPsmithi
Diploneis subovalis Cleve	DPsubova
Discostella pseudostelligera (Hustedt) Houk et Klee	DTpseuds
Discostella stelligera (Cleve et Grunow) Houk et Klee	DTstelli
Discostella woltereckii (Hustedt) Houk et Klee	DTwolter
Encyonema auerswaldii Rabenhorst	ECauersw
Encyonema elginense (Krammer) Mann	ECelgine
Encyonema lunatum (Smith) Van Heurck	EClunatu
Encyonema mesianum (Cholnoky) Mann	ECmesian
Encyonema minutum (Hilse) Mann	ECminutu
Encyonema muelleri (Hustedt) Mann	ECmuelle
Encyonema neogracile Krammer	ECneogra
Encyonema norvegicum (Grunow) Mayer	ECnorve
Encyonema perpusillum (Cleve-Euler) Mann	ECperpus
Encyonema prostratum (Berkeley) Ralfs	ECprstra
Encyonema silesiacum (Bleisch) Mann	ECsilesi
Encyonema triangulum (Ehrenberg) Kützing	ECtriang
Ellerbeckia arenaria (Moore ex Ralfs) Crawford	ELarenar
Entomoneis sp. 1 ?	EN1?
Entomoneis alata (Ehrenberg) Ehrenberg	ENalata
Entomoneis ornata (Bailey) Reimer	ENornata
Entomoneis paludosa (Smith) Reimer	ENpaludo
Eolimna minima (Grunow) Lange-Bertalot	Eolmini
Eolimna subadnata (Hustedt) Moser, Lange-Bertalot et Metzeltin	EOsubadn
Eolimna subminuscula (Manguin) Moser, Lange-Bertalot et Metzeltin	EOsubmin

Eolimna tantula (Hustedt) Lange-Bertalot	EOtantul
Epithemia sp. 1 ?	EP1?
Epithemia adnata (Kützing) Brébisson	EPadnata
Epithemia turgida (Ehrenberg) Kützing	EPturgid
Eucocconeis alpestris (Brun) Lange-Bertalot	ESalpes
Eucocconeis flexella (Kützing) Cleve	ESflexel
Eucocconeis laevis (Østrup) Lange-Bertalot	ESlaevis
Eunotia sp. 1 ?	EU1?
Eunotia sp. 2 ?	EU2?
Eunotia arcus Ehrenberg	EUarcus
Eunotia bactriana Ehrenberg	EUbactri
Eunotia bidentula Smith	EUbident
Eunotia bilunaris var. capitata (Grunow) Aboal	EUbilcap
Eunotia bilunaris var. linearis (Okuno) Lange-Bertalot et Nörpel	EUbillin
Eunotia bilunaris (Ehrenberg) Souza	EUbilun
Eunotia carolina Patrick	EUcaroli
Eunotia circumborealis Lange-Bertalot et Nörpel	EUcircum
Eunotia cristagalli Cleve	EUcrsgal
Eunotia denticulata (Brébisson) Rabenhorst	EUdentic
Eunotia diodon Ehrenberg	EUdiodon
Eunotia elegans Østrup	EUelegan
Eunotia exigua var. bidens Hustedt	EUexibid
Eunotia exigua (Brébisson) Rabenhorst	EUexigua
Eunotia exigua var. tridentula Østrup	EUexitri
Eunotia faba (Ehrenberg) Grunow	EUfaba
Eunotia fallax Cleve-Euler	EUfallax
Eunotia flexuosa (Brébisson ex Kutzing) Kützing	EUflexuo
Eunotia formica Ehrenberg	EUformic
Eunotia groenlandica (Grunow) Nörpel-Schempp et Lange-Bertalot	EUgroenl
Eunotia implicata Nörpel, Alles et Lange-Bertalot	EUimplic
Eunotia incisa Smith ex Gregory	EUincisa
Eunotia indica Grunow	EUindica
Eunotia intermedia (Krasske ex Hustedt) Nörpel et Lange-Bertalot	EUinterm
Eunotia maior (Smith) Rabenhorst	EUmaior
Eunotia meisteri Hustedt	EUmeiste
Eunotia microcephala Krasske	EUmicroc
Eunotia microcephala var. tridentata (Mayer) Hustedt	EUmictri

Eunotia monodon Ehrenberg	EUmonodo
Eunotia mucophila (Lange-Bertalot et Nörpel-Schempp) Lange-Bertalot	EUmucoph
Eunotia muscicola Krasske	EUmuscic
Eunotia muscicola var. tridentula Nörpel et Lange-Bertalot	EUmustri
Eunotia naegelii Migula	EUnaegel
Eunotia paludosa var. trinacria (Krasske) Nörpel et Alles	EUpaltri
Eunotia paludosa Grunow	EUpaludo
Eunotia parallela Ehrenberg	EUparall
Eunotia pectinalis (Kützing) Rabenhorst	EUpectin
Eunotia pectinalis var. undulata (Ralfs) Rabenhorst	EUpecund
Eunotia pectinalis var. ventricosa (Ehrenberg) Grunow	EUpecven
Eunotia perpusilla Grunow	EUperpus
Eunotia pirla Carter et Flower	EUpirla
Eunotia praerupta var. bidens (Ehrenberg) Grunow	EUprabid
Eunotia praerupta Ehrenberg	EUpraeru
Eunotia rhomboidea Hustedt	EUrhombo
Eunotia satelles (Nörpel-Schempp et Lange-Bertalot) Nörpel-Schempp et Lange-Bertalot	EUsatell
Eunotia septentrionalis Østrup	EUsepten
Eunotia serra var. diadema (Ehrenberg) Patrick	EUserdia
Eunotia serra Ehrenberg	EUserra
Eunotia siberica Cleve	EUsiberc
Eunotia siolii Hustedt	Eusiolii
Eunotia soleirolii (Kützing) Rabenhorst	EUsoleir
Eunotia spp.	EUspp
Eunotia subarcuatoides Alles, Nörpel et Lange-Bertalot	EUsubarc
Eunotia sudetica Müller	EUsudeti
Eunotia tenella (Grunow) Hustedt	EUtenell
Eunotia tetraodon Ehrenberg	EUtetrao
Eunotia valida Hustedt	EUvalida
Eunotia vanheurckii var. intermedia (Krasske ex Hustedt) Patrick	EUvanint
Eunotia veneris (Kützing) De Toni	EUveneri
Eunotia zasuminensis (Cabejszekowna) Körner	EUzasumi
Eunotia zygodon Ehrenberg	EUzygodo
Encyonopsis aff. cesatii EAM (Rabenhorst) Krammer	EYaffces
Encyonopsis cesatii (Rabenhorst) Krammer	EYcesati
Encyonopsis descripta (Hustedt) Krammer	Eydescrp

Encyonopsis krammeri Reichardt	Eykramme
Encyonopsis microcephala (Grunow) Krammer	EYmicroc
Fallacia sp. 1 ?	FA1?
Fallacia cryptolyra (Brockmann) Stickle et Mann	FAcrypto
Fallacia indifferens (Hustedt) Mann	FAindiff
Fallacia lenzii (Hustedt) Lange-Bertalot	FAlenzii
Fallacia maceria (Schimanski) Lange-Bertalot	FAmaceri
Fallacia monoculata (Hustedt) Mann	FAmonoc
Fallacia omissa (Hustedt) Mann	FAomissa
Fallacia pygmaea (Kützing) Stickle et Mann	FApygmae
Fallacia sp. 1 MUR DME	FAsp1MUR
Fallacia subhamulata (Grunow) Mann	FAsubham
Fallacia sublucidula (Hustedt) Mann	FAsubluc
Fallacia tenera (Hustedt) Mann	FAtener2
Fragilariforma bicapitata (Mayer) Williams et Round	FGbicapi
Fragilariforma constricta (Ehrenberg) Williams et Round	FGconstr
Fragilariforma constricta fo. stricta (Cleve-Euler) Poulin	FGconsts
Fragilariforma hungarica var. tumida (Cleve-Euler) Hamilton	FGhungar
Fragilariforma lata (Cleve-Euler) Williams et Round	FGlata
Fragilariforma strangulata (Zanon) Williams et Round	FGstrang
Fragilariforma virescens var. capitata (Østrup) Czarnecki	FGvicap
Fragilariforma virescens (Ralfs) Williams et Round	FGviresc
Fistulifera pelliculosa (Brébisson) Lange-Bertalot	FIpelli
Fragilaria sp. 1 ?	FR1?
Fragilaria sp. 2 ?	FR2?
Fragilaria sp. 3 ?	FR3?
Fragilaria capucina var. fragilarioides (Grunow) Ludwig et Flores	FRcapfra
Fragilaria capucina var. gracilis (Østrup) Hustedt	FRcapgra
Fragilaria capucina Desmazières	FRcapuci
Fragilaria crotonensis Kitton	FRcroton
Fragilaria famelica (Kützing) Lange-Bertalot	FRfameli
Fragilaria improbula Witkowski et Lange-Bertalot	FRimprob
Fragilaria mesolepta Rabenhorst	FRmesole
Fragilaria neoproducta Lange-Bertalot	FRneoprd
Fragilaria nitzschioides Grunow	FRnitzsc
Fragilaria pinnata var. acuminata Mayer	FRpinacu
Fragilaria rhabdosoma Ehrenberg	FRrhabdo

Fragilaria sepes Ehrenberg	FRsepes
Fragilaria tenera (Smith) Lange-Bertalot	FRtenera
Fragilaria vaucheriae (Kützing) Petersen	FRvauche
Fragilaria zeilleri var. elliptica Gasse	FRzeiell
Frustulia sp. 1 ?	FS1?
Frustulia amphipleuroides (Grunow) Cleve-Euler	FSamphi
Frustulia crassinervia (Brébisson) Lange-Bertalot et Krammer	Fscrassi
Frustulia creuzburgensis (Krasske) Hustedt	FScreuzb
Frustulia erifuga Lange-Bertalot et Krammer	FSerifu
Frustulia krammeri Lange-Bertalot et Metzeltin	FSkramme
Frustulia rhomboides var. capitata (Mayer) Patrick	FSrhocap
Frustulia saxonica Rabenhorst	FSsaxonc
Frustulia vulgaris (Thwaites) De Toni	FSvulgar
Frustulia weinholdii Hustedt	FSweinhd
Geissleria acceptata (Hustedt) Lange-Bertalot et Metzeltin	GEaccep
Geissleria decussis (Østrup) Lange-Bertalot et Metzeltin	GEdecu
Geissleria ignota (Krasske) Lange-Bertalot et Metzeltin	GEigno
Geissleria kriegeri (Krasske) Lange-Bertalot	GEkriege
Geissleria paludosa (Hustedt) Lange-Bertalot et Metzeltin	GEpalud
Geissleria punctifera (Hustedt) Metzeltin, Lange-Bertalot et García-Rodríguez	GEpuncti
Geissleria schoenfeldii (Hustedt) Lange-Bertalot et Metzeltin	GEschoen
Gomphosphenia lingulatiformis (Lange-Bertalot et Reichardt) Lange-Bertalot	GMlinfor
Gomphonema sp. 1 ?	GO1?
Gomphonema sp. 2 ?	GO2?
Gomphonema sp. 2 ANS NEW JERSEY KCP	GO2KCP
Gomphonema acuminatum var. elongatum (Smith) Carruthers	GOacuelo
Gomphonema acuminatum Ehrenberg	GOacumin
Gomphonema acutiusculum (Müller) Cleve-Euler	GOacuti
Gomphonema affine Kützing	GOaffine
Gomphonema americobtusatum Reichardt et Lange-Bertalot	GOameric
Gomphonema angustatum var. intermedia Grunow	GOangint
Gomphonema angustatum var. obtusatum (Kützing) Grunow	Goangobt
Gomphonema angustatum (Kützing) Rabenhorst	GOangstt
Gomphonema angustum Agardh	GOangust
Gomphonema apuncto Wallace	GOapncto
Gomphonema augur Ehrenberg	GOauger
Gomphonema brebissonii Kützing	GObrebis

Gomphonema capitatum Ehrenberg	GOcapita
Gomphonema cf. clevei UMICH Fricke	GOcfclem
Gomphonema clavatum Ehrenberg	GOclavat
Gomphonema coronatum Ehrenberg	GOcorona
Gomphonema drutelingense Reichardt	GOdrutel
Gomphonema exilissimum (Grunow) Lange-Bertalot et Reichardt	GOexilis
Gomphonema gracile Ehrenberg	GOgracil
Gomphonema innocens Reichardt	GOinnoce
Gomphonema insigne Gregory	GOinsign
Gomphonema intricatum Kützing	GOintric
Gomphonema intricatum var. vibrio (Ehrenberg) Cleve	GOintvib
Gomphonema kobayasii Kociolek et Kingston	GOkobaya
Gomphonema lagenula Kützing	GOlage
Gomphonema mexicanum Grunow	GOmexica
Gomphonema micropus Kützing	GOmicrop
Gomphonema minusculum Krasske	GOminusc
Gomphonema minutum (Agardh) Agardh	GOminutm
Gomphonema olivaceoides var. hutchinsoniana Patrick	GOolihut
Gomphonema olivaceoides Hustedt	GOolivac
Gomphonema olivaceum (Lyngbye) Kützing	GOolivcm
Gomphonema parvulius (Lange-Bertalot et Reichardt) Lange-Bertalot et Reichardt	GOpalius
Gomphonema parvulum fo. saprophilum Lange-Bertalot et Reichardt	GOparsap
Gomphonema parvulum (Kützing) Kützing	GOparvul
Gomphonema patricki Kociolek et Stoermer	GOpatric
Gomphonema pumilum var. elegans Reichardt et Lange-Bertalot	GOpueleg
Gomphonema pumilum (Grunow) Reichardt et Lange-Bertalot	GOpumilu
Gomphonema pygmaeum Kociolek et Stoermer	GOpygm
Gomphonema rhombicum Fricke	GOrhombi
Gomphonema sarcophagus Gregory	GOsarcop
Gomphonema sp. 1 NRSA KMM	GOsp1nrs
Gomphonema sp. 32 NAWQA EAM	GOsp32em
Gomphonema sphaerophorum Ehrenberg	GOsphaer
Gomphonema subclavatum (Grunow) Grunow	GOsubcla
Gomphonema subtile Ehrenberg	GOsubtil
Gomphonema truncatum Ehrenberg	GOtrunca
Gomphonema utae Lange-Bertalot et Reichardt	GOutae

Gomphonema variostriatum Camburn et Charles	GOvarstr
Gomphoneis eriense (Grunow) Skvortzow et Meyer	GSeriens
Gomphoneis eriense var. variabilis Kociolek et Stoermer	GSerinr1
Gomphoneis minuta (Stone) Kociolek et Stoermer	GSminuta
Gomphoneis sp. 1 ?	GSsp1?
Gyrosigma sp. 1 ?	GY1?
Gyrosigma sp. 2 ?	GY2?
Gyrosigma acuminatum (Kützing) Rabenhorst	GYacumin
Gyrosigma attenuatum (Kützing) Rabenhorst	GYattenu
Gyrosigma obscurum (Smith) Griffith et Henfrey	GYobscur
Gyrosigma obtusatum (Sullivant) Boyer	GYobtusa
Gyrosigma peisonis (Grunow) Hustedt	GYpeison
Gyrosigma reimeri Sterrenburg	Gyreimer
Gyrosigma sciotoense (Sullivant) Cleve	GYsciote
Gyrosigma spencerii (Smith) Griffith et Henfrey	GYspence
Gyrosigma spp.	GYspp
Gyrosigma wormleyi (Sullivant) Boyer	GYwormly
Hantzschia sp. 1 ?	HA1?
Hantzschia amphioxys (Ehrenberg) Grunow	HAamphio
Hippodonta capitata (Ehrenberg) Lange-Bertalot, Metzeltin et Witkowski	HIcapita
Hippodonta costulata (Grunow) Lange-Bertalot, Metzeltin et Witkowski	HIcostu
Hippodonta hungarica (Grunow) Lange-Bertalot, Metzeltin et Witkowski	HIhunga
Hippodonta lueneburgensis (Grunow) Lange-Bertalot, Metzeltin et Witkowski	HIluene
Hippodonta subcostulata (Hustedt) Lange-Bertalot, Metzeltin et Witkowski	HIsubcos
Halamphora acutiuscula (Kützing) Levkov	HLacutiu
Halamphora coffeaeformis (Agardh) Levkov	HLcoffea
Halamphora holsatica (Hustedt) Levkov	HLholsat
Halamphora montana (Krasske) Levkov	HLmontan
Halamphora subcapitata (Kisselew) Levkov	HLsubcap
Halamphora submontana (Hustedt) Levkov	HLsubmon
Halamphora veneta (Kützing) Levkov	HLveneta
Hannaea arcus (Ehrenberg) Patrick	HNarcus
Kobayasiella subtilissima (Cleve) Lange-Bertalot	KBsubtil
Craticula accomodiformis Lange-Bertalot	KCaccfor
Craticula accomoda (Hustedt) Mann	KCaccomd
Craticula ambigua (Ehrenberg) Mann	KCambig
Craticula buderi (Hustedt) Lange-Bertalot	KCbude

Craticula cuspida (Kützing) Mann	KCcuspi1
Craticula cuspidata (Kützing) Mann	KCcuspid
Craticula halophilioides (Hustedt) Lange-Bertalot	KChaloid
Craticula halophila (Grunow ex Van Heurck) Mann	KChaloph
Craticula molestiformis (Hustedt) Mayama	KCmoltif
Craticula submolesta (Hustedt) Lange-Bertalot	KCsubmol
Karayevia amoena (Hustedt) Bukhtiyarova	Kvamoena
Karayevia carissima (Lange-Bertalot) Bukhtiyarova	KVcariss
Karayevia clevei (Grunow) Bukhtiyarova	KVclevei
Karayevia laterostrata (Hustedt) Bukhtiyarova	KVlatero
Karayevia oblongella (Østrup) Aboal	KVoblong
Karayevia ploenensis (Hustedt) Bukhtiyarova	Kvploene
Karayevia suchlandtii (Hustedt) Bukhtiyarova	Kvsuchla
Lemnicola hungarica (Grunow) Round et Basson	LEhungar
Luticola cohnii (Hilse) Mann	LUcohnii
Luticola goeppertiana (Bleisch) Mann	LUgoepp2
Luticola mutica (Kützing) Mann	LUmutica
Luticola muticoides (Hustedt) Mann	LUmutico
Luticola naviculoides Johansen	LUnavic
Luticola nivalis (Ehrenberg) Mann	LUnival
Luticola stigma (Patrick) Johansen	LUstigm
Luticola undulata (Hilse) Mann	LUundula
Luticola ventricosa (Kützing) Mann	LUventri
Meridion circulare var. constrictum (Ralfs) Van Heurck	MDcircon
Meridion circulare (Greville) Agardh	MDcircul
Melosira nummuloides (Dillwyn) Agardh	MEnummld
Melosira varians Agardh	MEvarian
Microcostatus krasskei (Hustedt) Johansen et Sray	MIkrass
Microcostatus naumanii (Hustedt) Lange-Bertalot	MInauman
Mastogloia sp. 1 ?	MS1?
Mastogloia sp. 2 ?	MS2?
Mastogloia pumila (Grunow) Cleve	MSpumila
Mastogloia smithii var. amphicephala Grunow	MSsmiamp
Mastogloia smithii Thwaites ex Smith	MSsmithi
Mayamaea agrestis (Hustedt) Lange-Bertalot	MYagres
Mayamaea asellus (Weinhold) Lange-Bertalot	MYasell

Mayamaea atomus (Kützing) Lange-Bertalot	MYatomus
Mayamaea fossalis var. obsidialis (Hustedt) Lange-Bertalot	MYfosobs
Mayamaea permitis (Hustedt) Bruder et Medlin	MYpermit
Navicula sp. 1 ?	NA1?
Navicula sp. 1 DNREC SJM	NA1desjm
Navicula sp. 2 ?	NA2?
Navicula sp. 28 SAVANNAH EAM	NA28SVEM
Navicula sp. 3 ?	NA3?
Navicula sp. 3 NAWQA MP	NA3MP
Navicula sp. 4 ?	NA4?
Navicula sp. 5 ?	NA5?
Navicula sp. 6 ?	NA6?
Navicula sp. 7 ?	NA7?
Navicula agnita Hustedt	NAagnita
Navicula angusta Grunow	NAangust
Navicula antonii Lange-Bertalot	NAantoni
Navicula arvensis Hustedt	NAarvens
Navicula associata Lange-Bertalot et Hofmann	NAassoci
Navicula bicephala Hustedt	NAbiceph
Navicula broetzii Lange-Bertalot et Metzeltin	NAbroetz
Navicula canalis Patrick	NAcanals
Navicula capitellata Skvortzow	NAcapitl
Navicula capitatoradiata Germain	NAcaprad
Navicula cari Ehrenberg	NAcari
Navicula cariocincta Lange-Bertalot	Nacarioc
Navicula catalanogermanica Lange-Bertalot et Hofmann	NAcatalo
Navicula caterva Hohn et Hellerman	NAcatrva
Navicula cincta (Ehrenberg) Ralfs	NAcincta
Navicula contenta var. biceps (Grunow) Van Heurck	NAconbic
Navicula cryptocephala Kützing	NAcrypto
Navicula cryptotenelloides Lange-Bertalot	NAcrytds
Navicula cryptotenella Lange-Bertalot	NAcryten
Navicula difficillima Hustedt	NAdiffic
Navicula digitoradiata (Gregory) Ralfs	NAdigit
Navicula digitoradiata var. minima Cleve-Euler	NAdigmin
Navicula eidrigiana Carter	NAeidrig
Navicula elginensis var. cuneata Kobayasi	NAelgcun

Navicula erifuga Lange-Bertalot	NAerifga
Navicula escambia (Patrick) Metzeltin et Lange-Bertalot	NAescamb
Navicula exigua var. capitata Patrick	NAexicap
Navicula facilis Krasske	Nafacili
Navicula festiva Krasske	NAfestiv
Navicula flagellifera Hustedt	NAflagel
Navicula gerloffii Schimanski	NAgerlof
Navicula germainii Wallace	NAgermii
Navicula geronimensis Potapova	NAgero
Navicula globulifera Hustedt	NAglobul
Navicula gregaria Donkin	NAgregar
Navicula hanseatica Lange-Bertalot et Stachura	NAhansea
Navicula hintzii Lange-Bertalot	NAhintzi
Navicula hambergii Hustedt	NAhmberg
Navicula incertata Lange-Bertalot	NAincrtt
Navicula ingenua Hustedt	NAingnua
Navicula ingrata Krasske	NAingrat
Navicula kotschyi Grunow	NAkotsch
Navicula lanceolata (Agardh) Kützing	NAlancel
Navicula latelongitudinalis Patrick	NAlatlng
Navicula libonensis Schoeman	NAlibone
Navicula longicephala Hustedt	NAlongcp
Navicula medioconvexa Hustedt	NAmedcon
Navicula menisculus var. obtusa Hustedt	NAmenobt
Navicula menisculus Schumann	NAmenscl
Navicula microcari Lange-Bertalot	NAmicroc
Navicula modica Hustedt	NAmodica
Navicula notha Wallace	NAnotha
Navicula oblonga Østrup	NAoblong
Navicula parabilis Hohn et Hellerman	NAparabi
Navicula peregrina (Ehrenberg) Kützing	NAperegr
Navicula perminuta Grunow	NApermnt
Navicula phyllepta Kützing	NAphylpt
Navicula phylleptosoma Lange-Bertalot	NAphysom
Navicula porifera Hustedt	NAporif
Navicula porifera var. opportuna (Hustedt) Lange-Bertalot	NAporopp
Navicula pseudoarvensis Hustedt	NApsdarv

Navicula pseudolanceolata Lange-Bertalot	NApselan
Navicula pseudoventralis Hustedt	NApseven
Navicula pseudotenelloides Krasske	NApsten
Navicula radiosa Kützing	NAradios
Navicula recens (Lange-Bertalot) Lange-Bertalot	NArecens
Navicula reichardtiana Lange-Bertalot	NAreichd
Navicula rhynchocephala Kützing	NArhynch
Navicula rostellata Kützing	NArostel
Navicula ruttneri var. capitata Hustedt	Narutcap
Navicula salinarum Grunow	NAsalinm
Navicula sanctaecrucis Østrup	NAsancru
Navicula schadei Krasske	NAschdei
Navicula soodensis Krasske	Nasooden
Navicula sp. 1 MUR DME	NAsp1MUR
Navicula sp. 1 ANS VA KCP	NAsp1VA
Navicula sp. 2 MUR DME	NAsp2MUR
Navicula sp. 3 MUR DME	NAsp3MUR
Navicula sp. 4 MUR DME	NAsp4MUR
Navicula sp. 5 MUR DME	NAsp5MUR
Navicula sp. 6 MUR DME	NAsp6MUR
Navicula sp. 7 MUR DME	NAsp7MUR
Navicula submuralis Hustedt	NAsubmur
Navicula subrotundata Hustedt	NAsubrot
Navicula symmetrica Patrick	NAsymtrc
Navicula tenelloides Hustedt	NAtenell
Navicula tripunctata (Müller) Bory	NAtripun
Navicula trivialis Lange-Bertalot	NAtrivls
Navicula veneta Kützing	NAveneta
Navicula viridulacalcis Lange-Bertalot	NAvical
Navicula viridula (Kützing) Kützing	NAvirdla
Navicula vitabunda Hustedt	NAvitabu
Navicula vulpina Kützing	NAvulpin

Navicula wallacei Reimer	NAwallac
Navicula wildii Lange-Bertalot	NAwildii
Neidium affine (Ehrenberg) Pfitzer	NEaffine
Neidium alpinum Hustedt	NEalpinu
Neidium amphigomphus (Ehrenberg) Pfitzer	NEamph
Neidium ampliatum (Ehrenberg) Krammer	NEamplia
Neidium binodis (Ehrenberg) Hustedt	NEbinodi
Neidium bisulcatum (Lagerstedt) Cleve	NEbisulc
Neidium boyeri Reimer	NEboyeri
Neidium densestriatum (Østrup) Krammer	NEdenses
Neidium dubium fo. constrictum (Hustedt) Hustedt	NEdubcon
Neidium dubium (Ehrenberg) Cleve	NEdubium
Neidium hercynicum Mayer	NEhercyn
Neidium iridis (Ehrenberg) Cleve	NEiridis
Neidium productum (Smith) Cleve	NEproduc
Nitzschia sp. 1 ?	NI1?
Nitzschia sp. 2 ?	NI2?
Nitzschia sp. 3 ?	NI3?
Nitzschia sp. 4 ?	NI4?
Nitzschia sp. 5 ?	NI5?
Nitzschia acicularis (Kützing) Smith	NIacicul
Nitzschia acidoclinata Lange-Bertalot	NIacidcn
Nitzschia acicularioides Hustedt	NIacides
Nitzschia agnita Hustedt	NIagnita
Nitzschia amphibia Grunow	NIamphib
Nitzschia amphibioides Hustedt	NIampoid
Nitzschia angustatula Lange-Bertalot	NIangtu
Nitzschia angustata (Smith) Grunow	NIangutt
Nitzschia archibaldii Lange-Bertalot	NIarchib
Nitzschia bacillum Hustedt	NIbacilf
Nitzschia bita Hohn et Hellerman	NIbita
Nitzschia bremensis Hustedt	NIbremen
Nitzschia brevissima Grunow ex Van Heurck	NIbrevis
Nitzschia bryophila (Hustedt) Hustedt	NIbryoph
Nitzschia capitellata Hustedt	NIcapite
Nitzschia clausii Hantzsch	NIclausi
Nitzschia compressa var. elongata (Grunow) Lange-Bertalot	NIcomelo

Nitzschia communis Rabenhorst	NIcommun
Nitzschia commutata Grunow	NIcomtat
Nitzschia compressa var. vexans (Grunow) Lange-Bertalot	NIcomvex
Nitzschia dissipata var. media (Hantzsch) Grunow	NIdismed
Nitzschia dissipata (Kützing) Grunow	NIdissip
Nitzschia diversa Hustedt	Nidivers
Nitzschia draveillensis Coste et Ricard	NIdravln
Nitzschia dubia Smith	NIdubia
Nitzschia elegantula Grunow	NIelegnt
Nitzschia fasciculata (Grunow) Grunow	NIfascic
Nitzschia filiformis var. conferta (Richter) Lange-Bertalot	NIfilcon
Nitzschia filiformis (Smith) Van Heurck	NIfilifr
Nitzschia flexa Schumann	NIflexa
Nitzschia fonticola (Grunow) Grunow	NIfontic
Nitzschia fossilis (Grunow) Grunow	NIfossil
Nitzschia frustulum (Kützing) Grunow	NIfrustu
Nitzschia gessneri Hustedt	NIgeiss
Nitzschia gracilis Hantzsch	NIgracil
Nitzschia grossestriata Hustedt	NIgrostr
Nitzschia hantzschiana Rabenhorst	NIhantzs
Nitzschia harderi Hustedt	NIharder
Nitzschia heufleriana Grunow	NIheufle
Nitzschia homburgiensis Lange-Bertalot	NIhombur
Nitzschia hybrida Grunow	NIhybGru
Nitzschia incognita Legler et Krasske	NIincgnt
Nitzschia inconspicua Grunow	NIincons
Nitzschia intermedia Hantzsch ex Cleve et Grunow	NIinterm
Nitzschia kurzeana Rabenhorst	NIkurze
Nitzschia lacunarum Hustedt	NIlacnar
Nitzschia lacuum Lange-Bertalot	NIlacuum
Nitzschia laevis Hustedt	NIlaevis
Nitzschia liebethruthii Rabenhorst	NIliebrt
Nitzschia linearis (Agardh) Smith	NIlinear
Nitzschia linearis var. tenuis (Smith) Grunow	NIlinten
Nitzschia lorenziana Grunow	NIlorenz
Nitzschia manca Hustedt	NImanca
Nitzschia microcephala Grunow	NImicroc

Nitzschia nana Grunow ex Van Heurck	NInana
Nitzschia normanii Grunow ex Van Heurck	NInorman
Nitzschia obtusa Smith	NIobtusa
Nitzschia palea var. debilis (Kützing) Grunow	NIpaldeb
Nitzschia palea (Kützing) Smith	NIpalea
Nitzschia paleacea Grunow	NIpaleac
Nitzschia paleaeformis Hustedt	NIpaleaf
Nitzschia palustris Hustedt	NIpalus
Nitzschia parvula Smith	NIparvul
Nitzschia pellucida Grunow	NIpelluc
Nitzschia perminuta (Grunow) Peragallo	NIpermin
Nitzschia perspicua Cholnoky	NIperspi
Nitzschia prolongata var. hoehnkii (Hustedt) Lange-Bertalot	NIprohoe
Nitzschia pseudofonticola Hustedt	NIpsefon
Nitzschia pseudocommunis Hustedt	NIpseudc
Nitzschia pumila Hustedt	NIpumila
Nitzschia pura Hustedt	NIpura
Nitzschia pusilla Grunow	NIpusill
Nitzschia radicula Hustedt	NIradicu
Nitzschia recta Hantzsch ex Rabenhorst	NIrecta
Nitzschia rostellata Hustedt	NIrostel
Nitzschia scalpelliformis Grunow	NIscalpe
Nitzschia subconstricta Grunow	NIsconst
Nitzschia sigmoidea (Nitzsch) Smith	NIsigdea
Nitzschia sigma (Kützing) Smith	NIsigma
Nitzschia siliqua Archibald	NIsilqua
Nitzschia sinuata (Thwaites) Grunow	NIsinuat
Nitzschia sociabilis Hustedt	NIsociab
Nitzschia solita Hustedt	NIsolita
Nitzschia stagnorum Rabenhorst	NIstagno
Nitzschia subacicularis Hustedt	NIsubaci
Nitzschia sublinearis Hustedt	NIsublin
Nitzschia subtilis (Kützing) Grunow	NIsubtil
Nitzschia suchlandti Hustedt	Nisuchla
Nitzschia terrestris (Petersen) Hustedt	NIterres
Nitzschia thermalis (Ehrenberg) Auerswald	NItherma
Nitzschia thermaloides Hustedt	NIthermd

Nitzschia tropica Hustedt	NItropic
Nitzschia tubicola Grunow	NItubcla
Nitzschia umbonata (Ehrenberg) Lange-Bertalot	NIumbona
Nitzschia vitrea Norman	NIvitrea
Nitzschia wuellerstorffii Lange-Bertalot	NIwuelle
Nupela sp. 1 Idaho SEH	NU1Idah
Nupela sp. 5 NAWQA KM	NU5NQKM
Nupela carolina Potapova et Clason	Nucaroli
Nupela fennica (Hustedt) Lange-Bertalot	NUfenni
Nupela gracillima (Hustedt) Lange-Bertalot	NUgracil
Nupela impexiformis (Lange-Bertalot) Lange-Bertalot	Nuimpexi
Nupela lapidosa (Krasske) Lange-Bertalot	NUlapid
Nupela neglecta Ponader, Lowe et Potapova	Nuneglec
Nupela silvahercynia (Lange-Bertalot) Lange-Bertalot	NUsilva
Nupela sp. 1 ?	NUsp1?
Nupela tenuicephala (Hustedt) Lange-Bertalot	NUtenuic
Nupela vitiosa (Schimanski) Siver et Hamilton	NUvitios
Nupela wellneri (Lange-Bertalot) Lange-Bertalot	NUwell
Odontella aurita (Lyngbye) Agardh	ODaurita
Opephora sp. 1 ?	OP1?
Opephora aff. olsenii SAVANNAH EAM Møller	OPaffols
Opephora olsenii Møller	OPolseni
Orthoseira roeseana (Rabenhorst) OMeara	ORroesea
Paralia sulcata (Ehrenberg) Cleve	PAsulc
Parlibellus sp. 1 ?	PB1?
Parlibellus crucicula (Smith) Witkowski, Lange-Bertalot et Metzeltin	PBcruc
Parlibellus protracta (Grunow) Witkowski, Lange-Bertalot et Metzeltin	PBprotr
Placoneis abiskoensis (Hustedt) Lange-Bertalot et Metzeltin	PCabisko
Placoneis clementis (Grunow) Cox	PCclemen
Placoneis clementioides (Hustedt) Cox	PCclemto
Placoneis elginensis (Gregory) Cox	PCelgine
Placoneis exigua (Gregory) Mereschkowsky	PCexigua
Placoneis gastrum (Ehrenberg) Mereschkowsky	PCgastru
Placoneis placentula (Ehrenberg) Mereschkowsky	PCplacen
Placoneis pseudanglica Cox	Pcseudo
Placoneis subplacentula (Hustedt) Cox	PCsubpla
Placoneis symmetrica (Hustedt) Lange-Bertalot	PCsymmet

Pseudostaurosira brevistriata var. capitata (Héribaud) Andresen, Stoermer et Kreis	PDbrcap
Pseudostaurosira brevistriata var. 0A UL NAWQA 96 KM	PDbre0A
Pseudostaurosira brevistriata (Grunow) Williams et Round	PDbrevis
Pseudostaurosira elliptica (Schumann) Edlund, Morales et Spaulding	PDellipt
Pseudostaurosira microstriata (Marciniak) Flower	PDmicros
Pseudostaurosira neoelliptica (Witkowski) Morales	Pdneoell
Pseudostaurosira parasitica (Smith) Morales	Pdparasi
Pseudostaurosira parasitica var. subconstricta (Grunow) Morales	pdparsub
Pseudostaurosira pseudoconstruens (Marciniak) Williams et Round	PDpseudo
Pseudostaurosira subsalina (Hustedt) Morales	PDsubsal
Pseudostaurosira trainorii Morales	PDtraino
Plagiotropis lepidoptera var. proboscidea (Cleve) Reimer	PGleppro
Pinnularia sp. 1 ?	PI1?
Pinnularia sp. 2 ?	PI2?
Pinnularia sp. 3 ?	PI3?
Pinnularia abaujensis var. linearis (Hustedt) Patrick	PIabalin
Pinnularia abaujensis var. rostrata (Patrick) Patrick	PIabaros
Pinnularia abaujensis var. subundulata (Mayer ex Hustedt) Patrick	PIabasub
Pinnularia abaujensis (Pantocsek) Ross	PIabauje
Pinnularia abaujensis var. lacustris Camburn et Charles	PIablact
Pinnularia acidophila Hofmann et Krammer	PIacido
Pinnularia acoricola Hustedt	Piacoric
Pinnularia acrosphaeria var. parva Krammer	Piacparv
Pinnularia acrosphaeria (Brébisson) Smith	PIacro
Pinnularia acrosphaeria var. turgidula Grunow ex Cleve	PIacrtur
Pinnularia alpina Smith	PIalpina
Pinnularia amabilis Krammer	PIamabil
Pinnularia appendiculata (Agardh) Cleve	PIappend
Pinnularia biceps Gregory	PIbiceps
Pinnularia biceps fo. petersenii Ross	PIbicpet
Pinnularia biceps var. pusilla Camburn et Charles	PIbicpus
Pinnularia borealis Ehrenberg	PIboreal
Pinnularia borealis var. rectangularis Carlson	PIborrec
Pinnularia brebissonii var. diminuta (Grunow) Cleve	PIbredim
Pinnularia brevicostata Cleve	PIbrevic
Pinnularia brauniana (Grunow) Studnicka	Pibrnana

Pinnularia divergens Smith	PIdiverg
Pinnularia divergentissima (Grunow) Cleve	PIdivtis
Pinnularia formica (Ehrenberg) Patrick	PIformic
Pinnularia ignobilis (Krasske) Cleve-Euler	PIignob
Pinnularia intermedia (Lagerstedt) Cleve	PIinterm
Pinnularia interrupta Smith	PIinterr
Pinnularia lagerstedtii (Cleve) Cleve-Euler	PIlagers
Pinnularia latevittata Cleve	PIlatevi
Pinnularia legumen Ehrenberg	PIlegume
Pinnularia lundii Hustedt	PIlundii
Pinnularia macilenta (Ehrenberg) Ehrenberg	PImaclnt
Pinnularia maior (Kützing) Rabenhorst	PImaior
Pinnularia mesogongyla Ehrenberg	PImesogo
Pinnularia mesolepta (Ehrenberg) Smith	PImesole
Pinnularia microstauron (Ehrenberg) Cleve	PImicros
Pinnularia nodosa (Ehrenberg) Smith	PInodosa
Pinnularia obscura Krasske	PIobscur
Pinnularia parvulissima Krammer	PIparvul
Pinnularia perirrorata Krammer	Piperrta
Pinnularia perinterrupta Krammer	Pipitrpt
Pinnularia polyonca (Brébisson) Smith	PIpolyon
Pinnularia pulchra var. angusta (Cleve) Lange-Bertalot	PIpuvir
Pinnularia rhombarea Krammer et Metzeltin	PIrhomba
Pinnularia rupestris Hantzsch	PIrupest
Pinnularia ruttneri Hustedt	PIruttne
Pinnularia subcommutata var. nonfasciata Krammer	Pisbcmta
Pinnularia stomatophora (Grunow) Cleve	PIstomat
Pinnularia streptoraphe Cleve	PIstrept
Pinnularia subcapitata Gregory	PIsubcap
Pinnularia subcapitata var. paucistriata (Grunow) Cleve	PIsubpau
Pinnularia subrostrata (Cleve) Cleve-Euler	PIsubros
Pinnularia undula (Schumann) Krammer	Piundulk
Pinnularia viridis var. commutata (Grunow) Cleve	PIvircom
Pinnularia viridis (Nitzsch) Ehrenberg	PIviridi
Punctastriata lancettula (Schumann) Hamilton et Siver	PKlancet
Pleurosigma angulatum (Quekett) Smith	PLangul
Placoneis sp. 1 ?	PLAsp1Q

Platessa conspicua (Mayer) Lange-Bertalot	PLconspi
Platessa holsatica (Hustedt) Lange-Bertalot	PLholsa
Platessa hustedtii (Krasske) Lange-Bertalot	PLhuste
Platessa montana (Krasske) Lange-Bertalot	PLmonta
Pleurosigma salinarum (Grunow) Grunow	PLsalinm
Pleurosira laevis (Ehrenberg) Compère	PRlaevis
Psammothidium altaicum Bukhtiyarova	PSalta
Psammothidium bioretii (Germain) Bukhtiyarova et Round	PSambior
Psammothidium sp. 1 ?	PSAMMSP 1
Psammothidium chlidanos (Hohn et Hellerman) Lange-Bertalot	PSchlid
Psammothidium didymum (Hustedt) Bukhtiyarova et Round	PSdidy
Psammothidium grischunum fo. daonensis (Lange-Bertalot) Bukhtiyarova and Round	PSgridao
Psammothidium helveticum (Hustedt) Bukhtiyarova et Round	PShelvet
Prestauroneis integra (W. Smith) Bruder	PSintegr
Psammothidium lacus-vulcani (Lange-Bertalot et Krammer) Bukhtiyarova	PSlac-vu
Psammothidium lauenburgianum (Hustedt) Bukhtiyarova et Round	PSlauenb
Psammothidium marginulatum (Grunow) Bukhtiyarova et Round	PSmargin
Psammothidium rechtensis (Leclercq) Lange-Bertalot	PSrechte
Psammothidium rossii (Hustedt) Bukhtiyarova et Round	PSrossii
Psammothidium scoticum (Flower et Jones) Bukhtiyarova et Round	PSscot
Psammothidium semiapertum (Hustedt) Aboal	PSsemiap
Psammothidium subatomoides (Hustedt) Bukhtiyarova et Round	PSsubato
Psammothidium ventralis (Krasske) Bukhtiyarova et Round	PSventra
Planothidium sp. 1 ?	PT1?
Planothidium apiculatum (Patrick) Lange-Bertalot	PTapic
Planothidium biporomum (Hohn et Hellerman) Lange-Bertalot	PTbipo
Pseudostaurosiropsis connecticutensis Morales	PTconnec
Planothidium daui (Foged) Lange-Bertalot	PTdaui
Planothidium delicatulum (Kützing) Round et Bukhtiyarova	PTdeli
Planothidium dubium (Grunow) Round et Bukhtiyarova	PTdubi
Planothidium ellipticum (Cleve) Edlund	PTellip
Planothidium engelbrechtii (Cholnoky) Round et Bukhtiyarova	PTengel
Planothidium frequentissimum (Lange-Bertalot) Lange-Bertalot	PTfreq
Pseudostaurosiropsis geocollegarum (Witkowski et Lange-Bertalot) Morales	PTgeocol
Planothidium granum (Hohn et Hellerman) Lange-Bertalot	PTgran

Planothidium hauckianum (Grunow) Round et Bukhtiyarova	PThauck
Planothidium haynaldii (Schaarschmidt) Lange-Bertalot	PThaynad
Planothidium lanceolatum (Brébisson ex Kützing) Lange-Bertalot	PTlanceo
Planothidium lemmermannii (Hustedt) Morales	PTlemmer
Planothidium minutissimum (Krasske) Morales	PTminu
Planothidium oestrupii (Cleve-Euler) Edlund	PToest
Planothidium peragalli var. parvulum (Patrick) Andresen, Stoermer et Kreis	PTpeparv
Planothidium peragalli (Brun et Héribaud) Round et Bukhtiyarova	PTperaga
Planothidium rostratum (Østrup) Lange-Bertalot	PTrostr
Planothidium robustum (Hustedt) Lange-Bertalot	PTrotum
Planothidium spp.	PTspp
Planothidium stewartii (Patrick) Lange-Bertalot	PTstewa
Pinnunavis elegans (W. Smith) Okuno	PUeleg
Psammodictyon constrictum (Gregory) Mann	PYconst
Rhaphoneis amphiceros (Ehrenberg) Ehrenberg	RAamphic
Reimeria sinuata (Gregory) Kociolek et Stoermer	REsinuta
Reimeria uniseriata Sala, Guerrero et Ferrario	REuniser
Rhoicosphenia abbreviata (Agardh) Lange-Bertalot	ROabbre
Rhopalodia sp. 1 ?	RP1?
Rhopalodia sp. 2 ?	RP2?
Rhopalodia acuminata Krammer	Rpacumin
Rhopalodia brebissonii Krammer	RPbrebsn
Rhopalodia gibba (Ehrenberg) Müller	RPgibba
Rhopalodia gibberula (Ehrenberg) Müller	RPgibbrl
Rhopalodia musculus (Kützing) Müller	RPmuscul
Rhopalodia operculata (Agardh) Håkansson	RPoprlta
Rhopalodia sp. 1 MUR DME	RPsp1MUR
Rossithidium linearis (Smith) Round et Bukhtiyarova	RSlinea
Staurosirella berolinensis (Lemmermann) Bukhtiyarova	SAberoli
Staurosirella lapponica (Grunow) Williams et Round	SAlappon
Staurosirella leptostauron var. dubia (Grunow) Edlund	SAlepdub
Staurosirella leptostauron (Ehrenberg) Williams et Round	SAleptos
Staurosirella martyi (Héribaud) Morales et Manoylov	SAmartyi
Staurosirella pinnata (Ehrenberg) Williams et Round	SApinnat
Seminavis pusilla (Grunow) Cox et Reid	SApusill
Seminavis sp. 1 MUR DME	SAsp1MUR
Staurosirella subrobusta Morales	SAsubrob

Semiorbis hemicyclus (Ehrenberg) Patrick	SBhemicy
Seminavis sp. 1 ?	SEMINSP1
Sellaphora sp. 1 DNREC SJM	Sf1drcsm
Sellaphora americana (Ehrenberg) Mann	SFameric
Sellaphora bacillum (Ehrenberg) Mann	SFbacill
Sellaphora disjuncta (Hustedt) Mann	SFdisjun
Sellaphora elliptica (Hustedt) Johansen	Sfellipt
Sellaphora hustedtii (Krasske) Lange-Bertalot et Werum	SFhusted
Sellaphora laevissima (Kützing) Mann	SFlaevis
Sellaphora pupula var. capitata Skvortzow et Meyer	SFpupcap
Sellaphora pupula (Kützing) Meresckowsky	SFpupula
Sellaphora rectangularis (Gregory) Lange-Bertalot et Metzeltin	SFrectan
Sellaphora rostrata (Hustedt) Johansen	SFrostr
Sellaphora seminulum (Grunow) Mann	SFseminu
Sellaphora sp. 1 ?	SFsp1?
Sellaphora sp. 2 ?	Sfsp2Q
Sellaphora stroemii (Hustedt) Kobayasi	Sfstroem
Shionodiscus oestrupii (Ostenfeld) Alverson, Kang et Theriot	SHoestru
Simonsenia delognei (Grunow) Lange-Bertalot	SIdelog
Skeletonema sp. 1 ?	SK1?
Skeletonema costatum (Greville) Cleve	SKcostat
Skeletonema potamos (Weber) Hasle	SKpotamo
Stenopterobia sp. 1 ?	SN1?
Stenopterobia curvula (Smith) Krammer	SNcurvul
Stenopterobia delicatissima (Lewis) Van Heurck	SNdelica
Stenopterobia planctonica Metzeltin et Lange-Bertalot	SNplanct
Stauroforma exiguiformis (Lange-Bertalot) Flower, Jones et Round	SOexiguf
Staurosira sp. 1 VADEQ SJM	SR1vadeq
Staurosira construens var. binodis (Ehrenberg) Hamilton	SRconbin
Staurosira construens var. exigua (W. Smith) Kobayasi	SRconexi
Staurosira construens Ehrenberg	SRconstr
Staurosira construens var. venter (Ehrenberg) Hamilton	SRconven
Stauroneis sp. 1 ?	SS1?
Stauroneis agrestis Petersen	SSagrest
Stauroneis alpina Hustedt	SSalpina
Stauroneis anceps Ehrenberg	SSanceps
Stauroneis anceps fo. gracilis Rabenhorst	SSancgra

Stauroneis borrichii (Petersen) Lund	SSborric
Stauroneis kriegeri Patrick	SSkriege
Stauroneis legumen (Ehrenberg) Kützing	SSlegmen
Stauroneis livingstonii Reimer	SSliving
Stauroneis nobilis Schumann	SSnobils
Stauroneis obtusa Lagerstedt	SSobtusa
Stauroneis phoenicenteron (Nitzsch) Ehrenberg	SSphoeni
Stauroneis producta Grunow	SSproduc
Stauroneis prominula (Grunow) Hustedt	SSpromin
Stauroneis smithii var. incisa Pantocsek	SSsmiinc
Stauroneis smithii Grunow	SSsmithi
Stauroneis sp. 8 NAWQA DW	SSsp8em
Stauroneis stodderi Greenleaf	SSstodde
Stauroneis thermicola (Petersen) Lund	SSthermc
Stephanodiscus binderanus var. oestrupii (Cleve-Euler) Cleve-Euler	Stbidoes
Stephanodiscus hantzschii Grunow	SThantzs
Stephanodiscus minutulus (Kützing) Cleve et Möller	Stminut
Surirella sp. 1 ?	SU1?
Surirella amphioxys Smith	SUampoxy
Surirella angusta Kützing	SUangust
Surirella biseriata Brébisson	SUbiseri
Surirella brebissonii Krammer et Lange-Bertalot	Subreb
Surirella brebissonii var. kuetzingii Krammer et Lange-Bertalot	Subrekut
Surirella brightwellii Smith	SUbright
Surirella elegans Ehrenberg	SUelegan
Surirella guatimalensis Ehrenberg	SUguatim
Surirella helvetica Brun	SUhelvet
Surirella linearis var. constricta Grunow	SUlincon
Surirella linearis Smith	SUlinear
Surirella minuta Brébisson	SUminuta
Surirella ovalis Brébisson	SUovalis
Surirella peisonis Pantocsek	SUpeison
Surirella robusta Ehrenberg	SUrobust
Surirella splendida (Ehrenberg) Kützing	Susplen
Surirella striatula Turpin	SUstriat
Surirella subsalsa Smith	SUsubsal
Surirella tenera Gregory	SUtenera

Synedra sp. 1 ANS DRBI LR	SYdrbiLR
Synedra rumpens Kützing	SYrumpen
Synedra rumpens var. scotica Grunow	SYrumsco
Synedra sp. 2 NAWQA MORALES	SYsp2eam
Synedra ulna var. ramesi (Héribaud) Hustedt	SYulnram
Synedra ulna var. oxyrhynchus fo. mediocontracta (Fonti) Hustedt	SYuloxme
Tabellaria fenestrata (Lyngbye) Kützing	TAfenest
Tabellaria flocculosa (Roth) Kützing	TAfloccu
Tabellaria flocculosa var. linearis Koppen	TAflolin
Tabellaria flocculosa (strain III) sensu Koppen (Roth) Kützing	TAflost3
Tabellaria flocculosa (strain IV) sensu Koppen (Roth) Kützing	TAflost4
Tabellaria quadriseptata Knudsen	TAquadri
Tabularia fasciculata (Agardh) Williams et Round	TBfascic
Tabularia tabulata (Agardh) Snoeijs	TBtabula
Thalassiosira bramaputrae (Ehrenberg) Håkansson et Locker	THbrampt
Thalassiosira cf. lineata	THcflin
Thalassiosira eccentrica (Ehrenberg) Cleve	THeccent
Thalassiosira sp. 0A UL NAWQA 96 KM	THkmnq0A
Thalassiosira proschkinae Makarova	THprskin
Thalassiosira pseudonana Hasle et Heimdal	THpsnana
Thalassiosira sp. 1 NLS EAM	THsp1EAM
Thalassiosira sp. 1 ?	THspec1?
Thalassiosira spp.	THspp
Thalassiosira visurgis Hustedt	THvisurg
Thalassiosira weissflogii (Grunow) Fryxell et Hasle	THweiss
Thalassionema nitzschioides (Grunow) Van Heurck	TLnitzsc
Trachyneis aspera (Ehrenberg) Cleve	TRaspe
Triceratium sp. 1 ?	Trspec1?
Tryblionella acuminata Smith	TYacum
Tryblionella aerophila (Hustedt) Mann	TYaeroph
Tryblionella apiculata Gregory	TYapicul
Tryblionella balatonis (Grunow) Mann	TYbalato
Tryblionella calida (Grunow) Mann	TYcaldid
Tryblionella coarctata (Grunow) Mann	TYcoarc
Tryblionella compressa (Bailey) Poulin	TYcompr
Tryblionella debilis Arnott ex OMeara	TYdebili
Tryblionella gracilis Smith	TYgracil

Tryblionella granulata (Grunow) Mann	TYgranlt
Tryblionella hungarica (Grunow) Frenguelli	TYhungar
Tryblionella levidensis Smith	TYlevide
Tryblionella littoralis (Grunow) Mann	TYlittor
Tryblionella plana (Smith) Pelletan	TYplana
Tryblionella salinarum (Grunow) Pelletan	TYsalina
Tryblionella scalaris (Ehrenberg) Siver et Hamilton	TYscalar
Tryblionella sp. 1 ?	TYspec1?
Tryblionella umbilicata (Hustedt) Mann	TYumbil
Tryblionella victoriae Grunow	TYvictor
Ulnaria acus (Kützing) Aboal	ULacus
Ulnaria cf. ulna	ULcfulna
Ulnaria delicatissima var. angustissima (Grunow) Aboal	ULdelang
Ulnaria delicatissima (W. Smith) Aboal et Silva	ULdelica
Ulnaria ulna (Nitzsch) Compère	UlnaUlna
Undetermined Pennate sp. 1 ?	UN1?penn
Undetermined Pennate sp. 2 ?	UN2?penn
Undetermined Pennate sp. 3 ?	UN3?penn
Undetermined diatom	UNdiatom
Undetermined Centric sp. 1 ?	UNIDCEN1
Undetermined Centric sp. 2 ?	UNIDCEN2
Undetermined Pennate sp. 2 UL NAWQA WHIT KM	XP2ULNW

Raw Counts	S1-0	S1-10	S1-20
Total Counted:	500	500	502
Species	60	79	80
Taxon	Count	Count	Count
Achnanthes denticula			
Achnanthes islandica			
Actinocyclus normanii	15	20	16
Actinocyclus octonarius var. crassus ?	4	8	4
Actinoptychus senarius	2		
Amphora granulata			
Amphora sp. 1 (girdle view)	9	6	8
Amphora sp. 2			
Anaulus cf. balticus		6	
Aneumastus pseudotusculus			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Asterionella formosa			
Asterionella sp. 1			
Aulacoseira ambigua			10
Aulacoseira granulata			
Aulacoseira pusilla			
Aulacoseira sp. 1		1	
Aulacoseira sp. 2			
Aulacoseira tenella			
Bacillaria socialis	11	27	14
Biremis circumtexta			
Biremis? sp. 1			
Caloneis aemula		1	
Caloneis bacillum	11	5	12
Caloneis cf. lineatus			
Caloneis cf. ventricosa			
Caloneis lewisii			
Caloneis sp. 1 (girdle view)	22	14	
Caloneis sp. 2			
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Cavinula sp. 1		1	
Cocconeis cf. peltoides		1	
Cocconeis costata var. costata			
Cocconeis diminuta			

Raw Counts	S1-0	S1-10	S1-20
Cocconeis disculoides			
Cocconeis elongatum			4
Cocconeis placentula	2	3	1
Cocconeis scutellum			
Coscinodiscus cf. lineatus			
Coscinodiscus marginatus			2
Cosmoneis pusilla			
Cosmoneis sp. 1			1
Craticula cuspidata			
Cyclostephanos sp. 1	3		
Cyclostephanos sp. 2			
Cyclotella atomus?	107	91	29
Cyclotella caspia			
Cyclotella cyclopuncta			
Cyclotella distinguenda			
Cyclotella meneghiniana		22	21
Cyclotella rossii			
Cyclotella sp. 2	16	4	3
Cyclotella striata	47	28	75
Cyclotella stylorum			
Cymatopleura solea			
Cymatosira belgica			
Cymbella affinis			1
Cymbella excisiformis?			
Cymbella janischii			
Cymbella mexicana			
Cymbella minuta			
Cymbella sinuata		1	1
Cymbella sp. 2			
Decussata placenta			
Delphineis minutissima			
Delphineis surirella			1
Denticula kuetzengii			
Diadesmis gallica			1
Diatoma mesodon			
Diatoma moniliformis	6	8	4
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana			

Raw Counts	S1-0	S1-10	S1-20
Diploneis cf. bombus			
Diploneis cf. didyma			
Diploneis elliptica			
Diploneis pseudovalis	6		
Diploneis smithii	4	2	
Diploneis interrupta			
Encyonema nicafei			
Encyonema sp. 1	2	1	1
Encyonema sp. 2		2	
Encyonema sp. 3			
Encyonema triangulum			
Encyonopsis microcephala		1	1
Epithemia adnata			
Epithemia frickei			
Epithemia turgida			
Eunotia sp. 1			
Eunotia sp. 2			
Fallacia pygmia	1	1	7
Fragilaria brevistriata	3	1	2
Fragilaria capucina	1	2	
Fragilaria cf. microstriata			
Fragilaria elliptica			
Fragilaria schulzii			
Fragilaria vaucheriae			
Frickea lewisiana			
Frustulia amphipleuroides			
Frustulia rhomboides var. viridula			
Frustulia sp. 1	1	3	4
Frustulia vulgaris			
Geissleria decussis			
Geissleria kreigeri	5	13	1
Gomphoneis sp. 1	3		1
Gomphonema acuminatum			
Gomphonema innocens			
Gomphonema mammilla			
Gomphonema olivaceum			
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			

Raw Counts	S1-0	S1-10	S1-20
Grammatophora cf. macilenta			
Gyrosigma temperii			
Gyrosigma cf. balticum	4	2	
Gyrosigma sp.1	4	1	
Gyrosigma spencerii			
Hantzschia sp. 1 girdle view	15	8	
Hantzschia sp. 2 girdle view	2		
Hantzschia sp. 3			
Hantzschia virgata		3	
Hippodonta costulata			
Hippodonta coxiae			
Hippodonta sp. 1	2	4	2
Hippodonta sp. 2			
Karayevia amoena			
Leptocylindrus ? Cf. danicus			1
Luticola sp. 1			
Luticola sp. 2			
Luticola sp. 3			
Mastogloia smithii			
Mastogloia sp. 1			1
Mastogloia sp. 2			
Melosira sp. 1		2	
Melosira varians			
Meridion sp. 1	2	3	
Navicula abunda	22	5	16
Navicula angusta			
Navicula antonii			1
Navicula brachium	4	1	
Navicula cari	1	1	2
Navicula cf. capitoradiata			18
Navicula cf. galloae			
Navicula cf. heuflerii			
Navicula cf. oblonga			
Navicula cf. patrickii			1
Navicula cf. reichardtiana			
Navicula cf. salinarum		2	
Navicula cf. schweigeri		2	2
Navicula cf. subinflata		1	
Navicula cf. tripunctata	7	1	4
Navicula cf. zostereti	3	1	4

Raw Counts	S1-0	S1-10	S1-20
Navicula gregaria	17	27	27
Navicula halophila	5	5	9
Navicula lanceolata	2	9	12
Navicula marginulata			
Navicula oculiformis			2
Navicula peregrina	13	9	5
Navicula perminuta	7	3	1
Navicula phyllepta	9	4	6
Navicula slesvicensis			
Navicula sp. 1		6	5
Navicula sp. 2	2		
Navicula sp. 3		1	3
Navicula sp. 5			
Navicula sp. 6			
Navicula subinflata		1	
Navicula subminiscula			
Naviculoid diatom 1		1	
Naviculoid diatom 2			
Neidiopsis sp. 1			
Nitzschia amphibia		2	
Nitzschia brevissima	28	27	25
Nitzschia cf. agnita			
Nitzschia cf. borealis			
Nitzschia cf. groefii			
Nitzschia cf. laevis			2
Nitzschia cf. macilenta	4	4	4
Nitzschia clausii			
Nitzschia columbiana			
Nitzschia communis			
Nitzschia commutata			
Nitzschia constricta	3		
Nitzschia cylindrus			
Nitzschia debilis		7	24
Nitzschia desertorum			
Nitzschia dissipata			
Nitzschia filiformis			1
Nitzschia frustulum	9	1	
Nitzschia gracilis			3
Nitzschia incognita			
Nitzschia inconspicua			15

Raw Counts	S1-0	S1-10	S1-20
Nitzschia levidensis			
Nitzschia linearis			1
Nitzschia microcephala	4	1	
Nitzschia nana			
Nitzschia obtusa			
Nitzschia palea	1	9	12
Nitzschia panduriformis	1	3	2
Nitzschia pellucida		2	2
Nitzschia perminuta	1	2	2
Nitzschia proxima	4		
Nitzschia punctata	2	2	2
Nitzschia pusilla			
Nitzschia scalaris			
Nitzschia sigma		1	1
Nitzschia sigmaformis		2	
Nitzschia sp. 1			1
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4			
Nitzschia sp. 5			
Nitzschia umbonata			
Opephora martyi			1
Opephora sp. A			
Orthoseira sp. 1	1		
Paralia sulcata	8	7	11
Parlibellus cf. plicatus			
Pinnularia borealis			
Pinnularia divergens			
Pinnularia divergentissima			
Pinnularia interrupta			
Pinnularia marchica			
Pinnularia microstauron			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			
Pinnularia sp. 8			
Pinnularia sp.1		1	4
Pinnularia sp.2			3

Raw Counts	S1-0	S1-10	S1-20
Pinnularia viridis			
Placoneis cf. gastrum			
Placoneis sp. 1			
Placoneis sp. 2			
Plagiogramma cf. minima			
Planothidium frequentissimum			
Planothidium lanceolatum			
Planothidium paragali			
Planothidium sp. 1	3	10	13
Planothidium sp. 2			
Pleurosigma diverse-striatum			
Psammothidium? Sp. 1			
Pseudostauroneis parasitica	2		
Pseudostaurosira americana			1
Pseudostaurosiropsis sp. 1			1
Pseudostaurosiropsis sp. 1 (GV)			
Punctastriata mimetica			
Rhaphoneis amphiceros			
Rhaphoneis tenuis	3		1
Rhoicosphenia cf. marina		8	4
Rhoicosphenia sp. 1			
Rhopalodia acuminatum			
Rhopolodia gibba			
Rhopolodia musculus			
Sellaphora cf. hohnii			
Sellaphora laevissima			
Sellaphora pupula			3
Sellaphora rexii			
Sellaphora bacillum			
Skeletonema sp. 1			
Stauroneis agrestis			
Stauroneis CA			
Stauroneis cf. vandevijveri			
Stauroneis circumborealis			
Stauroneis GV			
Stauroneis kriegeri			
Stauroneis sp. 1			
Staurophora cf. soodensis			
Staurosira construens			
Staurosirella leptosauron var. dubia			

Raw Counts	S1-0	S1-10	S1-20
Staurosirella sp. 1			
Stephanodiscus sp. 1		2	
Surirella angusta			
Surirella brebissonii			1
Surirella cf. iowensis		1	
Surirella ovalis			
Surirella peisonis	1		1
Surirella sp. 1	2		
Surirella splendida			2
Synedra cf. fulgens			
Synedra famelica			
Synedra ulna var. biceps			
Synedra ulna var. ramesi			4
Tabularia fasciculata			
Tabularia ktenoeoides			
Thalassionema nitzschioides			1
Thalassiosira baltica		1	
Thalassiosira cf. lineata	1	5	1
Thalassiosira cf. tenera			
Thalassiosira decipiens		1	2
Thalassiosira eccentrica			
Thalassiosira ferelineata		3	
Thalassiosira oestrupii		1	1
Thalassiosira proschkinae	2	2	
Thalassiosira sp. 10 Cooper			
Thalassiosira sp. 2-1 Cooper			
Triceratium sp. 2			
Tybionella debilis	18	12	
Ulnaria acus			
Ulnaria ulna		7	3
Undulate colony?			
Unknown araphid			
Unknown GV?			

Raw Counts	S1-30	S1-40	S1-50
Total Counted:	517	522	536
Species	86	81	92
Taxon	Count	Count	Count
Achnanthes denticula	1		
Achnanthes islandica		1	
Actinocyclus normanii	5	3	10
Actinocyclus octonarius var. crassus ?		3	9
Actinoptychus senarius			2
Amphora granulata		2	
Amphora sp. 1 (girdle view)	4		
Amphora sp. 2			
Anaulus cf. balticus			
Aneumastus pseudotusculus			
Anomoeoneis sp. 1		11	2
Anorthoneis tenuis			
Asterionella formosa			
Asterionella sp. 1			
Aulacoseira ambigua	89	88	30
Aulacoseira granulata	17	44	44
Aulacoseira pusilla	7		
Aulacoseira sp. 1			
Aulacoseira sp. 2			
Aulacoseira tenella	4	6	6
Bacillaria socialis	3		3
Biremis circumtexta			3
Biremis? sp. 1			
Caloneis aemula			
Caloneis bacillum	1	10	
Caloneis cf. lineatus			
Caloneis cf. ventricosa			
Caloneis lewisii			
Caloneis sp. 1 (girdle view)	4		
Caloneis sp. 2			
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Cavinula sp. 1			
Cocconeis cf. peltoides	1		
Cocconeis costata var. costata			
Cocconeis diminuta		1	

Raw Counts	S1-30	S1-40	S1-50
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis placentula	1		3
Cocconeis scutellum			
Coscinodiscus cf. lineatus		3	11
Coscinodiscus marginatus			3
Cosmoneis pusilla			6
Cosmoneis sp. 1			2
Craticula cuspidata			
Cyclostephanos sp. 1	2		
Cyclostephanos sp. 2			
Cyclotella atomus?	8	9	11
Cyclotella caspia			
Cyclotella cyclopuncta			14
Cyclotella distinguenda			
Cyclotella meneghiniana	11	12	10
Cyclotella rossii			
Cyclotella sp. 2	1	1	
Cyclotella striata	40	6	8
Cyclotella stylorum		1	4
Cymatopleura solea			
Cymatosira belgica		2	8
Cymbella affinis	3	1	2
Cymbella excisiformis?			
Cymbella janischii			
Cymbella mexicana			
Cymbella minuta			
Cymbella sinuata		1	1
Cymbella sp. 2	1		
Decussata placenta			
Delphineis minutissima			
Delphineis surirella			
Denticula kuetzengii			
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis	3		2
Diatoma vulgaris	3		
Diatomella balfouriana			
Dimeregramma minor	1		
Diploneis boldtiana			1

Raw Counts	S1-30	S1-40	S1-50
Diploneis cf. bombus			
Diploneis cf. didyma			
Diploneis elliptica		1	
Diploneis pseudovalis			
Diploneis smithii	2		
Diploneis interrupta			
Encyonema nicafei		15	2
Encyonema sp. 1			2
Encyonema sp. 2			
Encyonema sp. 3	1		
Encyonema triangulum			
Encyonopsis microcephala		3	
Epithemia adnata			
Epithemia frickei			1
Epithemia turgida		2	2
Eunotia sp. 1		1	
Eunotia sp. 2			
Fallacia pygmia	7	9	17
Fragilaria brevistriata			
Fragilaria capucina			
Fragilaria cf. microstriata			
Fragilaria elliptica			
Fragilaria schulzii			
Fragilaria vaucheriae	25	7	22
Frickea lewisiana			
Frustulia amphipleuroides		1	
Frustulia rhomboides var. viridula			
Frustulia sp. 1	4		
Frustulia vulgaris		2	4
Geissleria decussis			
Geissleria kreigeri	4	5	4
Gomphoneis sp. 1			
Gomphonema acuminatum			
Gomphonema innocens			
Gomphonema mammilla			
Gomphonema olivaceum			
Gomphonema sp. 1	7		
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum	1		

Raw Counts	S1-30	S1-40	S1-50
Grammatophora cf. macilenta	7		
Gyrosigma temperii			
Gyrosigma cf. balticum			
Gyrosigma sp.1			
Gyrosigma spencerii			
Hantzschia sp. 1 girdle view			
Hantzschia sp. 2 girdle view			
Hantzschia sp. 3			
Hantzschia virgata		2	1
Hippodonta costulata			1
Hippodonta coxiae		1	1
Hippodonta sp. 1			
Hippodonta sp. 2			
Karayevia amoena			
Leptocylindrus ? Cf. danicus		1	1
Luticola sp. 1	2		
Luticola sp. 2			
Luticola sp. 3			
Mastogloia smithii			2
Mastogloia sp. 1			
Mastogloia sp. 2			
Melosira sp. 1			
Melosira varians		2	
Meridion sp. 1			
Navicula abunda	5	8	1
Navicula angusta			
Navicula antonii	1		
Navicula brachium			
Navicula cari	4	2	2
Navicula cf. capitoradiata	4	23	20
Navicula cf. galloae			
Navicula cf. heuflerii		2	
Navicula cf. oblonga			
Navicula cf. patrickii			
Navicula cf. reichardtiana			
Navicula cf. salinarum	2	4	2
Navicula cf. schweigeri			2
Navicula cf. subinflata	3	13	12
Navicula cf. tripunctata	8		
Navicula cf. zostereti	6		

Raw Counts	S1-30	S1-40	S1-50
Navicula gregaria	8		
Navicula halophila	3		
Navicula lanceolata	7	5	1
Navicula marginulata	2		
Navicula oculiformis			
Navicula peregrina	5	3	3
Navicula perminuta			
Navicula phyllepta	1		
Navicula slesvicensis			1
Navicula sp. 1	4	1	
Navicula sp. 2			
Navicula sp. 3	4		
Navicula sp. 5			
Navicula sp. 6			
Navicula subinflata			2
Navicula subminiscula			
Naviculoid diatom 1	1		
Naviculoid diatom 2			
Neidiopsis sp. 1			
Nitzschia amphibia	2		
Nitzschia brevissima	50	33	15
Nitzschia cf. agnita			
Nitzschia cf. borealis		1	1
Nitzschia cf. groefii			
Nitzschia cf. laevis		12	
Nitzschia cf. macilenta	5		
Nitzschia clausii		5	1
Nitzschia columbiana			
Nitzschia communis			2
Nitzschia commutata			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis	4	2	
Nitzschia desertorum			1
Nitzschia dissipata		3	1
Nitzschia filiformis	2		
Nitzschia frustulum			2
Nitzschia gracilis			
Nitzschia incognita		2	
Nitzschia inconspicua		2	

Raw Counts	S1-30	S1-40	S1-50
Nitzschia levidensis			2
Nitzschia linearis	14		1
Nitzschia microcephala			
Nitzschia nana		10	2
Nitzschia obtusa			
Nitzschia palea	18	13	21
Nitzschia panduriformis	1		
Nitzschia pellucida	2		
Nitzschia perminuta	2		
Nitzschia proxima	2		
Nitzschia punctata	3		
Nitzschia pusilla			
Nitzschia scalaris		1	4
Nitzschia sigma	1		
Nitzschia sigmaformis	2		
Nitzschia sp. 1	2		1
Nitzschia sp. 2	2		
Nitzschia sp. 3			
Nitzschia sp. 4		3	2
Nitzschia sp. 5			
Nitzschia umbonata			
Opephora martyi		2	
Opephora sp. A			
Orthoseira sp. 1	2		
Paralia sulcata	11	17	44
Parlibellus cf. plicatus		1	2
Pinnularia borealis			
Pinnularia divergens		3	8
Pinnularia divergentissima		8	
Pinnularia interrupta			
Pinnularia marchica		7	8
Pinnularia microstauron		3	4
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			
Pinnularia sp. 8			
Pinnularia sp.1	5		
Pinnularia sp.2	1		

Raw Counts	S1-30	S1-40	S1-50
Pinnularia viridis		2	3
Placoneis cf. gastrum		3	5
Placoneis sp. 1			
Placoneis sp. 2			
Plagiogramma cf. minima			
Planothidium frequentissimum		1	7
Planothidium lanceolatum	1		
Planothidium paragali			
Planothidium sp. 1	1		
Planothidium sp. 2			
Pleurosigma diverse-striatum			
Psammothidium? Sp. 1			
Pseudostauroneis parasitica	1		
Pseudostaurosira americana	1		
Pseudostaurosiropsis sp. 1			
Pseudostaurosiropsis sp. 1 (GV)			
Punctastriata mimetica			
Rhaphoneis amphiceros	2	4	11
Rhaphoneis tenuis			5
Rhoicosphenia cf. marina		2	
Rhoicosphenia sp. 1			
Rhopalodia acuminatum			
Rhopolodia gibba			
Rhopolodia musculus		1	2
Sellaphora cf. hohnii			
Sellaphora laevissima			
Sellaphora pupula	3	3	3
Sellaphora rexii			2
Sellaphora bacillum		2	
Skeletonema sp. 1			
Stauroneis agrestis			
Stauroneis CA			
Stauroneis cf. vandevijveri			
Stauroneis circumborealis			1
Stauroneis GV			2
Stauroneis kriegeri		4	
Stauroneis sp. 1			
Staurophora cf. soodensis			
Staurosira construens		2	2
Staurosirella leptosauron var. dubia			1

Raw Counts	S1-30	S1-40	S1-50
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angusta		4	9
Surirella brebissonii	3		
Surirella cf. iowensis			
Surirella ovalis	1		
Surirella peisonis			
Surirella sp. 1			2
Surirella splendida	1	15	2
Synedra cf. fulgens			
Synedra famelica			
Synedra ulna var. biceps			
Synedra ulna var. ramesi	5		
Tabularia fasciculata		6	
Tabularia ktenoeoides			5
Thalassionema nitzschioides	5	9	16
Thalassiosira baltica			
Thalassiosira cf. lineata	1		4
Thalassiosira cf. tenera	1		
Thalassiosira decipiens	1	2	
Thalassiosira eccentrica		3	7
Thalassiosira ferelineata	4	1	1
Thalassiosira oestrupii			1
Thalassiosira proschkinae			
Thalassiosira sp. 10 Cooper		2	2
Thalassiosira sp. 2-1 Cooper		1	3
Triceratium sp. 2			1
Tybionella debilis	6		2
Ulnaria acus			
Ulnaria ulna	11	9	14
Undulate colony?			
Unknown araphid			
Unknown GV?			

Raw Counts	S1-60	S1-70	S1-80
Total Counted:	503	505	503
Species	74	84	85
Taxon	Count	Count	Count
Achnanthes denticula			
Achnanthes islandica			
Actinocyclus normanii	40	15	5
Actinocyclus octonarius var. crassus ?	16	6	13
Actinoptychus senarius	1	6	13
Amphora granulata	2		1
Amphora sp. 1 (girdle view)	6		
Amphora sp. 2			
Anaulus cf. balticus			
Aneumastus pseudotusculus			
Anomoeoneis sp. 1		1	
Anorthoneis tenuis			
Asterionella formosa			
Asterionella sp. 1			1
Aulacoseira ambigua	8	11	15
Aulacoseira granulata		4	
Aulacoseira pusilla			
Aulacoseira sp. 1			
Aulacoseira sp. 2			
Aulacoseira tenella			
Bacillaria socialis		1	1
Biremis circumtexta			
Biremis? sp. 1			
Caloneis aemula			
Caloneis bacillum	1	1	3
Caloneis cf. lineatus			
Caloneis cf. ventricosa			
Caloneis lewisii			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			1
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Cavinula sp. 1			
Cocconeis cf. peltoides	1		
Cocconeis costata var. costata			1
Cocconeis diminuta	2		

Raw Counts	S1-60	S1-70	S1-80
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis placentula	9	7	6
Cocconeis scutellum	1		
Coscinodiscus cf. lineatus		15	
Coscinodiscus marginatus	3		9
Cosmoneis pusilla			
Cosmoneis sp. 1			1
Craticula cuspidata			
Cyclostephanos sp. 1	1		
Cyclostephanos sp. 2			
Cyclotella atomus?	13	8	19
Cyclotella caspia		1	
Cyclotella cyclopuncta		11	
Cyclotella distinguenda			
Cyclotella meneghiniana	10	5	12
Cyclotella rossii			
Cyclotella sp. 2			
Cyclotella striata	63	20	32
Cyclotella stylorum		9	16
Cymatopleura solea			
Cymatosira belgica	5	15	2
Cymbella affinis	6	1	11
Cymbella excisiformis?		2	2
Cymbella janischii			
Cymbella mexicana			
Cymbella minuta			
Cymbella sinuata	3	2	1
Cymbella sp. 2			
Decussata placenta			
Delphineis minutissima	1		
Delphineis surirella	2		2
Denticula kuetzengii			
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis	1		
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana			1

Raw Counts	S1-60	S1-70	S1-80
Diploneis cf. bombus		2	
Diploneis cf. didyma	1		
Diploneis elliptica		2	
Diploneis pseudovalis	1		6
Diploneis smithii	4	1	3
Diploneis interrupta			
Encyonema nicafei	7	6	3
Encyonema sp. 1		3	14
Encyonema sp. 2	1		
Encyonema sp. 3			
Encyonema triangulum		2	
Encyonopsis microcephala			
Epithemia adnata	7		2
Epithemia frickei			6
Epithemia turgida		1	1
Eunotia sp. 1		2	
Eunotia sp. 2			
Fallacia pygmia	9	4	12
Fragilaria brevistriata	3		
Fragilaria capucina			
Fragilaria cf. microstriata			
Fragilaria elliptica		4	3
Fragilaria schulzii			
Fragilaria vaucheriae	9	20	5
Frickea lewisiana			
Frustulia amphipleuroides			
Frustulia rhomboides var. viridula		1	
Frustulia sp. 1			1
Frustulia vulgaris		2	
Geissleria decussis		1	
Geissleria kreigeri	4	1	2
Gomphoneis sp. 1			
Gomphonema acuminatum			
Gomphonema innocens		7	
Gomphonema mammilla			3
Gomphonema olivaceum			2
Gomphonema sp. 1			1
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum	1		1

Raw Counts	S1-60	S1-70	S1-80
Grammatophora cf. macilenta		1	
Gyrosigma temperii			
Gyrosigma cf. balticum			2
Gyrosigma sp.1			
Gyrosigma spencerii			
Hantzschia sp. 1 girdle view			
Hantzschia sp. 2 girdle view	8		2
Hantzschia sp. 3			
Hantzschia virgata			
Hippodonta costulata		5	
Hippodonta coxiae			
Hippodonta sp. 1			
Hippodonta sp. 2			
Karayevia amoena			
Leptocylindrus ? Cf. danicus		1	
Luticola sp. 1			
Luticola sp. 2			1
Luticola sp. 3			
Mastogloia smithii			
Mastogloia sp. 1			
Mastogloia sp. 2			
Melosira sp. 1			
Melosira varians		2	
Meridion sp. 1			
Navicula abunda	13	7	10
Navicula angusta			
Navicula antonii			
Navicula brachium	1		5
Navicula cari			
Navicula cf. capitoradiata		2	10
Navicula cf. galloae			
Navicula cf. heuflerii	1		
Navicula cf. oblonga		1	
Navicula cf. patrickii		4	
Navicula cf. reichardtiana		1	
Navicula cf. salinarum			2
Navicula cf. schweigeri	1	1	
Navicula cf. subinflata			
Navicula cf. tripunctata	3	2	3
Navicula cf. zostereti	1		1

Raw Counts	S1-60	S1-70	S1-80
Navicula gregaria			1
Navicula halophila	1		2
Navicula lanceolata			1
Navicula marginulata			
Navicula oculiformis			
Navicula peregrina	16	13	6
Navicula perminuta			1
Navicula phyllepta	2		
Navicula slesvicensis			
Navicula sp. 1	2		
Navicula sp. 2			
Navicula sp. 3	4		
Navicula sp. 5			
Navicula sp. 6			
Navicula subinflata	2	1	1
Navicula subminiscula			
Naviculoid diatom 1			
Naviculoid diatom 2			
Neidiopsis sp. 1			
Nitzschia amphibia			2
Nitzschia brevissima			4
Nitzschia cf. agnita			
Nitzschia cf. borealis			
Nitzschia cf. groefii			
Nitzschia cf. laevis			
Nitzschia cf. macilenta	1		1
Nitzschia clausii		2	
Nitzschia columbiana		1	
Nitzschia communis			2
Nitzschia commutata			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis			2
Nitzschia desertorum			
Nitzschia dissipata		1	
Nitzschia filiformis			3
Nitzschia frustulum			
Nitzschia gracilis			1
Nitzschia incognita			
Nitzschia inconspicua	2		

Raw Counts	S1-60	S1-70	S1-80
Nitzschia levidensis			
Nitzschia linearis	3	1	9
Nitzschia microcephala			
Nitzschia nana			
Nitzschia obtusa			
Nitzschia palea	2	1	2
Nitzschia panduriformis			1
Nitzschia pellucida			
Nitzschia perminuta	2		4
Nitzschia proxima			
Nitzschia punctata		2	4
Nitzschia pusilla			
Nitzschia scalaris		2	
Nitzschia sigma	3		
Nitzschia sigmaformis			
Nitzschia sp. 1			2
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4		4	
Nitzschia sp. 5			
Nitzschia umbonata			
Opephora martyi	1	6	3
Opephora sp. A			1
Orthoseira sp. 1			6
Paralia sulcata	43	84	39
Parlibellus cf. plicatus	2		2
Pinnularia borealis			
Pinnularia divergens		1	
Pinnularia divergentissima			
Pinnularia interrupta			
Pinnularia marchica	4		2
Pinnularia microstauron			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6		1	
Pinnularia sp. 7			
Pinnularia sp. 8			
Pinnularia sp.1			
Pinnularia sp.2			

Raw Counts	S1-60	S1-70	S1-80
Pinnularia viridis			
Placoneis cf. gastrum		1	
Placoneis sp. 1			
Placoneis sp. 2			
Plagiogramma cf. minima	1		
Planothidium frequentissimum		1	
Planothidium lanceolatum			
Planothidium paragali			
Planothidium sp. 1	6		2
Planothidium sp. 2			5
Pleurosigma diverse-striatum		1	
Psammothidium? Sp. 1			
Pseudostauroneis parasitica	1		
Pseudostaurosira americana	3	1	
Pseudostaurosiropsis sp. 1			
Pseudostaurosiropsis sp. 1 (GV)			
Punctastriata mimetica			
Rhaphoneis amphiceros	25	35	23
Rhaphoneis tenuis		6	
Rhoicosphenia cf. marina	6		
Rhoicosphenia sp. 1			
Rhopalodia acuminatum		2	
Rhopolodia gibba			
Rhopolodia musculus		3	
Sellaphora cf. hohnii			
Sellaphora laevissima	1		
Sellaphora pupula		1	
Sellaphora rexii			
Sellaphora bacillum			
Skeletonema sp. 1	3		
Stauroneis agrestis		1	
Stauroneis CA			
Stauroneis cf. vandevijveri			
Stauroneis circumborealis			
Stauroneis GV			
Stauroneis kriegeri			
Stauroneis sp. 1			
Staurophora cf. soodensis			
Staurosira construens			
Staurosirella leptosauron var. dubia	3		

Raw Counts	S1-60	S1-70	S1-80
Staurosirella sp. 1			1
Stephanodiscus sp. 1			
Surirella angusta			
Surirella brebissonii			
Surirella cf. iowensis	1		
Surirella ovalis			
Surirella peisonis	1		
Surirella sp. 1			
Surirella splendida	4		
Synedra cf. fulgens			
Synedra famelica			
Synedra ulna var. biceps			
Synedra ulna var. ramesi			
Tabularia fasciculata			1
Tabularia ktenoeoides			12
Thalassionema nitzschioides	6	14	8
Thalassiosira baltica		1	
Thalassiosira cf. lineata		15	1
Thalassiosira cf. tenera	3		
Thalassiosira decipiens		9	
Thalassiosira eccentrica		14	
Thalassiosira ferelineata	42	6	21
Thalassiosira oestrupii	7	2	35
Thalassiosira proschkinae	13	1	
Thalassiosira sp. 10 Cooper		2	
Thalassiosira sp. 2-1 Cooper		6	
Triceratium sp. 2		2	
Tybionella debilis			7
Ulnaria acus		5	
Ulnaria ulna	17	29	16
Undulate colony?			
Unknown araphid			
Unknown GV?			

Raw Counts	S1-90	S1-100	S1-110	S1-120
Total Counted:	514	516	504	506
Species	90	112	75	79
Taxon	Count	Count	Count	Count
Achnanthes denticula				
Achnanthes islandica	4			
Actinocyclus normanii	16	1	1	1
Actinocyclus octonarius var. crassus ?	11	23	10	
Actinoptychus senarius	1	7	2	4
Amphora granulata				
Amphora sp. 1 (girdle view)				
Amphora sp. 2				2
Anaulus cf. balticus		4		
Aneumastus pseudotusculus		2		
Anomoeoneis sp. 1				
Anorthoneis tenuis				
Asterionella formosa		1		
Asterionella sp. 1				
Aulacoseira ambigua	66	11	9	24
Aulacoseira granulata				
Aulacoseira pusilla				
Aulacoseira sp. 1				
Aulacoseira sp. 2		5		
Aulacoseira tenella				
Bacillaria socialis	2		4	2
Biremis circumtexta	3			
Biremis? sp. 1				
Caloneis aemula			1	
Caloneis bacillum	2	1	19	3
Caloneis cf. lineatus				
Caloneis cf. ventricosa				
Caloneis lewisii				
Caloneis sp. 1 (girdle view)				
Caloneis sp. 2				
Caloneis sp. 3				
Caloneis sp. 4				
Campylodiscus sp. 1				
Cavinula sp. 1		1		
Cocconeis cf. peltoides		1		
Cocconeis costata var. costata				
Cocconeis diminuta				

Raw Counts	S1-90	S1-100	S1-110	S1-120
Cocconeis disculoides				
Cocconeis elongatum				
Cocconeis placentula	3	6		
Cocconeis scutellum				
Coscinodiscus cf. lineatus				10
Coscinodiscus marginatus	9	4	9	2
Cosmoneis pusilla			2	2
Cosmoneis sp. 1		2		
Craticula cuspidata				
Cyclostephanos sp. 1				
Cyclostephanos sp. 2				
Cyclotella atomus?	18	16	4	5
Cyclotella caspia		4		1
Cyclotella cyclopuncta	12	14	20	23
Cyclotella distinguenda		4		2
Cyclotella meneghiniana	9	1		3
Cyclotella rossii				
Cyclotella sp. 2	1			
Cyclotella striata	15	22	26	16
Cyclotella stylorum	4	24	13	19
Cymatopleura solea		1		
Cymatosira belgica	1		5	
Cymbella affinis	2	5		
Cymbella excisiformis?				
Cymbella janischii				
Cymbella mexicana				
Cymbella minuta		2		
Cymbella sinuata		4		
Cymbella sp. 2				
Decussata placenta			3	
Delphineis minutissima				
Delphineis surirella		5		1
Denticula kuetzengii	1			
Diadesmis gallica				
Diatoma mesodon				
Diatoma moniliformis	3	5	1	1
Diatoma vulgaris				
Diatomella balfouriana				
Dimeregramma minor				
Diploneis boldtiana	2	5	3	16

Raw Counts	S1-90	S1-100	S1-110	S1-120
Diploneis cf. bombus	3	2	2	1
Diploneis cf. didyma				
Diploneis elliptica			5	8
Diploneis pseudovalis		3	4	3
Diploneis smithii	1	1	3	2
Diploneis interrupta	1			
Encyonema nicafei	7	14	1	2
Encyonema sp. 1				
Encyonema sp. 2		2		
Encyonema sp. 3				
Encyonema triangulum				
Encyonopsis microcephala	3			
Epithemia adnata		1		
Epithemia frickei		1	1	
Epithemia turgida	7	2	1	3
Eunotia sp. 1				
Eunotia sp. 2				
Fallacia pygmia	7	2	2	
Fragilaria brevistriata				
Fragilaria capucina	1			
Fragilaria cf. microstriata				
Fragilaria elliptica	2			
Fragilaria schulzii				
Fragilaria vaucheriae	5			
Frickea lewisiana				
Frustulia amphipleuroides		1		
Frustulia rhomboides var. viridula		1		
Frustulia sp. 1		4		
Frustulia vulgaris	4	2		
Geissleria decussis				
Geissleria kreigeri	1			
Gomphoneis sp. 1		2		
Gomphonema acuminatum				
Gomphonema innocens		1		
Gomphonema mammilla				
Gomphonema olivaceum		2		
Gomphonema sp. 1	1			
Gomphonema sp. 2				
Gomphonema sp. 3	1			
Gomphonopsis exiguum				

Raw Counts	S1-90	S1-100	S1-110	S1-120
Grammatophora cf. macilenta				
Gyrosigma temperii		4		
Gyrosigma cf. balticum				
Gyrosigma sp.1				
Gyrosigma spencerii	3			
Hantzschia sp. 1 girdle view				
Hantzschia sp. 2 girdle view		4		6
Hantzschia sp. 3				2
Hantzschia virgata			7	6
Hippodonta costulata	1			
Hippodonta coxiae	1		2	
Hippodonta sp. 1		6		2
Hippodonta sp. 2				2
Karayevia amoena	1	1		
Leptocylindrus ? Cf. danicus	1		1	
Luticola sp. 1		1		
Luticola sp. 2		2		
Luticola sp. 3				
Mastogloia smithii				
Mastogloia sp. 1				
Mastogloia sp. 2				
Melosira sp. 1				1
Melosira varians		2		3
Meridion sp. 1		1		
Navicula abunda	6	15	4	4
Navicula angusta				
Navicula antonii	4			
Navicula brachium		1	2	
Navicula cari				2
Navicula cf. capitoradiata	8	12		
Navicula cf. galloae				
Navicula cf. heuflerii				
Navicula cf. oblonga	1			
Navicula cf. patrickii			2	
Navicula cf. reichardtiana		2	3	
Navicula cf. salinarum		1	1	3
Navicula cf. schweigeri	10			
Navicula cf. subinflata	3		24	4
Navicula cf. tripunctata		12		7
Navicula cf. zostereti				

Raw Counts	S1-90	S1-100	S1-110	S1-120
Navicula gregaria	1			
Navicula halophila	1	4		
Navicula lanceolata	2	1	1	
Navicula marginulata				
Navicula oculiformis				
Navicula peregrina	5	5	3	4
Navicula perminuta		2		
Navicula phyllepta				
Navicula slesvicensis				
Navicula sp. 1				
Navicula sp. 2				
Navicula sp. 3		2	3	1
Navicula sp. 5				
Navicula sp. 6				
Navicula subinflata				
Navicula subminiscula				1
Naviculoid diatom 1				
Naviculoid diatom 2		1		
Neidiopsis sp. 1				
Nitzschia amphibia		2		
Nitzschia brevissima	11	9	18	12
Nitzschia cf. agnita	2		2	
Nitzschia cf. borealis			1	
Nitzschia cf. groefii				
Nitzschia cf. laevis				
Nitzschia cf. macilenta		6	2	
Nitzschia clausii	4		7	25
Nitzschia columbiana	2	2	6	
Nitzschia communis	2	4	4	3
Nitzschia commutata				
Nitzschia constricta				
Nitzschia cylindrus				
Nitzschia debilis				9
Nitzschia desertorum	2	1		2
Nitzschia dissipata				2
Nitzschia filiformis		2		2
Nitzschia frustulum	2			
Nitzschia gracilis		2		2
Nitzschia incognita				6
Nitzschia inconspicua	2		2	1

Raw Counts	S1-90	S1-100	S1-110	S1-120
Nitzschia levidensis		2		
Nitzschia linearis	1	7		
Nitzschia microcephala				
Nitzschia nana			2	
Nitzschia obtusa				
Nitzschia palea	2	5	5	5
Nitzschia panduriformis	1	1		
Nitzschia pellucida				
Nitzschia perminuta				
Nitzschia proxima				
Nitzschia punctata	2	3	2	4
Nitzschia pusilla			4	2
Nitzschia scalaris	1		2	
Nitzschia sigma		2	1	
Nitzschia sigmaformis		1		
Nitzschia sp. 1	1	1	7	
Nitzschia sp. 2				
Nitzschia sp. 3				
Nitzschia sp. 4	1		6	
Nitzschia sp. 5				
Nitzschia umbonata				
Opephora martyi		2		1
Opephora sp. A		1		
Orthoseira sp. 1		1		
Paralia sulcata	49	22	76	63
Parlibellus cf. plicatus				
Pinnularia borealis			5	
Pinnularia divergens		5		
Pinnularia divergentissima				
Pinnularia interrupta				
Pinnularia marchica		2	38	62
Pinnularia microstauron	1		1	
Pinnularia sp. 3				
Pinnularia sp. 4				
Pinnularia sp. 5				
Pinnularia sp. 6				
Pinnularia sp. 7				
Pinnularia sp. 8				
Pinnularia sp.1				
Pinnularia sp.2				

Raw Counts	S1-90	S1-100	S1-110	S1-120
Pinnularia viridis			2	
Placoneis cf. gastrum			2	
Placoneis sp. 1	4			
Placoneis sp. 2				
Plagiogramma cf. minima				2
Planothidium frequentissimum	2			
Planothidium lanceolatum		5		2
Planothidium paragali	1			
Planothidium sp. 1		1		2
Planothidium sp. 2		1		
Pleurosigma diverse-striatum	5			
Psammothidium? Sp. 1				2
Pseudostauroneis parasitica				
Pseudostaurosira americana	6	3		
Pseudostaurosiropsis sp. 1				
Pseudostaurosiropsis sp. 1 (GV)		2		
Punctastriata mimetica				
Rhaphoneis amphiceros	28	8	24	8
Rhaphoneis tenuis	2	1	2	
Rhoicosphenia cf. marina	4			
Rhoicosphenia sp. 1				2
Rhopalodia acuminatum		3	2	9
Rhopolodia gibba				2
Rhopolodia musculus	3		4	1
Sellaphora cf. hohnii	4			1
Sellaphora laevissima				
Sellaphora pupula				
Sellaphora rexii				18
Sellaphora bacillum		4		
Skeletonema sp. 1				
Stauroneis agrestis	1			
Stauroneis CA			1	
Stauroneis cf. vandevijveri				
Stauroneis circumborealis				
Stauroneis GV				
Stauroneis kriegeri		3		
Stauroneis sp. 1				
Staurophora cf. soodensis	1	1		
Staurosira construens	2			
Staurosirella leptosauron var. dubia		2		2

Raw Counts	S1-90	S1-100	S1-110	S1-120
Staurosirella sp. 1				
Stephanodiscus sp. 1				
Surirella angusta				
Surirella brebissonii				
Surirella cf. iowensis				
Surirella ovalis				
Surirella peisonis		5		
Surirella sp. 1				
Surirella splendida				
Synedra cf. fulgens				
Synedra famelica				1
Synedra ulna var. biceps		3		
Synedra ulna var. ramesi				
Tabularia fasciculata	5			
Tabularia ktenoeoides				
Thalassionema nitzschioides	10	13	4	5
Thalassiosira baltica				
Thalassiosira cf. lineata	17	9	14	5
Thalassiosira cf. tenera		2	1	5
Thalassiosira decipiens	15	20	13	18
Thalassiosira eccentrica	12	4	10	3
Thalassiosira ferelineata		14		
Thalassiosira oestrupii		6		3
Thalassiosira proschkinae			3	4
Thalassiosira sp. 10 Cooper	7		4	1
Thalassiosira sp. 2-1 Cooper	8		14	
Triceratium sp. 2	1	3		
Tybionella debilis			4	2
Ulnaria acus	1	1		
Ulnaria ulna	12	12	3	3
Undulate colony?		4	2	
Unknown araphid				
Unknown GV?		2		

Raw Counts	S1-130	S1-140	S1-150	S1-160
Total Counted:	503	501	515	507
Species	85	79	78	68
Taxon	Count	Count	Count	Count
Achnanthes denticula		1		
Achnanthes islandica				
Actinocyclus normanii		1	1	1
Actinocyclus octonarius var. crassus ?	11	8	2	
Actinoptychus senarius	5	4	6	2
Amphora granulata				
Amphora sp. 1 (girdle view)				
Amphora sp. 2				
Anaulus cf. balticus				
Aneumastus pseudotusculus				
Anomoeoneis sp. 1				
Anorthoneis tenuis	1			
Asterionella formosa				
Asterionella sp. 1				
Aulacoseira ambigua	7	9	3	10
Aulacoseira granulata				
Aulacoseira pusilla				
Aulacoseira sp. 1				
Aulacoseira sp. 2				
Aulacoseira tenella				
Bacillaria socialis	6		4	2
Biremis circumtexta				
Biremis? sp. 1				
Caloneis aemula	2	4		
Caloneis bacillum	8	12	13	17
Caloneis cf. lineatus				
Caloneis cf. ventricosa		3		
Caloneis lewisii		1	2	
Caloneis sp. 1 (girdle view)				
Caloneis sp. 2				
Caloneis sp. 3			1	
Caloneis sp. 4				
Campylodiscus sp. 1				
Cavinula sp. 1				
Cocconeis cf. peltoides				
Cocconeis costata var. costata				
Cocconeis diminuta				

Raw Counts	S1-130	S1-140	S1-150	S1-160
Cocconeis disculoides				
Cocconeis elongatum				
Cocconeis placentula	1	1	1	
Cocconeis scutellum				
Coscinodiscus cf. lineatus		1	3	
Coscinodiscus marginatus	8	7		4
Cosmoneis pusilla	4	1	11	17
Cosmoneis sp. 1				
Craticula cuspidata				
Cyclostephanos sp. 1				
Cyclostephanos sp. 2				4
Cyclotella atomus?	10	4	1	2
Cyclotella caspia	1	6	1	
Cyclotella cyclopuncta	25	25	21	20
Cyclotella distinguenda				
Cyclotella meneghiniana				
Cyclotella rossii				
Cyclotella sp. 2				
Cyclotella striata	19	23	6	26
Cyclotella stylorum	12	10	9	3
Cymatopleura solea				
Cymatosira belgica	4		2	
Cymbella affinis	1		1	1
Cymbella excisiformis?	1		1	
Cymbella janischii				
Cymbella mexicana	1	1	4	
Cymbella minuta				
Cymbella sinuata				
Cymbella sp. 2				
Decussata placenta	4	4	1	2
Delphineis minutissima				
Delphineis surirella				1
Denticula kuetzengii				1
Diadesmis gallica				
Diatoma mesodon				
Diatoma moniliformis		2	1	1
Diatoma vulgaris				
Diatomella balfouriana				
Dimeregramma minor				
Diploneis boldtiana	6	30	12	23

Raw Counts	S1-130	S1-140	S1-150	S1-160
Diploneis cf. bombus				
Diploneis cf. didyma				
Diploneis elliptica	2	25	33	46
Diploneis pseudovalis	4	13	8	11
Diploneis smithii	2	8	1	10
Diploneis interrupta				
Encyonema nicafei	1		4	
Encyonema sp. 1				
Encyonema sp. 2				
Encyonema sp. 3				
Encyonema triangulum				
Encyonopsis microcephala				
Epithemia adnata				
Epithemia frickei				
Epithemia turgida	3	2	3	
Eunotia sp. 1				
Eunotia sp. 2			1	
Fallacia pygmia				
Fragilaria brevistriata		2		
Fragilaria capucina				
Fragilaria cf. microstriata		2		
Fragilaria elliptica				
Fragilaria schulzii				
Fragilaria vaucheriae				
Frickea lewisiana				
Frustulia amphipleuroides			1	
Frustulia rhomboides var. viridula				
Frustulia sp. 1				
Frustulia vulgaris	4			1
Geissleria decussis		2		
Geissleria kreigeri			1	
Gomphoneis sp. 1				
Gomphonema acuminatum				
Gomphonema innocens				
Gomphonema mammilla				
Gomphonema olivaceum				
Gomphonema sp. 1		4		
Gomphonema sp. 2				
Gomphonema sp. 3				
Gomphonopsis exiguum				

Raw Counts	S1-130	S1-140	S1-150	S1-160
Grammatophora cf. macilenta				
Gyrosigma temperii				
Gyrosigma cf. balticum		1		
Gyrosigma sp.1				
Gyrosigma spencerii	1		2	
Hantzschia sp. 1 girdle view				
Hantzschia sp. 2 girdle view		2		
Hantzschia sp. 3				
Hantzschia virgata	2	7	4	3
Hippodonta costulata				3
Hippodonta coxiae	3		3	
Hippodonta sp. 1				
Hippodonta sp. 2				1
Karayevia amoena				
Leptocylindrus ? Cf. danicus	4		3	
Luticola sp. 1				
Luticola sp. 2				
Luticola sp. 3			2	
Mastogloia smithii				
Mastogloia sp. 1				
Mastogloia sp. 2				
Melosira sp. 1				
Melosira varians				
Meridion sp. 1				
Navicula abunda	11	10	10	6
Navicula angusta				
Navicula antonii				
Navicula brachium	2			
Navicula cari	5		13	
Navicula cf. capitoradiata		3		
Navicula cf. galloae		1		
Navicula cf. heuflerii				
Navicula cf. oblonga	1	3		
Navicula cf. patrickii	2			
Navicula cf. reichardtiana				
Navicula cf. salinarum	2			3
Navicula cf. schweigeri		4		
Navicula cf. subinflata	2			
Navicula cf. tripunctata	4		3	2
Navicula cf. zostereti		2		

Raw Counts	S1-130	S1-140	S1-150	S1-160
Navicula gregaria		1		1
Navicula halophila				
Navicula lanceolata	2			
Navicula marginulata				
Navicula oculiformis				
Navicula peregrina	5	13	1	5
Navicula perminuta				
Navicula phyllepta				
Navicula slesvicensis				
Navicula sp. 1				
Navicula sp. 2				
Navicula sp. 3		4		3
Navicula sp. 5				1
Navicula sp. 6			3	
Navicula subinflata		1		
Navicula subminiscula				
Naviculoid diatom 1				
Naviculoid diatom 2				
Neidiopsis sp. 1		2		
Nitzschia amphibia	1	1		
Nitzschia brevissima	19	4	2	2
Nitzschia cf. agnita	2	2		
Nitzschia cf. borealis	5		5	
Nitzschia cf. groefii				
Nitzschia cf. laevis	1			
Nitzschia cf. macilenta	1			2
Nitzschia clausii	11	8	5	1
Nitzschia columbiana	4	3	3	1
Nitzschia communis	2		2	2
Nitzschia commutata	2		7	
Nitzschia constricta				
Nitzschia cylindrus				
Nitzschia debilis				
Nitzschia desertorum	2	2		
Nitzschia dissipata				
Nitzschia filiformis	1	2		1
Nitzschia frustulum				
Nitzschia gracilis				
Nitzschia incognita	2			
Nitzschia inconspicua	1			

Raw Counts	S1-130	S1-140	S1-150	S1-160
Nitzschia levidensis	2			9
Nitzschia linearis		5		
Nitzschia microcephala		1		
Nitzschia nana	1			2
Nitzschia obtusa		5		26
Nitzschia palea	6		2	1
Nitzschia panduriformis				
Nitzschia pellucida				
Nitzschia perminuta				
Nitzschia proxima		6	4	
Nitzschia punctata	2			
Nitzschia pusilla				
Nitzschia scalaris	9		13	5
Nitzschia sigma	5			
Nitzschia sigmaformis		2		2
Nitzschia sp. 1	10	12	15	31
Nitzschia sp. 2				
Nitzschia sp. 3				
Nitzschia sp. 4	9		19	
Nitzschia sp. 5				
Nitzschia umbonata				
Opephora martyi				
Opephora sp. A				
Orthoseira sp. 1		5		5
Paralia sulcata	75	49	50	50
Parlibellus cf. plicatus				
Pinnularia borealis				
Pinnularia divergens			5	9
Pinnularia divergentissima	2	1		
Pinnularia interrupta				
Pinnularia marchica	5	9	7	2
Pinnularia microstauron	2	9	23	4
Pinnularia sp. 3				
Pinnularia sp. 4				2
Pinnularia sp. 5				2
Pinnularia sp. 6				
Pinnularia sp. 7			2	
Pinnularia sp. 8			2	
Pinnularia sp.1				
Pinnularia sp.2				

Raw Counts	S1-130	S1-140	S1-150	S1-160
Pinnularia viridis	7	9	5	15
Placoneis cf. gastrum	3		18	2
Placoneis sp. 1		5		
Placoneis sp. 2				
Plagiogramma cf. minima				
Planothidium frequentissimum	6			
Planothidium lanceolatum			1	2
Planothidium paragali			1	
Planothidium sp. 1				
Planothidium sp. 2				
Pleurosigma diverse-striatum				
Psammothidium? Sp. 1				
Pseudostauroneis parasitica				
Pseudostaurosira americana				
Pseudostaurosiropsis sp. 1				
Pseudostaurosiropsis sp. 1 (GV)				
Punctastriata mimetica				
Rhaphoneis amphiceros	28	11	19	12
Rhaphoneis tenuis	3	2	3	
Rhoicosphenia cf. marina	2			
Rhoicosphenia sp. 1		2		
Rhopalodia acuminatum	13	17	10	37
Rhopolodia gibba				
Rhopolodia musculus	4	9	48	5
Sellaphora cf. hohnii				
Sellaphora laevissima			4	
Sellaphora pupula			1	
Sellaphora rexii				
Sellaphora bacillum			1	
Skeletonema sp. 1				
Stauroneis agrestis		1		
Stauroneis CA			2	3
Stauroneis cf. vandevijveri				
Stauroneis circumborealis				
Stauroneis GV				
Stauroneis kriegeri				
Stauroneis sp. 1				
Staurophora cf. soodensis				
Staurosira construens				
Staurosirella leptosauron var. dubia				

Raw Counts	S1-130	S1-140	S1-150	S1-160
Staurosirella sp. 1				
Stephanodiscus sp. 1				
Surirella angusta				
Surirella brebissonii		1		1
Surirella cf. iowensis				
Surirella ovalis			1	
Surirella peisonis				
Surirella sp. 1				
Surirella splendida				
Synedra cf. fulgens		7		
Synedra famelica				
Synedra ulna var. biceps				
Synedra ulna var. ramesi				
Tabularia fasciculata				
Tabularia ktenoeoides				
Thalassionema nitzschioides	23	12	12	3
Thalassiosira baltica				
Thalassiosira cf. lineata	3	4	5	7
Thalassiosira cf. tenera				
Thalassiosira decipiens	3	14		7
Thalassiosira eccentrica	3	2	2	2
Thalassiosira ferelineata	5	4	2	3
Thalassiosira oestrupii	1			8
Thalassiosira proschkinae	4		3	
Thalassiosira sp. 10 Cooper				
Thalassiosira sp. 2-1 Cooper	6		2	
Triceratium sp. 2				
Tybionella debilis	4	4	6	6
Ulnaria acus				
Ulnaria ulna	4	1		2
Undulate colony?				
Unknown araphid				
Unknown GV?				

Raw Counts	S1-170	S1-180	S1-190	S1-200
Total Counted:	551	521	532	503
Species	85	75	86	93
Taxon	Count	Count	Count	Count
Achnanthes denticula				
Achnanthes islandica				
Actinocyclus normanii	3		7	
Actinocyclus octonarius var. crassus ?	6	3	4	6
Actinoptychus senarius	10	5	17	3
Amphora granulata				2
Amphora sp. 1 (girdle view)				
Amphora sp. 2			1	
Anaulus cf. balticus			1	
Aneumastus pseudotusculus				
Anomoeoneis sp. 1				
Anorthoneis tenuis		2		1
Asterionella formosa				
Asterionella sp. 1				
Aulacoseira ambigua	9	6	3	6
Aulacoseira granulata				
Aulacoseira pusilla		2		
Aulacoseira sp. 1				
Aulacoseira sp. 2				
Aulacoseira tenella				
Bacillaria socialis	6	5	6	6
Biremis circumtexta				
Biremis? sp. 1			1	4
Caloneis aemula		2		
Caloneis bacillum	21	10	6	7
Caloneis cf. lineatus			2	
Caloneis cf. ventricosa				
Caloneis lewisii				5
Caloneis sp. 1 (girdle view)				
Caloneis sp. 2				
Caloneis sp. 3				
Caloneis sp. 4				
Campylodiscus sp. 1				
Cavinula sp. 1				
Cocconeis cf. peltoides				
Cocconeis costata var. costata			2	
Cocconeis diminuta				

Raw Counts	S1-170	S1-180	S1-190	S1-200
Cocconeis disculoides			2	
Cocconeis elongatum				
Cocconeis placentula		2	1	2
Cocconeis scutellum				1
Coscinodiscus cf. lineatus	7	8	11	
Coscinodiscus marginatus				5
Cosmoneis pusilla	2		3	2
Cosmoneis sp. 1				
Craticula cuspidata				
Cyclostephanos sp. 1				
Cyclostephanos sp. 2				
Cyclotella atomus?	3	1	4	5
Cyclotella caspia		4		
Cyclotella cyclopuncta	29	23	35	21
Cyclotella distinguenda				3
Cyclotella meneghiniana	1			2
Cyclotella rossii				
Cyclotella sp. 2				
Cyclotella striata	6	20	5	6
Cyclotella stylorum	17	8	23	1
Cymatopleura solea				
Cymatosira belgica	1	16	4	
Cymbella affinis	1	1	2	
Cymbella excisiformis?	1			
Cymbella janischii				
Cymbella mexicana	1			1
Cymbella minuta				
Cymbella sinuata		1		
Cymbella sp. 2				
Decussata placenta	3			2
Delphineis minutissima				
Delphineis surirella				
Denticula kuetzengii				2
Diadesmis gallica				
Diatoma mesodon	2			
Diatoma moniliformis		3	1	
Diatoma vulgaris			1	
Diatomella balfouriana				1
Dimeregramma minor				
Diploneis boldtiana	8	3	5	20

Raw Counts	S1-170	S1-180	S1-190	S1-200
Diploneis cf. bombus	1			1
Diploneis cf. didyma				
Diploneis elliptica	9	12	10	16
Diploneis pseudovalis	1	8	1	15
Diploneis smithii	1	4	4	4
Diploneis interrupta				
Encyonema nicafei		1	1	1
Encyonema sp. 1				
Encyonema sp. 2				
Encyonema sp. 3				
Encyonema triangulum				
Encyonopsis microcephala				
Epithemia adnata				
Epithemia frickei	1			
Epithemia turgida	4	3	5	2
Eunotia sp. 1			4	
Eunotia sp. 2	1			
Fallacia pygmia				
Fragilaria brevistriata				
Fragilaria capucina	1		1	
Fragilaria cf. microstriata				
Fragilaria elliptica		5	1	
Fragilaria schulzii		5		
Fragilaria vaucheriae				
Frickea lewisiana		2	1	
Frustulia amphipleuroides	1			2
Frustulia rhomboides var. viridula				
Frustulia sp. 1				
Frustulia vulgaris	3	2		
Geissleria decussis	1		1	
Geissleria kreigeri				3
Gomphoneis sp. 1				
Gomphonema acuminatum				
Gomphonema innocens			1	
Gomphonema mammilla				
Gomphonema olivaceum		1		
Gomphonema sp. 1				
Gomphonema sp. 2				
Gomphonema sp. 3				
Gomphonopsis exiguum				

Raw Counts	S1-170	S1-180	S1-190	S1-200
Grammatophora cf. macilenta			1	
Gyrosigma temperii				
Gyrosigma cf. balticum		1	2	1
Gyrosigma sp.1				
Gyrosigma spencerii	4			
Hantzschia sp. 1 girdle view				
Hantzschia sp. 2 girdle view		4		
Hantzschia sp. 3				
Hantzschia virgata		5		4
Hippodonta costulata		1	1	1
Hippodonta coxiae	4		7	3
Hippodonta sp. 1				1
Hippodonta sp. 2				
Karayevia amoena				
Leptocylindrus ? Cf. danicus	3		4	5
Luticola sp. 1				
Luticola sp. 2				
Luticola sp. 3				
Mastogloia smithii				
Mastogloia sp. 1				
Mastogloia sp. 2				
Melosira sp. 1		2		
Melosira varians				
Meridion sp. 1				
Navicula abunda	6	14	2	15
Navicula angusta				
Navicula antonii			1	
Navicula brachium	1			
Navicula cari	10		4	4
Navicula cf. capitoradiata	2			
Navicula cf. galloae				2
Navicula cf. heuflerii				
Navicula cf. oblonga			1	
Navicula cf. patrickii			1	
Navicula cf. reichardtiana				
Navicula cf. salinarum		2		
Navicula cf. schweigeri		2		
Navicula cf. subinflata				
Navicula cf. tripunctata		1		
Navicula cf. zostereti		3		1

Raw Counts	S1-170	S1-180	S1-190	S1-200
Navicula gregaria				
Navicula halophila				
Navicula lanceolata		5	1	
Navicula marginulata				
Navicula oculiformis				
Navicula peregrina	3	7	10	7
Navicula perminuta				
Navicula phyllepta				
Navicula slesvicensis				
Navicula sp. 1				
Navicula sp. 2				2
Navicula sp. 3				
Navicula sp. 5	4			
Navicula sp. 6				
Navicula subinflata				5
Navicula subminiscula		2		
Naviculoid diatom 1				
Naviculoid diatom 2				
Neidiopsis sp. 1				
Nitzschia amphibia	1			
Nitzschia brevissima	11	2	7	7
Nitzschia cf. agnita				2
Nitzschia cf. borealis	8		3	
Nitzschia cf. groefii	2			
Nitzschia cf. laevis				
Nitzschia cf. macilenta	3	1	7	
Nitzschia clausii	8	1	7	4
Nitzschia columbiana	11	9	5	5
Nitzschia communis	1	1		1
Nitzschia commutata	2		2	
Nitzschia constricta				
Nitzschia cylindrus		2		1
Nitzschia debilis				
Nitzschia desertorum				
Nitzschia dissipata				
Nitzschia filiformis	2		1	3
Nitzschia frustulum	2		2	
Nitzschia gracilis			3	
Nitzschia incognita	3	8		5
Nitzschia inconspicua				

Raw Counts	S1-170	S1-180	S1-190	S1-200
Nitzschia levidensis	2		4	
Nitzschia linearis				4
Nitzschia microcephala			2	1
Nitzschia nana			1	2
Nitzschia obtusa		28		4
Nitzschia palea		3		1
Nitzschia panduriformis			4	2
Nitzschia pellucida				
Nitzschia perminuta				
Nitzschia proxima				
Nitzschia punctata	3			
Nitzschia pusilla			9	
Nitzschia scalaris	9		5	2
Nitzschia sigma			1	3
Nitzschia sigmaformis				1
Nitzschia sp. 1	21	16	11	25
Nitzschia sp. 2				
Nitzschia sp. 3				2
Nitzschia sp. 4	39		21	14
Nitzschia sp. 5				
Nitzschia umbonata		1		
Opephora martyi	1		3	1
Opephora sp. A				
Orthoseira sp. 1		11		2
Paralia sulcata	85	89	78	68
Parlibellus cf. plicatus				
Pinnularia borealis				
Pinnularia divergens	4		6	7
Pinnularia divergentissima				
Pinnularia interrupta				
Pinnularia marchica	4	3		1
Pinnularia microstauron	7	2	2	5
Pinnularia sp. 3				
Pinnularia sp. 4	1			
Pinnularia sp. 5				4
Pinnularia sp. 6	2			
Pinnularia sp. 7				
Pinnularia sp. 8				
Pinnularia sp.1				
Pinnularia sp.2				

Raw Counts	S1-170	S1-180	S1-190	S1-200
Pinnularia viridis	2	4		2
Placoneis cf. gastrum	1		1	7
Placoneis sp. 1		2		
Placoneis sp. 2				
Plagiogramma cf. minima				
Planothidium frequentissimum	5			
Planothidium lanceolatum		1		
Planothidium paragali	2			
Planothidium sp. 1				
Planothidium sp. 2				
Pleurosigma diverse-striatum				
Psammothidium? Sp. 1				
Pseudostauroneis parasitica	4			1
Pseudostaurosira americana		2		
Pseudostaurosiropsis sp. 1				
Pseudostaurosiropsis sp. 1 (GV)				
Punctastriata mimetica	2			
Rhaphoneis amphiceros	39	23	49	25
Rhaphoneis tenuis	2		3	2
Rhoicosphenia cf. marina				
Rhoicosphenia sp. 1				
Rhopalodia acuminatum	1	3		8
Rhopolodia gibba		1		2
Rhopolodia musculus	22	23	24	22
Sellaphora cf. hohnii				
Sellaphora laevissima				
Sellaphora pupula				4
Sellaphora rexii				2
Sellaphora bacillum				
Skeletonema sp. 1				
Stauroneis agrestis				
Stauroneis CA			1	1
Stauroneis cf. vandevijveri				
Stauroneis circumborealis				
Stauroneis GV				
Stauroneis kriegeri				1
Stauroneis sp. 1			1	
Staurophora cf. soodensis				
Staurosira construens				
Staurosirella leptosauron var. dubia	3			

Raw Counts	S1-170	S1-180	S1-190	S1-200
Staurosirella sp. 1				
Stephanodiscus sp. 1				
Surirella angusta				
Surirella brebissonii		1		
Surirella cf. iowensis				1
Surirella ovalis				
Surirella peisonis	1		4	
Surirella sp. 1				
Surirella splendida			2	1
Synedra cf. fulgens				
Synedra famelica				
Synedra ulna var. biceps				
Synedra ulna var. ramesi				
Tabularia fasciculata				
Tabularia ktenoeoides				
Thalassionema nitzschioides	12	12	12	4
Thalassiosira baltica				
Thalassiosira cf. lineata	6	9	17	15
Thalassiosira cf. tenera	4			
Thalassiosira decipiens	3	12	5	7
Thalassiosira eccentrica	4	6	5	1
Thalassiosira ferelineata	2			2
Thalassiosira oestrupii		19		4
Thalassiosira proschkinae			1	
Thalassiosira sp. 10 Cooper			1	
Thalassiosira sp. 2-1 Cooper	1	3	1	
Triceratium sp. 2				
Tybionella debilis	4	4	6	
Ulnaria acus				
Ulnaria ulna		2	3	5
Undulate colony?				
Unknown araphid	1			
Unknown GV?				

Raw Counts	S1-210	S1-220	S1-230
Total Counted:	504	514	500
Species	88	74	86
Taxon	Count	Count	Count
Achnanthes denticula			
Achnanthes islandica			
Actinocyclus normanii	1	2	3
Actinocyclus octonarius var. crassus ?	3	5	4
Actinoptychus senarius	5	4	1
Amphora granulata			2
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus	2		
Aneumastus pseudotusculus			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Asterionella formosa			
Asterionella sp. 1			
Aulacoseira ambigua		4	
Aulacoseira granulata	2		
Aulacoseira pusilla			
Aulacoseira sp. 1			
Aulacoseira sp. 2			
Aulacoseira tenella			
Bacillaria socialis	6	4	3
Biremis circumtexta			
Biremis? sp. 1		3	4
Caloneis aemula			1
Caloneis bacillum	5	3	4
Caloneis cf. lineatus			
Caloneis cf. ventricosa			
Caloneis lewisii			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			
Caloneis sp. 3	2		
Caloneis sp. 4	1		
Campylodiscus sp. 1		1	
Cavinula sp. 1			
Cocconeis cf. peltoides			
Cocconeis costata var. costata			
Cocconeis diminuta			

Raw Counts	S1-210	S1-220	S1-230
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis placentula	4		
Cocconeis scutellum			
Coscinodiscus cf. lineatus	9		1
Coscinodiscus marginatus	2	8	1
Cosmoneis pusilla		3	2
Cosmoneis sp. 1			
Craticula cuspidata			
Cyclostephanos sp. 1			
Cyclostephanos sp. 2			
Cyclotella atomus?	2	1	3
Cyclotella caspia		1	1
Cyclotella cyclopuncta	35	43	37
Cyclotella distinguenda			2
Cyclotella meneghiniana			1
Cyclotella rossii			4
Cyclotella sp. 2		1	
Cyclotella striata	10	13	3
Cyclotella stylorum	4	10	1
Cymatopleura solea			
Cymatosira belgica	1		
Cymbella affinis			1
Cymbella excisiformis?			
Cymbella janischii	1		
Cymbella mexicana		1	1
Cymbella minuta			
Cymbella sinuata			
Cymbella sp. 2			
Decussata placenta	1	6	3
Delphineis minutissima			
Delphineis surirella			
Denticula kuetzengii	4		
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis	4		1
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana	1	8	31

Raw Counts	S1-210	S1-220	S1-230
Diploneis cf. bombus			
Diploneis cf. didyma			1
Diploneis elliptica	3	12	21
Diploneis pseudovalis		1	4
Diploneis smithii		1	5
Diploneis interrupta			
Encyonema nicafei			5
Encyonema sp. 1			
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema triangulum			
Encyonopsis microcephala			
Epithemia adnata			1
Epithemia frickei	4		1
Epithemia turgida	8	1	2
Eunotia sp. 1	4	6	9
Eunotia sp. 2	1	2	4
Fallacia pygmia	1		
Fragilaria brevistriata			
Fragilaria capucina			
Fragilaria cf. microstriata			
Fragilaria elliptica	5	1	
Fragilaria schulzii	2		
Fragilaria vaucheriae	1	1	2
Frickea lewisiana			
Frustulia amphipleuroides			
Frustulia rhomboides var. viridula			
Frustulia sp. 1			
Frustulia vulgaris			
Geissleria decussis	1		
Geissleria kreigeri			
Gomphoneis sp. 1			
Gomphonema acuminatum			
Gomphonema innocens			
Gomphonema mammilla			
Gomphonema olivaceum			
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			

Raw Counts	S1-210	S1-220	S1-230
Grammatophora cf. macilenta			
Gyrosigma temperii			
Gyrosigma cf. balticum			3
Gyrosigma sp.1			
Gyrosigma spencerii			
Hantzschia sp. 1 girdle view	4	6	
Hantzschia sp. 2 girdle view			
Hantzschia sp. 3			
Hantzschia virgata	1	1	6
Hippodonta costulata	4		5
Hippodonta coxiae	7		
Hippodonta sp. 1			
Hippodonta sp. 2			
Karayevia amoena			
Leptocylindrus ? Cf. danicus	6	7	6
Luticola sp. 1			
Luticola sp. 2			2
Luticola sp. 3			
Mastogloia smithii			
Mastogloia sp. 1			
Mastogloia sp. 2			2
Melosira sp. 1			
Melosira varians			
Meridion sp. 1			
Navicula abunda	12	5	8
Navicula angusta	3		
Navicula antonii			
Navicula brachium	1	2	
Navicula cari	3		
Navicula cf. capitoradiata	8		
Navicula cf. galloae			3
Navicula cf. heuflerii			
Navicula cf. oblonga	2	1	1
Navicula cf. patrickii		1	
Navicula cf. reichardtiana			
Navicula cf. salinarum	2		
Navicula cf. schweigeri			
Navicula cf. subinflata			
Navicula cf. tripunctata		2	
Navicula cf. zostereti			

Raw Counts	S1-210	S1-220	S1-230
Navicula gregaria			
Navicula halophila			
Navicula lanceolata	3		
Navicula marginulata			
Navicula oculiformis			
Navicula peregrina	5	1	6
Navicula perminuta			
Navicula phyllepta			
Navicula slesvicensis			
Navicula sp. 1			
Navicula sp. 2			
Navicula sp. 3	1		
Navicula sp. 5			1
Navicula sp. 6			
Navicula subinflata			
Navicula subminiscula			
Naviculoid diatom 1			
Naviculoid diatom 2			
Neidiopsis sp. 1			
Nitzschia amphibia	4		
Nitzschia brevissima	20	1	1
Nitzschia cf. agnita	9	8	
Nitzschia cf. borealis	10		
Nitzschia cf. groefii			
Nitzschia cf. laevis			
Nitzschia cf. macilenta	1	2	
Nitzschia clausii	6		2
Nitzschia columbiana	4		7
Nitzschia communis		6	4
Nitzschia commutata			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis		1	
Nitzschia desertorum			
Nitzschia dissipata		2	
Nitzschia filiformis	1		3
Nitzschia frustulum	1		
Nitzschia gracilis			
Nitzschia incognita			1
Nitzschia inconspicua			

Raw Counts	S1-210	S1-220	S1-230
Nitzschia levidensis		4	
Nitzschia linearis		1	3
Nitzschia microcephala		1	
Nitzschia nana			
Nitzschia obtusa		2	
Nitzschia palea	5		
Nitzschia panduriformis		1	4
Nitzschia pellucida			
Nitzschia perminuta		1	
Nitzschia proxima			2
Nitzschia punctata	7		6
Nitzschia pusilla			
Nitzschia scalaris	11	13	12
Nitzschia sigma		2	1
Nitzschia sigmaformis			
Nitzschia sp. 1	11	26	22
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4	24	10	50
Nitzschia sp. 5			2
Nitzschia umbonata	1		
Opephora martyi			
Opephora sp. A			
Orthoseira sp. 1			
Paralia sulcata	63	90	51
Parlibellus cf. plicatus			
Pinnularia borealis			
Pinnularia divergens	1		2
Pinnularia divergentissima	2		2
Pinnularia interrupta	1		
Pinnularia marchica	1	5	7
Pinnularia microstauron	11	12	14
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5		2	4
Pinnularia sp. 6			
Pinnularia sp. 7			
Pinnularia sp. 8			
Pinnularia sp.1	1		
Pinnularia sp.2			

Raw Counts	S1-210	S1-220	S1-230
Pinnularia viridis	3	4	3
Placoneis cf. gastrum	5	11	16
Placoneis sp. 1			
Placoneis sp. 2			3
Plagiogramma cf. minima			
Planothidium frequentissimum			5
Planothidium lanceolatum	4		1
Planothidium paragali			
Planothidium sp. 1			
Planothidium sp. 2			
Pleurosigma diverse-striatum			
Psammothidium? Sp. 1			
Pseudostauroneis parasitica	1		
Pseudostaurosira americana			
Pseudostaurosiropsis sp. 1			
Pseudostaurosiropsis sp. 1 (GV)			
Punctastriata mimetica			
Rhaphoneis amphiceros	43	45	13
Rhaphoneis tenuis		3	3
Rhoicosphenia cf. marina			
Rhoicosphenia sp. 1			
Rhopalodia acuminatum	4	3	5
Rhopolodia gibba			1
Rhopolodia musculus	12	43	25
Sellaphora cf. hohnii			
Sellaphora laevissima			
Sellaphora pupula			
Sellaphora rexii	1		
Sellaphora bacillum			
Skeletonema sp. 1			
Stauroneis agrestis		1	
Stauroneis CA	1		1
Stauroneis cf. vandevijveri			1
Stauroneis circumborealis			
Stauroneis GV			
Stauroneis kriegeri			
Stauroneis sp. 1			
Staurophora cf. soodensis			2
Staurosira construens			
Staurosirella leptosauron var. dubia	2	2	

Raw Counts	S1-210	S1-220	S1-230
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angusta			
Surirella brebissonii			
Surirella cf. iowensis			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida			
Synedra cf. fulgens			
Synedra famelica			
Synedra ulna var. biceps			
Synedra ulna var. ramesi			
Tabularia fasciculata			
Tabularia ktenoeoides			
Thalassionema nitzschioides	7	3	
Thalassiosira baltica			
Thalassiosira cf. lineata	5	14	1
Thalassiosira cf. tenera		1	
Thalassiosira decipiens	3	3	1
Thalassiosira eccentrica	4	4	1
Thalassiosira ferelineata		2	
Thalassiosira oestrupii	1	2	
Thalassiosira proschkinae	3	2	1
Thalassiosira sp. 10 Cooper			
Thalassiosira sp. 2-1 Cooper	3	6	3
Triceratium sp. 2			
Tybionella debilis	6		
Ulnaria acus			
Ulnaria ulna	4	3	1
Undulate colony?			
Unknown araphid			
Unknown GV?			

Relative Abundance	S1-0	S1-10	S1-20	S1-30
Achnanthes denticula	0	0	0	0.00193
Achnanthes islandica	0	0	0	0
Actinocyclus normanii	0.03	0.04	0.03187	0.00967
Actinocyclus octonarius var. crassus ?	0.008	0.016	0.00797	0
Actinoptychus senarius	0.004	0	0	0
Amphora granulata	0	0	0	0
Amphora sp. 1 (girdle view)	0.018	0.012	0.01594	0.00774
Amphora sp. 2	0	0	0	0
Anaulus cf. balticus	0	0.012	0	0
Aneumastus pseudotusculus	0	0	0	0
Anomoeoneis sp. 1	0	0	0	0
Anorthoneis tenuis	0	0	0	0
Asterionella formosa	0	0	0	0
Asterionella sp. 1	0	0	0	0
Aulacoseira ambigua	0	0	0.01992	0.17215
Aulacoseira granulata	0	0	0	0.03288
Aulacoseira pusilla	0	0	0	0.01354
Aulacoseira sp. 1	0	0.002	0	0
Aulacoseira sp. 2	0	0	0	0
Aulacoseira tenella	0	0	0	0.00774
Bacillaria socialis	0.022	0.054	0.02789	0.0058
Biremis circumtexta	0	0	0	0
Biremis? sp. 1	0	0	0	0
Caloneis aemula	0	0.002	0	0
Caloneis bacillum	0.022	0.01	0.0239	0.00193
Caloneis cf. lineatus	0	0	0	0
Caloneis cf. ventricosa	0	0	0	0
Caloneis lewisii	0	0	0	0
Caloneis sp. 1 (girdle view)	0.044	0.028	0	0.00774
Caloneis sp. 2	0	0	0	0
Caloneis sp. 3	0	0	0	0
Caloneis sp. 4	0	0	0	0
Campylodiscus sp. 1	0	0	0	0
Cavinula sp. 1	0	0.002	0	0
Cocconeis cf. peltoides	0	0.002	0	0.00193
Cocconeis costata var. costata	0	0	0	0
Cocconeis diminuta	0	0	0	0
Cocconeis disculoides	0	0	0	0
Cocconeis elongatum	0	0	0.00797	0
Cocconeis placentula	0.004	0.006	0.00199	0.00193

Relative Abundance	S1-0	S1-10	S1-20	S1-30
Cocconeis scutellum	0	0	0	0
Coscinodiscus cf. lineatus	0	0	0	0
Coscinodiscus marginatus	0	0	0.00398	0
Cosmoneis pusilla	0	0	0	0
Cosmoneis sp. 1	0	0	0.00199	0
Craticula cuspidata	0	0	0	0
Cyclostephanos sp. 1	0.006	0	0	0.00387
Cyclostephanos sp. 2	0	0	0	0
Cyclotella atomus?	0.214	0.182	0.05777	0.01547
Cyclotella caspia	0	0	0	0
Cyclotella cyclopuncta	0	0	0	0
Cyclotella distinguenda	0	0	0	0
Cyclotella meneghiniana	0	0.044	0.04183	0.02128
Cyclotella rossii	0	0	0	0
Cyclotella sp. 2	0.032	0.008	0.00598	0.00193
Cyclotella striata	0.094	0.056	0.1494	0.07737
Cyclotella stylorum	0	0	0	0
Cymatopleura solea	0	0	0	0
Cymatosira belgica	0	0	0	0
Cymbella affinis	0	0	0.00199	0.0058
Cymbella excisiformis?	0	0	0	0
Cymbella janischii	0	0	0	0
Cymbella mexicana	0	0	0	0
Cymbella minuta	0	0	0	0
Cymbella sinuata	0	0.002	0.00199	0
Cymbella sp. 2	0	0	0	0.00193
Decussata placenta	0	0	0	0
Delphineis minutissima	0	0	0	0
Delphineis surirella	0	0	0.00199	0
Denticula kuetzengii	0	0	0	0
Diadesmis gallica	0	0	0.00199	0
Diatoma mesodon	0	0	0	0
Diatoma moniliformis	0.012	0.016	0.00797	0.0058
Diatoma vulgaris	0	0	0	0.0058
Diatomella balfouriana	0	0	0	0
Dimeregramma minor	0	0	0	0.00193
Diploneis boldtiana	0	0	0	0
Diploneis cf. bombus	0	0	0	0
Diploneis cf. didyma	0	0	0	0
Diploneis elliptica	0	0	0	0

Relative Abundance	S1-0	S1-10	S1-20	S1-30
Diploneis pseudovalis	0.012	0	0	0
Diploneis smithii	0.008	0.004	0	0.00387
Diploneis interrupta	0	0	0	0
Encyonema nicafei	0	0	0	0
Encyonema sp. 1	0.004	0.002	0.00199	0
Encyonema sp. 2	0	0.004	0	0
Encyonema sp. 3	0	0	0	0.00193
Encyonema triangulum	0	0	0	0
Encyonopsis microcephala	0	0.002	0.00199	0
Epithemia adnata	0	0	0	0
Epithemia frickei	0	0	0	0
Epithemia turgida	0	0	0	0
Eunotia sp. 1	0	0	0	0
Eunotia sp. 2	0	0	0	0
Fallacia pygmia	0.002	0.002	0.01394	0.01354
Fragilaria brevistriata	0.006	0.002	0.00398	0
Fragilaria capucina	0.002	0.004	0	0
Fragilaria cf. microstriata	0	0	0	0
Fragilaria elliptica	0	0	0	0
Fragilaria schulzii	0	0	0	0
Fragilaria vaucheriae	0	0	0	0.04836
Frickea lewisiana	0	0	0	0
Frustulia amphipleuroides	0	0	0	0
Frustulia rhomboides var. viridula	0	0	0	0
Frustulia sp. 1	0.002	0.006	0.00797	0.00774
Frustulia vulgaris	0	0	0	0
Geissleria decussis	0	0	0	0
Geissleria kreigeri	0.01	0.026	0.00199	0.00774
Gomphoneis sp. 1	0.006	0	0.00199	0
Gomphonema acuminatum	0	0	0	0
Gomphonema innocens	0	0	0	0
Gomphonema mammilla	0	0	0	0
Gomphonema olivaceum	0	0	0	0
Gomphonema sp. 1	0	0	0	0.01354
Gomphonema sp. 2	0	0	0	0
Gomphonema sp. 3	0	0	0	0
Gomphonopsis exiguum	0	0	0	0.00193
Grammatophora cf. macilenta	0	0	0	0.01354
Gyrosigma temperii	0	0	0	0
Gyrosigma cf. balticum	0.008	0.004	0	0

Relative Abundance	S1-0	S1-10	S1-20	S1-30
Gyrosigma sp.1	0.008	0.002	0	0
Gyrosigma spencerii	0	0	0	0
Hantzschia sp. 1 girdle view	0.03	0.016	0	0
Hantzschia sp. 2 girdle view	0.004	0	0	0
Hantzschia sp. 3	0	0	0	0
Hantzschia virgata	0	0.006	0	0
Hippodonta costulata	0	0	0	0
Hippodonta coxiae	0	0	0	0
Hippodonta sp. 1	0.004	0.008	0.00398	0
Hippodonta sp. 2	0	0	0	0
Karayevia amoena	0	0	0	0
Leptocylindrus ? Cf. danicus	0	0	0.00199	0
Luticola sp. 1	0	0	0	0.00387
Luticola sp. 2	0	0	0	0
Luticola sp. 3	0	0	0	0
Mastogloia smithii	0	0	0	0
Mastogloia sp. 1	0	0	0.00199	0
Mastogloia sp. 2	0	0	0	0
Melosira sp. 1	0	0.004	0	0
Melosira varians	0	0	0	0
Meridion sp. 1	0.004	0.006	0	0
Navicula abunda	0.044	0.01	0.03187	0.00967
Navicula angusta	0	0	0	0
Navicula antonii	0	0	0.00199	0.00193
Navicula brachium	0.008	0.002	0	0
Navicula cari	0.002	0.002	0.00398	0.00774
Navicula cf. capitoradiata	0	0	0.03586	0.00774
Navicula cf. galloae	0	0	0	0
Navicula cf. heuflerii	0	0	0	0
Navicula cf. oblonga	0	0	0	0
Navicula cf. patrickii	0	0	0.00199	0
Navicula cf. reichardtiana	0	0	0	0
Navicula cf. salinarum	0	0.004	0	0.00387
Navicula cf. schweigeri	0	0.004	0.00398	0
Navicula cf. subinflata	0	0.002	0	0.0058
Navicula cf. tripunctata	0.014	0.002	0.00797	0.01547
Navicula cf. zostereti	0.006	0.002	0.00797	0.01161
Navicula gregaria	0.034	0.054	0.05378	0.01547
Navicula halophila	0.01	0.01	0.01793	0.0058
Navicula lanceolata	0.004	0.018	0.0239	0.01354

Relative Abundance	S1-0	S1-10	S1-20	S1-30
Navicula marginulata	0	0	0	0.00387
Navicula oculiformis	0	0	0.00398	0
Navicula peregrina	0.026	0.018	0.00996	0.00967
Navicula perminuta	0.014	0.006	0.00199	0
Navicula phyllepta	0.018	0.008	0.01195	0.00193
Navicula slesvicensis	0	0	0	0
Navicula sp. 1	0	0.012	0.00996	0.00774
Navicula sp. 2	0.004	0	0	0
Navicula sp. 3	0	0.002	0.00598	0.00774
Navicula sp. 5	0	0	0	0
Navicula sp. 6	0	0	0	0
Navicula subinflata	0	0.002	0	0
Navicula subminiscula	0	0	0	0
Naviculoid diatom 1	0	0.002	0	0.00193
Naviculoid diatom 2	0	0	0	0
Neidiopsis sp. 1	0	0	0	0
Nitzschia amphibia	0	0.004	0	0.00387
Nitzschia brevissima	0.056	0.054	0.0498	0.09671
Nitzschia cf. agnita	0	0	0	0
Nitzschia cf. borealis	0	0	0	0
Nitzschia cf. groefii	0	0	0	0
Nitzschia cf. laevis	0	0	0.00398	0
Nitzschia cf. macilenta	0.008	0.008	0.00797	0.00967
Nitzschia clausii	0	0	0	0
Nitzschia columbiana	0	0	0	0
Nitzschia communis	0	0	0	0
Nitzschia commutata	0	0	0	0
Nitzschia constricta	0.006	0	0	0
Nitzschia cylindrus	0	0	0	0
Nitzschia debilis	0	0.014	0.04781	0.00774
Nitzschia desertorum	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia filiformis	0	0	0.00199	0.00387
Nitzschia frustulum	0.018	0.002	0	0
Nitzschia gracilis	0	0	0.00598	0
Nitzschia incognita	0	0	0	0
Nitzschia inconspicua	0	0	0.02988	0
Nitzschia levidensis	0	0	0	0
Nitzschia linearis	0	0	0.00199	0.02708
Nitzschia microcephala	0.008	0.002	0	0

Relative Abundance	S1-0	S1-10	S1-20	S1-30
Nitzschia nana	0	0	0	0
Nitzschia obtusa	0	0	0	0
Nitzschia palea	0.002	0.018	0.0239	0.03482
Nitzschia panduriformis	0.002	0.006	0.00398	0.00193
Nitzschia pellucida	0	0.004	0.00398	0.00387
Nitzschia perminuta	0.002	0.004	0.00398	0.00387
Nitzschia proxima	0.008	0	0	0.00387
Nitzschia punctata	0.004	0.004	0.00398	0.0058
Nitzschia pusilla	0	0	0	0
Nitzschia scalaris	0	0	0	0
Nitzschia sigma	0	0.002	0.00199	0.00193
Nitzschia sigmaformis	0	0.004	0	0.00387
Nitzschia sp. 1	0	0	0.00199	0.00387
Nitzschia sp. 2	0	0	0	0.00387
Nitzschia sp. 3	0	0	0	0
Nitzschia sp. 4	0	0	0	0
Nitzschia sp. 5	0	0	0	0
Nitzschia umbonata	0	0	0	0
Opephora martyi	0	0	0.00199	0
Opephora sp. A	0	0	0	0
Orthoseira sp. 1	0.002	0	0	0.00387
Paralia sulcata	0.016	0.014	0.02191	0.02128
Parlibellus cf. plicatus	0	0	0	0
Pinnularia borealis	0	0	0	0
Pinnularia divergens	0	0	0	0
Pinnularia divergentissima	0	0	0	0
Pinnularia interrupta	0	0	0	0
Pinnularia marchica	0	0	0	0
Pinnularia microstauron	0	0	0	0
Pinnularia sp. 3	0	0	0	0
Pinnularia sp. 4	0	0	0	0
Pinnularia sp. 5	0	0	0	0
Pinnularia sp. 6	0	0	0	0
Pinnularia sp. 7	0	0	0	0
Pinnularia sp. 8	0	0	0	0
Pinnularia sp.1	0	0.002	0.00797	0.00967
Pinnularia sp.2	0	0	0.00598	0.00193
Pinnularia viridis	0	0	0	0
Placoneis cf. gastrum	0	0	0	0
Placoneis sp. 1	0	0	0	0

Relative Abundance	S1-0	S1-10	S1-20	S1-30
Placoneis sp. 2	0	0	0	0
Plagiogramma cf. minima	0	0	0	0
Planothidium frequentissimum	0	0	0	0
Planothidium lanceolatum	0	0	0	0.00193
Planothidium paragali	0	0	0	0
Planothidium sp. 1	0.006	0.02	0.0259	0.00193
Planothidium sp. 2	0	0	0	0
Pleurosigma diverse-striatum	0	0	0	0
Psammothidium? Sp. 1	0	0	0	0
Pseudostauroneis parasitica	0.004	0	0	0.00193
Pseudostaurosira americana	0	0	0.00199	0.00193
Pseudostaurosiropsis sp. 1	0	0	0.00199	0
Pseudostaurosiropsis sp. 1 (GV)	0	0	0	0
Punctastriata mimetica	0	0	0	0
Rhaphoneis amphiceros	0	0	0	0.00387
Rhaphoneis tenuis	0.006	0	0.00199	0
Rhoicosphenia cf. marina	0	0.016	0.00797	0
Rhoicosphenia sp. 1	0	0	0	0
Rhopalodia acuminatum	0	0	0	0
Rhopolodia gibba	0	0	0	0
Rhopolodia musculus	0	0	0	0
Sellaphora cf. hohnii	0	0	0	0
Sellaphora laevissima	0	0	0	0
Sellaphora pupula	0	0	0.00598	0.0058
Sellaphora rexii	0	0	0	0
Sellaphora bacillum	0	0	0	0
Skeletonema sp. 1	0	0	0	0
Stauroneis agrestis	0	0	0	0
Stauroneis CA	0	0	0	0
Stauroneis cf. vandevijveri	0	0	0	0
Stauroneis circumborealis	0	0	0	0
Stauroneis GV	0	0	0	0
Stauroneis kriegeri	0	0	0	0
Stauroneis sp. 1	0	0	0	0
Staurophora cf. soodensis	0	0	0	0
Staurosira construens	0	0	0	0
Staurosirella leptosauron var. dubia	0	0	0	0
Staurosirella sp. 1	0	0	0	0
Stephanodiscus sp. 1	0	0.004	0	0
Surirella angusta	0	0	0	0

Relative Abundance	S1-0	S1-10	S1-20	S1-30
Surirella brebissonii	0	0	0.00199	0.0058
Surirella cf. iowensis	0	0.002	0	0
Surirella ovalis	0	0	0	0.00193
Surirella peisonis	0.002	0	0.00199	0
Surirella sp. 1	0.004	0	0	0
Surirella splendida	0	0	0.00398	0.00193
Synedra cf. fulgens	0	0	0	0
Synedra famelica	0	0	0	0
Synedra ulna var. biceps	0	0	0	0
Synedra ulna var. ramesi	0	0	0.00797	0.00967
Tabularia fasciculata	0	0	0	0
Tabularia ktenoeoides	0	0	0	0
Thalassionema nitzschioides	0	0	0.00199	0.00967
Thalassiosira baltica	0	0.002	0	0
Thalassiosira cf. lineata	0.002	0.01	0.00199	0.00193
Thalassiosira cf. tenera	0	0	0	0.00193
Thalassiosira decipiens	0	0.002	0.00398	0.00193
Thalassiosira eccentrica	0	0	0	0
Thalassiosira ferelineata	0	0.006	0	0.00774
Thalassiosira oestrupii	0	0.002	0.00199	0
Thalassiosira proschkinae	0.004	0.004	0	0
Thalassiosira sp. 10 Cooper	0	0	0	0
Thalassiosira sp. 2-1 Cooper	0	0	0	0
Triceratium sp. 2	0	0	0	0
Tybionella debilis	0.036	0.024	0	0.01161
Ulnaria acus	0	0	0	0
Ulnaria ulna	0	0.014	0.00598	0.02128
Undulate colony?	0	0	0	0
Unknown araphid	0	0	0	0
Unknown GV?	0	0	0	0

Relative Abundance	S1-40	S1-50	S1-60	S1-70
Achnanthes denticula	0	0	0	0
Achnanthes islandica	0.00192	0	0	0
Actinocyclus normanii	0.00575	0.01866	0.07952	0.0297
Actinocyclus octonarius var. crassus ?	0.00575	0.01679	0.03181	0.01188
Actinoptychus senarius	0	0.00373	0.00199	0.01188
Amphora granulata	0.00383	0	0.00398	0
Amphora sp. 1 (girdle view)	0	0	0.01193	0
Amphora sp. 2	0	0	0	0
Anaulus cf. balticus	0	0	0	0
Aneumastus pseudotusculus	0	0	0	0
Anomoeoneis sp. 1	0.02107	0.00373	0	0.00198
Anorthoneis tenuis	0	0	0	0
Asterionella formosa	0	0	0	0
Asterionella sp. 1	0	0	0	0
Aulacoseira ambigua	0.16858	0.05597	0.0159	0.02178
Aulacoseira granulata	0.08429	0.08209	0	0.00792
Aulacoseira pusilla	0	0	0	0
Aulacoseira sp. 1	0	0	0	0
Aulacoseira sp. 2	0	0	0	0
Aulacoseira tenella	0.01149	0.01119	0	0
Bacillaria socialis	0	0.0056	0	0.00198
Biremis circumtexta	0	0.0056	0	0
Biremis? sp. 1	0	0	0	0
Caloneis aemula	0	0	0	0
Caloneis bacillum	0.01916	0	0.00199	0.00198
Caloneis cf. lineatus	0	0	0	0
Caloneis cf. ventricosa	0	0	0	0
Caloneis lewisii	0	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0	0
Caloneis sp. 2	0	0	0	0
Caloneis sp. 3	0	0	0	0
Caloneis sp. 4	0	0	0	0
Campylodiscus sp. 1	0	0	0	0
Cavinula sp. 1	0	0	0	0
Cocconeis cf. peltoides	0	0	0.00199	0
Cocconeis costata var. costata	0	0	0	0
Cocconeis diminuta	0.00192	0	0.00398	0
Cocconeis disculoides	0	0	0	0
Cocconeis elongatum	0	0	0	0
Cocconeis placentula	0	0.0056	0.01789	0.01386

Relative Abundance	S1-40	S1-50	S1-60	S1-70
Cocconeis scutellum	0	0	0.00199	0
Coscinodiscus cf. lineatus	0.00575	0.02052	0	0.0297
Coscinodiscus marginatus	0	0.0056	0.00596	0
Cosmoneis pusilla	0	0.01119	0	0
Cosmoneis sp. 1	0	0.00373	0	0
Craticula cuspidata	0	0	0	0
Cyclostephanos sp. 1	0	0	0.00199	0
Cyclostephanos sp. 2	0	0	0	0
Cyclotella atomus?	0.01724	0.02052	0.02584	0.01584
Cyclotella caspia	0	0	0	0.00198
Cyclotella cyclopuncta	0	0.02612	0	0.02178
Cyclotella distinguenda	0	0	0	0
Cyclotella meneghiniana	0.02299	0.01866	0.01988	0.0099
Cyclotella rossii	0	0	0	0
Cyclotella sp. 2	0.00192	0	0	0
Cyclotella striata	0.01149	0.01493	0.12525	0.0396
Cyclotella stylorum	0.00192	0.00746	0	0.01782
Cymatopleura solea	0	0	0	0
Cymatosira belgica	0.00383	0.01493	0.00994	0.0297
Cymbella affinis	0.00192	0.00373	0.01193	0.00198
Cymbella excisiformis?	0	0	0	0.00396
Cymbella janischii	0	0	0	0
Cymbella mexicana	0	0	0	0
Cymbella minuta	0	0	0	0
Cymbella sinuata	0.00192	0.00187	0.00596	0.00396
Cymbella sp. 2	0	0	0	0
Decussata placenta	0	0	0	0
Delphineis minutissima	0	0	0.00199	0
Delphineis surirella	0	0	0.00398	0
Denticula kuetzengii	0	0	0	0
Diadesmis gallica	0	0	0	0
Diatoma mesodon	0	0	0	0
Diatoma moniliformis	0	0.00373	0.00199	0
Diatoma vulgaris	0	0	0	0
Diatomella balfouriana	0	0	0	0
Dimeregramma minor	0	0	0	0
Diploneis boldtiana	0	0.00187	0	0
Diploneis cf. bombus	0	0	0	0.00396
Diploneis cf. didyma	0	0	0.00199	0
Diploneis elliptica	0.00192	0	0	0.00396

Relative Abundance	S1-40	S1-50	S1-60	S1-70
Diploneis pseudovalis	0	0	0.00199	0
Diploneis smithii	0	0	0.00795	0.00198
Diploneis interrupta	0	0	0	0
Encyonema nicafei	0.02874	0.00373	0.01392	0.01188
Encyonema sp. 1	0	0.00373	0	0.00594
Encyonema sp. 2	0	0	0.00199	0
Encyonema sp. 3	0	0	0	0
Encyonema triangulum	0	0	0	0.00396
Encyonopsis microcephala	0.00575	0	0	0
Epithemia adnata	0	0	0.01392	0
Epithemia frickei	0	0.00187	0	0
Epithemia turgida	0.00383	0.00373	0	0.00198
Eunotia sp. 1	0.00192	0	0	0.00396
Eunotia sp. 2	0	0	0	0
Fallacia pygmia	0.01724	0.03172	0.01789	0.00792
Fragilaria brevistriata	0	0	0.00596	0
Fragilaria capucina	0	0	0	0
Fragilaria cf. microstriata	0	0	0	0
Fragilaria elliptica	0	0	0	0.00792
Fragilaria schulzii	0	0	0	0
Fragilaria vaucheriae	0.01341	0.04104	0.01789	0.0396
Frickea lewisiana	0	0	0	0
Frustulia amphipleuroides	0.00192	0	0	0
Frustulia rhomboides var. viridula	0	0	0	0.00198
Frustulia sp. 1	0	0	0	0
Frustulia vulgaris	0.00383	0.00746	0	0.00396
Geissleria decussis	0	0	0	0.00198
Geissleria kreigeri	0.00958	0.00746	0.00795	0.00198
Gomphoneis sp. 1	0	0	0	0
Gomphonema acuminatum	0	0	0	0
Gomphonema innocens	0	0	0	0.01386
Gomphonema mammilla	0	0	0	0
Gomphonema olivaceum	0	0	0	0
Gomphonema sp. 1	0	0	0	0
Gomphonema sp. 2	0	0	0	0
Gomphonema sp. 3	0	0	0	0
Gomphonopsis exiguum	0	0	0.00199	0
Grammatophora cf. macilenta	0	0	0	0.00198
Gyrosigma temperii	0	0	0	0
Gyrosigma cf. balticum	0	0	0	0

Relative Abundance	S1-40	S1-50	S1-60	S1-70
Gyrosigma sp.1	0	0	0	0
Gyrosigma spencerii	0	0	0	0
Hantzschia sp. 1 girdle view	0	0	0	0
Hantzschia sp. 2 girdle view	0	0	0.0159	0
Hantzschia sp. 3	0	0	0	0
Hantzschia virgata	0.00383	0.00187	0	0
Hippodonta costulata	0	0.00187	0	0.0099
Hippodonta coxiae	0.00192	0.00187	0	0
Hippodonta sp. 1	0	0	0	0
Hippodonta sp. 2	0	0	0	0
Karayevia amoena	0	0	0	0
Leptocylindrus ? Cf. danicus	0.00192	0.00187	0	0.00198
Luticola sp. 1	0	0	0	0
Luticola sp. 2	0	0	0	0
Luticola sp. 3	0	0	0	0
Mastogloia smithii	0	0.00373	0	0
Mastogloia sp. 1	0	0	0	0
Mastogloia sp. 2	0	0	0	0
Melosira sp. 1	0	0	0	0
Melosira varians	0.00383	0	0	0.00396
Meridion sp. 1	0	0	0	0
Navicula abunda	0.01533	0.00187	0.02584	0.01386
Navicula angusta	0	0	0	0
Navicula antonii	0	0	0	0
Navicula brachium	0	0	0.00199	0
Navicula cari	0.00383	0.00373	0	0
Navicula cf. capitoradiata	0.04406	0.03731	0	0.00396
Navicula cf. galloae	0	0	0	0
Navicula cf. heuflerii	0.00383	0	0.00199	0
Navicula cf. oblonga	0	0	0	0.00198
Navicula cf. patrickii	0	0	0	0.00792
Navicula cf. reichardtiana	0	0	0	0.00198
Navicula cf. salinarum	0.00766	0.00373	0	0
Navicula cf. schweigeri	0	0.00373	0.00199	0.00198
Navicula cf. subinflata	0.0249	0.02239	0	0
Navicula cf. tripunctata	0	0	0.00596	0.00396
Navicula cf. zostereti	0	0	0.00199	0
Navicula gregaria	0	0	0	0
Navicula halophila	0	0	0.00199	0
Navicula lanceolata	0.00958	0.00187	0	0

Relative Abundance	S1-40	S1-50	S1-60	S1-70
Navicula marginulata	0	0	0	0
Navicula oculiformis	0	0	0	0
Navicula peregrina	0.00575	0.0056	0.03181	0.02574
Navicula perminuta	0	0	0	0
Navicula phyllepta	0	0	0.00398	0
Navicula slesvicensis	0	0.00187	0	0
Navicula sp. 1	0.00192	0	0.00398	0
Navicula sp. 2	0	0	0	0
Navicula sp. 3	0	0	0.00795	0
Navicula sp. 5	0	0	0	0
Navicula sp. 6	0	0	0	0
Navicula subinflata	0	0.00373	0.00398	0.00198
Navicula subminiscula	0	0	0	0
Naviculoid diatom 1	0	0	0	0
Naviculoid diatom 2	0	0	0	0
Neidiopsis sp. 1	0	0	0	0
Nitzschia amphibia	0	0	0	0
Nitzschia brevissima	0.06322	0.02799	0	0
Nitzschia cf. agnita	0	0	0	0
Nitzschia cf. borealis	0.00192	0.00187	0	0
Nitzschia cf. groefii	0	0	0	0
Nitzschia cf. laevis	0.02299	0	0	0
Nitzschia cf. macilenta	0	0	0.00199	0
Nitzschia clausii	0.00958	0.00187	0	0.00396
Nitzschia columbiana	0	0	0	0.00198
Nitzschia communis	0	0.00373	0	0
Nitzschia commutata	0	0	0	0
Nitzschia constricta	0	0	0	0
Nitzschia cylindrus	0	0	0	0
Nitzschia debilis	0.00383	0	0	0
Nitzschia desertorum	0	0.00187	0	0
Nitzschia dissipata	0.00575	0.00187	0	0.00198
Nitzschia filiformis	0	0	0	0
Nitzschia frustulum	0	0.00373	0	0
Nitzschia gracilis	0	0	0	0
Nitzschia incognita	0.00383	0	0	0
Nitzschia inconspicua	0.00383	0	0.00398	0
Nitzschia levidensis	0	0.00373	0	0
Nitzschia linearis	0	0.00187	0.00596	0.00198
Nitzschia microcephala	0	0	0	0

Relative Abundance	S1-40	S1-50	S1-60	S1-70
Nitzschia nana	0.01916	0.00373	0	0
Nitzschia obtusa	0	0	0	0
Nitzschia palea	0.0249	0.03918	0.00398	0.00198
Nitzschia panduriformis	0	0	0	0
Nitzschia pellucida	0	0	0	0
Nitzschia perminuta	0	0	0.00398	0
Nitzschia proxima	0	0	0	0
Nitzschia punctata	0	0	0	0.00396
Nitzschia pusilla	0	0	0	0
Nitzschia scalaris	0.00192	0.00746	0	0.00396
Nitzschia sigma	0	0	0.00596	0
Nitzschia sigmaformis	0	0	0	0
Nitzschia sp. 1	0	0.00187	0	0
Nitzschia sp. 2	0	0	0	0
Nitzschia sp. 3	0	0	0	0
Nitzschia sp. 4	0.00575	0.00373	0	0.00792
Nitzschia sp. 5	0	0	0	0
Nitzschia umbonata	0	0	0	0
Opephora martyi	0.00383	0	0.00199	0.01188
Opephora sp. A	0	0	0	0
Orthoseira sp. 1	0	0	0	0
Paralia sulcata	0.03257	0.08209	0.08549	0.16634
Parlibellus cf. plicatus	0.00192	0.00373	0.00398	0
Pinnularia borealis	0	0	0	0
Pinnularia divergens	0.00575	0.01493	0	0.00198
Pinnularia divergentissima	0.01533	0	0	0
Pinnularia interrupta	0	0	0	0
Pinnularia marchica	0.01341	0.01493	0.00795	0
Pinnularia microstauron	0.00575	0.00746	0	0
Pinnularia sp. 3	0	0	0	0
Pinnularia sp. 4	0	0	0	0
Pinnularia sp. 5	0	0	0	0
Pinnularia sp. 6	0	0	0	0.00198
Pinnularia sp. 7	0	0	0	0
Pinnularia sp. 8	0	0	0	0
Pinnularia sp.1	0	0	0	0
Pinnularia sp.2	0	0	0	0
Pinnularia viridis	0.00383	0.0056	0	0
Placoneis cf. gastrum	0.00575	0.00933	0	0.00198
Placoneis sp. 1	0	0	0	0

Relative Abundance	S1-40	S1-50	S1-60	S1-70
Placoneis sp. 2	0	0	0	0
Plagiogramma cf. minima	0	0	0.00199	0
Planothidium frequentissimum	0.00192	0.01306	0	0.00198
Planothidium lanceolatum	0	0	0	0
Planothidium paragali	0	0	0	0
Planothidium sp. 1	0	0	0.01193	0
Planothidium sp. 2	0	0	0	0
Pleurosigma diverse-striatum	0	0	0	0.00198
Psammothidium? Sp. 1	0	0	0	0
Pseudostauroneis parasitica	0	0	0.00199	0
Pseudostaurosira americana	0	0	0.00596	0.00198
Pseudostaurosiropsis sp. 1	0	0	0	0
Pseudostaurosiropsis sp. 1 (GV)	0	0	0	0
Punctastriata mimetica	0	0	0	0
Rhaphoneis amphiceros	0.00766	0.02052	0.0497	0.06931
Rhaphoneis tenuis	0	0.00933	0	0.01188
Rhoicosphenia cf. marina	0.00383	0	0.01193	0
Rhoicosphenia sp. 1	0	0	0	0
Rhopalodia acuminatum	0	0	0	0.00396
Rhopolodia gibba	0	0	0	0
Rhopolodia musculus	0.00192	0.00373	0	0.00594
Sellaphora cf. hohnii	0	0	0	0
Sellaphora laevissima	0	0	0.00199	0
Sellaphora pupula	0.00575	0.0056	0	0.00198
Sellaphora rexii	0	0.00373	0	0
Sellaphora bacillum	0.00383	0	0	0
Skeletonema sp. 1	0	0	0.00596	0
Stauroneis agrestis	0	0	0	0.00198
Stauroneis CA	0	0	0	0
Stauroneis cf. vandevijveri	0	0	0	0
Stauroneis circumborealis	0	0.00187	0	0
Stauroneis GV	0	0.00373	0	0
Stauroneis kriegeri	0.00766	0	0	0
Stauroneis sp. 1	0	0	0	0
Staurophora cf. soodensis	0	0	0	0
Staurosira construens	0.00383	0.00373	0	0
Staurosirella leptosauron var. dubia	0	0.00187	0.00596	0
Staurosirella sp. 1	0	0	0	0
Stephanodiscus sp. 1	0	0	0	0
Surirella angusta	0.00766	0.01679	0	0

Relative Abundance	S1-40	S1-50	S1-60	S1-70
Surirella brebissonii	0	0	0	0
Surirella cf. iowensis	0	0	0.00199	0
Surirella ovalis	0	0	0	0
Surirella peisonis	0	0	0.00199	0
Surirella sp. 1	0	0.00373	0	0
Surirella splendida	0.02874	0.00373	0.00795	0
Synedra cf. fulgens	0	0	0	0
Synedra famelica	0	0	0	0
Synedra ulna var. biceps	0	0	0	0
Synedra ulna var. ramesi	0	0	0	0
Tabularia fasciculata	0.01149	0	0	0
Tabularia ktenoeoides	0	0.00933	0	0
Thalassionema nitzschioides	0.01724	0.02985	0.01193	0.02772
Thalassiosira baltica	0	0	0	0.00198
Thalassiosira cf. lineata	0	0.00746	0	0.0297
Thalassiosira cf. tenera	0	0	0.00596	0
Thalassiosira decipiens	0.00383	0	0	0.01782
Thalassiosira eccentrica	0.00575	0.01306	0	0.02772
Thalassiosira ferelineata	0.00192	0.00187	0.0835	0.01188
Thalassiosira oestrupii	0	0.00187	0.01392	0.00396
Thalassiosira proschkinae	0	0	0.02584	0.00198
Thalassiosira sp. 10 Cooper	0.00383	0.00373	0	0.00396
Thalassiosira sp. 2-1 Cooper	0.00192	0.0056	0	0.01188
Triceratium sp. 2	0	0.00187	0	0.00396
Tybionella debilis	0	0.00373	0	0
Ulnaria acus	0	0	0	0.0099
Ulnaria ulna	0.01724	0.02612	0.0338	0.05743
Undulate colony?	0	0	0	0
Unknown araphid	0	0	0	0
Unknown GV?	0	0	0	0

Relative Abundance	S1-80	S1-90	S1-100	S1-110
Achnanthes denticula	0	0	0	0
Achnanthes islandica	0	0.00778	0	0
Actinocyclus normanii	0.00994	0.03113	0.00194	0.00198
Actinocyclus octonarius var. crassus ?	0.02584	0.0214	0.04457	0.01984
Actinoptychus senarius	0.02584	0.00195	0.01357	0.00397
Amphora granulata	0.00199	0	0	0
Amphora sp. 1 (girdle view)	0	0	0	0
Amphora sp. 2	0	0	0	0
Anaulus cf. balticus	0	0	0.00775	0
Aneumastus pseudotusculus	0	0	0.00388	0
Anomoeoneis sp. 1	0	0	0	0
Anorthoneis tenuis	0	0	0	0
Asterionella formosa	0	0	0.00194	0
Asterionella sp. 1	0.00199	0	0	0
Aulacoseira ambigua	0.02982	0.1284	0.02132	0.01786
Aulacoseira granulata	0	0	0	0
Aulacoseira pusilla	0	0	0	0
Aulacoseira sp. 1	0	0	0	0
Aulacoseira sp. 2	0	0	0.00969	0
Aulacoseira tenella	0	0	0	0
Bacillaria socialis	0.00199	0.00389	0	0.00794
Biremis circumtexta	0	0.00584	0	0
Biremis? sp. 1	0	0	0	0
Caloneis aemula	0	0	0	0.00198
Caloneis bacillum	0.00596	0.00389	0.00194	0.0377
Caloneis cf. lineatus	0	0	0	0
Caloneis cf. ventricosa	0	0	0	0
Caloneis lewisii	0	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0	0
Caloneis sp. 2	0.00199	0	0	0
Caloneis sp. 3	0	0	0	0
Caloneis sp. 4	0	0	0	0
Campylodiscus sp. 1	0	0	0	0
Cavinula sp. 1	0	0	0.00194	0
Cocconeis cf. peltoides	0	0	0.00194	0
Cocconeis costata var. costata	0.00199	0	0	0
Cocconeis diminuta	0	0	0	0
Cocconeis disculoides	0	0	0	0
Cocconeis elongatum	0	0	0	0
Cocconeis placentula	0.01193	0.00584	0.01163	0

Relative Abundance	S1-80	S1-90	S1-100	S1-110
Cocconeis scutellum	0	0	0	0
Coscinodiscus cf. lineatus	0	0	0	0
Coscinodiscus marginatus	0.01789	0.01751	0.00775	0.01786
Cosmoneis pusilla	0	0	0	0.00397
Cosmoneis sp. 1	0.00199	0	0.00388	0
Craticula cuspidata	0	0	0	0
Cyclostephanos sp. 1	0	0	0	0
Cyclostephanos sp. 2	0	0	0	0
Cyclotella atomus?	0.03777	0.03502	0.03101	0.00794
Cyclotella caspia	0	0	0.00775	0
Cyclotella cyclopuncta	0	0.02335	0.02713	0.03968
Cyclotella distinguenda	0	0	0.00775	0
Cyclotella meneghiniana	0.02386	0.01751	0.00194	0
Cyclotella rossii	0	0	0	0
Cyclotella sp. 2	0	0.00195	0	0
Cyclotella striata	0.06362	0.02918	0.04264	0.05159
Cyclotella stylorum	0.03181	0.00778	0.04651	0.02579
Cymatopleura solea	0	0	0.00194	0
Cymatosira belgica	0.00398	0.00195	0	0.00992
Cymbella affinis	0.02187	0.00389	0.00969	0
Cymbella excisiformis?	0.00398	0	0	0
Cymbella janischii	0	0	0	0
Cymbella mexicana	0	0	0	0
Cymbella minuta	0	0	0.00388	0
Cymbella sinuata	0.00199	0	0.00775	0
Cymbella sp. 2	0	0	0	0
Decussata placenta	0	0	0	0.00595
Delphineis minutissima	0	0	0	0
Delphineis surirella	0.00398	0	0.00969	0
Denticula kuetzengii	0	0.00195	0	0
Diadesmis gallica	0	0	0	0
Diatoma mesodon	0	0	0	0
Diatoma moniliformis	0	0.00584	0.00969	0.00198
Diatoma vulgaris	0	0	0	0
Diatomella balfouriana	0	0	0	0
Dimeregramma minor	0	0	0	0
Diploneis boldtiana	0.00199	0.00389	0.00969	0.00595
Diploneis cf. bombus	0	0.00584	0.00388	0.00397
Diploneis cf. didyma	0	0	0	0
Diploneis elliptica	0	0	0	0.00992

Relative Abundance	S1-80	S1-90	S1-100	S1-110
Diploneis pseudovalis	0.01193	0	0.00581	0.00794
Diploneis smithii	0.00596	0.00195	0.00194	0.00595
Diploneis interrupta	0	0.00195	0	0
Encyonema nicafei	0.00596	0.01362	0.02713	0.00198
Encyonema sp. 1	0.02783	0	0	0
Encyonema sp. 2	0	0	0.00388	0
Encyonema sp. 3	0	0	0	0
Encyonema triangulum	0	0	0	0
Encyonopsis microcephala	0	0.00584	0	0
Epithemia adnata	0.00398	0	0.00194	0
Epithemia frickei	0.01193	0	0.00194	0.00198
Epithemia turgida	0.00199	0.01362	0.00388	0.00198
Eunotia sp. 1	0	0	0	0
Eunotia sp. 2	0	0	0	0
Fallacia pygmia	0.02386	0.01362	0.00388	0.00397
Fragilaria brevistriata	0	0	0	0
Fragilaria capucina	0	0.00195	0	0
Fragilaria cf. microstriata	0	0	0	0
Fragilaria elliptica	0.00596	0.00389	0	0
Fragilaria schulzii	0	0	0	0
Fragilaria vaucheriae	0.00994	0.00973	0	0
Frickea lewisiana	0	0	0	0
Frustulia amphipleuroides	0	0	0.00194	0
Frustulia rhomboides var. viridula	0	0	0.00194	0
Frustulia sp. 1	0.00199	0	0.00775	0
Frustulia vulgaris	0	0.00778	0.00388	0
Geissleria decussis	0	0	0	0
Geissleria kreigeri	0.00398	0.00195	0	0
Gomphoneis sp. 1	0	0	0.00388	0
Gomphonema acuminatum	0	0	0	0
Gomphonema innocens	0	0	0.00194	0
Gomphonema mammilla	0.00596	0	0	0
Gomphonema olivaceum	0.00398	0	0.00388	0
Gomphonema sp. 1	0.00199	0.00195	0	0
Gomphonema sp. 2	0	0	0	0
Gomphonema sp. 3	0	0.00195	0	0
Gomphonopsis exiguum	0.00199	0	0	0
Grammatophora cf. macilenta	0	0	0	0
Gyrosigma temperii	0	0	0.00775	0
Gyrosigma cf. balticum	0.00398	0	0	0

Relative Abundance	S1-80	S1-90	S1-100	S1-110
Gyrosigma sp.1	0	0	0	0
Gyrosigma spencerii	0	0.00584	0	0
Hantzschia sp. 1 girdle view	0	0	0	0
Hantzschia sp. 2 girdle view	0.00398	0	0.00775	0
Hantzschia sp. 3	0	0	0	0
Hantzschia virgata	0	0	0	0.01389
Hippodonta costulata	0	0.00195	0	0
Hippodonta coxiae	0	0.00195	0	0.00397
Hippodonta sp. 1	0	0	0.01163	0
Hippodonta sp. 2	0	0	0	0
Karayevia amoena	0	0.00195	0.00194	0
Leptocylindrus ? Cf. danicus	0	0.00195	0	0.00198
Luticola sp. 1	0	0	0.00194	0
Luticola sp. 2	0.00199	0	0.00388	0
Luticola sp. 3	0	0	0	0
Mastogloia smithii	0	0	0	0
Mastogloia sp. 1	0	0	0	0
Mastogloia sp. 2	0	0	0	0
Melosira sp. 1	0	0	0	0
Melosira varians	0	0	0.00388	0
Meridion sp. 1	0	0	0.00194	0
Navicula abunda	0.01988	0.01167	0.02907	0.00794
Navicula angusta	0	0	0	0
Navicula antonii	0	0.00778	0	0
Navicula brachium	0.00994	0	0.00194	0.00397
Navicula cari	0	0	0	0
Navicula cf. capitoradiata	0.01988	0.01556	0.02326	0
Navicula cf. galloae	0	0	0	0
Navicula cf. heuflerii	0	0	0	0
Navicula cf. oblonga	0	0.00195	0	0
Navicula cf. patrickii	0	0	0	0.00397
Navicula cf. reichardtiana	0	0	0.00388	0.00595
Navicula cf. salinarum	0.00398	0	0.00194	0.00198
Navicula cf. schweigeri	0	0.01946	0	0
Navicula cf. subinflata	0	0.00584	0	0.04762
Navicula cf. tripunctata	0.00596	0	0.02326	0
Navicula cf. zostereti	0.00199	0	0	0
Navicula gregaria	0.00199	0.00195	0	0
Navicula halophila	0.00398	0.00195	0.00775	0
Navicula lanceolata	0.00199	0.00389	0.00194	0.00198

Relative Abundance	S1-80	S1-90	S1-100	S1-110
Navicula marginulata	0	0	0	0
Navicula oculiformis	0	0	0	0
Navicula peregrina	0.01193	0.00973	0.00969	0.00595
Navicula perminuta	0.00199	0	0.00388	0
Navicula phyllepta	0	0	0	0
Navicula slesvicensis	0	0	0	0
Navicula sp. 1	0	0	0	0
Navicula sp. 2	0	0	0	0
Navicula sp. 3	0	0	0.00388	0.00595
Navicula sp. 5	0	0	0	0
Navicula sp. 6	0	0	0	0
Navicula subinflata	0.00199	0	0	0
Navicula subminiscula	0	0	0	0
Naviculoid diatom 1	0	0	0	0
Naviculoid diatom 2	0	0	0.00194	0
Neidiopsis sp. 1	0	0	0	0
Nitzschia amphibia	0.00398	0	0.00388	0
Nitzschia brevissima	0.00795	0.0214	0.01744	0.03571
Nitzschia cf. agnita	0	0.00389	0	0.00397
Nitzschia cf. borealis	0	0	0	0.00198
Nitzschia cf. groefii	0	0	0	0
Nitzschia cf. laevis	0	0	0	0
Nitzschia cf. macilenta	0.00199	0	0.01163	0.00397
Nitzschia clausii	0	0.00778	0	0.01389
Nitzschia columbiana	0	0.00389	0.00388	0.0119
Nitzschia communis	0.00398	0.00389	0.00775	0.00794
Nitzschia commutata	0	0	0	0
Nitzschia constricta	0	0	0	0
Nitzschia cylindrus	0	0	0	0
Nitzschia debilis	0.00398	0	0	0
Nitzschia desertorum	0	0.00389	0.00194	0
Nitzschia dissipata	0	0	0	0
Nitzschia filiformis	0.00596	0	0.00388	0
Nitzschia frustulum	0	0.00389	0	0
Nitzschia gracilis	0.00199	0	0.00388	0
Nitzschia incognita	0	0	0	0
Nitzschia inconspicua	0	0.00389	0	0.00397
Nitzschia levidensis	0	0	0.00388	0
Nitzschia linearis	0.01789	0.00195	0.01357	0
Nitzschia microcephala	0	0	0	0

Relative Abundance	S1-80	S1-90	S1-100	S1-110
Nitzschia nana	0	0	0	0.00397
Nitzschia obtusa	0	0	0	0
Nitzschia palea	0.00398	0.00389	0.00969	0.00992
Nitzschia panduriformis	0.00199	0.00195	0.00194	0
Nitzschia pellucida	0	0	0	0
Nitzschia perminuta	0.00795	0	0	0
Nitzschia proxima	0	0	0	0
Nitzschia punctata	0.00795	0.00389	0.00581	0.00397
Nitzschia pusilla	0	0	0	0.00794
Nitzschia scalaris	0	0.00195	0	0.00397
Nitzschia sigma	0	0	0.00388	0.00198
Nitzschia sigmaformis	0	0	0.00194	0
Nitzschia sp. 1	0.00398	0.00195	0.00194	0.01389
Nitzschia sp. 2	0	0	0	0
Nitzschia sp. 3	0	0	0	0
Nitzschia sp. 4	0	0.00195	0	0.0119
Nitzschia sp. 5	0	0	0	0
Nitzschia umbonata	0	0	0	0
Opephora martyi	0.00596	0	0.00388	0
Opephora sp. A	0.00199	0	0.00194	0
Orthoseira sp. 1	0.01193	0	0.00194	0
Paralia sulcata	0.07753	0.09533	0.04264	0.15079
Parlibellus cf. plicatus	0.00398	0	0	0
Pinnularia borealis	0	0	0	0.00992
Pinnularia divergens	0	0	0.00969	0
Pinnularia divergentissima	0	0	0	0
Pinnularia interrupta	0	0	0	0
Pinnularia marchica	0.00398	0	0.00388	0.0754
Pinnularia microstauron	0	0.00195	0	0.00198
Pinnularia sp. 3	0	0	0	0
Pinnularia sp. 4	0	0	0	0
Pinnularia sp. 5	0	0	0	0
Pinnularia sp. 6	0	0	0	0
Pinnularia sp. 7	0	0	0	0
Pinnularia sp. 8	0	0	0	0
Pinnularia sp.1	0	0	0	0
Pinnularia sp.2	0	0	0	0
Pinnularia viridis	0	0	0	0.00397
Placoneis cf. gastrum	0	0	0	0.00397
Placoneis sp. 1	0	0.00778	0	0

Relative Abundance	S1-80	S1-90	S1-100	S1-110
Placoneis sp. 2	0	0	0	0
Plagiogramma cf. minima	0	0	0	0
Planothidium frequentissimum	0	0.00389	0	0
Planothidium lanceolatum	0	0	0.00969	0
Planothidium paragali	0	0.00195	0	0
Planothidium sp. 1	0.00398	0	0.00194	0
Planothidium sp. 2	0.00994	0	0.00194	0
Pleurosigma diverse-striatum	0	0.00973	0	0
Psammothidium? Sp. 1	0	0	0	0
Pseudostauroneis parasitica	0	0	0	0
Pseudostaurosira americana	0	0.01167	0.00581	0
Pseudostaurosiropsis sp. 1	0	0	0	0
Pseudostaurosiropsis sp. 1 (GV)	0	0	0.00388	0
Punctastriata mimetica	0	0	0	0
Rhaphoneis amphiceros	0.04573	0.05447	0.0155	0.04762
Rhaphoneis tenuis	0	0.00389	0.00194	0.00397
Rhoicosphenia cf. marina	0	0.00778	0	0
Rhoicosphenia sp. 1	0	0	0	0
Rhopalodia acuminatum	0	0	0.00581	0.00397
Rhopolodia gibba	0	0	0	0
Rhopolodia musculus	0	0.00584	0	0.00794
Sellaphora cf. hohnii	0	0.00778	0	0
Sellaphora laevissima	0	0	0	0
Sellaphora pupula	0	0	0	0
Sellaphora rexii	0	0	0	0
Sellaphora bacillum	0	0	0.00775	0
Skeletonema sp. 1	0	0	0	0
Stauroneis agrestis	0	0.00195	0	0
Stauroneis CA	0	0	0	0.00198
Stauroneis cf. vandevijveri	0	0	0	0
Stauroneis circumborealis	0	0	0	0
Stauroneis GV	0	0	0	0
Stauroneis kriegeri	0	0	0.00581	0
Stauroneis sp. 1	0	0	0	0
Staurophora cf. soodensis	0	0.00195	0.00194	0
Staurosira construens	0	0.00389	0	0
Staurosirella leptosauron var. dubia	0	0	0.00388	0
Staurosirella sp. 1	0.00199	0	0	0
Stephanodiscus sp. 1	0	0	0	0
Surirella angusta	0	0	0	0

Relative Abundance	S1-80	S1-90	S1-100	S1-110
Surirella brebissonii	0	0	0	0
Surirella cf. iowensis	0	0	0	0
Surirella ovalis	0	0	0	0
Surirella peisonis	0	0	0.00969	0
Surirella sp. 1	0	0	0	0
Surirella splendida	0	0	0	0
Synedra cf. fulgens	0	0	0	0
Synedra famelica	0	0	0	0
Synedra ulna var. biceps	0	0	0.00581	0
Synedra ulna var. ramesi	0	0	0	0
Tabularia fasciculata	0.00199	0.00973	0	0
Tabularia ktenoeoides	0.02386	0	0	0
Thalassionema nitzschioides	0.0159	0.01946	0.02519	0.00794
Thalassiosira baltica	0	0	0	0
Thalassiosira cf. lineata	0.00199	0.03307	0.01744	0.02778
Thalassiosira cf. tenera	0	0	0.00388	0.00198
Thalassiosira decipiens	0	0.02918	0.03876	0.02579
Thalassiosira eccentrica	0	0.02335	0.00775	0.01984
Thalassiosira ferelineata	0.04175	0	0.02713	0
Thalassiosira oestrupii	0.06958	0	0.01163	0
Thalassiosira proschkinae	0	0	0	0.00595
Thalassiosira sp. 10 Cooper	0	0.01362	0	0.00794
Thalassiosira sp. 2-1 Cooper	0	0.01556	0	0.02778
Triceratium sp. 2	0	0.00195	0.00581	0
Tybionella debilis	0.01392	0	0	0.00794
Ulnaria acus	0	0.00195	0.00194	0
Ulnaria ulna	0.03181	0.02335	0.02326	0.00595
Undulate colony?	0	0	0.00775	0.00397
Unknown araphid	0	0	0	0
Unknown GV?	0	0	0.00388	0

Relative Abundance	S1-120	S1-130	S1-140	S1-150
Achnanthes denticula	0	0	0.002	0
Achnanthes islandica	0	0	0	0
Actinocyclus normanii	0.00198	0	0.002	0.00194
Actinocyclus octonarius var. crassus ?	0	0.02187	0.01597	0.00388
Actinoptychus senarius	0.00791	0.00994	0.00798	0.01165
Amphora granulata	0	0	0	0
Amphora sp. 1 (girdle view)	0	0	0	0
Amphora sp. 2	0.00395	0	0	0
Anaulus cf. balticus	0	0	0	0
Aneumastus pseudotusculus	0	0	0	0
Anomoeoneis sp. 1	0	0	0	0
Anorthoneis tenuis	0	0.00199	0	0
Asterionella formosa	0	0	0	0
Asterionella sp. 1	0	0	0	0
Aulacoseira ambigua	0.04743	0.01392	0.01796	0.00583
Aulacoseira granulata	0	0	0	0
Aulacoseira pusilla	0	0	0	0
Aulacoseira sp. 1	0	0	0	0
Aulacoseira sp. 2	0	0	0	0
Aulacoseira tenella	0	0	0	0
Bacillaria socialis	0.00395	0.01193	0	0.00777
Biremis circumtexta	0	0	0	0
Biremis? sp. 1	0	0	0	0
Caloneis aemula	0	0.00398	0.00798	0
Caloneis bacillum	0.00593	0.0159	0.02395	0.02524
Caloneis cf. lineatus	0	0	0	0
Caloneis cf. ventricosa	0	0	0.00599	0
Caloneis lewisii	0	0	0.002	0.00388
Caloneis sp. 1 (girdle view)	0	0	0	0
Caloneis sp. 2	0	0	0	0
Caloneis sp. 3	0	0	0	0.00194
Caloneis sp. 4	0	0	0	0
Campylodiscus sp. 1	0	0	0	0
Cavinula sp. 1	0	0	0	0
Cocconeis cf. peltoides	0	0	0	0
Cocconeis costata var. costata	0	0	0	0
Cocconeis diminuta	0	0	0	0
Cocconeis disculoides	0	0	0	0
Cocconeis elongatum	0	0	0	0
Cocconeis placentula	0	0.00199	0.002	0.00194

Relative Abundance	S1-120	S1-130	S1-140	S1-150
Cocconeis scutellum	0	0	0	0
Coscinodiscus cf. lineatus	0.01976	0	0.002	0.00583
Coscinodiscus marginatus	0.00395	0.0159	0.01397	0
Cosmoneis pusilla	0.00395	0.00795	0.002	0.02136
Cosmoneis sp. 1	0	0	0	0
Craticula cuspidata	0	0	0	0
Cyclostephanos sp. 1	0	0	0	0
Cyclostephanos sp. 2	0	0	0	0
Cyclotella atomus?	0.00988	0.01988	0.00798	0.00194
Cyclotella caspia	0.00198	0.00199	0.01198	0.00194
Cyclotella cyclopuncta	0.04545	0.0497	0.0499	0.04078
Cyclotella distinguenda	0.00395	0	0	0
Cyclotella meneghiniana	0.00593	0	0	0
Cyclotella rossii	0	0	0	0
Cyclotella sp. 2	0	0	0	0
Cyclotella striata	0.03162	0.03777	0.04591	0.01165
Cyclotella stylorum	0.03755	0.02386	0.01996	0.01748
Cymatopleura solea	0	0	0	0
Cymatosira belgica	0	0.00795	0	0.00388
Cymbella affinis	0	0.00199	0	0.00194
Cymbella excisiformis?	0	0.00199	0	0.00194
Cymbella janischii	0	0	0	0
Cymbella mexicana	0	0.00199	0.002	0.00777
Cymbella minuta	0	0	0	0
Cymbella sinuata	0	0	0	0
Cymbella sp. 2	0	0	0	0
Decussata placenta	0	0.00795	0.00798	0.00194
Delphineis minutissima	0	0	0	0
Delphineis surirella	0.00198	0	0	0
Denticula kuetzengii	0	0	0	0
Diadesmis gallica	0	0	0	0
Diatoma mesodon	0	0	0	0
Diatoma moniliformis	0.00198	0	0.00399	0.00194
Diatoma vulgaris	0	0	0	0
Diatomella balfouriana	0	0	0	0
Dimeregramma minor	0	0	0	0
Diploneis boldtiana	0.03162	0.01193	0.05988	0.0233
Diploneis cf. bombus	0.00198	0	0	0
Diploneis cf. didyma	0	0	0	0
Diploneis elliptica	0.01581	0.00398	0.0499	0.06408

Relative Abundance	S1-120	S1-130	S1-140	S1-150
Diploneis pseudovalis	0.00593	0.00795	0.02595	0.01553
Diploneis smithii	0.00395	0.00398	0.01597	0.00194
Diploneis interrupta	0	0	0	0
Encyonema nicafei	0.00395	0.00199	0	0.00777
Encyonema sp. 1	0	0	0	0
Encyonema sp. 2	0	0	0	0
Encyonema sp. 3	0	0	0	0
Encyonema triangulum	0	0	0	0
Encyonopsis microcephala	0	0	0	0
Epithemia adnata	0	0	0	0
Epithemia frickei	0	0	0	0
Epithemia turgida	0.00593	0.00596	0.00399	0.00583
Eunotia sp. 1	0	0	0	0
Eunotia sp. 2	0	0	0	0.00194
Fallacia pygmia	0	0	0	0
Fragilaria brevistriata	0	0	0.00399	0
Fragilaria capucina	0	0	0	0
Fragilaria cf. microstriata	0	0	0.00399	0
Fragilaria elliptica	0	0	0	0
Fragilaria schulzii	0	0	0	0
Fragilaria vaucheriae	0	0	0	0
Frickea lewisiana	0	0	0	0
Frustulia amphipleuroides	0	0	0	0.00194
Frustulia rhomboides var. viridula	0	0	0	0
Frustulia sp. 1	0	0	0	0
Frustulia vulgaris	0	0.00795	0	0
Geissleria decussis	0	0	0.00399	0
Geissleria kreigeri	0	0	0	0.00194
Gomphoneis sp. 1	0	0	0	0
Gomphonema acuminatum	0	0	0	0
Gomphonema innocens	0	0	0	0
Gomphonema mammilla	0	0	0	0
Gomphonema olivaceum	0	0	0	0
Gomphonema sp. 1	0	0	0.00798	0
Gomphonema sp. 2	0	0	0	0
Gomphonema sp. 3	0	0	0	0
Gomphonopsis exiguum	0	0	0	0
Grammatophora cf. macilenta	0	0	0	0
Gyrosigma temperii	0	0	0	0
Gyrosigma cf. balticum	0	0	0.002	0

Relative Abundance	S1-120	S1-130	S1-140	S1-150
Gyrosigma sp.1	0	0	0	0
Gyrosigma spencerii	0	0.00199	0	0.00388
Hantzschia sp. 1 girdle view	0	0	0	0
Hantzschia sp. 2 girdle view	0.01186	0	0.00399	0
Hantzschia sp. 3	0.00395	0	0	0
Hantzschia virgata	0.01186	0.00398	0.01397	0.00777
Hippodonta costulata	0	0	0	0
Hippodonta coxiae	0	0.00596	0	0.00583
Hippodonta sp. 1	0.00395	0	0	0
Hippodonta sp. 2	0.00395	0	0	0
Karayevia amoena	0	0	0	0
Leptocylindrus ? Cf. danicus	0	0.00795	0	0.00583
Luticola sp. 1	0	0	0	0
Luticola sp. 2	0	0	0	0
Luticola sp. 3	0	0	0	0.00388
Mastogloia smithii	0	0	0	0
Mastogloia sp. 1	0	0	0	0
Mastogloia sp. 2	0	0	0	0
Melosira sp. 1	0.00198	0	0	0
Melosira varians	0.00593	0	0	0
Meridion sp. 1	0	0	0	0
Navicula abunda	0.00791	0.02187	0.01996	0.01942
Navicula angusta	0	0	0	0
Navicula antonii	0	0	0	0
Navicula brachium	0	0.00398	0	0
Navicula cari	0.00395	0.00994	0	0.02524
Navicula cf. capitoradiata	0	0	0.00599	0
Navicula cf. galloae	0	0	0.002	0
Navicula cf. heuflerii	0	0	0	0
Navicula cf. oblonga	0	0.00199	0.00599	0
Navicula cf. patrickii	0	0.00398	0	0
Navicula cf. reichardtiana	0	0	0	0
Navicula cf. salinarum	0.00593	0.00398	0	0
Navicula cf. schweigeri	0	0	0.00798	0
Navicula cf. subinflata	0.00791	0.00398	0	0
Navicula cf. tripunctata	0.01383	0.00795	0	0.00583
Navicula cf. zostereti	0	0	0.00399	0
Navicula gregaria	0	0	0.002	0
Navicula halophila	0	0	0	0
Navicula lanceolata	0	0.00398	0	0

Relative Abundance	S1-120	S1-130	S1-140	S1-150
Navicula marginulata	0	0	0	0
Navicula oculiformis	0	0	0	0
Navicula peregrina	0.00791	0.00994	0.02595	0.00194
Navicula perminuta	0	0	0	0
Navicula phyllepta	0	0	0	0
Navicula slesvicensis	0	0	0	0
Navicula sp. 1	0	0	0	0
Navicula sp. 2	0	0	0	0
Navicula sp. 3	0.00198	0	0.00798	0
Navicula sp. 5	0	0	0	0
Navicula sp. 6	0	0	0	0.00583
Navicula subinflata	0	0	0.002	0
Navicula subminiscula	0.00198	0	0	0
Naviculoid diatom 1	0	0	0	0
Naviculoid diatom 2	0	0	0	0
Neidiopsis sp. 1	0	0	0.00399	0
Nitzschia amphibia	0	0.00199	0.002	0
Nitzschia brevissima	0.02372	0.03777	0.00798	0.00388
Nitzschia cf. agnita	0	0.00398	0.00399	0
Nitzschia cf. borealis	0	0.00994	0	0.00971
Nitzschia cf. groefii	0	0	0	0
Nitzschia cf. laevis	0	0.00199	0	0
Nitzschia cf. macilenta	0	0.00199	0	0
Nitzschia clausii	0.04941	0.02187	0.01597	0.00971
Nitzschia columbiana	0	0.00795	0.00599	0.00583
Nitzschia communis	0.00593	0.00398	0	0.00388
Nitzschia commutata	0	0.00398	0	0.01359
Nitzschia constricta	0	0	0	0
Nitzschia cylindrus	0	0	0	0
Nitzschia debilis	0.01779	0	0	0
Nitzschia desertorum	0.00395	0.00398	0.00399	0
Nitzschia dissipata	0.00395	0	0	0
Nitzschia filiformis	0.00395	0.00199	0.00399	0
Nitzschia frustulum	0	0	0	0
Nitzschia gracilis	0.00395	0	0	0
Nitzschia incognita	0.01186	0.00398	0	0
Nitzschia inconspicua	0.00198	0.00199	0	0
Nitzschia levidensis	0	0.00398	0	0
Nitzschia linearis	0	0	0.00998	0
Nitzschia microcephala	0	0	0.002	0

Relative Abundance	S1-120	S1-130	S1-140	S1-150
Nitzschia nana	0	0.00199	0	0
Nitzschia obtusa	0	0	0.00998	0
Nitzschia palea	0.00988	0.01193	0	0.00388
Nitzschia panduriformis	0	0	0	0
Nitzschia pellucida	0	0	0	0
Nitzschia perminuta	0	0	0	0
Nitzschia proxima	0	0	0.01198	0.00777
Nitzschia punctata	0.00791	0.00398	0	0
Nitzschia pusilla	0.00395	0	0	0
Nitzschia scalaris	0	0.01789	0	0.02524
Nitzschia sigma	0	0.00994	0	0
Nitzschia sigmaformis	0	0	0.00399	0
Nitzschia sp. 1	0	0.01988	0.02395	0.02913
Nitzschia sp. 2	0	0	0	0
Nitzschia sp. 3	0	0	0	0
Nitzschia sp. 4	0	0.01789	0	0.03689
Nitzschia sp. 5	0	0	0	0
Nitzschia umbonata	0	0	0	0
Opephora martyi	0.00198	0	0	0
Opephora sp. A	0	0	0	0
Orthoseira sp. 1	0	0	0.00998	0
Paralia sulcata	0.12451	0.14911	0.0978	0.09709
Parlibellus cf. plicatus	0	0	0	0
Pinnularia borealis	0	0	0	0
Pinnularia divergens	0	0	0	0.00971
Pinnularia divergentissima	0	0.00398	0.002	0
Pinnularia interrupta	0	0	0	0
Pinnularia marchica	0.12253	0.00994	0.01796	0.01359
Pinnularia microstauron	0	0.00398	0.01796	0.04466
Pinnularia sp. 3	0	0	0	0
Pinnularia sp. 4	0	0	0	0
Pinnularia sp. 5	0	0	0	0
Pinnularia sp. 6	0	0	0	0
Pinnularia sp. 7	0	0	0	0.00388
Pinnularia sp. 8	0	0	0	0.00388
Pinnularia sp.1	0	0	0	0
Pinnularia sp.2	0	0	0	0
Pinnularia viridis	0	0.01392	0.01796	0.00971
Placoneis cf. gastrum	0	0.00596	0	0.03495
Placoneis sp. 1	0	0	0.00998	0

Relative Abundance	S1-120	S1-130	S1-140	S1-150
Placoneis sp. 2	0	0	0	0
Plagiogramma cf. minima	0.00395	0	0	0
Planothidium frequentissimum	0	0.01193	0	0
Planothidium lanceolatum	0.00395	0	0	0.00194
Planothidium paragali	0	0	0	0.00194
Planothidium sp. 1	0.00395	0	0	0
Planothidium sp. 2	0	0	0	0
Pleurosigma diverse-striatum	0	0	0	0
Psammothidium? Sp. 1	0.00395	0	0	0
Pseudostauroneis parasitica	0	0	0	0
Pseudostaurosira americana	0	0	0	0
Pseudostaurosiropsis sp. 1	0	0	0	0
Pseudostaurosiropsis sp. 1 (GV)	0	0	0	0
Punctastriata mimetica	0	0	0	0
Rhaphoneis amphiceros	0.01581	0.05567	0.02196	0.03689
Rhaphoneis tenuis	0	0.00596	0.00399	0.00583
Rhoicosphenia cf. marina	0	0.00398	0	0
Rhoicosphenia sp. 1	0.00395	0	0.00399	0
Rhopalodia acuminatum	0.01779	0.02584	0.03393	0.01942
Rhopolodia gibba	0.00395	0	0	0
Rhopolodia musculus	0.00198	0.00795	0.01796	0.0932
Sellaphora cf. hohnii	0.00198	0	0	0
Sellaphora laevissima	0	0	0	0.00777
Sellaphora pupula	0	0	0	0.00194
Sellaphora rexii	0.03557	0	0	0
Sellaphora bacillum	0	0	0	0.00194
Skeletonema sp. 1	0	0	0	0
Stauroneis agrestis	0	0	0.002	0
Stauroneis CA	0	0	0	0.00388
Stauroneis cf. vandevijveri	0	0	0	0
Stauroneis circumborealis	0	0	0	0
Stauroneis GV	0	0	0	0
Stauroneis kriegeri	0	0	0	0
Stauroneis sp. 1	0	0	0	0
Staurophora cf. soodensis	0	0	0	0
Staurosira construens	0	0	0	0
Staurosirella leptosauron var. dubia	0.00395	0	0	0
Staurosirella sp. 1	0	0	0	0
Stephanodiscus sp. 1	0	0	0	0
Surirella angusta	0	0	0	0

Relative Abundance	S1-120	S1-130	S1-140	S1-150
Surirella brebissonii	0	0	0.002	0
Surirella cf. iowensis	0	0	0	0
Surirella ovalis	0	0	0	0.00194
Surirella peisonis	0	0	0	0
Surirella sp. 1	0	0	0	0
Surirella splendida	0	0	0	0
Synedra cf. fulgens	0	0	0.01397	0
Synedra famelica	0.00198	0	0	0
Synedra ulna var. biceps	0	0	0	0
Synedra ulna var. ramesi	0	0	0	0
Tabularia fasciculata	0	0	0	0
Tabularia ktenoeoides	0	0	0	0
Thalassionema nitzschioides	0.00988	0.04573	0.02395	0.0233
Thalassiosira baltica	0	0	0	0
Thalassiosira cf. lineata	0.00988	0.00596	0.00798	0.00971
Thalassiosira cf. tenera	0.00988	0	0	0
Thalassiosira decipiens	0.03557	0.00596	0.02794	0
Thalassiosira eccentrica	0.00593	0.00596	0.00399	0.00388
Thalassiosira ferelineata	0	0.00994	0.00798	0.00388
Thalassiosira oestrupii	0.00593	0.00199	0	0
Thalassiosira proschkinae	0.00791	0.00795	0	0.00583
Thalassiosira sp. 10 Cooper	0.00198	0	0	0
Thalassiosira sp. 2-1 Cooper	0	0.01193	0	0.00388
Triceratium sp. 2	0	0	0	0
Tybionella debilis	0.00395	0.00795	0.00798	0.01165
Ulnaria acus	0	0	0	0
Ulnaria ulna	0.00593	0.00795	0.002	0
Undulate colony?	0	0	0	0
Unknown araphid	0	0	0	0
Unknown GV?	0	0	0	0

Relative Abundance	S1-160	S1-170	S1-180	S1-190
Achnanthes denticula	0	0	0	0
Achnanthes islandica	0	0	0	0
Actinocyclus normanii	0.00197	0.00544	0	0.01316
Actinocyclus octonarius var. crassus ?	0	0.01089	0.00576	0.00752
Actinoptychus senarius	0.00394	0.01815	0.0096	0.03195
Amphora granulata	0	0	0	0
Amphora sp. 1 (girdle view)	0	0	0	0
Amphora sp. 2	0	0	0	0.00188
Anaulus cf. balticus	0	0	0	0.00188
Aneumastus pseudotusculus	0	0	0	0
Anomoeoneis sp. 1	0	0	0	0
Anorthoneis tenuis	0	0	0.00384	0
Asterionella formosa	0	0	0	0
Asterionella sp. 1	0	0	0	0
Aulacoseira ambigua	0.01972	0.01633	0.01152	0.00564
Aulacoseira granulata	0	0	0	0
Aulacoseira pusilla	0	0	0.00384	0
Aulacoseira sp. 1	0	0	0	0
Aulacoseira sp. 2	0	0	0	0
Aulacoseira tenella	0	0	0	0
Bacillaria socialis	0.00394	0.01089	0.0096	0.01128
Biremis circumtexta	0	0	0	0
Biremis? sp. 1	0	0	0	0.00188
Caloneis aemula	0	0	0.00384	0
Caloneis bacillum	0.03353	0.03811	0.01919	0.01128
Caloneis cf. lineatus	0	0	0	0.00376
Caloneis cf. ventricosa	0	0	0	0
Caloneis lewisii	0	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0	0
Caloneis sp. 2	0	0	0	0
Caloneis sp. 3	0	0	0	0
Caloneis sp. 4	0	0	0	0
Campylodiscus sp. 1	0	0	0	0
Cavinula sp. 1	0	0	0	0
Cocconeis cf. peltoides	0	0	0	0
Cocconeis costata var. costata	0	0	0	0.00376
Cocconeis diminuta	0	0	0	0
Cocconeis disculoides	0	0	0	0.00376
Cocconeis elongatum	0	0	0	0
Cocconeis placentula	0	0	0.00384	0.00188

Relative Abundance	S1-160	S1-170	S1-180	S1-190
Cocconeis scutellum	0	0	0	0
Coscinodiscus cf. lineatus	0	0.0127	0.01536	0.02068
Coscinodiscus marginatus	0.00789	0	0	0
Cosmoneis pusilla	0.03353	0.00363	0	0.00564
Cosmoneis sp. 1	0	0	0	0
Craticula cuspidata	0	0	0	0
Cyclostephanos sp. 1	0	0	0	0
Cyclostephanos sp. 2	0.00789	0	0	0
Cyclotella atomus?	0.00394	0.00544	0.00192	0.00752
Cyclotella caspia	0	0	0.00768	0
Cyclotella cyclopuncta	0.03945	0.05263	0.04415	0.06579
Cyclotella distinguenda	0	0	0	0
Cyclotella meneghiniana	0	0.00181	0	0
Cyclotella rossii	0	0	0	0
Cyclotella sp. 2	0	0	0	0
Cyclotella striata	0.05128	0.01089	0.03839	0.0094
Cyclotella stylorum	0.00592	0.03085	0.01536	0.04323
Cymatopleura solea	0	0	0	0
Cymatosira belgica	0	0.00181	0.03071	0.00752
Cymbella affinis	0.00197	0.00181	0.00192	0.00376
Cymbella excisiformis?	0	0.00181	0	0
Cymbella janischii	0	0	0	0
Cymbella mexicana	0	0.00181	0	0
Cymbella minuta	0	0	0	0
Cymbella sinuata	0	0	0.00192	0
Cymbella sp. 2	0	0	0	0
Decussata placenta	0.00394	0.00544	0	0
Delphineis minutissima	0	0	0	0
Delphineis surirella	0.00197	0	0	0
Denticula kuetzengii	0.00197	0	0	0
Diadesmis gallica	0	0	0	0
Diatoma mesodon	0	0.00363	0	0
Diatoma moniliformis	0.00197	0	0.00576	0.00188
Diatoma vulgaris	0	0	0	0.00188
Diatomella balfouriana	0	0	0	0
Dimeregramma minor	0	0	0	0
Diploneis boldtiana	0.04536	0.01452	0.00576	0.0094
Diploneis cf. bombus	0	0.00181	0	0
Diploneis cf. didyma	0	0	0	0
Diploneis elliptica	0.09073	0.01633	0.02303	0.0188

Relative Abundance	S1-160	S1-170	S1-180	S1-190
Diploneis pseudovalis	0.0217	0.00181	0.01536	0.00188
Diploneis smithii	0.01972	0.00181	0.00768	0.00752
Diploneis interrupta	0	0	0	0
Encyonema nicafei	0	0	0.00192	0.00188
Encyonema sp. 1	0	0	0	0
Encyonema sp. 2	0	0	0	0
Encyonema sp. 3	0	0	0	0
Encyonema triangulum	0	0	0	0
Encyonopsis microcephala	0	0	0	0
Epithemia adnata	0	0	0	0
Epithemia frickei	0	0.00181	0	0
Epithemia turgida	0	0.00726	0.00576	0.0094
Eunotia sp. 1	0	0	0	0.00752
Eunotia sp. 2	0	0.00181	0	0
Fallacia pygmia	0	0	0	0
Fragilaria brevistriata	0	0	0	0
Fragilaria capucina	0	0.00181	0	0.00188
Fragilaria cf. microstriata	0	0	0	0
Fragilaria elliptica	0	0	0.0096	0.00188
Fragilaria schulzii	0	0	0.0096	0
Fragilaria vaucheriae	0	0	0	0
Frickea lewisiana	0	0	0.00384	0.00188
Frustulia amphipleuroides	0	0.00181	0	0
Frustulia rhomboides var. viridula	0	0	0	0
Frustulia sp. 1	0	0	0	0
Frustulia vulgaris	0.00197	0.00544	0.00384	0
Geissleria decussis	0	0.00181	0	0.00188
Geissleria kreigeri	0	0	0	0
Gomphoneis sp. 1	0	0	0	0
Gomphonema acuminatum	0	0	0	0
Gomphonema innocens	0	0	0	0.00188
Gomphonema mammilla	0	0	0	0
Gomphonema olivaceum	0	0	0.00192	0
Gomphonema sp. 1	0	0	0	0
Gomphonema sp. 2	0	0	0	0
Gomphonema sp. 3	0	0	0	0
Gomphonopsis exiguum	0	0	0	0
Grammatophora cf. macilenta	0	0	0	0.00188
Gyrosigma temperii	0	0	0	0
Gyrosigma cf. balticum	0	0	0.00192	0.00376

Relative Abundance	S1-160	S1-170	S1-180	S1-190
Gyrosigma sp.1	0	0	0	0
Gyrosigma spencerii	0	0.00726	0	0
Hantzschia sp. 1 girdle view	0	0	0	0
Hantzschia sp. 2 girdle view	0	0	0.00768	0
Hantzschia sp. 3	0	0	0	0
Hantzschia virgata	0.00592	0	0.0096	0
Hippodonta costulata	0.00592	0	0.00192	0.00188
Hippodonta coxiae	0	0.00726	0	0.01316
Hippodonta sp. 1	0	0	0	0
Hippodonta sp. 2	0.00197	0	0	0
Karayevia amoena	0	0	0	0
Leptocylindrus ? Cf. danicus	0	0.00544	0	0.00752
Luticola sp. 1	0	0	0	0
Luticola sp. 2	0	0	0	0
Luticola sp. 3	0	0	0	0
Mastogloia smithii	0	0	0	0
Mastogloia sp. 1	0	0	0	0
Mastogloia sp. 2	0	0	0	0
Melosira sp. 1	0	0	0.00384	0
Melosira varians	0	0	0	0
Meridion sp. 1	0	0	0	0
Navicula abunda	0.01183	0.01089	0.02687	0.00376
Navicula angusta	0	0	0	0
Navicula antonii	0	0	0	0.00188
Navicula brachium	0	0.00181	0	0
Navicula cari	0	0.01815	0	0.00752
Navicula cf. capitoradiata	0	0.00363	0	0
Navicula cf. galloae	0	0	0	0
Navicula cf. heuflerii	0	0	0	0
Navicula cf. oblonga	0	0	0	0.00188
Navicula cf. patrickii	0	0	0	0.00188
Navicula cf. reichardtiana	0	0	0	0
Navicula cf. salinarum	0.00592	0	0.00384	0
Navicula cf. schweigeri	0	0	0.00384	0
Navicula cf. subinflata	0	0	0	0
Navicula cf. tripunctata	0.00394	0	0.00192	0
Navicula cf. zostereti	0	0	0.00576	0
Navicula gregaria	0.00197	0	0	0
Navicula halophila	0	0	0	0
Navicula lanceolata	0	0	0.0096	0.00188

Relative Abundance	S1-160	S1-170	S1-180	S1-190
Navicula marginulata	0	0	0	0
Navicula oculiformis	0	0	0	0
Navicula peregrina	0.00986	0.00544	0.01344	0.0188
Navicula perminuta	0	0	0	0
Navicula phyllepta	0	0	0	0
Navicula slesvicensis	0	0	0	0
Navicula sp. 1	0	0	0	0
Navicula sp. 2	0	0	0	0
Navicula sp. 3	0.00592	0	0	0
Navicula sp. 5	0.00197	0.00726	0	0
Navicula sp. 6	0	0	0	0
Navicula subinflata	0	0	0	0
Navicula subminiscula	0	0	0.00384	0
Naviculoid diatom 1	0	0	0	0
Naviculoid diatom 2	0	0	0	0
Neidiopsis sp. 1	0	0	0	0
Nitzschia amphibia	0	0.00181	0	0
Nitzschia brevissima	0.00394	0.01996	0.00384	0.01316
Nitzschia cf. agnita	0	0	0	0
Nitzschia cf. borealis	0	0.01452	0	0.00564
Nitzschia cf. groefii	0	0.00363	0	0
Nitzschia cf. laevis	0	0	0	0
Nitzschia cf. macilenta	0.00394	0.00544	0.00192	0.01316
Nitzschia clausii	0.00197	0.01452	0.00192	0.01316
Nitzschia columbiana	0.00197	0.01996	0.01727	0.0094
Nitzschia communis	0.00394	0.00181	0.00192	0
Nitzschia commutata	0	0.00363	0	0.00376
Nitzschia constricta	0	0	0	0
Nitzschia cylindrus	0	0	0.00384	0
Nitzschia debilis	0	0	0	0
Nitzschia desertorum	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia filiformis	0.00197	0.00363	0	0.00188
Nitzschia frustulum	0	0.00363	0	0.00376
Nitzschia gracilis	0	0	0	0.00564
Nitzschia incognita	0	0.00544	0.01536	0
Nitzschia inconspicua	0	0	0	0
Nitzschia levidensis	0.01775	0.00363	0	0.00752
Nitzschia linearis	0	0	0	0
Nitzschia microcephala	0	0	0	0.00376

Relative Abundance	S1-160	S1-170	S1-180	S1-190
Nitzschia nana	0.00394	0	0	0.00188
Nitzschia obtusa	0.05128	0	0.05374	0
Nitzschia palea	0.00197	0	0.00576	0
Nitzschia panduriformis	0	0	0	0.00752
Nitzschia pellucida	0	0	0	0
Nitzschia perminuta	0	0	0	0
Nitzschia proxima	0	0	0	0
Nitzschia punctata	0	0.00544	0	0
Nitzschia pusilla	0	0	0	0.01692
Nitzschia scalaris	0.00986	0.01633	0	0.0094
Nitzschia sigma	0	0	0	0.00188
Nitzschia sigmaformis	0.00394	0	0	0
Nitzschia sp. 1	0.06114	0.03811	0.03071	0.02068
Nitzschia sp. 2	0	0	0	0
Nitzschia sp. 3	0	0	0	0
Nitzschia sp. 4	0	0.07078	0	0.03947
Nitzschia sp. 5	0	0	0	0
Nitzschia umbonata	0	0	0.00192	0
Opephora martyi	0	0.00181	0	0.00564
Opephora sp. A	0	0	0	0
Orthoseira sp. 1	0.00986	0	0.02111	0
Paralia sulcata	0.09862	0.15426	0.17083	0.14662
Parlibellus cf. plicatus	0	0	0	0
Pinnularia borealis	0	0	0	0
Pinnularia divergens	0.01775	0.00726	0	0.01128
Pinnularia divergentissima	0	0	0	0
Pinnularia interrupta	0	0	0	0
Pinnularia marchica	0.00394	0.00726	0.00576	0
Pinnularia microstauron	0.00789	0.0127	0.00384	0.00376
Pinnularia sp. 3	0	0	0	0
Pinnularia sp. 4	0.00394	0.00181	0	0
Pinnularia sp. 5	0.00394	0	0	0
Pinnularia sp. 6	0	0.00363	0	0
Pinnularia sp. 7	0	0	0	0
Pinnularia sp. 8	0	0	0	0
Pinnularia sp.1	0	0	0	0
Pinnularia sp.2	0	0	0	0
Pinnularia viridis	0.02959	0.00363	0.00768	0
Placoneis cf. gastrum	0.00394	0.00181	0	0.00188
Placoneis sp. 1	0	0	0.00384	0

Relative Abundance	S1-160	S1-170	S1-180	S1-190
Placoneis sp. 2	0	0	0	0
Plagiogramma cf. minima	0	0	0	0
Planothidium frequentissimum	0	0.00907	0	0
Planothidium lanceolatum	0.00394	0	0.00192	0
Planothidium paragali	0	0.00363	0	0
Planothidium sp. 1	0	0	0	0
Planothidium sp. 2	0	0	0	0
Pleurosigma diverse-striatum	0	0	0	0
Psammothidium? Sp. 1	0	0	0	0
Pseudostauroneis parasitica	0	0.00726	0	0
Pseudostaurosira americana	0	0	0.00384	0
Pseudostaurosiropsis sp. 1	0	0	0	0
Pseudostaurosiropsis sp. 1 (GV)	0	0	0	0
Punctastriata mimetica	0	0.00363	0	0
Rhaphoneis amphiceros	0.02367	0.07078	0.04415	0.09211
Rhaphoneis tenuis	0	0.00363	0	0.00564
Rhoicosphenia cf. marina	0	0	0	0
Rhoicosphenia sp. 1	0	0	0	0
Rhopalodia acuminatum	0.07298	0.00181	0.00576	0
Rhopolodia gibba	0	0	0.00192	0
Rhopolodia musculus	0.00986	0.03993	0.04415	0.04511
Sellaphora cf. hohnii	0	0	0	0
Sellaphora laevissima	0	0	0	0
Sellaphora pupula	0	0	0	0
Sellaphora rexii	0	0	0	0
Sellaphora bacillum	0	0	0	0
Skeletonema sp. 1	0	0	0	0
Stauroneis agrestis	0	0	0	0
Stauroneis CA	0.00592	0	0	0.00188
Stauroneis cf. vandevijveri	0	0	0	0
Stauroneis circumborealis	0	0	0	0
Stauroneis GV	0	0	0	0
Stauroneis kriegeri	0	0	0	0
Stauroneis sp. 1	0	0	0	0.00188
Staurophora cf. soodensis	0	0	0	0
Staurosira construens	0	0	0	0
Staurosirella leptosauron var. dubia	0	0.00544	0	0
Staurosirella sp. 1	0	0	0	0
Stephanodiscus sp. 1	0	0	0	0
Surirella angusta	0	0	0	0

Relative Abundance	S1-160	S1-170	S1-180	S1-190
Surirella brebissonii	0.00197	0	0.00192	0
Surirella cf. iowensis	0	0	0	0
Surirella ovalis	0	0	0	0
Surirella peisonis	0	0.00181	0	0.00752
Surirella sp. 1	0	0	0	0
Surirella splendida	0	0	0	0.00376
Synedra cf. fulgens	0	0	0	0
Synedra famelica	0	0	0	0
Synedra ulna var. biceps	0	0	0	0
Synedra ulna var. ramesi	0	0	0	0
Tabularia fasciculata	0	0	0	0
Tabularia ktenoeoides	0	0	0	0
Thalassionema nitzschioides	0.00592	0.02178	0.02303	0.02256
Thalassiosira baltica	0	0	0	0
Thalassiosira cf. lineata	0.01381	0.01089	0.01727	0.03195
Thalassiosira cf. tenera	0	0.00726	0	0
Thalassiosira decipiens	0.01381	0.00544	0.02303	0.0094
Thalassiosira eccentrica	0.00394	0.00726	0.01152	0.0094
Thalassiosira ferelineata	0.00592	0.00363	0	0
Thalassiosira oestrupii	0.01578	0	0.03647	0
Thalassiosira proschkinae	0	0	0	0.00188
Thalassiosira sp. 10 Cooper	0	0	0	0.00188
Thalassiosira sp. 2-1 Cooper	0	0.00181	0.00576	0.00188
Triceratium sp. 2	0	0	0	0
Tybionella debilis	0.01183	0.00726	0.00768	0.01128
Ulnaria acus	0	0	0	0
Ulnaria ulna	0.00394	0	0.00384	0.00564
Undulate colony?	0	0	0	0
Unknown araphid	0	0.00181	0	0
Unknown GV?	0	0	0	0

Relative Abundance	S1-200	S1-210	S1-220	S1-230
Achnanthes denticula	0	0	0	0
Achnanthes islandica	0	0	0	0
Actinocyclus normanii	0	0.00198	0.00389	0.006
Actinocyclus octonarius var. crassus ?	0.01193	0.00595	0.00973	0.008
Actinoptychus senarius	0.00596	0.00992	0.00778	0.002
Amphora granulata	0.00398	0	0	0.004
Amphora sp. 1 (girdle view)	0	0	0	0
Amphora sp. 2	0	0	0	0
Anaulus cf. balticus	0	0.00397	0	0
Aneumastus pseudotusculus	0	0	0	0
Anomoeoneis sp. 1	0	0	0	0
Anorthoneis tenuis	0.00199	0	0	0
Asterionella formosa	0	0	0	0
Asterionella sp. 1	0	0	0	0
Aulacoseira ambigua	0.01193	0	0.00778	0
Aulacoseira granulata	0	0.00397	0	0
Aulacoseira pusilla	0	0	0	0
Aulacoseira sp. 1	0	0	0	0
Aulacoseira sp. 2	0	0	0	0
Aulacoseira tenella	0	0	0	0
Bacillaria socialis	0.01193	0.0119	0.00778	0.006
Biremis circumtexta	0	0	0	0
Biremis? sp. 1	0.00795	0	0.00584	0.008
Caloneis aemula	0	0	0	0.002
Caloneis bacillum	0.01392	0.00992	0.00584	0.008
Caloneis cf. lineatus	0	0	0	0
Caloneis cf. ventricosa	0	0	0	0
Caloneis lewisii	0.00994	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0	0
Caloneis sp. 2	0	0	0	0
Caloneis sp. 3	0	0.00397	0	0
Caloneis sp. 4	0	0.00198	0	0
Campylodiscus sp. 1	0	0	0.00195	0
Cavinula sp. 1	0	0	0	0
Cocconeis cf. peltoides	0	0	0	0
Cocconeis costata var. costata	0	0	0	0
Cocconeis diminuta	0	0	0	0
Cocconeis disculoides	0	0	0	0
Cocconeis elongatum	0	0	0	0
Cocconeis placentula	0.00398	0.00794	0	0

Relative Abundance	S1-200	S1-210	S1-220	S1-230
Cocconeis scutellum	0.00199	0	0	0
Coscinodiscus cf. lineatus	0	0.01786	0	0.002
Coscinodiscus marginatus	0.00994	0.00397	0.01556	0.002
Cosmoneis pusilla	0.00398	0	0.00584	0.004
Cosmoneis sp. 1	0	0	0	0
Craticula cuspidata	0	0	0	0
Cyclostephanos sp. 1	0	0	0	0
Cyclostephanos sp. 2	0	0	0	0
Cyclotella atomus?	0.00994	0.00397	0.00195	0.006
Cyclotella caspia	0	0	0.00195	0.002
Cyclotella cyclopuncta	0.04175	0.06944	0.08366	0.074
Cyclotella distinguenda	0.00596	0	0	0.004
Cyclotella meneghiniana	0.00398	0	0	0.002
Cyclotella rossii	0	0	0	0.008
Cyclotella sp. 2	0	0	0.00195	0
Cyclotella striata	0.01193	0.01984	0.02529	0.006
Cyclotella stylorum	0.00199	0.00794	0.01946	0.002
Cymatopleura solea	0	0	0	0
Cymatosira belgica	0	0.00198	0	0
Cymbella affinis	0	0	0	0.002
Cymbella excisiformis?	0	0	0	0
Cymbella janischii	0	0.00198	0	0
Cymbella mexicana	0.00199	0	0.00195	0.002
Cymbella minuta	0	0	0	0
Cymbella sinuata	0	0	0	0
Cymbella sp. 2	0	0	0	0
Decussata placenta	0.00398	0.00198	0.01167	0.006
Delphineis minutissima	0	0	0	0
Delphineis surirella	0	0	0	0
Denticula kuetzengii	0.00398	0.00794	0	0
Diadesmis gallica	0	0	0	0
Diatoma mesodon	0	0	0	0
Diatoma moniliformis	0	0.00794	0	0.002
Diatoma vulgaris	0	0	0	0
Diatomella balfouriana	0.00199	0	0	0
Dimeregramma minor	0	0	0	0
Diploneis boldtiana	0.03976	0.00198	0.01556	0.062
Diploneis cf. bombus	0.00199	0	0	0
Diploneis cf. didyma	0	0	0	0.002
Diploneis elliptica	0.03181	0.00595	0.02335	0.042

Relative Abundance	S1-200	S1-210	S1-220	S1-230
Diploneis pseudovalis	0.02982	0	0.00195	0.008
Diploneis smithii	0.00795	0	0.00195	0.01
Diploneis interrupta	0	0	0	0
Encyonema nicafei	0.00199	0	0	0.01
Encyonema sp. 1	0	0	0	0
Encyonema sp. 2	0	0	0	0
Encyonema sp. 3	0	0	0	0
Encyonema triangulum	0	0	0	0
Encyonopsis microcephala	0	0	0	0
Epithemia adnata	0	0	0	0.002
Epithemia frickei	0	0.00794	0	0.002
Epithemia turgida	0.00398	0.01587	0.00195	0.004
Eunotia sp. 1	0	0.00794	0.01167	0.018
Eunotia sp. 2	0	0.00198	0.00389	0.008
Fallacia pygmia	0	0.00198	0	0
Fragilaria brevistriata	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria cf. microstriata	0	0	0	0
Fragilaria elliptica	0	0.00992	0.00195	0
Fragilaria schulzii	0	0.00397	0	0
Fragilaria vaucheriae	0	0.00198	0.00195	0.004
Frickea lewisiana	0	0	0	0
Frustulia amphipleuroides	0.00398	0	0	0
Frustulia rhomboides var. viridula	0	0	0	0
Frustulia sp. 1	0	0	0	0
Frustulia vulgaris	0	0	0	0
Geissleria decussis	0	0.00198	0	0
Geissleria kreigeri	0.00596	0	0	0
Gomphoneis sp. 1	0	0	0	0
Gomphonema acuminatum	0	0	0	0
Gomphonema innocens	0	0	0	0
Gomphonema mammilla	0	0	0	0
Gomphonema olivaceum	0	0	0	0
Gomphonema sp. 1	0	0	0	0
Gomphonema sp. 2	0	0	0	0
Gomphonema sp. 3	0	0	0	0
Gomphonopsis exiguum	0	0	0	0
Grammatophora cf. macilenta	0	0	0	0
Gyrosigma temperii	0	0	0	0
Gyrosigma cf. balticum	0.00199	0	0	0.006

Relative Abundance	S1-200	S1-210	S1-220	S1-230
Gyrosigma sp.1	0	0	0	0
Gyrosigma spencerii	0	0	0	0
Hantzschia sp. 1 girdle view	0	0.00794	0.01167	0
Hantzschia sp. 2 girdle view	0	0	0	0
Hantzschia sp. 3	0	0	0	0
Hantzschia virgata	0.00795	0.00198	0.00195	0.012
Hippodonta costulata	0.00199	0.00794	0	0.01
Hippodonta coxiae	0.00596	0.01389	0	0
Hippodonta sp. 1	0.00199	0	0	0
Hippodonta sp. 2	0	0	0	0
Karayevia amoena	0	0	0	0
Leptocylindrus ? Cf. danicus	0.00994	0.0119	0.01362	0.012
Luticola sp. 1	0	0	0	0
Luticola sp. 2	0	0	0	0.004
Luticola sp. 3	0	0	0	0
Mastogloia smithii	0	0	0	0
Mastogloia sp. 1	0	0	0	0
Mastogloia sp. 2	0	0	0	0.004
Melosira sp. 1	0	0	0	0
Melosira varians	0	0	0	0
Meridion sp. 1	0	0	0	0
Navicula abunda	0.02982	0.02381	0.00973	0.016
Navicula angusta	0	0.00595	0	0
Navicula antonii	0	0	0	0
Navicula brachium	0	0.00198	0.00389	0
Navicula cari	0.00795	0.00595	0	0
Navicula cf. capitoradiata	0	0.01587	0	0
Navicula cf. galloae	0.00398	0	0	0.006
Navicula cf. heuflerii	0	0	0	0
Navicula cf. oblonga	0	0.00397	0.00195	0.002
Navicula cf. patrickii	0	0	0.00195	0
Navicula cf. reichardtiana	0	0	0	0
Navicula cf. salinarum	0	0.00397	0	0
Navicula cf. schweigeri	0	0	0	0
Navicula cf. subinflata	0	0	0	0
Navicula cf. tripunctata	0	0	0.00389	0
Navicula cf. zostereti	0.00199	0	0	0
Navicula gregaria	0	0	0	0
Navicula halophila	0	0	0	0
Navicula lanceolata	0	0.00595	0	0

Relative Abundance	S1-200	S1-210	S1-220	S1-230
Navicula marginulata	0	0	0	0
Navicula oculiformis	0	0	0	0
Navicula peregrina	0.01392	0.00992	0.00195	0.012
Navicula perminuta	0	0	0	0
Navicula phyllepta	0	0	0	0
Navicula slesvicensis	0	0	0	0
Navicula sp. 1	0	0	0	0
Navicula sp. 2	0.00398	0	0	0
Navicula sp. 3	0	0.00198	0	0
Navicula sp. 5	0	0	0	0.002
Navicula sp. 6	0	0	0	0
Navicula subinflata	0.00994	0	0	0
Navicula subminiscula	0	0	0	0
Naviculoid diatom 1	0	0	0	0
Naviculoid diatom 2	0	0	0	0
Neidiopsis sp. 1	0	0	0	0
Nitzschia amphibia	0	0.00794	0	0
Nitzschia brevissima	0.01392	0.03968	0.00195	0.002
Nitzschia cf. agnita	0.00398	0.01786	0.01556	0
Nitzschia cf. borealis	0	0.01984	0	0
Nitzschia cf. groefii	0	0	0	0
Nitzschia cf. laevis	0	0	0	0
Nitzschia cf. macilenta	0	0.00198	0.00389	0
Nitzschia clausii	0.00795	0.0119	0	0.004
Nitzschia columbiana	0.00994	0.00794	0	0.014
Nitzschia communis	0.00199	0	0.01167	0.008
Nitzschia commutata	0	0	0	0
Nitzschia constricta	0	0	0	0
Nitzschia cylindrus	0.00199	0	0	0
Nitzschia debilis	0	0	0.00195	0
Nitzschia desertorum	0	0	0	0
Nitzschia dissipata	0	0	0.00389	0
Nitzschia filiformis	0.00596	0.00198	0	0.006
Nitzschia frustulum	0	0.00198	0	0
Nitzschia gracilis	0	0	0	0
Nitzschia incognita	0.00994	0	0	0.002
Nitzschia inconspicua	0	0	0	0
Nitzschia levidensis	0	0	0.00778	0
Nitzschia linearis	0.00795	0	0.00195	0.006
Nitzschia microcephala	0.00199	0	0.00195	0

Relative Abundance	S1-200	S1-210	S1-220	S1-230
Nitzschia nana	0.00398	0	0	0
Nitzschia obtusa	0.00795	0	0.00389	0
Nitzschia palea	0.00199	0.00992	0	0
Nitzschia panduriformis	0.00398	0	0.00195	0.008
Nitzschia pellucida	0	0	0	0
Nitzschia perminuta	0	0	0.00195	0
Nitzschia proxima	0	0	0	0.004
Nitzschia punctata	0	0.01389	0	0.012
Nitzschia pusilla	0	0	0	0
Nitzschia scalaris	0.00398	0.02183	0.02529	0.024
Nitzschia sigma	0.00596	0	0.00389	0.002
Nitzschia sigmaformis	0.00199	0	0	0
Nitzschia sp. 1	0.0497	0.02183	0.05058	0.044
Nitzschia sp. 2	0	0	0	0
Nitzschia sp. 3	0.00398	0	0	0
Nitzschia sp. 4	0.02783	0.04762	0.01946	0.1
Nitzschia sp. 5	0	0	0	0.004
Nitzschia umbonata	0	0.00198	0	0
Opephora martyi	0.00199	0	0	0
Opephora sp. A	0	0	0	0
Orthoseira sp. 1	0.00398	0	0	0
Paralia sulcata	0.13519	0.125	0.1751	0.102
Parlibellus cf. plicatus	0	0	0	0
Pinnularia borealis	0	0	0	0
Pinnularia divergens	0.01392	0.00198	0	0.004
Pinnularia divergentissima	0	0.00397	0	0.004
Pinnularia interrupta	0	0.00198	0	0
Pinnularia marchica	0.00199	0.00198	0.00973	0.014
Pinnularia microstauron	0.00994	0.02183	0.02335	0.028
Pinnularia sp. 3	0	0	0	0
Pinnularia sp. 4	0	0	0	0
Pinnularia sp. 5	0.00795	0	0.00389	0.008
Pinnularia sp. 6	0	0	0	0
Pinnularia sp. 7	0	0	0	0
Pinnularia sp. 8	0	0	0	0
Pinnularia sp.1	0	0.00198	0	0
Pinnularia sp.2	0	0	0	0
Pinnularia viridis	0.00398	0.00595	0.00778	0.006
Placoneis cf. gastrum	0.01392	0.00992	0.0214	0.032
Placoneis sp. 1	0	0	0	0

Relative Abundance	S1-200	S1-210	S1-220	S1-230
Placoneis sp. 2	0	0	0	0.006
Plagiogramma cf. minima	0	0	0	0
Planothidium frequentissimum	0	0	0	0.01
Planothidium lanceolatum	0	0.00794	0	0.002
Planothidium paragali	0	0	0	0
Planothidium sp. 1	0	0	0	0
Planothidium sp. 2	0	0	0	0
Pleurosigma diverse-striatum	0	0	0	0
Psammothidium? Sp. 1	0	0	0	0
Pseudostauroneis parasitica	0.00199	0.00198	0	0
Pseudostaurosira americana	0	0	0	0
Pseudostaurosiropsis sp. 1	0	0	0	0
Pseudostaurosiropsis sp. 1 (GV)	0	0	0	0
Punctastriata mimetica	0	0	0	0
Rhaphoneis amphiceros	0.0497	0.08532	0.08755	0.026
Rhaphoneis tenuis	0.00398	0	0.00584	0.006
Rhoicosphenia cf. marina	0	0	0	0
Rhoicosphenia sp. 1	0	0	0	0
Rhopalodia acuminatum	0.0159	0.00794	0.00584	0.01
Rhopolodia gibba	0.00398	0	0	0.002
Rhopolodia musculus	0.04374	0.02381	0.08366	0.05
Sellaphora cf. hohnii	0	0	0	0
Sellaphora laevissima	0	0	0	0
Sellaphora pupula	0.00795	0	0	0
Sellaphora rexii	0.00398	0.00198	0	0
Sellaphora bacillum	0	0	0	0
Skeletonema sp. 1	0	0	0	0
Stauroneis agrestis	0	0	0.00195	0
Stauroneis CA	0.00199	0.00198	0	0.002
Stauroneis cf. vandevijveri	0	0	0	0.002
Stauroneis circumborealis	0	0	0	0
Stauroneis GV	0	0	0	0
Stauroneis kriegeri	0.00199	0	0	0
Stauroneis sp. 1	0	0	0	0
Staurophora cf. soodensis	0	0	0	0.004
Staurosira construens	0	0	0	0
Staurosirella leptosauron var. dubia	0	0.00397	0.00389	0
Staurosirella sp. 1	0	0	0	0
Stephanodiscus sp. 1	0	0	0	0
Surirella angusta	0	0	0	0

Relative Abundance	S1-200	S1-210	S1-220	S1-230
Surirella brebissonii	0	0	0	0
Surirella cf. iowensis	0.00199	0	0	0
Surirella ovalis	0	0	0	0
Surirella peisonis	0	0	0	0
Surirella sp. 1	0	0	0	0
Surirella splendida	0.00199	0	0	0
Synedra cf. fulgens	0	0	0	0
Synedra famelica	0	0	0	0
Synedra ulna var. biceps	0	0	0	0
Synedra ulna var. ramesi	0	0	0	0
Tabularia fasciculata	0	0	0	0
Tabularia ktenoeoides	0	0	0	0
Thalassionema nitzschioides	0.00795	0.01389	0.00584	0
Thalassiosira baltica	0	0	0	0
Thalassiosira cf. lineata	0.02982	0.00992	0.02724	0.002
Thalassiosira cf. tenera	0	0	0.00195	0
Thalassiosira decipiens	0.01392	0.00595	0.00584	0.002
Thalassiosira eccentrica	0.00199	0.00794	0.00778	0.002
Thalassiosira ferelineata	0.00398	0	0.00389	0
Thalassiosira oestrupii	0.00795	0.00198	0.00389	0
Thalassiosira proschkinae	0	0.00595	0.00389	0.002
Thalassiosira sp. 10 Cooper	0	0	0	0
Thalassiosira sp. 2-1 Cooper	0	0.00595	0.01167	0.006
Triceratium sp. 2	0	0	0	0
Tybionella debilis	0	0.0119	0	0
Ulnaria acus	0	0	0	0
Ulnaria ulna	0.00994	0.00794	0.00584	0.002
Undulate colony?	0	0	0	0
Unknown araphid	0	0	0	0
Unknown GV?	0	0	0	0

Raw Counts	S2-0	S2-10	S2-20
Total Counted:	515	506	502
Species	80	97	82
Taxon	Count	Count	Count
Achnanthes amoena			2
Achnanthes coarctica			
Achnanthes denticula			
Achnanthes islandica	2		6
Achnanthidium altergracillima			2
Actinocyclus normanii	21	31	7
Actinocyclus octonarius var. crassus ?	4	2	3
Actinoptycus senarius		4	2
Amphora copulata			
Amphora granulata			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus	4	2	
Aneumastus pseudotusculus			
Aneumastus sp. 1			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Assymmetrical CA		1	
Asterionella formosa			
Asterionella sp. 1			
Aulacosira ambigua	10	11	19
Aulacosira granulata			4
Aulacosira granulata var. angustissima			
Aulacosira pusilla			
Aulacosira sp. 1			
Aulacosira sp. 2			
Aulacosira tenella			
Bacillaria socialis	5	6	13
Biremis circumtextua			
Biremis? sp. 1			
Caloneis aemula			
Caloneis bacillum	4	5	8
Caloneis cf. ventricon			
Caloneis lewisii			
Caloneis cf. lineatus			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			

Raw Counts	S2-0	S2-10	S2-20
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Cavinula scuttleum			
Cavinula sp. 1			
Cocconeis costata var. costata			
Cocconeis diminuta			
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis peltoides?			
Cocconeis placentula	4	1	2
Cocconeis scutellum			
Coscinodiscus cf. lineatus	4	5	3
Coscinodiscus marginatus	1	1	3
Cosmoneis pusilla			
Cosmoneis sp. 1			
Craticula cuspidata			
Cymbapleura A			
Cyclostephanos sp. 1	2		
Cyclostephanos sp. 2			
Cyclotella atomus?	96	60	28
Cyclotella caspia	5	2	
Cyclotella cyclopuncta			
Cyclotella distinguenda			
Cyclotella meneghiniana	23	40	29
Cyclotella rossii			
Cyclotella sp. 2			
Cyclotella striata	35	29	62
Cyclotella stylorum			
Cymatocira belgica	3	4	5
Cymatopleura solea			2
Cymbella afinis		5	
Cymbella exciisifinis?	1	3	
Cymbella janischii			
Cymbella mexicana			
Cymbella microcephala			
Cymbella minuta			
Cymbella sp. 2			
Cymbella synuata	4	2	
Descustata placenta			

Raw Counts	S2-0	S2-10	S2-20
Delphineis minutissima	1	3	
Delphineis surirella			
Denticula kuetzengii	10	6	2
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis			
Diatoma vulgaris	2		
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana			
Diploneis cf. bombous			
Diploneis cf. didyma			
Diploneis elliptica			
Diploneis interupta			
Diploneis pseudovalis			
Diploneis smithii			
Diploneis sp. 1			
Diploneis sp. 2			
Encyonema nicafei	1	3	4
Encyonema sp. 1	1		
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema triangulum			
Epithemia andata			
Epithemia frickei			
Epithemia smithii			
Epithemis sorex			1
Epithemia turgida	1	1	1
Eunotia richbuttensis			
Eunotia sp. 1			
Eunotia sp. 2			
Eunotia sp. 3 (GV)		2	6
Fallacia pygmia	3	5	2
Fragilaria brevistriata			
Fragilaria capucina			
Fragilaria elliptica	1	1	
Fragilaria cf. microstriata			
Fragilaria schulzii			
Fragillaria tenera			
Fragilaria vaucheria	17	7	4

Raw Counts	S2-0	S2-10	S2-20
Frickea lewisiana			
Frustulia sp. 1			
Frustulia rhomboides var. viridula			
Frustulia vulgaris	2		
Geissleria decussis	2		2
Gompheneis sp. 1		1	3
Gompheneis sp. 3		2	
Gomphoneis hurculeana			
Gomphonema acuminatum			
Gomphonema innocens		2	
Gomphonema kobayasii			3
Gomphonema mammilla			
Gomphonema olivaceum			5
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Grammatophora cf. macilenta			
Gyrosigma balticum?			
Gyrosigma sp.1	1		
Gyrosigma spencerii	2	2	
Gyrosigma temperii			
Hanzschia sp. 1 girdle view			
Hanzschia sp. 2 girdle view			
Hanzschia sp. 3			
Hanzschia sp. 4			
Hanzschia virgata			3
Hippodonta costulata	1	1	
Hippodonta coxiae	3	1	2
Hippodonta hungarica			
Hippodonta sp. 1			
Hippodonta sp. 2			
Leptocylindrus ? Cf. danicus			
Luticula sp. 1	1	1	
Luticula sp. 2			
Luticula sp. 3			
Luticula sp. 4			
Mastagloia smithii			
Mastagloia sp. 1			
Mastagloia sp. 2			

Raw Counts	S2-0	S2-10	S2-20
Melosira sp. 1			
Melosira varians			
Meridion sp. 1			
Navicula abunda	7	7	3
Navicula amphipleuroides			
Navicula angusta			
Navicula antonii	1	7	
Navicula brachium			
Navicula cari	15	7	6
Navicula clematis		1	
Navicula denta			
Navicula cf. kreigeri	5	2	9
Navicula cf. patrickii	2	1	1
Navicula cf. galloae			
Navicula gregaria	3	5	
Navicula haloplila	5	6	6
Navicula cf. heuflerii	7	4	
Navicula lanceolata	13	3	9
Navicula cf. ludloviana (CA)			
Navicula marginulata			
Navicula oblonga?		3	
Navicula oculiformis			
Navicula peregrina	5	1	5
Navicula perminuta	10	9	10
Navicula phyllepta			
Navicula reichardtiana?			
Navicula cf. reinardtii			
Navicula salinarum?		2	3
Navicula schweigeri?	2	5	3
Navicula slevicenis			
Navicula sp. 1	1		
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 4 (capitoradiata?)	2	1	3
Navicula sp. 5		1	
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8			
Navicula sp. 9			
Navicula sp. 10		1	

Raw Counts	S2-0	S2-10	S2-20
Navicula subinflata			
Navicula subminiscula	5	2	7
Navicula tripunctata?	10	6	7
Navicula vilaplanii		1	6
Navicula zostereti ?	11	13	
Naviculoid diatom 1?			
Naviculoid diatom 2			
Neodephaneis pelagica			
Niedopsis sp. 1			
Nitzschia cf. agnita	4	12	6
Nitzschia amphibia	8	2	2
Nitzschia cf. biremis			
Nitzschia bita			
Nitzschia cf. borealis			
Nitzschia brevissima	53	43	21
Nitzschia claussi		3	2
Nitzschia columbiana	1	1	
Nitzschia communata			
Nitzschia communis	1	1	
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis	3		
Nitzschia desertium			
Nitzschia dissipata			
Nitzschia filiformis	1		2
Nitzschia fonticula			
Nitzschia frustulum		2	
Nitzschia gracilis			
Nitzschia cf. groefii	2		2
Nitzschia incognita			
Nitzschia inconspicua	6	2	5
Nitzschia levidensis			
Nitzschia laevis?			
Nitzschia linearis			
Nitzschia macilenta?			
Nitzschia marginulatus			
Nitzschia microcephala			
Nitzschia nana		2	1
Nitzschia obtusa			
Nitzschia palea	1	3	2

Raw Counts	S2-0	S2-10	S2-20
Nitzschia panduriformis			2
Nitzschia pellucida			
Nitzschia perminuta			2
Nitzschia proxima	2		8
Nitzschia punctata		1	
Nitzschia pusilla	2	5	14
Nitzschia scalaris		1	
Nitzschia sigma		5	2
Nitzschia sigmaformis	2		
Nitzschia sp. 1			
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4			
Nitzschia sp. 5			
Nitzschia umbonata			
Opephera martyi			
Opephera sp. A			
Orthosira sp. 1			
Paralia sulcata	8	10	17
Parlibellis plicatus ?			
Pinnularia borealis			
Pinnularia divergens		1	
Pinnularia divertissima			
Pinnularia ignobilis		5	
Pinnularia interupta			
Pinularia marchica	2	4	1
Pinnularia microstauron			
Pinularia sp.1			
Pinularia sp.2			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			
Pinnularia sp. 8			
Pinnularia sp. 9			
Pinnularia sp. 10		1	
Pinnularia viridis	1	2	2
Placoneis gastrum?			
Placoneis paralegali			

Raw Counts	S2-0	S2-10	S2-20
Placoneis sp. 1			
Placoneis sp. 2			
Plagiogramma cf. minima			
Planothidium bipoomum			
Planothidium frequentissimum	4	11	6
Planothidium lanceolata	2	6	2
Planothidium minutissimum			
Planothidium paragali			
Planothidium sp. 1			
Planothidium sp. 2			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Unknown Centric			
Psammothium? Sp. 1			1
Pseudostauroneis parasitica	2	1	
Pseudostauropsis sp. 1 (GV)		6	
Pseudostaurosira americana	2	3	
Pseudostaurosiropsis sp. 1	1	1	5
Punctastriata mimetica			
Raphoneis amphiceros	1	4	2
Raphoneis ? Tenuis		1	
Rexlowia sp. 1		2	
Rhoicosphenia cr. marina	2	2	
Rhoicosphenia sp. 1			
Rhopolodia acuminatum			
Rhopolodia gibba			
Rhopolodia musculus			
Sellophora bacillum			
Sellaphora hohnii?			
Sellophora laevissima			
Sellophora pulchara			4
Sellophora pupulla		2	1
Sellophora rexii			
Sellophora sp. 1 (Navicula subinflata?)	9	6	22
Sellophora sp. 2			
Skelotonemia sp. 1			
Stauroforma exiguaformis			
Stauroneis agrestis			
Stauroneis arcuborealis			
Stauroneis CA			

Raw Counts	S2-0	S2-10	S2-20
Stauroneis GV			
Stauroneis kreigeri			
Stauroneis vandevijeri?			
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Staurophora soodensis?			
Staurosira construens			
Staurosirella leptosauron var. dubia			1
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angustus			
Surirella brebissonii			
Surirella iowensis?			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida	1	2	9
Synedra famelica			
Synedra fulgens?			
Synedra ulna var. biceps			
Synedra ulna var. ramesi		1	2
Tabularia fasciculata			1
Tabularia ktenoeoides			
Thalassionema nitzschiodes	1	2	7
Thalassiosira baltica			
Thalassiosira cf. tenera			
Thalassiosira cf. lineata			5
Thalassiosira decipiens			
Thalassiosira eccentrica		1	1
Thalassiosira ferelineata			4
Thalassiosira oestruppa		2	
Thalassiosira proschkinae		1	1
Thalassiosira sp. 2-1 Cooper			1
Thalassiosira sp. 10 Cooper	1	1	
Trachyneis aspera var. vulgaris			
Tybionella debilis	8	4	12
Tryblionella sp. 1			
ulnaria acus			
Ulnaria ulna	3	1	8

Raw Counts	S2-0	S2-10	S2-20
unknown araphid			
Unknown biraphid			
Unknown CA			
Uknown GV?			
Undulate colony??			

Raw Counts	S2-30	S2-40	S2-50
Total Counted:	501	505	501
Species	98	106	97
Taxon	Count	Count	Count
Achnanthes amoena	3	7	
Achnanthes coarctica			
Achnanthes denticula			
Achnanthes islandica	6	3	
Achnanthidium altergracillima	5		9
Actinocyclus normanii		6	4
Actinocyclus octonarius var. crassus ?	2	5	3
Actinoptycus senarius	1		4
Amphora copulata		6	
Amphora granulata			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus			4
Aneumastus pseudotusculus	6		
Aneumastus sp. 1		2	
Anomoeoneis sp. 1		1	
Anorthoneis tenuis			
Assymmetrical CA			
Asterionella formosa			
Asterionella sp. 1			
Aulacosira ambigua	21	18	15
Aulacosira granulata		11	6
Aulacosira granulata var. angustissima		2	
Aulacosira pusilla			
Aulacosira sp. 1			
Aulacosira sp. 2			
Aulacosira tenella			
Bacillaria socialis	6	2	2
Biremis circumtextua			
Biremis? sp. 1			
Caloneis aemula			
Caloneis bacillum	3	31	2
Caloneis cf. ventricon			2
Caloneis lewisii		12	
Caloneis cf. lineatus			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			

Raw Counts	S2-30	S2-40	S2-50
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Cavinula scuttleum			
Cavinula sp. 1			
Cocconeis costata var. costata			
Cocconeis diminuta			
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis peltoides?			
Cocconeis placentula	4	4	
Cocconeis scutellum			
Coscinodiscus cf. lineatus	5	1	8
Coscinodiscus marginatus	9	7	7
Cosmoneis pusilla			
Cosmoneis sp. 1			
Craticula cuspidata		2	
Cymbapleura A			
Cyclostephanos sp. 1	2	2	3
Cyclostephanos sp. 2			
Cyclotella atomus?	10	7	6
Cyclotella caspia		1	
Cyclotella cyclopuncta		5	1
Cyclotella distinguenda			
Cyclotella meneghiniana	17		6
Cyclotella rossii	1	5	2
Cyclotella sp. 2			
Cyclotella striata	14	15	28
Cyclotella stylorum			5
Cymatocira belgica	2	5	10
Cymatopleura solea			
Cymbella afinis		1	
Cymbella exciisifinis?			
Cymbella janischii			2
Cymbella mexicana			
Cymbella microcephala			
Cymbella minuta			
Cymbella sp. 2			
Cymbella synuata		2	
Descustata placenta			

Raw Counts	S2-30	S2-40	S2-50
Delphineis minutissima		4	2
Delphineis surirella			1
Denticula kuetzengii		1	
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis			
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana		1	
Diploneis cf. bombous			2
Diploneis cf. didyma			
Diploneis elliptica		3	
Diploneis interupta			
Diploneis pseudovalis			
Diploneis smithii		1	
Diploneis sp. 1			
Diploneis sp. 2			
Encyonema nicafei	10	13	34
Encyonema sp. 1			
Encyonema sp. 2			1
Encyonema sp. 3			
Encyonema triangulum			
Epithemia andata			
Epithemia frickei			
Epithemia smithii			
Epithemis sorex			
Epithemia turgida		1	1
Eunotia richbuttensis		3	
Eunotia sp. 1	2	3	2
Eunotia sp. 2	1		
Eunotia sp. 3 (GV)	2		
Fallacia pygmia	22	8	9
Fragilaria brevistriata			
Fragilaria capucina			
Fragilaria elliptica	1	13	1
Fragilaria cf. microstriata			
Fragilaria schulzii			
Fragillaria tenera			
Fragilaria vaucheria	17	5	7

Raw Counts	S2-30	S2-40	S2-50
Frickea lewisiana		8	6
Frustulia sp. 1			
Frustulia rhomboides var. viridula	2	1	
Frustulia vulgaris		6	
Geissleria decussis	4		
Gompheneis sp. 1			2
Gompheneis sp. 3			
Gomphoneis hurculeana			
Gomphonema acuminatum			2
Gomphonema innocens			5
Gomphonema kobayasii		10	
Gomphonema mammilla			
Gomphonema olivaceum	3		3
Gomphonema sp. 1	2		2
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Grammatophora cf. macilenta			
Gyrosigma balticum?			
Gyrosigma sp.1			
Gyrosigma spencerii	6	1	1
Gyrosigma temperii			
Hanzschia sp. 1 girdle view			
Hanzschia sp. 2 girdle view			
Hanzschia sp. 3			
Hanzschia sp. 4			
Hanzschia virgata	1		2
Hippodonta costulata		3	
Hippodonta coxiae	1		
Hippodonta hungarica		6	
Hippodonta sp. 1			
Hippodonta sp. 2			
Leptocylindrus ? Cf. danicus			1
Luticula sp. 1		2	
Luticula sp. 2			
Luticula sp. 3			
Luticula sp. 4			
Mastagloia smithii		4	2
Mastagloia sp. 1			
Mastagloia sp. 2			

Raw Counts	S2-30	S2-40	S2-50
Melosira sp. 1			
Melosira varians			
Meridion sp. 1			
Navicula abunda	1	6	5
Navicula amphipleuroides			
Navicula angusta			
Navicula antonii	2		2
Navicula brachium			
Navicula cari		4	1
Navicula clematis			
Navicula denta	4		
Navicula cf. kreigeri	5		2
Navicula cf. patrickii			
Navicula cf. galloae			
Navicula gregaria		2	
Navicula haloplila	4	2	2
Navicula cf. heuflerii			3
Navicula lanceolata	4	2	1
Navicula cf. ludloviana (CA)			
Navicula marginulata			
Navicula oblonga?	1		1
Navicula oculiformis			
Navicula peregrina	2	2	9
Navicula perminuta	5	3	8
Navicula phyllepta		2	3
Navicula reichardtiana?		2	
Navicula cf. reinardtii			
Navicula salinarum?		2	3
Navicula schweigeri?	7	9	8
Navicula slevicenis			
Navicula sp. 1			
Navicula sp. 2			
Navicula sp. 3	1		
Navicula sp. 4 (capitoradiata?)	18	17	20
Navicula sp. 5	2	1	
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8	4		
Navicula sp. 9	4		
Navicula sp. 10	4		

Raw Counts	S2-30	S2-40	S2-50
Navicula subinflata			
Navicula subminiscula	13		
Navicula tripunctata?	5	11	5
Navicula vilaplanii	3	10	5
Navicula zostereti ?			
Naviculoid diatom 1?			
Naviculoid diatom 2			
Neodephaneis pelagica			
Niedopsis sp. 1			
Nitzschia cf. agnita		2	
Nitzschia amphibia	2		
Nitzschia cf. biremis			
Nitzschia bita			
Nitzschia cf. borealis			
Nitzschia brevissima	11	9	24
Nitzschia claussi		2	
Nitzschia columbiana			1
Nitzschia communata			
Nitzschia communis		2	
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis			
Nitzschia desertium			4
Nitzschia dissipata		1	
Nitzschia filiformis	4		
Nitzschia fonticula		2	
Nitzschia frustulum			
Nitzschia gracilis			
Nitzschia cf. groefii	2		
Nitzschia incognita			
Nitzschia inconspicua	1	1	
Nitzschia levidensis			
Nitzschia laevis?		2	
Nitzschia linearis		1	
Nitzschia macilenta?	1	1	1
Nitzschia marginulatus			
Nitzschia microcephala			
Nitzschia nana	2	1	
Nitzschia obtusa			
Nitzschia palea	8	2	1

Raw Counts	S2-30	S2-40	S2-50
Nitzschia panduriformis	2		
Nitzschia pellucida			
Nitzschia perminuta			4
Nitzschia proxima	2	3	4
Nitzschia punctata			2
Nitzschia pusilla	7	3	1
Nitzschia scalaris			
Nitzschia sigma	15	7	12
Nitzschia sigmaformis			
Nitzschia sp. 1			
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4	1	3	1
Nitzschia sp. 5			
Nitzschia umbonata			
Opephera martyi	2		
Opephera sp. A			
Orthosira sp. 1			
Paralia sulcata	13	23	31
Parlibellis plicatus ?			4
Pinnularia borealis		1	1
Pinnularia divergens	1	3	6
Pinnularia divertissima	2	5	
Pinnularia ignobilis	14		
Pinnularia interupta	9	8	
Pinularia marchica		3	
Pinnularia microstauron			
Pinularia sp.1			
Pinularia sp.2			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			2
Pinnularia sp. 8			
Pinnularia sp. 9		5	2
Pinnularia sp. 10			
Pinnularia viridis	8	7	
Placoneis gastrum?	1	2	1
Placoneis paralegali			

Raw Counts	S2-30	S2-40	S2-50
Placoneis sp. 1			
Placoneis sp. 2			
Plagiogramma cf. minima			
Planothidium bipoomum			
Planothidium frequentissimum	11	5	2
Planothidium lanceolata	4		
Planothidium minutissimum			
Planothidium paragali			
Planothidium sp. 1			
Planothidium sp. 2			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Unknown Centric			1
Psammothium? Sp. 1			
Pseudostauroneis parasitica	1		
Pseudostauropsis sp. 1 (GV)			
Pseudostaurosira americana	3		1
Pseudostaurosiropsis sp. 1	2	2	3
Punctastriata mimetica			
Raphoneis amphiceros	8	8	16
Raphoneis ? Tenuis	1		2
Rexlowia sp. 1			
Rhoicosphenia cr. marina	2		
Rhoicosphenia sp. 1			
Rhopolodia acuminatum	1		
Rhopolodia gibba			
Rhopolodia musculus		1	
Sellophora bacillum			
Sellaphora hohnii?			
Sellophora laevissima			
Sellophora pulchara			
Sellophora pupulla			1
Sellophora rexii	2		
Sellophora sp. 1 (Navicula subinflata?)	11	2	10
Sellophora sp. 2		4	
Skelotonemia sp. 1			
Stauroforma exiguaformis			
Stauroneis agrestis	4		
Stauroneis arcuborealis			
Stauroneis CA			

Raw Counts	S2-30	S2-40	S2-50
Stauroneis GV			
Stauroneis kreigeri		7	8
Stauroneis vandevijeri?			
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3	3		
Staurophora soodensis?			
Staurosira construens	1		
Staurosirella leptosauron var. dubia	1	2	
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angustus			
Surirella brebissonii	1		
Surirella iowensis?			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida	21	5	12
Synedra famelica		1	
Synedra fulgens?			
Synedra ulna var. biceps			
Synedra ulna var. ramesi			
Tabularia fasciculata			1
Tabularia ktenoeoides			
Thalassionema nitzschiodes	7	5	3
Thalassiosira baltica			
Thalassiosira cf. tenera		2	1
Thalassiosira cf. lineata	1	5	4
Thalassiosira decipiens	3		2
Thalassiosira eccentrica	5	4	6
Thalassiosira ferelineata			1
Thalassiosira oestruppa		2	
Thalassiosira proschkinae		1	3
Thalassiosira sp. 2-1 Cooper	1	3	3
Thalassiosira sp. 10 Cooper	3		
Trachyneis aspera var. vulgaris	2		
Tybionella debilis	2		2
Tryblionella sp. 1			
ulnaria acus		2	5
Ulnaria ulna	12	10	19

Raw Counts	S2-30	S2-40	S2-50
unknown araphid			
Unknown biraphid			
Unknown CA			
Uknown GV?			
Undulate colony??			

Raw Counts	S2-60	S2-70	S2-80
Total Counted:	505	501	516
Species	87	82	90
Taxon	Count	Count	Count
Achnanthes amoena			1
Achnanthes coarctica			
Achnanthes denticula			
Achnanthes islandica	2	1	1
Achnanthidium altergracillima		1	
Actinocyclus normanii	15	4	6
Actinocyclus octonarius var. crassus ?	2	16	9
Actinoptycus senarius	4	5	11
Amphora copulata			
Amphora granulata			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus			
Aneumastus pseudotusculus		3	
Aneumastus sp. 1			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Assymmetrical CA			
Asterionella formosa			
Asterionella sp. 1			
Aulacosira ambigua	6	2	13
Aulacosira granulata	8		
Aulacosira granulata var. angustissima			
Aulacosira pusilla			
Aulacosira sp. 1			
Aulacosira sp. 2			
Aulacosira tenella			
Bacillaria socialis	2	9	2
Biremis circumtextua	2		
Biremis? sp. 1			
Caloneis aemula		1	
Caloneis bacillum		9	2
Caloneis cf. ventricon			
Caloneis lewisii			1
Caloneis cf. lineatus			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			

Raw Counts	S2-60	S2-70	S2-80
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Cavinula scuttleum	1		
Cavinula sp. 1			
Cocconeis costata var. costata			
Cocconeis diminuta			
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis peltoides?			
Cocconeis placentula	5	1	
Cocconeis scutellum			
Coscinodiscus cf. lineatus	5	7	14
Coscinodiscus marginatus	4	20	16
Cosmoneis pusilla			1
Cosmoneis sp. 1			
Craticula cuspidata			
Cymbapleura A			
Cyclostephanos sp. 1	6	7	5
Cyclostephanos sp. 2			
Cyclotella atomus?	5	11	10
Cyclotella caspia		1	
Cyclotella cyclopuncta		1	3
Cyclotella distinguenda			2
Cyclotella meneghiniana	5	17	13
Cyclotella rossii	4	6	6
Cyclotella sp. 2			1
Cyclotella striata	28	44	60
Cyclotella stylorum			5
Cymatocira belgica	9	15	10
Cymatopleura solea			
Cymbella afinis		3	1
Cymbella exciisifinis?			
Cymbella janischii			1
Cymbella mexicana			
Cymbella microcephala			
Cymbella minuta		1	
Cymbella sp. 2			
Cymbella synuata		1	
Descustata placenta			

Raw Counts	S2-60	S2-70	S2-80
Delphineis minutissima	3	1	2
Delphineis surirella		3	
Denticula kuetzengii		2	1
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis	1		
Diatoma vulgaris			
Diatomella balfouriana	1		
Dimeregramma minor			
Diploneis boldtiana	2		1
Diploneis cf. bombous			1
Diploneis cf. didyma			
Diploneis elliptica		2	
Diploneis interupta			
Diploneis pseudovalis			1
Diploneis smithii		2	5
Diploneis sp. 1			
Diploneis sp. 2			
Encyonema nicafei	14		5
Encyonema sp. 1	5		
Encyonema sp. 2	2		
Encyonema sp. 3			
Encyonema triangulum	3		
Epithemia andata			
Epithemia frickei			
Epithemia smithii		2	
Epithemis sorex			2
Epithemia turgida	1	6	2
Eunotia richbuttensis			
Eunotia sp. 1			
Eunotia sp. 2			
Eunotia sp. 3 (GV)			
Fallacia pygmia	87		2
Fragilaria brevistriata	4		1
Fragilaria capucina			
Fragilaria elliptica	2	8	
Fragilaria cf. microstriata			
Fragilaria schulzii			
Fragillaria tenera			
Fragilaria vaucheria	1	2	

Raw Counts	S2-60	S2-70	S2-80
Frickea lewisiana			
Frustulia sp. 1			
Frustulia rhomboides var. viridula			
Frustulia vulgaris		2	2
Geissleria decussis			
Gompheneis sp. 1	1		
Gompheneis sp. 3			
Gomphoneis hurculeana			
Gomphonema acuminatum	10		
Gomphonema innocens		2	
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceum			
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Grammatophora cf. macilenta			1
Gyrosigma balticum?			
Gyrosigma sp.1			
Gyrosigma spencerii		2	1
Gyrosigma temperii			
Hanzschia sp. 1 girdle view			
Hanzschia sp. 2 girdle view			
Hanzschia sp. 3			
Hanzschia sp. 4			
Hanzschia virgata	2	1	8
Hippodonta costulata	2		1
Hippodonta coxiae	2	1	
Hippodonta hungarica	4	2	
Hippodonta sp. 1			
Hippodonta sp. 2			
Leptocylindrus ? Cf. danicus		3	
Luticula sp. 1			
Luticula sp. 2			
Luticula sp. 3			13
Luticula sp. 4			
Mastagloia smithii			
Mastagloia sp. 1			
Mastagloia sp. 2			

Raw Counts	S2-60	S2-70	S2-80
Melosira sp. 1	4		
Melosira varians	2		
Meridion sp. 1			
Navicula abunda	1		6
Navicula amphipleuroides			
Navicula angusta			
Navicula antonii	3		3
Navicula brachium			
Navicula cari	5	2	2
Navicula clematis			
Navicula denta			
Navicula cf. kreigeri	2		
Navicula cf. patrickii			2
Navicula cf. galloae			
Navicula gregaria			1
Navicula haloplila	3	3	
Navicula cf. heuflerii			
Navicula lanceolata	2		3
Navicula cf. ludloviana (CA)			
Navicula marginulata			
Navicula oblonga?	4		
Navicula oculiformis			
Navicula peregrina	12	12	5
Navicula perminuta	6	4	1
Navicula phyllepta			3
Navicula reichardtiana?			
Navicula cf. reinardtii			4
Navicula salinarum?	15		
Navicula schweigeri?	3	1	
Navicula slevicenis			
Navicula sp. 1			
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 4 (capitoradiata?)	29	1	
Navicula sp. 5			
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8			
Navicula sp. 9			
Navicula sp. 10			

Raw Counts	S2-60	S2-70	S2-80
Navicula subinflata			
Navicula subminiscula			
Navicula tripunctata?	5	4	7
Navicula vilaplanii	2		
Navicula zostereti ?			3
Naviculoid diatom 1?			
Naviculoid diatom 2			
Neodephaneis pelagica			
Niedopsis sp. 1			
Nitzschia cf. agnita	8	1	
Nitzschia amphibia			2
Nitzschia cf. biremis			
Nitzschia bita			
Nitzschia cf. borealis			
Nitzschia brevissima	11	17	9
Nitzschia claussi			2
Nitzschia columbiana	4	2	1
Nitzschia communata			
Nitzschia communis			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis			
Nitzschia desertium			
Nitzschia dissipata			
Nitzschia filiformis			2
Nitzschia fonticula			
Nitzschia frustulum	4		
Nitzschia gracilis			
Nitzschia cf. groefii			
Nitzschia incognita			
Nitzschia inconspicua			
Nitzschia levidensis			1
Nitzschia laevis?			
Nitzschia linearis	2		
Nitzschia macilenta?	2	3	1
Nitzschia marginulatus			
Nitzschia microcephala			
Nitzschia nana			
Nitzschia obtusa			
Nitzschia palea	4	1	2

Raw Counts	S2-60	S2-70	S2-80
Nitzschia panduriformis			1
Nitzschia pellucida			
Nitzschia perminuta		2	
Nitzschia proxima	2	6	
Nitzschia punctata	1		2
Nitzschia pusilla			
Nitzschia scalaris			
Nitzschia sigma	8		
Nitzschia sigmaformis			
Nitzschia sp. 1			2
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4	3		4
Nitzschia sp. 5		4	
Nitzschia umbonata			
Opephera martyi			4
Opephera sp. A			
Orthosira sp. 1			
Paralia sulcata	31	72	75
Parlibellis plicatus ?	1	4	4
Pinnularia borealis			
Pinnularia divergens		2	3
Pinnularia divertissima			2
Pinnularia ignobilis			
Pinnularia interupta			
Pinularia marchica		9	14
Pinnularia microstauron			
Pinularia sp.1			
Pinularia sp.2			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			2
Pinnularia sp. 8			
Pinnularia sp. 9			
Pinnularia sp. 10			
Pinnularia viridis		1	
Placoneis gastrum?	2	1	
Placoneis paralegali		1	

Raw Counts	S2-60	S2-70	S2-80
Placoneis sp. 1			
Placoneis sp. 2			
Plagiogramma cf. minima			
Planothidium bipoomum			
Planothidium frequentissimum	2	8	4
Planothidium lanceolata			
Planothidium minutissimum			
Planothidium paragali			
Planothidium sp. 1			
Planothidium sp. 2			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Unknown Centric			
Psammothium? Sp. 1			
Pseudostauroneis parasitica			
Pseudostauropsis sp. 1 (GV)			
Pseudostaurosira americana	1	3	1
Pseudostaurosiropsis sp. 1	9	6	6
Punctastriata mimetica			
Raphoneis amphiceros	13	46	20
Raphoneis ? Tenuis	1		1
Rexlowia sp. 1			
Rhoicosphenia cr. marina			
Rhoicosphenia sp. 1			
Rhopolodia acuminatum		1	
Rhopolodia gibba			
Rhopolodia musculus			1
Sellophora bacillum			
Sellaphora hohnii?		3	
Sellophora laevissima			
Sellophora pulchara			
Sellophora pupulla	2		
Sellophora rexii			1
Sellophora sp. 1 (Navicula subinflata?)	6	6	2
Sellophora sp. 2			
Skelotonemia sp. 1			
Stauroforma exiguaformis			
Stauroneis agrestis			
Stauroneis arcuborealis			
Stauroneis CA			

Raw Counts	S2-60	S2-70	S2-80
Stauroneis GV			
Stauroneis kreigeri			
Stauroneis vandevijeri?			
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Staurophora soodensis?			
Staurosira construens			1
Staurosirella leptosauron var. dubia	1		1
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angustus			
Surirella brebissonii	3	2	
Surirella iowensis?			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida	3		
Synedra famelica			
Synedra fulgens?			
Synedra ulna var. biceps			
Synedra ulna var. ramesi			
Tabularia fasciculata			
Tabularia ktenoeoides			
Thalassionema nitzschiodes	7	12	11
Thalassiosira baltica			
Thalassiosira cf. tenera	1	2	3
Thalassiosira cf. lineata	1	8	15
Thalassiosira decipiens	1	4	6
Thalassiosira eccentrica	2	6	13
Thalassiosira ferelineata			6
Thalassiosira oestruppa	2	2	
Thalassiosira proschkinae		1	
Thalassiosira sp. 2-1 Cooper	2	3	1
Thalassiosira sp. 10 Cooper	2	4	
Trachyneis aspera var. vulgaris			
Tybionella debilis	2	1	
Tryblionella sp. 1		1	
ulnaria acus			
Ulnaria ulna	3	2	7

Raw Counts	S2-60	S2-70	S2-80
unknown araphid			
Unknown biraphid			
Unknown CA			
Uknown GV?			
Undulate colony??			

Raw Counts	S2-90	S2-100	S2-110
Total Counted:	511	510	507
Species	86	87	103
Taxon	Count	Count	Count
Achnanthes amoena			
Achnanthes coarctica			1
Achnanthes denticula			1
Achnanthes islandica	5		3
Achnanthidium altergracillima	2		2
Actinocyclus normanii	10	2	3
Actinocyclus octonarius var. crassus ?	17	18	7
Actinoptycus senarius	6	2	4
Amphora copulata			
Amphora granulata			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus			3
Aneumastus pseudotusculus	2		
Aneumastus sp. 1	2		
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Assymmetrical CA			
Asterionella formosa			
Asterionella sp. 1			
Aulacosira ambigua	5	20	24
Aulacosira granulata	4		10
Aulacosira granulata var. angustissima			
Aulacosira pusilla			
Aulacosira sp. 1			
Aulacosira sp. 2			
Aulacosira tenella			4
Bacillaria socialis		7	1
Biremis circumtextua			2
Biremis? sp. 1			
Caloneis aemula			1
Caloneis bacillum	10		4
Caloneis cf. ventricon			
Caloneis lewisii			
Caloneis cf. lineatus			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			

Raw Counts	S2-90	S2-100	S2-110
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Cavinula scuttleum	3		
Cavinula sp. 1			
Cocconeis costata var. costata			
Cocconeis diminuta		1	
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis peltoides?			
Cocconeis placentula	1	4	3
Cocconeis scutellum			
Coscinodiscus cf. lineatus	8	7	18
Coscinodiscus marginatus	24	27	5
Cosmoneis pusilla			1
Cosmoneis sp. 1			
Craticula cuspidata			
Cymbapleura A			
Cyclostephanos sp. 1	2	7	4
Cyclostephanos sp. 2			
Cyclotella atomus?	10	7	4
Cyclotella caspia			
Cyclotella cyclopuncta	5	5	4
Cyclotella distinguenda		2	
Cyclotella meneghiniana	15	16	6
Cyclotella rossii	3	5	4
Cyclotella sp. 2			1
Cyclotella striata	25	46	41
Cyclotella stylorum	2	3	3
Cymatocira belgica	8	28	11
Cymatopleura solea			
Cymbella afinis			
Cymbella exciisifinis?			
Cymbella janischii			
Cymbella mexicana		1	
Cymbella microcephala		1	
Cymbella minuta			
Cymbella sp. 2			
Cymbella synuata		2	
Descustata placenta			

Raw Counts	S2-90	S2-100	S2-110
Delphineis minutissima	6	9	3
Delphineis surirella		1	5
Denticula kuetzengii		10	
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis	1		1
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana		2	1
Diploneis cf. bombous			
Diploneis cf. didyma			
Diploneis elliptica	1		2
Diploneis interupta			
Diploneis pseudovalis			
Diploneis smithii			
Diploneis sp. 1			
Diploneis sp. 2			
Encyonema nicafei	6	2	3
Encyonema sp. 1			
Encyonema sp. 2	3		
Encyonema sp. 3			
Encyonema triangulum			2
Epithemia andata		1	
Epithemia frickei			
Epithemia smithii			
Epithemis sorex		1	
Epithemia turgida	3		1
Eunotia richbuttensis			
Eunotia sp. 1	2		
Eunotia sp. 2			
Eunotia sp. 3 (GV)			
Fallacia pygmia	4		6
Fragilaria brevistriata			
Fragilaria capucina			
Fragilaria elliptica	1	2	2
Fragilaria cf. microstriata			
Fragilaria schulzii			
Fragillaria tenera	1	1	
Fragilaria vaucheria			3

Raw Counts	S2-90	S2-100	S2-110
Frickea lewisiana			
Frustulia sp. 1			
Frustulia rhomboides var. viridula			
Frustulia vulgaris			2
Geissleria decussis			
Gompheneis sp. 1			
Gompheneis sp. 3			
Gomphoneis hurculeana			
Gomphonema acuminatum			
Gomphonema innocens			7
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceum			
Gomphonema sp. 1			2
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Grammatophora cf. macilenta		1	
Gyrosigma balticum?			
Gyrosigma sp.1			2
Gyrosigma spencerii	9	3	3
Gyrosigma temperii			
Hanzschia sp. 1 girdle view			
Hanzschia sp. 2 girdle view			
Hanzschia sp. 3			
Hanzschia sp. 4		4	
Hanzschia virgata	4	6	
Hippodonta costulata	7	7	13
Hippodonta coxiae			2
Hippodonta hungarica			
Hippodonta sp. 1			
Hippodonta sp. 2			
Leptocylindrus ? Cf. danicus	1		1
Luticula sp. 1			
Luticula sp. 2			
Luticula sp. 3			
Luticula sp. 4			
Mastagloia smithii	2	1	
Mastagloia sp. 1			
Mastagloia sp. 2			

Raw Counts	S2-90	S2-100	S2-110
Melosira sp. 1		4	
Melosira varians			
Meridion sp. 1			
Navicula abunda	5	6	1
Navicula amphipleuroides			
Navicula angusta			
Navicula antonii			
Navicula brachium			
Navicula cari	9	1	1
Navicula clematis			
Navicula denta			
Navicula cf. kreigeri	1		1
Navicula cf. patrickii	1		3
Navicula cf. galloae			
Navicula gregaria	2		2
Navicula haloplila	2	2	1
Navicula cf. heuflerii			
Navicula lanceolata			
Navicula cf. ludloviana (CA)			
Navicula marginulata			
Navicula oblonga?			
Navicula oculiformis			
Navicula peregrina	17	2	18
Navicula perminuta	5	1	3
Navicula phyllepta			
Navicula reichardtiana?			
Navicula cf. reinardtii		2	7
Navicula salinarum?		2	6
Navicula schweigeri?	2		
Navicula slevicenis			
Navicula sp. 1			
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 4 (capitoradiata?)		5	6
Navicula sp. 5			
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8			
Navicula sp. 9			
Navicula sp. 10			

Raw Counts	S2-90	S2-100	S2-110
Navicula subinflata			
Navicula subminiscula		1	
Navicula tripunctata?	8	7	1
Navicula vilaplanii			
Navicula zostereti ?	6	4	4
Naviculoid diatom 1?			
Naviculoid diatom 2			
Neodephaneis pelagica			
Niedopsis sp. 1			
Nitzschia cf. agnita	2		1
Nitzschia amphibia		4	2
Nitzschia cf. biremis		2	
Nitzschia bita			
Nitzschia cf. borealis			
Nitzschia brevissima	28	21	24
Nitzschia claussi	1	1	
Nitzschia columbiana	10	3	3
Nitzschia communata			
Nitzschia communis			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis			
Nitzschia desertium			
Nitzschia dissipata	3	1	
Nitzschia filiformis			6
Nitzschia fonticula			
Nitzschia frustulum			
Nitzschia gracilis	1		
Nitzschia cf. groefii			
Nitzschia incognita	1		
Nitzschia inconspicua			
Nitzschia levidensis	3	1	2
Nitzschia laevis?			
Nitzschia linearis	3		
Nitzschia macilenta?	3	5	3
Nitzschia marginulatus			
Nitzschia microcephala	1		
Nitzschia nana			1
Nitzschia obtusa			
Nitzschia palea	7		7

Raw Counts	S2-90	S2-100	S2-110
Nitzschia panduriformis	1		1
Nitzschia pellucida			
Nitzschia perminuta			
Nitzschia proxima	8	2	3
Nitzschia punctata		7	1
Nitzschia pusilla			
Nitzschia scalaris			3
Nitzschia sigma	4	3	1
Nitzschia sigmaformis		1	
Nitzschia sp. 1			
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4	2	4	3
Nitzschia sp. 5			
Nitzschia umbonata			
Opephera martyi			
Opephera sp. A			
Orthosira sp. 1			
Paralia sulcata	30	41	33
Parlibellis plicatus ?	3		1
Pinnularia borealis			
Pinnularia divergens		2	1
Pinnularia divertissima			
Pinnularia ignobilis			
Pinnularia interupta			
Pinularia marchica	2	2	3
Pinnularia microstauron			2
Pinularia sp.1			
Pinularia sp.2			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			
Pinnularia sp. 8			
Pinnularia sp. 9			
Pinnularia sp. 10			
Pinnularia viridis	4	1	1
Placoneis gastrum?	1		2
Placoneis paralegali			

Raw Counts	S2-90	S2-100	S2-110
Placoneis sp. 1			
Placoneis sp. 2			
Plagiogramma cf. minima			
Planothidium bipoomum			
Planothidium frequentissimum	5	4	11
Planothidium lanceolata			
Planothidium minutissimum			
Planothidium paragali			
Planothidium sp. 1			
Planothidium sp. 2			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Unknown Centric		1	2
Psammothium? Sp. 1			
Pseudostauroneis parasitica			
Pseudostauropsis sp. 1 (GV)			
Pseudostaurosira americana			
Pseudostaurosiropsis sp. 1	13	13	5
Punctastriata mimetica			
Raphoneis amphiceros	18	20	18
Raphoneis ? Tenuis	3	2	1
Rexlowia sp. 1			
Rhoicosphenia cr. marina			2
Rhoicosphenia sp. 1			
Rhopolodia acuminatum		1	1
Rhopolodia gibba			2
Rhopolodia musculus		1	
Sellophora bacillum		1	
Sellaphora hohnii?		2	
Sellophora laevissima			
Sellophora pulchara			
Sellophora pupulla			
Sellophora rexii			1
Sellophora sp. 1 (Navicula subinflata?)		1	4
Sellophora sp. 2			
Skelotonemia sp. 1		2	
Stauroforma exiguaformis			
Stauroneis agrestis			
Stauroneis arcuborealis			
Stauroneis CA			

Raw Counts	S2-90	S2-100	S2-110
Stauroneis GV			
Stauroneis kreigeri			
Stauroneis vandevijeri?			
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Staurophora soodensis?			
Staurosira construens			
Staurosirella leptosauron var. dubia			
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angustus			
Surirella brebissonii	4	2	11
Surirella iowensis?			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida	5	1	
Synedra famelica			
Synedra fulgens?			
Synedra ulna var. biceps			
Synedra ulna var. ramesi			
Tabularia fasciculata			
Tabularia ktenoeoides			
Thalassionema nitzschiodes	10	7	10
Thalassiosira baltica			
Thalassiosira cf. tenera	1		9
Thalassiosira cf. lineata	17	10	3
Thalassiosira decipiens	4	4	2
Thalassiosira eccentrica	13	13	7
Thalassiosira ferelineata		1	
Thalassiosira oestruppa	1		3
Thalassiosira proschkinae	5	9	8
Thalassiosira sp. 2-1 Cooper	5	6	5
Thalassiosira sp. 10 Cooper			2
Trachyneis aspera var. vulgaris	1		
Tybionella debilis	4	2	
Tryblionella sp. 1			
ulnaria acus			
Ulnaria ulna	6	7	6

Raw Counts	S2-90	S2-100	S2-110
unknown araphid			
Unknown biraphid			
Unknown CA			
Uknown GV?			
Undulate colony??			

Raw Counts	S2-120	S2-130	S2-140
Total Counted:	513	504	504
Species	80	83	74
Taxon	Count	Count	Count
Achnanthes amoena			
Achnanthes coarctica			
Achnanthes denticula			
Achnanthes islandica	2	1	2
Achnanthidium altergracillima			
Actinocyclus normanii	4	2	1
Actinocyclus octonarius var. crassus ?	11	19	7
Actinoptycus senarius	14	7	6
Amphora copulata			
Amphora granulata			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus		2	
Aneumastus pseudotusculus			
Aneumastus sp. 1			
Anomoeoneis sp. 1		2	
Anorthoneis tenuis			
Assymmetrical CA			
Asterionella formosa			
Asterionella sp. 1			
Aulacosira ambigua	13	15	22
Aulacosira granulata		4	
Aulacosira granulata var. angustissima			
Aulacosira pusilla			
Aulacosira sp. 1			
Aulacosira sp. 2			
Aulacosira tenella		6	9
Bacillaria socialis		3	1
Biremis circumtextua	4	2	6
Biremis? sp. 1			
Caloneis aemula		1	
Caloneis bacillum	1	2	4
Caloneis cf. ventricon			
Caloneis lewisii			
Caloneis cf. lineatus			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			

Raw Counts	S2-120	S2-130	S2-140
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Cavinula scuttleum			
Cavinula sp. 1			
Cocconeis costata var. costata			
Cocconeis diminuta			
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis peltoides?			
Cocconeis placentula	2	2	5
Cocconeis scutellum			
Coscinodiscus cf. lineatus	17	17	16
Coscinodiscus marginatus	10	3	10
Cosmoneis pusilla			
Cosmoneis sp. 1			
Craticula cuspidata			
Cymbapleura A			
Cyclostephanos sp. 1	4	2	5
Cyclostephanos sp. 2			
Cyclotella atomus?	3	10	22
Cyclotella caspia			
Cyclotella cyclopuncta	8	2	1
Cyclotella distinguenda			
Cyclotella meneghiniana	13	11	22
Cyclotella rossii	10	3	4
Cyclotella sp. 2	1		
Cyclotella striata	45	39	47
Cyclotella stylorum	5	5	6
Cymatocira belgica	16	10	21
Cymatopleura solea			
Cymbella afinis			1
Cymbella exciisifinis?			
Cymbella janischii			
Cymbella mexicana			1
Cymbella microcephala			
Cymbella minuta			
Cymbella sp. 2			
Cymbella synuata			
Descustata placenta			

Raw Counts	S2-120	S2-130	S2-140
Delphineis minutissima	1	1	
Delphineis surirella	9	7	5
Denticula kuetzengii	2		
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis			
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana			3
Diploneis cf. bombous			1
Diploneis cf. didyma			
Diploneis elliptica	1		
Diploneis interupta			
Diploneis pseudovalis		1	
Diploneis smithii	2		
Diploneis sp. 1			
Diploneis sp. 2			
Encyonema nicafei	3	3	3
Encyonema sp. 1			
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema triangulum			
Epithemia andata			
Epithemia frickei			
Epithemia smithii			
Epithemis sorex			
Epithemia turgida	1	3	
Eunotia richbuttensis	4		
Eunotia sp. 1		2	
Eunotia sp. 2	2	2	
Eunotia sp. 3 (GV)			
Fallacia pygmia	20	38	16
Fragilaria brevistriata			
Fragilaria capucina	3		10
Fragilaria elliptica	3	7	1
Fragilaria cf. microstriata			
Fragilaria schulzii			
Fragillaria tenera			
Fragilaria vaucheria		7	

Raw Counts	S2-120	S2-130	S2-140
Frickea lewisiana			
Frustulia sp. 1			
Frustulia rhomboides var. viridula			
Frustulia vulgaris			
Geissleria decussis			
Gompheneis sp. 1			
Gompheneis sp. 3			
Gomphoneis hurculeana			1
Gomphonema acuminatum			
Gomphonema innocens		3	
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceum			
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Grammatophora cf. macilenta			
Gyrosigma balticum?			
Gyrosigma sp.1			
Gyrosigma spencerii	1	2	
Gyrosigma temperii			
Hanzschia sp. 1 girdle view			
Hanzschia sp. 2 girdle view			
Hanzschia sp. 3			
Hanzschia sp. 4			
Hanzschia virgata			6
Hippodonta costulata	3	10	8
Hippodonta coxiae	2	3	9
Hippodonta hungarica			
Hippodonta sp. 1			
Hippodonta sp. 2			
Leptocylindrus ? Cf. danicus		2	
Luticula sp. 1			
Luticula sp. 2			
Luticula sp. 3			
Luticula sp. 4			
Mastagloia smithii			
Mastagloia sp. 1			
Mastagloia sp. 2			

Raw Counts	S2-120	S2-130	S2-140
Melosira sp. 1			
Melosira varians			1
Meridion sp. 1			
Navicula abunda	5	5	5
Navicula amphipleuroides			
Navicula angusta			
Navicula antonii			
Navicula brachium			
Navicula cari		7	1
Navicula clematis			
Navicula denta			
Navicula cf. kreigeri	2	1	
Navicula cf. patrickii	2		
Navicula cf. galloae			
Navicula gregaria			
Navicula haloplila	2		
Navicula cf. heuflerii	3	2	1
Navicula lanceolata			
Navicula cf. ludloviana (CA)			
Navicula marginulata			
Navicula oblonga?	1		
Navicula oculiformis			
Navicula peregrina	7	11	4
Navicula perminuta		5	5
Navicula phyllepta			2
Navicula reichardtiana?			2
Navicula cf. reinardtii			
Navicula salinarum?		2	1
Navicula schweigeri?	4		
Navicula slevicenis			
Navicula sp. 1	1		2
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 4 (capitoradiata?)		3	3
Navicula sp. 5			
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8			
Navicula sp. 9			
Navicula sp. 10			

Raw Counts	S2-120	S2-130	S2-140
Navicula subinflata		3	
Navicula subminiscula		1	2
Navicula tripunctata?		1	2
Navicula vilaplanii			
Navicula zostereti ?		2	
Naviculoid diatom 1?			
Naviculoid diatom 2			
Neodephaneis pelagica			
Niedopsis sp. 1			
Nitzschia cf. agnita		6	
Nitzschia amphibia		4	
Nitzschia cf. biremis			
Nitzschia bita			
Nitzschia cf. borealis			
Nitzschia brevissima	12	9	5
Nitzschia claussi	1	1	
Nitzschia columbiana	2	6	8
Nitzschia communata			
Nitzschia communis			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis			
Nitzschia desertium			2
Nitzschia dissipata			
Nitzschia filiformis	7		
Nitzschia fonticula			
Nitzschia frustulum			
Nitzschia gracilis			
Nitzschia cf. groefii			
Nitzschia incognita			
Nitzschia inconspicua			
Nitzschia levidensis	4	4	
Nitzschia laevis?			
Nitzschia linearis			
Nitzschia macilenta?	3	6	3
Nitzschia marginulatus			
Nitzschia microcephala		4	
Nitzschia nana			2
Nitzschia obtusa			
Nitzschia palea	2	2	4

Raw Counts	S2-120	S2-130	S2-140
Nitzschia panduriformis			
Nitzschia pellucida			
Nitzschia perminuta			
Nitzschia proxima	1	2	2
Nitzschia punctata	5	4	4
Nitzschia pusilla	6	2	
Nitzschia scalaris		3	
Nitzschia sigma			
Nitzschia sigmaformis			
Nitzschia sp. 1			
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4	1		
Nitzschia sp. 5			
Nitzschia umbonata			
Opephera martyi			
Opephera sp. A			
Orthosira sp. 1			
Paralia sulcata	61	32	39
Parlibellis plicatus ?			3
Pinnularia borealis			
Pinnularia divergens			1
Pinnularia divertissima			
Pinnularia ignobilis			
Pinnularia interupta			
Pinularia marchica	1		
Pinnularia microstauron	5	1	4
Pinularia sp.1			
Pinularia sp.2			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			
Pinnularia sp. 8			
Pinnularia sp. 9			
Pinnularia sp. 10			
Pinnularia viridis			
Placoneis gastrum?	6		
Placoneis paralegali			

Raw Counts	S2-120	S2-130	S2-140
Placoneis sp. 1			
Placoneis sp. 2			
Plagiogramma cf. minima			
Planothidium bipoomum	3		
Planothidium frequentissimum			
Planothidium lanceolata			
Planothidium minutissimum			1
Planothidium paragali			
Planothidium sp. 1			
Planothidium sp. 2			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Unknown Centric	2	3	3
Psammothium? Sp. 1			
Pseudostauroneis parasitica			
Pseudostauropsis sp. 1 (GV)			
Pseudostaurosira americana		2	3
Pseudostaurosiropsis sp. 1	12	6	15
Punctastriata mimetica			
Raphoneis amphiceros	30	10	22
Raphoneis ? Tenuis	3		1
Rexlowia sp. 1			
Rhoicosphenia cr. marina	2		
Rhoicosphenia sp. 1			
Rhopolodia acuminatum	1		
Rhopolodia gibba			
Rhopolodia musculus			
Sellophora bacillum		1	
Sellaphora hohnii?			
Sellophora laevissima			
Sellophora pulchara			
Sellophora pupulla			
Sellophora rexii	4		
Sellophora sp. 1 (Navicula subinflata?)	5		
Sellophora sp. 2			
Skelotonemia sp. 1			
Stauroforma exiguaformis			
Stauroneis agrestis			
Stauroneis arcuborealis			
Stauroneis CA			

Raw Counts	S2-120	S2-130	S2-140
Stauroneis GV			
Stauroneis kreigeri			
Stauroneis vandevijeri?			
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Staurophora soodensis?	1		
Staurosira construens			
Staurosirella leptosauron var. dubia		4	
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angustus			
Surirella brebissonii	1	6	
Surirella iowensis?			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida		3	
Synedra famelica	2		2
Synedra fulgens?			
Synedra ulna var. biceps			
Synedra ulna var. ramesi			
Tabularia fasciculata			
Tabularia ktenoeoides			
Thalassionema nitzschiodes	16	16	23
Thalassiosira baltica			
Thalassiosira cf. tenera	4		
Thalassiosira cf. lineata	2	8	9
Thalassiosira decipiens	7	7	2
Thalassiosira eccentrica	21	16	13
Thalassiosira ferelineata			
Thalassiosira oestruppa	1	14	3
Thalassiosira proschkinae	3		
Thalassiosira sp. 2-1 Cooper	4	8	9
Thalassiosira sp. 10 Cooper	3	5	3
Trachyneis aspera var. vulgaris			
Tybionella debilis		3	2
Tryblionella sp. 1			
ulnaria acus			
Ulnaria ulna	2	2	3

Raw Counts	S2-120	S2-130	S2-140
unknown araphid			
Unknown biraphid			
Unknown CA			
Uknown GV?			
Undulate colony??			

Raw Counts	S2-150	S2-160	S2-170
Total Counted:	521	507	501
Species	81	76	74
Taxon	Count	Count	Count
Achnanthes amoena	1		
Achnanthes coarctica			
Achnanthes denticula	1		
Achnanthes islandica	10	1	6
Achnanthidium altergracillima		2	
Actinocyclus normanii		2	11
Actinocyclus octonarius var. crassus ?	19	10	12
Actinoptycus senarius	6	2	4
Amphora copulata			
Amphora granulata			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus	4	2	
Aneumastus pseudotusculus			
Aneumastus sp. 1			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Assymmetrical CA			
Asterionella formosa			
Asterionella sp. 1			
Aulacosira ambigua		60	11
Aulacosira granulata	6	6	8
Aulacosira granulata var. angustissima		13	
Aulacosira pusilla			
Aulacosira sp. 1			
Aulacosira sp. 2			
Aulacosira tenella			6
Bacillaria socialis	4		2
Biremis circumtextua	3		
Biremis? sp. 1			
Caloneis aemula			
Caloneis bacillum			
Caloneis cf. ventricon			
Caloneis lewisii			
Caloneis cf. lineatus			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			

Raw Counts	S2-150	S2-160	S2-170
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Cavinula scuttleum			
Cavinula sp. 1			
Cocconeis costata var. costata			
Cocconeis diminuta			
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis peltoides?			
Cocconeis placentula	4	4	9
Cocconeis scutellum			
Coscinodiscus cf. lineatus	18	9	11
Coscinodiscus marginatus	10	10	9
Cosmoneis pusilla			
Cosmoneis sp. 1			
Craticula cuspidata			
Cymbapleura A			
Cyclostephanos sp. 1	5	1	
Cyclostephanos sp. 2			
Cyclotella atomus?	16	25	27
Cyclotella caspia			
Cyclotella cyclopuncta	8	12	11
Cyclotella distinguenda			
Cyclotella meneghiniana	9	14	33
Cyclotella rossii	5		
Cyclotella sp. 2	12	5	3
Cyclotella striata	30	35	35
Cyclotella stylorum	5	10	5
Cymatocira belgica	17	17	9
Cymatopleura solea			
Cymbella afinis		2	
Cymbella exciisifinis?			
Cymbella janischii	1		
Cymbella mexicana			
Cymbella microcephala			
Cymbella minuta			
Cymbella sp. 2			
Cymbella synuata			
Descustata placenta			1

Raw Counts	S2-150	S2-160	S2-170
Delphineis minutissima	8	7	6
Delphineis surirella	4		
Denticula kuetzengii			
Diadesmis gallica			
Diatoma mesodon	2		
Diatoma moniliformis			1
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana	1		
Diploneis cf. bombous	1		1
Diploneis cf. didyma			
Diploneis elliptica			
Diploneis interupta			
Diploneis pseudovalis			
Diploneis smithii		2	
Diploneis sp. 1			
Diploneis sp. 2			
Encyonema nicafei		2	
Encyonema sp. 1			
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema triangulum			
Epithemia andata	2		
Epithemia frickei			
Epithemia smithii			
Epithemis sorex			
Epithemia turgida	1	1	4
Eunotia richbuttensis			
Eunotia sp. 1			1
Eunotia sp. 2			
Eunotia sp. 3 (GV)			
Fallacia pygmia	10	8	5
Fragilaria brevistriata			
Fragilaria capucina			
Fragilaria elliptica	2	3	1
Fragilaria cf. microstriata			
Fragilaria schulzii			
Fragillaria tenera			
Fragilaria vaucheria		9	5

Raw Counts	S2-150	S2-160	S2-170
Frickea lewisiana			
Frustulia sp. 1			
Frustulia rhomboides var. viridula			
Frustulia vulgaris			3
Geissleria decussis		1	
Gompheneis sp. 1			
Gompheneis sp. 3			
Gomphoneis hurculeana			
Gomphonema acuminatum			
Gomphonema innocens		2	3
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceum			
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Grammatophora cf. macilenta			
Gyrosigma balticum?			2
Gyrosigma sp.1			
Gyrosigma spencerii	1	1	
Gyrosigma temperii			
Hanzschia sp. 1 girdle view			
Hanzschia sp. 2 girdle view			
Hanzschia sp. 3			
Hanzschia sp. 4			
Hanzschia virgata	4		
Hippodonta costulata			1
Hippodonta coxiae	20	13	3
Hippodonta hungarica			
Hippodonta sp. 1			
Hippodonta sp. 2			
Leptocylindrus ? Cf. danicus			1
Luticula sp. 1			
Luticula sp. 2			
Luticula sp. 3			
Luticula sp. 4			
Mastagloia smithii			
Mastagloia sp. 1			
Mastagloia sp. 2			

Raw Counts	S2-150	S2-160	S2-170
Melosira sp. 1		4	
Melosira varians	4	4	
Meridion sp. 1			
Navicula abunda	4		5
Navicula amphipleuroides			
Navicula angusta			
Navicula antonii			
Navicula brachium	1		
Navicula cari	1	2	1
Navicula clematis			
Navicula denta			
Navicula cf. kreigeri		1	
Navicula cf. patrickii	2		
Navicula cf. galloae			
Navicula gregaria		2	
Navicula haloplila	7	4	1
Navicula cf. heuflerii			
Navicula lanceolata	2		
Navicula cf. ludloviana (CA)			
Navicula marginulata			
Navicula oblonga?			
Navicula oculiformis			
Navicula peregrina	3	6	1
Navicula perminuta	2	1	5
Navicula phyllepta			
Navicula reichardtiana?			
Navicula cf. reinardtii			
Navicula salinarum?	3		1
Navicula schweigeri?			
Navicula slevicenis			
Navicula sp. 1			
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 4 (capitoradiata?)	8	9	
Navicula sp. 5			
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8			
Navicula sp. 9			
Navicula sp. 10			

Raw Counts	S2-150	S2-160	S2-170
Navicula subinflata			
Navicula subminiscula		2	
Navicula tripunctata?	2	3	
Navicula vilaplanii			
Navicula zostereti ?		3	1
Naviculoid diatom 1?			
Naviculoid diatom 2			
Neodephaneis pelagica			
Niedopsis sp. 1			
Nitzschia cf. agnita	5	4	
Nitzschia amphibia		7	
Nitzschia cf. biremis			
Nitzschia bita			
Nitzschia cf. borealis	2		
Nitzschia brevissima	4		9
Nitzschia claussi		1	
Nitzschia columbiana	4	1	3
Nitzschia communata			
Nitzschia communis			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis	2	2	
Nitzschia desertium		2	
Nitzschia dissipata			
Nitzschia filiformis	1	2	
Nitzschia fonticula			
Nitzschia frustulum	3		
Nitzschia gracilis		2	2
Nitzschia cf. groefii			
Nitzschia incognita			
Nitzschia inconspicua	1		2
Nitzschia levidensis	9	4	
Nitzschia laevis?			
Nitzschia linearis			
Nitzschia macilenta?			1
Nitzschia marginulatus			
Nitzschia microcephala			
Nitzschia nana		1	1
Nitzschia obtusa			
Nitzschia palea	5	5	4

Raw Counts	S2-150	S2-160	S2-170
Nitzschia panduriformis	1		
Nitzschia pellucida			
Nitzschia perminuta		5	
Nitzschia proxima			
Nitzschia punctata	6	15	3
Nitzschia pusilla	6		2
Nitzschia scalaris			
Nitzschia sigma	2		1
Nitzschia sigmaformis			
Nitzschia sp. 1			
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4		1	
Nitzschia sp. 5			
Nitzschia umbonata			
Opephera martyi			1
Opephera sp. A			
Orthosira sp. 1			
Paralia sulcata	42	40	44
Parlibellis plicatus ?			
Pinnularia borealis			
Pinnularia divergens			
Pinnularia divertissima			
Pinnularia ignobilis			
Pinnularia interupta			
Pinularia marchica			
Pinnularia microstauron			
Pinularia sp.1			
Pinularia sp.2			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			
Pinnularia sp. 8			
Pinnularia sp. 9			
Pinnularia sp. 10			
Pinnularia viridis		1	4
Placoneis gastrum?			1
Placoneis paralegali			

Raw Counts	S2-150	S2-160	S2-170
Placoneis sp. 1			
Placoneis sp. 2			
Plagiogramma cf. minima			
Planothidium bipoomum			
Planothidium frequentissimum	2	2	4
Planothidium lanceolata			
Planothidium minutissimum			
Planothidium paragali			2
Planothidium sp. 1			
Planothidium sp. 2			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Unknown Centric	1	1	1
Psammothium? Sp. 1			
Pseudostauroneis parasitica			
Pseudostauropsis sp. 1 (GV)			
Pseudostaurosira americana			4
Pseudostaurosiropsis sp. 1	9	6	37
Punctastriata mimetica			
Raphoneis amphiceros	35	10	43
Raphoneis ? Tenuis			
Rexlowia sp. 1			
Rhoicosphenia cr. marina			
Rhoicosphenia sp. 1			
Rhopolodia acuminatum	1		
Rhopolodia gibba			
Rhopolodia musculus	1		
Sellophora bacillum			
Sellaphora hohnii?			
Sellophora laevissima			
Sellophora pulchara			
Sellophora pupulla		4	
Sellophora rexii			
Sellophora sp. 1 (Navicula subinflata?)	2	4	
Sellophora sp. 2			
Skelotonemia sp. 1			
Stauroforma exiguaformis	2		
Stauroneis agrestis			
Stauroneis arcuborealis			
Stauroneis CA			

Raw Counts	S2-150	S2-160	S2-170
Stauroneis GV			
Stauroneis kreigeri			2
Stauroneis vandevijeri?			
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Staurophora soodensis?			2
Staurosira construens			
Staurosirella leptosauron var. dubia			
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angustus			
Surirella brebissonii	1		
Surirella iowensis?			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida	2	2	
Synedra famelica			
Synedra fulgens?			
Synedra ulna var. biceps			
Synedra ulna var. ramesi			
Tabularia fasciculata			
Tabularia ktenoeoides			
Thalassionema nitzschiodes	15	14	15
Thalassiosira baltica			
Thalassiosira cf. tenera			1
Thalassiosira cf. lineata	8	8	12
Thalassiosira decipiens	18	2	6
Thalassiosira eccentrica	19	6	8
Thalassiosira ferelineata			2
Thalassiosira oestruppa	5	7	4
Thalassiosira proschkinae			
Thalassiosira sp. 2-1 Cooper	11	7	4
Thalassiosira sp. 10 Cooper	3	4	6
Trachyneis aspera var. vulgaris			
Tybionella debilis	2	4	2
Tryblionella sp. 1			1
ulnaria acus			
Ulnaria ulna	1	1	2

Raw Counts	S2-150	S2-160	S2-170
unknown araphid			
Unknown biraphid			
Unknown CA	1		
Uknown GV?			
Undulate colony??			

Raw Counts	S2-180	S2-190	S2-200
Total Counted:	500	507	502
Species	90	89	79
Taxon	Count	Count	Count
Achnanthes amoena	1		
Achnanthes coarctica			
Achnanthes denticula			
Achnanthes islandica	8		6
Achnanthidium altergracillima			
Actinocyclus normanii	9	2	
Actinocyclus octonarius var. crassus ?	17	20	14
Actinoptycus senarius	7	8	10
Amphora copulata			
Amphora granulata			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus		2	
Aneumastus pseudotusculus			
Aneumastus sp. 1			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Assymmetrical CA			
Asterionella formosa			
Asterionella sp. 1			
Aulacosira ambigua	6	8	4
Aulacosira granulata	5	4	4
Aulacosira granulata var. angustissima			
Aulacosira pusilla			
Aulacosira sp. 1			
Aulacosira sp. 2			
Aulacosira tenella	6		
Bacillaria socialis	1		
Biremis circumtextua			
Biremis? sp. 1			
Caloneis aemula			
Caloneis bacillum			2
Caloneis cf. ventricon			
Caloneis lewisii			
Caloneis cf. lineatus			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			

Raw Counts	S2-180	S2-190	S2-200
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Cavinula scuttleum			1
Cavinula sp. 1			
Cocconeis costata var. costata			
Cocconeis diminuta		1	
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis peltoides?			
Cocconeis placentula	4	9	2
Cocconeis scutellum			
Coscinodiscus cf. lineatus	8	12	3
Coscinodiscus marginatus	8	18	6
Cosmoneis pusilla			
Cosmoneis sp. 1			
Craticula cuspidata			
Cymbapleura A		2	
Cyclostephanos sp. 1	2		2
Cyclostephanos sp. 2			
Cyclotella atomus?	12	14	6
Cyclotella caspia			
Cyclotella cyclopuncta	20	14	11
Cyclotella distinguenda			
Cyclotella meneghiniana	8	3	9
Cyclotella rossii		1	
Cyclotella sp. 2	4	5	
Cyclotella striata	10	22	16
Cyclotella stylorum	9	18	4
Cymatocira belgica	12	12	13
Cymatopleura solea			
Cymbella afinis			
Cymbella exciisifinis?			
Cymbella janischii			
Cymbella mexicana			
Cymbella microcephala			
Cymbella minuta			
Cymbella sp. 2			
Cymbella synuata			1
Descustata placenta			

Raw Counts	S2-180	S2-190	S2-200
Delphineis minutissima	8		7
Delphineis surirella	1		
Denticula kuetzengii			27
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis	1		
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana	1	1	2
Diploneis cf. bombous		2	
Diploneis cf. didyma			
Diploneis elliptica		1	3
Diploneis interupta			
Diploneis pseudovalis			
Diploneis smithii			
Diploneis sp. 1			
Diploneis sp. 2			
Encyonema nicafei	4	1	
Encyonema sp. 1			
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema triangulum			
Epithemia andata			
Epithemia frickei			
Epithemia smithii			
Epithemis sorex			
Epithemia turgida	4	2	
Eunotia richbuttensis			
Eunotia sp. 1			
Eunotia sp. 2	2		
Eunotia sp. 3 (GV)	2		
Fallacia pygmia	3		
Fragilaria brevistriata			
Fragilaria capucina			
Fragilaria elliptica	3	2	4
Fragilaria cf. microstriata			
Fragilaria schulzii			
Fragillaria tenera			
Fragilaria vaucheria	1	1	

Raw Counts	S2-180	S2-190	S2-200
Frickea lewisiana			
Frustulia sp. 1			
Frustulia rhomboides var. viridula			
Frustulia vulgaris			
Geissleria decussis			
Gompheneis sp. 1			
Gompheneis sp. 3			
Gomphoneis hurculeana			
Gomphonema acuminatum			
Gomphonema innocens	1		
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceum			
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Grammatophora cf. macilenta			
Gyrosigma balticum?	1	1	
Gyrosigma sp.1			
Gyrosigma spencerii			5
Gyrosigma temperii			
Hanzschia sp. 1 girdle view			
Hanzschia sp. 2 girdle view			
Hanzschia sp. 3			
Hanzschia sp. 4			
Hanzschia virgata		2	
Hippodonta costulata	2		
Hippodonta coxiae	4	6	4
Hippodonta hungarica			
Hippodonta sp. 1			
Hippodonta sp. 2			
Leptocylindrus ? Cf. danicus			
Luticula sp. 1		1	
Luticula sp. 2			
Luticula sp. 3			
Luticula sp. 4			
Mastagloia smithii	2		
Mastagloia sp. 1			
Mastagloia sp. 2			

Raw Counts	S2-180	S2-190	S2-200
Melosira sp. 1		9	
Melosira varians			4
Meridion sp. 1	1		
Navicula abunda	11	7	9
Navicula amphipleuroides			
Navicula angusta			
Navicula antonii			1
Navicula brachium			
Navicula cari	1	1	4
Navicula clematis			
Navicula denta			
Navicula cf. kreigeri		1	1
Navicula cf. patrickii		2	
Navicula cf. galloae			
Navicula gregaria			
Navicula haloplila		5	
Navicula cf. heuflerii			
Navicula lanceolata	2		1
Navicula cf. ludloviana (CA)			
Navicula marginulata			
Navicula oblonga?			
Navicula oculiformis			
Navicula peregrina	1	3	6
Navicula perminuta	16		2
Navicula phyllepta	1		
Navicula reichardtiana?		1	
Navicula cf. reinardtii			
Navicula salinarum?		2	
Navicula schweigeri?	2	1	1
Navicula slevicenis			
Navicula sp. 1		1	
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 4 (capitoradiata?)	4	4	
Navicula sp. 5			
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8			
Navicula sp. 9			
Navicula sp. 10			

Raw Counts	S2-180	S2-190	S2-200
Navicula subinflata			
Navicula subminiscula		6	
Navicula tripunctata?			12
Navicula vilaplanii			
Navicula zostereti ?			6
Naviculoid diatom 1?			
Naviculoid diatom 2			
Neodephaneis pelagica	2		
Niedopsis sp. 1			
Nitzschia cf. agnita	2	1	3
Nitzschia amphibia			2
Nitzschia cf. biremis			
Nitzschia bita	2		
Nitzschia cf. borealis			
Nitzschia brevissima	4	4	23
Nitzschia claussi		4	6
Nitzschia columbiana	3	1	13
Nitzschia communata			
Nitzschia communis			
Nitzschia constricta		2	
Nitzschia cylindrus			
Nitzschia debilis			
Nitzschia desertium		2	
Nitzschia dissipata			
Nitzschia filiformis		2	
Nitzschia fonticula			
Nitzschia frustulum			
Nitzschia gracilis		2	
Nitzschia cf. groefii			
Nitzschia incognita			
Nitzschia inconspicua	1		2
Nitzschia levidensis			
Nitzschia laevis?			
Nitzschia linearis			
Nitzschia macilenta?	6	1	1
Nitzschia marginulatus		2	
Nitzschia microcephala			
Nitzschia nana	1	2	2
Nitzschia obtusa			
Nitzschia palea	2	2	4

Raw Counts	S2-180	S2-190	S2-200
Nitzschia panduriformis	2		
Nitzschia pellucida			
Nitzschia perminuta			
Nitzschia proxima		5	9
Nitzschia punctata	6	15	8
Nitzschia pusilla		6	8
Nitzschia scalaris			2
Nitzschia sigma	2	2	1
Nitzschia sigmaformis	2	1	1
Nitzschia sp. 1	1		2
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4	1	3	3
Nitzschia sp. 5			
Nitzschia umbonata			
Opephera martyi		1	
Opephera sp. A			
Orthosira sp. 1			
Paralia sulcata	46	62	80
Parlibellis plicatus ?			1
Pinnularia borealis			
Pinnularia divergens			
Pinnularia divertissima			
Pinnularia ignobilis			
Pinnularia interupta			
Pinularia marchica			3
Pinnularia microstauron		1	
Pinularia sp.1			
Pinularia sp.2			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			
Pinnularia sp. 8			
Pinnularia sp. 9			
Pinnularia sp. 10			
Pinnularia viridis			1
Placoneis gastrum?	7		
Placoneis paralegali			

Raw Counts	S2-180	S2-190	S2-200
Placoneis sp. 1			
Placoneis sp. 2			
Plagiogramma cf. minima			
Planothidium bipoomum			
Planothidium frequentissimum	3		1
Planothidium lanceolata			
Planothidium minutissimum			
Planothidium paragali			
Planothidium sp. 1			
Planothidium sp. 2			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Unknown Centric	1	3	1
Psammothium? Sp. 1			
Pseudostauroneis parasitica			
Pseudostauropsis sp. 1 (GV)			
Pseudostaurosira americana	4	6	
Pseudostaurosiropsis sp. 1	15	12	10
Punctastriata mimetica			
Raphoneis amphiceros	27	21	30
Raphoneis ? Tenuis		2	2
Rexlowia sp. 1			
Rhoicosphenia cr. marina	2	2	
Rhoicosphenia sp. 1			
Rhopolodia acuminatum	1	4	13
Rhopolodia gibba			
Rhopolodia musculus			3
Sellophora bacillum			
Sellaphora hohnii?			
Sellophora laevissima			2
Sellophora pulchara			
Sellophora pupulla		2	1
Sellophora rexii			
Sellophora sp. 1 (Navicula subinflata?)	7	3	4
Sellophora sp. 2			
Skelotonemia sp. 1		6	
Stauroforma exiguaformis		6	
Stauroneis agrestis		2	
Stauroneis arcuborealis			
Stauroneis CA	1		

Raw Counts	S2-180	S2-190	S2-200
Stauroneis GV			
Stauroneis kreigeri	6		
Stauroneis vandevijeri?		1	
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Staurophora soodensis?	3		
Staurosira construens	2		1
Staurosirella leptosauron var. dubia	1		1
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angustus	2		
Surirella brebissonii	2		
Surirella iowensis?			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida	3		
Synedra famelica			
Synedra fulgens?			
Synedra ulna var. biceps			
Synedra ulna var. ramesi			
Tabularia fasciculata			1
Tabularia ktenoeoides			
Thalassionema nitzschiodes	18	24	14
Thalassiosira baltica			
Thalassiosira cf. tenera	1	1	
Thalassiosira cf. lineata	14	9	5
Thalassiosira decipiens	6	5	3
Thalassiosira eccentrica	16	5	5
Thalassiosira ferelineata	3	1	
Thalassiosira oestruppa	12	2	2
Thalassiosira proschkinae	1	1	1
Thalassiosira sp. 2-1 Cooper	8	14	1
Thalassiosira sp. 10 Cooper	4	4	3
Trachyneis aspera var. vulgaris			
Tybionella debilis		4	10
Tryblionella sp. 1	2		
ulnaria acus			
Ulnaria ulna	9	8	

Raw Counts	S2-180	S2-190	S2-200
unknown araphid			
Unknown biraphid			
Unknown CA			
Uknown GV?			
Undulate colony??			

Raw Counts	S2-210	S2-220	S2-230
Total Counted:	508	502	503
Species	94	85	96
Taxon	Count	Count	Count
Achnanthes amoena			2
Achnanthes coarctica			
Achnanthes denticula			
Achnanthes islandica	2		1
Achnanthidium altergracillima			
Actinocyclus normanii	2	5	3
Actinocyclus octonarius var. crassus ?	14	13	5
Actinoptycus senarius	7	7	6
Amphora copulata			
Amphora granulata	2		
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus	2		
Aneumastus pseudotusculus			
Aneumastus sp. 1			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Assymmetrical CA			
Asterionella formosa			
Asterionella sp. 1			
Aulacosira ambigua	12	12	4
Aulacosira granulata			
Aulacosira granulata var. angustissima			
Aulacosira pusilla			
Aulacosira sp. 1			
Aulacosira sp. 2			
Aulacosira tenella			
Bacillaria socialis	2	2	1
Biremis circumtextua			1
Biremis? sp. 1			
Caloneis aemula	3		6
Caloneis bacillum	9	3	2
Caloneis cf. ventricon			
Caloneis lewisii			
Caloneis cf. lineatus			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			

Raw Counts	S2-210	S2-220	S2-230
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Cavinula scuttleum			
Cavinula sp. 1			
Cocconeis costata var. costata			
Cocconeis diminuta	1		
Cocconeis disculoides		1	
Cocconeis elongatum			
Cocconeis peltoides?			1
Cocconeis placentula	7		3
Cocconeis scutellum			
Coscinodiscus cf. lineatus	2	4	5
Coscinodiscus marginatus	5	8	6
Cosmoneis pusilla		3	
Cosmoneis sp. 1			
Craticula cuspidata	2		
Cymbapleura A			
Cyclostephanos sp. 1	1	1	5
Cyclostephanos sp. 2			
Cyclotella atomus?	14	4	6
Cyclotella caspia		7	3
Cyclotella cyclopuncta	12	19	27
Cyclotella distinguenda		1	
Cyclotella meneghiniana	4	6	5
Cyclotella rossii	2		
Cyclotella sp. 2			
Cyclotella striata	17	19	8
Cyclotella stylorum	10	8	3
Cymatocira belgica	12	13	4
Cymatopleura solea			
Cymbella afinis	1	1	
Cymbella exciisifinis?			
Cymbella janischii	2		1
Cymbella mexicana			
Cymbella microcephala			
Cymbella minuta	2		
Cymbella sp. 2			
Cymbella synuata			
Descustata placenta	1	1	5

Raw Counts	S2-210	S2-220	S2-230
Delphineis minutissima			
Delphineis surirella			
Denticula kuetzengii	12	3	4
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis	6	3	8
Diatoma vulgaris			2
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana	5	5	2
Diploneis cf. bombous	1		
Diploneis cf. didyma			
Diploneis elliptica	4	2	4
Diploneis interupta			
Diploneis pseudovalis	1	2	
Diploneis smithii	1		
Diploneis sp. 1			
Diploneis sp. 2			
Encyonema nicafei		3	1
Encyonema sp. 1			
Encyonema sp. 2			1
Encyonema sp. 3			
Encyonema triangulum			
Epithemia andata			
Epithemia frickei		1	
Epithemia smithii			
Epithemis sorex			
Epithemia turgida		5	5
Eunotia richbuttensis			
Eunotia sp. 1			
Eunotia sp. 2			
Eunotia sp. 3 (GV)			2
Fallacia pygmia			
Fragilaria brevistriata	3		
Fragilaria capucina			
Fragilaria elliptica	4	7	
Fragilaria cf. microstriata			
Fragilaria schulzii			
Fragillaria tenera			
Fragilaria vaucheria		1	

Raw Counts	S2-210	S2-220	S2-230
Frickea lewisiana	1		
Frustulia sp. 1			
Frustulia rhomboides var. viridula			
Frustulia vulgaris	2	1	
Geissleria decussis			1
Gompheneis sp. 1			
Gompheneis sp. 3			
Gomphoneis hurculeana			
Gomphonema acuminatum			
Gomphonema innocens			
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceum	1		
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Grammatophora cf. macilenta			
Gyrosigma balticum?	1		1
Gyrosigma sp.1			
Gyrosigma spencerii		5	
Gyrosigma temperii		2	
Hanzschia sp. 1 girdle view			
Hanzschia sp. 2 girdle view			
Hanzschia sp. 3			
Hanzschia sp. 4			
Hanzschia virgata		2	5
Hippodonta costulata	6		
Hippodonta coxiae	3	6	15
Hippodonta hungarica			
Hippodonta sp. 1			
Hippodonta sp. 2			
Leptocylindrus ? Cf. danicus			1
Luticula sp. 1			
Luticula sp. 2			
Luticula sp. 3			
Luticula sp. 4		2	
Mastagloia smithii			
Mastagloia sp. 1			
Mastagloia sp. 2			

Raw Counts	S2-210	S2-220	S2-230
Melosira sp. 1			
Melosira varians		2	
Meridion sp. 1			
Navicula abunda	14	7	4
Navicula amphipleuroides			
Navicula angusta			
Navicula antonii	2		1
Navicula brachium			5
Navicula cari	2	5	4
Navicula clematis			
Navicula denta			
Navicula cf. kreigeri	2	1	
Navicula cf. patrickii	4		3
Navicula cf. galloae			
Navicula gregaria			
Navicula haloplila			
Navicula cf. heuflerii			
Navicula lanceolata	2	7	1
Navicula cf. ludloviana (CA)			1
Navicula marginulata	1		
Navicula oblonga?		1	
Navicula oculiformis			
Navicula peregrina	6	6	4
Navicula perminuta			
Navicula phyllepta			
Navicula reichardtiana?			
Navicula cf. reinardtii			
Navicula salinarum?	3		
Navicula schweigeri?	2	1	
Navicula slevicenis			
Navicula sp. 1			
Navicula sp. 2			1
Navicula sp. 3			
Navicula sp. 4 (capitoradiata?)			
Navicula sp. 5			
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8			
Navicula sp. 9			
Navicula sp. 10			

Raw Counts	S2-210	S2-220	S2-230
Navicula subinflata			
Navicula subminiscula			1
Navicula tripunctata?	3	1	1
Navicula vilaplanii			
Navicula zostereti ?		3	
Naviculoid diatom 1?			
Naviculoid diatom 2			
Neodephaneis pelagica			
Niedopsis sp. 1			
Nitzschia cf. agnita	3		4
Nitzschia amphibia		1	2
Nitzschia cf. biremis			
Nitzschia bita			
Nitzschia cf. borealis	2		2
Nitzschia brevissima	18	29	15
Nitzschia claussi	2	4	6
Nitzschia columbiana	7	6	2
Nitzschia communata		2	
Nitzschia communis	6	1	
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis			
Nitzschia desertium			
Nitzschia dissipata			
Nitzschia filiformis	1		
Nitzschia fonticula			
Nitzschia frustulum			
Nitzschia gracilis			
Nitzschia cf. groefii			
Nitzschia incognita		2	7
Nitzschia inconspicua	2		1
Nitzschia levidensis		5	3
Nitzschia laevis?			
Nitzschia linearis	1		2
Nitzschia macilenta?	3		3
Nitzschia marginulatus			
Nitzschia microcephala			
Nitzschia nana			4
Nitzschia obtusa			
Nitzschia palea	2	2	4

Raw Counts	S2-210	S2-220	S2-230
Nitzschia panduriformis			
Nitzschia pellucida			
Nitzschia perminuta			
Nitzschia proxima	2		3
Nitzschia punctata		8	
Nitzschia pusilla			1
Nitzschia scalaris	1	1	6
Nitzschia sigma		5	
Nitzschia sigmaformis		5	
Nitzschia sp. 1	2	2	7
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4	1		3
Nitzschia sp. 5			
Nitzschia umbonata			
Opephera martyi	1		
Opephera sp. A			
Orthosira sp. 1			
Paralia sulcata	79	82	83
Parlibellis plicatus ?			1
Pinnularia borealis			
Pinnularia divergens	3	3	4
Pinnularia divertissima	2		
Pinnularia ignobilis			
Pinnularia interupta	2		
Pinularia marchica		2	4
Pinnularia microstauron		1	2
Pinularia sp.1			
Pinularia sp.2			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			
Pinnularia sp. 8			
Pinnularia sp. 9			
Pinnularia sp. 10			
Pinnularia viridis	2	3	1
Placoneis gastrum?	2		5
Placoneis paralegali			

Raw Counts	S2-210	S2-220	S2-230
Placoneis sp. 1			
Placoneis sp. 2			
Plagiogramma cf. minima			
Planothidium bipoomum			
Planothidium frequentissimum			5
Planothidium lanceolata			6
Planothidium minutissimum			
Planothidium paragali			
Planothidium sp. 1			
Planothidium sp. 2			
Platessa cf. hustedtii			3
Pleurosigma diverse-striatum			
Unknown Centric	2		2
Psammothium? Sp. 1			
Pseudostauroneis parasitica		1	
Pseudostauropsis sp. 1 (GV)			
Pseudostaurosira americana	3	4	1
Pseudostaurosiropsis sp. 1		1	
Punctastriata mimetica			
Raphoneis amphiceros	36	23	46
Raphoneis ? Tenuis	1	4	1
Rexlowia sp. 1		2	
Rhoicosphenia cr. marina			
Rhoicosphenia sp. 1			
Rhopolodia acuminatum	13	7	5
Rhopolodia gibba			
Rhopolodia musculus	5	11	7
Sellophora bacillum			4
Sellaphora hohnii?			
Sellophora laevissima			
Sellophora pulchara			
Sellophora pupulla	2		3
Sellophora rexii	2		
Sellophora sp. 1 (Navicula subinflata?)	2		10
Sellophora sp. 2			
Skelotonemia sp. 1			
Stauroforma exiguaformis			
Stauroneis agrestis			4
Stauroneis arcuborealis			
Stauroneis CA			2

Raw Counts	S2-210	S2-220	S2-230
Stauroneis GV			
Stauroneis kreigeri			
Stauroneis vandevijeri?			
Stauroneis sp. 1	6		
Stauroneis sp. 2			
Stauroneis sp. 3			
Staurophora soodensis?			
Staurosira construens			
Staurosirella leptosauron var. dubia		1	
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angustus			
Surirella brebissonii			
Surirella iowensis?			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida			
Synedra famelica			
Synedra fulgens?			
Synedra ulna var. biceps			
Synedra ulna var. ramesi			
Tabularia fasciculata			
Tabularia ktenoeoides		2	
Thalassionema nitzschiodes	23	18	14
Thalassiosira baltica			
Thalassiosira cf. tenera			
Thalassiosira cf. lineata	4	6	4
Thalassiosira decipiens	5	7	1
Thalassiosira eccentrica	6	7	4
Thalassiosira ferelineata	2		
Thalassiosira oestruppa			1
Thalassiosira proschkinae	1	4	
Thalassiosira sp. 2-1 Cooper	4	3	4
Thalassiosira sp. 10 Cooper	4	4	2
Trachyneis aspera var. vulgaris			
Tybionella debilis		8	8
Tryblionella sp. 1			
ulnaria acus			
Ulnaria ulna	1	3	

Raw Counts	S2-210	S2-220	S2-230
unknown araphid			
Unknown biraphid			
Unknown CA			
Uknown GV?			
Undulate colony??			

Raw Counts	S2-240	S2-250	S2-260
Total Counted:	510	503	500
Species	76	72	81
Taxon	Count	Count	Count
Achnanthes amoena			
Achnanthes coarctica			
Achnanthes denticula			
Achnanthes islandica			1
Achnanthidium altergracillima			
Actinocyclus normanii	1	3	2
Actinocyclus octonarius var. crassus ?	7	8	5
Actinoptycus senarius	10	9	14
Amphora copulata			
Amphora granulata			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus			
Aneumastus pseudotusculus			
Aneumastus sp. 1			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Assymmetrical CA			
Asterionella formosa			
Asterionella sp. 1			
Aulacosira ambigua	5		
Aulacosira granulata			
Aulacosira granulata var. angustissima			
Aulacosira pusilla			
Aulacosira sp. 1			
Aulacosira sp. 2			
Aulacosira tenella			
Bacillaria socialis		1	2
Biremis circumtextua	1		
Biremis? sp. 1			
Caloneis aemula		4	5
Caloneis bacillum	1	18	11
Caloneis cf. ventricon			
Caloneis lewisii			
Caloneis cf. lineatus			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			

Raw Counts	S2-240	S2-250	S2-260
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Cavinula scuttleum			3
Cavinula sp. 1		2	1
Cocconeis costata var. costata			
Cocconeis diminuta			
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis peltoides?	1		
Cocconeis placentula		1	3
Cocconeis scutellum			
Coscinodiscus cf. lineatus	13	5	3
Coscinodiscus marginatus	12	3	4
Cosmoneis pusilla			1
Cosmoneis sp. 1			
Craticula cuspidata			
Cymbapleura A			
Cyclostephanos sp. 1	8	5	4
Cyclostephanos sp. 2			
Cyclotella atomus?	6	8	10
Cyclotella caspia			
Cyclotella cyclopuncta	32	40	16
Cyclotella distinguenda	6		
Cyclotella meneghiniana	1	2	15
Cyclotella rossii			3
Cyclotella sp. 2	1		2
Cyclotella striata	16	22	31
Cyclotella stylorum	9	18	5
Cymatocira belgica	2	1	9
Cymatopleura solea			
Cymbella afinis			
Cymbella exciisifinis?			
Cymbella janischii		1	
Cymbella mexicana			
Cymbella microcephala			
Cymbella minuta		1	
Cymbella sp. 2			
Cymbella synuata			1
Descustata placenta	1		

Raw Counts	S2-240	S2-250	S2-260
Delphineis minutissima			
Delphineis surirella			5
Denticula kuetzengii			
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis	2		1
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana	2	5	2
Diploneis cf. bombous		5	3
Diploneis cf. didyma			
Diploneis elliptica	14	7	2
Diploneis interupta			
Diploneis pseudovalis	5	5	1
Diploneis smithii	1		
Diploneis sp. 1		1	
Diploneis sp. 2		1	
Encyonema nicafei	1		
Encyonema sp. 1			
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema triangulum			
Epithemia andata			
Epithemia frickei			1
Epithemia smithii		2	
Epithemis sorex			
Epithemia turgida	2	1	9
Eunotia richbuttensis	2		
Eunotia sp. 1			3
Eunotia sp. 2			1
Eunotia sp. 3 (GV)			
Fallacia pygmia			
Fragilaria brevistriata			
Fragilaria capucina			
Fragilaria elliptica	1		
Fragilaria cf. microstriata			
Fragilaria schulzii			
Fragillaria tenera			
Fragilaria vaucheria		1	

Raw Counts	S2-240	S2-250	S2-260
Frickea lewisiana			
Frustulia sp. 1			
Frustulia rhomboides var. viridula			
Frustulia vulgaris			
Geissleria decussis			
Gompheneis sp. 1			
Gompheneis sp. 3			
Gomphoneis hurculeana			
Gomphonema acuminatum			
Gomphonema innocens	1	1	1
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceum			
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Grammatophora cf. macilenta		1	
Gyrosigma balticum?			
Gyrosigma sp.1			
Gyrosigma spencerii		2	
Gyrosigma temperii			
Hanzschia sp. 1 girdle view			
Hanzschia sp. 2 girdle view			
Hanzschia sp. 3			
Hanzschia sp. 4			
Hanzschia virgata	3		
Hippodonta costulata			
Hippodonta coxiae	1	4	2
Hippodonta hungarica			
Hippodonta sp. 1			
Hippodonta sp. 2			
Leptocylindrus ? Cf. danicus	3	1	2
Luticula sp. 1			
Luticula sp. 2			
Luticula sp. 3			
Luticula sp. 4			
Mastagloia smithii			
Mastagloia sp. 1			
Mastagloia sp. 2			

Raw Counts	S2-240	S2-250	S2-260
Melosira sp. 1			7
Melosira varians			
Meridion sp. 1			
Navicula abunda	7	6	
Navicula amphipleuroides			
Navicula angusta			
Navicula antonii			
Navicula brachium			
Navicula cari		1	2
Navicula clematis			
Navicula denta			
Navicula cf. kreigeri			
Navicula cf. patrickii			2
Navicula cf. galloae			
Navicula gregaria			
Navicula haloplila			
Navicula cf. heuflerii			
Navicula lanceolata			2
Navicula cf. ludloviana (CA)			
Navicula marginulata			
Navicula oblonga?	1		
Navicula oculiformis			
Navicula peregrina	4	2	2
Navicula perminuta	1	1	1
Navicula phyllepta			
Navicula reichardtiana?			
Navicula cf. reinardtii			
Navicula salinarum?			
Navicula schweigeri?			
Navicula slevicenis			
Navicula sp. 1			
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 4 (capitoradiata?)			
Navicula sp. 5			
Navicula sp. 6			
Navicula sp. 7			6
Navicula sp. 8			
Navicula sp. 9			
Navicula sp. 10			

Raw Counts	S2-240	S2-250	S2-260
Navicula subinflata			
Navicula subminiscula			
Navicula tripunctata?			4
Navicula vilaplanii			
Navicula zostereti ?			
Naviculoid diatom 1?			
Naviculoid diatom 2			
Neodephaneis pelagica			
Niedopsis sp. 1			
Nitzschia cf. agnita	2	1	
Nitzschia amphibia			
Nitzschia cf. biremis			
Nitzschia bita			
Nitzschia cf. borealis		1	
Nitzschia brevissima	7	4	11
Nitzschia claussi	15	2	4
Nitzschia columbiana	1		2
Nitzschia communata			
Nitzschia communis	2		
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis			
Nitzschia desertium			
Nitzschia dissipata		1	
Nitzschia filiformis			
Nitzschia fonticula			
Nitzschia frustulum			
Nitzschia gracilis			
Nitzschia cf. groefii			
Nitzschia incognita	1	2	
Nitzschia inconspicua			
Nitzschia levidensis	7	1	2
Nitzschia laevis?			
Nitzschia linearis	1		1
Nitzschia macilenta?		1	
Nitzschia marginulatus			
Nitzschia microcephala			
Nitzschia nana	2	2	
Nitzschia obtusa			
Nitzschia palea	6	4	

Raw Counts	S2-240	S2-250	S2-260
Nitzschia panduriformis			2
Nitzschia pellucida			
Nitzschia perminuta			
Nitzschia proxima		1	
Nitzschia punctata			
Nitzschia pusilla			2
Nitzschia scalaris	4	2	3
Nitzschia sigma		1	7
Nitzschia sigmaformis	1		
Nitzschia sp. 1	4	6	2
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4	2	5	1
Nitzschia sp. 5			
Nitzschia umbonata			
Opephera martyi	1		
Opephera sp. A			
Orthosira sp. 1			
Paralia sulcata	131	138	119
Parlibellis plicatus ?			
Pinnularia borealis			
Pinnularia divergens	2	5	1
Pinnularia divertissima		1	
Pinnularia ignobilis			
Pinnularia interupta			
Pinularia marchica	4		7
Pinnularia microstauron	8	2	3
Pinularia sp.1			1
Pinularia sp.2			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			
Pinnularia sp. 8			
Pinnularia sp. 9			
Pinnularia sp. 10			
Pinnularia viridis	5	1	2
Placoneis gastrum?	5		
Placoneis paralegali			

Raw Counts	S2-240	S2-250	S2-260
Placoneis sp. 1			
Placoneis sp. 2			
Plagiogramma cf. minima			
Planothidium bipoomum			
Planothidium frequentissimum			
Planothidium lanceolata			
Planothidium minutissimum			
Planothidium paragali			
Planothidium sp. 1			
Planothidium sp. 2			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Unknown Centric			2
Psammothium? Sp. 1			
Pseudostauroneis parasitica			
Pseudostauropsis sp. 1 (GV)			
Pseudostaurosira americana		3	2
Pseudostaurosiropsis sp. 1			4
Punctastriata mimetica			
Raphoneis amphiceros	46	56	43
Raphoneis ? Tenuis	4	3	
Rexlowia sp. 1			
Rhoicosphenia cr. marina			
Rhoicosphenia sp. 1			
Rhopolodia acuminatum	9	7	9
Rhopolodia gibba	2		
Rhopolodia musculus	13	3	7
Sellophora bacillum			2
Sellaphora hohnii?			
Sellophora laevissima			
Sellophora pulchara			
Sellophora pupulla	2	2	
Sellophora rexii			
Sellophora sp. 1 (Navicula subinflata?)	1		1
Sellophora sp. 2			
Skelotonemia sp. 1			
Stauroforma exiguaformis			
Stauroneis agrestis			
Stauroneis arcuborealis			
Stauroneis CA	1		

Raw Counts	S2-240	S2-250	S2-260
Stauroneis GV			
Stauroneis kreigeri			
Stauroneis vandevijeri?			
Stauroneis sp. 1			
Stauroneis sp. 2	2		
Stauroneis sp. 3			
Staurophora soodensis?			
Staurosira construens			
Staurosirella leptosauron var. dubia			1
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angustus			
Surirella brebissonii	1		
Surirella iowensis?			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida			
Synedra famelica			
Synedra fulgens?			
Synedra ulna var. biceps			
Synedra ulna var. ramesi			
Tabularia fasciculata			
Tabularia ktenoeoides			
Thalassionema nitzschiodes	13	25	16
Thalassiosira baltica			
Thalassiosira cf. tenera			
Thalassiosira cf. lineata	5	5	6
Thalassiosira decipiens	3	4	2
Thalassiosira eccentrica	5	3	9
Thalassiosira ferelineata		1	1
Thalassiosira oestruppa			
Thalassiosira proschkinae	1	4	1
Thalassiosira sp. 2-1 Cooper	3	4	5
Thalassiosira sp. 10 Cooper	1	1	3
Trachyneis aspera var. vulgaris			
Tybionella debilis	2	2	3
Tryblionella sp. 1			
ulnaria acus			
Ulnaria ulna	1		2

Raw Counts	S2-240	S2-250	S2-260
unknown araphid			
Unknown biraphid			1
Unknown CA			
Uknown GV?			
Undulate colony??			

Percent Abundance	S1-0	S1-10	S1-20	S1-30
Achnanthes coarctaca	0	0	0	0
Achnanthes denticula	0	0	0	0
Achnanthes islandica	0.003883	0	0.011952	0.011976
Achnanthidium gracillimum	0	0	0.003984	0.00998
Actinocyclus normanii	0.040777	0.061265	0.013944	0
Actinocyclus octonarius var. crassus ?	0.007767	0.003953	0.005976	0.003992
Actinoptychus senarius	0	0.007905	0.003984	0.001996
Amphora copulata	0	0	0	0
Amphora granulata	0	0	0	0
Amphora sp. 1 (girdle view)	0	0	0	0
Amphora sp. 2	0	0	0	0
Anaulus cf. balticus	0.007767	0.003953	0	0
Aneumastus pseudotusculus	0	0	0	0.011976
Aneumastus sp. 1	0	0	0	0
Anomoeoneis sp. 1	0	0	0	0
Anorthoneis tenuis	0	0	0	0
Asterionella formosa	0	0	0	0
Asterionella sp. 1	0	0	0	0
Asymmetrical CA	0	0.001976	0	0
Aulacoseira ambigua	0.019417	0.021739	0.037849	0.041916
Aulacoseira granulata	0	0	0.007968	0
Aulacoseira granulata var. angustissima	0	0	0	0
Aulacoseira sp. 1	0	0	0	0
Aulacoseira sp. 2	0	0	0	0
Aulacoseira tenella	0	0	0	0
Aulacosira pusilla	0	0	0	0
Bacillaria socialis	0.009709	0.011858	0.025896	0.011976
Biremis circumtexta	0	0	0	0
Biremis? sp. 1	0	0	0	0
Caloneis aemula	0	0	0	0
Caloneis bacillum	0.007767	0.009881	0.015936	0.005988
Caloneis cf. lineatus	0	0	0	0
Caloneis cf. ventricosa	0	0	0	0
Caloneis lewisii	0	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0	0
Caloneis sp. 2	0	0	0	0
Caloneis sp. 3	0	0	0	0
Caloneis sp. 4	0	0	0	0
Campylodiscus sp. 1	0	0	0	0
Cavinula scutelloides	0	0	0	0

Percent Abundance	S1-0	S1-10	S1-20	S1-30
Cavinula sp. 1	0	0	0	0
Cocconeis cf. peltoides	0	0	0	0
Cocconeis costata var. costata	0	0	0	0
Cocconeis diminuta	0	0	0	0
Cocconeis disculoides	0	0	0	0
Cocconeis elongatum	0	0	0	0
Cocconeis placentula	0.007767	0.001976	0.003984	0.007984
Cocconeis scutellum	0	0	0	0
Coscinodiscus cf. lineatus	0.007767	0.009881	0.005976	0.00998
Coscinodiscus marginatus	0.001942	0.001976	0.005976	0.017964
Cosmoneis pusilla	0	0	0	0
Cosmoneis sp. 1	0	0	0	0
Craticula cuspidata	0	0	0	0
Cyclostephanos sp. 1	0.003883	0	0	0.003992
Cyclostephanos sp. 2	0	0	0	0
Cyclotella atomus?	0.186408	0.118577	0.055777	0.01996
Cyclotella caspia	0.009709	0.003953	0	0
Cyclotella cyclopuncta	0	0	0	0
Cyclotella distinguenda	0	0	0	0
Cyclotella meneghiniana	0.04466	0.079051	0.057769	0.033932
Cyclotella rossii	0	0	0	0.001996
Cyclotella sp. 2	0	0	0	0
Cyclotella striata	0.067961	0.057312	0.123506	0.027944
Cyclotella stylorum	0	0	0	0
Cymatopleura solea	0	0	0.003984	0
Cymatosira belgica	0.005825	0.007905	0.00996	0.003992
Cymbella affinis	0	0.009881	0	0
Cymbella cf. excisiformis	0.001942	0.005929	0	0
Cymbella janischii	0	0	0	0
Cymbella mexicana	0	0	0	0
Cymbella minuta	0	0	0	0
Cymbella sp. 2	0	0	0	0
Cymbopleura A	0	0	0	0
Decussata placenta	0	0	0	0
Delphineis minutissima	0.001942	0.005929	0	0
Delphineis surirella	0	0	0	0
Denticula kuetzengii	0.019417	0.011858	0.003984	0
Diadesmis cf. contenta	0	0	0	0
Diadesmis gallica	0	0	0	0
Diatoma mesodon	0	0	0	0

Percent Abundance	S1-0	S1-10	S1-20	S1-30
Diatoma moniliformis	0	0	0	0
Diatoma vulgaris	0.003883	0	0	0
Diatomella balfouriana	0	0	0	0
Dimeregramma minor	0	0	0	0
Diploneis boldtiana	0	0	0	0
Diploneis cf. bombus	0	0	0	0
Diploneis cf. didyma	0	0	0	0
Diploneis elliptica	0	0	0	0
Diploneis pseudovalis	0	0	0	0
Diploneis smithii	0	0	0	0
Diploneis sp. 1	0	0	0	0
Diploneis sp. 2	0	0	0	0
Diploneis interrupta	0	0	0	0
Encyonema nicafei	0.001942	0.005929	0.007968	0.01996
Encyonema sp. 1	0.001942	0	0	0
Encyonema sp. 2	0	0	0	0
Encyonema sp. 3	0	0	0	0
Encyonema triangulum	0	0	0	0
Encyonopsis microcephala	0	0	0	0
Epithemia adnata	0	0	0	0
Epithemia frickei	0	0	0	0
Epithemia smithii	0	0	0	0
Epithemia sorex	0	0	0.001992	0
Epithemia turgida	0.001942	0.001976	0.001992	0
Eunotia richbuttensis	0	0	0	0
Eunotia sp. 1	0	0	0	0.003992
Eunotia sp. 2	0	0	0	0.001996
Eunotia sp. 3 (GV)	0	0.003953	0.011952	0.003992
Fallacia pygmia	0.005825	0.009881	0.003984	0.043912
Fragilaria brevistriata	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria cf. microstriata	0	0	0	0
Fragilaria elliptica	0.001942	0.001976	0	0.001996
Fragilaria schulzii	0	0	0	0
Fragilaria tenera	0	0	0	0
Fragilaria vaucheriae	0.03301	0.013834	0.007968	0.033932
Frickea lewisiana	0	0	0	0
Frustulia amphipleuroides	0	0	0	0
Frustulia rhomboides var. viridula	0	0	0	0.003992
Frustulia sp. 1	0	0	0	0

Percent Abundance	S1-0	S1-10	S1-20	S1-30
Frustulia vulgaris	0.003883	0	0	0
Geissleria decussis	0.003883	0	0.003984	0.007984
Geissleria kreigeri	0.009709	0.003953	0.017928	0.00998
Gomphoneis hurculeana	0	0	0	0
Gomphoneis sp. 1	0	0.001976	0.005976	0
Gomphoneis sp. 3	0	0.003953	0	0
Gomphonema acuminatum	0	0	0	0
Gomphonema innocens	0	0.003953	0	0
Gomphonema kobayasii	0	0	0.005976	0
Gomphonema mammilla	0	0	0	0
Gomphonema olivaceum	0	0	0.00996	0.005988
Gomphonema sp. 1	0	0	0	0.003992
Gomphonema sp. 2	0	0	0	0
Gomphonema sp. 3	0	0	0	0
Gomphonopsis exiguum	0	0	0	0
Grammatophora cf. macilenta	0	0	0	0
Gyrosigma temperii	0	0	0	0
Gyrosigma cf. balticum	0	0	0	0
Gyrosigma sp.1	0.001942	0	0	0
Gyrosigma spencerii	0.003883	0.003953	0	0.011976
Hantzschia sp. 1 girdle view	0	0	0	0
Hantzschia sp. 2 girdle view	0	0	0	0
Hantzschia sp. 3	0	0	0	0
Hantzschia sp. 4	0	0	0	0
Hantzschia virgata	0	0	0.005976	0.001996
Hippodonta costulata	0.001942	0.001976	0	0
Hippodonta coxiae	0.005825	0.001976	0.003984	0.001996
Hippodonta hungarica	0	0	0	0
Hippodonta sp. 1	0	0	0	0
Hippodonta sp. 2	0	0	0	0
Karayevia amoena	0	0	0.003984	0.005988
Leptocylindrus ? Cf. danicus	0	0	0	0
Luticola sp. 1	0.001942	0.001976	0	0
Luticola sp. 2	0	0	0	0
Luticola sp. 3	0	0	0	0
Luticola sp. 4	0	0	0	0
Mastogloia smithii	0	0	0	0
Mastogloia sp. 1	0	0	0	0
Mastogloia sp. 2	0	0	0	0
Melosira sp. 1	0	0	0	0

Percent Abundance	S1-0	S1-10	S1-20	S1-30
Melosira varians	0	0	0	0
Meridion sp. 1	0	0	0	0
Navicula abunda	0.013592	0.013834	0.005976	0.001996
Navicula angusta	0	0	0	0
Navicula antonii	0.001942	0.013834	0	0.003992
Navicula brachium	0	0	0	0
Navicula cari	0.029126	0.013834	0.011952	0
Navicula cf. capitoradiata	0.003883	0.001976	0.005976	0.035928
Navicula cf. galloae	0	0	0	0
Navicula cf. heuflerii	0.013592	0.007905	0	0
Navicula cf. ludloviana (CA)	0	0	0	0
Navicula cf. oblonga	0	0.005929	0	0.001996
Navicula cf. patrickii	0.003883	0.001976	0.001992	0
Navicula cf. reichardtiana	0	0	0	0
Navicula cf. reinhardtii	0	0	0	0
Navicula cf. salinarum	0	0.003953	0.005976	0
Navicula cf. schweigeri	0.003883	0.009881	0.005976	0.013972
Navicula cf. subinflata	0.017476	0.011858	0.043825	0.021956
Navicula cf. tripunctata	0.019417	0.011858	0.013944	0.00998
Navicula cf. zostereti	0.021359	0.025692	0	0
Navicula clementis	0	0.001976	0	0
Navicula denta	0	0	0	0.007984
Navicula gregaria	0.005825	0.009881	0	0
Navicula halophila	0.009709	0.011858	0.011952	0.007984
Navicula lanceolata	0.025243	0.005929	0.017928	0.007984
Navicula marginulata	0	0	0	0
Navicula oculiformis	0	0	0	0
Navicula peregrina	0.009709	0.001976	0.00996	0.003992
Navicula perminuta	0.019417	0.017787	0.01992	0.00998
Navicula phyllepta	0	0	0	0
Navicula slesvicensis	0	0	0	0
Navicula sp. 1	0.001942	0	0	0
Navicula sp. 10	0	0.001976	0	0.007984
Navicula sp. 2	0	0	0	0
Navicula sp. 3	0	0	0	0.001996
Navicula sp. 5	0	0.001976	0	0.003992
Navicula sp. 6	0	0	0	0
Navicula sp. 7	0	0	0	0
Navicula sp. 8	0	0	0	0.007984
Navicula sp. 9	0	0	0	0.007984

Percent Abundance	S1-0	S1-10	S1-20	S1-30
Navicula subinflata	0	0	0	0
Navicula subminiscula	0.009709	0.003953	0.013944	0.025948
Navicula vilaplanii	0	0.001976	0.011952	0.005988
Naviculoid diatom 1	0	0	0	0
Naviculoid diatom 2	0	0	0	0
Neidiopsis sp. 1	0	0	0	0
Neodephaneis pelagica	0	0	0	0
Nitzschia amphibia	0.015534	0.003953	0.003984	0.003992
Nitzschia bita	0	0	0	0
Nitzschia brevissima	0.102913	0.08498	0.041833	0.021956
Nitzschia cf. agnita	0.007767	0.023715	0.011952	0
Nitzschia cf. biremis	0	0	0	0
Nitzschia cf. borealis	0	0	0	0
Nitzschia cf. groefii	0.003883	0	0.003984	0.003992
Nitzschia cf. laevis	0	0	0	0
Nitzschia cf. macilenta	0	0	0	0.001996
Nitzschia clausii	0	0.005929	0.003984	0
Nitzschia columbiana	0.001942	0.001976	0	0
Nitzschia communis	0.001942	0.001976	0	0
Nitzschia commutata	0	0	0	0
Nitzschia constricta	0	0	0	0
Nitzschia cylindrus	0	0	0	0
Nitzschia debilis	0.005825	0	0	0
Nitzschia desertorum	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia filiformis	0.001942	0	0.003984	0.007984
Nitzschia fonticola	0	0	0	0
Nitzschia frustulum	0	0.003953	0	0
Nitzschia gracilis	0	0	0	0
Nitzschia incognita	0	0	0	0
Nitzschia inconspicua	0.01165	0.003953	0.00996	0.001996
Nitzschia levidensis	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia marginulatus	0	0	0	0
Nitzschia microcephala	0	0	0	0
Nitzschia nana	0	0.003953	0.001992	0.003992
Nitzschia obtusa	0	0	0	0
Nitzschia palea	0.001942	0.005929	0.003984	0.015968
Nitzschia panduriformis	0	0	0.003984	0.003992
Nitzschia pellucida	0	0	0	0

Percent Abundance	S1-0	S1-10	S1-20	S1-30
Nitzschia perminuta	0	0	0.003984	0
Nitzschia proxima	0.003883	0	0.015936	0.003992
Nitzschia punctata	0	0.001976	0	0
Nitzschia pusilla	0.003883	0.009881	0.027888	0.013972
Nitzschia scalaris	0	0.001976	0	0
Nitzschia sigma	0	0.009881	0.003984	0.02994
Nitzschia sigmaformis	0.003883	0	0	0
Nitzschia sp. 1	0	0	0	0
Nitzschia sp. 2	0	0	0	0
Nitzschia sp. 3	0	0	0	0
Nitzschia sp. 4	0	0	0	0.001996
Nitzschia sp. 5	0	0	0	0
Nitzschia umbonata	0	0	0	0
Opephora martyi	0	0	0	0.003992
Opephora sp. A	0	0	0	0
Orthoseira sp. 1	0	0	0	0
Paralia sulcata	0.015534	0.019763	0.033865	0.025948
Parlibellus cf. plicatus	0	0	0	0
Pinnularia borealis	0	0	0	0
Pinnularia divergens	0	0.001976	0	0.001996
Pinnularia divergentissima	0	0	0	0.003992
Pinnularia ignobilis	0	0.009881	0	0.027944
Pinnularia interrupta	0	0	0	0.017964
Pinnularia marchica	0.003883	0.007905	0.001992	0
Pinnularia microstauron	0	0	0	0
Pinnularia sp. 10	0	0.001976	0	0
Pinnularia sp. 3	0	0	0	0
Pinnularia sp. 4	0	0	0	0
Pinnularia sp. 5	0	0	0	0
Pinnularia sp. 6	0	0	0	0
Pinnularia sp. 7	0	0	0	0
Pinnularia sp. 8	0	0	0	0
Pinnularia sp. 9	0	0	0	0
Pinnularia sp.1	0	0	0	0
Pinnularia sp.2	0	0	0	0
Pinnularia viridis	0.001942	0.003953	0.003984	0.015968
Placoneis cf. gastrum	0	0	0	0.001996
Placoneis paralegali	0	0	0	0
Placoneis sp. 1	0	0	0	0
Placoneis sp. 2	0	0	0	0

Percent Abundance	S1-0	S1-10	S1-20	S1-30
Plagiogramma cf. minima	0	0	0	0
Planothidium biporomum	0	0	0	0
Planothidium frequentissimum	0.007767	0.021739	0.011952	0.021956
Planothidium lanceolatum	0.003883	0.011858	0.003984	0.007984
Planothidium minutissimum	0	0	0	0
Planothidium paragali	0	0	0	0
Planothidium sp. 1	0	0	0	0
Planothidium sp. 2	0	0	0	0
Platessa cf. hustedtii	0	0	0	0
Pleurosigma diverse-striatum	0	0	0	0
Psammothidium? Sp. 1	0	0	0.001992	0
Pseudostauroneis parasitica	0.003883	0.001976	0	0.001996
Pseudostaurosira americana	0.003883	0.005929	0	0.005988
Pseudostaurosiropsis sp. 1	0.001942	0.001976	0.00996	0.003992
Pseudostaurosiropsis sp. 1 (GV)	0	0.011858	0	0
Punctastriata mimetica	0	0	0	0
Reimeria sinuata	0.007767	0.003953	0	0
Rexlowea sp. 1	0	0.003953	0	0
Rhaphoneis amphiceros	0.001942	0.007905	0.003984	0.015968
Rhaphoneis tenuis	0	0.001976	0	0.001996
Rhoicosphenia cf. marina	0.003883	0.003953	0	0.003992
Rhoicosphenia sp. 1	0	0	0	0
Rhopalodia acuminatum	0	0	0	0.001996
Rhopolodia gibba	0	0	0	0
Rhopolodia musculus	0	0	0	0
Sellaphora cf. hohnii	0	0	0	0
Sellaphora laevissima	0	0	0	0
Sellaphora pulchra	0	0	0.007968	0
Sellaphora pupula	0	0.003953	0.001992	0
Sellaphora rexii	0	0	0	0.003992
Sellaphora bacillum	0	0	0	0
Skeletonema sp. 1	0	0	0	0
Stauroforma exiguaformis	0	0	0	0
Stauroneis agrestis	0	0	0	0.007984
Stauroneis CA	0	0	0	0
Stauroneis cf. vandevijveri	0	0	0	0
Stauroneis circumborealis	0	0	0	0
Stauroneis GV	0	0	0	0
Stauroneis kriegeri	0	0	0	0
Stauroneis sp. 1	0	0	0	0

Percent Abundance	S1-0	S1-10	S1-20	S1-30
Stauroneis sp. 2	0	0	0	0
Stauroneis sp. 3	0	0	0	0.005988
Staurophora cf. soodensis	0	0	0	0
Staurosira construens	0	0	0	0.001996
Staurosirella leptosauron var. dubia	0	0	0.001992	0.001996
Staurosirella sp. 1	0	0	0	0
Stephanodiscus sp. 1	0	0	0	0
Surirella angusta	0	0	0	0
Surirella brebissonii	0	0	0	0.001996
Surirella cf. iowensis	0	0	0	0
Surirella ovalis	0	0	0	0
Surirella peisonis	0	0	0	0
Surirella sp. 1	0	0	0	0
Surirella splendida	0.001942	0.003953	0.017928	0.041916
Synedra cf. fulgens	0	0	0	0
Synedra famelica	0	0	0	0
Synedra ulna var. biceps	0	0	0	0
Synedra ulna var. ramesi	0	0.001976	0.003984	0
Tabularia fasciculata	0	0	0.001992	0
Tabularia ktenoeoides	0	0	0	0
Thalassionema nitzschioides	0.001942	0.003953	0.013944	0.013972
Thalassiosira baltica	0	0	0	0
Thalassiosira cf. lineata	0	0	0.00996	0.001996
Thalassiosira cf. tenera	0	0	0	0
Thalassiosira decipiens	0	0	0	0.005988
Thalassiosira eccentrica	0	0.001976	0.001992	0.00998
Thalassiosira ferelineata	0	0	0.007968	0
Thalassiosira oestrupii	0	0.003953	0	0
Thalassiosira proschkinae	0	0.001976	0.001992	0
Thalassiosira sp. 10 Cooper	0.001942	0.001976	0	0.005988
Thalassiosira sp. 2-1 Cooper	0	0	0.001992	0.001996
Trachyneis aspera var. vulgaris	0	0	0	0.003992
Triceratium sp. 2	0	0	0	0
Tryblionella sp. 1	0	0	0	0
Tybionella debilis	0.015534	0.007905	0.023904	0.003992
Ulnaria acus	0	0	0	0
Ulnaria ulna	0.005825	0.001976	0.015936	0.023952
Undulate colony?	0	0	0	0
Unknown araphid	0	0	0	0
Unknown biraphid	0	0	0	0

Percent Abundance	S1-0	S1-10	S1-20	S1-30
Unknown CA	0	0	0	0
Unknown GV?	0	0	0	0

Percent Abundance	S1-40	S1-50	S1-60	S1-70
Achnanthes coarctaca	0	0	0	0
Achnanthes denticula	0	0	0	0
Achnanthes islandica	0.005941	0	0.00396	0.001996
Achnanthidium gracillimum	0	0.017964	0	0.001996
Actinocyclus normanii	0.011881	0.007984	0.029703	0.007984
Actinocyclus octonarius var. crassus ?	0.009901	0.005988	0.00396	0.031936
Actinoptychus senarius	0	0.007984	0.007921	0.00998
Amphora copulata	0.011881	0	0	0
Amphora granulata	0	0	0	0
Amphora sp. 1 (girdle view)	0	0	0	0
Amphora sp. 2	0	0	0	0
Anaulus cf. balticus	0	0.007984	0	0
Aneumastus pseudotusculus	0	0	0	0.005988
Aneumastus sp. 1	0.00396	0	0	0
Anomoeoneis sp. 1	0.00198	0	0	0
Anorthoneis tenuis	0	0	0	0
Asterionella formosa	0	0	0	0
Asterionella sp. 1	0	0	0	0
Asymmetrical CA	0	0	0	0
Aulacoseira ambigua	0.035644	0.02994	0.011881	0.003992
Aulacoseira granulata	0.021782	0.011976	0.015842	0
Aulacoseira granulata var. angustissima	0.00396	0	0	0
Aulacoseira sp. 1	0	0	0	0
Aulacoseira sp. 2	0	0	0	0
Aulacoseira tenella	0	0	0	0
Aulacosira pusilla	0	0	0	0
Bacillaria socialis	0.00396	0.003992	0.00396	0.017964
Biremis circumtexta	0	0	0.00396	0
Biremis? sp. 1	0	0	0	0
Caloneis aemula	0	0	0	0.001996
Caloneis bacillum	0.061386	0.003992	0	0.017964
Caloneis cf. lineatus	0	0	0	0
Caloneis cf. ventricosa	0	0.003992	0	0
Caloneis lewisii	0.023762	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0	0
Caloneis sp. 2	0	0	0	0
Caloneis sp. 3	0	0	0	0
Caloneis sp. 4	0	0	0	0
Campylodiscus sp. 1	0	0	0	0
Cavinula scutelloides	0	0	0.00198	0

Percent Abundance	S1-40	S1-50	S1-60	S1-70
Cavinula sp. 1	0	0	0	0
Cocconeis cf. peltoides	0	0	0	0
Cocconeis costata var. costata	0	0	0	0
Cocconeis diminuta	0	0	0	0
Cocconeis disculoides	0	0	0	0
Cocconeis elongatum	0	0	0	0
Cocconeis placentula	0.007921	0	0.009901	0.001996
Cocconeis scutellum	0	0	0	0
Coscinodiscus cf. lineatus	0.00198	0.015968	0.009901	0.013972
Coscinodiscus marginatus	0.013861	0.013972	0.007921	0.03992
Cosmoneis pusilla	0	0	0	0
Cosmoneis sp. 1	0	0	0	0
Craticula cuspidata	0.00396	0	0	0
Cyclostephanos sp. 1	0.00396	0.005988	0.011881	0.013972
Cyclostephanos sp. 2	0	0	0	0
Cyclotella atomus?	0.013861	0.011976	0.009901	0.021956
Cyclotella caspia	0.00198	0	0	0.001996
Cyclotella cyclopuncta	0.009901	0.001996	0	0.001996
Cyclotella distinguenda	0	0	0	0
Cyclotella meneghiniana	0	0.011976	0.009901	0.033932
Cyclotella rossii	0.009901	0.003992	0.007921	0.011976
Cyclotella sp. 2	0	0	0	0
Cyclotella striata	0.029703	0.055888	0.055446	0.087824
Cyclotella stylorum	0	0.00998	0	0
Cymatopleura solea	0	0	0	0
Cymatosira belgica	0.009901	0.01996	0.017822	0.02994
Cymbella affinis	0.00198	0	0	0.005988
Cymbella cf. excisiformis	0	0	0	0
Cymbella janischii	0	0.003992	0	0
Cymbella mexicana	0	0	0	0
Cymbella minuta	0	0	0	0.001996
Cymbella sp. 2	0	0	0	0
Cymbopleura A	0	0	0	0
Decussata placenta	0	0	0	0
Delphineis minutissima	0.007921	0.003992	0.005941	0.001996
Delphineis surirella	0	0.001996	0	0.005988
Denticula kuetzengii	0.00198	0	0	0.003992
Diadesmis cf. contenta	0.007921	0	0	0
Diadesmis gallica	0	0	0	0
Diatoma mesodon	0	0	0	0

Percent Abundance	S1-40	S1-50	S1-60	S1-70
Diatoma moniliformis	0	0	0.00198	0
Diatoma vulgaris	0	0	0	0
Diatomella balfouriana	0	0	0.00198	0
Dimeregramma minor	0	0	0	0
Diploneis boldtiana	0.00198	0	0.00396	0
Diploneis cf. bombus	0	0.003992	0	0
Diploneis cf. didyma	0	0	0	0
Diploneis elliptica	0.005941	0	0	0.003992
Diploneis pseudovalis	0	0	0	0
Diploneis smithii	0.00198	0	0	0.003992
Diploneis sp. 1	0	0	0	0
Diploneis sp. 2	0	0	0	0
Diploneis interrupta	0	0	0	0
Encyonema nicafei	0.025743	0.067864	0.027723	0
Encyonema sp. 1	0	0	0.009901	0
Encyonema sp. 2	0	0.001996	0.00396	0
Encyonema sp. 3	0	0	0	0
Encyonema triangulum	0	0	0.005941	0
Encyonopsis microcephala	0	0	0	0
Epithemia adnata	0	0	0	0
Epithemia frickei	0	0	0	0
Epithemia smithii	0	0	0	0.003992
Epithemia sorex	0	0	0	0
Epithemia turgida	0.00198	0.001996	0.00198	0.011976
Eunotia richbuttensis	0.005941	0	0	0
Eunotia sp. 1	0.005941	0.003992	0	0
Eunotia sp. 2	0	0	0	0
Eunotia sp. 3 (GV)	0	0	0	0
Fallacia pygmia	0.015842	0.017964	0.172277	0
Fragilaria brevistriata	0	0	0.007921	0
Fragilaria capucina	0	0	0	0
Fragilaria cf. microstriata	0	0	0	0
Fragilaria elliptica	0.025743	0.001996	0.00396	0.015968
Fragilaria schulzii	0	0	0	0
Fragilaria tenera	0	0	0	0
Fragilaria vaucheriae	0.009901	0.013972	0.00198	0.003992
Frickea lewisiana	0.015842	0.011976	0	0
Frustulia amphipleuroides	0	0	0	0
Frustulia rhomboides var. viridula	0.00198	0	0	0
Frustulia sp. 1	0	0	0	0

Percent Abundance	S1-40	S1-50	S1-60	S1-70
Frustulia vulgaris	0.011881	0	0	0.003992
Geissleria decussis	0	0	0	0
Geissleria kreigeri	0	0.003992	0.00396	0
Gomphoneis hurculeana	0	0	0	0
Gomphoneis sp. 1	0	0.003992	0.00198	0
Gomphoneis sp. 3	0	0	0	0
Gomphonema acuminatum	0	0.003992	0.019802	0
Gomphonema innocens	0	0.00998	0	0.003992
Gomphonema kobayasii	0.019802	0	0	0
Gomphonema mammilla	0	0	0	0
Gomphonema olivaceum	0	0.005988	0	0
Gomphonema sp. 1	0	0.003992	0	0
Gomphonema sp. 2	0	0	0	0
Gomphonema sp. 3	0	0	0	0
Gomphonopsis exiguum	0	0	0	0
Grammatophora cf. macilenta	0	0	0	0
Gyrosigma temperii	0	0	0	0
Gyrosigma cf. balticum	0	0	0	0
Gyrosigma sp.1	0	0	0	0
Gyrosigma spencerii	0.00198	0.001996	0	0.003992
Hantzschia sp. 1 girdle view	0	0	0	0
Hantzschia sp. 2 girdle view	0	0	0	0
Hantzschia sp. 3	0	0	0	0
Hantzschia sp. 4	0	0	0	0
Hantzschia virgata	0	0.003992	0.00396	0.001996
Hippodonta costulata	0.005941	0	0.00396	0
Hippodonta coxiae	0	0	0.00396	0.001996
Hippodonta hungarica	0.011881	0	0.007921	0.003992
Hippodonta sp. 1	0	0	0	0
Hippodonta sp. 2	0	0	0	0
Karayevia amoena	0.013861	0	0	0
Leptocylindrus ? Cf. danicus	0	0.001996	0	0.005988
Luticola sp. 1	0.00396	0	0	0
Luticola sp. 2	0	0	0	0
Luticola sp. 3	0	0	0	0
Luticola sp. 4	0	0	0	0
Mastogloia smithii	0.007921	0.003992	0	0
Mastogloia sp. 1	0	0	0	0
Mastogloia sp. 2	0	0	0	0
Melosira sp. 1	0	0	0.007921	0

Percent Abundance	S1-40	S1-50	S1-60	S1-70
Melosira varians	0	0	0.00396	0
Meridion sp. 1	0	0	0	0
Navicula abunda	0.011881	0.00998	0.00198	0
Navicula angusta	0	0	0	0
Navicula antonii	0	0.003992	0.005941	0
Navicula brachium	0	0	0	0
Navicula cari	0.007921	0.001996	0.009901	0.003992
Navicula cf. capitoradiata	0.033663	0.03992	0.057426	0.001996
Navicula cf. galloae	0	0	0	0
Navicula cf. heuflerii	0	0.005988	0	0
Navicula cf. ludloviana (CA)	0	0	0	0
Navicula cf. oblonga	0	0.001996	0.007921	0
Navicula cf. patrickii	0	0	0	0
Navicula cf. reichardtiana	0.00396	0	0	0
Navicula cf. reinhardtii	0	0	0	0
Navicula cf. salinarum	0.00396	0.005988	0.029703	0
Navicula cf. schweigeri	0.017822	0.015968	0.005941	0.001996
Navicula cf. subinflata	0.00396	0.01996	0.011881	0.011976
Navicula cf. tripunctata	0.021782	0.00998	0.009901	0.007984
Navicula cf. zostereti	0	0	0	0
Navicula clementis	0	0	0	0
Navicula denta	0	0	0	0
Navicula gregaria	0.00396	0	0	0
Navicula halophila	0.00396	0.003992	0.005941	0.005988
Navicula lanceolata	0.00396	0.001996	0.00396	0
Navicula marginulata	0	0	0	0
Navicula oculiformis	0	0	0	0
Navicula peregrina	0.00396	0.017964	0.023762	0.023952
Navicula perminuta	0.005941	0.015968	0.011881	0.007984
Navicula phyllepta	0.00396	0.005988	0	0
Navicula slesvicensis	0	0	0	0
Navicula sp. 1	0	0	0	0
Navicula sp. 10	0	0	0	0
Navicula sp. 2	0	0	0	0
Navicula sp. 3	0	0	0	0
Navicula sp. 5	0.00198	0	0	0
Navicula sp. 6	0	0	0	0
Navicula sp. 7	0	0	0	0
Navicula sp. 8	0	0	0	0
Navicula sp. 9	0	0	0	0

Percent Abundance	S1-40	S1-50	S1-60	S1-70
Navicula subinflata	0	0	0	0
Navicula subminiscula	0	0	0	0
Navicula vilaplanii	0.019802	0.00998	0.00396	0
Naviculoid diatom 1	0	0	0	0
Naviculoid diatom 2	0	0	0	0
Neidiopsis sp. 1	0	0	0	0
Neodephaneis pelagica	0	0	0	0
Nitzschia amphibia	0	0	0	0
Nitzschia bita	0	0	0	0
Nitzschia brevissima	0.017822	0.047904	0.021782	0.033932
Nitzschia cf. agnita	0.00396	0	0.015842	0.001996
Nitzschia cf. biremis	0	0	0	0
Nitzschia cf. borealis	0	0	0	0
Nitzschia cf. groefii	0	0	0	0
Nitzschia cf. laevis	0.00396	0	0	0
Nitzschia cf. macilenta	0.00198	0.001996	0.00396	0.005988
Nitzschia clausii	0.00396	0	0	0
Nitzschia columbiana	0	0.001996	0.007921	0.003992
Nitzschia communis	0.00396	0	0	0
Nitzschia commutata	0	0	0	0
Nitzschia constricta	0	0	0	0
Nitzschia cylindrus	0	0	0	0
Nitzschia debilis	0	0	0	0
Nitzschia desertorum	0	0.007984	0	0
Nitzschia dissipata	0.00198	0	0	0
Nitzschia filiformis	0	0	0	0
Nitzschia fonticola	0.00396	0	0	0
Nitzschia frustulum	0	0	0.007921	0
Nitzschia gracilis	0	0	0	0
Nitzschia incognita	0	0	0	0
Nitzschia inconspicua	0.00198	0	0	0
Nitzschia levidensis	0	0	0	0
Nitzschia linearis	0.00198	0	0.00396	0
Nitzschia marginulatus	0	0	0	0
Nitzschia microcephala	0	0	0	0
Nitzschia nana	0.00198	0	0	0
Nitzschia obtusa	0	0	0	0
Nitzschia palea	0.00396	0.001996	0.007921	0.001996
Nitzschia panduriformis	0	0	0	0
Nitzschia pellucida	0	0	0	0

Percent Abundance	S1-40	S1-50	S1-60	S1-70
Nitzschia perminuta	0	0.007984	0	0.003992
Nitzschia proxima	0.005941	0.007984	0.00396	0.011976
Nitzschia punctata	0	0.003992	0.00198	0
Nitzschia pusilla	0.005941	0.001996	0	0
Nitzschia scalaris	0	0	0	0
Nitzschia sigma	0.013861	0.023952	0.015842	0
Nitzschia sigmaformis	0	0	0	0
Nitzschia sp. 1	0	0	0	0
Nitzschia sp. 2	0	0	0	0
Nitzschia sp. 3	0	0	0	0
Nitzschia sp. 4	0.005941	0.001996	0.005941	0
Nitzschia sp. 5	0	0	0	0.007984
Nitzschia umbonata	0	0	0	0
Opephora martyi	0	0	0	0
Opephora sp. A	0	0	0	0
Orthoseira sp. 1	0	0	0	0
Paralia sulcata	0.045545	0.061876	0.061386	0.143713
Parlibellus cf. plicatus	0	0.007984	0.00198	0.007984
Pinnularia borealis	0.00198	0.001996	0	0
Pinnularia divergens	0.005941	0.011976	0	0.003992
Pinnularia divergentissima	0.009901	0	0	0
Pinnularia ignobilis	0	0	0	0
Pinnularia interrupta	0.015842	0	0	0
Pinnularia marchica	0.005941	0	0	0.017964
Pinnularia microstauron	0	0	0	0
Pinnularia sp. 10	0	0	0	0
Pinnularia sp. 3	0	0	0	0
Pinnularia sp. 4	0	0	0	0
Pinnularia sp. 5	0	0	0	0
Pinnularia sp. 6	0	0	0	0
Pinnularia sp. 7	0	0.003992	0	0
Pinnularia sp. 8	0	0	0	0
Pinnularia sp. 9	0.009901	0.003992	0	0
Pinnularia sp.1	0	0	0	0
Pinnularia sp.2	0	0	0	0
Pinnularia viridis	0.013861	0	0	0.001996
Placoneis cf. gastrum	0.00396	0.001996	0.00396	0.001996
Placoneis paralegali	0	0	0	0.001996
Placoneis sp. 1	0	0	0	0
Placoneis sp. 2	0	0	0	0

Percent Abundance	S1-40	S1-50	S1-60	S1-70
Plagiogramma cf. minima	0	0	0	0
Planothidium biporomum	0	0	0	0
Planothidium frequentissimum	0.009901	0.003992	0.00396	0.015968
Planothidium lanceolatum	0	0	0	0
Planothidium minutissimum	0	0	0	0
Planothidium paragali	0	0	0	0
Planothidium sp. 1	0	0	0	0
Planothidium sp. 2	0	0	0	0
Platessa cf. hustedtii	0	0	0	0
Pleurosigma diverse-striatum	0	0	0	0
Psammothidium? Sp. 1	0	0	0	0
Pseudostauroneis parasitica	0	0	0	0
Pseudostaurosira americana	0	0.001996	0.00198	0.005988
Pseudostaurosiropsis sp. 1	0.00396	0.005988	0.017822	0.011976
Pseudostaurosiropsis sp. 1 (GV)	0	0	0	0
Punctastriata mimetica	0	0	0	0
Reimeria sinuata	0.00396	0	0	0.001996
Rexlowea sp. 1	0	0	0	0
Rhaphoneis amphiceros	0.015842	0.031936	0.025743	0.091816
Rhaphoneis tenuis	0	0.003992	0.00198	0
Rhoicosphenia cf. marina	0	0	0	0
Rhoicosphenia sp. 1	0	0	0	0
Rhopalodia acuminatum	0	0	0	0.001996
Rhopolodia gibba	0	0	0	0
Rhopolodia musculus	0.00198	0	0	0
Sellaphora cf. hohnii	0	0	0	0.005988
Sellaphora laevissima	0	0	0	0
Sellaphora pulchra	0	0	0	0
Sellaphora pupula	0	0.001996	0.00396	0
Sellaphora rexii	0	0	0	0
Sellaphora bacillum	0	0	0	0
Skeletonema sp. 1	0	0	0	0
Stauroforma exiguaformis	0	0	0	0
Stauroneis agrestis	0	0	0	0
Stauroneis CA	0	0	0	0
Stauroneis cf. vandevijveri	0	0	0	0
Stauroneis circumborealis	0	0	0	0
Stauroneis GV	0	0	0	0
Stauroneis kriegeri	0.013861	0.015968	0	0
Stauroneis sp. 1	0	0	0	0

Percent Abundance	S1-40	S1-50	S1-60	S1-70
Stauroneis sp. 2	0	0	0	0
Stauroneis sp. 3	0	0	0	0
Staurophora cf. soodensis	0	0	0	0
Staurosira construens	0	0	0	0
Staurosirella leptosauron var. dubia	0.00396	0	0.00198	0
Staurosirella sp. 1	0	0	0	0
Stephanodiscus sp. 1	0	0	0	0
Surirella angusta	0	0	0	0
Surirella brebissonii	0	0	0.005941	0.003992
Surirella cf. iowensis	0	0	0	0
Surirella ovalis	0	0	0	0
Surirella peisonis	0	0	0	0
Surirella sp. 1	0	0	0	0
Surirella splendida	0.009901	0.023952	0.005941	0
Synedra cf. fulgens	0	0	0	0
Synedra famelica	0.00198	0	0	0
Synedra ulna var. biceps	0	0	0	0
Synedra ulna var. ramesi	0	0	0	0
Tabularia fasciculata	0	0.001996	0	0
Tabularia ktenoeoides	0	0	0	0
Thalassionema nitzschioides	0.009901	0.005988	0.013861	0.023952
Thalassiosira baltica	0	0	0	0
Thalassiosira cf. lineata	0.009901	0.007984	0.00198	0.015968
Thalassiosira cf. tenera	0.00396	0.001996	0.00198	0.003992
Thalassiosira decipiens	0	0.003992	0.00198	0.007984
Thalassiosira eccentrica	0.007921	0.011976	0.00396	0.011976
Thalassiosira ferelineata	0	0.001996	0	0
Thalassiosira oestrupii	0.00396	0	0.00396	0.003992
Thalassiosira proschkinae	0.00198	0.005988	0	0.001996
Thalassiosira sp. 10 Cooper	0	0	0.00396	0.007984
Thalassiosira sp. 2-1 Cooper	0.005941	0.005988	0.00396	0.005988
Trachyneis aspera var. vulgaris	0	0	0	0
Triceratium sp. 2	0	0.001996	0	0
Tryblionella sp. 1	0	0	0	0.001996
Tybionella debilis	0	0.003992	0.00396	0.001996
Ulnaria acus	0.00396	0.00998	0	0
Ulnaria ulna	0.019802	0.037924	0.005941	0.003992
Undulate colony?	0	0	0	0
Unknown araphid	0	0	0	0
Unknown biraphid	0	0	0	0

Percent Abundance	S1-40	S1-50	S1-60	S1-70
Unknown CA	0	0	0	0
Unknown GV?	0	0	0	0

Percent Abundance	S1-80	S1-90	S1-100	S1-110
Achnanthes coarctaca	0	0	0	0.001972
Achnanthes denticula	0	0	0	0.001972
Achnanthes islandica	0.001938	0.009785	0	0.005917
Achnanthidium gracillimum	0	0.003914	0	0.003945
Actinocyclus normanii	0.011628	0.019569	0.003922	0.005917
Actinocyclus octonarius var. crassus ?	0.017442	0.033268	0.035294	0.013807
Actinoptychus senarius	0.021318	0.011742	0.003922	0.00789
Amphora copulata	0	0	0	0
Amphora granulata	0	0	0	0
Amphora sp. 1 (girdle view)	0	0	0	0
Amphora sp. 2	0	0	0	0
Anaulus cf. balticus	0	0	0	0.005917
Aneumastus pseudotusculus	0	0.003914	0	0
Aneumastus sp. 1	0	0.003914	0	0
Anomoeoneis sp. 1	0	0	0	0
Anorthoneis tenuis	0	0	0	0
Asterionella formosa	0	0	0	0
Asterionella sp. 1	0	0	0	0
Asymmetrical CA	0	0	0	0
Aulacoseira ambigua	0.025194	0.009785	0.039216	0.047337
Aulacoseira granulata	0	0.007828	0	0.019724
Aulacoseira granulata var. angustissima	0	0	0	0
Aulacoseira sp. 1	0	0	0	0
Aulacoseira sp. 2	0	0	0	0
Aulacoseira tenella	0	0	0	0.00789
Aulacosira pusilla	0	0	0	0
Bacillaria socialis	0.003876	0	0.013725	0.001972
Biremis circumtexta	0	0	0	0.003945
Biremis? sp. 1	0	0	0	0
Caloneis aemula	0	0	0	0.001972
Caloneis bacillum	0.003876	0.019569	0	0.00789
Caloneis cf. lineatus	0	0	0	0
Caloneis cf. ventricosa	0	0	0	0
Caloneis lewisii	0.001938	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0	0
Caloneis sp. 2	0	0	0	0
Caloneis sp. 3	0	0	0	0
Caloneis sp. 4	0	0	0	0
Campylodiscus sp. 1	0	0	0	0
Cavinula scutelloides	0	0.005871	0	0

Percent Abundance	S1-80	S1-90	S1-100	S1-110
Cavinula sp. 1	0	0	0	0
Cocconeis cf. peltoides	0	0	0	0
Cocconeis costata var. costata	0	0	0	0
Cocconeis diminuta	0	0	0.001961	0
Cocconeis disculoides	0	0	0	0
Cocconeis elongatum	0	0	0	0
Cocconeis placentula	0	0.001957	0.007843	0.005917
Cocconeis scutellum	0	0	0	0
Coscinodiscus cf. lineatus	0.027132	0.015656	0.013725	0.035503
Coscinodiscus marginatus	0.031008	0.046967	0.052941	0.009862
Cosmoneis pusilla	0.001938	0	0	0.001972
Cosmoneis sp. 1	0	0	0	0
Craticula cuspidata	0	0	0	0
Cyclostephanos sp. 1	0.00969	0.003914	0.013725	0.00789
Cyclostephanos sp. 2	0	0	0	0
Cyclotella atomus?	0.01938	0.019569	0.013725	0.00789
Cyclotella caspia	0	0	0	0
Cyclotella cyclopuncta	0.005814	0.009785	0.009804	0.00789
Cyclotella distinguenda	0.003876	0	0.003922	0
Cyclotella meneghiniana	0.025194	0.029354	0.031373	0.011834
Cyclotella rossii	0.011628	0.005871	0.009804	0.00789
Cyclotella sp. 2	0.001938	0	0	0.001972
Cyclotella striata	0.116279	0.048924	0.090196	0.080868
Cyclotella stylorum	0.00969	0.003914	0.005882	0.005917
Cymatopleura solea	0	0	0	0
Cymatosira belgica	0.01938	0.015656	0.054902	0.021696
Cymbella affinis	0.001938	0	0	0
Cymbella cf. excisiformis	0	0	0	0
Cymbella janischii	0.001938	0	0	0
Cymbella mexicana	0	0	0.001961	0
Cymbella minuta	0	0	0	0
Cymbella sp. 2	0	0	0	0
Cymbopleura A	0	0	0	0
Decussata placenta	0	0	0	0
Delphineis minutissima	0.003876	0.011742	0.017647	0.005917
Delphineis surirella	0	0	0.001961	0.009862
Denticula kuetzengii	0.001938	0	0.019608	0
Diadesmis cf. contenta	0	0	0	0
Diadesmis gallica	0	0	0	0
Diatoma mesodon	0	0	0	0

Percent Abundance	S1-80	S1-90	S1-100	S1-110
Diatoma moniliformis	0	0.001957	0	0.001972
Diatoma vulgaris	0	0	0	0
Diatomella balfouriana	0	0	0	0
Dimeregramma minor	0	0	0	0
Diploneis boldtiana	0.001938	0	0.003922	0.001972
Diploneis cf. bombus	0.001938	0	0	0
Diploneis cf. didyma	0	0	0	0
Diploneis elliptica	0	0.001957	0	0.003945
Diploneis pseudovalis	0.001938	0	0	0
Diploneis smithii	0.00969	0	0	0
Diploneis sp. 1	0	0	0	0
Diploneis sp. 2	0	0	0	0
Diploneis interrupta	0	0	0	0
Encyonema nicafei	0.00969	0.011742	0.003922	0.005917
Encyonema sp. 1	0	0	0	0
Encyonema sp. 2	0	0.005871	0	0
Encyonema sp. 3	0	0	0	0
Encyonema triangulum	0	0	0	0.003945
Encyonopsis microcephala	0	0	0.001961	0
Epithemia adnata	0	0	0.001961	0
Epithemia frickei	0	0	0	0
Epithemia smithii	0	0	0	0
Epithemia sorex	0.003876	0	0.001961	0
Epithemia turgida	0.003876	0.005871	0	0.001972
Eunotia richbuttensis	0	0	0	0
Eunotia sp. 1	0	0.003914	0	0
Eunotia sp. 2	0	0	0	0
Eunotia sp. 3 (GV)	0	0	0	0
Fallacia pygmia	0.003876	0.007828	0	0.011834
Fragilaria brevistriata	0.001938	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria cf. microstriata	0	0	0	0
Fragilaria elliptica	0	0.001957	0.003922	0.003945
Fragilaria schulzii	0	0	0	0
Fragilaria tenera	0	0.001957	0.001961	0
Fragilaria vaucheriae	0	0	0	0.005917
Frickea lewisiana	0	0	0	0
Frustulia amphipleuroides	0	0	0	0
Frustulia rhomboides var. viridula	0	0	0	0
Frustulia sp. 1	0	0	0	0

Percent Abundance	S1-80	S1-90	S1-100	S1-110
Frustulia vulgaris	0.003876	0	0	0.003945
Geissleria decussis	0	0	0	0
Geissleria kreigeri	0	0.001957	0	0.001972
Gomphoneis hurculeana	0	0	0	0
Gomphoneis sp. 1	0	0	0	0
Gomphoneis sp. 3	0	0	0	0
Gomphonema acuminatum	0	0	0	0
Gomphonema innocens	0	0	0	0.013807
Gomphonema kobayasii	0	0	0	0
Gomphonema mammilla	0	0	0	0
Gomphonema olivaceum	0	0	0	0
Gomphonema sp. 1	0	0	0	0.003945
Gomphonema sp. 2	0	0	0	0
Gomphonema sp. 3	0	0	0	0
Gomphonopsis exiguum	0	0	0	0
Grammatophora cf. macilenta	0.001938	0	0.001961	0
Gyrosigma temperii	0	0	0	0
Gyrosigma cf. balticum	0	0	0	0
Gyrosigma sp.1	0	0	0	0.003945
Gyrosigma spencerii	0.001938	0.017613	0.005882	0.005917
Hantzschia sp. 1 girdle view	0	0	0	0
Hantzschia sp. 2 girdle view	0	0	0	0
Hantzschia sp. 3	0	0	0	0
Hantzschia sp. 4	0	0	0.007843	0
Hantzschia virgata	0.015504	0.007828	0.011765	0
Hippodonta costulata	0.001938	0.013699	0.013725	0.025641
Hippodonta coxiae	0	0	0	0.003945
Hippodonta hungarica	0	0	0	0
Hippodonta sp. 1	0	0	0	0
Hippodonta sp. 2	0	0	0	0
Karayevia amoena	0.001938	0	0	0
Leptocylindrus ? Cf. danicus	0	0.001957	0	0.001972
Luticola sp. 1	0	0	0	0
Luticola sp. 2	0	0	0	0
Luticola sp. 3	0.025194	0	0	0
Luticola sp. 4	0	0	0	0
Mastogloia smithii	0	0.003914	0.001961	0
Mastogloia sp. 1	0	0	0	0
Mastogloia sp. 2	0	0	0	0
Melosira sp. 1	0	0	0.007843	0

Percent Abundance	S1-80	S1-90	S1-100	S1-110
Melosira varians	0	0	0	0
Meridion sp. 1	0	0	0	0
Navicula abunda	0.011628	0.009785	0.011765	0.001972
Navicula angusta	0	0	0	0
Navicula antonii	0.005814	0	0	0
Navicula brachium	0	0	0	0
Navicula cari	0.003876	0.017613	0.001961	0.001972
Navicula cf. capitoradiata	0	0	0.009804	0.011834
Navicula cf. galloae	0	0	0	0
Navicula cf. heuflerii	0	0	0	0
Navicula cf. ludloviana (CA)	0	0	0	0
Navicula cf. oblonga	0	0	0	0
Navicula cf. patrickii	0.003876	0.001957	0	0.005917
Navicula cf. reichardtiana	0	0	0	0
Navicula cf. reinhardtii	0.007752	0	0.003922	0.013807
Navicula cf. salinarum	0	0	0.003922	0.011834
Navicula cf. schweigeri	0	0.003914	0	0
Navicula cf. subinflata	0.003876	0	0.001961	0.00789
Navicula cf. tripunctata	0.013566	0.015656	0.013725	0.001972
Navicula cf. zostereti	0.005814	0.011742	0.007843	0.00789
Navicula clementis	0	0	0	0
Navicula denta	0	0	0	0
Navicula gregaria	0.001938	0.003914	0	0.003945
Navicula halophila	0	0.003914	0.003922	0.001972
Navicula lanceolata	0.005814	0	0	0
Navicula marginulata	0	0	0	0
Navicula oculiformis	0	0	0	0
Navicula peregrina	0.00969	0.033268	0.003922	0.035503
Navicula perminuta	0.001938	0.009785	0.001961	0.005917
Navicula phyllepta	0.005814	0	0	0
Navicula slesvicensis	0	0	0	0
Navicula sp. 1	0	0	0	0
Navicula sp. 10	0	0	0	0
Navicula sp. 2	0	0	0	0
Navicula sp. 3	0	0	0	0
Navicula sp. 5	0	0	0	0
Navicula sp. 6	0	0	0	0
Navicula sp. 7	0	0	0	0
Navicula sp. 8	0	0	0	0
Navicula sp. 9	0	0	0	0

Percent Abundance	S1-80	S1-90	S1-100	S1-110
Navicula subinflata	0	0	0	0
Navicula subminiscula	0	0	0.001961	0
Navicula vilaplanii	0	0	0	0
Naviculoid diatom 1	0	0	0	0
Naviculoid diatom 2	0	0	0	0
Neidiopsis sp. 1	0	0	0	0
Neodephaneis pelagica	0	0	0	0
Nitzschia amphibia	0.003876	0	0.007843	0.003945
Nitzschia bita	0	0	0	0
Nitzschia brevissima	0.017442	0.054795	0.041176	0.047337
Nitzschia cf. agnita	0	0.003914	0	0.001972
Nitzschia cf. biremis	0	0	0.003922	0
Nitzschia cf. borealis	0	0	0	0
Nitzschia cf. groefii	0	0	0	0
Nitzschia cf. laevis	0	0	0	0
Nitzschia cf. macilenta	0.001938	0.005871	0.009804	0.005917
Nitzschia clausii	0.003876	0.001957	0.001961	0
Nitzschia columbiana	0.001938	0.019569	0.005882	0.005917
Nitzschia communis	0	0	0	0
Nitzschia commutata	0	0	0	0
Nitzschia constricta	0	0	0	0
Nitzschia cylindrus	0	0	0	0
Nitzschia debilis	0	0	0	0
Nitzschia desertorum	0	0	0	0
Nitzschia dissipata	0	0.005871	0.001961	0
Nitzschia filiformis	0.003876	0	0	0.011834
Nitzschia fonticola	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia gracilis	0	0.001957	0	0
Nitzschia incognita	0	0.001957	0	0
Nitzschia inconspicua	0	0	0	0
Nitzschia levidensis	0.001938	0.005871	0.001961	0.003945
Nitzschia linearis	0	0.005871	0	0
Nitzschia marginulatus	0	0	0	0
Nitzschia microcephala	0	0.001957	0	0
Nitzschia nana	0	0	0	0.001972
Nitzschia obtusa	0	0	0	0
Nitzschia palea	0.003876	0.013699	0	0.013807
Nitzschia panduriformis	0.001938	0.001957	0	0.001972
Nitzschia pellucida	0	0	0	0

Percent Abundance	S1-80	S1-90	S1-100	S1-110
Nitzschia perminuta	0	0	0	0
Nitzschia proxima	0	0.015656	0.003922	0.005917
Nitzschia punctata	0.003876	0	0.013725	0.001972
Nitzschia pusilla	0	0	0	0
Nitzschia scalaris	0	0	0	0.005917
Nitzschia sigma	0	0.007828	0.005882	0.001972
Nitzschia sigmaformis	0	0	0.001961	0
Nitzschia sp. 1	0.003876	0	0	0
Nitzschia sp. 2	0	0	0	0
Nitzschia sp. 3	0	0	0	0
Nitzschia sp. 4	0.007752	0.003914	0.007843	0.005917
Nitzschia sp. 5	0	0	0	0
Nitzschia umbonata	0	0	0	0
Opephora martyi	0.007752	0	0	0
Opephora sp. A	0	0	0	0
Orthoseira sp. 1	0	0	0	0
Paralia sulcata	0.145349	0.058708	0.080392	0.065089
Parlibellus cf. plicatus	0.007752	0.005871	0	0.001972
Pinnularia borealis	0	0	0	0
Pinnularia divergens	0.005814	0	0.003922	0.001972
Pinnularia divergentissima	0.003876	0	0	0
Pinnularia ignobilis	0	0	0	0
Pinnularia interrupta	0	0	0	0
Pinnularia marchica	0.027132	0.003914	0.003922	0.005917
Pinnularia microstauron	0	0	0	0.003945
Pinnularia sp. 10	0	0	0	0
Pinnularia sp. 3	0	0	0	0
Pinnularia sp. 4	0	0	0	0
Pinnularia sp. 5	0	0	0	0
Pinnularia sp. 6	0	0	0	0
Pinnularia sp. 7	0.003876	0	0	0
Pinnularia sp. 8	0	0	0	0
Pinnularia sp. 9	0	0	0	0
Pinnularia sp.1	0	0	0	0
Pinnularia sp.2	0	0	0	0
Pinnularia viridis	0	0.007828	0.001961	0.001972
Placoneis cf. gastrum	0	0.001957	0	0.003945
Placoneis paralegali	0	0	0	0
Placoneis sp. 1	0	0	0	0
Placoneis sp. 2	0	0	0	0

Percent Abundance	S1-80	S1-90	S1-100	S1-110
Plagiogramma cf. minima	0	0	0	0
Planothidium biporomum	0	0	0	0
Planothidium frequentissimum	0.007752	0.009785	0.007843	0.021696
Planothidium lanceolatum	0	0	0	0
Planothidium minutissimum	0	0	0	0
Planothidium paragali	0	0	0	0
Planothidium sp. 1	0	0	0	0
Planothidium sp. 2	0	0	0	0
Platessa cf. hustedtii	0	0	0	0
Pleurosigma diverse-striatum	0	0	0	0
Psammothidium? Sp. 1	0	0	0	0
Pseudostauroneis parasitica	0	0	0	0
Pseudostaurosira americana	0.001938	0	0	0
Pseudostaurosiropsis sp. 1	0.011628	0.02544	0.02549	0.009862
Pseudostaurosiropsis sp. 1 (GV)	0	0	0	0
Punctastriata mimetica	0	0	0	0
Reimeria sinuata	0	0	0.003922	0
Rexlowea sp. 1	0	0	0	0
Rhaphoneis amphiceros	0.03876	0.035225	0.039216	0.035503
Rhaphoneis tenuis	0.001938	0.005871	0.003922	0.001972
Rhoicosphenia cf. marina	0	0	0	0.003945
Rhoicosphenia sp. 1	0	0	0	0
Rhopalodia acuminatum	0	0	0.001961	0.001972
Rhopolodia gibba	0	0	0	0.003945
Rhopolodia musculus	0.001938	0	0.001961	0
Sellaphora cf. hohnii	0	0	0.003922	0
Sellaphora laevissima	0	0	0	0
Sellaphora pulchra	0	0	0	0
Sellaphora pupula	0	0	0	0
Sellaphora rexii	0.001938	0	0	0.001972
Sellaphora bacillum	0	0	0.001961	0
Skeletonema sp. 1	0	0	0.003922	0
Stauroforma exiguaformis	0	0	0	0
Stauroneis agrestis	0	0	0	0
Stauroneis CA	0	0	0	0
Stauroneis cf. vandevijveri	0	0	0	0
Stauroneis circumborealis	0	0	0	0
Stauroneis GV	0	0	0	0
Stauroneis kriegeri	0	0	0	0
Stauroneis sp. 1	0	0	0	0

Percent Abundance	S1-80	S1-90	S1-100	S1-110
Stauroneis sp. 2	0	0	0	0
Stauroneis sp. 3	0	0	0	0
Staurophora cf. soodensis	0	0	0	0
Staurosira construens	0.001938	0	0	0
Staurosirella leptosauron var. dubia	0.001938	0	0	0
Staurosirella sp. 1	0	0	0	0
Stephanodiscus sp. 1	0	0	0	0
Surirella angusta	0	0	0	0
Surirella brebissonii	0	0.007828	0.003922	0.021696
Surirella cf. iowensis	0	0	0	0
Surirella ovalis	0	0	0	0
Surirella peisonis	0	0	0	0
Surirella sp. 1	0	0	0	0
Surirella splendida	0	0.009785	0.001961	0
Synedra cf. fulgens	0	0	0	0
Synedra famelica	0	0	0	0
Synedra ulna var. biceps	0	0	0	0
Synedra ulna var. ramesi	0	0	0	0
Tabularia fasciculata	0	0	0	0
Tabularia ktenoeoides	0	0	0	0
Thalassionema nitzschioides	0.021318	0.019569	0.013725	0.019724
Thalassiosira baltica	0	0	0	0
Thalassiosira cf. lineata	0.02907	0.033268	0.019608	0.005917
Thalassiosira cf. tenera	0.005814	0.001957	0	0.017751
Thalassiosira decipiens	0.011628	0.007828	0.007843	0.003945
Thalassiosira eccentrica	0.025194	0.02544	0.02549	0.013807
Thalassiosira ferelineata	0.011628	0	0.001961	0
Thalassiosira oestrupii	0	0.001957	0	0.005917
Thalassiosira proschkinae	0	0.009785	0.017647	0.015779
Thalassiosira sp. 10 Cooper	0	0	0	0.003945
Thalassiosira sp. 2-1 Cooper	0.001938	0.009785	0.011765	0.009862
Trachyneis aspera var. vulgaris	0	0.001957	0	0
Triceratium sp. 2	0	0	0.001961	0.003945
Tryblionella sp. 1	0	0	0	0
Tybionella debilis	0	0.007828	0.003922	0
Ulnaria acus	0	0	0	0
Ulnaria ulna	0.013566	0.011742	0.013725	0.011834
Undulate colony?	0	0	0	0
Unknown araphid	0	0	0	0
Unknown biraphid	0	0	0	0

Percent Abundance	S1-80	S1-90	S1-100	S1-110
Unknown CA	0	0	0	0
Unknown GV?	0	0	0	0

Percent Abundance	S1-120	S1-130	S1-140	S1-150
Achnanthes coarctaca	0	0	0	0
Achnanthes denticula	0	0	0	0.001919
Achnanthes islandica	0.003899	0.001984	0.003968	0.019194
Achnanthidium gracillimum	0	0	0	0
Actinocyclus normanii	0.007797	0.003968	0.001984	0
Actinocyclus octonarius var. crassus ?	0.021442	0.037698	0.013889	0.036468
Actinoptychus senarius	0.02729	0.013889	0.011905	0.011516
Amphora copulata	0	0	0	0
Amphora granulata	0	0	0	0
Amphora sp. 1 (girdle view)	0	0	0	0
Amphora sp. 2	0	0	0	0
Anaulus cf. balticus	0	0.003968	0	0.007678
Aneumastus pseudotusculus	0	0	0	0
Aneumastus sp. 1	0	0	0	0
Anomoeoneis sp. 1	0	0.003968	0	0
Anorthoneis tenuis	0	0	0	0
Asterionella formosa	0	0	0	0
Asterionella sp. 1	0	0	0	0
Asymmetrical CA	0	0	0	0
Aulacoseira ambigua	0.025341	0.029762	0.043651	0
Aulacoseira granulata	0	0.007937	0	0.011516
Aulacoseira granulata var. angustissima	0	0	0	0
Aulacoseira sp. 1	0	0	0	0
Aulacoseira sp. 2	0	0	0	0
Aulacoseira tenella	0	0.011905	0.017857	0
Aulacosira pusilla	0	0	0	0
Bacillaria socialis	0	0.005952	0.001984	0.007678
Biremis circumtexta	0.007797	0.003968	0.011905	0.005758
Biremis? sp. 1	0	0	0	0
Caloneis aemula	0	0.001984	0	0
Caloneis bacillum	0.001949	0.003968	0.007937	0
Caloneis cf. lineatus	0	0	0	0
Caloneis cf. ventricosa	0	0	0	0
Caloneis lewisii	0	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0	0
Caloneis sp. 2	0	0	0	0
Caloneis sp. 3	0	0	0	0
Caloneis sp. 4	0	0	0	0
Campylodiscus sp. 1	0	0	0	0
Cavinula scutelloides	0	0	0	0

Percent Abundance	S1-120	S1-130	S1-140	S1-150
Cavinula sp. 1	0	0	0	0
Cocconeis cf. peltoides	0	0	0	0
Cocconeis costata var. costata	0	0	0	0
Cocconeis diminuta	0	0	0	0
Cocconeis disculoides	0	0	0	0
Cocconeis elongatum	0	0	0	0
Cocconeis placentula	0.003899	0.003968	0.009921	0.007678
Cocconeis scutellum	0	0	0	0
Coscinodiscus cf. lineatus	0.033138	0.03373	0.031746	0.034549
Coscinodiscus marginatus	0.019493	0.005952	0.019841	0.019194
Cosmoneis pusilla	0	0	0	0
Cosmoneis sp. 1	0	0	0	0
Craticula cuspidata	0	0	0	0
Cyclostephanos sp. 1	0.007797	0.003968	0.009921	0.009597
Cyclostephanos sp. 2	0	0	0	0
Cyclotella atomus?	0.005848	0.019841	0.043651	0.03071
Cyclotella caspia	0	0	0	0
Cyclotella cyclopuncta	0.015595	0.003968	0.001984	0.015355
Cyclotella distinguenda	0	0	0	0
Cyclotella meneghiniana	0.025341	0.021825	0.043651	0.017274
Cyclotella rossii	0.019493	0.005952	0.007937	0.009597
Cyclotella sp. 2	0.001949	0	0	0.023033
Cyclotella striata	0.087719	0.077381	0.093254	0.057582
Cyclotella stylorum	0.009747	0.009921	0.011905	0.009597
Cymatopleura solea	0	0	0	0
Cymatosira belgica	0.031189	0.019841	0.041667	0.03263
Cymbella affinis	0	0	0.001984	0
Cymbella cf. excisiformis	0	0	0	0
Cymbella janischii	0	0	0	0.001919
Cymbella mexicana	0	0	0.001984	0
Cymbella minuta	0	0	0	0
Cymbella sp. 2	0	0	0	0
Cymbopleura A	0	0	0	0
Decussata placenta	0	0	0	0
Delphineis minutissima	0.001949	0.001984	0	0.015355
Delphineis surirella	0.017544	0.013889	0.009921	0.007678
Denticula kuetzengii	0.003899	0	0	0
Diadesmis cf. contenta	0	0	0	0
Diadesmis gallica	0	0	0	0
Diatoma mesodon	0	0	0	0.003839

Percent Abundance	S1-120	S1-130	S1-140	S1-150
Diatoma moniliformis	0	0	0	0
Diatoma vulgaris	0	0	0	0
Diatomella balfouriana	0	0	0	0
Dimeregramma minor	0	0	0	0
Diploneis boldtiana	0	0	0.005952	0.001919
Diploneis cf. bombus	0	0	0.001984	0.001919
Diploneis cf. didyma	0	0	0	0
Diploneis elliptica	0.001949	0	0	0
Diploneis pseudovalis	0	0.001984	0	0
Diploneis smithii	0.003899	0	0	0
Diploneis sp. 1	0	0	0	0
Diploneis sp. 2	0	0	0	0
Diploneis interrupta	0	0	0	0
Encyonema nicafei	0.005848	0.005952	0.005952	0
Encyonema sp. 1	0	0	0	0
Encyonema sp. 2	0	0	0	0
Encyonema sp. 3	0	0	0	0
Encyonema triangulum	0	0	0	0
Encyonopsis microcephala	0	0	0	0
Epithemia adnata	0	0	0	0.003839
Epithemia frickei	0	0	0	0
Epithemia smithii	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0.001949	0.005952	0	0.001919
Eunotia richbuttensis	0.007797	0	0	0
Eunotia sp. 1	0	0.003968	0	0
Eunotia sp. 2	0.003899	0.003968	0	0
Eunotia sp. 3 (GV)	0	0	0	0
Fallacia pygmia	0.038986	0.075397	0.031746	0.019194
Fragilaria brevistriata	0	0	0	0
Fragilaria capucina	0.005848	0	0.019841	0
Fragilaria cf. microstriata	0	0	0	0
Fragilaria elliptica	0.005848	0.013889	0.001984	0.003839
Fragilaria schulzii	0	0	0	0
Fragilaria tenera	0	0	0	0
Fragilaria vaucheriae	0	0.013889	0	0
Frickea lewisiana	0	0	0	0
Frustulia amphipleuroides	0	0	0	0
Frustulia rhomboides var. viridula	0	0	0	0
Frustulia sp. 1	0	0	0	0

Percent Abundance	S1-120	S1-130	S1-140	S1-150
Frustulia vulgaris	0	0	0	0
Geissleria decussis	0	0	0	0
Geissleria kreigeri	0.003899	0.001984	0	0
Gomphoneis hurculeana	0	0	0.001984	0
Gomphoneis sp. 1	0	0	0	0
Gomphoneis sp. 3	0	0	0	0
Gomphonema acuminatum	0	0	0	0
Gomphonema innocens	0	0.005952	0	0
Gomphonema kobayasii	0	0	0	0
Gomphonema mammilla	0	0	0	0
Gomphonema olivaceum	0	0	0	0
Gomphonema sp. 1	0	0	0	0
Gomphonema sp. 2	0	0	0	0
Gomphonema sp. 3	0	0	0	0
Gomphonopsis exiguum	0	0	0	0
Grammatophora cf. macilenta	0	0	0	0
Gyrosigma temperii	0	0	0	0
Gyrosigma cf. balticum	0	0	0	0
Gyrosigma sp.1	0	0	0	0
Gyrosigma spencerii	0.001949	0.003968	0	0.001919
Hantzschia sp. 1 girdle view	0	0	0	0
Hantzschia sp. 2 girdle view	0	0	0	0
Hantzschia sp. 3	0	0	0	0
Hantzschia sp. 4	0	0	0	0
Hantzschia virgata	0	0	0.011905	0.007678
Hippodonta costulata	0.005848	0.019841	0.015873	0
Hippodonta coxiae	0.003899	0.005952	0.017857	0.038388
Hippodonta hungarica	0	0	0	0
Hippodonta sp. 1	0	0	0	0
Hippodonta sp. 2	0	0	0	0
Karayevia amoena	0	0	0	0.001919
Leptocylindrus ? Cf. danicus	0	0.003968	0	0
Luticola sp. 1	0	0	0	0
Luticola sp. 2	0	0	0	0
Luticola sp. 3	0	0	0	0
Luticola sp. 4	0	0	0	0
Mastogloia smithii	0	0	0	0
Mastogloia sp. 1	0	0	0	0
Mastogloia sp. 2	0	0	0	0
Melosira sp. 1	0	0	0	0

Percent Abundance	S1-120	S1-130	S1-140	S1-150
Melosira varians	0	0	0.001984	0.007678
Meridion sp. 1	0	0	0	0
Navicula abunda	0.009747	0.009921	0.009921	0.007678
Navicula angusta	0	0	0	0
Navicula antonii	0	0	0	0
Navicula brachium	0	0	0	0.001919
Navicula cari	0	0.013889	0.001984	0.001919
Navicula cf. capitoradiata	0	0.005952	0.005952	0.015355
Navicula cf. galloae	0	0	0	0
Navicula cf. heuflerii	0.005848	0.003968	0.001984	0
Navicula cf. ludloviana (CA)	0	0	0	0
Navicula cf. oblonga	0.001949	0	0	0
Navicula cf. patrickii	0.003899	0	0	0.003839
Navicula cf. reichardtiana	0	0	0.003968	0
Navicula cf. reinhardtii	0	0	0	0
Navicula cf. salinarum	0	0.003968	0.001984	0.005758
Navicula cf. schweigeri	0.007797	0	0	0
Navicula cf. subinflata	0.009747	0	0	0.003839
Navicula cf. tripunctata	0	0.001984	0.003968	0.003839
Navicula cf. zostereti	0	0.003968	0	0
Navicula clementis	0	0	0	0
Navicula denta	0	0	0	0
Navicula gregaria	0	0	0	0
Navicula halophila	0.003899	0	0	0.013436
Navicula lanceolata	0	0	0	0.003839
Navicula marginulata	0	0	0	0
Navicula oculiformis	0	0	0	0
Navicula peregrina	0.013645	0.021825	0.007937	0.005758
Navicula perminuta	0	0.009921	0.009921	0.003839
Navicula phyllepta	0	0	0.003968	0
Navicula slesvicensis	0	0	0	0
Navicula sp. 1	0.001949	0	0.003968	0
Navicula sp. 10	0	0	0	0
Navicula sp. 2	0	0	0	0
Navicula sp. 3	0	0	0	0
Navicula sp. 5	0	0	0	0
Navicula sp. 6	0	0	0	0
Navicula sp. 7	0	0	0	0
Navicula sp. 8	0	0	0	0
Navicula sp. 9	0	0	0	0

Percent Abundance	S1-120	S1-130	S1-140	S1-150
Navicula subinflata	0	0.005952	0	0
Navicula subminiscula	0	0.001984	0.003968	0
Navicula vilaplanii	0	0	0	0
Naviculoid diatom 1	0	0	0	0
Naviculoid diatom 2	0	0	0	0
Neidiopsis sp. 1	0	0	0	0
Neodephaneis pelagica	0	0	0	0
Nitzschia amphibia	0	0.007937	0	0
Nitzschia bita	0	0	0	0
Nitzschia brevissima	0.023392	0.017857	0.009921	0.007678
Nitzschia cf. agnita	0	0.011905	0	0.009597
Nitzschia cf. biremis	0	0	0	0
Nitzschia cf. borealis	0	0	0	0.003839
Nitzschia cf. groefii	0	0	0	0
Nitzschia cf. laevis	0	0	0	0
Nitzschia cf. macilenta	0.005848	0.011905	0.005952	0
Nitzschia clausii	0.001949	0.001984	0	0
Nitzschia columbiana	0.003899	0.011905	0.015873	0.007678
Nitzschia communis	0	0	0	0
Nitzschia commutata	0	0	0	0
Nitzschia constricta	0	0	0	0
Nitzschia cylindrus	0	0	0	0
Nitzschia debilis	0	0	0	0.003839
Nitzschia desertorum	0	0	0.003968	0
Nitzschia dissipata	0	0	0	0
Nitzschia filiformis	0.013645	0	0	0.001919
Nitzschia fonticola	0	0	0	0
Nitzschia frustulum	0	0	0	0.005758
Nitzschia gracilis	0	0	0	0
Nitzschia incognita	0	0	0	0
Nitzschia inconspicua	0	0	0	0.001919
Nitzschia levidensis	0.007797	0.007937	0	0.017274
Nitzschia linearis	0	0	0	0
Nitzschia marginulatus	0	0	0	0
Nitzschia microcephala	0	0.007937	0	0
Nitzschia nana	0	0	0.003968	0
Nitzschia obtusa	0	0	0	0
Nitzschia palea	0.003899	0.003968	0.007937	0.009597
Nitzschia panduriformis	0	0	0	0.001919
Nitzschia pellucida	0	0	0	0

Percent Abundance	S1-120	S1-130	S1-140	S1-150
Nitzschia perminuta	0	0	0	0
Nitzschia proxima	0.001949	0.003968	0.003968	0
Nitzschia punctata	0.009747	0.007937	0.007937	0.011516
Nitzschia pusilla	0.011696	0.003968	0	0.011516
Nitzschia scalaris	0	0.005952	0	0
Nitzschia sigma	0	0	0	0.003839
Nitzschia sigmaformis	0	0	0	0
Nitzschia sp. 1	0	0	0	0
Nitzschia sp. 2	0	0	0	0
Nitzschia sp. 3	0	0	0	0
Nitzschia sp. 4	0.001949	0	0	0
Nitzschia sp. 5	0	0	0	0
Nitzschia umbonata	0	0	0	0
Opephora martyi	0	0	0	0
Opephora sp. A	0	0	0	0
Orthoseira sp. 1	0	0	0	0
Paralia sulcata	0.118908	0.063492	0.077381	0.080614
Parlibellus cf. plicatus	0	0	0.005952	0
Pinnularia borealis	0	0	0	0
Pinnularia divergens	0	0	0.001984	0
Pinnularia divergentissima	0	0	0	0
Pinnularia ignobilis	0	0	0	0
Pinnularia interrupta	0	0	0	0
Pinnularia marchica	0.001949	0	0	0
Pinnularia microstauron	0.009747	0.001984	0.007937	0
Pinnularia sp. 10	0	0	0	0
Pinnularia sp. 3	0	0	0	0
Pinnularia sp. 4	0	0	0	0
Pinnularia sp. 5	0	0	0	0
Pinnularia sp. 6	0	0	0	0
Pinnularia sp. 7	0	0	0	0
Pinnularia sp. 8	0	0	0	0
Pinnularia sp. 9	0	0	0	0
Pinnularia sp.1	0	0	0	0
Pinnularia sp.2	0	0	0	0
Pinnularia viridis	0	0	0	0
Placoneis cf. gastrum	0.011696	0	0	0
Placoneis paralegali	0	0	0	0
Placoneis sp. 1	0	0	0	0
Placoneis sp. 2	0	0	0	0

Percent Abundance	S1-120	S1-130	S1-140	S1-150
Plagiogramma cf. minima	0	0	0	0
Planothidium biporomum	0.005848	0	0	0
Planothidium frequentissimum	0	0	0	0.003839
Planothidium lanceolatum	0	0	0	0
Planothidium minutissimum	0	0	0.001984	0
Planothidium paragali	0	0	0	0
Planothidium sp. 1	0	0	0	0
Planothidium sp. 2	0	0	0	0
Platessa cf. hustedtii	0	0	0	0
Pleurosigma diverse-striatum	0	0	0	0
Psammothidium? Sp. 1	0	0	0	0
Pseudostauroneis parasitica	0	0	0	0
Pseudostaurosira americana	0	0.003968	0.005952	0
Pseudostaurosiropsis sp. 1	0.023392	0.011905	0.029762	0.017274
Pseudostaurosiropsis sp. 1 (GV)	0	0	0	0
Punctastriata mimetica	0	0	0	0
Reimeria sinuata	0	0	0	0
Rexlowea sp. 1	0	0	0	0
Rhaphoneis amphiceros	0.05848	0.019841	0.043651	0.067179
Rhaphoneis tenuis	0.005848	0	0.001984	0
Rhoicosphenia cf. marina	0.003899	0	0	0
Rhoicosphenia sp. 1	0	0	0	0
Rhopalodia acuminatum	0.001949	0	0	0.001919
Rhopolodia gibba	0	0	0	0
Rhopolodia musculus	0	0	0	0.001919
Sellaphora cf. hohnii	0	0	0	0
Sellaphora laevissima	0	0	0	0
Sellaphora pulchra	0	0	0	0
Sellaphora pupula	0	0	0	0
Sellaphora rexii	0.007797	0	0	0
Sellaphora bacillum	0	0.001984	0	0
Skeletonema sp. 1	0	0	0	0
Stauroforma exiguaformis	0	0	0	0.003839
Stauroneis agrestis	0	0	0	0
Stauroneis CA	0	0	0	0
Stauroneis cf. vandevijveri	0	0	0	0
Stauroneis circumborealis	0	0	0	0
Stauroneis GV	0	0	0	0
Stauroneis kriegeri	0	0	0	0
Stauroneis sp. 1	0	0	0	0

Percent Abundance	S1-120	S1-130	S1-140	S1-150
Stauroneis sp. 2	0	0	0	0
Stauroneis sp. 3	0	0	0	0
Staurophora cf. soodensis	0.001949	0	0	0
Staurosira construens	0	0	0	0
Staurosirella leptosauron var. dubia	0	0.007937	0	0
Staurosirella sp. 1	0	0	0	0
Stephanodiscus sp. 1	0	0	0	0
Surirella angusta	0	0	0	0
Surirella brebissonii	0.001949	0.011905	0	0.001919
Surirella cf. iowensis	0	0	0	0
Surirella ovalis	0	0	0	0
Surirella peisonis	0	0	0	0
Surirella sp. 1	0	0	0	0
Surirella splendida	0	0.005952	0	0.003839
Synedra cf. fulgens	0	0	0	0
Synedra famelica	0.003899	0	0.003968	0
Synedra ulna var. biceps	0	0	0	0
Synedra ulna var. ramesi	0	0	0	0
Tabularia fasciculata	0	0	0	0
Tabularia ktenoeoides	0	0	0	0
Thalassionema nitzschioides	0.031189	0.031746	0.045635	0.028791
Thalassiosira baltica	0	0	0	0
Thalassiosira cf. lineata	0.003899	0.015873	0.017857	0.015355
Thalassiosira cf. tenera	0.007797	0	0	0
Thalassiosira decipiens	0.013645	0.013889	0.003968	0.034549
Thalassiosira eccentrica	0.040936	0.031746	0.025794	0.036468
Thalassiosira ferelineata	0	0	0	0
Thalassiosira oestrupii	0.001949	0.027778	0.005952	0.009597
Thalassiosira proschkinae	0.005848	0	0	0
Thalassiosira sp. 10 Cooper	0.005848	0.009921	0.005952	0.005758
Thalassiosira sp. 2-1 Cooper	0.007797	0.015873	0.017857	0.021113
Trachyneis aspera var. vulgaris	0	0	0	0
Triceratium sp. 2	0.003899	0.005952	0.005952	0.001919
Tryblionella sp. 1	0	0	0	0
Tybionella debilis	0	0.005952	0.003968	0.003839
Ulnaria acus	0	0	0	0
Ulnaria ulna	0.003899	0.003968	0.005952	0.001919
Undulate colony?	0	0	0	0
Unknown araphid	0	0	0	0
Unknown biraphid	0	0	0	0

Percent Abundance	S1-120	S1-130	S1-140	S1-150
Unknown CA	0	0	0	0.001919
Unknown GV?	0	0	0	0

Percent Abundance	S1-160	S1-170	S1-180	S1-190
Achnanthes coarctaca	0	0	0	0
Achnanthes denticula	0	0	0	0
Achnanthes islandica	0.001972	0.011976	0.016	0
Achnanthidium gracillimum	0.003945	0	0	0
Actinocyclus normanii	0.003945	0.021956	0.018	0.003945
Actinocyclus octonarius var. crassus ?	0.019724	0.023952	0.034	0.039448
Actinoptychus senarius	0.003945	0.007984	0.014	0.015779
Amphora copulata	0	0	0	0
Amphora granulata	0	0	0	0
Amphora sp. 1 (girdle view)	0	0	0	0
Amphora sp. 2	0	0	0	0
Anaulus cf. balticus	0.003945	0	0	0.003945
Aneumastus pseudotusculus	0	0	0	0
Aneumastus sp. 1	0	0	0	0
Anomoeoneis sp. 1	0	0	0	0
Anorthoneis tenuis	0	0	0	0
Asterionella formosa	0	0	0	0
Asterionella sp. 1	0	0	0	0
Asymmetrical CA	0	0	0	0
Aulacoseira ambigua	0.118343	0.021956	0.012	0.015779
Aulacoseira granulata	0.011834	0.015968	0.01	0.00789
Aulacoseira granulata var. angustissima	0.025641	0	0	0
Aulacoseira sp. 1	0	0	0	0
Aulacoseira sp. 2	0	0	0	0
Aulacoseira tenella	0	0.011976	0.012	0
Aulacosira pusilla	0	0	0	0
Bacillaria socialis	0	0.003992	0.002	0
Biremis circumtexta	0	0	0	0
Biremis? sp. 1	0	0	0	0
Caloneis aemula	0	0	0	0
Caloneis bacillum	0	0	0	0
Caloneis cf. lineatus	0	0	0	0
Caloneis cf. ventricosa	0	0	0	0
Caloneis lewisii	0	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0	0
Caloneis sp. 2	0	0	0	0
Caloneis sp. 3	0	0	0	0
Caloneis sp. 4	0	0	0	0
Campylodiscus sp. 1	0	0	0	0
Cavinula scutelloides	0	0	0	0

Percent Abundance	S1-160	S1-170	S1-180	S1-190
Cavinula sp. 1	0	0	0	0
Cocconeis cf. peltoides	0	0	0	0
Cocconeis costata var. costata	0	0	0	0
Cocconeis diminuta	0	0	0	0.001972
Cocconeis disculoides	0	0	0	0
Cocconeis elongatum	0	0	0	0
Cocconeis placentula	0.00789	0.017964	0.008	0.017751
Cocconeis scutellum	0	0	0	0
Coscinodiscus cf. lineatus	0.017751	0.021956	0.016	0.023669
Coscinodiscus marginatus	0.019724	0.017964	0.016	0.035503
Cosmoneis pusilla	0	0	0	0
Cosmoneis sp. 1	0	0	0	0
Craticula cuspidata	0	0	0	0
Cyclostephanos sp. 1	0.001972	0	0.004	0
Cyclostephanos sp. 2	0	0	0	0
Cyclotella atomus?	0.04931	0.053892	0.024	0.027613
Cyclotella caspia	0	0	0	0
Cyclotella cyclopuncta	0.023669	0.021956	0.04	0.027613
Cyclotella distinguenda	0	0	0	0
Cyclotella meneghiniana	0.027613	0.065868	0.016	0.005917
Cyclotella rossii	0	0	0	0.001972
Cyclotella sp. 2	0.009862	0.005988	0.008	0.009862
Cyclotella striata	0.069034	0.06986	0.02	0.043393
Cyclotella stylorum	0.019724	0.00998	0.018	0.035503
Cymatopleura solea	0	0	0	0
Cymatosira belgica	0.033531	0.017964	0.024	0.023669
Cymbella affinis	0.003945	0	0	0
Cymbella cf. excisiformis	0	0	0	0
Cymbella janischii	0	0	0	0
Cymbella mexicana	0	0	0	0
Cymbella minuta	0	0	0	0
Cymbella sp. 2	0	0	0	0
Cymbopleura A	0	0	0	0.003945
Decussata placenta	0	0.001996	0	0
Delphineis minutissima	0.013807	0.011976	0.016	0
Delphineis surirella	0	0	0.002	0
Denticula kuetzengii	0	0	0	0
Diadesmis cf. contenta	0	0	0	0
Diadesmis gallica	0	0	0	0
Diatoma mesodon	0	0	0	0

Percent Abundance	S1-160	S1-170	S1-180	S1-190
Diatoma moniliformis	0	0.001996	0.002	0
Diatoma vulgaris	0	0	0	0
Diatomella balfouriana	0	0	0	0
Dimeregramma minor	0	0	0	0
Diploneis boldtiana	0	0	0.002	0.001972
Diploneis cf. bombus	0	0.001996	0	0.003945
Diploneis cf. didyma	0	0	0	0
Diploneis elliptica	0	0	0	0.001972
Diploneis pseudovalis	0	0	0	0
Diploneis smithii	0.003945	0	0	0
Diploneis sp. 1	0	0	0	0
Diploneis sp. 2	0	0	0	0
Diploneis interrupta	0	0	0	0
Encyonema nicafei	0.003945	0	0.008	0.001972
Encyonema sp. 1	0	0	0	0
Encyonema sp. 2	0	0	0	0
Encyonema sp. 3	0	0	0	0
Encyonema triangulum	0	0	0	0
Encyonopsis microcephala	0	0	0	0
Epithemia adnata	0	0	0	0
Epithemia frickei	0	0	0	0
Epithemia smithii	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0.001972	0.007984	0.008	0.003945
Eunotia richbuttensis	0	0	0	0
Eunotia sp. 1	0	0.001996	0	0
Eunotia sp. 2	0	0	0.004	0
Eunotia sp. 3 (GV)	0	0	0.004	0
Fallacia pygmia	0.015779	0.00998	0.006	0
Fragilaria brevistriata	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria cf. microstriata	0	0	0	0
Fragilaria elliptica	0.005917	0.001996	0.006	0.003945
Fragilaria schulzii	0	0	0	0
Fragilaria tenera	0	0	0	0
Fragilaria vaucheriae	0.017751	0.00998	0.002	0.001972
Frickea lewisiana	0	0	0	0
Frustulia amphipleuroides	0	0	0	0
Frustulia rhomboides var. viridula	0	0	0	0
Frustulia sp. 1	0	0	0	0

Percent Abundance	S1-160	S1-170	S1-180	S1-190
Frustulia vulgaris	0	0.005988	0	0
Geissleria decussis	0.001972	0	0	0
Geissleria kreigeri	0.001972	0	0	0.001972
Gomphoneis hurculeana	0	0	0	0
Gomphoneis sp. 1	0	0	0	0
Gomphoneis sp. 3	0	0	0	0
Gomphonema acuminatum	0	0	0	0
Gomphonema innocens	0.003945	0.005988	0.002	0
Gomphonema kobayasii	0	0	0	0
Gomphonema mammilla	0	0	0	0
Gomphonema olivaceum	0	0	0	0
Gomphonema sp. 1	0	0	0	0
Gomphonema sp. 2	0	0	0	0
Gomphonema sp. 3	0	0	0	0
Gomphonopsis exiguum	0	0	0	0
Grammatophora cf. macilenta	0	0	0	0
Gyrosigma temperii	0	0	0	0
Gyrosigma cf. balticum	0	0.003992	0.002	0.001972
Gyrosigma sp.1	0	0	0	0
Gyrosigma spencerii	0.001972	0	0	0
Hantzschia sp. 1 girdle view	0	0	0	0
Hantzschia sp. 2 girdle view	0	0	0	0
Hantzschia sp. 3	0	0	0	0
Hantzschia sp. 4	0	0	0	0
Hantzschia virgata	0	0	0	0.003945
Hippodonta costulata	0	0.001996	0.004	0
Hippodonta coxiae	0.025641	0.005988	0.008	0.011834
Hippodonta hungarica	0	0	0	0
Hippodonta sp. 1	0	0	0	0
Hippodonta sp. 2	0	0	0	0
Karayevia amoena	0	0	0.002	0
Leptocylindrus ? Cf. danicus	0	0.001996	0	0
Luticola sp. 1	0	0	0	0.001972
Luticola sp. 2	0	0	0	0
Luticola sp. 3	0	0	0	0
Luticola sp. 4	0	0	0	0
Mastogloia smithii	0	0	0.004	0
Mastogloia sp. 1	0	0	0	0
Mastogloia sp. 2	0	0	0	0
Melosira sp. 1	0.00789	0	0	0.017751

Percent Abundance	S1-160	S1-170	S1-180	S1-190
Melosira varians	0.00789	0	0	0
Meridion sp. 1	0	0	0.002	0
Navicula abunda	0	0.00998	0.022	0.013807
Navicula angusta	0	0	0	0
Navicula antonii	0	0	0	0
Navicula brachium	0	0	0	0
Navicula cari	0.003945	0.001996	0.002	0.001972
Navicula cf. capitoradiata	0.017751	0	0.008	0.00789
Navicula cf. galloae	0	0	0	0
Navicula cf. heuflerii	0	0	0	0
Navicula cf. ludloviana (CA)	0	0	0	0
Navicula cf. oblonga	0	0	0	0
Navicula cf. patrickii	0	0	0	0.003945
Navicula cf. reichardtiana	0	0	0	0.001972
Navicula cf. reinhardtii	0	0	0	0
Navicula cf. salinarum	0	0.001996	0	0.003945
Navicula cf. schweigeri	0	0	0.004	0.001972
Navicula cf. subinflata	0.00789	0	0.014	0.005917
Navicula cf. tripunctata	0.005917	0	0	0
Navicula cf. zostereti	0.005917	0.001996	0	0
Navicula clementis	0	0	0	0
Navicula denta	0	0	0	0
Navicula gregaria	0.003945	0	0	0
Navicula halophila	0.00789	0.001996	0	0.009862
Navicula lanceolata	0	0	0.004	0
Navicula marginulata	0	0	0	0
Navicula oculiformis	0	0	0	0
Navicula peregrina	0.011834	0.001996	0.002	0.005917
Navicula perminuta	0.001972	0.00998	0.032	0
Navicula phyllepta	0	0	0.002	0
Navicula slesvicensis	0	0	0	0
Navicula sp. 1	0	0	0	0.001972
Navicula sp. 10	0	0	0	0
Navicula sp. 2	0	0	0	0
Navicula sp. 3	0	0	0	0
Navicula sp. 5	0	0	0	0
Navicula sp. 6	0	0	0	0
Navicula sp. 7	0	0	0	0
Navicula sp. 8	0	0	0	0
Navicula sp. 9	0	0	0	0

Percent Abundance	S1-160	S1-170	S1-180	S1-190
Navicula subinflata	0	0	0	0
Navicula subminiscula	0.003945	0	0	0.011834
Navicula vilaplanii	0	0	0	0
Naviculoid diatom 1	0	0	0	0
Naviculoid diatom 2	0	0	0	0
Neidiopsis sp. 1	0	0	0	0
Neodephaneis pelagica	0	0	0.004	0
Nitzschia amphibia	0.013807	0	0	0
Nitzschia bita	0	0	0.004	0
Nitzschia brevissima	0	0.017964	0.008	0.00789
Nitzschia cf. agnita	0.00789	0	0.004	0.001972
Nitzschia cf. biremis	0	0	0	0
Nitzschia cf. borealis	0	0	0	0
Nitzschia cf. groefii	0	0	0	0
Nitzschia cf. laevis	0	0	0	0
Nitzschia cf. macilenta	0	0.001996	0.012	0.001972
Nitzschia clausii	0.001972	0	0	0.00789
Nitzschia columbiana	0.001972	0.005988	0.006	0.001972
Nitzschia communis	0	0	0	0
Nitzschia commutata	0	0	0	0
Nitzschia constricta	0	0	0	0.003945
Nitzschia cylindrus	0	0	0	0
Nitzschia debilis	0.003945	0	0	0
Nitzschia desertorum	0.003945	0	0	0.003945
Nitzschia dissipata	0	0	0	0
Nitzschia filiformis	0.003945	0	0	0.003945
Nitzschia fonticola	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia gracilis	0.003945	0.003992	0	0.003945
Nitzschia incognita	0	0	0	0
Nitzschia inconspicua	0	0.003992	0.002	0
Nitzschia levidensis	0.00789	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia marginulatus	0	0	0	0.003945
Nitzschia microcephala	0	0	0	0
Nitzschia nana	0.001972	0.001996	0.002	0.003945
Nitzschia obtusa	0	0	0	0
Nitzschia palea	0.009862	0.007984	0.004	0.003945
Nitzschia panduriformis	0	0	0.004	0
Nitzschia pellucida	0	0	0	0

Percent Abundance	S1-160	S1-170	S1-180	S1-190
Nitzschia perminuta	0.009862	0	0	0
Nitzschia proxima	0	0	0	0.009862
Nitzschia punctata	0.029586	0.005988	0.012	0.029586
Nitzschia pusilla	0	0.003992	0	0.011834
Nitzschia scalaris	0	0	0	0
Nitzschia sigma	0	0.001996	0.004	0.003945
Nitzschia sigmaformis	0	0	0.004	0.001972
Nitzschia sp. 1	0	0	0.002	0
Nitzschia sp. 2	0	0	0	0
Nitzschia sp. 3	0	0	0	0
Nitzschia sp. 4	0.001972	0	0.002	0.005917
Nitzschia sp. 5	0	0	0	0
Nitzschia umbonata	0	0	0	0
Opephora martyi	0	0.001996	0	0.001972
Opephora sp. A	0	0	0	0
Orthoseira sp. 1	0	0	0	0
Paralia sulcata	0.078895	0.087824	0.092	0.122288
Parlibellus cf. plicatus	0	0	0	0
Pinnularia borealis	0	0	0	0
Pinnularia divergens	0	0	0	0
Pinnularia divergentissima	0	0	0	0
Pinnularia ignobilis	0	0	0	0
Pinnularia interrupta	0	0	0	0
Pinnularia marchica	0	0	0	0
Pinnularia microstauron	0	0	0	0.001972
Pinnularia sp. 10	0	0	0	0
Pinnularia sp. 3	0	0	0	0
Pinnularia sp. 4	0	0	0	0
Pinnularia sp. 5	0	0	0	0
Pinnularia sp. 6	0	0	0	0
Pinnularia sp. 7	0	0	0	0
Pinnularia sp. 8	0	0	0	0
Pinnularia sp. 9	0	0	0	0
Pinnularia sp.1	0	0	0	0
Pinnularia sp.2	0	0	0	0
Pinnularia viridis	0.001972	0.007984	0	0
Placoneis cf. gastrum	0	0.001996	0.014	0
Placoneis paralegali	0	0	0	0
Placoneis sp. 1	0	0	0	0
Placoneis sp. 2	0	0	0	0

Percent Abundance	S1-160	S1-170	S1-180	S1-190
Plagiogramma cf. minima	0	0	0	0
Planothidium biporomum	0	0	0	0
Planothidium frequentissimum	0.003945	0.007984	0.006	0
Planothidium lanceolatum	0	0	0	0
Planothidium minutissimum	0	0	0	0
Planothidium paragali	0	0.003992	0	0
Planothidium sp. 1	0	0	0	0
Planothidium sp. 2	0	0	0	0
Platessa cf. hustedtii	0	0	0	0
Pleurosigma diverse-striatum	0	0	0	0
Psammothidium? Sp. 1	0	0	0	0
Pseudostauroneis parasitica	0	0	0	0
Pseudostaurosira americana	0	0.007984	0.008	0.011834
Pseudostaurosiropsis sp. 1	0.011834	0.073852	0.03	0.023669
Pseudostaurosiropsis sp. 1 (GV)	0	0	0	0
Punctastriata mimetica	0	0	0	0
Reimeria sinuata	0	0	0	0
Rexlowea sp. 1	0	0	0	0
Rhaphoneis amphiceros	0.019724	0.085828	0.054	0.04142
Rhaphoneis tenuis	0	0	0	0.003945
Rhoicosphenia cf. marina	0	0	0.004	0.003945
Rhoicosphenia sp. 1	0	0	0	0
Rhopalodia acuminatum	0	0	0.002	0.00789
Rhopolodia gibba	0	0	0	0
Rhopolodia musculus	0	0	0	0
Sellaphora cf. hohnii	0	0	0	0
Sellaphora laevissima	0	0	0	0
Sellaphora pulchra	0	0	0	0
Sellaphora pupula	0.00789	0	0	0.003945
Sellaphora rexii	0	0	0	0
Sellaphora bacillum	0	0	0	0
Skeletonema sp. 1	0	0	0	0.011834
Stauroforma exiguaformis	0	0	0	0.011834
Stauroneis agrestis	0	0	0	0.003945
Stauroneis CA	0	0	0.002	0
Stauroneis cf. vandevijveri	0	0	0	0.001972
Stauroneis circumborealis	0	0	0	0
Stauroneis GV	0	0	0	0
Stauroneis kriegeri	0	0.003992	0.012	0
Stauroneis sp. 1	0	0	0	0

Percent Abundance	S1-160	S1-170	S1-180	S1-190
Stauroneis sp. 2	0	0	0	0
Stauroneis sp. 3	0	0	0	0
Staurophora cf. soodensis	0	0.003992	0.006	0
Staurosira construens	0	0	0.004	0
Staurosirella leptosauron var. dubia	0	0	0.002	0
Staurosirella sp. 1	0	0	0	0
Stephanodiscus sp. 1	0	0	0	0
Surirella angusta	0	0	0.004	0
Surirella brebissonii	0	0	0.004	0
Surirella cf. iowensis	0	0	0	0
Surirella ovalis	0	0	0	0
Surirella peisonis	0	0	0	0
Surirella sp. 1	0	0	0	0
Surirella splendida	0.003945	0	0.006	0
Synedra cf. fulgens	0	0	0	0
Synedra famelica	0	0	0	0
Synedra ulna var. biceps	0	0	0	0
Synedra ulna var. ramesi	0	0	0	0
Tabularia fasciculata	0	0	0	0
Tabularia ktenoeoides	0	0	0	0
Thalassionema nitzschioides	0.027613	0.02994	0.036	0.047337
Thalassiosira baltica	0	0	0	0
Thalassiosira cf. lineata	0.015779	0.023952	0.028	0.017751
Thalassiosira cf. tenera	0	0.001996	0.002	0.001972
Thalassiosira decipiens	0.003945	0.011976	0.012	0.009862
Thalassiosira eccentrica	0.011834	0.015968	0.032	0.009862
Thalassiosira ferelineata	0	0.003992	0.006	0.001972
Thalassiosira oestrupii	0.013807	0.007984	0.024	0.003945
Thalassiosira proschkinae	0	0	0.002	0.001972
Thalassiosira sp. 10 Cooper	0.00789	0.011976	0.008	0.00789
Thalassiosira sp. 2-1 Cooper	0.013807	0.007984	0.016	0.027613
Trachyneis aspera var. vulgaris	0	0	0	0
Triceratium sp. 2	0.001972	0.001996	0.002	0.005917
Tryblionella sp. 1	0	0.001996	0.004	0
Tybionella debilis	0.00789	0.003992	0	0.00789
Ulnaria acus	0	0	0	0
Ulnaria ulna	0.001972	0.003992	0.018	0.015779
Undulate colony?	0	0	0	0
Unknown araphid	0	0	0	0
Unknown biraphid	0	0	0	0

Percent Abundance	S1-160	S1-170	S1-180	S1-190
Unknown CA	0	0	0	0
Unknown GV?	0	0	0	0

Percent Abundance	S1-200	S1-210	S1-220	S1-230
Achnanthes coarctaca	0	0	0	0
Achnanthes denticula	0	0	0	0
Achnanthes islandica	0.011952	0.003937	0	0.001988
Achnanthidium gracillimum	0	0	0	0
Actinocyclus normanii	0	0.003937	0.00996	0.005964
Actinocyclus octonarius var. crassus ?	0.027888	0.027559	0.025896	0.00994
Actinoptychus senarius	0.01992	0.01378	0.013944	0.011928
Amphora copulata	0	0	0	0
Amphora granulata	0	0.003937	0	0
Amphora sp. 1 (girdle view)	0	0	0	0
Amphora sp. 2	0	0	0	0
Anaulus cf. balticus	0	0.003937	0	0
Aneumastus pseudotusculus	0	0	0	0
Aneumastus sp. 1	0	0	0	0
Anomoeoneis sp. 1	0	0	0	0
Anorthoneis tenuis	0	0	0	0
Asterionella formosa	0	0	0	0
Asterionella sp. 1	0	0	0	0
Asymmetrical CA	0	0	0	0
Aulacoseira ambigua	0.007968	0.023622	0.023904	0.007952
Aulacoseira granulata	0.007968	0	0	0
Aulacoseira granulata var. angustissima	0	0	0	0
Aulacoseira sp. 1	0	0	0	0
Aulacoseira sp. 2	0	0	0	0
Aulacoseira tenella	0	0	0	0
Aulacosira pusilla	0	0	0	0
Bacillaria socialis	0	0.003937	0.003984	0.001988
Biremis circumtexta	0	0	0	0.001988
Biremis? sp. 1	0	0	0	0
Caloneis aemula	0	0.005906	0	0.011928
Caloneis bacillum	0.003984	0.017717	0.005976	0.003976
Caloneis cf. lineatus	0	0	0	0
Caloneis cf. ventricosa	0	0	0	0
Caloneis lewisii	0	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0	0
Caloneis sp. 2	0	0	0	0
Caloneis sp. 3	0	0	0	0
Caloneis sp. 4	0	0	0	0
Campylodiscus sp. 1	0	0	0	0
Cavinula scutelloides	0.001992	0	0	0

Percent Abundance	S1-200	S1-210	S1-220	S1-230
Cavinula sp. 1	0	0	0	0
Cocconeis cf. peltoides	0	0	0	0.001988
Cocconeis costata var. costata	0	0	0	0
Cocconeis diminuta	0	0.001969	0	0
Cocconeis disculoides	0	0	0.001992	0
Cocconeis elongatum	0	0	0	0
Cocconeis placentula	0.003984	0.01378	0	0.005964
Cocconeis scutellum	0	0	0	0
Coscinodiscus cf. lineatus	0.005976	0.003937	0.007968	0.00994
Coscinodiscus marginatus	0.011952	0.009843	0.015936	0.011928
Cosmoneis pusilla	0	0	0.005976	0
Cosmoneis sp. 1	0	0	0	0
Craticula cuspidata	0	0.003937	0	0
Cyclostephanos sp. 1	0.003984	0.001969	0.001992	0.00994
Cyclostephanos sp. 2	0	0	0	0
Cyclotella atomus?	0.011952	0.027559	0.007968	0.011928
Cyclotella caspia	0	0	0.013944	0.005964
Cyclotella cyclopuncta	0.021912	0.023622	0.037849	0.053678
Cyclotella distinguenda	0	0	0.001992	0
Cyclotella meneghiniana	0.017928	0.007874	0.011952	0.00994
Cyclotella rossii	0	0.003937	0	0
Cyclotella sp. 2	0	0	0	0
Cyclotella striata	0.031873	0.033465	0.037849	0.015905
Cyclotella stylorum	0.007968	0.019685	0.015936	0.005964
Cymatopleura solea	0	0	0	0
Cymatosira belgica	0.025896	0.023622	0.025896	0.007952
Cymbella affinis	0	0.001969	0.001992	0
Cymbella cf. excisiformis	0	0	0	0
Cymbella janischii	0	0.003937	0	0.001988
Cymbella mexicana	0	0	0	0
Cymbella minuta	0	0.003937	0	0
Cymbella sp. 2	0	0	0	0
Cymbopleura A	0	0	0	0
Decussata placenta	0	0.001969	0.001992	0.00994
Delphineis minutissima	0.013944	0	0	0
Delphineis surirella	0	0	0	0
Denticula kuetzengii	0.053785	0.023622	0.005976	0.007952
Diadesmis cf. contenta	0	0	0	0
Diadesmis gallica	0	0	0	0
Diatoma mesodon	0	0	0	0

Percent Abundance	S1-200	S1-210	S1-220	S1-230
Diatoma moniliformis	0	0.011811	0.005976	0.015905
Diatoma vulgaris	0	0	0	0.003976
Diatomella balfouriana	0	0	0	0
Dimeregramma minor	0	0	0	0
Diploneis boldtiana	0.003984	0.009843	0.00996	0.003976
Diploneis cf. bombus	0	0.001969	0	0
Diploneis cf. didyma	0	0	0	0
Diploneis elliptica	0.005976	0.007874	0.003984	0.007952
Diploneis pseudovalis	0	0.001969	0.003984	0
Diploneis smithii	0	0.001969	0	0
Diploneis sp. 1	0	0	0	0
Diploneis sp. 2	0	0	0	0
Diploneis interrupta	0	0	0	0
Encyonema nicafei	0	0	0.005976	0.001988
Encyonema sp. 1	0	0	0	0
Encyonema sp. 2	0	0	0	0.001988
Encyonema sp. 3	0	0	0	0
Encyonema triangulum	0	0	0	0
Encyonopsis microcephala	0	0	0	0
Epithemia adnata	0	0	0	0
Epithemia frickei	0	0	0.001992	0
Epithemia smithii	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0.00996	0.00994
Eunotia richbuttensis	0	0	0	0
Eunotia sp. 1	0	0	0	0
Eunotia sp. 2	0	0	0	0
Eunotia sp. 3 (GV)	0	0	0	0.003976
Fallacia pygmia	0	0	0	0
Fragilaria brevistriata	0	0.005906	0	0
Fragilaria capucina	0	0	0	0
Fragilaria cf. microstriata	0	0	0	0
Fragilaria elliptica	0.007968	0.007874	0.013944	0
Fragilaria schulzii	0	0	0	0
Fragilaria tenera	0	0	0	0
Fragilaria vaucheriae	0	0	0.001992	0
Frickea lewisiana	0	0.001969	0	0
Frustulia amphipleuroides	0	0	0	0
Frustulia rhomboides var. viridula	0	0	0	0
Frustulia sp. 1	0	0	0	0

Percent Abundance	S1-200	S1-210	S1-220	S1-230
Frustulia vulgaris	0	0.003937	0.001992	0
Geissleria decussis	0	0	0	0.001988
Geissleria kreigeri	0.001992	0.003937	0.001992	0
Gomphoneis hurculeana	0	0	0	0
Gomphoneis sp. 1	0	0	0	0
Gomphoneis sp. 3	0	0	0	0
Gomphonema acuminatum	0	0	0	0
Gomphonema innocens	0	0	0	0
Gomphonema kobayasii	0	0	0	0
Gomphonema mammilla	0	0	0	0
Gomphonema olivaceum	0	0.001969	0	0
Gomphonema sp. 1	0	0	0	0
Gomphonema sp. 2	0	0	0	0
Gomphonema sp. 3	0	0	0	0
Gomphonopsis exiguum	0	0	0	0
Grammatophora cf. macilenta	0	0	0	0
Gyrosigma temperii	0	0	0.003984	0
Gyrosigma cf. balticum	0	0.001969	0	0.001988
Gyrosigma sp.1	0	0	0	0
Gyrosigma spencerii	0.00996	0	0.00996	0
Hantzschia sp. 1 girdle view	0	0	0	0
Hantzschia sp. 2 girdle view	0	0	0	0
Hantzschia sp. 3	0	0	0	0
Hantzschia sp. 4	0	0	0	0
Hantzschia virgata	0	0	0.003984	0.00994
Hippodonta costulata	0	0.011811	0	0
Hippodonta coxiae	0.007968	0.005906	0.011952	0.029821
Hippodonta hungarica	0	0	0	0
Hippodonta sp. 1	0	0	0	0
Hippodonta sp. 2	0	0	0	0
Karayevia amoena	0	0	0	0.003976
Leptocylindrus ? Cf. danicus	0	0	0	0.001988
Luticola sp. 1	0	0	0	0
Luticola sp. 2	0	0	0	0
Luticola sp. 3	0	0	0	0
Luticola sp. 4	0	0	0.003984	0
Mastogloia smithii	0	0	0	0
Mastogloia sp. 1	0	0	0	0
Mastogloia sp. 2	0	0	0	0
Melosira sp. 1	0	0	0	0

Percent Abundance	S1-200	S1-210	S1-220	S1-230
Melosira varians	0.007968	0	0.003984	0
Meridion sp. 1	0	0	0	0
Navicula abunda	0.017928	0.027559	0.013944	0.007952
Navicula angusta	0	0	0	0
Navicula antonii	0.001992	0.003937	0	0.001988
Navicula brachium	0	0	0	0.00994
Navicula cari	0.007968	0.003937	0.00996	0.007952
Navicula cf. capitoradiata	0	0	0	0
Navicula cf. galloae	0	0	0	0
Navicula cf. heuflerii	0	0	0	0
Navicula cf. ludloviana (CA)	0	0	0	0.001988
Navicula cf. oblonga	0	0	0.001992	0
Navicula cf. patrickii	0	0.007874	0	0.005964
Navicula cf. reichardtiana	0	0	0	0
Navicula cf. reinhardtii	0	0	0	0
Navicula cf. salinarum	0	0.005906	0	0
Navicula cf. schweigeri	0.001992	0.003937	0.001992	0
Navicula cf. subinflata	0.007968	0.003937	0	0.019881
Navicula cf. tripunctata	0.023904	0.005906	0.001992	0.001988
Navicula cf. zostereti	0.011952	0	0.005976	0
Navicula clementis	0	0	0	0
Navicula denta	0	0	0	0
Navicula gregaria	0	0	0	0
Navicula halophila	0	0	0	0
Navicula lanceolata	0.001992	0.003937	0.013944	0.001988
Navicula marginulata	0	0.001969	0	0
Navicula oculiformis	0	0	0	0
Navicula peregrina	0.011952	0.011811	0.011952	0.007952
Navicula perminuta	0.003984	0	0	0
Navicula phyllepta	0	0	0	0
Navicula slesvicensis	0	0	0	0
Navicula sp. 1	0	0	0	0
Navicula sp. 10	0	0	0	0
Navicula sp. 2	0	0	0	0.001988
Navicula sp. 3	0	0	0	0
Navicula sp. 5	0	0	0	0
Navicula sp. 6	0	0	0	0
Navicula sp. 7	0	0	0	0
Navicula sp. 8	0	0	0	0
Navicula sp. 9	0	0	0	0

Percent Abundance	S1-200	S1-210	S1-220	S1-230
Navicula subinflata	0	0	0	0
Navicula subminiscula	0	0	0	0.001988
Navicula vilaplanii	0	0	0	0
Naviculoid diatom 1	0	0	0	0
Naviculoid diatom 2	0	0	0	0
Neidiopsis sp. 1	0	0	0	0
Neodephaneis pelagica	0	0	0	0
Nitzschia amphibia	0.003984	0	0.001992	0.003976
Nitzschia bita	0	0	0	0
Nitzschia brevissima	0.045817	0.035433	0.057769	0.029821
Nitzschia cf. agnita	0.005976	0.005906	0	0.007952
Nitzschia cf. biremis	0	0	0	0
Nitzschia cf. borealis	0	0.003937	0	0.003976
Nitzschia cf. groefii	0	0	0	0
Nitzschia cf. laevis	0	0	0	0
Nitzschia cf. macilenta	0.001992	0.005906	0	0.005964
Nitzschia clausii	0.011952	0.003937	0.007968	0.011928
Nitzschia columbiana	0.025896	0.01378	0.011952	0.003976
Nitzschia communis	0	0.011811	0.001992	0
Nitzschia commutata	0	0	0.003984	0
Nitzschia constricta	0	0	0	0
Nitzschia cylindrus	0	0	0	0
Nitzschia debilis	0	0	0	0
Nitzschia desertorum	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia filiformis	0	0.001969	0	0
Nitzschia fonticola	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia gracilis	0	0	0	0
Nitzschia incognita	0	0	0.003984	0.013917
Nitzschia inconspicua	0.003984	0.003937	0	0.001988
Nitzschia levidensis	0	0	0.00996	0.005964
Nitzschia linearis	0	0.001969	0	0.003976
Nitzschia marginulatus	0	0	0	0
Nitzschia microcephala	0	0	0	0
Nitzschia nana	0.003984	0	0	0.007952
Nitzschia obtusa	0	0	0	0
Nitzschia palea	0.007968	0.003937	0.003984	0.007952
Nitzschia panduriformis	0	0	0	0
Nitzschia pellucida	0	0	0	0

Percent Abundance	S1-200	S1-210	S1-220	S1-230
Nitzschia perminuta	0	0	0	0
Nitzschia proxima	0.017928	0.003937	0	0.005964
Nitzschia punctata	0.015936	0	0.015936	0
Nitzschia pusilla	0.015936	0	0	0.001988
Nitzschia scalaris	0.003984	0.001969	0.001992	0.011928
Nitzschia sigma	0.001992	0	0.00996	0
Nitzschia sigmaformis	0.001992	0	0.00996	0
Nitzschia sp. 1	0.003984	0.003937	0.003984	0.013917
Nitzschia sp. 2	0	0	0	0
Nitzschia sp. 3	0	0	0	0
Nitzschia sp. 4	0.005976	0.001969	0	0.005964
Nitzschia sp. 5	0	0	0	0
Nitzschia umbonata	0	0	0	0
Opephora martyi	0	0.001969	0	0
Opephora sp. A	0	0	0	0
Orthoseira sp. 1	0	0	0	0
Paralia sulcata	0.159363	0.155512	0.163347	0.16501
Parlibellus cf. plicatus	0.001992	0	0	0.001988
Pinnularia borealis	0	0	0	0
Pinnularia divergens	0	0.005906	0.005976	0.007952
Pinnularia divergentissima	0	0.003937	0	0
Pinnularia ignobilis	0	0	0	0
Pinnularia interrupta	0	0.003937	0	0
Pinnularia marchica	0.005976	0	0.003984	0.007952
Pinnularia microstauron	0	0	0.001992	0.003976
Pinnularia sp. 10	0	0	0	0
Pinnularia sp. 3	0	0	0	0
Pinnularia sp. 4	0	0	0	0
Pinnularia sp. 5	0	0	0	0
Pinnularia sp. 6	0	0	0	0
Pinnularia sp. 7	0	0	0	0
Pinnularia sp. 8	0	0	0	0
Pinnularia sp. 9	0	0	0	0
Pinnularia sp.1	0	0	0	0
Pinnularia sp.2	0	0	0	0
Pinnularia viridis	0.001992	0.003937	0.005976	0.001988
Placoneis cf. gastrum	0	0.003937	0	0.00994
Placoneis paralegali	0	0	0	0
Placoneis sp. 1	0	0	0	0
Placoneis sp. 2	0	0	0	0

Percent Abundance	S1-200	S1-210	S1-220	S1-230
Plagiogramma cf. minima	0	0	0	0
Planothidium biporomum	0	0	0	0
Planothidium frequentissimum	0.001992	0	0	0.00994
Planothidium lanceolatum	0	0	0	0.011928
Planothidium minutissimum	0	0	0	0
Planothidium paragali	0	0	0	0
Planothidium sp. 1	0	0	0	0
Planothidium sp. 2	0	0	0	0
Platessa cf. hustedtii	0	0	0	0.005964
Pleurosigma diverse-striatum	0	0	0	0
Psammothidium? Sp. 1	0	0	0	0
Pseudostauroneis parasitica	0	0	0.001992	0
Pseudostaurosira americana	0	0.005906	0.007968	0.001988
Pseudostaurosiropsis sp. 1	0.01992	0	0.001992	0
Pseudostaurosiropsis sp. 1 (GV)	0	0	0	0
Punctastriata mimetica	0	0	0	0
Reimeria sinuata	0.001992	0	0	0
Rexlowea sp. 1	0	0	0.003984	0
Rhaphoneis amphiceros	0.059761	0.070866	0.045817	0.091451
Rhaphoneis tenuis	0.003984	0.001969	0.007968	0.001988
Rhoicosphenia cf. marina	0	0	0	0
Rhoicosphenia sp. 1	0	0	0	0
Rhopalodia acuminatum	0.025896	0.025591	0.013944	0.00994
Rhopolodia gibba	0	0	0	0
Rhopolodia musculus	0.005976	0.009843	0.021912	0.013917
Sellaphora cf. hohnii	0	0	0	0
Sellaphora laevissima	0.003984	0	0	0
Sellaphora pulchra	0	0	0	0
Sellaphora pupula	0.001992	0.003937	0	0.005964
Sellaphora rexii	0	0.003937	0	0
Sellaphora bacillum	0	0	0	0.007952
Skeletonema sp. 1	0	0	0	0
Stauroforma exiguaformis	0	0	0	0
Stauroneis agrestis	0	0	0	0.007952
Stauroneis CA	0	0	0	0.003976
Stauroneis cf. vandevijveri	0	0	0	0
Stauroneis circumborealis	0	0	0	0
Stauroneis GV	0	0	0	0
Stauroneis kriegeri	0	0	0	0
Stauroneis sp. 1	0	0.011811	0	0

Percent Abundance	S1-200	S1-210	S1-220	S1-230
Stauroneis sp. 2	0	0	0	0
Stauroneis sp. 3	0	0	0	0
Staurophora cf. soodensis	0	0	0	0
Staurosira construens	0.001992	0	0	0
Staurosirella leptosauron var. dubia	0.001992	0	0.001992	0
Staurosirella sp. 1	0	0	0	0
Stephanodiscus sp. 1	0	0	0	0
Surirella angusta	0	0	0	0
Surirella brebissonii	0	0	0	0
Surirella cf. iowensis	0	0	0	0
Surirella ovalis	0	0	0	0
Surirella peisonis	0	0	0	0
Surirella sp. 1	0	0	0	0
Surirella splendida	0	0	0	0
Synedra cf. fulgens	0	0	0	0
Synedra famelica	0	0	0	0
Synedra ulna var. biceps	0	0	0	0
Synedra ulna var. ramesi	0	0	0	0
Tabularia fasciculata	0.001992	0	0	0
Tabularia ktenoeoides	0	0	0.003984	0
Thalassionema nitzschioides	0.027888	0.045276	0.035857	0.027833
Thalassiosira baltica	0	0	0	0
Thalassiosira cf. lineata	0.00996	0.007874	0.011952	0.007952
Thalassiosira cf. tenera	0	0	0	0
Thalassiosira decipiens	0.005976	0.009843	0.013944	0.001988
Thalassiosira eccentrica	0.00996	0.011811	0.013944	0.007952
Thalassiosira ferelineata	0	0.003937	0	0
Thalassiosira oestrupii	0.003984	0	0	0.001988
Thalassiosira proschkinae	0.001992	0.001969	0.007968	0
Thalassiosira sp. 10 Cooper	0.005976	0.007874	0.007968	0.003976
Thalassiosira sp. 2-1 Cooper	0.001992	0.007874	0.005976	0.007952
Trachyneis aspera var. vulgaris	0	0	0	0
Triceratium sp. 2	0.001992	0.003937	0	0.003976
Tryblionella sp. 1	0	0	0	0
Tybionella debilis	0.01992	0	0.015936	0.015905
Ulnaria acus	0	0	0	0
Ulnaria ulna	0	0.001969	0.005976	0
Undulate colony?	0	0	0	0
Unknown araphid	0	0	0	0
Unknown biraphid	0	0	0	0

Percent Abundance	S1-200	S1-210	S1-220	S1-230
Unknown CA	0	0	0	0
Unknown GV?	0	0	0	0

Percent Abundance	S1-240	S1-250	S1-260
Achnanthes coarctaca	0	0	0
Achnanthes denticula	0	0	0
Achnanthes islandica	0	0	0.002
Achnanthidium gracillimum	0	0	0
Actinocyclus normanii	0.001961	0.005964	0.004
Actinocyclus octonarius var. crassus ?	0.013725	0.015905	0.01
Actinoptychus senarius	0.019608	0.017893	0.028
Amphora copulata	0	0	0
Amphora granulata	0	0	0
Amphora sp. 1 (girdle view)	0	0	0
Amphora sp. 2	0	0	0
Anaulus cf. balticus	0	0	0
Aneumastus pseudotusculus	0	0	0
Aneumastus sp. 1	0	0	0
Anomoeoneis sp. 1	0	0	0
Anorthoneis tenuis	0	0	0
Asterionella formosa	0	0	0
Asterionella sp. 1	0	0	0
Asymmetrical CA	0	0	0
Aulacoseira ambigua	0.009804	0	0
Aulacoseira granulata	0	0	0
Aulacoseira granulata var. angustissima	0	0	0
Aulacoseira sp. 1	0	0	0
Aulacoseira sp. 2	0	0	0
Aulacoseira tenella	0	0	0
Aulacosira pusilla	0	0	0
Bacillaria socialis	0	0.001988	0.004
Biremis circumtexta	0.001961	0	0
Biremis? sp. 1	0	0	0
Caloneis aemula	0	0.007952	0.01
Caloneis bacillum	0.001961	0.035785	0.022
Caloneis cf. lineatus	0	0	0
Caloneis cf. ventricosa	0	0	0
Caloneis lewisii	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0
Caloneis sp. 2	0	0	0
Caloneis sp. 3	0	0	0
Caloneis sp. 4	0	0	0
Campylodiscus sp. 1	0	0	0
Cavinula scutelloides	0	0	0.006

Percent Abundance	S1-240	S1-250	S1-260
Cavinula sp. 1	0	0.003976	0.002
Cocconeis cf. peltoides	0.001961	0	0
Cocconeis costata var. costata	0	0	0
Cocconeis diminuta	0	0	0
Cocconeis disculoides	0	0	0
Cocconeis elongatum	0	0	0
Cocconeis placentula	0	0.001988	0.006
Cocconeis scutellum	0	0	0
Coscinodiscus cf. lineatus	0.02549	0.00994	0.006
Coscinodiscus marginatus	0.023529	0.005964	0.008
Cosmoneis pusilla	0	0	0.002
Cosmoneis sp. 1	0	0	0
Craticula cuspidata	0	0	0
Cyclostephanos sp. 1	0.015686	0.00994	0.008
Cyclostephanos sp. 2	0	0	0
Cyclotella atomus?	0.011765	0.015905	0.02
Cyclotella caspia	0	0	0
Cyclotella cyclopuncta	0.062745	0.079523	0.032
Cyclotella distinguenda	0.011765	0	0
Cyclotella meneghiniana	0.001961	0.003976	0.03
Cyclotella rossii	0	0	0.006
Cyclotella sp. 2	0.001961	0	0.004
Cyclotella striata	0.031373	0.043738	0.062
Cyclotella stylorum	0.017647	0.035785	0.01
Cymatopleura solea	0	0	0
Cymatosira belgica	0.003922	0.001988	0.018
Cymbella affinis	0	0	0
Cymbella cf. excisiformis	0	0	0
Cymbella janischii	0	0.001988	0
Cymbella mexicana	0	0	0
Cymbella minuta	0	0.001988	0
Cymbella sp. 2	0	0	0
Cymbopleura A	0	0	0
Decussata placenta	0.001961	0	0
Delphineis minutissima	0	0	0
Delphineis surirella	0	0	0.01
Denticula kuetzengii	0	0	0
Diadesmis cf. contenta	0	0	0
Diadesmis gallica	0	0	0
Diatoma mesodon	0	0	0

Percent Abundance	S1-240	S1-250	S1-260
Diatoma moniliformis	0.003922	0	0.002
Diatoma vulgaris	0	0	0
Diatomella balfouriana	0	0	0
Dimeregramma minor	0	0	0
Diploneis boldtiana	0.003922	0.00994	0.004
Diploneis cf. bombus	0	0.00994	0.006
Diploneis cf. didyma	0	0	0
Diploneis elliptica	0.027451	0.013917	0.004
Diploneis pseudovalis	0.009804	0.00994	0.002
Diploneis smithii	0.001961	0	0
Diploneis sp. 1	0	0.001988	0
Diploneis sp. 2	0	0.001988	0
Diploneis interrupta	0	0	0
Encyonema nicafei	0.001961	0	0
Encyonema sp. 1	0	0	0
Encyonema sp. 2	0	0	0
Encyonema sp. 3	0	0	0
Encyonema triangulum	0	0	0
Encyonopsis microcephala	0	0	0
Epithemia adnata	0	0	0
Epithemia frickei	0	0	0.002
Epithemia smithii	0	0.003976	0
Epithemia sorex	0	0	0
Epithemia turgida	0.003922	0.001988	0.018
Eunotia richbuttensis	0.003922	0	0
Eunotia sp. 1	0	0	0.006
Eunotia sp. 2	0	0	0.002
Eunotia sp. 3 (GV)	0	0	0
Fallacia pygmia	0	0	0
Fragilaria brevistriata	0	0	0
Fragilaria capucina	0	0	0
Fragilaria cf. microstriata	0	0	0
Fragilaria elliptica	0.001961	0	0
Fragilaria schulzii	0	0	0
Fragilaria tenera	0	0	0
Fragilaria vaucheriae	0	0.001988	0
Frickea lewisiana	0	0	0
Frustulia amphipleuroides	0	0	0
Frustulia rhomboides var. viridula	0	0	0
Frustulia sp. 1	0	0	0

Percent Abundance	S1-240	S1-250	S1-260
Frustulia vulgaris	0	0	0
Geissleria decussis	0	0	0
Geissleria kreigeri	0	0	0
Gomphoneis hurculeana	0	0	0
Gomphoneis sp. 1	0	0	0
Gomphoneis sp. 3	0	0	0
Gomphonema acuminatum	0	0	0
Gomphonema innocens	0.001961	0.001988	0.002
Gomphonema kobayasii	0	0	0
Gomphonema mammilla	0	0	0
Gomphonema olivaceum	0	0	0
Gomphonema sp. 1	0	0	0
Gomphonema sp. 2	0	0	0
Gomphonema sp. 3	0	0	0
Gomphonopsis exiguum	0	0	0
Grammatophora cf. macilenta	0	0.001988	0
Gyrosigma temperii	0	0	0
Gyrosigma cf. balticum	0	0	0
Gyrosigma sp.1	0	0	0
Gyrosigma spencerii	0	0.003976	0
Hantzschia sp. 1 girdle view	0	0	0
Hantzschia sp. 2 girdle view	0	0	0
Hantzschia sp. 3	0	0	0
Hantzschia sp. 4	0	0	0
Hantzschia virgata	0.005882	0	0
Hippodonta costulata	0	0	0
Hippodonta coxiae	0.001961	0.007952	0.004
Hippodonta hungarica	0	0	0
Hippodonta sp. 1	0	0	0
Hippodonta sp. 2	0	0	0
Karayevia amoena	0	0	0
Leptocylindrus ? Cf. danicus	0.005882	0.001988	0.004
Luticola sp. 1	0	0	0
Luticola sp. 2	0	0	0
Luticola sp. 3	0	0	0
Luticola sp. 4	0	0	0
Mastogloia smithii	0	0	0
Mastogloia sp. 1	0	0	0
Mastogloia sp. 2	0	0	0
Melosira sp. 1	0	0	0.014

Percent Abundance	S1-240	S1-250	S1-260
Melosira varians	0	0	0
Meridion sp. 1	0	0	0
Navicula abunda	0.013725	0.011928	0
Navicula angusta	0	0	0
Navicula antonii	0	0	0
Navicula brachium	0	0	0
Navicula cari	0	0.001988	0.004
Navicula cf. capitoradiata	0	0	0
Navicula cf. galloae	0	0	0
Navicula cf. heuflerii	0	0	0
Navicula cf. ludloviana (CA)	0	0	0
Navicula cf. oblonga	0.001961	0	0
Navicula cf. patrickii	0	0	0.004
Navicula cf. reichardtiana	0	0	0
Navicula cf. reinhardtii	0	0	0
Navicula cf. salinarum	0	0	0
Navicula cf. schweigeri	0	0	0
Navicula cf. subinflata	0.001961	0	0.002
Navicula cf. tripunctata	0	0	0.008
Navicula cf. zostereti	0	0	0
Navicula clementis	0	0	0
Navicula denta	0	0	0
Navicula gregaria	0	0	0
Navicula halophila	0	0	0
Navicula lanceolata	0	0	0.004
Navicula marginulata	0	0	0
Navicula oculiformis	0	0	0
Navicula peregrina	0.007843	0.003976	0.004
Navicula perminuta	0.001961	0.001988	0.002
Navicula phyllepta	0	0	0
Navicula slesvicensis	0	0	0
Navicula sp. 1	0	0	0
Navicula sp. 10	0	0	0
Navicula sp. 2	0	0	0
Navicula sp. 3	0	0	0
Navicula sp. 5	0	0	0
Navicula sp. 6	0	0	0
Navicula sp. 7	0	0	0.012
Navicula sp. 8	0	0	0
Navicula sp. 9	0	0	0

Percent Abundance	S1-240	S1-250	S1-260
Navicula subinflata	0	0	0
Navicula subminiscula	0	0	0
Navicula vilaplanii	0	0	0
Naviculoid diatom 1	0	0	0
Naviculoid diatom 2	0	0	0
Neidiopsis sp. 1	0	0	0
Neodephaneis pelagica	0	0	0
Nitzschia amphibia	0	0	0
Nitzschia bita	0	0	0
Nitzschia brevissima	0.013725	0.007952	0.022
Nitzschia cf. agnita	0.003922	0.001988	0
Nitzschia cf. biremis	0	0	0
Nitzschia cf. borealis	0	0.001988	0
Nitzschia cf. groefii	0	0	0
Nitzschia cf. laevis	0	0	0
Nitzschia cf. macilenta	0	0.001988	0
Nitzschia clausii	0.029412	0.003976	0.008
Nitzschia columbiana	0.001961	0	0.004
Nitzschia communis	0.003922	0	0
Nitzschia commutata	0	0	0
Nitzschia constricta	0	0	0
Nitzschia cylindrus	0	0	0
Nitzschia debilis	0	0	0
Nitzschia desertorum	0	0	0
Nitzschia dissipata	0	0.001988	0
Nitzschia filiformis	0	0	0
Nitzschia fonticola	0	0	0
Nitzschia frustulum	0	0	0
Nitzschia gracilis	0	0	0
Nitzschia incognita	0.001961	0.003976	0
Nitzschia inconspicua	0	0	0
Nitzschia levidensis	0.013725	0.001988	0.004
Nitzschia linearis	0.001961	0	0.002
Nitzschia marginulatus	0	0	0
Nitzschia microcephala	0	0	0
Nitzschia nana	0.003922	0.003976	0
Nitzschia obtusa	0	0	0
Nitzschia palea	0.011765	0.007952	0
Nitzschia panduriformis	0	0	0.004
Nitzschia pellucida	0	0	0

Percent Abundance	S1-240	S1-250	S1-260
Nitzschia perminuta	0	0	0
Nitzschia proxima	0	0.001988	0
Nitzschia punctata	0	0	0
Nitzschia pusilla	0	0	0.004
Nitzschia scalaris	0.007843	0.003976	0.006
Nitzschia sigma	0	0.001988	0.014
Nitzschia sigmaformis	0.001961	0	0
Nitzschia sp. 1	0.007843	0.011928	0.004
Nitzschia sp. 2	0	0	0
Nitzschia sp. 3	0	0	0
Nitzschia sp. 4	0.003922	0.00994	0.002
Nitzschia sp. 5	0	0	0
Nitzschia umbonata	0	0	0
Opephora martyi	0.001961	0	0
Opephora sp. A	0	0	0
Orthoseira sp. 1	0	0	0
Paralia sulcata	0.256863	0.274354	0.238
Parlibellus cf. plicatus	0	0	0
Pinnularia borealis	0	0	0
Pinnularia divergens	0.003922	0.00994	0.002
Pinnularia divergentissima	0	0.001988	0
Pinnularia ignobilis	0	0	0
Pinnularia interrupta	0	0	0
Pinnularia marchica	0.007843	0	0.014
Pinnularia microstauron	0.015686	0.003976	0.006
Pinnularia sp. 10	0	0	0
Pinnularia sp. 3	0	0	0
Pinnularia sp. 4	0	0	0
Pinnularia sp. 5	0	0	0
Pinnularia sp. 6	0	0	0
Pinnularia sp. 7	0	0	0
Pinnularia sp. 8	0	0	0
Pinnularia sp. 9	0	0	0
Pinnularia sp.1	0	0	0.002
Pinnularia sp.2	0	0	0
Pinnularia viridis	0.009804	0.001988	0.004
Placoneis cf. gastrum	0.009804	0	0
Placoneis paralegali	0	0	0
Placoneis sp. 1	0	0	0
Placoneis sp. 2	0	0	0

Percent Abundance	S1-240	S1-250	S1-260
Plagiogramma cf. minima	0	0	0
Planothidium biporomum	0	0	0
Planothidium frequentissimum	0	0	0
Planothidium lanceolatum	0	0	0
Planothidium minutissimum	0	0	0
Planothidium paragali	0	0	0
Planothidium sp. 1	0	0	0
Planothidium sp. 2	0	0	0
Platessa cf. hustedtii	0	0	0
Pleurosigma diverse-striatum	0	0	0
Psammothidium? Sp. 1	0	0	0
Pseudostauroneis parasitica	0	0	0
Pseudostaurosira americana	0	0.005964	0.004
Pseudostaurosiropsis sp. 1	0	0	0.008
Pseudostaurosiropsis sp. 1 (GV)	0	0	0
Punctastriata mimetica	0	0	0
Reimeria sinuata	0	0	0.002
Rexlowea sp. 1	0	0	0
Rhaphoneis amphiceros	0.090196	0.111332	0.086
Rhaphoneis tenuis	0.007843	0.005964	0
Rhoicosphenia cf. marina	0	0	0
Rhoicosphenia sp. 1	0	0	0
Rhopalodia acuminatum	0.017647	0.013917	0.018
Rhopolodia gibba	0.003922	0	0
Rhopolodia musculus	0.02549	0.005964	0.014
Sellaphora cf. hohnii	0	0	0
Sellaphora laevissima	0	0	0
Sellaphora pulchra	0	0	0
Sellaphora pupula	0.003922	0.003976	0
Sellaphora rexii	0	0	0
Sellaphora bacillum	0	0	0.004
Skeletonema sp. 1	0	0	0
Stauroforma exiguaformis	0	0	0
Stauroneis agrestis	0	0	0
Stauroneis CA	0.001961	0	0
Stauroneis cf. vandevijveri	0	0	0
Stauroneis circumborealis	0	0	0
Stauroneis GV	0	0	0
Stauroneis kriegeri	0	0	0
Stauroneis sp. 1	0	0	0

Percent Abundance	S1-240	S1-250	S1-260
Stauroneis sp. 2	0.003922	0	0
Stauroneis sp. 3	0	0	0
Staurophora cf. soodensis	0	0	0
Staurosira construens	0	0	0
Staurosirella leptosauron var. dubia	0	0	0.002
Staurosirella sp. 1	0	0	0
Stephanodiscus sp. 1	0	0	0
Surirella angusta	0	0	0
Surirella brebissonii	0.001961	0	0
Surirella cf. iowensis	0	0	0
Surirella ovalis	0	0	0
Surirella peisonis	0	0	0
Surirella sp. 1	0	0	0
Surirella splendida	0	0	0
Synedra cf. fulgens	0	0	0
Synedra famelica	0	0	0
Synedra ulna var. biceps	0	0	0
Synedra ulna var. ramesi	0	0	0
Tabularia fasciculata	0	0	0
Tabularia ktenoeoides	0	0	0
Thalassionema nitzschioides	0.02549	0.049702	0.032
Thalassiosira baltica	0	0	0
Thalassiosira cf. lineata	0.009804	0.00994	0.012
Thalassiosira cf. tenera	0	0	0
Thalassiosira decipiens	0.005882	0.007952	0.004
Thalassiosira eccentrica	0.009804	0.005964	0.018
Thalassiosira ferelineata	0	0.001988	0.002
Thalassiosira oestrupii	0	0	0
Thalassiosira proschkinae	0.001961	0.007952	0.002
Thalassiosira sp. 10 Cooper	0.001961	0.001988	0.006
Thalassiosira sp. 2-1 Cooper	0.005882	0.007952	0.01
Trachyneis aspera var. vulgaris	0	0	0
Triceratium sp. 2	0	0	0.004
Tryblionella sp. 1	0	0	0
Tybionella debilis	0.003922	0.003976	0.006
Ulnaria acus	0	0	0
Ulnaria ulna	0.001961	0	0.004
Undulate colony?	0	0	0
Unknown araphid	0	0	0
Unknown biraphid	0	0	0.002

Percent Abundance	S1-240	S1-250	S1-260
Unknown CA	0	0	0
Unknown GV?	0	0	0

Raw Counts	S3-0	S3-10	S3-20
Total Counted:	516	501	506
Species	72	83	103
Taxon	Count	Count	Count
Achnanthes coarctaca			
Achnanthes denticula			
Achnanthes GV			2
Achnanthes islandica		2	
Achnanthidium exiguum			
Achnanthidium gracillimum			
Actinocyclus normanii	4	41	6
Actinocyclus octonarius var. crassus ?		12	1
Actinoptychus senarius		3	6
Adalfia brockmannii			
Adalfia sp. 1			
Amphora copulata			
Amphora granulata		1	
Amphora ovalis			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus			
Aneumastus pseudotusculus			
Aneumastus sp. 1			2
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Asterionella formosa			
Asterionella sp. 1			
Asymmetrical CA			
Aulacoseira ambigua	4	8	23
Aulacoseira granulata			6
Aulacoseira granulata var. angustissima			
Aulacoseira pusilla			
Aulacoseira sp. 1			
Aulacoseira sp. 2			
Aulacoseira tenella			
Bacillaria socialis	3	9	2
Biremis circumtexta			
Biremis? sp. 1			
Caloneis aemula			
Caloneis bacillum	2	6	4
Caloneis cf. lineatus			

Raw Counts	S3-0	S3-10	S3-20
Caloneis cf. ventricosa			
Caloneis lewisii			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Capartogramma crucicula			
Cavinula scutelloides			
Cavinula sp. 1			
Cocconeis cf. peltoides			
Cocconeis costata var. costata			
Cocconeis diminuta			
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis placentula	2	1	1
Cocconeis scutellum			
Coscinodiscus cf. lineatus	1	4	2
Coscinodiscus marginatus	1	4	1
Cosmoneis pusilla			1
Cosmoneis sp. 1			
Cosmoneis sp. 2			
Craticula cuspidata		3	
Cyclostephanos sp. 1			2
Cyclostephanos sp. 2			
Cyclotella atomus?	217	19	19
Cyclotella caspia			
Cyclotella cyclopuncta		2	2
Cyclotella distinguenda			
Cyclotella meneghiniana	8	51	40
Cyclotella rossii		7	1
Cyclotella sp. 2			
Cyclotella striata	10	43	26
Cyclotella stylorum			
Cymatopleura solea			
Cymatosira belgica	3	3	1
Cymbella affinis		1	
Cymbella cf. excisiformis			
Cymbella janischii		2	1
Cymbella mexicana			

Raw Counts	S3-0	S3-10	S3-20
Cymbella minuta			
Cymbella sp. 2			
Cymbella turgidula			
Cymbopleura A			
Cymbopleura cuspidata			
Cymbopleura sp. 1			1
Decussata placenta			
Delphineis minutissima			
Delphineis surirella	2	4	
Denticula kuetzengii	6	12	6
Diadesmis cf. contenta			
Diadesmis gallica			
Diatoma mesodon	4		
Diatoma moniliformis			
Diatoma vulgaris			
Diatomella balfouriana	1	4	
Dimeregramma minor			
Diploneis boldtiana	5		
Diploneis cf. bombus			
Diploneis cf. didyma			
Diploneis elliptica	2	1	
Diploneis pseudovalis			
Diploneis smithii			
Diploneis sp. 1			
Diploneis sp. 2			
Diploneis interrupta			
Discostella stelligera	5		
Encyonema minutum			
Encyonema nicafei	1	4	6
Encyonema sp. 1			
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema sp. 4			
Encyonema triangulum			
Encyonopsis microcephala			
Epithemia adnata			
Epithemia frickei			
Epithemia smithii			
Epithemia sorex			
Epithemia turgida	1		1

Raw Counts	S3-0	S3-10	S3-20
Eunotia richbuttensis		1	
Eunotia sp. 1			
Eunotia sp. 2			
Eunotia sp. 3 (GV)			2
Fallacia pygmaea			8
Fragilaria brevistriata			
Fragilaria capucina			
Fragilaria cf. microstriata			
Fragilaria elliptica			1
Fragilaria schulzii			
Fragilaria tenera			
Fragilaria vaucheriae	8	1	2
Frickea lewisiana		1	2
Frustulia amphipleuroides			
Frustulia capitata			
Frustulia rhomboides var. viridula			2
Frustulia sp. 1			
Frustulia vulgaris		2	13
Geissleria cf. kriegeri			1
Geissleria decussis			
Gomphoneis hurculeana			
Gomphoneis sp. 1			2
Gomphoneis sp. 3		2	
Gomphonema acuminatum			
Gomphonema innocens		1	4
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceoides			
Gomphonema olivaceum		1	
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Gomphosphenia lingulatiformis			
Grammatophora cf. macilenta			
Gyrosigma temperii			
Gyrosigma cf. balticum			2
Gyrosigma sp.1			1
Gyrosigma spencerii	2	4	2
Hantzschia sp. 1 girdle view			

Raw Counts	S3-0	S3-10	S3-20
Hantzschia sp. 2 girdle view			
Hantzschia sp. 3			
Hantzschia sp. 4			
Hantzschia virgata	2		1
Hippodonta costulata	3	6	1
Hippodonta coxiae	1		
Hippodonta hungarica			2
Hippodonta sp. 1			
Hippodonta sp. 2			
Karayevia amoena	1		
Karayevia clevei			
Kobayasiella sp. 1			3
Leptocylindrus cf. danicus			1
Luticola sp. 1			
Luticola sp. 2			
Luticola sp. 3	4	6	
Luticola sp. 4			
Luticola sp. 5			
Mastogloia smithii			
Mastogloia sp. 1			
Mastogloia sp. 2			
Melosira sp. 1	1		1
Melosira varians	2		
Meridion circulare var. constrictum			
Meridion sp. 1			
Navicula A			
Navicula abunda	1	7	
Navicula angusta			
Navicula antonii	2		4
Navicula brachium			
Navicula cari	11	9	5
Navicula cf. capitoradiata	5	2	4
Navicula cf. galloae			
Navicula cf. heuflerii		2	
Navicula cf. ludloviana (CA)			
Navicula cf. oblonga			
Navicula cf. patrickii	1		3
Navicula cf. reichardtiana			
Navicula cf. reinhardtii			
Navicula cf. salinarum	5	2	1

Raw Counts	S3-0	S3-10	S3-20
Navicula cf. schweigeri		2	
Navicula cf. subinflata	9	14	5
Navicula cf. tripunctata	6	4	10
Navicula cf. zostereti	6		10
Navicula clementis			
Navicula denta		1	
Navicula difficillima			
Navicula facilis			
Navicula germainii			
Navicula glomus			
Navicula gregaria		1	
Navicula halophila	1	4	3
Navicula kotschyi			
Navicula lanceolata	14	16	14
Navicula marginulata			
Navicula oculiformis			
Navicula peregrina	6	1	2
Navicula perminuta	3	8	4
Navicula phyllepta			2
Navicula slesvicensis			
Navicula sp. 1			4
Navicula sp. 10			2
Navicula sp. 11			
Navicula sp. 12			
Navicula sp. 13			
Navicula sp. 14			
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 5			
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8			
Navicula sp. 9			
Navicula subinflata			
Navicula subminiscula	12	9	1
Navicula trivialis			
Navicula vilaplanii		2	2
Naviculoid diatom 1			
Naviculoid diatom 2			
Neidiopsis sp. 1			

Raw Counts	S3-0	S3-10	S3-20
Neodephaneis pelagica			
Nitzschia amphibia	13	2	
Nitzschia angustata	2		
Nitzschia biacrula			
Nitzschia bita			
Nitzschia brevissima	28	19	28
Nitzschia cf. agnita			2
Nitzschia cf. biremis		1	
Nitzschia cf. borealis			
Nitzschia cf. groefii			
Nitzschia cf. laevis			
Nitzschia cf. macilenta			
Nitzschia cf. subacicularis		2	
Nitzschia clausii		1	2
Nitzschia columbiana		3	2
Nitzschia communis			
Nitzschia commutata			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis			18
Nitzschia desertorum			
Nitzschia dissipata	2	3	
Nitzschia filiformis	2	2	4
Nitzschia fonticola	12		
Nitzschia frustulum			2
Nitzschia gracilis			
Nitzschia incognita			2
Nitzschia inconspicua	2	6	5
Nitzschia innominata	1		
Nitzschia levidensis			
Nitzschia linearis		2	9
Nitzschia marginulatus			
Nitzschia microcephala			
Nitzschia minuta	2		
Nitzschia nana		2	
Nitzschia obtusa			
Nitzschia palea	4	4	2
Nitzschia panduriformis	2		
Nitzschia pellucida			1
Nitzschia perminuta	6	3	

Raw Counts	S3-0	S3-10	S3-20
Nitzschia proxima			
Nitzschia punctata	2	2	
Nitzschia pusilla			
Nitzschia scalaris			1
Nitzschia sigma	1	2	8
Nitzschia sigmaformis			1
Nitzschia sociabilis			
Nitzschia sp. 1			
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4		4	2
Nitzschia sp. 5			
Nitzschia sp. 6	2		
Nitzschia sp. 7			
Nitzschia sp. 8			
Nitzschia umbonata			
Opephora martyi			
Opephora olsenii			
Opephora sp. A			
Orthoseira sp. 1			
Paralia sulcata	4	15	20
Parlibellus cf. plicatus			
Parlibellus sp. 2			
Pinnularia biceps			2
Pinnularia borealis			
Pinnularia divergens		2	
Pinnularia divergentissima		1	1
Pinnularia ignobilis			
Pinnularia interrupta			
Pinnularia marchica		20	26
Pinnularia microstauron	2	1	1
Pinnularia sp. 10			
Pinnularia sp. 11			
Pinnularia sp. 12			
Pinnularia sp. 13			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			

Raw Counts	S3-0	S3-10	S3-20
Pinnularia sp. 8			
Pinnularia sp. 9			
Pinnularia sp.1			
Pinnularia sp.2			
Pinnularia viridis			
Placoneis cf. gastrum		1	2
Placoneis elginensis			
Placoneis paralegali			
Placoneis sp. 1			
Placoneis sp. 2			
Placoneis sp. 3			
Plagiogramma cf. minima			
Planothidium abbreviatum			
Planothidium apiculatum			
Planothidium biporomum			
Planothidium dubium			
Planothidium frequentissimum	5		4
Planothidium lanceolatum			
Planothidium minutissimum			
Planothidium paragali			
Planothidium rostratum			
Planothidium sp. 1			
Planothidium sp. 2			
Planothidium sp. 3			
Platessa bahlsii			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Psammothidium? Sp. 1			
Pseudostaurosira americana	8	5	4
Pseudostaurosira parasitica			
Pseudostaurosira brevistriata			
Pseudostaurosiropsis sp. 1	4		7
Pseudostaurosiropsis sp. 1 (GV)			
Punctastriata mimetica			
Reimeria sinuata	1	2	2
Rexlowea sp. 1			
Rhaphoneis amphiceros	3	12	4
Rhaphoneis tenuis			
Rhoicosphenia cf. marina	4		2
Rhoicosphenia sp. 1			

Raw Counts	S3-0	S3-10	S3-20
Rhopalodia acuminatum		2	1
Rhopolodia gibba			
Rhopolodia musculus			1
Sellaphora cf. hohnii			
Sellaphora laevissima			
Sellaphora pulchra			
Sellaphora pupula	1		1
Sellaphora rexii		1	
Sellaphora bacillum			
Skeletonema sp. 1			
Stauroforma exiguaformis			
Stauroneis agrestis			2
Stauroneis CA			
Stauroneis cf. vandevijveri			
Stauroneis circumborealis			
Stauroneis conspicua			
Stauroneis GV			2
Stauroneis kriegeri			
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Stauroneis sp. 4			5
Staurophora cf. soodensis			
Staurosira construens			
Staurosira construens var. binodis			
Staurosirella leptosauron var. dubia			
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angusta			
Surirella brebissonii	1		4
Surirella cf. iowensis			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida		1	12
Symmetrical biraphid1			
Symmetrical biraphid2			
Synedra cf. fulgens			
Synedra famelica			
Synedra ulna var. biceps			

Raw Counts	S3-0	S3-10	S3-20
Synedra ulna var. ramesi			
Tabularia fasciculata	4		
Tabularia ktenoeoides			
Thalassionema nitzschioides		2	1
Thalassiosira baltica			
Thalassiosira cf. lineata			
Thalassiosira cf. tenera			
Thalassiosira decipiens			3
Thalassiosira eccentrica	1	1	1
Thalassiosira ferelineata			
Thalassiosira oestrupii			
Thalassiosira proschkinae			
Thalassiosira sp. 10 Cooper			3
Thalassiosira sp. 2-1 Cooper			
Trachyneis aspera var. vulgaris			
Triceratium sp. 2			
Triceratium sp.1			
Tryblionella debilis	7	14	6
Tryblionella salinarum			
Tryblionella sp. 1			
Tryblionella sp. 2			
Ulnaria acus			
Ulnaria ulna	2	7	10
Undulate colony??			
unknown araphid			
Unknown biraphid			
Unknown CA			
Unknown colony			
Unknown GV?			

Raw Counts	S3-30	S3-40	S3-50
Total Counted:	505	515	503
Species	92	94	99
Taxon	Count	Count	Count
Achnanthes coarctaca			
Achnanthes denticula			
Achnanthes GV			
Achnanthes islandica			1
Achnanthidium exiguum			
Achnanthidium gracillimum			1
Actinocyclus normanii	3		4
Actinocyclus octonarius var. crassus ?	2	5	12
Actinoptychus senarius	2	4	9
Adalfia brockmannii			
Adalfia sp. 1			
Amphora copulata			
Amphora granulata			
Amphora ovalis			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus		2	
Aneumastus pseudotusculus	4	4	
Aneumastus sp. 1			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Asterionella formosa		1	
Asterionella sp. 1			
Asymmetrical CA			
Aulacoseira ambigua	38	65	5
Aulacoseira granulata	16		2
Aulacoseira granulata var. angustissima			
Aulacoseira pusilla			
Aulacoseira sp. 1			
Aulacoseira sp. 2			
Aulacoseira tenella			
Bacillaria socialis	2	4	3
Biremis circumtexta			
Biremis? sp. 1			
Caloneis aemula			
Caloneis bacillum	16	7	12
Caloneis cf. lineatus			

Raw Counts	S3-30	S3-40	S3-50
Caloneis cf. ventricosa			
Caloneis lewisii			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Capartogramma crucicula			
Cavinula scutelloides			
Cavinula sp. 1			
Cocconeis cf. peltoides			
Cocconeis costata var. costata			
Cocconeis diminuta			
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis placentula		8	8
Cocconeis scutellum			
Coscinodiscus cf. lineatus	4	4	8
Coscinodiscus marginatus		5	10
Cosmoneis pusilla			
Cosmoneis sp. 1			
Cosmoneis sp. 2			
Craticula cuspidata			
Cyclostephanos sp. 1			3
Cyclostephanos sp. 2			
Cyclotella atomus?	4		5
Cyclotella caspia			
Cyclotella cyclopuncta	4	4	9
Cyclotella distinguenda			
Cyclotella meneghiniana	22	4	17
Cyclotella rossii		1	5
Cyclotella sp. 2			
Cyclotella striata	24	7	29
Cyclotella stylorum			
Cymatopleura solea			
Cymatosira belgica	1	5	9
Cymbella affinis			
Cymbella cf. excisiformis			
Cymbella janischii	2	1	
Cymbella mexicana	1		

Raw Counts	S3-30	S3-40	S3-50
Cymbella minuta	1		
Cymbella sp. 2	2	4	
Cymbella turgidula			
Cymbopleura A			
Cymbopleura cuspidata			
Cymbopleura sp. 1		2	
Decussata placenta			
Delphineis minutissima			7
Delphineis surirella		1	1
Denticula kuetzengii			1
Diadesmis cf. contenta		4	3
Diadesmis gallica			
Diatoma mesodon		1	
Diatoma moniliformis			
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana			
Diploneis cf. bombus			4
Diploneis cf. didyma			
Diploneis elliptica	1	1	
Diploneis pseudovalis	1		
Diploneis smithii			
Diploneis sp. 1			
Diploneis sp. 2			
Diploneis interrupta			
Discostella stelligera			
Encyonema minutum			10
Encyonema nicafei	13	20	13
Encyonema sp. 1		3	
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema sp. 4			2
Encyonema triangulum		2	
Encyonopsis microcephala			
Epithemia adnata			
Epithemia frickei			
Epithemia smithii			
Epithemia sorex			
Epithemia turgida	1	1	3

Raw Counts	S3-30	S3-40	S3-50
Eunotia richbuttensis			
Eunotia sp. 1		1	
Eunotia sp. 2			
Eunotia sp. 3 (GV)			
Fallacia pygmaea	1		7
Fragilaria brevistriata			
Fragilaria capucina		1	
Fragilaria cf. microstriata			
Fragilaria elliptica	1		8
Fragilaria schulzii			
Fragilaria tenera			
Fragilaria vaucheriae	8	11	9
Frickea lewisiana	17		
Frustulia amphipleuroides			1
Frustulia capitata		11	
Frustulia rhomboides var. viridula		2	
Frustulia sp. 1			
Frustulia vulgaris	10		
Geissleria cf. kriegeri		2	
Geissleria decussis			
Gomphoneis hurculeana			
Gomphoneis sp. 1		4	
Gomphoneis sp. 3	3		
Gomphonema acuminatum			
Gomphonema innocens			6
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceoides		2	
Gomphonema olivaceum			
Gomphonema sp. 1			1
Gomphonema sp. 2			
Gomphonema sp. 3			1
Gomphonopsis exiguum			
Gomphosphenia lingulatiformis			
Grammatophora cf. macilenta			
Gyrosigma temperii			
Gyrosigma cf. balticum			
Gyrosigma sp.1			
Gyrosigma spencerii		2	3
Hantzschia sp. 1 girdle view			

Raw Counts	S3-30	S3-40	S3-50
Hantzschia sp. 2 girdle view			
Hantzschia sp. 3			
Hantzschia sp. 4			
Hantzschia virgata	3		5
Hippodonta costulata		7	
Hippodonta coxiae			
Hippodonta hungarica			
Hippodonta sp. 1			
Hippodonta sp. 2			
Karayevia amoena	3	1	1
Karayevia clevei			2
Kobayasiella sp. 1			
Leptocylindrus cf. danicus		1	1
Luticola sp. 1			
Luticola sp. 2			
Luticola sp. 3	2		6
Luticola sp. 4		1	2
Luticola sp. 5			
Mastogloia smithii			
Mastogloia sp. 1			
Mastogloia sp. 2			
Melosira sp. 1	1		4
Melosira varians	3		
Meridion circulare var. constrictum			
Meridion sp. 1			
Navicula A			
Navicula abunda			3
Navicula angusta			
Navicula antonii			
Navicula brachium			
Navicula cari	2	2	3
Navicula cf. capitoradiata		1	
Navicula cf. galloae			
Navicula cf. heuflerii	2		
Navicula cf. ludloviana (CA)			
Navicula cf. oblonga			
Navicula cf. patrickii			
Navicula cf. reichardtiana	1		
Navicula cf. reinhardtii			
Navicula cf. salinarum		1	

Raw Counts	S3-30	S3-40	S3-50
Navicula cf. schweigeri	2	3	2
Navicula cf. subinflata	12	4	1
Navicula cf. tripunctata	1	3	
Navicula cf. zostereti	5	2	6
Navicula clementis		1	
Navicula denta		1	
Navicula difficillima			
Navicula facilis			
Navicula germainii			
Navicula glomus			
Navicula gregaria	1		
Navicula halophila			2
Navicula kotschyi			
Navicula lanceolata	3	1	7
Navicula marginulata			
Navicula oculiformis			
Navicula peregrina	7	6	22
Navicula perminuta	2	4	6
Navicula phyllepta		1	3
Navicula slesvicensis			
Navicula sp. 1			
Navicula sp. 10	1		
Navicula sp. 11	3	14	1
Navicula sp. 12			2
Navicula sp. 13			2
Navicula sp. 14			
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 5	3	4	
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8	2		
Navicula sp. 9			
Navicula subinflata			
Navicula subminiscula	8	3	4
Navicula trivialis		9	
Navicula vilaplanii			
Naviculoid diatom 1			
Naviculoid diatom 2			
Neidiopsis sp. 1			

Raw Counts	S3-30	S3-40	S3-50
Neodephaneis pelagica			
Nitzschia amphibia		3	
Nitzschia angustata			
Nitzschia biacrula			
Nitzschia bita		2	
Nitzschia brevissima	44	20	9
Nitzschia cf. agnita		2	4
Nitzschia cf. biremis			
Nitzschia cf. borealis			
Nitzschia cf. groefii	2		
Nitzschia cf. laevis			2
Nitzschia cf. macilenta	2		
Nitzschia cf. subacicularis			
Nitzschia clausii	3	5	2
Nitzschia columbiana	3		2
Nitzschia communis			
Nitzschia commutata			
Nitzschia constricta		2	
Nitzschia cylindrus			
Nitzschia debilis	2	6	
Nitzschia desertorum			
Nitzschia dissipata			
Nitzschia filiformis	2		
Nitzschia fonticola			
Nitzschia frustulum	2		1
Nitzschia gracilis			
Nitzschia incognita	2	1	
Nitzschia inconspicua	1	4	
Nitzschia innominata			
Nitzschia levidensis			
Nitzschia linearis	3	10	
Nitzschia marginulatus			
Nitzschia microcephala			
Nitzschia minuta			
Nitzschia nana	8	2	
Nitzschia obtusa			
Nitzschia palea		4	5
Nitzschia panduriformis			
Nitzschia pellucida			
Nitzschia perminuta		7	1

Raw Counts	S3-30	S3-40	S3-50
Nitzschia proxima			
Nitzschia punctata			
Nitzschia pusilla			
Nitzschia scalaris		3	1
Nitzschia sigma	7		2
Nitzschia sigmaformis			
Nitzschia sociabilis			
Nitzschia sp. 1		1	
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4	2		
Nitzschia sp. 5			
Nitzschia sp. 6			3
Nitzschia sp. 7			
Nitzschia sp. 8			
Nitzschia umbonata			
Opephora martyi	2		1
Opephora olsenii			
Opephora sp. A			
Orthoseira sp. 1			
Paralia sulcata	19	18	37
Parlibellus cf. plicatus			
Parlibellus sp. 2	2		
Pinnularia biceps	1		
Pinnularia borealis	1		
Pinnularia divergens	4	4	1
Pinnularia divergentissima			
Pinnularia ignobilis			
Pinnularia interrupta			
Pinnularia marchica	26	61	4
Pinnularia microstauron	7	3	3
Pinnularia sp. 10			
Pinnularia sp. 11			
Pinnularia sp. 12			
Pinnularia sp. 13			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			

Raw Counts	S3-30	S3-40	S3-50
Pinnularia sp. 8			
Pinnularia sp. 9			
Pinnularia sp.1			
Pinnularia sp.2			
Pinnularia viridis	2		
Placoneis cf. gastrum	2		
Placoneis elginensis			
Placoneis paralegali			
Placoneis sp. 1			
Placoneis sp. 2			
Placoneis sp. 3			2
Plagiogramma cf. minima			
Planothidium abbreviatum			
Planothidium apiculatum			3
Planothidium biporomum			
Planothidium dubium			
Planothidium frequentissimum	1	5	2
Planothidium lanceolatum	2		
Planothidium minutissimum			1
Planothidium paragali			
Planothidium rostratum			
Planothidium sp. 1			
Planothidium sp. 2			
Planothidium sp. 3			
Platessa bahlsii			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Psammothidium? Sp. 1			
Pseudostaurosira americana			1
Pseudostaurosira parasitica		2	
Pseudostaurosira brevistriata			2
Pseudostaurosiropsis sp. 1	2	1	9
Pseudostaurosiropsis sp. 1 (GV)			
Punctastriata mimetica			
Reimeria sinuata	5		
Rexlowea sp. 1	7		
Rhaphoneis amphiceros	2	9	15
Rhaphoneis tenuis			
Rhoicosphenia cf. marina			
Rhoicosphenia sp. 1			

Raw Counts	S3-30	S3-40	S3-50
Rhopalodia acuminatum			
Rhopolodia gibba			
Rhopolodia musculus			
Sellaphora cf. hohnii			
Sellaphora laevissima			
Sellaphora pulchra			
Sellaphora pupula	3		
Sellaphora rexii		18	
Sellaphora bacillum			
Skeletonema sp. 1			
Stauroforma exiguaformis			
Stauroneis agrestis			
Stauroneis CA			
Stauroneis cf. vandevijveri			
Stauroneis circumborealis			
Stauroneis conspicua			
Stauroneis GV			
Stauroneis kriegeri	3	3	1
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Stauroneis sp. 4			
Staurophora cf. soodensis			
Staurosira construens		2	
Staurosira construens var. binodis	2		
Staurosirella leptosauron var. dubia			
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angusta			
Surirella brebissonii			
Surirella cf. iowensis			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida	13	6	2
Symmetrical biraphid1			
Symmetrical biraphid2			
Synedra cf. fulgens			
Synedra famelica			
Synedra ulna var. biceps			

Raw Counts	S3-30	S3-40	S3-50
Synedra ulna var. ramesi			
Tabularia fasciculata		1	
Tabularia ktenoeoides			
Thalassionema nitzschioides	5	2	12
Thalassiosira baltica			
Thalassiosira cf. lineata			9
Thalassiosira cf. tenera	2		1
Thalassiosira decipiens	2	1	4
Thalassiosira eccentrica	4	5	12
Thalassiosira ferelineata		2	3
Thalassiosira oestrupii			2
Thalassiosira proschkinae			2
Thalassiosira sp. 10 Cooper	2	3	2
Thalassiosira sp. 2-1 Cooper		3	5
Trachyneis aspera var. vulgaris			
Triceratium sp. 2	1		1
Triceratium sp.1			1
Tryblionella debilis	20	10	2
Tryblionella salinarum			
Tryblionella sp. 1		1	1
Tryblionella sp. 2			
Ulnaria acus			
Ulnaria ulna	8	7	9
Undulate colony??			
unknown araphid			
Unknown biraphid	1		
Unknown CA			
Unknown colony			4
Unknown GV?			

Raw Counts	S3-60	S3-70	S3-80
Total Counted:	503	500	503
Species	92	91	78
Taxon	Count	Count	Count
Achnanthes coarctaca			
Achnanthes denticula			
Achnanthes GV			
Achnanthes islandica		1	6
Achnanthidium exiguum			
Achnanthidium gracillimum			
Actinocyclus normanii	8	6	17
Actinocyclus octonarius var. crassus ?	2	8	11
Actinoptychus senarius	8	5	7
Adalfia brockmannii			
Adalfia sp. 1			
Amphora copulata			
Amphora granulata			
Amphora ovalis			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus			
Aneumastus pseudotusculus			
Aneumastus sp. 1			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Asterionella formosa			
Asterionella sp. 1			
Asymmetrical CA			
Aulacoseira ambigua	12	11	14
Aulacoseira granulata			
Aulacoseira granulata var. angustissima			
Aulacoseira pusilla			
Aulacoseira sp. 1			
Aulacoseira sp. 2			
Aulacoseira tenella			2
Bacillaria socialis	3	2	2
Biremis circumtexta			
Biremis? sp. 1			
Caloneis aemula			
Caloneis bacillum	8	2	
Caloneis cf. lineatus			

Raw Counts	S3-60	S3-70	S3-80
Caloneis cf. ventricosa			
Caloneis lewisii			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Capartogramma crucicula			
Cavinula scutelloides			
Cavinula sp. 1			1
Cocconeis cf. peltoides			
Cocconeis costata var. costata			
Cocconeis diminuta			
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis placentula	11	6	2
Cocconeis scutellum			
Coscinodiscus cf. lineatus	11	12	1
Coscinodiscus marginatus	8	9	37
Cosmoneis pusilla		1	
Cosmoneis sp. 1			
Cosmoneis sp. 2			
Craticula cuspidata			
Cyclostephanos sp. 1	5	8	3
Cyclostephanos sp. 2			
Cyclotella atomus?	4	8	8
Cyclotella caspia	1	1	6
Cyclotella cyclopuncta	4	8	9
Cyclotella distinguenda			4
Cyclotella meneghiniana	12	45	14
Cyclotella rossii	7	8	7
Cyclotella sp. 2			
Cyclotella striata	23	33	81
Cyclotella stylorum			
Cymatopleura solea			
Cymatosira belgica	9	10	11
Cymbella affinis	2		4
Cymbella cf. excisiformis		1	
Cymbella janischii	2		4
Cymbella mexicana			

Raw Counts	S3-60	S3-70	S3-80
Cymbella minuta			1
Cymbella sp. 2			
Cymbella turgidula			4
Cymbopleura A			
Cymbopleura cuspidata			
Cymbopleura sp. 1			
Decussata placenta		4	2
Delphineis minutissima	3	1	
Delphineis surirella	3		
Denticula kuetzengii			
Diadesmis cf. contenta	2	11	
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis			
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana	1		
Diploneis cf. bombus		1	1
Diploneis cf. didyma			
Diploneis elliptica	1		1
Diploneis pseudovalis			
Diploneis smithii		2	
Diploneis sp. 1			
Diploneis sp. 2			
Diploneis interrupta			
Discostella stelligera			
Encyonema minutum			
Encyonema nicafei	17	7	9
Encyonema sp. 1			
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema sp. 4			
Encyonema triangulum			
Encyonopsis microcephala			
Epithemia adnata			
Epithemia frickei			
Epithemia smithii			
Epithemia sorex			
Epithemia turgida		1	2

Raw Counts	S3-60	S3-70	S3-80
Eunotia richbuttensis			4
Eunotia sp. 1			1
Eunotia sp. 2	3	1	
Eunotia sp. 3 (GV)			
Fallacia pygmaea	10	7	
Fragilaria brevistriata			
Fragilaria capucina			
Fragilaria cf. microstriata			
Fragilaria elliptica	7	1	
Fragilaria schulzii			
Fragilaria tenera			
Fragilaria vaucheriae	11	2	2
Frickea lewisiana			
Frustulia amphipleuroides			
Frustulia capitata			
Frustulia rhomboides var. viridula			
Frustulia sp. 1			
Frustulia vulgaris	3		
Geissleria cf. kriegeri		1	
Geissleria decussis			
Gomphoneis hurculeana			
Gomphoneis sp. 1			
Gomphoneis sp. 3	2	1	
Gomphonema acuminatum			1
Gomphonema innocens	5		1
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceoides			
Gomphonema olivaceum			
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3	6	3	
Gomphonopsis exiguum			
Gomphosphenia lingulatiformis			
Grammatophora cf. macilenta			
Gyrosigma temperii			
Gyrosigma cf. balticum			
Gyrosigma sp.1	2		
Gyrosigma spencerii	1	3	
Hantzschia sp. 1 girdle view			

Raw Counts	S3-60	S3-70	S3-80
Hantzschia sp. 2 girdle view			
Hantzschia sp. 3			
Hantzschia sp. 4			
Hantzschia virgata	3	6	2
Hippodonta costulata			
Hippodonta coxiae	3	5	
Hippodonta hungarica			
Hippodonta sp. 1			
Hippodonta sp. 2			
Karayevia amoena		1	
Karayevia clevei			
Kobayasiella sp. 1			
Leptocylindrus cf. danicus	3		3
Luticola sp. 1		4	
Luticola sp. 2		11	
Luticola sp. 3	1	4	
Luticola sp. 4			11
Luticola sp. 5			
Mastogloia smithii			
Mastogloia sp. 1			
Mastogloia sp. 2			
Melosira sp. 1			
Melosira varians			
Meridion circulare var. constrictum			
Meridion sp. 1			
Navicula A			***2***
Navicula abunda	4		1
Navicula angusta			
Navicula antonii			
Navicula brachium			
Navicula cari	2	10	2
Navicula cf. capitoradiata	4		
Navicula cf. galloae			
Navicula cf. heuflerii			1
Navicula cf. ludloviana (CA)			
Navicula cf. oblonga			
Navicula cf. patrickii		1	1
Navicula cf. reichardtiana			
Navicula cf. reinhardtii			
Navicula cf. salinarum	2		

Raw Counts	S3-60	S3-70	S3-80
Navicula cf. schweigeri		1	
Navicula cf. subinflata	10	2	
Navicula cf. tripunctata	4	4	1
Navicula cf. zostereti	2	4	4
Navicula clementis			
Navicula denta			
Navicula difficillima			
Navicula facilis			
Navicula germainii			
Navicula glomus			
Navicula gregaria		1	
Navicula halophila	1		1
Navicula kotschyi			
Navicula lanceolata	2	2	
Navicula marginulata			
Navicula oculiformis			
Navicula peregrina	14	15	21
Navicula perminuta	2	1	
Navicula phyllepta	4		
Navicula slesvicensis			
Navicula sp. 1	1	1	1
Navicula sp. 10	3		
Navicula sp. 11	9	7	
Navicula sp. 12			
Navicula sp. 13			
Navicula sp. 14			
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 5	5		
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8	1	11	
Navicula sp. 9			
Navicula subinflata			
Navicula subminiscula	1		
Navicula trivialis			
Navicula vilaplanii			
Naviculoid diatom 1			
Naviculoid diatom 2			
Neidiopsis sp. 1			

Raw Counts	S3-60	S3-70	S3-80
Neodephaneis pelagica			
Nitzschia amphibia	1	3	2
Nitzschia angustata			
Nitzschia biacrula			
Nitzschia bita	2	4	
Nitzschia brevissima	6	8	10
Nitzschia cf. agnita	2		
Nitzschia cf. biremis			
Nitzschia cf. borealis			
Nitzschia cf. groefii			
Nitzschia cf. laevis			
Nitzschia cf. macilenta			
Nitzschia cf. subacicularis			
Nitzschia clausii	1	3	1
Nitzschia columbiana	1	1	
Nitzschia communis			
Nitzschia commutata			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis		1	
Nitzschia desertorum			
Nitzschia dissipata			
Nitzschia filiformis			
Nitzschia fonticola			
Nitzschia frustulum	1	4	
Nitzschia gracilis			
Nitzschia incognita			
Nitzschia inconspicua			
Nitzschia innominata			
Nitzschia levidensis			
Nitzschia linearis			
Nitzschia marginulatus			
Nitzschia microcephala			
Nitzschia minuta			
Nitzschia nana	2		
Nitzschia obtusa			
Nitzschia palea	4	1	
Nitzschia panduriformis			
Nitzschia pellucida			
Nitzschia perminuta			

Raw Counts	S3-60	S3-70	S3-80
Nitzschia proxima			
Nitzschia punctata			1
Nitzschia pusilla			2
Nitzschia scalaris	5		
Nitzschia sigma	3	2	3
Nitzschia sigmaformis	1	1	
Nitzschia sociabilis			
Nitzschia sp. 1	1		
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4		2	1
Nitzschia sp. 5			
Nitzschia sp. 6			
Nitzschia sp. 7			
Nitzschia sp. 8			
Nitzschia umbonata			
Opephora martyi		1	1
Opephora olsenii			
Opephora sp. A			
Orthoseira sp. 1			
Paralia sulcata	42	56	54
Parlibellus cf. plicatus		2	
Parlibellus sp. 2			
Pinnularia biceps			
Pinnularia borealis	2	4	2
Pinnularia divergens			1
Pinnularia divergentissima	49		
Pinnularia ignobilis			
Pinnularia interrupta	1		
Pinnularia marchica	16	2	
Pinnularia microstauron	4	1	
Pinnularia sp. 10			
Pinnularia sp. 11		2	
Pinnularia sp. 12			
Pinnularia sp. 13			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			

Raw Counts	S3-60	S3-70	S3-80
Pinnularia sp. 8			
Pinnularia sp. 9	1		
Pinnularia sp.1			
Pinnularia sp.2			
Pinnularia viridis	2		1
Placoneis cf. gastrum			
Placoneis elginensis			
Placoneis paralegali			
Placoneis sp. 1			
Placoneis sp. 2			
Placoneis sp. 3			
Plagiogramma cf. minima			
Planothidium abbreviatum			
Planothidium apiculatum			
Planothidium biporomum			
Planothidium dubium	2		
Planothidium frequentissimum			
Planothidium lanceolatum	2		2
Planothidium minutissimum			
Planothidium paragali			
Planothidium rostratum			2
Planothidium sp. 1			
Planothidium sp. 2			
Planothidium sp. 3			
Platessa bahlsii			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Psammothidium? Sp. 1			
Pseudostaurosira americana			3
Pseudostaurosira parasitica		1	
Pseudostaurosira brevistriata			
Pseudostaurosiropsis sp. 1	5	7	2
Pseudostaurosiropsis sp. 1 (GV)			
Punctastriata mimetica			
Reimeria sinuata		1	
Rexlowea sp. 1			
Rhaphoneis amphiceros	13	16	24
Rhaphoneis tenuis		6	3
Rhoicosphenia cf. marina			
Rhoicosphenia sp. 1			

Raw Counts	S3-60	S3-70	S3-80
Rhopalodia acuminatum		2	
Rhopolodia gibba			
Rhopolodia musculus			
Sellaphora cf. hohnii			2
Sellaphora laevissima			
Sellaphora pulchra			
Sellaphora pupula		2	
Sellaphora rexii			
Sellaphora bacillum			2
Skeletonema sp. 1			
Stauroforma exiguaformis			
Stauroneis agrestis			
Stauroneis CA			
Stauroneis cf. vandevijveri			
Stauroneis circumborealis			
Stauroneis conspicua			
Stauroneis GV			
Stauroneis kriegeri	2		
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Stauroneis sp. 4			
Staurophora cf. soodensis			
Staurosira construens			
Staurosira construens var. binodis			
Staurosirella leptosauron var. dubia			
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angusta			
Surirella brebissonii			
Surirella cf. iowensis			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida	1	3	
Symmetrical biraphid1			
Symmetrical biraphid2			
Synedra cf. fulgens			
Synedra famelica			
Synedra ulna var. biceps			

Raw Counts	S3-60	S3-70	S3-80
Synedra ulna var. ramesi			
Tabularia fasciculata			
Tabularia ktenoeoides			
Thalassionema nitzschioides	8	8	11
Thalassiosira baltica		3	
Thalassiosira cf. lineata		3	2
Thalassiosira cf. tenera			
Thalassiosira decipiens	1	2	14
Thalassiosira eccentrica	7	9	8
Thalassiosira ferelineata			4
Thalassiosira oestrupii			
Thalassiosira proschkinae	2	2	4
Thalassiosira sp. 10 Cooper	1	2	2
Thalassiosira sp. 2-1 Cooper	4	5	3
Trachyneis aspera var. vulgaris			
Triceratium sp. 2		1	
Triceratium sp.1			
Tryblionella debilis	4	3	2
Tryblionella salinarum		4	
Tryblionella sp. 1			
Tryblionella sp. 2			
Ulnaria acus			1
Ulnaria ulna	6		2
Undulate colony??			
unknown araphid			
Unknown biraphid			
Unknown CA			
Unknown colony			
Unknown GV?			

Raw Counts	S3-90	S3-100	S3-110
Total Counted:	500	500	502
Species	88	83	82
Taxon	Count	Count	Count
Achnanthes coarctaca	1		
Achnanthes denticula			
Achnanthes GV			
Achnanthes islandica	2		1
Achnanthidium exiguum		3	
Achnanthidium gracillimum		1	
Actinocyclus normanii	6	5	8
Actinocyclus octonarius var. crassus ?	9	2	2
Actinoptychus senarius	1	5	8
Adalfia brockmannii			
Adalfia sp. 1			
Amphora copulata	1		
Amphora granulata			
Amphora ovalis			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus	3		
Aneumastus pseudotusculus			
Aneumastus sp. 1			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Asterionella formosa			
Asterionella sp. 1			
Asymmetrical CA			
Aulacoseira ambigua	23	33	22
Aulacoseira granulata			
Aulacoseira granulata var. angustissima			
Aulacoseira pusilla			
Aulacoseira sp. 1			
Aulacoseira sp. 2			
Aulacoseira tenella			
Bacillaria socialis	1	1	1
Biremis circumtexta		1	
Biremis? sp. 1			
Caloneis aemula			2
Caloneis bacillum	1	6	4
Caloneis cf. lineatus			

Raw Counts	S3-90	S3-100	S3-110
Caloneis cf. ventricosa			
Caloneis lewisii			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Capartogramma crucicula			
Cavinula scutelloides			
Cavinula sp. 1	1		
Cocconeis cf. peltoides			
Cocconeis costata var. costata			
Cocconeis diminuta			
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis placentula	3	4	5
Cocconeis scutellum			
Coscinodiscus cf. lineatus	8	3	4
Coscinodiscus marginatus	35	33	32
Cosmoneis pusilla			
Cosmoneis sp. 1			
Cosmoneis sp. 2			
Craticula cuspidata			
Cyclostephanos sp. 1	1	2	
Cyclostephanos sp. 2			
Cyclotella atomus?	10		4
Cyclotella caspia	2		9
Cyclotella cyclopuncta	8	7	6
Cyclotella distinguenda	4		
Cyclotella meneghiniana	8	7	8
Cyclotella rossii	4	22	13
Cyclotella sp. 2			
Cyclotella striata	72	62	72
Cyclotella stylorum			
Cymatopleura solea			
Cymatosira belgica	12	10	6
Cymbella affinis		2	6
Cymbella cf. excisiformis			
Cymbella janischii		2	
Cymbella mexicana			

Raw Counts	S3-90	S3-100	S3-110
Cymbella minuta			
Cymbella sp. 2			
Cymbella turgidula	3	2	
Cymbopleura A			
Cymbopleura cuspidata			
Cymbopleura sp. 1			
Decussata placenta			1
Delphineis minutissima	8		
Delphineis surirella	1		3
Denticula kuetzengii			
Diadesmis cf. contenta	1		2
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis			
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor		10	1
Diploneis boldtiana			
Diploneis cf. bombus		2	
Diploneis cf. didyma			
Diploneis elliptica		4	
Diploneis pseudovalis			4
Diploneis smithii	5	6	
Diploneis sp. 1			
Diploneis sp. 2			
Diploneis interrupta			
Discostella stelligera			
Encyonema minutum			
Encyonema nicafei	6	9	2
Encyonema sp. 1			
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema sp. 4			
Encyonema triangulum			
Encyonopsis microcephala	2		
Epithemia adnata	2		1
Epithemia frickei			
Epithemia smithii			
Epithemia sorex			
Epithemia turgida	1	2	2

Raw Counts	S3-90	S3-100	S3-110
Eunotia richbuttensis			
Eunotia sp. 1		2	
Eunotia sp. 2			2
Eunotia sp. 3 (GV)			2
Fallacia pygmaea		2	5
Fragilaria brevistriata			
Fragilaria capucina			
Fragilaria cf. microstriata			
Fragilaria elliptica	8	6	5
Fragilaria schulzii			
Fragilaria tenera			
Fragilaria vaucheriae	1	5	8
Frickea lewisiana			
Frustulia amphipleuroides			
Frustulia capitata			
Frustulia rhomboides var. viridula			
Frustulia sp. 1			
Frustulia vulgaris	3		4
Geissleria cf. kriegeri			
Geissleria decussis			
Gomphoneis hurculeana			
Gomphoneis sp. 1			
Gomphoneis sp. 3			
Gomphonema acuminatum			
Gomphonema innocens	2	5	12
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceoides			
Gomphonema olivaceum			
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Gomphosphenia lingulatiformis			
Grammatophora cf. macilenta			
Gyrosigma temperii			
Gyrosigma cf. balticum		1	
Gyrosigma sp.1			
Gyrosigma spencerii	6		
Hantzschia sp. 1 girdle view			

Raw Counts	S3-90	S3-100	S3-110
Hantzschia sp. 2 girdle view			
Hantzschia sp. 3			
Hantzschia sp. 4			
Hantzschia virgata	1	1	1
Hippodonta costulata	1		
Hippodonta coxiae			3
Hippodonta hungarica			
Hippodonta sp. 1			
Hippodonta sp. 2			
Karayevia amoena			
Karayevia clevei			
Kobayasiella sp. 1			
Leptocylindrus cf. danicus	5	1	3
Luticola sp. 1			
Luticola sp. 2			
Luticola sp. 3			5
Luticola sp. 4	3	4	
Luticola sp. 5			
Mastogloia smithii			
Mastogloia sp. 1			
Mastogloia sp. 2			
Melosira sp. 1			1
Melosira varians			
Meridion circulare var. constrictum			
Meridion sp. 1			
Navicula A			
Navicula abunda	2	2	2
Navicula angusta			
Navicula antonii	2		
Navicula brachium			
Navicula cari	5	5	1
Navicula cf. capitoradiata		2	
Navicula cf. galloae			
Navicula cf. heuflerii		1	2
Navicula cf. ludloviana (CA)			
Navicula cf. oblonga			
Navicula cf. patrickii			
Navicula cf. reichardtiana			
Navicula cf. reinhardtii	2		
Navicula cf. salinarum			

Raw Counts	S3-90	S3-100	S3-110
Navicula cf. schweigeri			
Navicula cf. subinflata		2	
Navicula cf. tripunctata	2	2	4
Navicula cf. zostereti	6	4	3
Navicula clementis			3
Navicula denta			
Navicula difficillima			
Navicula facilis			
Navicula germainii			
Navicula glomus			
Navicula gregaria			1
Navicula halophila	2	1	
Navicula kotschyi			
Navicula lanceolata		1	
Navicula marginulata			
Navicula oculiformis	1		
Navicula peregrina	10	4	5
Navicula perminuta	2		
Navicula phyllepta			
Navicula slesvicensis			
Navicula sp. 1	6		
Navicula sp. 10			
Navicula sp. 11			
Navicula sp. 12			
Navicula sp. 13			
Navicula sp. 14			
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 5	1	1	
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8			
Navicula sp. 9			
Navicula subinflata			
Navicula subminiscula			
Navicula trivialis			
Navicula vilaplanii			
Naviculoid diatom 1			
Naviculoid diatom 2			
Neidiopsis sp. 1			

Raw Counts	S3-90	S3-100	S3-110
Neodephaneis pelagica			
Nitzschia amphibia	2	2	1
Nitzschia angustata			
Nitzschia biacrula			
Nitzschia bita			
Nitzschia brevissima	10	4	10
Nitzschia cf. agnita	1	4	
Nitzschia cf. biremis			
Nitzschia cf. borealis	1		1
Nitzschia cf. groefii			
Nitzschia cf. laevis			
Nitzschia cf. macilenta			
Nitzschia cf. subacicularis			
Nitzschia clausii			
Nitzschia columbiana		3	1
Nitzschia communis			
Nitzschia commutata			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis		1	
Nitzschia desertorum			
Nitzschia dissipata			
Nitzschia filiformis			2
Nitzschia fonticola			
Nitzschia frustulum			3
Nitzschia gracilis			
Nitzschia incognita			
Nitzschia inconspicua	1		2
Nitzschia innominata			
Nitzschia levidensis			
Nitzschia linearis	1		
Nitzschia marginulatus			
Nitzschia microcephala			
Nitzschia minuta			
Nitzschia nana			
Nitzschia obtusa			
Nitzschia palea	1	3	2
Nitzschia panduriformis	1		
Nitzschia pellucida			
Nitzschia perminuta			

Raw Counts	S3-90	S3-100	S3-110
Nitzschia proxima			
Nitzschia punctata	4	1	
Nitzschia pusilla	1		
Nitzschia scalaris			
Nitzschia sigma	3	6	1
Nitzschia sigmaformis	1		
Nitzschia sociabilis			
Nitzschia sp. 1			
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4	1	4	
Nitzschia sp. 5			
Nitzschia sp. 6			
Nitzschia sp. 7			
Nitzschia sp. 8			
Nitzschia umbonata			
Opephora martyi		2	4
Opephora olsenii			
Opephora sp. A			
Orthoseira sp. 1			
Paralia sulcata	63	59	73
Parlibellus cf. plicatus	2		
Parlibellus sp. 2			
Pinnularia biceps			
Pinnularia borealis			
Pinnularia divergens			
Pinnularia divergentissima		1	2
Pinnularia ignobilis			
Pinnularia interrupta			
Pinnularia marchica	2		1
Pinnularia microstauron			3
Pinnularia sp. 10			
Pinnularia sp. 11			
Pinnularia sp. 12			
Pinnularia sp. 13			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			

Raw Counts	S3-90	S3-100	S3-110
Pinnularia sp. 8			
Pinnularia sp. 9			
Pinnularia sp.1			
Pinnularia sp.2			
Pinnularia viridis	5		2
Placoneis cf. gastrum		1	2
Placoneis elginensis			
Placoneis paralegali			
Placoneis sp. 1			
Placoneis sp. 2			
Placoneis sp. 3			
Plagiogramma cf. minima			
Planothidium abbreviatum			3
Planothidium apiculatum			
Planothidium biporomum			
Planothidium dubium			
Planothidium frequentissimum	1	1	
Planothidium lanceolatum		1	
Planothidium minutissimum			
Planothidium paragali			
Planothidium rostratum			
Planothidium sp. 1			
Planothidium sp. 2			
Planothidium sp. 3			
Platessa bahlsii			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Psammothidium? Sp. 1			
Pseudostaurosira americana	2	6	
Pseudostaurosira parasitica			
Pseudostaurosira brevistriata			
Pseudostaurosiropsis sp. 1	5	9	1
Pseudostaurosiropsis sp. 1 (GV)			
Punctastriata mimetica			
Reimeria sinuata		2	1
Rexlowea sp. 1			
Rhaphoneis amphiceros	28	29	14
Rhaphoneis tenuis	3		1
Rhoicosphenia cf. marina			
Rhoicosphenia sp. 1			

Raw Counts	S3-90	S3-100	S3-110
Rhopalodia acuminatum	3	2	2
Rhopolodia gibba			
Rhopolodia musculus	1		5
Sellaphora cf. hohnii			
Sellaphora laevissima			
Sellaphora pulchra			
Sellaphora pupula		1	
Sellaphora rexii			
Sellaphora bacillum			
Skeletonema sp. 1			
Stauroforma exiguaformis			
Stauroneis agrestis			
Stauroneis CA		2	
Stauroneis cf. vandevijveri			
Stauroneis circumborealis			
Stauroneis conspicua			
Stauroneis GV			
Stauroneis kriegeri	1	3	
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Stauroneis sp. 4			
Staurophora cf. soodensis			
Staurosira construens	3	2	
Staurosira construens var. binodis			
Staurosirella leptosauron var. dubia			
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angusta			
Surirella brebissonii	2	1	
Surirella cf. iowensis			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida	1		3
Symmetrical biraphid1			
Symmetrical biraphid2			
Synedra cf. fulgens			
Synedra famelica			
Synedra ulna var. biceps			

Raw Counts	S3-90	S3-100	S3-110
Synedra ulna var. ramesi			
Tabularia fasciculata			
Tabularia ktenoeoides			
Thalassionema nitzschioides	15	10	16
Thalassiosira baltica			
Thalassiosira cf. lineata		3	
Thalassiosira cf. tenera		4	2
Thalassiosira decipiens	5	4	9
Thalassiosira eccentrica	8	15	14
Thalassiosira ferelineata	2		
Thalassiosira oestrupii			
Thalassiosira proschkinae	1	3	2
Thalassiosira sp. 10 Cooper		1	6
Thalassiosira sp. 2-1 Cooper		3	4
Trachyneis aspera var. vulgaris			
Triceratium sp. 2		4	1
Triceratium sp.1			
Tryblionella debilis	1		2
Tryblionella salinarum			
Tryblionella sp. 1		2	1
Tryblionella sp. 2			
Ulnaria acus			
Ulnaria ulna	2	3	4
Undulate colony??			
unknown araphid			
Unknown biraphid			
Unknown CA			
Unknown colony			
Unknown GV?			

Raw Counts	S3-120	S3-130	S3-140
Total Counted:	501	501	500
Species	92	92	96
Taxon	Count	Count	Count
Achnanthes coarctaca			
Achnanthes denticula		1	1
Achnanthes GV			
Achnanthes islandica	2	3	2
Achnanthidium exiguum			
Achnanthidium gracillimum	4	3	1
Actinocyclus normanii	4	1	2
Actinocyclus octonarius var. crassus ?	8	1	10
Actinoptychus senarius	10	9	
Adalfia brockmannii			
Adalfia sp. 1			
Amphora copulata			
Amphora granulata			
Amphora ovalis			2
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus			
Aneumastus pseudotusculus			
Aneumastus sp. 1			
Anomoeoneis sp. 1		2	
Anorthoneis tenuis			
Asterionella formosa			
Asterionella sp. 1			
Asymmetrical CA			
Aulacoseira ambigua	28	22	15
Aulacoseira granulata			
Aulacoseira granulata var. angustissima			
Aulacoseira pusilla			
Aulacoseira sp. 1			
Aulacoseira sp. 2			
Aulacoseira tenella			
Bacillaria socialis	1	1	1
Biremis circumtexta			
Biremis? sp. 1	2		2
Caloneis aemula			
Caloneis bacillum		7	7
Caloneis cf. lineatus			

Raw Counts	S3-120	S3-130	S3-140
Caloneis cf. ventricosa			
Caloneis lewisii			2
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Capartogramma crucicula			
Cavinula scutelloides			
Cavinula sp. 1			
Cocconeis cf. peltoides	1		
Cocconeis costata var. costata			
Cocconeis diminuta			2
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis placentula		2	1
Cocconeis scutellum			
Coscinodiscus cf. lineatus	11	2	1
Coscinodiscus marginatus	17	22	13
Cosmoneis pusilla			1
Cosmoneis sp. 1			
Cosmoneis sp. 2	1		
Craticula cuspidata			
Cyclostephanos sp. 1	6	1	2
Cyclostephanos sp. 2			
Cyclotella atomus?	5	11	4
Cyclotella caspia	13	16	4
Cyclotella cyclopuncta	8	7	11
Cyclotella distinguenda			
Cyclotella meneghiniana	21	16	3
Cyclotella rossii	17	9	10
Cyclotella sp. 2	2	4	
Cyclotella striata	44	50	22
Cyclotella stylorum			
Cymatopleura solea			
Cymatosira belgica	6	2	15
Cymbella affinis		8	
Cymbella cf. excisiformis	2		
Cymbella janischii	1		
Cymbella mexicana			

Raw Counts	S3-120	S3-130	S3-140
Cymbella minuta			
Cymbella sp. 2			
Cymbella turgidula			
Cymbopleura A			
Cymbopleura cuspidata			
Cymbopleura sp. 1			
Decussata placenta			
Delphineis minutissima	2	3	
Delphineis surirella			3
Denticula kuetzengii		1	1
Diadesmis cf. contenta	6	10	7
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis			
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana	3	1	6
Diploneis cf. bombus	2		
Diploneis cf. didyma			
Diploneis elliptica			3
Diploneis pseudovalis	3	2	
Diploneis smithii	3	1	
Diploneis sp. 1			
Diploneis sp. 2			
Diploneis interrupta			
Discostella stelligera			
Encyonema minutum			
Encyonema nicafei	1	5	7
Encyonema sp. 1			
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema sp. 4			
Encyonema triangulum			
Encyonopsis microcephala			
Epithemia adnata		1	
Epithemia frickei			
Epithemia smithii			
Epithemia sorex			
Epithemia turgida	3	3	1

Raw Counts	S3-120	S3-130	S3-140
Eunotia richbuttensis			
Eunotia sp. 1		2	
Eunotia sp. 2			
Eunotia sp. 3 (GV)			
Fallacia pygmaea		1	
Fragilaria brevistriata			
Fragilaria capucina			
Fragilaria cf. microstriata			
Fragilaria elliptica	5	5	7
Fragilaria schulzii			
Fragilaria tenera			
Fragilaria vaucheriae	5	2	3
Frickea lewisiana		3	1
Frustulia amphipleuroides			
Frustulia capitata			
Frustulia rhomboides var. viridula			
Frustulia sp. 1			
Frustulia vulgaris	2	2	1
Geissleria cf. kriegeri			
Geissleria decussis			
Gomphoneis hurculeana			
Gomphoneis sp. 1			
Gomphoneis sp. 3			
Gomphonema acuminatum			
Gomphonema innocens	1	2	4
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceoides			
Gomphonema olivaceum	3		
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Gomphosphenia lingulatiformis			
Grammatophora cf. macilenta			
Gyrosigma temperii			
Gyrosigma cf. balticum	2		
Gyrosigma sp.1			
Gyrosigma spencerii		8	2
Hantzschia sp. 1 girdle view			

Raw Counts	S3-120	S3-130	S3-140
Hantzschia sp. 2 girdle view			
Hantzschia sp. 3			
Hantzschia sp. 4			
Hantzschia virgata		2	1
Hippodonta costulata		2	
Hippodonta coxiae	2	5	3
Hippodonta hungarica	2		
Hippodonta sp. 1			
Hippodonta sp. 2			
Karayevia amoena	1		1
Karayevia clevei			
Kobayasiella sp. 1			
Leptocylindrus cf. danicus	3	3	
Luticola sp. 1		1	1
Luticola sp. 2			
Luticola sp. 3	2		5
Luticola sp. 4	2	8	
Luticola sp. 5			
Mastogloia smithii			
Mastogloia sp. 1			
Mastogloia sp. 2			
Melosira sp. 1			
Melosira varians			
Meridion circulare var. constrictum			
Meridion sp. 1			
Navicula A			
Navicula abunda			
Navicula angusta			
Navicula antonii			1
Navicula brachium			
Navicula cari	3	9	
Navicula cf. capitoradiata			
Navicula cf. galloae			
Navicula cf. heuflerii		1	1
Navicula cf. ludloviana (CA)			
Navicula cf. oblonga			
Navicula cf. patrickii		1	
Navicula cf. reichardtiana	2		
Navicula cf. reinhardtii			
Navicula cf. salinarum			

Raw Counts	S3-120	S3-130	S3-140
Navicula cf. schweigeri			
Navicula cf. subinflata		1	
Navicula cf. tripunctata	13	9	
Navicula cf. zostereti	1	4	7
Navicula clementis			
Navicula denta			
Navicula difficillima			
Navicula facilis			
Navicula germainii			
Navicula glomus			
Navicula gregaria			
Navicula halophila	1	3	
Navicula kotschyi			
Navicula lanceolata	3		
Navicula marginulata			2
Navicula oculiformis			
Navicula peregrina	16	16	2
Navicula perminuta	5		2
Navicula phyllepta			
Navicula slesvicensis			
Navicula sp. 1	1		
Navicula sp. 10			
Navicula sp. 11			
Navicula sp. 12			
Navicula sp. 13			
Navicula sp. 14			
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 5			
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8			
Navicula sp. 9			
Navicula subinflata			
Navicula subminiscula			
Navicula trivialis			
Navicula vilaplanii			
Naviculoid diatom 1			1
Naviculoid diatom 2			
Neidiopsis sp. 1			

Raw Counts	S3-120	S3-130	S3-140
Neodephaneis pelagica			
Nitzschia amphibia	2	2	7
Nitzschia angustata			
Nitzschia biacrula			
Nitzschia bita			1
Nitzschia brevissima	14	11	30
Nitzschia cf. agnita		2	4
Nitzschia cf. biremis			
Nitzschia cf. borealis			1
Nitzschia cf. groefii			
Nitzschia cf. laevis			
Nitzschia cf. macilenta			1
Nitzschia cf. subacicularis			
Nitzschia clausii	1		
Nitzschia columbiana			
Nitzschia communis			
Nitzschia commutata			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis	1		1
Nitzschia desertorum			
Nitzschia dissipata	1	1	
Nitzschia filiformis	1	1	
Nitzschia fonticola			
Nitzschia frustulum	3	3	
Nitzschia gracilis			
Nitzschia incognita			
Nitzschia inconspicua			
Nitzschia innominata			
Nitzschia levidensis			
Nitzschia linearis		2	2
Nitzschia marginulatus			
Nitzschia microcephala			
Nitzschia minuta			
Nitzschia nana			
Nitzschia obtusa			
Nitzschia palea			
Nitzschia panduriformis		2	
Nitzschia pellucida			
Nitzschia perminuta	1		

Raw Counts	S3-120	S3-130	S3-140
Nitzschia proxima	2		
Nitzschia punctata	1		6
Nitzschia pusilla			
Nitzschia scalaris	2		4
Nitzschia sigma	3	3	1
Nitzschia sigmaformis			
Nitzschia sociabilis			
Nitzschia sp. 1			1
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4	1	2	
Nitzschia sp. 5			
Nitzschia sp. 6			
Nitzschia sp. 7			
Nitzschia sp. 8			
Nitzschia umbonata			
Opephora martyi		4	2
Opephora olsenii			
Opephora sp. A			
Orthoseira sp. 1			
Paralia sulcata	59	54	87
Parlibellus cf. plicatus	1	2	
Parlibellus sp. 2			
Pinnularia biceps			
Pinnularia borealis	1		
Pinnularia divergens	1		9
Pinnularia divergentissima			
Pinnularia ignobilis			
Pinnularia interrupta			
Pinnularia marchica	8	4	6
Pinnularia microstauron			8
Pinnularia sp. 10			
Pinnularia sp. 11			
Pinnularia sp. 12			
Pinnularia sp. 13			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			

Raw Counts	S3-120	S3-130	S3-140
Pinnularia sp. 8			
Pinnularia sp. 9	1		1
Pinnularia sp.1			
Pinnularia sp.2			
Pinnularia viridis	3	3	8
Placoneis cf. gastrum	2		6
Placoneis elginensis			
Placoneis paralegali		2	
Placoneis sp. 1			
Placoneis sp. 2			
Placoneis sp. 3			
Plagiogramma cf. minima			
Planothidium abbreviatum			
Planothidium apiculatum			
Planothidium biporomum			
Planothidium dubium			
Planothidium frequentissimum			2
Planothidium lanceolatum	2	2	5
Planothidium minutissimum			
Planothidium paragali		4	
Planothidium rostratum			
Planothidium sp. 1			
Planothidium sp. 2			
Planothidium sp. 3			
Platessa bahlsii			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Psammothidium? Sp. 1			
Pseudostaurosira americana	1		1
Pseudostaurosira parasitica			1
Pseudostaurosira brevistriata			
Pseudostaurosiropsis sp. 1	9	5	4
Pseudostaurosiropsis sp. 1 (GV)			
Punctastriata mimetica			
Reimeria sinuata	2		
Rexlowea sp. 1			
Rhaphoneis amphiceros	15	15	21
Rhaphoneis tenuis	2	1	4
Rhoicosphenia cf. marina			2
Rhoicosphenia sp. 1			

Raw Counts	S3-120	S3-130	S3-140
Rhopalodia acuminatum	6	1	6
Rhopolodia gibba			
Rhopolodia musculus		2	10
Sellaphora cf. hohnii	2		
Sellaphora laevissima			
Sellaphora pulchra			
Sellaphora pupula		2	6
Sellaphora rexii			
Sellaphora bacillum			7
Skeletonema sp. 1			
Stauroforma exiguaformis			1
Stauroneis agrestis			
Stauroneis CA		2	
Stauroneis cf. vandevijveri			
Stauroneis circumborealis			
Stauroneis conspicua			1
Stauroneis GV			
Stauroneis kriegeri			3
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Stauroneis sp. 4			
Staurophora cf. soodensis			
Staurosira construens			
Staurosira construens var. binodis			
Staurosirella leptosauron var. dubia		4	5
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angusta			
Surirella brebissonii	1	1	1
Surirella cf. iowensis			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida		2	1
Symmetrical biraphid1		2	
Symmetrical biraphid2			
Synedra cf. fulgens			
Synedra famelica			
Synedra ulna var. biceps			

Raw Counts	S3-120	S3-130	S3-140
Synedra ulna var. ramesi			
Tabularia fasciculata			
Tabularia ktenoeoides			
Thalassionema nitzschioides	8	9	7
Thalassiosira baltica			
Thalassiosira cf. lineata	3	4	1
Thalassiosira cf. tenera			5
Thalassiosira decipiens	13	10	3
Thalassiosira eccentrica	3	4	
Thalassiosira ferelineata			
Thalassiosira oestrupii			1
Thalassiosira proschkinae	1		3
Thalassiosira sp. 10 Cooper	3	3	2
Thalassiosira sp. 2-1 Cooper	4	3	2
Trachyneis aspera var. vulgaris			
Triceratium sp. 2	1	1	
Triceratium sp.1			
Tryblionella debilis	2	7	2
Tryblionella salinarum			
Tryblionella sp. 1			
Tryblionella sp. 2	2		
Ulnaria acus			
Ulnaria ulna		2	
Undulate colony??			
unknown araphid			
Unknown biraphid			
Unknown CA			
Unknown colony			
Unknown GV?			

Raw Counts	S3-150	S3-160	S3-170
Total Counted:	510	506	507
Species	87	89	96
Taxon	Count	Count	Count
Achnanthes coarctaca			
Achnanthes denticula			
Achnanthes GV			
Achnanthes islandica			
Achnanthidium exiguum			
Achnanthidium gracillimum			
Actinocyclus normanii	2	2	
Actinocyclus octonarius var. crassus ?	6	10	10
Actinoptychus senarius	4	5	3
Adalfia brockmannii			
Adalfia sp. 1			
Amphora copulata			
Amphora granulata			
Amphora ovalis	1		
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus		4	2
Aneumastus pseudotusculus			
Aneumastus sp. 1			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Asterionella formosa			
Asterionella sp. 1	3		
Asymmetrical CA			
Aulacoseira ambigua	6	19	14
Aulacoseira granulata			
Aulacoseira granulata var. angustissima			
Aulacoseira pusilla			
Aulacoseira sp. 1			
Aulacoseira sp. 2			
Aulacoseira tenella		12	12
Bacillaria socialis	1	5	1
Biremis circumtexta			1
Biremis? sp. 1			
Caloneis aemula		2	3
Caloneis bacillum	9	7	1
Caloneis cf. lineatus			

Raw Counts	S3-150	S3-160	S3-170
Caloneis cf. ventricosa			
Caloneis lewisii	3		
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Capartogramma crucicula		4	
Cavinula scutelloides			
Cavinula sp. 1			
Cocconeis cf. peltoides			
Cocconeis costata var. costata			
Cocconeis diminuta			
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis placentula	4		3
Cocconeis scutellum			
Coscinodiscus cf. lineatus	4	2	7
Coscinodiscus marginatus	13	17	14
Cosmoneis pusilla			
Cosmoneis sp. 1			
Cosmoneis sp. 2			
Craticula cuspidata	2		
Cyclostephanos sp. 1	4	4	6
Cyclostephanos sp. 2			
Cyclotella atomus?	7	3	11
Cyclotella caspia		9	12
Cyclotella cyclopuncta	11	6	2
Cyclotella distinguenda			
Cyclotella meneghiniana	10	4	4
Cyclotella rossii	6	12	7
Cyclotella sp. 2			
Cyclotella striata	12	40	41
Cyclotella stylorum		2	
Cymatopleura solea			
Cymatosira belgica	11	12	12
Cymbella affinis			
Cymbella cf. excisiformis			
Cymbella janischii	1		
Cymbella mexicana	2		1

Raw Counts	S3-150	S3-160	S3-170
Cymbella minuta			
Cymbella sp. 2			
Cymbella turgidula			
Cymbopleura A			
Cymbopleura cuspidata			
Cymbopleura sp. 1	2		
Decussata placenta			
Delphineis minutissima	2	2	13
Delphineis surirella	5	6	5
Denticula kuetzengii		2	
Diadesmis cf. contenta	8		10
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis			
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana	1		
Diploneis cf. bombus			1
Diploneis cf. didyma			
Diploneis elliptica	7	4	2
Diploneis pseudovalis			1
Diploneis smithii		2	
Diploneis sp. 1			
Diploneis sp. 2			
Diploneis interrupta			
Discostella stelligera			
Encyonema minutum			
Encyonema nicafei	1	1	
Encyonema sp. 1		1	
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema sp. 4			
Encyonema triangulum			
Encyonopsis microcephala			
Epithemia adnata	4	6	2
Epithemia frickei			
Epithemia smithii			
Epithemia sorex			
Epithemia turgida	1	3	1

Raw Counts	S3-150	S3-160	S3-170
Eunotia richbuttensis			
Eunotia sp. 1	1		
Eunotia sp. 2	3		
Eunotia sp. 3 (GV)			2
Fallacia pygmaea	4		2
Fragilaria brevistriata			4
Fragilaria capucina			
Fragilaria cf. microstriata			
Fragilaria elliptica	12	4	
Fragilaria schulzii			
Fragilaria tenera			
Fragilaria vaucheriae			
Frickea lewisiana	3		
Frustulia amphipleuroides			
Frustulia capitata			
Frustulia rhomboides var. viridula			
Frustulia sp. 1			
Frustulia vulgaris		1	2
Geissleria cf. kriegeri		1	2
Geissleria decussis			
Gomphoneis hurculeana			
Gomphoneis sp. 1	3		1
Gomphoneis sp. 3			
Gomphonema acuminatum			
Gomphonema innocens	7	1	
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceoides			
Gomphonema olivaceum			
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Gomphosphenia lingulatiformis			
Grammatophora cf. macilenta			
Gyrosigma temperii			
Gyrosigma cf. balticum			
Gyrosigma sp.1			
Gyrosigma spencerii			4
Hantzschia sp. 1 girdle view			

Raw Counts	S3-150	S3-160	S3-170
Hantzschia sp. 2 girdle view			
Hantzschia sp. 3			
Hantzschia sp. 4			
Hantzschia virgata		1	
Hippodonta costulata			
Hippodonta coxiae		1	5
Hippodonta hungarica			
Hippodonta sp. 1			
Hippodonta sp. 2			
Karayevia amoena			
Karayevia clevei			
Kobayasiella sp. 1			
Leptocylindrus cf. danicus			
Luticola sp. 1	3		
Luticola sp. 2	15	8	4
Luticola sp. 3			
Luticola sp. 4			
Luticola sp. 5			
Mastogloia smithii			
Mastogloia sp. 1			
Mastogloia sp. 2			
Melosira sp. 1			1
Melosira varians			
Meridion circulare var. constrictum		1	
Meridion sp. 1			
Navicula A			
Navicula abunda	2		
Navicula angusta			
Navicula antonii	1		
Navicula brachium			
Navicula cari	4	3	3
Navicula cf. capitoradiata			
Navicula cf. galloae			
Navicula cf. heuflerii			3
Navicula cf. ludloviana (CA)			
Navicula cf. oblonga			
Navicula cf. patrickii		3	4
Navicula cf. reichardtiana			
Navicula cf. reinhardtii			
Navicula cf. salinarum	1		

Raw Counts	S3-150	S3-160	S3-170
Navicula cf. schweigeri		1	
Navicula cf. subinflata			2
Navicula cf. tripunctata	2	2	10
Navicula cf. zostereti	2	8	7
Navicula clementis		1	
Navicula denta	2		
Navicula difficillima			
Navicula facilis			2
Navicula germainii			
Navicula glomus			
Navicula gregaria			
Navicula halophila			
Navicula kotschyi			
Navicula lanceolata		6	2
Navicula marginulata			
Navicula oculiformis			2
Navicula peregrina	4	9	6
Navicula perminuta		3	4
Navicula phyllepta	2		
Navicula slesvicensis			
Navicula sp. 1			
Navicula sp. 10			
Navicula sp. 11			
Navicula sp. 12			
Navicula sp. 13			
Navicula sp. 14		2	1
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 5			
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8			
Navicula sp. 9			
Navicula subinflata			
Navicula subminiscula			
Navicula trivialis			
Navicula vilaplanii			
Naviculoid diatom 1			
Naviculoid diatom 2			
Neidiopsis sp. 1			

Raw Counts	S3-150	S3-160	S3-170
Neodephaneis pelagica			
Nitzschia amphibia			4
Nitzschia angustata			
Nitzschia biacrula			4
Nitzschia bita			2
Nitzschia brevissima	15	15	33
Nitzschia cf. agnita	3	2	4
Nitzschia cf. biremis			
Nitzschia cf. borealis			
Nitzschia cf. groefii			
Nitzschia cf. laevis			
Nitzschia cf. macilenta			
Nitzschia cf. subacicularis			
Nitzschia clausii			
Nitzschia columbiana		1	
Nitzschia communis			
Nitzschia commutata			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis			
Nitzschia desertorum			
Nitzschia dissipata		2	2
Nitzschia filiformis			
Nitzschia fonticola			
Nitzschia frustulum		1	
Nitzschia gracilis			
Nitzschia incognita			
Nitzschia inconspicua			
Nitzschia innominata			
Nitzschia levidensis			3
Nitzschia linearis			1
Nitzschia marginulatus		1	
Nitzschia microcephala			
Nitzschia minuta			
Nitzschia nana			
Nitzschia obtusa			
Nitzschia palea			
Nitzschia panduriformis	1	3	3
Nitzschia pellucida			
Nitzschia perminuta			

Raw Counts	S3-150	S3-160	S3-170
Nitzschia proxima	2	4	7
Nitzschia punctata	2	3	3
Nitzschia pusilla			2
Nitzschia scalaris			
Nitzschia sigma	1		2
Nitzschia sigmaformis			3
Nitzschia sociabilis			
Nitzschia sp. 1	1	2	
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4		2	
Nitzschia sp. 5			
Nitzschia sp. 6			
Nitzschia sp. 7			2
Nitzschia sp. 8			
Nitzschia umbonata			
Opephora martyi		3	3
Opephora olsenii		2	
Opephora sp. A			
Orthoseira sp. 1			
Paralia sulcata	71	72	56
Parlibellus cf. plicatus			1
Parlibellus sp. 2			
Pinnularia biceps			
Pinnularia borealis	1		
Pinnularia divergens	7		1
Pinnularia divergentissima	2		
Pinnularia ignobilis			
Pinnularia interrupta	1		
Pinnularia marchica	9	3	4
Pinnularia microstauron	4	1	
Pinnularia sp. 10	1		
Pinnularia sp. 11			
Pinnularia sp. 12			
Pinnularia sp. 13			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			

Raw Counts	S3-150	S3-160	S3-170
Pinnularia sp. 8			
Pinnularia sp. 9	4		
Pinnularia sp.1			
Pinnularia sp.2			
Pinnularia viridis	19	1	1
Placoneis cf. gastrum	20	7	2
Placoneis elginensis			
Placoneis paralegali		1	
Placoneis sp. 1			
Placoneis sp. 2			
Placoneis sp. 3			
Plagiogramma cf. minima			
Planothidium abbreviatum			
Planothidium apiculatum			
Planothidium biporomum			4
Planothidium dubium			
Planothidium frequentissimum			2
Planothidium lanceolatum	5	4	
Planothidium minutissimum			
Planothidium paragali			
Planothidium rostratum			
Planothidium sp. 1			
Planothidium sp. 2			
Planothidium sp. 3			
Platessa bahlsii			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Psammothidium? Sp. 1			
Pseudostaurosira americana			
Pseudostaurosira parasitica	4		
Pseudostaurosira brevistriata			
Pseudostaurosiropsis sp. 1	12	9	6
Pseudostaurosiropsis sp. 1 (GV)			
Punctastriata mimetica			
Reimeria sinuata			
Rexlowea sp. 1			
Rhaphoneis amphiceros	14	17	21
Rhaphoneis tenuis	2	5	1
Rhoicosphenia cf. marina			2
Rhoicosphenia sp. 1			

Raw Counts	S3-150	S3-160	S3-170
Rhopalodia acuminatum	13	10	4
Rhopolodia gibba			
Rhopolodia musculus	7	22	5
Sellaphora cf. hohnii			
Sellaphora laevissima			
Sellaphora pulchra			
Sellaphora pupula	13	2	
Sellaphora rexii			
Sellaphora bacillum	22	5	3
Skeletonema sp. 1			
Stauroforma exiguaformis		8	
Stauroneis agrestis			
Stauroneis CA			
Stauroneis cf. vandevijveri			
Stauroneis circumborealis			
Stauroneis conspicua	2		1
Stauroneis GV			
Stauroneis kriegeri		2	
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Stauroneis sp. 4			
Staurophora cf. soodensis			
Staurosira construens			
Staurosira construens var. binodis			
Staurosirella leptosauron var. dubia		5	1
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angusta			
Surirella brebissonii		2	
Surirella cf. iowensis			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida	3		1
Symmetrical biraphid1			
Symmetrical biraphid2	2		
Synedra cf. fulgens			
Synedra famelica			
Synedra ulna var. biceps			

Raw Counts	S3-150	S3-160	S3-170
Synedra ulna var. ramesi			
Tabularia fasciculata			
Tabularia ktenoeoides			
Thalassionema nitzschioides	7	3	8
Thalassiosira baltica			
Thalassiosira cf. lineata	2	3	2
Thalassiosira cf. tenera	2	2	2
Thalassiosira decipiens	6	2	7
Thalassiosira eccentrica	2	4	2
Thalassiosira ferelineata			
Thalassiosira oestrupii		2	6
Thalassiosira proschkinae			
Thalassiosira sp. 10 Cooper	1	1	2
Thalassiosira sp. 2-1 Cooper	2	2	1
Trachyneis aspera var. vulgaris			
Triceratium sp. 2	1	2	4
Triceratium sp.1			
Tryblionella debilis			2
Tryblionella salinarum			2
Tryblionella sp. 1			
Tryblionella sp. 2			
Ulnaria acus			
Ulnaria ulna			
Undulate colony??		4	
unknown araphid			
Unknown biraphid			
Unknown CA			
Unknown colony			
Unknown GV?			

Raw Counts	S3-180	S3-190	S3-200
Total Counted:	503	500	509
Species	93	83	87
Taxon	Count	Count	Count
Achnanthes coarctaca			
Achnanthes denticula	1		
Achnanthes GV			
Achnanthes islandica			
Achnanthidium exiguum			
Achnanthidium gracillimum			
Actinocyclus normanii	1	1	
Actinocyclus octonarius var. crassus ?	4	16	11
Actinoptychus senarius	4	7	3
Adalfia brockmannii			
Adalfia sp. 1			
Amphora copulata			
Amphora granulata			
Amphora ovalis			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus			
Aneumastus pseudotusculus			
Aneumastus sp. 1			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Asterionella formosa			1
Asterionella sp. 1			
Asymmetrical CA			
Aulacoseira ambigua	18	10	6
Aulacoseira granulata			
Aulacoseira granulata var. angustissima			
Aulacoseira pusilla			
Aulacoseira sp. 1			
Aulacoseira sp. 2			
Aulacoseira tenella	14	11	3
Bacillaria socialis	3		1
Biremis circumtexta			1
Biremis? sp. 1			
Caloneis aemula	2		
Caloneis bacillum	4		1
Caloneis cf. lineatus			

Raw Counts	S3-180	S3-190	S3-200
Caloneis cf. ventricosa			
Caloneis lewisii			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Capartogramma crucicula			1
Cavinula scutelloides			
Cavinula sp. 1			
Cocconeis cf. peltoides			
Cocconeis costata var. costata			
Cocconeis diminuta			
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis placentula	1	3	5
Cocconeis scutellum			
Coscinodiscus cf. lineatus	7	4	3
Coscinodiscus marginatus	14	7	6
Cosmoneis pusilla			
Cosmoneis sp. 1			
Cosmoneis sp. 2			
Craticula cuspidata			
Cyclostephanos sp. 1	2	6	1
Cyclostephanos sp. 2			
Cyclotella atomus?	21	12	15
Cyclotella caspia	5	6	10
Cyclotella cyclopuncta	5	7	2
Cyclotella distinguenda			
Cyclotella meneghiniana	5	5	15
Cyclotella rossii	1	1	4
Cyclotella sp. 2			
Cyclotella striata	33	35	39
Cyclotella stylorum	1	1	
Cymatopleura solea			
Cymatosira belgica	11	17	20
Cymbella affinis		3	
Cymbella cf. excisiformis			
Cymbella janischii			
Cymbella mexicana			

Raw Counts	S3-180	S3-190	S3-200
Cymbella minuta			
Cymbella sp. 2			
Cymbella turgidula			
Cymbopleura A			
Cymbopleura cuspidata		1	
Cymbopleura sp. 1			
Decussata placenta			
Delphineis minutissima	13	8	13
Delphineis surirella	3	4	1
Denticula kuetzengii	14	2	2
Diadesmis cf. contenta	20	30	26
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis			
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana			3
Diploneis cf. bombus	1		1
Diploneis cf. didyma			
Diploneis elliptica	1	4	
Diploneis pseudovalis			
Diploneis smithii			
Diploneis sp. 1			
Diploneis sp. 2			
Diploneis interrupta			
Discostella stelligera			
Encyonema minutum			
Encyonema nicafei	1		5
Encyonema sp. 1			
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema sp. 4			
Encyonema triangulum			
Encyonopsis microcephala			
Epithemia adnata	2	1	2
Epithemia frickei			
Epithemia smithii			
Epithemia sorex			
Epithemia turgida	2	8	3

Raw Counts	S3-180	S3-190	S3-200
Eunotia richbuttensis			
Eunotia sp. 1			
Eunotia sp. 2		1	
Eunotia sp. 3 (GV)			
Fallacia pygmaea	2	5	
Fragilaria brevistriata			2
Fragilaria capucina			
Fragilaria cf. microstriata			
Fragilaria elliptica		5	1
Fragilaria schulzii			
Fragilaria tenera			
Fragilaria vaucheriae	2	3	5
Frickea lewisiana			
Frustulia amphipleuroides			
Frustulia capitata			
Frustulia rhomboides var. viridula			
Frustulia sp. 1			
Frustulia vulgaris	3		2
Geissleria cf. kriegeri	3		
Geissleria decussis			
Gomphoneis hurculeana			
Gomphoneis sp. 1			
Gomphoneis sp. 3			
Gomphonema acuminatum			
Gomphonema innocens	2	1	
Gomphonema kobayasii			
Gomphonema mammilla			1
Gomphonema olivaceoides			
Gomphonema olivaceum			
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Gomphosphenia lingulatiformis			2
Grammatophora cf. macilenta	1		
Gyrosigma temperii			
Gyrosigma cf. balticum			
Gyrosigma sp.1			
Gyrosigma spencerii	2	2	
Hantzschia sp. 1 girdle view			

Raw Counts	S3-180	S3-190	S3-200
Hantzschia sp. 2 girdle view			
Hantzschia sp. 3			
Hantzschia sp. 4			
Hantzschia virgata		1	
Hippodonta costulata	1		
Hippodonta coxiae	11		2
Hippodonta hungarica		3	
Hippodonta sp. 1			
Hippodonta sp. 2			
Karayevia amoena	3		
Karayevia clevei			
Kobayasiella sp. 1			
Leptocylindrus cf. danicus		1	1
Luticola sp. 1			
Luticola sp. 2	4		
Luticola sp. 3		6	6
Luticola sp. 4			
Luticola sp. 5			
Mastogloia smithii			
Mastogloia sp. 1			
Mastogloia sp. 2			
Melosira sp. 1			
Melosira varians			
Meridion circulare var. constrictum			
Meridion sp. 1		1	
Navicula A			
Navicula abunda	2		
Navicula angusta			
Navicula antonii	6		
Navicula brachium			
Navicula cari	2	3	5
Navicula cf. capitoradiata	4		2
Navicula cf. galloae			
Navicula cf. heuflerii			1
Navicula cf. ludloviana (CA)			
Navicula cf. oblonga			
Navicula cf. patrickii		2	
Navicula cf. reichardtiana			
Navicula cf. reinhardtii			
Navicula cf. salinarum			

Raw Counts	S3-180	S3-190	S3-200
Navicula cf. schweigeri		1	
Navicula cf. subinflata	8		4
Navicula cf. tripunctata	6	10	5
Navicula cf. zostereti	6	6	2
Navicula clementis	2		
Navicula denta	3		
Navicula difficillima			
Navicula facilis	2		
Navicula germainii			
Navicula glomus			
Navicula gregaria	2		1
Navicula halophila			
Navicula kotschyi			
Navicula lanceolata	3	2	
Navicula marginulata			
Navicula oculiformis			
Navicula peregrina	1	7	5
Navicula perminuta	1		2
Navicula phyllepta		3	
Navicula slesvicensis			
Navicula sp. 1			
Navicula sp. 10			
Navicula sp. 11			
Navicula sp. 12			
Navicula sp. 13			
Navicula sp. 14			
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 5			4
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8	5		
Navicula sp. 9			
Navicula subinflata			
Navicula subminiscula			
Navicula trivialis			
Navicula vilaplanii		2	
Naviculoid diatom 1			
Naviculoid diatom 2			
Neidiopsis sp. 1			

Raw Counts	S3-180	S3-190	S3-200
Neodephaneis pelagica			
Nitzschia amphibia	2	4	
Nitzschia angustata			
Nitzschia biacrula	1		
Nitzschia bita	2		2
Nitzschia brevissima	32	33	41
Nitzschia cf. agnita	2		
Nitzschia cf. biremis			3
Nitzschia cf. borealis			
Nitzschia cf. groefii			
Nitzschia cf. laevis			
Nitzschia cf. macilenta			
Nitzschia cf. subacicularis			
Nitzschia clausii	1	2	
Nitzschia columbiana		2	
Nitzschia communis			
Nitzschia commutata			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis			
Nitzschia desertorum			
Nitzschia dissipata	12	5	2
Nitzschia filiformis			
Nitzschia fonticola			
Nitzschia frustulum	1		
Nitzschia gracilis			
Nitzschia incognita			
Nitzschia inconspicua			
Nitzschia innominata			
Nitzschia levidensis			5
Nitzschia linearis			
Nitzschia marginulatus			
Nitzschia microcephala			
Nitzschia minuta			
Nitzschia nana			
Nitzschia obtusa			
Nitzschia palea		1	
Nitzschia panduriformis			
Nitzschia pellucida			
Nitzschia perminuta	2	1	2

Raw Counts	S3-180	S3-190	S3-200
Nitzschia proxima	2	4	7
Nitzschia punctata	3	7	12
Nitzschia pusilla		6	2
Nitzschia scalaris			
Nitzschia sigma	1	5	5
Nitzschia sigmaformis	4		4
Nitzschia sociabilis			
Nitzschia sp. 1		1	
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4			2
Nitzschia sp. 5		1	
Nitzschia sp. 6			
Nitzschia sp. 7			
Nitzschia sp. 8			
Nitzschia umbonata			
Opephora martyi	1		6
Opephora olsenii			
Opephora sp. A			
Orthoseira sp. 1			
Paralia sulcata	51	53	41
Parlibellus cf. plicatus			
Parlibellus sp. 2			
Pinnularia biceps			
Pinnularia borealis			
Pinnularia divergens			
Pinnularia divergentissima			
Pinnularia ignobilis			
Pinnularia interrupta			
Pinnularia marchica	2	6	2
Pinnularia microstauron		1	
Pinnularia sp. 10			
Pinnularia sp. 11			
Pinnularia sp. 12		2	
Pinnularia sp. 13			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			

Raw Counts	S3-180	S3-190	S3-200
Pinnularia sp. 8			
Pinnularia sp. 9			
Pinnularia sp.1			
Pinnularia sp.2			
Pinnularia viridis			
Placoneis cf. gastrum			4
Placoneis elginensis			
Placoneis paralegali			
Placoneis sp. 1			
Placoneis sp. 2			
Placoneis sp. 3			
Plagiogramma cf. minima			
Planothidium abbreviatum			
Planothidium apiculatum			
Planothidium biporomum		2	4
Planothidium dubium		6	
Planothidium frequentissimum	3	2	2
Planothidium lanceolatum			2
Planothidium minutissimum			
Planothidium paragali			
Planothidium rostratum			
Planothidium sp. 1			
Planothidium sp. 2			
Planothidium sp. 3			
Platessa bahlsii			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Psammothidium? Sp. 1			
Pseudostaurosira americana		7	4
Pseudostaurosira parasitica			
Pseudostaurosira brevistriata			
Pseudostaurosiropsis sp. 1	9	3	5
Pseudostaurosiropsis sp. 1 (GV)			
Punctastriata mimetica			
Reimeria sinuata	3		
Rexlowea sp. 1			
Rhaphoneis amphiceros	11	17	14
Rhaphoneis tenuis	2	4	1
Rhoicosphenia cf. marina			
Rhoicosphenia sp. 1			

Raw Counts	S3-180	S3-190	S3-200
Rhopalodia acuminatum	2	1	
Rhopolodia gibba			
Rhopolodia musculus	7	12	3
Sellaphora cf. hohnii			
Sellaphora laevissima			
Sellaphora pulchra			
Sellaphora pupula	1		
Sellaphora rexii			
Sellaphora bacillum	1		1
Skeletonema sp. 1			
Stauroforma exiguaformis			
Stauroneis agrestis			
Stauroneis CA			
Stauroneis cf. vandevijveri			
Stauroneis circumborealis			
Stauroneis conspicua			
Stauroneis GV			
Stauroneis kriegeri			1
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Stauroneis sp. 4			
Staurophora cf. soodensis			
Staurosira construens			
Staurosira construens var. binodis			
Staurosirella leptosauron var. dubia			7
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angusta			
Surirella brebissonii		4	
Surirella cf. iowensis			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida	1		
Symmetrical biraphid1			
Symmetrical biraphid2			
Synedra cf. fulgens			
Synedra famelica			
Synedra ulna var. biceps			

Raw Counts	S3-180	S3-190	S3-200
Synedra ulna var. ramesi			
Tabularia fasciculata			
Tabularia ktenoeoides			
Thalassionema nitzschioides	6	6	10
Thalassiosira baltica			13
Thalassiosira cf. lineata	2	5	5
Thalassiosira cf. tenera	3	1	3
Thalassiosira decipiens	5	5	11
Thalassiosira eccentrica	5	7	8
Thalassiosira ferelineata			
Thalassiosira oestrupii	5		
Thalassiosira proschkinae	4	2	1
Thalassiosira sp. 10 Cooper	5	2	5
Thalassiosira sp. 2-1 Cooper	1	1	2
Trachyneis aspera var. vulgaris			
Triceratium sp. 2			6
Triceratium sp.1		2	
Tryblionella debilis	4		2
Tryblionella salinarum			
Tryblionella sp. 1		2	
Tryblionella sp. 2			
Ulnaria acus			
Ulnaria ulna	3		2
Undulate colony??			
unknown araphid			
Unknown biraphid			
Unknown CA			
Unknown colony			
Unknown GV?			

Raw Counts	S3-210	S3-220	S3-230
Total Counted:	516	500	503
Species	87	78	97
Taxon	Count	Count	Count
Achnanthes coarctaca			
Achnanthes denticula		4	1
Achnanthes GV			
Achnanthes islandica	2	1	
Achnanthidium exiguum	1		
Achnanthidium gracillimum			
Actinocyclus normanii	1	2	
Actinocyclus octonarius var. crassus ?	6	4	7
Actinoptychus senarius	3	3	
Adalfia brockmannii			
Adalfia sp. 1			
Amphora copulata			
Amphora granulata			
Amphora ovalis			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus			
Aneumastus pseudotusculus			
Aneumastus sp. 1			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Asterionella formosa			
Asterionella sp. 1			
Asymmetrical CA			
Aulacoseira ambigua	19	6	17
Aulacoseira granulata			
Aulacoseira granulata var. angustissima			
Aulacoseira pusilla			
Aulacoseira sp. 1			
Aulacoseira sp. 2			
Aulacoseira tenella	22		9
Bacillaria socialis	4	1	3
Biremis circumtexta		2	
Biremis? sp. 1			
Caloneis aemula			
Caloneis bacillum			
Caloneis cf. lineatus			

Raw Counts	S3-210	S3-220	S3-230
Caloneis cf. ventricosa			
Caloneis lewisii			
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Capartogramma crucicula	1		
Cavinula scutelloides			
Cavinula sp. 1			
Cocconeis cf. peltoides			
Cocconeis costata var. costata			
Cocconeis diminuta			
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis placentula	1	6	2
Cocconeis scutellum	1		1
Coscinodiscus cf. lineatus		2	5
Coscinodiscus marginatus	17	14	11
Cosmoneis pusilla		2	
Cosmoneis sp. 1			
Cosmoneis sp. 2			
Craticula cuspidata			
Cyclostephanos sp. 1	9	6	2
Cyclostephanos sp. 2			
Cyclotella atomus?	20	71	24
Cyclotella caspia	17	17	16
Cyclotella cyclopuncta	2	3	2
Cyclotella distinguenda			
Cyclotella meneghiniana	9	4	8
Cyclotella rossii	6	11	14
Cyclotella sp. 2			
Cyclotella striata	34	36	29
Cyclotella stylorum			
Cymatopleura solea			
Cymatosira belgica	14	12	12
Cymbella affinis			1
Cymbella cf. excisiformis			
Cymbella janischii			
Cymbella mexicana			

Raw Counts	S3-210	S3-220	S3-230
Cymbella minuta			
Cymbella sp. 2			
Cymbella turgidula			
Cymbopleura A			
Cymbopleura cuspidata			
Cymbopleura sp. 1			
Decussata placenta			
Delphineis minutissima	8	19	14
Delphineis surirella	3	9	2
Denticula kuetzengii			
Diadesmis cf. contenta	13	24	26
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis			
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana	1		1
Diploneis cf. bombus			
Diploneis cf. didyma			
Diploneis elliptica		1	1
Diploneis pseudovalis			
Diploneis smithii	1	1	
Diploneis sp. 1			
Diploneis sp. 2			
Diploneis interrupta			
Discostella stelligera			
Encyonema minutum			
Encyonema nicafei	2		3
Encyonema sp. 1			
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema sp. 4			
Encyonema triangulum			
Encyonopsis microcephala			
Epithemia adnata	7		2
Epithemia frickei	2	3	
Epithemia smithii			
Epithemia sorex			
Epithemia turgida	1	2	4

Raw Counts	S3-210	S3-220	S3-230
Eunotia richbuttensis			
Eunotia sp. 1			
Eunotia sp. 2		1	
Eunotia sp. 3 (GV)			
Fallacia pygmaea		5	
Fragilaria brevistriata			
Fragilaria capucina			
Fragilaria cf. microstriata			
Fragilaria elliptica	1	3	
Fragilaria schulzii			
Fragilaria tenera			
Fragilaria vaucheriae	7		2
Frickea lewisiana			
Frustulia amphipleuroides			
Frustulia capitata			
Frustulia rhomboides var. viridula	2		
Frustulia sp. 1			
Frustulia vulgaris			2
Geissleria cf. kriegeri			
Geissleria decussis			
Gomphoneis hurculeana			
Gomphoneis sp. 1			1
Gomphoneis sp. 3			
Gomphonema acuminatum			
Gomphonema innocens	1	2	
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceoides			
Gomphonema olivaceum			
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Gomphosphenia lingulatiformis			
Grammatophora cf. macilenta			
Gyrosigma temperii			
Gyrosigma cf. balticum	1	2	
Gyrosigma sp.1			
Gyrosigma spencerii	4		1
Hantzschia sp. 1 girdle view			

Raw Counts	S3-210	S3-220	S3-230
Hantzschia sp. 2 girdle view			
Hantzschia sp. 3			
Hantzschia sp. 4			
Hantzschia virgata			1
Hippodonta costulata			1
Hippodonta coxiae	14	5	8
Hippodonta hungarica		5	4
Hippodonta sp. 1			
Hippodonta sp. 2			
Karayevia amoena			
Karayevia clevei			
Kobayasiella sp. 1		1	
Leptocylindrus cf. danicus			
Luticola sp. 1			
Luticola sp. 2	6	4	
Luticola sp. 3			
Luticola sp. 4			1
Luticola sp. 5			
Mastogloia smithii			
Mastogloia sp. 1			
Mastogloia sp. 2			
Melosira sp. 1			
Melosira varians			
Meridion circulare var. constrictum			
Meridion sp. 1			
Navicula A			
Navicula abunda	1		2
Navicula angusta			
Navicula antonii	1		1
Navicula brachium			
Navicula cari	8	3	2
Navicula cf. capitoradiata	1	1	4
Navicula cf. galloae			
Navicula cf. heuflerii			
Navicula cf. ludloviana (CA)			
Navicula cf. oblonga			
Navicula cf. patrickii	1		1
Navicula cf. reichardtiana	1		
Navicula cf. reinhardtii			
Navicula cf. salinarum			

Raw Counts	S3-210	S3-220	S3-230
Navicula cf. schweigeri			
Navicula cf. subinflata		4	15
Navicula cf. tripunctata	2	2	3
Navicula cf. zostereti	3	9	3
Navicula clementis			
Navicula denta		2	2
Navicula difficillima			1
Navicula facilis			
Navicula germainii		2	
Navicula glomus			
Navicula gregaria			3
Navicula halophila			
Navicula kotschyi			
Navicula lanceolata	5	10	13
Navicula marginulata			
Navicula oculiformis	1		
Navicula peregrina	12	7	7
Navicula perminuta			
Navicula phyllepta			3
Navicula slesvicensis			
Navicula sp. 1	1		5
Navicula sp. 10			
Navicula sp. 11			
Navicula sp. 12			
Navicula sp. 13			
Navicula sp. 14			
Navicula sp. 2			
Navicula sp. 3			
Navicula sp. 5	1		2
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8			
Navicula sp. 9			
Navicula subinflata			
Navicula subminiscula		3	
Navicula trivialis			
Navicula vilaplanii			
Naviculoid diatom 1			
Naviculoid diatom 2			
Neidiopsis sp. 1			

Raw Counts	S3-210	S3-220	S3-230
Neodephaneis pelagica			
Nitzschia amphibia	2	2	4
Nitzschia angustata			
Nitzschia biacrula			
Nitzschia bita	5		2
Nitzschia brevissima	30	21	27
Nitzschia cf. agnita			14
Nitzschia cf. biremis			
Nitzschia cf. borealis	2	2	
Nitzschia cf. groefii			
Nitzschia cf. laevis			
Nitzschia cf. macilenta			
Nitzschia cf. subacicularis			
Nitzschia clausii			
Nitzschia columbiana			
Nitzschia communis			
Nitzschia commutata			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis			
Nitzschia desertorum			
Nitzschia dissipata	2	5	8
Nitzschia filiformis			
Nitzschia fonticola			
Nitzschia frustulum	2		2
Nitzschia gracilis			
Nitzschia incognita			
Nitzschia inconspicua		2	
Nitzschia innominata			
Nitzschia levidensis			2
Nitzschia linearis		1	
Nitzschia marginulatus			
Nitzschia microcephala			2
Nitzschia minuta			
Nitzschia nana			
Nitzschia obtusa			
Nitzschia palea		2	4
Nitzschia panduriformis		3	
Nitzschia pellucida			
Nitzschia perminuta	3		

Raw Counts	S3-210	S3-220	S3-230
Nitzschia proxima	3	3	5
Nitzschia punctata	5	2	7
Nitzschia pusilla			2
Nitzschia scalaris			1
Nitzschia sigma	2		
Nitzschia sigmaformis		1	
Nitzschia sociabilis			
Nitzschia sp. 1			
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4	1		1
Nitzschia sp. 5			
Nitzschia sp. 6			
Nitzschia sp. 7			
Nitzschia sp. 8			3
Nitzschia umbonata			
Opephora martyi	8	1	
Opephora olsenii			
Opephora sp. A			
Orthoseira sp. 1			
Paralia sulcata	38	35	25
Parlibellus cf. plicatus			
Parlibellus sp. 2			
Pinnularia biceps			
Pinnularia borealis			
Pinnularia divergens	1	2	1
Pinnularia divergentissima			
Pinnularia ignobilis			
Pinnularia interrupta			
Pinnularia marchica	2		2
Pinnularia microstauron	2		
Pinnularia sp. 10			
Pinnularia sp. 11			
Pinnularia sp. 12			
Pinnularia sp. 13			
Pinnularia sp. 3			
Pinnularia sp. 4			
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			

Raw Counts	S3-210	S3-220	S3-230
Pinnularia sp. 8			
Pinnularia sp. 9			
Pinnularia sp.1			
Pinnularia sp.2			
Pinnularia viridis			
Placoneis cf. gastrum			
Placoneis elginensis			
Placoneis paralegali			
Placoneis sp. 1			
Placoneis sp. 2			
Placoneis sp. 3			
Plagiogramma cf. minima			
Planothidium abbreviatum			
Planothidium apiculatum			
Planothidium biporomum	2		5
Planothidium dubium			
Planothidium frequentissimum	3	3	3
Planothidium lanceolatum			
Planothidium minutissimum			
Planothidium paragali			
Planothidium rostratum			
Planothidium sp. 1			
Planothidium sp. 2			
Planothidium sp. 3			
Platessa bahlsii			
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Psammothidium? Sp. 1			
Pseudostaurosira americana	1	1	4
Pseudostaurosira parasitica			
Pseudostaurosira brevistriata			
Pseudostaurosiropsis sp. 1	6	4	7
Pseudostaurosiropsis sp. 1 (GV)			
Punctastriata mimetica			
Reimeria sinuata		2	2
Rexlowea sp. 1			
Rhaphoneis amphiceros	10	16	9
Rhaphoneis tenuis			2
Rhoicosphenia cf. marina	2		2
Rhoicosphenia sp. 1			

Raw Counts	S3-210	S3-220	S3-230
Rhopalodia acuminatum			4
Rhopolodia gibba			
Rhopolodia musculus	6		
Sellaphora cf. hohnii	4		1
Sellaphora laevissima			
Sellaphora pulchra			
Sellaphora pupula		2	1
Sellaphora rexii			1
Sellaphora bacillum			
Skeletonema sp. 1			
Stauroforma exiguaformis			
Stauroneis agrestis			
Stauroneis CA			
Stauroneis cf. vandevijveri			
Stauroneis circumborealis			
Stauroneis conspicua			
Stauroneis GV			
Stauroneis kriegeri	3		
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Stauroneis sp. 4			
Staurophora cf. soodensis			
Staurosira construens			
Staurosira construens var. binodis			
Staurosirella leptosauron var. dubia	16		4
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angusta			
Surirella brebissonii	3	5	1
Surirella cf. iowensis			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida			1
Symmetrical biraphid1			
Symmetrical biraphid2			
Synedra cf. fulgens			
Synedra famelica			
Synedra ulna var. biceps			

Raw Counts	S3-210	S3-220	S3-230
Synedra ulna var. ramesi			
Tabularia fasciculata			
Tabularia ktenoeoides			
Thalassionema nitzschioides	3	7	6
Thalassiosira baltica	6	8	5
Thalassiosira cf. lineata	9	7	7
Thalassiosira cf. tenera	1	2	1
Thalassiosira decipiens	8	4	4
Thalassiosira eccentrica	6	5	3
Thalassiosira ferelineata			
Thalassiosira oestrupii			
Thalassiosira proschkinae	8		3
Thalassiosira sp. 10 Cooper	4	3	2
Thalassiosira sp. 2-1 Cooper	2	4	1
Trachyneis aspera var. vulgaris			
Triceratium sp. 2		2	2
Triceratium sp.1			2
Tryblionella debilis	4	2	2
Tryblionella salinarum			
Tryblionella sp. 1			
Tryblionella sp. 2			
Ulnaria acus			
Ulnaria ulna		4	1
Undulate colony??			
unknown araphid			
Unknown biraphid			
Unknown CA			
Unknown colony			
Unknown GV?			

Raw Counts	S3-240	S3-250	S3-260
Total Counted:	516	502	506
Species	85	85	97
Taxon	Count	Count	Count
Achnanthes coarctaca			1
Achnanthes denticula		2	
Achnanthes GV			
Achnanthes islandica			
Achnanthidium exiguum			2
Achnanthidium gracillimum			
Actinocyclus normanii	1		1
Actinocyclus octonarius var. crassus ?	7	6	16
Actinoptychus senarius	2	6	4
Adalfia brockmannii		2	
Adalfia sp. 1	1		
Amphora copulata			
Amphora granulata			
Amphora ovalis			
Amphora sp. 1 (girdle view)			
Amphora sp. 2			
Anaulus cf. balticus			
Aneumastus pseudotusculus			2
Aneumastus sp. 1			
Anomoeoneis sp. 1			
Anorthoneis tenuis			
Asterionella formosa			
Asterionella sp. 1			
Asymmetrical CA			
Aulacoseira ambigua	7	9	12
Aulacoseira granulata			
Aulacoseira granulata var. angustissima			
Aulacoseira pusilla			
Aulacoseira sp. 1			
Aulacoseira sp. 2			
Aulacoseira tenella	6	14	6
Bacillaria socialis	3	1	
Biremis circumtexta		1	
Biremis? sp. 1			
Caloneis aemula		1	
Caloneis bacillum	1	3	2
Caloneis cf. lineatus			

Raw Counts	S3-240	S3-250	S3-260
Caloneis cf. ventricosa			
Caloneis lewisii			2
Caloneis sp. 1 (girdle view)			
Caloneis sp. 2			
Caloneis sp. 3			
Caloneis sp. 4			
Campylodiscus sp. 1			
Capartogramma crucicula			
Cavinula scutelloides			
Cavinula sp. 1	2		
Cocconeis cf. peltoides			
Cocconeis costata var. costata			
Cocconeis diminuta			
Cocconeis disculoides			
Cocconeis elongatum			
Cocconeis placentula	6	2	5
Cocconeis scutellum			
Coscinodiscus cf. lineatus	9	7	1
Coscinodiscus marginatus	12	9	10
Cosmoneis pusilla			1
Cosmoneis sp. 1			
Cosmoneis sp. 2			
Craticula cuspidata			
Cyclostephanos sp. 1	5	1	5
Cyclostephanos sp. 2			
Cyclotella atomus?	72	43	17
Cyclotella caspia	22	38	13
Cyclotella cyclopuncta	3	3	3
Cyclotella distinguenda			
Cyclotella meneghiniana	13	8	2
Cyclotella rossii	14	8	7
Cyclotella sp. 2			
Cyclotella striata	36	56	13
Cyclotella stylorum		2	
Cymatopleura solea			
Cymatosira belgica	20	14	19
Cymbella affinis			
Cymbella cf. excisiformis		2	
Cymbella janischii			
Cymbella mexicana			

Raw Counts	S3-240	S3-250	S3-260
Cymbella minuta			
Cymbella sp. 2			
Cymbella turgidula			
Cymbopleura A			
Cymbopleura cuspidata			
Cymbopleura sp. 1			
Decussata placenta			
Delphineis minutissima	20	8	13
Delphineis surirella	5	2	3
Denticula kuetzengii	1		4
Diadesmis cf. contenta	16	13	63
Diadesmis gallica			
Diatoma mesodon			
Diatoma moniliformis			
Diatoma vulgaris			
Diatomella balfouriana			
Dimeregramma minor			
Diploneis boldtiana		4	3
Diploneis cf. bombus		1	
Diploneis cf. didyma			
Diploneis elliptica		3	
Diploneis pseudovalis			
Diploneis smithii			
Diploneis sp. 1			
Diploneis sp. 2			
Diploneis interrupta			
Discostella stelligera			
Encyonema minutum			
Encyonema nicafei		2	1
Encyonema sp. 1			
Encyonema sp. 2			
Encyonema sp. 3			
Encyonema sp. 4			
Encyonema triangulum			
Encyonopsis microcephala			
Epithemia adnata		1	2
Epithemia frickei	1		
Epithemia smithii			
Epithemia sorex			
Epithemia turgida	1	2	2

Raw Counts	S3-240	S3-250	S3-260
Eunotia richbuttensis			
Eunotia sp. 1			
Eunotia sp. 2			
Eunotia sp. 3 (GV)			
Fallacia pygmaea	3	5	6
Fragilaria brevistriata		2	
Fragilaria capucina			
Fragilaria cf. microstriata			
Fragilaria elliptica	3	2	2
Fragilaria schulzii			
Fragilaria tenera			
Fragilaria vaucheriae	3	4	
Frickea lewisiana			
Frustulia amphipleuroides			
Frustulia capitata			
Frustulia rhomboides var. viridula			
Frustulia sp. 1			
Frustulia vulgaris			
Geissleria cf. kriegeri	1		
Geissleria decussis			
Gomphoneis hurculeana			
Gomphoneis sp. 1	2		1
Gomphoneis sp. 3			
Gomphonema acuminatum			
Gomphonema innocens	2		2
Gomphonema kobayasii			
Gomphonema mammilla			
Gomphonema olivaceoides			
Gomphonema olivaceum			
Gomphonema sp. 1			
Gomphonema sp. 2			
Gomphonema sp. 3			
Gomphonopsis exiguum			
Gomphosphenia lingulatiformis			
Grammatophora cf. macilenta			
Gyrosigma temperii			
Gyrosigma cf. balticum			
Gyrosigma sp.1			
Gyrosigma spencerii			
Hantzschia sp. 1 girdle view			

Raw Counts	S3-240	S3-250	S3-260
Hantzschia sp. 2 girdle view			
Hantzschia sp. 3			
Hantzschia sp. 4			
Hantzschia virgata	2		
Hippodonta costulata			
Hippodonta coxiae	8	7	3
Hippodonta hungarica	1	6	3
Hippodonta sp. 1			
Hippodonta sp. 2			
Karayevia amoena			
Karayevia clevei			
Kobayasiella sp. 1		2	
Leptocylindrus cf. danicus			
Luticola sp. 1			
Luticola sp. 2	2		8
Luticola sp. 3		4	
Luticola sp. 4		2	
Luticola sp. 5			1
Mastogloia smithii			
Mastogloia sp. 1			
Mastogloia sp. 2			
Melosira sp. 1		6	
Melosira varians			
Meridion circulare var. constrictum			
Meridion sp. 1			2
Navicula A			
Navicula abunda		2	
Navicula angusta			
Navicula antonii			
Navicula brachium			
Navicula cari	1	2	6
Navicula cf. capitoradiata		2	
Navicula cf. galloae			
Navicula cf. heuflerii			
Navicula cf. ludloviana (CA)			
Navicula cf. oblonga			
Navicula cf. patrickii			
Navicula cf. reichardtiana			2
Navicula cf. reinhardtii			
Navicula cf. salinarum			

Raw Counts	S3-240	S3-250	S3-260
Navicula cf. schweigeri		2	
Navicula cf. subinflata	2		4
Navicula cf. tripunctata	2	4	9
Navicula cf. zostereti	1	1	1
Navicula clementis			
Navicula denta			
Navicula difficillima			
Navicula facilis			
Navicula germainii			
Navicula glomus			1
Navicula gregaria			2
Navicula halophila	1		3
Navicula kotschyi			1
Navicula lanceolata	4	6	1
Navicula marginulata			
Navicula oculiformis			
Navicula peregrina	4	3	3
Navicula perminuta	5	1	2
Navicula phyllepta	1		
Navicula slesvicensis			
Navicula sp. 1			
Navicula sp. 10			
Navicula sp. 11			
Navicula sp. 12			
Navicula sp. 13			
Navicula sp. 14			
Navicula sp. 2			
Navicula sp. 3			4
Navicula sp. 5			
Navicula sp. 6			
Navicula sp. 7			
Navicula sp. 8			
Navicula sp. 9			
Navicula subinflata			
Navicula subminiscula			
Navicula trivialis	1		
Navicula vilaplanii			
Naviculoid diatom 1			
Naviculoid diatom 2			
Neidiopsis sp. 1			

Raw Counts	S3-240	S3-250	S3-260
Neodephaneis pelagica			
Nitzschia amphibia		2	4
Nitzschia angustata			
Nitzschia biacrula			
Nitzschia bita	2	4	2
Nitzschia brevissima	14	19	14
Nitzschia cf. agnita		2	7
Nitzschia cf. biremis			
Nitzschia cf. borealis			
Nitzschia cf. groefii			
Nitzschia cf. laevis			
Nitzschia cf. macilenta			
Nitzschia cf. subacicularis			
Nitzschia clausii			2
Nitzschia columbiana			
Nitzschia communis			
Nitzschia commutata			
Nitzschia constricta			
Nitzschia cylindrus			
Nitzschia debilis	2	2	
Nitzschia desertorum			
Nitzschia dissipata	2	7	4
Nitzschia filiformis	1		
Nitzschia fonticola			
Nitzschia frustulum	2		
Nitzschia gracilis			
Nitzschia incognita			
Nitzschia inconspicua	2		
Nitzschia innominata			
Nitzschia levidensis	7	5	3
Nitzschia linearis		1	
Nitzschia marginulatus			
Nitzschia microcephala			
Nitzschia minuta			
Nitzschia nana			
Nitzschia obtusa			
Nitzschia palea	2		
Nitzschia panduriformis			2
Nitzschia pellucida			1
Nitzschia perminuta			

Raw Counts	S3-240	S3-250	S3-260
Nitzschia proxima	6	1	5
Nitzschia punctata	5	6	5
Nitzschia pusilla	2	5	4
Nitzschia scalaris		1	
Nitzschia sigma			1
Nitzschia sigmaformis			
Nitzschia sociabilis	2		
Nitzschia sp. 1	1	1	
Nitzschia sp. 2			
Nitzschia sp. 3			
Nitzschia sp. 4			
Nitzschia sp. 5			
Nitzschia sp. 6			
Nitzschia sp. 7			
Nitzschia sp. 8			
Nitzschia umbonata			
Opephora martyi			
Opephora olsenii			
Opephora sp. A			
Orthoseira sp. 1			
Paralia sulcata	31	25	28
Parlibellus cf. plicatus			
Parlibellus sp. 2			
Pinnularia biceps			
Pinnularia borealis			
Pinnularia divergens		3	4
Pinnularia divergentissima			
Pinnularia ignobilis			
Pinnularia interrupta			
Pinnularia marchica	2		
Pinnularia microstauron			1
Pinnularia sp. 10			
Pinnularia sp. 11			
Pinnularia sp. 12			
Pinnularia sp. 13		1	
Pinnularia sp. 3			
Pinnularia sp. 4			1
Pinnularia sp. 5			
Pinnularia sp. 6			
Pinnularia sp. 7			

Raw Counts	S3-240	S3-250	S3-260
Pinnularia sp. 8			
Pinnularia sp. 9			
Pinnularia sp.1			
Pinnularia sp.2			
Pinnularia viridis		1	
Placoneis cf. gastrum			1
Placoneis elginensis		2	
Placoneis paralegali			
Placoneis sp. 1			
Placoneis sp. 2			
Placoneis sp. 3			
Plagiogramma cf. minima			
Planothidium abbreviatum			
Planothidium apiculatum			
Planothidium biporomum	1		1
Planothidium dubium			
Planothidium frequentissimum	1		2
Planothidium lanceolatum	1	2	
Planothidium minutissimum			
Planothidium paragali			
Planothidium rostratum			
Planothidium sp. 1			
Planothidium sp. 2			
Planothidium sp. 3			1
Platessa bahlsii			4
Platessa cf. hustedtii			
Pleurosigma diverse-striatum			
Psammothidium? Sp. 1			
Pseudostaurosira americana		1	6
Pseudostaurosira parasitica	15		
Pseudostaurosira brevistriata			
Pseudostaurosiropsis sp. 1	9	14	7
Pseudostaurosiropsis sp. 1 (GV)			
Punctastriata mimetica			
Reimeria sinuata	2	2	
Rexlowea sp. 1			
Rhaphoneis amphiceros	7	8	13
Rhaphoneis tenuis	1		
Rhoicosphenia cf. marina			2
Rhoicosphenia sp. 1			

Raw Counts	S3-240	S3-250	S3-260
Rhopalodia acuminatum			5
Rhopolodia gibba			
Rhopolodia musculus			5
Sellaphora cf. hohnii			
Sellaphora laevissima			
Sellaphora pulchra			
Sellaphora pupula	2		
Sellaphora rexii	1		
Sellaphora bacillum	1		1
Skeletonema sp. 1			
Stauroforma exiguaformis			
Stauroneis agrestis			
Stauroneis CA			
Stauroneis cf. vandevijveri			
Stauroneis circumborealis			
Stauroneis conspicua			
Stauroneis GV			
Stauroneis kriegeri			
Stauroneis sp. 1			
Stauroneis sp. 2			
Stauroneis sp. 3			
Stauroneis sp. 4			
Staurophora cf. soodensis			
Staurosira construens			4
Staurosira construens var. binodis			
Staurosirella leptosauron var. dubia			2
Staurosirella sp. 1			
Stephanodiscus sp. 1			
Surirella angusta			
Surirella brebissonii	1		3
Surirella cf. iowensis			
Surirella ovalis			
Surirella peisonis			
Surirella sp. 1			
Surirella splendida			1
Symmetrical biraphid1			
Symmetrical biraphid2			
Synedra cf. fulgens			
Synedra famelica			
Synedra ulna var. biceps			

Raw Counts	S3-240	S3-250	S3-260
Synedra ulna var. ramesi			
Tabularia fasciculata	2		
Tabularia ktenoeoides			
Thalassionema nitzschioides	5	3	5
Thalassiosira baltica	13	7	5
Thalassiosira cf. lineata	2	13	4
Thalassiosira cf. tenera	4	2	3
Thalassiosira decipiens	5	8	8
Thalassiosira eccentrica	6	2	4
Thalassiosira ferelineata			
Thalassiosira oestrupii			
Thalassiosira proschkinae	5	8	6
Thalassiosira sp. 10 Cooper		2	9
Thalassiosira sp. 2-1 Cooper	6	3	7
Trachyneis aspera var. vulgaris			
Triceratium sp. 2	6	1	3
Triceratium sp.1			
Tryblionella debilis	2		2
Tryblionella salinarum			
Tryblionella sp. 1			
Tryblionella sp. 2			
Ulnaria acus			
Ulnaria ulna		1	2
Undulate colony??			
unknown araphid			
Unknown biraphid			
Unknown CA			
Unknown colony			
Unknown GV?			

Percent Abundance	S3-0	S3-10	S3-20
Achnanthes coarctaca	0	0	0
Achnanthes denticula	0	0	0
Achnanthes GV	0	0	0.003952569
Achnanthes islandica	0	0.003992016	0
Achnanthidium exiguum	0	0	0
Achnanthidium gracillimum	0	0	0
Actinocyclus normanii	0.007751938	0.081836327	0.011857708
Actinocyclus octonarius var. crassus ?	0	0.023952096	0.001976285
Actinoptychus senarius	0	0.005988024	0.011857708
Adalfia brockmannii	0	0	0
Adalfia sp. 1	0	0	0
Amphora copulata	0	0	0
Amphora granulata	0	0.001996008	0
Amphora ovalis	0	0	0
Amphora sp. 1 (girdle view)	0	0	0
Amphora sp. 2	0	0	0
Anaulus cf. balticus	0	0	0
Aneumastus pseudotusculus	0	0	0
Aneumastus sp. 1	0	0	0.003952569
Anomoeoneis sp. 1	0	0	0
Anorthoneis tenuis	0	0	0
Asterionella formosa	0	0	0
Asterionella sp. 1	0	0	0
Asymmetrical CA	0	0	0
Aulacoseira ambigua	0.007751938	0.015968064	0.045454545
Aulacoseira granulata	0	0	0.011857708
Aulacoseira granulata var. angustissima	0	0	0
Aulacoseira pusilla	0	0	0
Aulacoseira sp. 1	0	0	0
Aulacoseira sp. 2	0	0	0
Aulacoseira tenella	0	0	0
Bacillaria socialis	0.005813953	0.017964072	0.003952569
Biremis circumtexta	0	0	0
Biremis? sp. 1	0	0	0
Caloneis aemula	0	0	0
Caloneis bacillum	0.003875969	0.011976048	0.007905138
Caloneis cf. lineatus	0	0	0
Caloneis cf. ventricosa	0	0	0
Caloneis lewisii	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0

Percent Abundance	S3-0	S3-10	S3-20
Caloneis sp. 2	0	0	0
Caloneis sp. 3	0	0	0
Caloneis sp. 4	0	0	0
Campylodiscus sp. 1	0	0	0
Capartogramma crucicula	0	0	0
Cavinula scutelloides	0	0	0
Cavinula sp. 1	0	0	0
Cocconeis cf. peltoides	0	0	0
Cocconeis costata var. costata	0	0	0
Cocconeis diminuta	0	0	0
Cocconeis disculoides	0	0	0
Cocconeis elongatum	0	0	0
Cocconeis placentula	0.003875969	0.001996008	0.001976285
Cocconeis scutellum	0	0	0
Coscinodiscus cf. lineatus	0.001937984	0.007984032	0.003952569
Coscinodiscus marginatus	0.001937984	0.007984032	0.001976285
Cosmoneis pusilla	0	0	0.001976285
Cosmoneis sp. 1	0	0	0
Cosmoneis sp. 2	0	0	0
Craticula cuspidata	0	0.005988024	0
Cyclostephanos sp. 1	0	0	0.003952569
Cyclostephanos sp. 2	0	0	0
Cyclotella atomus?	0.420542636	0.037924152	0.037549407
Cyclotella caspia	0	0	0
Cyclotella cyclopuncta	0	0.003992016	0.003952569
Cyclotella distinguenda	0	0	0
Cyclotella meneghiniana	0.015503876	0.101796407	0.079051383
Cyclotella rossii	0	0.013972056	0.001976285
Cyclotella sp. 2	0	0	0
Cyclotella striata	0.019379845	0.085828343	0.051383399
Cyclotella stylorum	0	0	0
Cymatopleura solea	0	0	0
Cymatosira belgica	0.005813953	0.005988024	0.001976285
Cymbella affinis	0	0.001996008	0
Cymbella cf. excisiformis	0	0	0
Cymbella janischii	0	0.003992016	0.001976285
Cymbella mexicana	0	0	0
Cymbella minuta	0	0	0
Cymbella sp. 2	0	0	0
Cymbella turgidula	0	0	0

Percent Abundance	S3-0	S3-10	S3-20
Cymbopleura A	0	0	0
Cymbopleura cuspidata	0	0	0
Cymbopleura sp. 1	0	0	0.001976285
Decussata placenta	0	0	0
Delphineis minutissima	0	0	0
Delphineis surirella	0.003875969	0.007984032	0
Denticula kuetzengii	0.011627907	0.023952096	0.011857708
Diadesmis cf. contenta	0	0	0
Diadesmis gallica	0	0	0
Diatoma mesodon	0.007751938	0	0
Diatoma moniliformis	0	0	0
Diatoma vulgaris	0	0	0
Diatomella balfouriana	0.001937984	0.007984032	0
Dimeregramma minor	0	0	0
Diploneis boldtiana	0.009689922	0	0
Diploneis cf. bombus	0	0	0
Diploneis cf. didyma	0	0	0
Diploneis elliptica	0.003875969	0.001996008	0
Diploneis pseudovalis	0	0	0
Diploneis smithii	0	0	0
Diploneis sp. 1	0	0	0
Diploneis sp. 2	0	0	0
Diploneis interrupta	0	0	0
Discostella stelligera	0.009689922	0	0
Encyonema minutum	0	0	0
Encyonema nicafei	0.001937984	0.007984032	0.011857708
Encyonema sp. 1	0	0	0
Encyonema sp. 2	0	0	0
Encyonema sp. 3	0	0	0
Encyonema sp. 4	0	0	0
Encyonema triangulum	0	0	0
Encyonopsis microcephala	0	0	0
Epithemia adnata	0	0	0
Epithemia frickei	0	0	0
Epithemia smithii	0	0	0
Epithemia sorex	0	0	0
Epithemia turgida	0.001937984	0	0.001976285
Eunotia richbuttensis	0	0.001996008	0
Eunotia sp. 1	0	0	0
Eunotia sp. 2	0	0	0

Percent Abundance	S3-0	S3-10	S3-20
Eunotia sp. 3 (GV)	0	0	0.003952569
Fallacia pygmaea	0	0	0.015810277
Fragilaria brevistriata	0	0	0
Fragilaria capucina	0	0	0
Fragilaria cf. microstriata	0	0	0
Fragilaria elliptica	0	0	0.001976285
Fragilaria schulzii	0	0	0
Fragilaria tenera	0	0	0
Fragilaria vaucheriae	0.015503876	0.001996008	0.003952569
Frickea lewisiana	0	0.001996008	0.003952569
Frustulia amphipleuroides	0	0	0
Frustulia capitata	0	0	0
Frustulia rhomboides var. viridula	0	0	0.003952569
Frustulia sp. 1	0	0	0
Frustulia vulgaris	0	0.003992016	0.0256917
Geissleria cf. kriegeri	0	0	0.001976285
Geissleria decussis	0	0	0
Gomphoneis hurculeana	0	0	0
Gomphoneis sp. 1	0	0	0.003952569
Gomphoneis sp. 3	0	0.003992016	0
Gomphonema acuminatum	0	0	0
Gomphonema innocens	0	0.001996008	0.007905138
Gomphonema kobayasii	0	0	0
Gomphonema mammilla	0	0	0
Gomphonema olivaceoides	0	0	0
Gomphonema olivaceum	0	0.001996008	0
Gomphonema sp. 1	0	0	0
Gomphonema sp. 2	0	0	0
Gomphonema sp. 3	0	0	0
Gomphonopsis exiguum	0	0	0
Gomphosphenia lingulatiformis	0	0	0
Grammatophora cf. macilenta	0	0	0
Gyrosigma temperii	0	0	0
Gyrosigma cf. balticum	0	0	0.003952569
Gyrosigma sp.1	0	0	0.001976285
Gyrosigma spencerii	0.003875969	0.007984032	0.003952569
Hantzschia sp. 1 girdle view	0	0	0
Hantzschia sp. 2 girdle view	0	0	0
Hantzschia sp. 3	0	0	0
Hantzschia sp. 4	0	0	0

Percent Abundance	S3-0	S3-10	S3-20
Hantzschia virgata	0.003875969	0	0.001976285
Hippodonta costulata	0.005813953	0.011976048	0.001976285
Hippodonta coxiae	0.001937984	0	0
Hippodonta hungarica	0	0	0.003952569
Hippodonta sp. 1	0	0	0
Hippodonta sp. 2	0	0	0
Karayevia amoena	0.001937984	0	0
Karayevia clevei	0	0	0
Kobayasiella sp. 1	0	0	0.005928854
Leptocylindrus cf. danicus	0	0	0.001976285
Luticola sp. 1	0	0	0
Luticola sp. 2	0	0	0
Luticola sp. 3	0.007751938	0.011976048	0
Luticola sp. 4	0	0	0
Luticola sp. 5	0	0	0
Mastogloia smithii	0	0	0
Mastogloia sp. 1	0	0	0
Mastogloia sp. 2	0	0	0
Melosira sp. 1	0.001937984	0	0.001976285
Melosira varians	0.003875969	0	0
Meridion circulare var. constrictum	0	0	0
Meridion sp. 1	0	0	0
Navicula A	0	0	0
Navicula abunda	0.001937984	0.013972056	0
Navicula angusta	0	0	0
Navicula antonii	0.003875969	0	0.007905138
Navicula brachium	0	0	0
Navicula cari	0.021317829	0.017964072	0.009881423
Navicula cf. capitoradiata	0.009689922	0.003992016	0.007905138
Navicula cf. galloae	0	0	0
Navicula cf. heuflerii	0	0.003992016	0
Navicula cf. ludloviana (CA)	0	0	0
Navicula cf. oblonga	0	0	0
Navicula cf. patrickii	0.001937984	0	0.005928854
Navicula cf. reichardtiana	0	0	0
Navicula cf. reinhardtii	0	0	0
Navicula cf. salinarum	0.009689922	0.003992016	0.001976285
Navicula cf. schweigeri	0	0.003992016	0
Navicula cf. subinflata	0.01744186	0.027944112	0.009881423
Navicula cf. tripunctata	0.011627907	0.007984032	0.019762846

Percent Abundance	S3-0	S3-10	S3-20
Navicula cf. zostereti	0.011627907	0	0.019762846
Navicula clementis	0	0	0
Navicula denta	0	0.001996008	0
Navicula difficillima	0	0	0
Navicula facilis	0	0	0
Navicula germainii	0	0	0
Navicula glomus	0	0	0
Navicula gregaria	0	0.001996008	0
Navicula halophila	0.001937984	0.007984032	0.005928854
Navicula kotschyi	0	0	0
Navicula lanceolata	0.027131783	0.031936128	0.027667984
Navicula marginulata	0	0	0
Navicula oculiformis	0	0	0
Navicula peregrina	0.011627907	0.001996008	0.003952569
Navicula perminuta	0.005813953	0.015968064	0.007905138
Navicula phyllepta	0	0	0.003952569
Navicula slesvicensis	0	0	0
Navicula sp. 1	0	0	0.007905138
Navicula sp. 10	0	0	0.003952569
Navicula sp. 11	0	0	0
Navicula sp. 12	0	0	0
Navicula sp. 13	0	0	0
Navicula sp. 14	0	0	0
Navicula sp. 2	0	0	0
Navicula sp. 3	0	0	0
Navicula sp. 5	0	0	0
Navicula sp. 6	0	0	0
Navicula sp. 7	0	0	0
Navicula sp. 8	0	0	0
Navicula sp. 9	0	0	0
Navicula subinflata	0	0	0
Navicula subminiscula	0.023255814	0.017964072	0.001976285
Navicula trivialis	0	0	0
Navicula vilaplanii	0	0.003992016	0.003952569
Naviculoid diatom 1	0	0	0
Naviculoid diatom 2	0	0	0
Neidiopsis sp. 1	0	0	0
Neodephaneis pelagica	0	0	0
Nitzschia amphibia	0.025193798	0.003992016	0
Nitzschia angustata	0.003875969	0	0

Percent Abundance	S3-0	S3-10	S3-20
Nitzschia biacrula	0	0	0
Nitzschia bita	0	0	0
Nitzschia brevissima	0.054263566	0.037924152	0.055335968
Nitzschia cf. agnita	0	0	0.003952569
Nitzschia cf. biremis	0	0.001996008	0
Nitzschia cf. borealis	0	0	0
Nitzschia cf. groefii	0	0	0
Nitzschia cf. laevis	0	0	0
Nitzschia cf. macilenta	0	0	0
Nitzschia cf. subacicularis	0	0.003992016	0
Nitzschia clausii	0	0.001996008	0.003952569
Nitzschia columbiana	0	0.005988024	0.003952569
Nitzschia communis	0	0	0
Nitzschia commutata	0	0	0
Nitzschia constricta	0	0	0
Nitzschia cylindrus	0	0	0
Nitzschia debilis	0	0	0.035573123
Nitzschia desertorum	0	0	0
Nitzschia dissipata	0.003875969	0.005988024	0
Nitzschia filiformis	0.003875969	0.003992016	0.007905138
Nitzschia fonticola	0.023255814	0	0
Nitzschia frustulum	0	0	0.003952569
Nitzschia gracilis	0	0	0
Nitzschia incognita	0	0	0.003952569
Nitzschia inconspicua	0.003875969	0.011976048	0.009881423
Nitzschia innominata	0.001937984	0	0
Nitzschia levidensis	0	0	0
Nitzschia linearis	0	0.003992016	0.017786561
Nitzschia marginulatus	0	0	0
Nitzschia microcephala	0	0	0
Nitzschia minuta	0.003875969	0	0
Nitzschia nana	0	0.003992016	0
Nitzschia obtusa	0	0	0
Nitzschia palea	0.007751938	0.007984032	0.003952569
Nitzschia panduriformis	0.003875969	0	0
Nitzschia pellucida	0	0	0.001976285
Nitzschia perminuta	0.011627907	0.005988024	0
Nitzschia proxima	0	0	0
Nitzschia punctata	0.003875969	0.003992016	0
Nitzschia pusilla	0	0	0

Percent Abundance	S3-0	S3-10	S3-20
Nitzschia scalaris	0	0	0.001976285
Nitzschia sigma	0.001937984	0.003992016	0.015810277
Nitzschia sigmaformis	0	0	0.001976285
Nitzschia sociabilis	0	0	0
Nitzschia sp. 1	0	0	0
Nitzschia sp. 2	0	0	0
Nitzschia sp. 3	0	0	0
Nitzschia sp. 4	0	0.007984032	0.003952569
Nitzschia sp. 5	0	0	0
Nitzschia sp. 6	0.003875969	0	0
Nitzschia sp. 7	0	0	0
Nitzschia sp. 8	0	0	0
Nitzschia umbonata	0	0	0
Opephora martyi	0	0	0
Opephora olsenii	0	0	0
Opephora sp. A	0	0	0
Orthoseira sp. 1	0	0	0
Paralia sulcata	0.007751938	0.02994012	0.039525692
Parlibellus cf. plicatus	0	0	0
Parlibellus sp. 2	0	0	0
Pinnularia biceps	0	0	0.003952569
Pinnularia borealis	0	0	0
Pinnularia divergens	0	0.003992016	0
Pinnularia divergentissima	0	0.001996008	0.001976285
Pinnularia ignobilis	0	0	0
Pinnularia interrupta	0	0	0
Pinnularia marchica	0	0.03992016	0.051383399
Pinnularia microstauron	0.003875969	0.001996008	0.001976285
Pinnularia sp. 10	0	0	0
Pinnularia sp. 11	0	0	0
Pinnularia sp. 12	0	0	0
Pinnularia sp. 13	0	0	0
Pinnularia sp. 3	0	0	0
Pinnularia sp. 4	0	0	0
Pinnularia sp. 5	0	0	0
Pinnularia sp. 6	0	0	0
Pinnularia sp. 7	0	0	0
Pinnularia sp. 8	0	0	0
Pinnularia sp. 9	0	0	0
Pinnularia sp.1	0	0	0

Percent Abundance	S3-0	S3-10	S3-20
Pinnularia sp.2	0	0	0
Pinnularia viridis	0	0	0
Placoneis cf. gastrum	0	0.001996008	0.003952569
Placoneis elginensis	0	0	0
Placoneis paralegali	0	0	0
Placoneis sp. 1	0	0	0
Placoneis sp. 2	0	0	0
Placoneis sp. 3	0	0	0
Plagiogramma cf. minima	0	0	0
Planothidium abbreviatum	0	0	0
Planothidium apiculatum	0	0	0
Planothidium biporomum	0	0	0
Planothidium dubium	0	0	0
Planothidium frequentissimum	0.009689922	0	0.007905138
Planothidium lanceolatum	0	0	0
Planothidium minutissimum	0	0	0
Planothidium paragali	0	0	0
Planothidium rostratum	0	0	0
Planothidium sp. 1	0	0	0
Planothidium sp. 2	0	0	0
Planothidium sp. 3	0	0	0
Platessa bahlsii	0	0	0
Platessa cf. hustedtii	0	0	0
Pleurosigma diverse-striatum	0	0	0
Psammothidium? Sp. 1	0	0	0
Pseudostaurosira americana	0.015503876	0.00998004	0.007905138
Pseudostaurosira parasitica	0	0	0
Pseudostaurosira brevistriata	0	0	0
Pseudostaurosiropsis sp. 1	0.007751938	0	0.013833992
Pseudostaurosiropsis sp. 1 (GV)	0	0	0
Punctastriata mimetica	0	0	0
Reimeria sinuata	0.001937984	0.003992016	0.003952569
Rexlowea sp. 1	0	0	0
Rhaphoneis amphiceros	0.005813953	0.023952096	0.007905138
Rhaphoneis tenuis	0	0	0
Rhoicosphenia cf. marina	0.007751938	0	0.003952569
Rhoicosphenia sp. 1	0	0	0
Rhopalodia acuminatum	0	0.003992016	0.001976285
Rhopolodia gibba	0	0	0
Rhopolodia musculus	0	0	0.001976285

Percent Abundance	S3-0	S3-10	S3-20
Sellaphora cf. hohnii	0	0	0
Sellaphora laevissima	0	0	0
Sellaphora pulchra	0	0	0
Sellaphora pupula	0.001937984	0	0.001976285
Sellaphora rexii	0	0.001996008	0
Sellaphora bacillum	0	0	0
Skeletonema sp. 1	0	0	0
Stauroforma exiguaformis	0	0	0
Stauroneis agrestis	0	0	0.003952569
Stauroneis CA	0	0	0
Stauroneis cf. vandevijveri	0	0	0
Stauroneis circumborealis	0	0	0
Stauroneis conspicua	0	0	0
Stauroneis GV	0	0	0.003952569
Stauroneis kriegeri	0	0	0
Stauroneis sp. 1	0	0	0
Stauroneis sp. 2	0	0	0
Stauroneis sp. 3	0	0	0
Stauroneis sp. 4	0	0	0.009881423
Staurophora cf. soodensis	0	0	0
Staurosira construens	0	0	0
Staurosira construens var. binodis	0	0	0
Staurosirella leptosauron var. dubia	0	0	0
Staurosirella sp. 1	0	0	0
Stephanodiscus sp. 1	0	0	0
Surirella angusta	0	0	0
Surirella brebissonii	0.001937984	0	0.007905138
Surirella cf. iowensis	0	0	0
Surirella ovalis	0	0	0
Surirella peisonis	0	0	0
Surirella sp. 1	0	0	0
Surirella splendida	0	0.001996008	0.023715415
Symmetrical biraphid1	0	0	0
Symmetrical biraphid2	0	0	0
Synedra cf. fulgens	0	0	0
Synedra famelica	0	0	0
Synedra ulna var. biceps	0	0	0
Synedra ulna var. ramesi	0	0	0
Tabularia fasciculata	0.007751938	0	0
Tabularia ktenoeoides	0	0	0

Percent Abundance	S3-0	S3-10	S3-20
Thalassionema nitzschioides	0	0.003992016	0.001976285
Thalassiosira baltica	0	0	0
Thalassiosira cf. lineata	0	0	0
Thalassiosira cf. tenera	0	0	0
Thalassiosira decipiens	0	0	0.005928854
Thalassiosira eccentrica	0.001937984	0.001996008	0.001976285
Thalassiosira ferelineata	0	0	0
Thalassiosira oestrupii	0	0	0
Thalassiosira proschkinae	0	0	0
Thalassiosira sp. 10 Cooper	0	0	0.005928854
Thalassiosira sp. 2-1 Cooper	0	0	0
Trachyneis aspera var. vulgaris	0	0	0
Triceratium sp. 2	0	0	0
Triceratium sp.1	0	0	0
Tryblionella debilis	0.013565891	0.027944112	0.011857708
Tryblionella salinarum	0	0	0
Tryblionella sp. 1	0	0	0
Tryblionella sp. 2	0	0	0
Ulnaria acus	0	0	0
Ulnaria ulna	0.003875969	0.013972056	0.019762846
Undulate colony??	0	0	0
unknown araphid	0	0	0
Unknown biraphid	0	0	0
Unknown CA	0	0	0
Unknown colony	0	0	0
Unknown GV?	0	0	0

Percent Abundance	S3-30	S3-40	S3-50
Achnanthes coarctaca	0	0	0
Achnanthes denticula	0	0	0
Achnanthes GV	0	0	0
Achnanthes islandica	0	0	0.001988072
Achnanthidium exiguum	0	0	0
Achnanthidium gracillimum	0	0	0.001988072
Actinocyclus normanii	0.005940594	0	0.007952286
Actinocyclus octonarius var. crassus ?	0.003960396	0.009708738	0.023856859
Actinoptychus senarius	0.003960396	0.00776699	0.017892644
Adalfia brockmannii	0	0	0
Adalfia sp. 1	0	0	0
Amphora copulata	0	0	0
Amphora granulata	0	0	0
Amphora ovalis	0	0	0
Amphora sp. 1 (girdle view)	0	0	0
Amphora sp. 2	0	0	0
Anaulus cf. balticus	0	0.003883495	0
Aneumastus pseudotusculus	0.007920792	0.00776699	0
Aneumastus sp. 1	0	0	0
Anomoeoneis sp. 1	0	0	0
Anorthoneis tenuis	0	0	0
Asterionella formosa	0	0.001941748	0
Asterionella sp. 1	0	0	0
Asymmetrical CA	0	0	0
Aulacoseira ambigua	0.075247525	0.126213592	0.009940358
Aulacoseira granulata	0.031683168	0	0.003976143
Aulacoseira granulata var. angustissima	0	0	0
Aulacoseira pusilla	0	0	0
Aulacoseira sp. 1	0	0	0
Aulacoseira sp. 2	0	0	0
Aulacoseira tenella	0	0	0
Bacillaria socialis	0.003960396	0.00776699	0.005964215
Biremis circumtexta	0	0	0
Biremis? sp. 1	0	0	0
Caloneis aemula	0	0	0
Caloneis bacillum	0.031683168	0.013592233	0.023856859
Caloneis cf. lineatus	0	0	0
Caloneis cf. ventricosa	0	0	0
Caloneis lewisii	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0

Percent Abundance	S3-30	S3-40	S3-50
Caloneis sp. 2	0	0	0
Caloneis sp. 3	0	0	0
Caloneis sp. 4	0	0	0
Campylodiscus sp. 1	0	0	0
Capartogramma crucicula	0	0	0
Cavinula scutelloides	0	0	0
Cavinula sp. 1	0	0	0
Cocconeis cf. peltoides	0	0	0
Cocconeis costata var. costata	0	0	0
Cocconeis diminuta	0	0	0
Cocconeis disculoides	0	0	0
Cocconeis elongatum	0	0	0
Cocconeis placentula	0	0.015533981	0.015904573
Cocconeis scutellum	0	0	0
Coscinodiscus cf. lineatus	0.007920792	0.00776699	0.015904573
Coscinodiscus marginatus	0	0.009708738	0.019880716
Cosmoneis pusilla	0	0	0
Cosmoneis sp. 1	0	0	0
Cosmoneis sp. 2	0	0	0
Craticula cuspidata	0	0	0
Cyclostephanos sp. 1	0	0	0.005964215
Cyclostephanos sp. 2	0	0	0
Cyclotella atomus?	0.007920792	0	0.009940358
Cyclotella caspia	0	0	0
Cyclotella cyclopuncta	0.007920792	0.00776699	0.017892644
Cyclotella distinguenda	0	0	0
Cyclotella meneghiniana	0.043564356	0.00776699	0.033797217
Cyclotella rossii	0	0.001941748	0.009940358
Cyclotella sp. 2	0	0	0
Cyclotella striata	0.047524752	0.013592233	0.057654076
Cyclotella stylorum	0	0	0
Cymatopleura solea	0	0	0
Cymatosira belgica	0.001980198	0.009708738	0.017892644
Cymbella affinis	0	0	0
Cymbella cf. excisiformis	0	0	0
Cymbella janischii	0.003960396	0.001941748	0
Cymbella mexicana	0.001980198	0	0
Cymbella minuta	0.001980198	0	0
Cymbella sp. 2	0.003960396	0.00776699	0
Cymbella turgidula	0	0	0

Percent Abundance	S3-30	S3-40	S3-50
Cymbopleura A	0	0	0
Cymbopleura cuspidata	0	0	0
Cymbopleura sp. 1	0	0.003883495	0
Decussata placenta	0	0	0
Delphineis minutissima	0	0	0.013916501
Delphineis surirella	0	0.001941748	0.001988072
Denticula kuetzengii	0	0	0.001988072
Diadesmis cf. contenta	0	0.00776699	0.005964215
Diadesmis gallica	0	0	0
Diatoma mesodon	0	0.001941748	0
Diatoma moniliformis	0	0	0
Diatoma vulgaris	0	0	0
Diatomella balfouriana	0	0	0
Dimeregramma minor	0	0	0
Diploneis boldtiana	0	0	0
Diploneis cf. bombus	0	0	0.007952286
Diploneis cf. didyma	0	0	0
Diploneis elliptica	0.001980198	0.001941748	0
Diploneis pseudovalis	0.001980198	0	0
Diploneis smithii	0	0	0
Diploneis sp. 1	0	0	0
Diploneis sp. 2	0	0	0
Diploneis interrupta	0	0	0
Discostella stelligera	0	0	0
Encyonema minutum	0	0	0.019880716
Encyonema nicafei	0.025742574	0.038834951	0.02584493
Encyonema sp. 1	0	0.005825243	0
Encyonema sp. 2	0	0	0
Encyonema sp. 3	0	0	0
Encyonema sp. 4	0	0	0.003976143
Encyonema triangulum	0	0.003883495	0
Encyonopsis microcephala	0	0	0
Epithemia adnata	0	0	0
Epithemia frickei	0	0	0
Epithemia smithii	0	0	0
Epithemia sorex	0	0	0
Epithemia turgida	0.001980198	0.001941748	0.005964215
Eunotia richbuttensis	0	0	0
Eunotia sp. 1	0	0.001941748	0
Eunotia sp. 2	0	0	0

Percent Abundance	S3-30	S3-40	S3-50
Eunotia sp. 3 (GV)	0	0	0
Fallacia pygmaea	0.001980198	0	0.013916501
Fragilaria brevistriata	0	0	0
Fragilaria capucina	0	0.001941748	0
Fragilaria cf. microstriata	0	0	0
Fragilaria elliptica	0.001980198	0	0.015904573
Fragilaria schulzii	0	0	0
Fragilaria tenera	0	0	0
Fragilaria vaucheriae	0.015841584	0.021359223	0.017892644
Frickea lewisiana	0.033663366	0	0
Frustulia amphipleuroides	0	0	0.001988072
Frustulia capitata	0	0.021359223	0
Frustulia rhomboides var. viridula	0	0.003883495	0
Frustulia sp. 1	0	0	0
Frustulia vulgaris	0.01980198	0	0
Geissleria cf. kriegeri	0	0.003883495	0
Geissleria decussis	0	0	0
Gomphoneis hurculeana	0	0	0
Gomphoneis sp. 1	0	0.00776699	0
Gomphoneis sp. 3	0.005940594	0	0
Gomphonema acuminatum	0	0	0
Gomphonema innocens	0	0	0.011928429
Gomphonema kobayasii	0	0	0
Gomphonema mammilla	0	0	0
Gomphonema olivaceoides	0	0.003883495	0
Gomphonema olivaceum	0	0	0
Gomphonema sp. 1	0	0	0.001988072
Gomphonema sp. 2	0	0	0
Gomphonema sp. 3	0	0	0.001988072
Gomphonopsis exiguum	0	0	0
Gomphosphenia lingulatiformis	0	0	0
Grammatophora cf. macilenta	0	0	0
Gyrosigma temperii	0	0	0
Gyrosigma cf. balticum	0	0	0
Gyrosigma sp.1	0	0	0
Gyrosigma spencerii	0	0.003883495	0.005964215
Hantzschia sp. 1 girdle view	0	0	0
Hantzschia sp. 2 girdle view	0	0	0
Hantzschia sp. 3	0	0	0
Hantzschia sp. 4	0	0	0

Percent Abundance	S3-30	S3-40	S3-50
Hantzschia virgata	0.005940594	0	0.009940358
Hippodonta costulata	0	0.013592233	0
Hippodonta coxiae	0	0	0
Hippodonta hungarica	0	0	0
Hippodonta sp. 1	0	0	0
Hippodonta sp. 2	0	0	0
Karayevia amoena	0.005940594	0.001941748	0.001988072
Karayevia clevei	0	0	0.003976143
Kobayasiella sp. 1	0	0	0
Leptocylindrus cf. danicus	0	0.001941748	0.001988072
Luticola sp. 1	0	0	0
Luticola sp. 2	0	0	0
Luticola sp. 3	0.003960396	0	0.011928429
Luticola sp. 4	0	0.001941748	0.003976143
Luticola sp. 5	0	0	0
Mastogloia smithii	0	0	0
Mastogloia sp. 1	0	0	0
Mastogloia sp. 2	0	0	0
Melosira sp. 1	0.001980198	0	0.007952286
Melosira varians	0.005940594	0	0
Meridion circulare var. constrictum	0	0	0
Meridion sp. 1	0	0	0
Navicula A	0	0	0
Navicula abunda	0	0	0.005964215
Navicula angusta	0	0	0
Navicula antonii	0	0	0
Navicula brachium	0	0	0
Navicula cari	0.003960396	0.003883495	0.005964215
Navicula cf. capitoradiata	0	0.001941748	0
Navicula cf. galloae	0	0	0
Navicula cf. heuflerii	0.003960396	0	0
Navicula cf. ludloviana (CA)	0	0	0
Navicula cf. oblonga	0	0	0
Navicula cf. patrickii	0	0	0
Navicula cf. reichardtiana	0.001980198	0	0
Navicula cf. reinhardtii	0	0	0
Navicula cf. salinarum	0	0.001941748	0
Navicula cf. schweigeri	0.003960396	0.005825243	0.003976143
Navicula cf. subinflata	0.023762376	0.00776699	0.001988072
Navicula cf. tripunctata	0.001980198	0.005825243	0

Percent Abundance	S3-30	S3-40	S3-50
Navicula cf. zostereti	0.00990099	0.003883495	0.011928429
Navicula clementis	0	0.001941748	0
Navicula denta	0	0.001941748	0
Navicula difficillima	0	0	0
Navicula facilis	0	0	0
Navicula germainii	0	0	0
Navicula glomus	0	0	0
Navicula gregaria	0.001980198	0	0
Navicula halophila	0	0	0.003976143
Navicula kotschyi	0	0	0
Navicula lanceolata	0.005940594	0.001941748	0.013916501
Navicula marginulata	0	0	0
Navicula oculiformis	0	0	0
Navicula peregrina	0.013861386	0.011650485	0.043737575
Navicula perminuta	0.003960396	0.00776699	0.011928429
Navicula phyllepta	0	0.001941748	0.005964215
Navicula slesvicensis	0	0	0
Navicula sp. 1	0	0	0
Navicula sp. 10	0.001980198	0	0
Navicula sp. 11	0.005940594	0.027184466	0.001988072
Navicula sp. 12	0	0	0.003976143
Navicula sp. 13	0	0	0.003976143
Navicula sp. 14	0	0	0
Navicula sp. 2	0	0	0
Navicula sp. 3	0	0	0
Navicula sp. 5	0.005940594	0.00776699	0
Navicula sp. 6	0	0	0
Navicula sp. 7	0	0	0
Navicula sp. 8	0.003960396	0	0
Navicula sp. 9	0	0	0
Navicula subinflata	0	0	0
Navicula subminiscula	0.015841584	0.005825243	0.007952286
Navicula trivialis	0	0.017475728	0
Navicula vilaplanii	0	0	0
Naviculoid diatom 1	0	0	0
Naviculoid diatom 2	0	0	0
Neidiopsis sp. 1	0	0	0
Neodephaneis pelagica	0	0	0
Nitzschia amphibia	0	0.005825243	0
Nitzschia angustata	0	0	0

Percent Abundance	S3-30	S3-40	S3-50
Nitzschia biacrula	0	0	0
Nitzschia bita	0	0.003883495	0
Nitzschia brevissima	0.087128713	0.038834951	0.017892644
Nitzschia cf. agnita	0	0.003883495	0.007952286
Nitzschia cf. biremis	0	0	0
Nitzschia cf. borealis	0	0	0
Nitzschia cf. groefii	0.003960396	0	0
Nitzschia cf. laevis	0	0	0.003976143
Nitzschia cf. macilenta	0.003960396	0	0
Nitzschia cf. subacicularis	0	0	0
Nitzschia clausii	0.005940594	0.009708738	0.003976143
Nitzschia columbiana	0.005940594	0	0.003976143
Nitzschia communis	0	0	0
Nitzschia commutata	0	0	0
Nitzschia constricta	0	0.003883495	0
Nitzschia cylindrus	0	0	0
Nitzschia debilis	0.003960396	0.011650485	0
Nitzschia desertorum	0	0	0
Nitzschia dissipata	0	0	0
Nitzschia filiformis	0.003960396	0	0
Nitzschia fonticola	0	0	0
Nitzschia frustulum	0.003960396	0	0.001988072
Nitzschia gracilis	0	0	0
Nitzschia incognita	0.003960396	0.001941748	0
Nitzschia inconspicua	0.001980198	0.00776699	0
Nitzschia innominata	0	0	0
Nitzschia levidensis	0	0	0
Nitzschia linearis	0.005940594	0.019417476	0
Nitzschia marginulatus	0	0	0
Nitzschia microcephala	0	0	0
Nitzschia minuta	0	0	0
Nitzschia nana	0.015841584	0.003883495	0
Nitzschia obtusa	0	0	0
Nitzschia palea	0	0.00776699	0.009940358
Nitzschia panduriformis	0	0	0
Nitzschia pellucida	0	0	0
Nitzschia perminuta	0	0.013592233	0.001988072
Nitzschia proxima	0	0	0
Nitzschia punctata	0	0	0
Nitzschia pusilla	0	0	0

Percent Abundance	S3-30	S3-40	S3-50
Nitzschia scalaris	0	0.005825243	0.001988072
Nitzschia sigma	0.013861386	0	0.003976143
Nitzschia sigmaformis	0	0	0
Nitzschia sociabilis	0	0	0
Nitzschia sp. 1	0	0.001941748	0
Nitzschia sp. 2	0	0	0
Nitzschia sp. 3	0	0	0
Nitzschia sp. 4	0.003960396	0	0
Nitzschia sp. 5	0	0	0
Nitzschia sp. 6	0	0	0.005964215
Nitzschia sp. 7	0	0	0
Nitzschia sp. 8	0	0	0
Nitzschia umbonata	0	0	0
Opephora martyi	0.003960396	0	0.001988072
Opephora olsenii	0	0	0
Opephora sp. A	0	0	0
Orthoseira sp. 1	0	0	0
Paralia sulcata	0.037623762	0.034951456	0.073558648
Parlibellus cf. plicatus	0	0	0
Parlibellus sp. 2	0.003960396	0	0
Pinnularia biceps	0.001980198	0	0
Pinnularia borealis	0.001980198	0	0
Pinnularia divergens	0.007920792	0.00776699	0.001988072
Pinnularia divergentissima	0	0	0
Pinnularia ignobilis	0	0	0
Pinnularia interrupta	0	0	0
Pinnularia marchica	0.051485149	0.118446602	0.007952286
Pinnularia microstauron	0.013861386	0.005825243	0.005964215
Pinnularia sp. 10	0	0	0
Pinnularia sp. 11	0	0	0
Pinnularia sp. 12	0	0	0
Pinnularia sp. 13	0	0	0
Pinnularia sp. 3	0	0	0
Pinnularia sp. 4	0	0	0
Pinnularia sp. 5	0	0	0
Pinnularia sp. 6	0	0	0
Pinnularia sp. 7	0	0	0
Pinnularia sp. 8	0	0	0
Pinnularia sp. 9	0	0	0
Pinnularia sp.1	0	0	0

Percent Abundance	S3-30	S3-40	S3-50
Pinnularia sp.2	0	0	0
Pinnularia viridis	0.003960396	0	0
Placoneis cf. gastrum	0.003960396	0	0
Placoneis elginensis	0	0	0
Placoneis paralegali	0	0	0
Placoneis sp. 1	0	0	0
Placoneis sp. 2	0	0	0
Placoneis sp. 3	0	0	0.003976143
Plagiogramma cf. minima	0	0	0
Planothidium abbreviatum	0	0	0
Planothidium apiculatum	0	0	0.005964215
Planothidium biporomum	0	0	0
Planothidium dubium	0	0	0
Planothidium frequentissimum	0.001980198	0.009708738	0.003976143
Planothidium lanceolatum	0.003960396	0	0
Planothidium minutissimum	0	0	0.001988072
Planothidium paragali	0	0	0
Planothidium rostratum	0	0	0
Planothidium sp. 1	0	0	0
Planothidium sp. 2	0	0	0
Planothidium sp. 3	0	0	0
Platessa bahlsii	0	0	0
Platessa cf. hustedtii	0	0	0
Pleurosigma diverse-striatum	0	0	0
Psammothidium? Sp. 1	0	0	0
Pseudostaurosira americana	0	0	0.001988072
Pseudostaurosira parasitica	0	0.003883495	0
Pseudostaurosira brevistriata	0	0	0.003976143
Pseudostaurosiropsis sp. 1	0.003960396	0.001941748	0.017892644
Pseudostaurosiropsis sp. 1 (GV)	0	0	0
Punctastriata mimetica	0	0	0
Reimeria sinuata	0.00990099	0	0
Rexlowea sp. 1	0.013861386	0	0
Rhaphoneis amphiceros	0.003960396	0.017475728	0.029821074
Rhaphoneis tenuis	0	0	0
Rhoicosphenia cf. marina	0	0	0
Rhoicosphenia sp. 1	0	0	0
Rhopalodia acuminatum	0	0	0
Rhopolodia gibba	0	0	0
Rhopolodia musculus	0	0	0

Percent Abundance	S3-30	S3-40	S3-50
Sellaphora cf. hohnii	0	0	0
Sellaphora laevissima	0	0	0
Sellaphora pulchra	0	0	0
Sellaphora pupula	0.005940594	0	0
Sellaphora rexii	0	0.034951456	0
Sellaphora bacillum	0	0	0
Skeletonema sp. 1	0	0	0
Stauroforma exiguaformis	0	0	0
Stauroneis agrestis	0	0	0
Stauroneis CA	0	0	0
Stauroneis cf. vandevijveri	0	0	0
Stauroneis circumborealis	0	0	0
Stauroneis conspicua	0	0	0
Stauroneis GV	0	0	0
Stauroneis kriegeri	0.005940594	0.005825243	0.001988072
Stauroneis sp. 1	0	0	0
Stauroneis sp. 2	0	0	0
Stauroneis sp. 3	0	0	0
Stauroneis sp. 4	0	0	0
Staurophora cf. soodensis	0	0	0
Staurosira construens	0	0.003883495	0
Staurosira construens var. binodis	0.003960396	0	0
Staurosirella leptosauron var. dubia	0	0	0
Staurosirella sp. 1	0	0	0
Stephanodiscus sp. 1	0	0	0
Surirella angusta	0	0	0
Surirella brebissonii	0	0	0
Surirella cf. iowensis	0	0	0
Surirella ovalis	0	0	0
Surirella peisonis	0	0	0
Surirella sp. 1	0	0	0
Surirella splendida	0.025742574	0.011650485	0.003976143
Symmetrical biraphid1	0	0	0
Symmetrical biraphid2	0	0	0
Synedra cf. fulgens	0	0	0
Synedra famelica	0	0	0
Synedra ulna var. biceps	0	0	0
Synedra ulna var. ramesi	0	0	0
Tabularia fasciculata	0	0.001941748	0
Tabularia ktenoeoides	0	0	0

Percent Abundance	S3-30	S3-40	S3-50
Thalassionema nitzschioides	0.00990099	0.003883495	0.023856859
Thalassiosira baltica	0	0	0
Thalassiosira cf. lineata	0	0	0.017892644
Thalassiosira cf. tenera	0.003960396	0	0.001988072
Thalassiosira decipiens	0.003960396	0.001941748	0.007952286
Thalassiosira eccentrica	0.007920792	0.009708738	0.023856859
Thalassiosira ferelineata	0	0.003883495	0.005964215
Thalassiosira oestrupii	0	0	0.003976143
Thalassiosira proschkinae	0	0	0.003976143
Thalassiosira sp. 10 Cooper	0.003960396	0.005825243	0.003976143
Thalassiosira sp. 2-1 Cooper	0	0.005825243	0.009940358
Trachyneis aspera var. vulgaris	0	0	0
Triceratium sp. 2	0.001980198	0	0.001988072
Triceratium sp.1	0	0	0.001988072
Tryblionella debilis	0.03960396	0.019417476	0.003976143
Tryblionella salinarum	0	0	0
Tryblionella sp. 1	0	0.001941748	0.001988072
Tryblionella sp. 2	0	0	0
Ulnaria acus	0	0	0
Ulnaria ulna	0.015841584	0.013592233	0.017892644
Undulate colony??	0	0	0
unknown araphid	0	0	0
Unknown biraphid	0.001980198	0	0
Unknown CA	0	0	0
Unknown colony	0	0	0.007952286
Unknown GV?	0	0	0

Percent Abundance	S3-60	S3-70	S3-80	S3-90
Achnanthes coarctaca	0	0	0	0.002
Achnanthes denticula	0	0	0	0
Achnanthes GV	0	0	0	0
Achnanthes islandica	0	0.002	0.011928429	0.004
Achnanthidium exiguum	0	0	0	0
Achnanthidium gracillimum	0	0	0	0
Actinocyclus normanii	0.015904573	0.012	0.033797217	0.012
Actinocyclus octonarius var. crassus ?	0.003976143	0.016	0.021868787	0.018
Actinoptychus senarius	0.015904573	0.01	0.013916501	0.002
Adalfia brockmannii	0	0	0	0
Adalfia sp. 1	0	0	0	0
Amphora copulata	0	0	0	0.002
Amphora granulata	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp. 1 (girdle view)	0	0	0	0
Amphora sp. 2	0	0	0	0
Anaulus cf. balticus	0	0	0	0.006
Aneumastus pseudotusculus	0	0	0	0
Aneumastus sp. 1	0	0	0	0
Anomoeoneis sp. 1	0	0	0	0
Anorthoneis tenuis	0	0	0	0
Asterionella formosa	0	0	0	0
Asterionella sp. 1	0	0	0	0
Asymmetrical CA	0	0	0	0
Aulacoseira ambigua	0.023856859	0.022	0.027833002	0.046
Aulacoseira granulata	0	0	0	0
Aulacoseira granulata var. angustissima	0	0	0	0
Aulacoseira pusilla	0	0	0	0
Aulacoseira sp. 1	0	0	0	0
Aulacoseira sp. 2	0	0	0	0
Aulacoseira tenella	0	0	0.003976143	0
Bacillaria socialis	0.005964215	0.004	0.003976143	0.002
Biremis circumtexta	0	0	0	0
Biremis? sp. 1	0	0	0	0
Caloneis aemula	0	0	0	0
Caloneis bacillum	0.015904573	0.004	0	0.002
Caloneis cf. lineatus	0	0	0	0
Caloneis cf. ventricosa	0	0	0	0
Caloneis lewisii	0	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0	0

Percent Abundance	S3-60	S3-70	S3-80	S3-90
Caloneis sp. 2	0	0	0	0
Caloneis sp. 3	0	0	0	0
Caloneis sp. 4	0	0	0	0
Campylodiscus sp. 1	0	0	0	0
Capartogramma crucicula	0	0	0	0
Cavinula scutelloides	0	0	0	0
Cavinula sp. 1	0	0	0.001988072	0.002
Cocconeis cf. peltoides	0	0	0	0
Cocconeis costata var. costata	0	0	0	0
Cocconeis diminuta	0	0	0	0
Cocconeis disculoides	0	0	0	0
Cocconeis elongatum	0	0	0	0
Cocconeis placentula	0.021868787	0.012	0.003976143	0.006
Cocconeis scutellum	0	0	0	0
Coscinodiscus cf. lineatus	0.021868787	0.024	0.001988072	0.016
Coscinodiscus marginatus	0.015904573	0.018	0.073558648	0.07
Cosmoneis pusilla	0	0.002	0	0
Cosmoneis sp. 1	0	0	0	0
Cosmoneis sp. 2	0	0	0	0
Craticula cuspidata	0	0	0	0
Cyclostephanos sp. 1	0.009940358	0.016	0.005964215	0.002
Cyclostephanos sp. 2	0	0	0	0
Cyclotella atomus?	0.007952286	0.016	0.015904573	0.02
Cyclotella caspia	0.001988072	0.002	0.011928429	0.004
Cyclotella cyclopuncta	0.007952286	0.016	0.017892644	0.016
Cyclotella distinguenda	0	0	0.007952286	0.008
Cyclotella meneghiniana	0.023856859	0.09	0.027833002	0.016
Cyclotella rossii	0.013916501	0.016	0.013916501	0.008
Cyclotella sp. 2	0	0	0	0
Cyclotella striata	0.045725646	0.066	0.161033797	0.144
Cyclotella stylorum	0	0	0	0
Cymatopleura solea	0	0	0	0
Cymatosira belgica	0.017892644	0.02	0.021868787	0.024
Cymbella affinis	0.003976143	0	0.007952286	0
Cymbella cf. excisiformis	0	0.002	0	0
Cymbella janischii	0.003976143	0	0.007952286	0
Cymbella mexicana	0	0	0	0
Cymbella minuta	0	0	0.001988072	0
Cymbella sp. 2	0	0	0	0
Cymbella turgidula	0	0	0.007952286	0.006

Percent Abundance	S3-60	S3-70	S3-80	S3-90
Cymbopleura A	0	0	0	0
Cymbopleura cuspidata	0	0	0	0
Cymbopleura sp. 1	0	0	0	0
Decussata placenta	0	0.008	0.003976143	0
Delphineis minutissima	0.005964215	0.002	0	0.016
Delphineis surirella	0.005964215	0	0	0.002
Denticula kuetzengii	0	0	0	0
Diadesmis cf. contenta	0.003976143	0.022	0	0.002
Diadesmis gallica	0	0	0	0
Diatoma mesodon	0	0	0	0
Diatoma moniliformis	0	0	0	0
Diatoma vulgaris	0	0	0	0
Diatomella balfouriana	0	0	0	0
Dimeregramma minor	0	0	0	0
Diploneis boldtiana	0.001988072	0	0	0
Diploneis cf. bombus	0	0.002	0.001988072	0
Diploneis cf. didyma	0	0	0	0
Diploneis elliptica	0.001988072	0	0.001988072	0
Diploneis pseudovalis	0	0	0	0
Diploneis smithii	0	0.004	0	0.01
Diploneis sp. 1	0	0	0	0
Diploneis sp. 2	0	0	0	0
Diploneis interrupta	0	0	0	0
Discostella stelligera	0	0	0	0
Encyonema minutum	0	0	0	0
Encyonema nicafei	0.033797217	0.014	0.017892644	0.012
Encyonema sp. 1	0	0	0	0
Encyonema sp. 2	0	0	0	0
Encyonema sp. 3	0	0	0	0
Encyonema sp. 4	0	0	0	0
Encyonema triangulum	0	0	0	0
Encyonopsis microcephala	0	0	0	0.004
Epithemia adnata	0	0	0	0.004
Epithemia frickei	0	0	0	0
Epithemia smithii	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0.002	0.003976143	0.002
Eunotia richbuttensis	0	0	0.007952286	0
Eunotia sp. 1	0	0	0.001988072	0
Eunotia sp. 2	0.005964215	0.002	0	0

Percent Abundance	S3-60	S3-70	S3-80	S3-90
Eunotia sp. 3 (GV)	0	0	0	0
Fallacia pygmaea	0.019880716	0.014	0	0
Fragilaria brevistriata	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria cf. microstriata	0	0	0	0
Fragilaria elliptica	0.013916501	0.002	0	0.016
Fragilaria schulzii	0	0	0	0
Fragilaria tenera	0	0	0	0
Fragilaria vaucheriae	0.021868787	0.004	0.003976143	0.002
Frickea lewisiana	0	0	0	0
Frustulia amphipleuroides	0	0	0	0
Frustulia capitata	0	0	0	0
Frustulia rhomboides var. viridula	0	0	0	0
Frustulia sp. 1	0	0	0	0
Frustulia vulgaris	0.005964215	0	0	0.006
Geissleria cf. kriegeri	0	0.002	0	0
Geissleria decussis	0	0	0	0
Gomphoneis hurculeana	0	0	0	0
Gomphoneis sp. 1	0	0	0	0
Gomphoneis sp. 3	0.003976143	0.002	0	0
Gomphonema acuminatum	0	0	0.001988072	0
Gomphonema innocens	0.009940358	0	0.001988072	0.004
Gomphonema kobayasii	0	0	0	0
Gomphonema mammilla	0	0	0	0
Gomphonema olivaceoides	0	0	0	0
Gomphonema olivaceum	0	0	0	0
Gomphonema sp. 1	0	0	0	0
Gomphonema sp. 2	0	0	0	0
Gomphonema sp. 3	0.011928429	0.006	0	0
Gomphonopsis exiguum	0	0	0	0
Gomphosphenia lingulatiformis	0	0	0	0
Grammatophora cf. macilenta	0	0	0	0
Gyrosigma temperii	0	0	0	0
Gyrosigma cf. balticum	0	0	0	0
Gyrosigma sp.1	0.003976143	0	0	0
Gyrosigma spencerii	0.001988072	0.006	0	0.012
Hantzschia sp. 1 girdle view	0	0	0	0
Hantzschia sp. 2 girdle view	0	0	0	0
Hantzschia sp. 3	0	0	0	0
Hantzschia sp. 4	0	0	0	0

Percent Abundance	S3-60	S3-70	S3-80	S3-90
Hantzschia virgata	0.005964215	0.012	0.003976143	0.002
Hippodonta costulata	0	0	0	0.002
Hippodonta coxiae	0.005964215	0.01	0	0
Hippodonta hungarica	0	0	0	0
Hippodonta sp. 1	0	0	0	0
Hippodonta sp. 2	0	0	0	0
Karayevia amoena	0	0.002	0	0
Karayevia clevei	0	0	0	0
Kobayasiella sp. 1	0	0	0	0
Leptocylindrus cf. danicus	0.005964215	0	0.005964215	0.01
Luticola sp. 1	0	0.008	0	0
Luticola sp. 2	0	0.022	0	0
Luticola sp. 3	0.001988072	0.008	0	0
Luticola sp. 4	0	0	0.021868787	0.006
Luticola sp. 5	0	0	0	0
Mastogloia smithii	0	0	0	0
Mastogloia sp. 1	0	0	0	0
Mastogloia sp. 2	0	0	0	0
Melosira sp. 1	0	0	0	0
Melosira varians	0	0	0	0
Meridion circulare var. constrictum	0	0	0	0
Meridion sp. 1	0	0	0	0
Navicula A	0	0	0.003976143	0
Navicula abunda	0.007952286	0	0.001988072	0.004
Navicula angusta	0	0	0	0
Navicula antonii	0	0	0	0.004
Navicula brachium	0	0	0	0
Navicula cari	0.003976143	0.02	0.003976143	0.01
Navicula cf. capitoradiata	0.007952286	0	0	0
Navicula cf. galloae	0	0	0	0
Navicula cf. heuflerii	0	0	0.001988072	0
Navicula cf. ludloviana (CA)	0	0	0	0
Navicula cf. oblonga	0	0	0	0
Navicula cf. patrickii	0	0.002	0.001988072	0
Navicula cf. reichardtiana	0	0	0	0
Navicula cf. reinhardtii	0	0	0	0.004
Navicula cf. salinarum	0.003976143	0	0	0
Navicula cf. schweigeri	0	0.002	0	0
Navicula cf. subinflata	0.019880716	0.004	0	0
Navicula cf. tripunctata	0.007952286	0.008	0.001988072	0.004

Percent Abundance	S3-60	S3-70	S3-80	S3-90
Navicula cf. zostereti	0.003976143	0.008	0.007952286	0.012
Navicula clementis	0	0	0	0
Navicula denta	0	0	0	0
Navicula difficillima	0	0	0	0
Navicula facilis	0	0	0	0
Navicula germainii	0	0	0	0
Navicula glomus	0	0	0	0
Navicula gregaria	0	0.002	0	0
Navicula halophila	0.001988072	0	0.001988072	0.004
Navicula kotschyi	0	0	0	0
Navicula lanceolata	0.003976143	0.004	0	0
Navicula marginulata	0	0	0	0
Navicula oculiformis	0	0	0	0.002
Navicula peregrina	0.027833002	0.03	0.041749503	0.02
Navicula perminuta	0.003976143	0.002	0	0.004
Navicula phyllepta	0.007952286	0	0	0
Navicula slesvicensis	0	0	0	0
Navicula sp. 1	0.001988072	0.002	0.001988072	0.012
Navicula sp. 10	0.005964215	0	0	0
Navicula sp. 11	0.017892644	0.014	0	0
Navicula sp. 12	0	0	0	0
Navicula sp. 13	0	0	0	0
Navicula sp. 14	0	0	0	0
Navicula sp. 2	0	0	0	0
Navicula sp. 3	0	0	0	0
Navicula sp. 5	0.009940358	0	0	0.002
Navicula sp. 6	0	0	0	0
Navicula sp. 7	0	0	0	0
Navicula sp. 8	0.001988072	0.022	0	0
Navicula sp. 9	0	0	0	0
Navicula subinflata	0	0	0	0
Navicula subminiscula	0.001988072	0	0	0
Navicula trivialis	0	0	0	0
Navicula vilaplanii	0	0	0	0
Naviculoid diatom 1	0	0	0	0
Naviculoid diatom 2	0	0	0	0
Neidiopsis sp. 1	0	0	0	0
Neodephaneis pelagica	0	0	0	0
Nitzschia amphibia	0.001988072	0.006	0.003976143	0.004
Nitzschia angustata	0	0	0	0

Percent Abundance	S3-60	S3-70	S3-80	S3-90
Nitzschia biacrula	0	0	0	0
Nitzschia bita	0.003976143	0.008	0	0
Nitzschia brevissima	0.011928429	0.016	0.019880716	0.02
Nitzschia cf. agnita	0.003976143	0	0	0.002
Nitzschia cf. biremis	0	0	0	0
Nitzschia cf. borealis	0	0	0	0.002
Nitzschia cf. groefii	0	0	0	0
Nitzschia cf. laevis	0	0	0	0
Nitzschia cf. macilenta	0	0	0	0
Nitzschia cf. subacicularis	0	0	0	0
Nitzschia clausii	0.001988072	0.006	0.001988072	0
Nitzschia columbiana	0.001988072	0.002	0	0
Nitzschia communis	0	0	0	0
Nitzschia commutata	0	0	0	0
Nitzschia constricta	0	0	0	0
Nitzschia cylindrus	0	0	0	0
Nitzschia debilis	0	0.002	0	0
Nitzschia desertorum	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia filiformis	0	0	0	0
Nitzschia fonticola	0	0	0	0
Nitzschia frustulum	0.001988072	0.008	0	0
Nitzschia gracilis	0	0	0	0
Nitzschia incognita	0	0	0	0
Nitzschia inconspicua	0	0	0	0.002
Nitzschia innominata	0	0	0	0
Nitzschia levidensis	0	0	0	0
Nitzschia linearis	0	0	0	0.002
Nitzschia marginulatus	0	0	0	0
Nitzschia microcephala	0	0	0	0
Nitzschia minuta	0	0	0	0
Nitzschia nana	0.003976143	0	0	0
Nitzschia obtusa	0	0	0	0
Nitzschia palea	0.007952286	0.002	0	0.002
Nitzschia panduriformis	0	0	0	0.002
Nitzschia pellucida	0	0	0	0
Nitzschia perminuta	0	0	0	0
Nitzschia proxima	0	0	0	0
Nitzschia punctata	0	0	0.001988072	0.008
Nitzschia pusilla	0	0	0.003976143	0.002

Percent Abundance	S3-60	S3-70	S3-80	S3-90
Nitzschia scalaris	0.009940358	0	0	0
Nitzschia sigma	0.005964215	0.004	0.005964215	0.006
Nitzschia sigmaformis	0.001988072	0.002	0	0.002
Nitzschia sociabilis	0	0	0	0
Nitzschia sp. 1	0.001988072	0	0	0
Nitzschia sp. 2	0	0	0	0
Nitzschia sp. 3	0	0	0	0
Nitzschia sp. 4	0	0.004	0.001988072	0.002
Nitzschia sp. 5	0	0	0	0
Nitzschia sp. 6	0	0	0	0
Nitzschia sp. 7	0	0	0	0
Nitzschia sp. 8	0	0	0	0
Nitzschia umbonata	0	0	0	0
Opephora martyi	0	0.002	0.001988072	0
Opephora olsenii	0	0	0	0
Opephora sp. A	0	0	0	0
Orthoseira sp. 1	0	0	0	0
Paralia sulcata	0.083499006	0.112	0.107355865	0.126
Parlibellus cf. plicatus	0	0.004	0	0.004
Parlibellus sp. 2	0	0	0	0
Pinnularia biceps	0	0	0	0
Pinnularia borealis	0.003976143	0.008	0.003976143	0
Pinnularia divergens	0	0	0.001988072	0
Pinnularia divergentissima	0.097415507	0	0	0
Pinnularia ignobilis	0	0	0	0
Pinnularia interrupta	0.001988072	0	0	0
Pinnularia marchica	0.031809145	0.004	0	0.004
Pinnularia microstauron	0.007952286	0.002	0	0
Pinnularia sp. 10	0	0	0	0
Pinnularia sp. 11	0	0.004	0	0
Pinnularia sp. 12	0	0	0	0
Pinnularia sp. 13	0	0	0	0
Pinnularia sp. 3	0	0	0	0
Pinnularia sp. 4	0	0	0	0
Pinnularia sp. 5	0	0	0	0
Pinnularia sp. 6	0	0	0	0
Pinnularia sp. 7	0	0	0	0
Pinnularia sp. 8	0	0	0	0
Pinnularia sp. 9	0.001988072	0	0	0
Pinnularia sp.1	0	0	0	0

Percent Abundance	S3-60	S3-70	S3-80	S3-90
Pinnularia sp.2	0	0	0	0
Pinnularia viridis	0.003976143	0	0.001988072	0.01
Placoneis cf. gastrum	0	0	0	0
Placoneis elginensis	0	0	0	0
Placoneis paralegali	0	0	0	0
Placoneis sp. 1	0	0	0	0
Placoneis sp. 2	0	0	0	0
Placoneis sp. 3	0	0	0	0
Plagiogramma cf. minima	0	0	0	0
Planothidium abbreviatum	0	0	0	0
Planothidium apiculatum	0	0	0	0
Planothidium biporomum	0	0	0	0
Planothidium dubium	0.003976143	0	0	0
Planothidium frequentissimum	0	0	0	0.002
Planothidium lanceolatum	0.003976143	0	0.003976143	0
Planothidium minutissimum	0	0	0	0
Planothidium paragali	0	0	0	0
Planothidium rostratum	0	0	0.003976143	0
Planothidium sp. 1	0	0	0	0
Planothidium sp. 2	0	0	0	0
Planothidium sp. 3	0	0	0	0
Platessa bahlsii	0	0	0	0
Platessa cf. hustedtii	0	0	0	0
Pleurosigma diverse-striatum	0	0	0	0
Psammothidium? Sp. 1	0	0	0	0
Pseudostaurosira americana	0	0	0.005964215	0.004
Pseudostaurosira parasitica	0	0.002	0	0
Pseudostaurosira brevistriata	0	0	0	0
Pseudostaurosiropsis sp. 1	0.009940358	0.014	0.003976143	0.01
Pseudostaurosiropsis sp. 1 (GV)	0	0	0	0
Punctastriata mimetica	0	0	0	0
Reimeria sinuata	0	0.002	0	0
Rexlowea sp. 1	0	0	0	0
Rhaphoneis amphiceros	0.02584493	0.032	0.047713718	0.056
Rhaphoneis tenuis	0	0.012	0.005964215	0.006
Rhoicosphenia cf. marina	0	0	0	0
Rhoicosphenia sp. 1	0	0	0	0
Rhopalodia acuminatum	0	0.004	0	0.006
Rhopolodia gibba	0	0	0	0
Rhopolodia musculus	0	0	0	0.002

Percent Abundance	S3-60	S3-70	S3-80	S3-90
Sellaphora cf. hohnii	0	0	0.003976143	0
Sellaphora laevissima	0	0	0	0
Sellaphora pulchra	0	0	0	0
Sellaphora pupula	0	0.004	0	0
Sellaphora rexii	0	0	0	0
Sellaphora bacillum	0	0	0.003976143	0
Skeletonema sp. 1	0	0	0	0
Stauroforma exiguaformis	0	0	0	0
Stauroneis agrestis	0	0	0	0
Stauroneis CA	0	0	0	0
Stauroneis cf. vandevijveri	0	0	0	0
Stauroneis circumborealis	0	0	0	0
Stauroneis conspicua	0	0	0	0
Stauroneis GV	0	0	0	0
Stauroneis kriegeri	0.003976143	0	0	0.002
Stauroneis sp. 1	0	0	0	0
Stauroneis sp. 2	0	0	0	0
Stauroneis sp. 3	0	0	0	0
Stauroneis sp. 4	0	0	0	0
Staurophora cf. soodensis	0	0	0	0
Staurosira construens	0	0	0	0.006
Staurosira construens var. binodis	0	0	0	0
Staurosirella leptosauron var. dubia	0	0	0	0
Staurosirella sp. 1	0	0	0	0
Stephanodiscus sp. 1	0	0	0	0
Surirella angusta	0	0	0	0
Surirella brebissonii	0	0	0	0.004
Surirella cf. iowensis	0	0	0	0
Surirella ovalis	0	0	0	0
Surirella peisonis	0	0	0	0
Surirella sp. 1	0	0	0	0
Surirella splendida	0.001988072	0.006	0	0.002
Symmetrical biraphid1	0	0	0	0
Symmetrical biraphid2	0	0	0	0
Synedra cf. fulgens	0	0	0	0
Synedra famelica	0	0	0	0
Synedra ulna var. biceps	0	0	0	0
Synedra ulna var. ramesi	0	0	0	0
Tabularia fasciculata	0	0	0	0
Tabularia ktenoeoides	0	0	0	0

Percent Abundance	S3-60	S3-70	S3-80	S3-90
Thalassionema nitzschioides	0.015904573	0.016	0.021868787	0.03
Thalassiosira baltica	0	0.006	0	0
Thalassiosira cf. lineata	0	0.006	0.003976143	0
Thalassiosira cf. tenera	0	0	0	0
Thalassiosira decipiens	0.001988072	0.004	0.027833002	0.01
Thalassiosira eccentrica	0.013916501	0.018	0.015904573	0.016
Thalassiosira ferelineata	0	0	0.007952286	0.004
Thalassiosira oestrupii	0	0	0	0
Thalassiosira proschkinae	0.003976143	0.004	0.007952286	0.002
Thalassiosira sp. 10 Cooper	0.001988072	0.004	0.003976143	0
Thalassiosira sp. 2-1 Cooper	0.007952286	0.01	0.005964215	0
Trachyneis aspera var. vulgaris	0	0	0	0
Triceratium sp. 2	0	0.002	0	0
Triceratium sp.1	0	0	0	0
Tryblionella debilis	0.007952286	0.006	0.003976143	0.002
Tryblionella salinarum	0	0.008	0	0
Tryblionella sp. 1	0	0	0	0
Tryblionella sp. 2	0	0	0	0
Ulnaria acus	0	0	0.001988072	0
Ulnaria ulna	0.011928429	0	0.003976143	0.004
Undulate colony??	0	0	0	0
unknown araphid	0	0	0	0
Unknown biraphid	0	0	0	0
Unknown CA	0	0	0	0
Unknown colony	0	0	0	0
Unknown GV?	0	0	0	0

Percent Abundance	S3-100	S3-110	S3-120
Achnanthes coarctaca	0	0	0
Achnanthes denticula	0	0	0
Achnanthes GV	0	0	0
Achnanthes islandica	0	0.001992032	0.003992016
Achnanthidium exiguum	0.006	0	0
Achnanthidium gracillimum	0.002	0	0.007984032
Actinocyclus normanii	0.01	0.015936255	0.007984032
Actinocyclus octonarius var. crassus ?	0.004	0.003984064	0.015968064
Actinoptychus senarius	0.01	0.015936255	0.01996008
Adalfia brockmannii	0	0	0
Adalfia sp. 1	0	0	0
Amphora copulata	0	0	0
Amphora granulata	0	0	0
Amphora ovalis	0	0	0
Amphora sp. 1 (girdle view)	0	0	0
Amphora sp. 2	0	0	0
Anaulus cf. balticus	0	0	0
Aneumastus pseudotusculus	0	0	0
Aneumastus sp. 1	0	0	0
Anomoeoneis sp. 1	0	0	0
Anorthoneis tenuis	0	0	0
Asterionella formosa	0	0	0
Asterionella sp. 1	0	0	0
Asymmetrical CA	0	0	0
Aulacoseira ambigua	0.066	0.043824701	0.055888224
Aulacoseira granulata	0	0	0
Aulacoseira granulata var. angustissima	0	0	0
Aulacoseira pusilla	0	0	0
Aulacoseira sp. 1	0	0	0
Aulacoseira sp. 2	0	0	0
Aulacoseira tenella	0	0	0
Bacillaria socialis	0.002	0.001992032	0.001996008
Biremis circumtexta	0.002	0	0
Biremis? sp. 1	0	0	0.003992016
Caloneis aemula	0	0.003984064	0
Caloneis bacillum	0.012	0.007968127	0
Caloneis cf. lineatus	0	0	0
Caloneis cf. ventricosa	0	0	0
Caloneis lewisii	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0

Percent Abundance	S3-100	S3-110	S3-120
Caloneis sp. 2	0	0	0
Caloneis sp. 3	0	0	0
Caloneis sp. 4	0	0	0
Campylodiscus sp. 1	0	0	0
Capartogramma crucicula	0	0	0
Cavinula scutelloides	0	0	0
Cavinula sp. 1	0	0	0
Cocconeis cf. peltoides	0	0	0.001996008
Cocconeis costata var. costata	0	0	0
Cocconeis diminuta	0	0	0
Cocconeis disculoides	0	0	0
Cocconeis elongatum	0	0	0
Cocconeis placentula	0.008	0.009960159	0
Cocconeis scutellum	0	0	0
Coscinodiscus cf. lineatus	0.006	0.007968127	0.021956088
Coscinodiscus marginatus	0.066	0.06374502	0.033932136
Cosmoneis pusilla	0	0	0
Cosmoneis sp. 1	0	0	0
Cosmoneis sp. 2	0	0	0.001996008
Craticula cuspidata	0	0	0
Cyclostephanos sp. 1	0.004	0	0.011976048
Cyclostephanos sp. 2	0	0	0
Cyclotella atomus?	0	0.007968127	0.00998004
Cyclotella caspia	0	0.017928287	0.025948104
Cyclotella cyclopuncta	0.014	0.011952191	0.015968064
Cyclotella distinguenda	0	0	0
Cyclotella meneghiniana	0.014	0.015936255	0.041916168
Cyclotella rossii	0.044	0.025896414	0.033932136
Cyclotella sp. 2	0	0	0.003992016
Cyclotella striata	0.124	0.143426295	0.087824351
Cyclotella stylorum	0	0	0
Cymatopleura solea	0	0	0
Cymatosira belgica	0.02	0.011952191	0.011976048
Cymbella affinis	0.004	0.011952191	0
Cymbella cf. excisiformis	0	0	0.003992016
Cymbella janischii	0.004	0	0.001996008
Cymbella mexicana	0	0	0
Cymbella minuta	0	0	0
Cymbella sp. 2	0	0	0
Cymbella turgidula	0.004	0	0

Percent Abundance	S3-100	S3-110	S3-120
Cymbopleura A	0	0	0
Cymbopleura cuspidata	0	0	0
Cymbopleura sp. 1	0	0	0
Decussata placenta	0	0.001992032	0
Delphineis minutissima	0	0	0.003992016
Delphineis surirella	0	0.005976096	0
Denticula kuetzengii	0	0	0
Diadesmis cf. contenta	0	0.003984064	0.011976048
Diadesmis gallica	0	0	0
Diatoma mesodon	0	0	0
Diatoma moniliformis	0	0	0
Diatoma vulgaris	0	0	0
Diatomella balfouriana	0	0	0
Dimeregramma minor	0.02	0.001992032	0
Diploneis boldtiana	0	0	0.005988024
Diploneis cf. bombus	0.004	0	0.003992016
Diploneis cf. didyma	0	0	0
Diploneis elliptica	0.008	0	0
Diploneis pseudovalis	0	0.007968127	0.005988024
Diploneis smithii	0.012	0	0.005988024
Diploneis sp. 1	0	0	0
Diploneis sp. 2	0	0	0
Diploneis interrupta	0	0	0
Discostella stelligera	0	0	0
Encyonema minutum	0	0	0
Encyonema nicafei	0.018	0.003984064	0.001996008
Encyonema sp. 1	0	0	0
Encyonema sp. 2	0	0	0
Encyonema sp. 3	0	0	0
Encyonema sp. 4	0	0	0
Encyonema triangulum	0	0	0
Encyonopsis microcephala	0	0	0
Epithemia adnata	0	0.001992032	0
Epithemia frickei	0	0	0
Epithemia smithii	0	0	0
Epithemia sorex	0	0	0
Epithemia turgida	0.004	0.003984064	0.005988024
Eunotia richbuttensis	0	0	0
Eunotia sp. 1	0.004	0	0
Eunotia sp. 2	0	0.003984064	0

Percent Abundance	S3-100	S3-110	S3-120
Eunotia sp. 3 (GV)	0	0.003984064	0
Fallacia pygmaea	0.004	0.009960159	0
Fragilaria brevistriata	0	0	0
Fragilaria capucina	0	0	0
Fragilaria cf. microstriata	0	0	0
Fragilaria elliptica	0.012	0.009960159	0.00998004
Fragilaria schulzii	0	0	0
Fragilaria tenera	0	0	0
Fragilaria vaucheriae	0.01	0.015936255	0.00998004
Frickea lewisiana	0	0	0
Frustulia amphipleuroides	0	0	0
Frustulia capitata	0	0	0
Frustulia rhomboides var. viridula	0	0	0
Frustulia sp. 1	0	0	0
Frustulia vulgaris	0	0.007968127	0.003992016
Geissleria cf. kriegeri	0	0	0
Geissleria decussis	0	0	0
Gomphoneis hurculeana	0	0	0
Gomphoneis sp. 1	0	0	0
Gomphoneis sp. 3	0	0	0
Gomphonema acuminatum	0	0	0
Gomphonema innocens	0.01	0.023904382	0.001996008
Gomphonema kobayasii	0	0	0
Gomphonema mammilla	0	0	0
Gomphonema olivaceoides	0	0	0
Gomphonema olivaceum	0	0	0.005988024
Gomphonema sp. 1	0	0	0
Gomphonema sp. 2	0	0	0
Gomphonema sp. 3	0	0	0
Gomphonopsis exiguum	0	0	0
Gomphosphenia lingulatiformis	0	0	0
Grammatophora cf. macilenta	0	0	0
Gyrosigma temperii	0	0	0
Gyrosigma cf. balticum	0.002	0	0.003992016
Gyrosigma sp.1	0	0	0
Gyrosigma spencerii	0	0	0
Hantzschia sp. 1 girdle view	0	0	0
Hantzschia sp. 2 girdle view	0	0	0
Hantzschia sp. 3	0	0	0
Hantzschia sp. 4	0	0	0

Percent Abundance	S3-100	S3-110	S3-120
Hantzschia virgata	0.002	0.001992032	0
Hippodonta costulata	0	0	0
Hippodonta coxiae	0	0.005976096	0.003992016
Hippodonta hungarica	0	0	0.003992016
Hippodonta sp. 1	0	0	0
Hippodonta sp. 2	0	0	0
Karayevia amoena	0	0	0.001996008
Karayevia clevei	0	0	0
Kobayasiella sp. 1	0	0	0
Leptocylindrus cf. danicus	0.002	0.005976096	0.005988024
Luticola sp. 1	0	0	0
Luticola sp. 2	0	0	0
Luticola sp. 3	0	0.009960159	0.003992016
Luticola sp. 4	0.008	0	0.003992016
Luticola sp. 5	0	0	0
Mastogloia smithii	0	0	0
Mastogloia sp. 1	0	0	0
Mastogloia sp. 2	0	0	0
Melosira sp. 1	0	0.001992032	0
Melosira varians	0	0	0
Meridion circulare var. constrictum	0	0	0
Meridion sp. 1	0	0	0
Navicula A	0	0	0
Navicula abunda	0.004	0.003984064	0
Navicula angusta	0	0	0
Navicula antonii	0	0	0
Navicula brachium	0	0	0
Navicula cari	0.01	0.001992032	0.005988024
Navicula cf. capitoradiata	0.004	0	0
Navicula cf. galloae	0	0	0
Navicula cf. heuflerii	0.002	0.003984064	0
Navicula cf. ludloviana (CA)	0	0	0
Navicula cf. oblonga	0	0	0
Navicula cf. patrickii	0	0	0
Navicula cf. reichardtiana	0	0	0.003992016
Navicula cf. reinhardtii	0	0	0
Navicula cf. salinarum	0	0	0
Navicula cf. schweigeri	0	0	0
Navicula cf. subinflata	0.004	0	0
Navicula cf. tripunctata	0.004	0.007968127	0.025948104

Percent Abundance	S3-100	S3-110	S3-120
Navicula cf. zostereti	0.008	0.005976096	0.001996008
Navicula clementis	0	0.005976096	0
Navicula denta	0	0	0
Navicula difficillima	0	0	0
Navicula facilis	0	0	0
Navicula germainii	0	0	0
Navicula glomus	0	0	0
Navicula gregaria	0	0.001992032	0
Navicula halophila	0.002	0	0.001996008
Navicula kotschyi	0	0	0
Navicula lanceolata	0.002	0	0.005988024
Navicula marginulata	0	0	0
Navicula oculiformis	0	0	0
Navicula peregrina	0.008	0.009960159	0.031936128
Navicula perminuta	0	0	0.00998004
Navicula phyllepta	0	0	0
Navicula slesvicensis	0	0	0
Navicula sp. 1	0	0	0.001996008
Navicula sp. 10	0	0	0
Navicula sp. 11	0	0	0
Navicula sp. 12	0	0	0
Navicula sp. 13	0	0	0
Navicula sp. 14	0	0	0
Navicula sp. 2	0	0	0
Navicula sp. 3	0	0	0
Navicula sp. 5	0.002	0	0
Navicula sp. 6	0	0	0
Navicula sp. 7	0	0	0
Navicula sp. 8	0	0	0
Navicula sp. 9	0	0	0
Navicula subinflata	0	0	0
Navicula subminiscula	0	0	0
Navicula trivialis	0	0	0
Navicula vilaplanii	0	0	0
Naviculoid diatom 1	0	0	0
Naviculoid diatom 2	0	0	0
Neidiopsis sp. 1	0	0	0
Neodephaneis pelagica	0	0	0
Nitzschia amphibia	0.004	0.001992032	0.003992016
Nitzschia angustata	0	0	0

Percent Abundance	S3-100	S3-110	S3-120
Nitzschia biacrula	0	0	0
Nitzschia bita	0	0	0
Nitzschia brevissima	0.008	0.019920319	0.027944112
Nitzschia cf. agnita	0.008	0	0
Nitzschia cf. biremis	0	0	0
Nitzschia cf. borealis	0	0.001992032	0
Nitzschia cf. groefii	0	0	0
Nitzschia cf. laevis	0	0	0
Nitzschia cf. macilenta	0	0	0
Nitzschia cf. subacicularis	0	0	0
Nitzschia clausii	0	0	0.001996008
Nitzschia columbiana	0.006	0.001992032	0
Nitzschia communis	0	0	0
Nitzschia commutata	0	0	0
Nitzschia constricta	0	0	0
Nitzschia cylindrus	0	0	0
Nitzschia debilis	0.002	0	0.001996008
Nitzschia desertorum	0	0	0
Nitzschia dissipata	0	0	0.001996008
Nitzschia filiformis	0	0.003984064	0.001996008
Nitzschia fonticola	0	0	0
Nitzschia frustulum	0	0.005976096	0.005988024
Nitzschia gracilis	0	0	0
Nitzschia incognita	0	0	0
Nitzschia inconspicua	0	0.003984064	0
Nitzschia innominata	0	0	0
Nitzschia levidensis	0	0	0
Nitzschia linearis	0	0	0
Nitzschia marginulatus	0	0	0
Nitzschia microcephala	0	0	0
Nitzschia minuta	0	0	0
Nitzschia nana	0	0	0
Nitzschia obtusa	0	0	0
Nitzschia palea	0.006	0.003984064	0
Nitzschia panduriformis	0	0	0
Nitzschia pellucida	0	0	0
Nitzschia perminuta	0	0	0.001996008
Nitzschia proxima	0	0	0.003992016
Nitzschia punctata	0.002	0	0.001996008
Nitzschia pusilla	0	0	0

Percent Abundance	S3-100	S3-110	S3-120
Nitzschia scalaris	0	0	0.003992016
Nitzschia sigma	0.012	0.001992032	0.005988024
Nitzschia sigmaformis	0	0	0
Nitzschia sociabilis	0	0	0
Nitzschia sp. 1	0	0	0
Nitzschia sp. 2	0	0	0
Nitzschia sp. 3	0	0	0
Nitzschia sp. 4	0.008	0	0.001996008
Nitzschia sp. 5	0	0	0
Nitzschia sp. 6	0	0	0
Nitzschia sp. 7	0	0	0
Nitzschia sp. 8	0	0	0
Nitzschia umbonata	0	0	0
Opephora martyi	0.004	0.007968127	0
Opephora olsenii	0	0	0
Opephora sp. A	0	0	0
Orthoseira sp. 1	0	0	0
Paralia sulcata	0.118	0.145418327	0.117764471
Parlibellus cf. plicatus	0	0	0.001996008
Parlibellus sp. 2	0	0	0
Pinnularia biceps	0	0	0
Pinnularia borealis	0	0	0.001996008
Pinnularia divergens	0	0	0.001996008
Pinnularia divergentissima	0.002	0.003984064	0
Pinnularia ignobilis	0	0	0
Pinnularia interrupta	0	0	0
Pinnularia marchica	0	0.001992032	0.015968064
Pinnularia microstauron	0	0.005976096	0
Pinnularia sp. 10	0	0	0
Pinnularia sp. 11	0	0	0
Pinnularia sp. 12	0	0	0
Pinnularia sp. 13	0	0	0
Pinnularia sp. 3	0	0	0
Pinnularia sp. 4	0	0	0
Pinnularia sp. 5	0	0	0
Pinnularia sp. 6	0	0	0
Pinnularia sp. 7	0	0	0
Pinnularia sp. 8	0	0	0
Pinnularia sp. 9	0	0	0.001996008
Pinnularia sp.1	0	0	0

Percent Abundance	S3-100	S3-110	S3-120
Pinnularia sp.2	0	0	0
Pinnularia viridis	0	0.003984064	0.005988024
Placoneis cf. gastrum	0.002	0.003984064	0.003992016
Placoneis elginensis	0	0	0
Placoneis paralegali	0	0	0
Placoneis sp. 1	0	0	0
Placoneis sp. 2	0	0	0
Placoneis sp. 3	0	0	0
Plagiogramma cf. minima	0	0	0
Planothidium abbreviatum	0	0.005976096	0
Planothidium apiculatum	0	0	0
Planothidium biporomum	0	0	0
Planothidium dubium	0	0	0
Planothidium frequentissimum	0.002	0	0
Planothidium lanceolatum	0.002	0	0.003992016
Planothidium minutissimum	0	0	0
Planothidium paragali	0	0	0
Planothidium rostratum	0	0	0
Planothidium sp. 1	0	0	0
Planothidium sp. 2	0	0	0
Planothidium sp. 3	0	0	0
Platessa bahlsii	0	0	0
Platessa cf. hustedtii	0	0	0
Pleurosigma diverse-striatum	0	0	0
Psammothidium? Sp. 1	0	0	0
Pseudostaurosira americana	0.012	0	0.001996008
Pseudostaurosira parasitica	0	0	0
Pseudostaurosira brevistriata	0	0	0
Pseudostaurosiropsis sp. 1	0.018	0.001992032	0.017964072
Pseudostaurosiropsis sp. 1 (GV)	0	0	0
Punctastriata mimetica	0	0	0
Reimeria sinuata	0.004	0.001992032	0.003992016
Rexlowea sp. 1	0	0	0
Rhaphoneis amphiceros	0.058	0.027888446	0.02994012
Rhaphoneis tenuis	0	0.001992032	0.003992016
Rhoicosphenia cf. marina	0	0	0
Rhoicosphenia sp. 1	0	0	0
Rhopalodia acuminatum	0.004	0.003984064	0.011976048
Rhopolodia gibba	0	0	0
Rhopolodia musculus	0	0.009960159	0

Percent Abundance	S3-100	S3-110	S3-120
Sellaphora cf. hohnii	0	0	0.003992016
Sellaphora laevissima	0	0	0
Sellaphora pulchra	0	0	0
Sellaphora pupula	0.002	0	0
Sellaphora rexii	0	0	0
Sellaphora bacillum	0	0	0
Skeletonema sp. 1	0	0	0
Stauroforma exiguaformis	0	0	0
Stauroneis agrestis	0	0	0
Stauroneis CA	0.004	0	0
Stauroneis cf. vandevijveri	0	0	0
Stauroneis circumborealis	0	0	0
Stauroneis conspicua	0	0	0
Stauroneis GV	0	0	0
Stauroneis kriegeri	0.006	0	0
Stauroneis sp. 1	0	0	0
Stauroneis sp. 2	0	0	0
Stauroneis sp. 3	0	0	0
Stauroneis sp. 4	0	0	0
Staurophora cf. soodensis	0	0	0
Staurosira construens	0.004	0	0
Staurosira construens var. binodis	0	0	0
Staurosirella leptosauron var. dubia	0	0	0
Staurosirella sp. 1	0	0	0
Stephanodiscus sp. 1	0	0	0
Surirella angusta	0	0	0
Surirella brebissonii	0.002	0	0.001996008
Surirella cf. iowensis	0	0	0
Surirella ovalis	0	0	0
Surirella peisonis	0	0	0
Surirella sp. 1	0	0	0
Surirella splendida	0	0.005976096	0
Symmetrical biraphid1	0	0	0
Symmetrical biraphid2	0	0	0
Synedra cf. fulgens	0	0	0
Synedra famelica	0	0	0
Synedra ulna var. biceps	0	0	0
Synedra ulna var. ramesi	0	0	0
Tabularia fasciculata	0	0	0
Tabularia ktenoeoides	0	0	0

Percent Abundance	S3-100	S3-110	S3-120
Thalassionema nitzschioides	0.02	0.03187251	0.015968064
Thalassiosira baltica	0	0	0
Thalassiosira cf. lineata	0.006	0	0.005988024
Thalassiosira cf. tenera	0.008	0.003984064	0
Thalassiosira decipiens	0.008	0.017928287	0.025948104
Thalassiosira eccentrica	0.03	0.027888446	0.005988024
Thalassiosira ferelineata	0	0	0
Thalassiosira oestrupii	0	0	0
Thalassiosira proschkinae	0.006	0.003984064	0.001996008
Thalassiosira sp. 10 Cooper	0.002	0.011952191	0.005988024
Thalassiosira sp. 2-1 Cooper	0.006	0.007968127	0.007984032
Trachyneis aspera var. vulgaris	0	0	0
Triceratium sp. 2	0.008	0.001992032	0.001996008
Triceratium sp.1	0	0	0
Tryblionella debilis	0	0.003984064	0.003992016
Tryblionella salinarum	0	0	0
Tryblionella sp. 1	0.004	0.001992032	0
Tryblionella sp. 2	0	0	0.003992016
Ulnaria acus	0	0	0
Ulnaria ulna	0.006	0.007968127	0
Undulate colony??	0	0	0
unknown araphid	0	0	0
Unknown biraphid	0	0	0
Unknown CA	0	0	0
Unknown colony	0	0	0
Unknown GV?	0	0	0

Percent Abundance	S3-130	S3-140	S3-150
Achnanthes coarctaca	0	0	0
Achnanthes denticula	0.001996008	0.002	0
Achnanthes GV	0	0	0
Achnanthes islandica	0.005988024	0.004	0
Achnanthidium exiguum	0	0	0
Achnanthidium gracillimum	0.005988024	0.002	0
Actinocyclus normanii	0.001996008	0.004	0.003921569
Actinocyclus octonarius var. crassus ?	0.001996008	0.02	0.011764706
Actinoptychus senarius	0.017964072	0	0.007843137
Adalfia brockmannii	0	0	0
Adalfia sp. 1	0	0	0
Amphora copulata	0	0	0
Amphora granulata	0	0	0
Amphora ovalis	0	0.004	0.001960784
Amphora sp. 1 (girdle view)	0	0	0
Amphora sp. 2	0	0	0
Anaulus cf. balticus	0	0	0
Aneumastus pseudotusculus	0	0	0
Aneumastus sp. 1	0	0	0
Anomoeoneis sp. 1	0.003992016	0	0
Anorthoneis tenuis	0	0	0
Asterionella formosa	0	0	0
Asterionella sp. 1	0	0	0.005882353
Asymmetrical CA	0	0	0
Aulacoseira ambigua	0.043912176	0.03	0.011764706
Aulacoseira granulata	0	0	0
Aulacoseira granulata var. angustissima	0	0	0
Aulacoseira pusilla	0	0	0
Aulacoseira sp. 1	0	0	0
Aulacoseira sp. 2	0	0	0
Aulacoseira tenella	0	0	0
Bacillaria socialis	0.001996008	0.002	0.001960784
Biremis circumtexta	0	0	0
Biremis? sp. 1	0	0.004	0
Caloneis aemula	0	0	0
Caloneis bacillum	0.013972056	0.014	0.017647059
Caloneis cf. lineatus	0	0	0
Caloneis cf. ventricosa	0	0	0
Caloneis lewisii	0	0.004	0.005882353
Caloneis sp. 1 (girdle view)	0	0	0

Percent Abundance	S3-130	S3-140	S3-150
Caloneis sp. 2	0	0	0
Caloneis sp. 3	0	0	0
Caloneis sp. 4	0	0	0
Campylodiscus sp. 1	0	0	0
Capartogramma crucicula	0	0	0
Cavinula scutelloides	0	0	0
Cavinula sp. 1	0	0	0
Cocconeis cf. peltoides	0	0	0
Cocconeis costata var. costata	0	0	0
Cocconeis diminuta	0	0.004	0
Cocconeis disculoides	0	0	0
Cocconeis elongatum	0	0	0
Cocconeis placentula	0.003992016	0.002	0.007843137
Cocconeis scutellum	0	0	0
Coscinodiscus cf. lineatus	0.003992016	0.002	0.007843137
Coscinodiscus marginatus	0.043912176	0.026	0.025490196
Cosmoneis pusilla	0	0.002	0
Cosmoneis sp. 1	0	0	0
Cosmoneis sp. 2	0	0	0
Craticula cuspidata	0	0	0.003921569
Cyclostephanos sp. 1	0.001996008	0.004	0.007843137
Cyclostephanos sp. 2	0	0	0
Cyclotella atomus?	0.021956088	0.008	0.01372549
Cyclotella caspia	0.031936128	0.008	0
Cyclotella cyclopuncta	0.013972056	0.022	0.021568627
Cyclotella distinguenda	0	0	0
Cyclotella meneghiniana	0.031936128	0.006	0.019607843
Cyclotella rossii	0.017964072	0.02	0.011764706
Cyclotella sp. 2	0.007984032	0	0
Cyclotella striata	0.099800399	0.044	0.023529412
Cyclotella stylorum	0	0	0
Cymatopleura solea	0	0	0
Cymatosira belgica	0.003992016	0.03	0.021568627
Cymbella affinis	0.015968064	0	0
Cymbella cf. excisiformis	0	0	0
Cymbella janischii	0	0	0.001960784
Cymbella mexicana	0	0	0.003921569
Cymbella minuta	0	0	0
Cymbella sp. 2	0	0	0
Cymbella turgidula	0	0	0

Percent Abundance	S3-130	S3-140	S3-150
Cymbopleura A	0	0	0
Cymbopleura cuspidata	0	0	0
Cymbopleura sp. 1	0	0	0.003921569
Decussata placenta	0	0	0
Delphineis minutissima	0.005988024	0	0.003921569
Delphineis surirella	0	0.006	0.009803922
Denticula kuetzengii	0.001996008	0.002	0
Diadesmis cf. contenta	0.01996008	0.014	0.015686275
Diadesmis gallica	0	0	0
Diatoma mesodon	0	0	0
Diatoma moniliformis	0	0	0
Diatoma vulgaris	0	0	0
Diatomella balfouriana	0	0	0
Dimeregramma minor	0	0	0
Diploneis boldtiana	0.001996008	0.012	0.001960784
Diploneis cf. bombus	0	0	0
Diploneis cf. didyma	0	0	0
Diploneis elliptica	0	0.006	0.01372549
Diploneis pseudovalis	0.003992016	0	0
Diploneis smithii	0.001996008	0	0
Diploneis sp. 1	0	0	0
Diploneis sp. 2	0	0	0
Diploneis interrupta	0	0	0
Discostella stelligera	0	0	0
Encyonema minutum	0	0	0
Encyonema nicafei	0.00998004	0.014	0.001960784
Encyonema sp. 1	0	0	0
Encyonema sp. 2	0	0	0
Encyonema sp. 3	0	0	0
Encyonema sp. 4	0	0	0
Encyonema triangulum	0	0	0
Encyonopsis microcephala	0	0	0
Epithemia adnata	0.001996008	0	0.007843137
Epithemia frickei	0	0	0
Epithemia smithii	0	0	0
Epithemia sorex	0	0	0
Epithemia turgida	0.005988024	0.002	0.001960784
Eunotia richbuttensis	0	0	0
Eunotia sp. 1	0.003992016	0	0.001960784
Eunotia sp. 2	0	0	0.005882353

Percent Abundance	S3-130	S3-140	S3-150
Eunotia sp. 3 (GV)	0	0	0
Fallacia pygmaea	0.001996008	0	0.007843137
Fragilaria brevistriata	0	0	0
Fragilaria capucina	0	0	0
Fragilaria cf. microstriata	0	0	0
Fragilaria elliptica	0.00998004	0.014	0.023529412
Fragilaria schulzii	0	0	0
Fragilaria tenera	0	0	0
Fragilaria vaucheriae	0.003992016	0.006	0
Frickea lewisiana	0.005988024	0.002	0.005882353
Frustulia amphipleuroides	0	0	0
Frustulia capitata	0	0	0
Frustulia rhomboides var. viridula	0	0	0
Frustulia sp. 1	0	0	0
Frustulia vulgaris	0.003992016	0.002	0
Geissleria cf. kriegeri	0	0	0
Geissleria decussis	0	0	0
Gomphoneis hurculeana	0	0	0
Gomphoneis sp. 1	0	0	0.005882353
Gomphoneis sp. 3	0	0	0
Gomphonema acuminatum	0	0	0
Gomphonema innocens	0.003992016	0.008	0.01372549
Gomphonema kobayasii	0	0	0
Gomphonema mammilla	0	0	0
Gomphonema olivaceoides	0	0	0
Gomphonema olivaceum	0	0	0
Gomphonema sp. 1	0	0	0
Gomphonema sp. 2	0	0	0
Gomphonema sp. 3	0	0	0
Gomphonopsis exiguum	0	0	0
Gomphosphenia lingulatiformis	0	0	0
Grammatophora cf. macilenta	0	0	0
Gyrosigma temperii	0	0	0
Gyrosigma cf. balticum	0	0	0
Gyrosigma sp.1	0	0	0
Gyrosigma spencerii	0.015968064	0.004	0
Hantzschia sp. 1 girdle view	0	0	0
Hantzschia sp. 2 girdle view	0	0	0
Hantzschia sp. 3	0	0	0
Hantzschia sp. 4	0	0	0

Percent Abundance	S3-130	S3-140	S3-150
Hantzschia virgata	0.003992016	0.002	0
Hippodonta costulata	0.003992016	0	0
Hippodonta coxiae	0.00998004	0.006	0
Hippodonta hungarica	0	0	0
Hippodonta sp. 1	0	0	0
Hippodonta sp. 2	0	0	0
Karayevia amoena	0	0.002	0
Karayevia clevei	0	0	0
Kobayasiella sp. 1	0	0	0
Leptocylindrus cf. danicus	0.005988024	0	0
Luticola sp. 1	0.001996008	0.002	0.005882353
Luticola sp. 2	0	0	0.029411765
Luticola sp. 3	0	0.01	0
Luticola sp. 4	0.015968064	0	0
Luticola sp. 5	0	0	0
Mastogloia smithii	0	0	0
Mastogloia sp. 1	0	0	0
Mastogloia sp. 2	0	0	0
Melosira sp. 1	0	0	0
Melosira varians	0	0	0
Meridion circulare var. constrictum	0	0	0
Meridion sp. 1	0	0	0
Navicula A	0	0	0
Navicula abunda	0	0	0.003921569
Navicula angusta	0	0	0
Navicula antonii	0	0.002	0.001960784
Navicula brachium	0	0	0
Navicula cari	0.017964072	0	0.007843137
Navicula cf. capitoradiata	0	0	0
Navicula cf. galloae	0	0	0
Navicula cf. heuflerii	0.001996008	0.002	0
Navicula cf. ludloviana (CA)	0	0	0
Navicula cf. oblonga	0	0	0
Navicula cf. patrickii	0.001996008	0	0
Navicula cf. reichardtiana	0	0	0
Navicula cf. reinhardtii	0	0	0
Navicula cf. salinarum	0	0	0.001960784
Navicula cf. schweigeri	0	0	0
Navicula cf. subinflata	0.001996008	0	0
Navicula cf. tripunctata	0.017964072	0	0.003921569

Percent Abundance	S3-130	S3-140	S3-150
Navicula cf. zostereti	0.007984032	0.014	0.003921569
Navicula clementis	0	0	0
Navicula denta	0	0	0.003921569
Navicula difficillima	0	0	0
Navicula facilis	0	0	0
Navicula germainii	0	0	0
Navicula glomus	0	0	0
Navicula gregaria	0	0	0
Navicula halophila	0.005988024	0	0
Navicula kotschyi	0	0	0
Navicula lanceolata	0	0	0
Navicula marginulata	0	0.004	0
Navicula oculiformis	0	0	0
Navicula peregrina	0.031936128	0.004	0.007843137
Navicula perminuta	0	0.004	0
Navicula phyllepta	0	0	0.003921569
Navicula slesvicensis	0	0	0
Navicula sp. 1	0	0	0
Navicula sp. 10	0	0	0
Navicula sp. 11	0	0	0
Navicula sp. 12	0	0	0
Navicula sp. 13	0	0	0
Navicula sp. 14	0	0	0
Navicula sp. 2	0	0	0
Navicula sp. 3	0	0	0
Navicula sp. 5	0	0	0
Navicula sp. 6	0	0	0
Navicula sp. 7	0	0	0
Navicula sp. 8	0	0	0
Navicula sp. 9	0	0	0
Navicula subinflata	0	0	0
Navicula subminiscula	0	0	0
Navicula trivialis	0	0	0
Navicula vilaplanii	0	0	0
Naviculoid diatom 1	0	0.002	0
Naviculoid diatom 2	0	0	0
Neidiopsis sp. 1	0	0	0
Neodephaneis pelagica	0	0	0
Nitzschia amphibia	0.003992016	0.014	0
Nitzschia angustata	0	0	0

Percent Abundance	S3-130	S3-140	S3-150
Nitzschia biacrula	0	0	0
Nitzschia bita	0	0.002	0
Nitzschia brevissima	0.021956088	0.06	0.029411765
Nitzschia cf. agnita	0.003992016	0.008	0.005882353
Nitzschia cf. biremis	0	0	0
Nitzschia cf. borealis	0	0.002	0
Nitzschia cf. groefii	0	0	0
Nitzschia cf. laevis	0	0	0
Nitzschia cf. macilenta	0	0.002	0
Nitzschia cf. subacicularis	0	0	0
Nitzschia clausii	0	0	0
Nitzschia columbiana	0	0	0
Nitzschia communis	0	0	0
Nitzschia commutata	0	0	0
Nitzschia constricta	0	0	0
Nitzschia cylindrus	0	0	0
Nitzschia debilis	0	0.002	0
Nitzschia desertorum	0	0	0
Nitzschia dissipata	0.001996008	0	0
Nitzschia filiformis	0.001996008	0	0
Nitzschia fonticola	0	0	0
Nitzschia frustulum	0.005988024	0	0
Nitzschia gracilis	0	0	0
Nitzschia incognita	0	0	0
Nitzschia inconspicua	0	0	0
Nitzschia innominata	0	0	0
Nitzschia levidensis	0	0	0
Nitzschia linearis	0.003992016	0.004	0
Nitzschia marginulatus	0	0	0
Nitzschia microcephala	0	0	0
Nitzschia minuta	0	0	0
Nitzschia nana	0	0	0
Nitzschia obtusa	0	0	0
Nitzschia palea	0	0	0
Nitzschia panduriformis	0.003992016	0	0.001960784
Nitzschia pellucida	0	0	0
Nitzschia perminuta	0	0	0
Nitzschia proxima	0	0	0.003921569
Nitzschia punctata	0	0.012	0.003921569
Nitzschia pusilla	0	0	0

Percent Abundance	S3-130	S3-140	S3-150
Nitzschia scalaris	0	0.008	0
Nitzschia sigma	0.005988024	0.002	0.001960784
Nitzschia sigmaformis	0	0	0
Nitzschia sociabilis	0	0	0
Nitzschia sp. 1	0	0.002	0.001960784
Nitzschia sp. 2	0	0	0
Nitzschia sp. 3	0	0	0
Nitzschia sp. 4	0.003992016	0	0
Nitzschia sp. 5	0	0	0
Nitzschia sp. 6	0	0	0
Nitzschia sp. 7	0	0	0
Nitzschia sp. 8	0	0	0
Nitzschia umbonata	0	0	0
Opephora martyi	0.007984032	0.004	0
Opephora olsenii	0	0	0
Opephora sp. A	0	0	0
Orthoseira sp. 1	0	0	0
Paralia sulcata	0.107784431	0.174	0.139215686
Parlibellus cf. plicatus	0.003992016	0	0
Parlibellus sp. 2	0	0	0
Pinnularia biceps	0	0	0
Pinnularia borealis	0	0	0.001960784
Pinnularia divergens	0	0.018	0.01372549
Pinnularia divergentissima	0	0	0.003921569
Pinnularia ignobilis	0	0	0
Pinnularia interrupta	0	0	0.001960784
Pinnularia marchica	0.007984032	0.012	0.017647059
Pinnularia microstauron	0	0.016	0.007843137
Pinnularia sp. 10	0	0	0.001960784
Pinnularia sp. 11	0	0	0
Pinnularia sp. 12	0	0	0
Pinnularia sp. 13	0	0	0
Pinnularia sp. 3	0	0	0
Pinnularia sp. 4	0	0	0
Pinnularia sp. 5	0	0	0
Pinnularia sp. 6	0	0	0
Pinnularia sp. 7	0	0	0
Pinnularia sp. 8	0	0	0
Pinnularia sp. 9	0	0.002	0.007843137
Pinnularia sp.1	0	0	0

Percent Abundance	S3-130	S3-140	S3-150
Pinnularia sp.2	0	0	0
Pinnularia viridis	0.005988024	0.016	0.037254902
Placoneis cf. gastrum	0	0.012	0.039215686
Placoneis elginensis	0	0	0
Placoneis paralegali	0.003992016	0	0
Placoneis sp. 1	0	0	0
Placoneis sp. 2	0	0	0
Placoneis sp. 3	0	0	0
Plagiogramma cf. minima	0	0	0
Planothidium abbreviatum	0	0	0
Planothidium apiculatum	0	0	0
Planothidium biporomum	0	0	0
Planothidium dubium	0	0	0
Planothidium frequentissimum	0	0.004	0
Planothidium lanceolatum	0.003992016	0.01	0.009803922
Planothidium minutissimum	0	0	0
Planothidium paragali	0.007984032	0	0
Planothidium rostratum	0	0	0
Planothidium sp. 1	0	0	0
Planothidium sp. 2	0	0	0
Planothidium sp. 3	0	0	0
Platessa bahlsii	0	0	0
Platessa cf. hustedtii	0	0	0
Pleurosigma diverse-striatum	0	0	0
Psammothidium? Sp. 1	0	0	0
Pseudostaurosira americana	0	0.002	0
Pseudostaurosira parasitica	0	0.002	0.007843137
Pseudostaurosira brevistriata	0	0	0
Pseudostaurosiropsis sp. 1	0.00998004	0.008	0.023529412
Pseudostaurosiropsis sp. 1 (GV)	0	0	0
Punctastriata mimetica	0	0	0
Reimeria sinuata	0	0	0
Rexlowea sp. 1	0	0	0
Rhaphoneis amphiceros	0.02994012	0.042	0.02745098
Rhaphoneis tenuis	0.001996008	0.008	0.003921569
Rhoicosphenia cf. marina	0	0.004	0
Rhoicosphenia sp. 1	0	0	0
Rhopalodia acuminatum	0.001996008	0.012	0.025490196
Rhopolodia gibba	0	0	0
Rhopolodia musculus	0.003992016	0.02	0.01372549

Percent Abundance	S3-130	S3-140	S3-150
Sellaphora cf. hohnii	0	0	0
Sellaphora laevissima	0	0	0
Sellaphora pulchra	0	0	0
Sellaphora pupula	0.003992016	0.012	0.025490196
Sellaphora rexii	0	0	0
Sellaphora bacillum	0	0.014	0.043137255
Skeletonema sp. 1	0	0	0
Stauroforma exiguaformis	0	0.002	0
Stauroneis agrestis	0	0	0
Stauroneis CA	0.003992016	0	0
Stauroneis cf. vandevijveri	0	0	0
Stauroneis circumborealis	0	0	0
Stauroneis conspicua	0	0.002	0.003921569
Stauroneis GV	0	0	0
Stauroneis kriegeri	0	0.006	0
Stauroneis sp. 1	0	0	0
Stauroneis sp. 2	0	0	0
Stauroneis sp. 3	0	0	0
Stauroneis sp. 4	0	0	0
Staurophora cf. soodensis	0	0	0
Staurosira construens	0	0	0
Staurosira construens var. binodis	0	0	0
Staurosirella leptosauron var. dubia	0.007984032	0.01	0
Staurosirella sp. 1	0	0	0
Stephanodiscus sp. 1	0	0	0
Surirella angusta	0	0	0
Surirella brebissonii	0.001996008	0.002	0
Surirella cf. iowensis	0	0	0
Surirella ovalis	0	0	0
Surirella peisonis	0	0	0
Surirella sp. 1	0	0	0
Surirella splendida	0.003992016	0.002	0.005882353
Symmetrical biraphid1	0.003992016	0	0
Symmetrical biraphid2	0	0	0.003921569
Synedra cf. fulgens	0	0	0
Synedra famelica	0	0	0
Synedra ulna var. biceps	0	0	0
Synedra ulna var. ramesi	0	0	0
Tabularia fasciculata	0	0	0
Tabularia ktenoeoides	0	0	0

Percent Abundance	S3-130	S3-140	S3-150
Thalassionema nitzschioides	0.017964072	0.014	0.01372549
Thalassiosira baltica	0	0	0
Thalassiosira cf. lineata	0.007984032	0.002	0.003921569
Thalassiosira cf. tenera	0	0.01	0.003921569
Thalassiosira decipiens	0.01996008	0.006	0.011764706
Thalassiosira eccentrica	0.007984032	0	0.003921569
Thalassiosira ferelineata	0	0	0
Thalassiosira oestrupii	0	0.002	0
Thalassiosira proschkinae	0	0.006	0
Thalassiosira sp. 10 Cooper	0.005988024	0.004	0.001960784
Thalassiosira sp. 2-1 Cooper	0.005988024	0.004	0.003921569
Trachyneis aspera var. vulgaris	0	0	0
Triceratium sp. 2	0.001996008	0	0.001960784
Triceratium sp.1	0	0	0
Tryblionella debilis	0.013972056	0.004	0
Tryblionella salinarum	0	0	0
Tryblionella sp. 1	0	0	0
Tryblionella sp. 2	0	0	0
Ulnaria acus	0	0	0
Ulnaria ulna	0.003992016	0	0
Undulate colony??	0	0	0
unknown araphid	0	0	0
Unknown biraphid	0	0	0
Unknown CA	0	0	0
Unknown colony	0	0	0
Unknown GV?	0	0	0

Percent Abundance	S3-160	S3-170	S3-180
Achnanthes coarctaca	0	0	0
Achnanthes denticula	0	0	0.001988072
Achnanthes GV	0	0	0
Achnanthes islandica	0	0	0
Achnanthidium exiguum	0	0	0
Achnanthidium gracillimum	0	0	0
Actinocyclus normanii	0.003952569	0	0.001988072
Actinocyclus octonarius var. crassus ?	0.019762846	0.019723866	0.007952286
Actinoptychus senarius	0.009881423	0.00591716	0.007952286
Adalfia brockmannii	0	0	0
Adalfia sp. 1	0	0	0
Amphora copulata	0	0	0
Amphora granulata	0	0	0
Amphora ovalis	0	0	0
Amphora sp. 1 (girdle view)	0	0	0
Amphora sp. 2	0	0	0
Anaulus cf. balticus	0.007905138	0.003944773	0
Aneumastus pseudotusculus	0	0	0
Aneumastus sp. 1	0	0	0
Anomoeoneis sp. 1	0	0	0
Anorthoneis tenuis	0	0	0
Asterionella formosa	0	0	0
Asterionella sp. 1	0	0	0
Asymmetrical CA	0	0	0
Aulacoseira ambigua	0.037549407	0.027613412	0.035785288
Aulacoseira granulata	0	0	0
Aulacoseira granulata var. angustissima	0	0	0
Aulacoseira pusilla	0	0	0
Aulacoseira sp. 1	0	0	0
Aulacoseira sp. 2	0	0	0
Aulacoseira tenella	0.023715415	0.023668639	0.027833002
Bacillaria socialis	0.009881423	0.001972387	0.005964215
Biremis circumtexta	0	0.001972387	0
Biremis? sp. 1	0	0	0
Caloneis aemula	0.003952569	0.00591716	0.003976143
Caloneis bacillum	0.013833992	0.001972387	0.007952286
Caloneis cf. lineatus	0	0	0
Caloneis cf. ventricosa	0	0	0
Caloneis lewisii	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0

Percent Abundance	S3-160	S3-170	S3-180
Caloneis sp. 2	0	0	0
Caloneis sp. 3	0	0	0
Caloneis sp. 4	0	0	0
Campylodiscus sp. 1	0	0	0
Capartogramma crucicula	0.007905138	0	0
Cavinula scutelloides	0	0	0
Cavinula sp. 1	0	0	0
Cocconeis cf. peltoides	0	0	0
Cocconeis costata var. costata	0	0	0
Cocconeis diminuta	0	0	0
Cocconeis disculoides	0	0	0
Cocconeis elongatum	0	0	0
Cocconeis placentula	0	0.00591716	0.001988072
Cocconeis scutellum	0	0	0
Coscinodiscus cf. lineatus	0.003952569	0.013806706	0.013916501
Coscinodiscus marginatus	0.033596838	0.027613412	0.027833002
Cosmoneis pusilla	0	0	0
Cosmoneis sp. 1	0	0	0
Cosmoneis sp. 2	0	0	0
Craticula cuspidata	0	0	0
Cyclostephanos sp. 1	0.007905138	0.01183432	0.003976143
Cyclostephanos sp. 2	0	0	0
Cyclotella atomus?	0.005928854	0.021696252	0.041749503
Cyclotella caspia	0.017786561	0.023668639	0.009940358
Cyclotella cyclopuncta	0.011857708	0.003944773	0.009940358
Cyclotella distinguenda	0	0	0
Cyclotella meneghiniana	0.007905138	0.007889546	0.009940358
Cyclotella rossii	0.023715415	0.013806706	0.001988072
Cyclotella sp. 2	0	0	0
Cyclotella striata	0.079051383	0.08086785	0.065606362
Cyclotella stylorum	0.003952569	0	0.001988072
Cymatopleura solea	0	0	0
Cymatosira belgica	0.023715415	0.023668639	0.021868787
Cymbella affinis	0	0	0
Cymbella cf. excisiformis	0	0	0
Cymbella janischii	0	0	0
Cymbella mexicana	0	0.001972387	0
Cymbella minuta	0	0	0
Cymbella sp. 2	0	0	0
Cymbella turgidula	0	0	0

Percent Abundance	S3-160	S3-170	S3-180
Cymbopleura A	0	0	0
Cymbopleura cuspidata	0	0	0
Cymbopleura sp. 1	0	0	0
Decussata placenta	0	0	0
Delphineis minutissima	0.003952569	0.025641026	0.02584493
Delphineis surirella	0.011857708	0.009861933	0.005964215
Denticula kuetzengii	0.003952569	0	0.027833002
Diadesmis cf. contenta	0	0.019723866	0.039761431
Diadesmis gallica	0	0	0
Diatoma mesodon	0	0	0
Diatoma moniliformis	0	0	0
Diatoma vulgaris	0	0	0
Diatomella balfouriana	0	0	0
Dimeregramma minor	0	0	0
Diploneis boldtiana	0	0	0
Diploneis cf. bombus	0	0.001972387	0.001988072
Diploneis cf. didyma	0	0	0
Diploneis elliptica	0.007905138	0.003944773	0.001988072
Diploneis pseudovalis	0	0.001972387	0
Diploneis smithii	0.003952569	0	0
Diploneis sp. 1	0	0	0
Diploneis sp. 2	0	0	0
Diploneis interrupta	0	0	0
Discostella stelligera	0	0	0
Encyonema minutum	0	0	0
Encyonema nicafei	0.001976285	0	0.001988072
Encyonema sp. 1	0.001976285	0	0
Encyonema sp. 2	0	0	0
Encyonema sp. 3	0	0	0
Encyonema sp. 4	0	0	0
Encyonema triangulum	0	0	0
Encyonopsis microcephala	0	0	0
Epithemia adnata	0.011857708	0.003944773	0.003976143
Epithemia frickei	0	0	0
Epithemia smithii	0	0	0
Epithemia sorex	0	0	0
Epithemia turgida	0.005928854	0.001972387	0.003976143
Eunotia richbuttensis	0	0	0
Eunotia sp. 1	0	0	0
Eunotia sp. 2	0	0	0

Percent Abundance	S3-160	S3-170	S3-180
Eunotia sp. 3 (GV)	0	0.003944773	0
Fallacia pygmaea	0	0.003944773	0.003976143
Fragilaria brevistriata	0	0.007889546	0
Fragilaria capucina	0	0	0
Fragilaria cf. microstriata	0	0	0
Fragilaria elliptica	0.007905138	0	0
Fragilaria schulzii	0	0	0
Fragilaria tenera	0	0	0
Fragilaria vaucheriae	0	0	0.003976143
Frickea lewisiana	0	0	0
Frustulia amphipleuroides	0	0	0
Frustulia capitata	0	0	0
Frustulia rhomboides var. viridula	0	0	0
Frustulia sp. 1	0	0	0
Frustulia vulgaris	0.001976285	0.003944773	0.005964215
Geissleria cf. kriegeri	0.001976285	0.003944773	0.005964215
Geissleria decussis	0	0	0
Gomphoneis hurculeana	0	0	0
Gomphoneis sp. 1	0	0.001972387	0
Gomphoneis sp. 3	0	0	0
Gomphonema acuminatum	0	0	0
Gomphonema innocens	0.001976285	0	0.003976143
Gomphonema kobayasii	0	0	0
Gomphonema mammilla	0	0	0
Gomphonema olivaceoides	0	0	0
Gomphonema olivaceum	0	0	0
Gomphonema sp. 1	0	0	0
Gomphonema sp. 2	0	0	0
Gomphonema sp. 3	0	0	0
Gomphonopsis exiguum	0	0	0
Gomphosphenia lingulatiformis	0	0	0
Grammatophora cf. macilenta	0	0	0.001988072
Gyrosigma temperii	0	0	0
Gyrosigma cf. balticum	0	0	0
Gyrosigma sp.1	0	0	0
Gyrosigma spencerii	0	0.007889546	0.003976143
Hantzschia sp. 1 girdle view	0	0	0
Hantzschia sp. 2 girdle view	0	0	0
Hantzschia sp. 3	0	0	0
Hantzschia sp. 4	0	0	0

Percent Abundance	S3-160	S3-170	S3-180
Hantzschia virgata	0.001976285	0	0
Hippodonta costulata	0	0	0.001988072
Hippodonta coxiae	0.001976285	0.009861933	0.021868787
Hippodonta hungarica	0	0	0
Hippodonta sp. 1	0	0	0
Hippodonta sp. 2	0	0	0
Karayevia amoena	0	0	0.005964215
Karayevia clevei	0	0	0
Kobayasiella sp. 1	0	0	0
Leptocylindrus cf. danicus	0	0	0
Luticola sp. 1	0	0	0
Luticola sp. 2	0.015810277	0.007889546	0.007952286
Luticola sp. 3	0	0	0
Luticola sp. 4	0	0	0
Luticola sp. 5	0	0	0
Mastogloia smithii	0	0	0
Mastogloia sp. 1	0	0	0
Mastogloia sp. 2	0	0	0
Melosira sp. 1	0	0.001972387	0
Melosira varians	0	0	0
Meridion circulare var. constrictum	0.001976285	0	0
Meridion sp. 1	0	0	0
Navicula A	0	0	0
Navicula abunda	0	0	0.003976143
Navicula angusta	0	0	0
Navicula antonii	0	0	0.011928429
Navicula brachium	0	0	0
Navicula cari	0.005928854	0.00591716	0.003976143
Navicula cf. capitoradiata	0	0	0.007952286
Navicula cf. galloae	0	0	0
Navicula cf. heuflerii	0	0.00591716	0
Navicula cf. ludloviana (CA)	0	0	0
Navicula cf. oblonga	0	0	0
Navicula cf. patrickii	0.005928854	0.007889546	0
Navicula cf. reichardtiana	0	0	0
Navicula cf. reinhardtii	0	0	0
Navicula cf. salinarum	0	0	0
Navicula cf. schweigeri	0.001976285	0	0
Navicula cf. subinflata	0	0.003944773	0.015904573
Navicula cf. tripunctata	0.003952569	0.019723866	0.011928429

Percent Abundance	S3-160	S3-170	S3-180
Navicula cf. zostereti	0.015810277	0.013806706	0.011928429
Navicula clementis	0.001976285	0	0.003976143
Navicula denta	0	0	0.005964215
Navicula difficillima	0	0	0
Navicula facilis	0	0.003944773	0.003976143
Navicula germainii	0	0	0
Navicula glomus	0	0	0
Navicula gregaria	0	0	0.003976143
Navicula halophila	0	0	0
Navicula kotschyi	0	0	0
Navicula lanceolata	0.011857708	0.003944773	0.005964215
Navicula marginulata	0	0	0
Navicula oculiformis	0	0.003944773	0
Navicula peregrina	0.017786561	0.01183432	0.001988072
Navicula perminuta	0.005928854	0.007889546	0.001988072
Navicula phyllepta	0	0	0
Navicula slesvicensis	0	0	0
Navicula sp. 1	0	0	0
Navicula sp. 10	0	0	0
Navicula sp. 11	0	0	0
Navicula sp. 12	0	0	0
Navicula sp. 13	0	0	0
Navicula sp. 14	0.003952569	0.001972387	0
Navicula sp. 2	0	0	0
Navicula sp. 3	0	0	0
Navicula sp. 5	0	0	0
Navicula sp. 6	0	0	0
Navicula sp. 7	0	0	0
Navicula sp. 8	0	0	0.009940358
Navicula sp. 9	0	0	0
Navicula subinflata	0	0	0
Navicula subminiscula	0	0	0
Navicula trivialis	0	0	0
Navicula vilaplanii	0	0	0
Naviculoid diatom 1	0	0	0
Naviculoid diatom 2	0	0	0
Neidiopsis sp. 1	0	0	0
Neodephaneis pelagica	0	0	0
Nitzschia amphibia	0	0.007889546	0.003976143
Nitzschia angustata	0	0	0

Percent Abundance	S3-160	S3-170	S3-180
Nitzschia biacrula	0	0.007889546	0.001988072
Nitzschia bita	0	0.003944773	0.003976143
Nitzschia brevissima	0.029644269	0.065088757	0.06361829
Nitzschia cf. agnita	0.003952569	0.007889546	0.003976143
Nitzschia cf. biremis	0	0	0
Nitzschia cf. borealis	0	0	0
Nitzschia cf. groefii	0	0	0
Nitzschia cf. laevis	0	0	0
Nitzschia cf. macilenta	0	0	0
Nitzschia cf. subacicularis	0	0	0
Nitzschia clausii	0	0	0.001988072
Nitzschia columbiana	0.001976285	0	0
Nitzschia communis	0	0	0
Nitzschia commutata	0	0	0
Nitzschia constricta	0	0	0
Nitzschia cylindrus	0	0	0
Nitzschia debilis	0	0	0
Nitzschia desertorum	0	0	0
Nitzschia dissipata	0.003952569	0.003944773	0.023856859
Nitzschia filiformis	0	0	0
Nitzschia fonticola	0	0	0
Nitzschia frustulum	0.001976285	0	0.001988072
Nitzschia gracilis	0	0	0
Nitzschia incognita	0	0	0
Nitzschia inconspicua	0	0	0
Nitzschia innominata	0	0	0
Nitzschia levidensis	0	0.00591716	0
Nitzschia linearis	0	0.001972387	0
Nitzschia marginulatus	0.001976285	0	0
Nitzschia microcephala	0	0	0
Nitzschia minuta	0	0	0
Nitzschia nana	0	0	0
Nitzschia obtusa	0	0	0
Nitzschia palea	0	0	0
Nitzschia panduriformis	0.005928854	0.00591716	0
Nitzschia pellucida	0	0	0
Nitzschia perminuta	0	0	0.003976143
Nitzschia proxima	0.007905138	0.013806706	0.003976143
Nitzschia punctata	0.005928854	0.00591716	0.005964215
Nitzschia pusilla	0	0.003944773	0

Percent Abundance	S3-160	S3-170	S3-180
Nitzschia scalaris	0	0	0
Nitzschia sigma	0	0.003944773	0.001988072
Nitzschia sigmaformis	0	0.00591716	0.007952286
Nitzschia sociabilis	0	0	0
Nitzschia sp. 1	0.003952569	0	0
Nitzschia sp. 2	0	0	0
Nitzschia sp. 3	0	0	0
Nitzschia sp. 4	0.003952569	0	0
Nitzschia sp. 5	0	0	0
Nitzschia sp. 6	0	0	0
Nitzschia sp. 7	0	0.003944773	0
Nitzschia sp. 8	0	0	0
Nitzschia umbonata	0	0	0
Opephora martyi	0.005928854	0.00591716	0.001988072
Opephora olsenii	0.003952569	0	0
Opephora sp. A	0	0	0
Orthoseira sp. 1	0	0	0
Paralia sulcata	0.14229249	0.110453649	0.10139165
Parlibellus cf. plicatus	0	0.001972387	0
Parlibellus sp. 2	0	0	0
Pinnularia biceps	0	0	0
Pinnularia borealis	0	0	0
Pinnularia divergens	0	0.001972387	0
Pinnularia divergentissima	0	0	0
Pinnularia ignobilis	0	0	0
Pinnularia interrupta	0	0	0
Pinnularia marchica	0.005928854	0.007889546	0.003976143
Pinnularia microstauron	0.001976285	0	0
Pinnularia sp. 10	0	0	0
Pinnularia sp. 11	0	0	0
Pinnularia sp. 12	0	0	0
Pinnularia sp. 13	0	0	0
Pinnularia sp. 3	0	0	0
Pinnularia sp. 4	0	0	0
Pinnularia sp. 5	0	0	0
Pinnularia sp. 6	0	0	0
Pinnularia sp. 7	0	0	0
Pinnularia sp. 8	0	0	0
Pinnularia sp. 9	0	0	0
Pinnularia sp.1	0	0	0

Percent Abundance	S3-160	S3-170	S3-180
Pinnularia sp.2	0	0	0
Pinnularia viridis	0.001976285	0.001972387	0
Placoneis cf. gastrum	0.013833992	0.003944773	0
Placoneis elginensis	0	0	0
Placoneis paralegali	0.001976285	0	0
Placoneis sp. 1	0	0	0
Placoneis sp. 2	0	0	0
Placoneis sp. 3	0	0	0
Plagiogramma cf. minima	0	0	0
Planothidium abbreviatum	0	0	0
Planothidium apiculatum	0	0	0
Planothidium biporomum	0	0.007889546	0
Planothidium dubium	0	0	0
Planothidium frequentissimum	0	0.003944773	0.005964215
Planothidium lanceolatum	0.007905138	0	0
Planothidium minutissimum	0	0	0
Planothidium paragali	0	0	0
Planothidium rostratum	0	0	0
Planothidium sp. 1	0	0	0
Planothidium sp. 2	0	0	0
Planothidium sp. 3	0	0	0
Platessa bahlsii	0	0	0
Platessa cf. hustedtii	0	0	0
Pleurosigma diverse-striatum	0	0	0
Psammothidium? Sp. 1	0	0	0
Pseudostaurosira americana	0	0	0
Pseudostaurosira parasitica	0	0	0
Pseudostaurosira brevistriata	0	0	0
Pseudostaurosiropsis sp. 1	0.017786561	0.01183432	0.017892644
Pseudostaurosiropsis sp. 1 (GV)	0	0	0
Punctastriata mimetica	0	0	0
Reimeria sinuata	0	0	0.005964215
Rexlowea sp. 1	0	0	0
Rhaphoneis amphiceros	0.033596838	0.041420118	0.021868787
Rhaphoneis tenuis	0.009881423	0.001972387	0.003976143
Rhoicosphenia cf. marina	0	0.003944773	0
Rhoicosphenia sp. 1	0	0	0
Rhopalodia acuminatum	0.019762846	0.007889546	0.003976143
Rhopolodia gibba	0	0	0
Rhopolodia musculus	0.043478261	0.009861933	0.013916501

Percent Abundance	S3-160	S3-170	S3-180
Sellaphora cf. hohnii	0	0	0
Sellaphora laevissima	0	0	0
Sellaphora pulchra	0	0	0
Sellaphora pupula	0.003952569	0	0.001988072
Sellaphora rexii	0	0	0
Sellaphora bacillum	0.009881423	0.00591716	0.001988072
Skeletonema sp. 1	0	0	0
Stauroforma exiguaformis	0.015810277	0	0
Stauroneis agrestis	0	0	0
Stauroneis CA	0	0	0
Stauroneis cf. vandevijveri	0	0	0
Stauroneis circumborealis	0	0	0
Stauroneis conspicua	0	0.001972387	0
Stauroneis GV	0	0	0
Stauroneis kriegeri	0.003952569	0	0
Stauroneis sp. 1	0	0	0
Stauroneis sp. 2	0	0	0
Stauroneis sp. 3	0	0	0
Stauroneis sp. 4	0	0	0
Staurophora cf. soodensis	0	0	0
Staurosira construens	0	0	0
Staurosira construens var. binodis	0	0	0
Staurosirella leptosauron var. dubia	0.009881423	0.001972387	0
Staurosirella sp. 1	0	0	0
Stephanodiscus sp. 1	0	0	0
Surirella angusta	0	0	0
Surirella brebissonii	0.003952569	0	0
Surirella cf. iowensis	0	0	0
Surirella ovalis	0	0	0
Surirella peisonis	0	0	0
Surirella sp. 1	0	0	0
Surirella splendida	0	0.001972387	0.001988072
Symmetrical biraphid1	0	0	0
Symmetrical biraphid2	0	0	0
Synedra cf. fulgens	0	0	0
Synedra famelica	0	0	0
Synedra ulna var. biceps	0	0	0
Synedra ulna var. ramesi	0	0	0
Tabularia fasciculata	0	0	0
Tabularia ktenoeoides	0	0	0

Percent Abundance	S3-160	S3-170	S3-180
Thalassionema nitzschioides	0.005928854	0.015779093	0.011928429
Thalassiosira baltica	0	0	0
Thalassiosira cf. lineata	0.005928854	0.003944773	0.003976143
Thalassiosira cf. tenera	0.003952569	0.003944773	0.005964215
Thalassiosira decipiens	0.003952569	0.013806706	0.009940358
Thalassiosira eccentrica	0.007905138	0.003944773	0.009940358
Thalassiosira ferelineata	0	0	0
Thalassiosira oestrupii	0.003952569	0.01183432	0.009940358
Thalassiosira proschkinae	0	0	0.007952286
Thalassiosira sp. 10 Cooper	0.001976285	0.003944773	0.009940358
Thalassiosira sp. 2-1 Cooper	0.003952569	0.001972387	0.001988072
Trachyneis aspera var. vulgaris	0	0	0
Triceratium sp. 2	0.003952569	0.007889546	0
Triceratium sp.1	0	0	0
Tryblionella debilis	0	0.003944773	0.007952286
Tryblionella salinarum	0	0.003944773	0
Tryblionella sp. 1	0	0	0
Tryblionella sp. 2	0	0	0
Ulnaria acus	0	0	0
Ulnaria ulna	0	0	0.005964215
Undulate colony??	0.007905138	0	0
unknown araphid	0	0	0
Unknown biraphid	0	0	0
Unknown CA	0	0	0
Unknown colony	0	0	0
Unknown GV?	0	0	0

Percent Abundance	S3-190	S3-200	S3-210	S3-220
Achnanthes coarctaca	0	0	0	0
Achnanthes denticula	0	0	0	0.008
Achnanthes GV	0	0	0	0
Achnanthes islandica	0	0	0.003875969	0.002
Achnanthidium exiguum	0	0	0.001937984	0
Achnanthidium gracillimum	0	0	0	0
Actinocyclus normanii	0.002	0	0.001937984	0.004
Actinocyclus octonarius var. crassus ?	0.032	0.021611002	0.011627907	0.008
Actinoptychus senarius	0.014	0.00589391	0.005813953	0.006
Adalfia brockmannii	0	0	0	0
Adalfia sp. 1	0	0	0	0
Amphora copulata	0	0	0	0
Amphora granulata	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp. 1 (girdle view)	0	0	0	0
Amphora sp. 2	0	0	0	0
Anaulus cf. balticus	0	0	0	0
Aneumastus pseudotusculus	0	0	0	0
Aneumastus sp. 1	0	0	0	0
Anomoeoneis sp. 1	0	0	0	0
Anorthoneis tenuis	0	0	0	0
Asterionella formosa	0	0.001964637	0	0
Asterionella sp. 1	0	0	0	0
Asymmetrical CA	0	0	0	0
Aulacoseira ambigua	0.02	0.011787819	0.036821705	0.012
Aulacoseira granulata	0	0	0	0
Aulacoseira granulata var. angustissima	0	0	0	0
Aulacoseira pusilla	0	0	0	0
Aulacoseira sp. 1	0	0	0	0
Aulacoseira sp. 2	0	0	0	0
Aulacoseira tenella	0.022	0.00589391	0.042635659	0
Bacillaria socialis	0	0.001964637	0.007751938	0.002
Biremis circumtexta	0	0.001964637	0	0.004
Biremis? sp. 1	0	0	0	0
Caloneis aemula	0	0	0	0
Caloneis bacillum	0	0.001964637	0	0
Caloneis cf. lineatus	0	0	0	0
Caloneis cf. ventricosa	0	0	0	0
Caloneis lewisii	0	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0	0

Percent Abundance	S3-190	S3-200	S3-210	S3-220
Caloneis sp. 2	0	0	0	0
Caloneis sp. 3	0	0	0	0
Caloneis sp. 4	0	0	0	0
Campylodiscus sp. 1	0	0	0	0
Capartogramma crucicula	0	0.001964637	0.001937984	0
Cavinula scutelloides	0	0	0	0
Cavinula sp. 1	0	0	0	0
Cocconeis cf. peltoides	0	0	0	0
Cocconeis costata var. costata	0	0	0	0
Cocconeis diminuta	0	0	0	0
Cocconeis disculoides	0	0	0	0
Cocconeis elongatum	0	0	0	0
Cocconeis placentula	0.006	0.009823183	0.001937984	0.012
Cocconeis scutellum	0	0	0.001937984	0
Coscinodiscus cf. lineatus	0.008	0.00589391	0	0.004
Coscinodiscus marginatus	0.014	0.011787819	0.032945736	0.028
Cosmoneis pusilla	0	0	0	0.004
Cosmoneis sp. 1	0	0	0	0
Cosmoneis sp. 2	0	0	0	0
Craticula cuspidata	0	0	0	0
Cyclostephanos sp. 1	0.012	0.001964637	0.01744186	0.012
Cyclostephanos sp. 2	0	0	0	0
Cyclotella atomus?	0.024	0.029469548	0.03875969	0.142
Cyclotella caspia	0.012	0.019646365	0.032945736	0.034
Cyclotella cyclopuncta	0.014	0.003929273	0.003875969	0.006
Cyclotella distinguenda	0	0	0	0
Cyclotella meneghiniana	0.01	0.029469548	0.01744186	0.008
Cyclotella rossii	0.002	0.007858546	0.011627907	0.022
Cyclotella sp. 2	0	0	0	0
Cyclotella striata	0.07	0.076620825	0.065891473	0.072
Cyclotella stylorum	0.002	0	0	0
Cymatopleura solea	0	0	0	0
Cymatosira belgica	0.034	0.039292731	0.027131783	0.024
Cymbella affinis	0.006	0	0	0
Cymbella cf. excisiformis	0	0	0	0
Cymbella janischii	0	0	0	0
Cymbella mexicana	0	0	0	0
Cymbella minuta	0	0	0	0
Cymbella sp. 2	0	0	0	0
Cymbella turgidula	0	0	0	0

Percent Abundance	S3-190	S3-200	S3-210	S3-220
Cymbopleura A	0	0	0	0
Cymbopleura cuspidata	0.002	0	0	0
Cymbopleura sp. 1	0	0	0	0
Decussata placenta	0	0	0	0
Delphineis minutissima	0.016	0.025540275	0.015503876	0.038
Delphineis surirella	0.008	0.001964637	0.005813953	0.018
Denticula kuetzengii	0.004	0.003929273	0	0
Diadesmis cf. contenta	0.06	0.05108055	0.025193798	0.048
Diadesmis gallica	0	0	0	0
Diatoma mesodon	0	0	0	0
Diatoma moniliformis	0	0	0	0
Diatoma vulgaris	0	0	0	0
Diatomella balfouriana	0	0	0	0
Dimeregramma minor	0	0	0	0
Diploneis boldtiana	0	0.00589391	0.001937984	0
Diploneis cf. bombus	0	0.001964637	0	0
Diploneis cf. didyma	0	0	0	0
Diploneis elliptica	0.008	0	0	0.002
Diploneis pseudovalis	0	0	0	0
Diploneis smithii	0	0	0.001937984	0.002
Diploneis sp. 1	0	0	0	0
Diploneis sp. 2	0	0	0	0
Diploneis interrupta	0	0	0	0
Discostella stelligera	0	0	0	0
Encyonema minutum	0	0	0	0
Encyonema nicafei	0	0.009823183	0.003875969	0
Encyonema sp. 1	0	0	0	0
Encyonema sp. 2	0	0	0	0
Encyonema sp. 3	0	0	0	0
Encyonema sp. 4	0	0	0	0
Encyonema triangulum	0	0	0	0
Encyonopsis microcephala	0	0	0	0
Epithemia adnata	0.002	0.003929273	0.013565891	0
Epithemia frickei	0	0	0.003875969	0.006
Epithemia smithii	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0.016	0.00589391	0.001937984	0.004
Eunotia richbuttensis	0	0	0	0
Eunotia sp. 1	0	0	0	0
Eunotia sp. 2	0.002	0	0	0.002

Percent Abundance	S3-190	S3-200	S3-210	S3-220
Eunotia sp. 3 (GV)	0	0	0	0
Fallacia pygmaea	0.01	0	0	0.01
Fragilaria brevistriata	0	0.003929273	0	0
Fragilaria capucina	0	0	0	0
Fragilaria cf. microstriata	0	0	0	0
Fragilaria elliptica	0.01	0.001964637	0.001937984	0.006
Fragilaria schulzii	0	0	0	0
Fragilaria tenera	0	0	0	0
Fragilaria vaucheriae	0.006	0.009823183	0.013565891	0
Frickea lewisiana	0	0	0	0
Frustulia amphipleuroides	0	0	0	0
Frustulia capitata	0	0	0	0
Frustulia rhomboides var. viridula	0	0	0.003875969	0
Frustulia sp. 1	0	0	0	0
Frustulia vulgaris	0	0.003929273	0	0
Geissleria cf. kriegeri	0	0	0	0
Geissleria decussis	0	0	0	0
Gomphoneis hurculeana	0	0	0	0
Gomphoneis sp. 1	0	0	0	0
Gomphoneis sp. 3	0	0	0	0
Gomphonema acuminatum	0	0	0	0
Gomphonema innocens	0.002	0	0.001937984	0.004
Gomphonema kobayasii	0	0	0	0
Gomphonema mammilla	0	0.001964637	0	0
Gomphonema olivaceoides	0	0	0	0
Gomphonema olivaceum	0	0	0	0
Gomphonema sp. 1	0	0	0	0
Gomphonema sp. 2	0	0	0	0
Gomphonema sp. 3	0	0	0	0
Gomphonopsis exiguum	0	0	0	0
Gomphosphenia lingulatiformis	0	0.003929273	0	0
Grammatophora cf. macilenta	0	0	0	0
Gyrosigma temperii	0	0	0	0
Gyrosigma cf. balticum	0	0	0.001937984	0.004
Gyrosigma sp.1	0	0	0	0
Gyrosigma spencerii	0.004	0	0.007751938	0
Hantzschia sp. 1 girdle view	0	0	0	0
Hantzschia sp. 2 girdle view	0	0	0	0
Hantzschia sp. 3	0	0	0	0
Hantzschia sp. 4	0	0	0	0

Percent Abundance	S3-190	S3-200	S3-210	S3-220
Hantzschia virgata	0.002	0	0	0
Hippodonta costulata	0	0	0	0
Hippodonta coxiae	0	0.003929273	0.027131783	0.01
Hippodonta hungarica	0.006	0	0	0.01
Hippodonta sp. 1	0	0	0	0
Hippodonta sp. 2	0	0	0	0
Karayevia amoena	0	0	0	0
Karayevia clevei	0	0	0	0
Kobayasiella sp. 1	0	0	0	0.002
Leptocylindrus cf. danicus	0.002	0.001964637	0	0
Luticola sp. 1	0	0	0	0
Luticola sp. 2	0	0	0.011627907	0.008
Luticola sp. 3	0.012	0.011787819	0	0
Luticola sp. 4	0	0	0	0
Luticola sp. 5	0	0	0	0
Mastogloia smithii	0	0	0	0
Mastogloia sp. 1	0	0	0	0
Mastogloia sp. 2	0	0	0	0
Melosira sp. 1	0	0	0	0
Melosira varians	0	0	0	0
Meridion circulare var. constrictum	0	0	0	0
Meridion sp. 1	0.002	0	0	0
Navicula A	0	0	0	0
Navicula abunda	0	0	0.001937984	0
Navicula angusta	0	0	0	0
Navicula antonii	0	0	0.001937984	0
Navicula brachium	0	0	0	0
Navicula cari	0.006	0.009823183	0.015503876	0.006
Navicula cf. capitoradiata	0	0.003929273	0.001937984	0.002
Navicula cf. galloae	0	0	0	0
Navicula cf. heuflerii	0	0.001964637	0	0
Navicula cf. ludloviana (CA)	0	0	0	0
Navicula cf. oblonga	0	0	0	0
Navicula cf. patrickii	0.004	0	0.001937984	0
Navicula cf. reichardtiana	0	0	0.001937984	0
Navicula cf. reinhardtii	0	0	0	0
Navicula cf. salinarum	0	0	0	0
Navicula cf. schweigeri	0.002	0	0	0
Navicula cf. subinflata	0	0.007858546	0	0.008
Navicula cf. tripunctata	0.02	0.009823183	0.003875969	0.004

Percent Abundance	S3-190	S3-200	S3-210	S3-220
Navicula cf. zostereti	0.012	0.003929273	0.005813953	0.018
Navicula clementis	0	0	0	0
Navicula denta	0	0	0	0.004
Navicula difficillima	0	0	0	0
Navicula facilis	0	0	0	0
Navicula germainii	0	0	0	0.004
Navicula glomus	0	0	0	0
Navicula gregaria	0	0.001964637	0	0
Navicula halophila	0	0	0	0
Navicula kotschyi	0	0	0	0
Navicula lanceolata	0.004	0	0.009689922	0.02
Navicula marginulata	0	0	0	0
Navicula oculiformis	0	0	0.001937984	0
Navicula peregrina	0.014	0.009823183	0.023255814	0.014
Navicula perminuta	0	0.003929273	0	0
Navicula phyllepta	0.006	0	0	0
Navicula slesvicensis	0	0	0	0
Navicula sp. 1	0	0	0.001937984	0
Navicula sp. 10	0	0	0	0
Navicula sp. 11	0	0	0	0
Navicula sp. 12	0	0	0	0
Navicula sp. 13	0	0	0	0
Navicula sp. 14	0	0	0	0
Navicula sp. 2	0	0	0	0
Navicula sp. 3	0	0	0	0
Navicula sp. 5	0	0.007858546	0.001937984	0
Navicula sp. 6	0	0	0	0
Navicula sp. 7	0	0	0	0
Navicula sp. 8	0	0	0	0
Navicula sp. 9	0	0	0	0
Navicula subinflata	0	0	0	0
Navicula subminiscula	0	0	0	0.006
Navicula trivialis	0	0	0	0
Navicula vilaplanii	0.004	0	0	0
Naviculoid diatom 1	0	0	0	0
Naviculoid diatom 2	0	0	0	0
Neidiopsis sp. 1	0	0	0	0
Neodephaneis pelagica	0	0	0	0
Nitzschia amphibia	0.008	0	0.003875969	0.004
Nitzschia angustata	0	0	0	0

Percent Abundance	S3-190	S3-200	S3-210	S3-220
Nitzschia biacrula	0	0	0	0
Nitzschia bita	0	0.003929273	0.009689922	0
Nitzschia brevissima	0.066	0.080550098	0.058139535	0.042
Nitzschia cf. agnita	0	0	0	0
Nitzschia cf. biremis	0	0.00589391	0	0
Nitzschia cf. borealis	0	0	0.003875969	0.004
Nitzschia cf. groefii	0	0	0	0
Nitzschia cf. laevis	0	0	0	0
Nitzschia cf. macilenta	0	0	0	0
Nitzschia cf. subacicularis	0	0	0	0
Nitzschia clausii	0.004	0	0	0
Nitzschia columbiana	0.004	0	0	0
Nitzschia communis	0	0	0	0
Nitzschia commutata	0	0	0	0
Nitzschia constricta	0	0	0	0
Nitzschia cylindrus	0	0	0	0
Nitzschia debilis	0	0	0	0
Nitzschia desertorum	0	0	0	0
Nitzschia dissipata	0.01	0.003929273	0.003875969	0.01
Nitzschia filiformis	0	0	0	0
Nitzschia fonticola	0	0	0	0
Nitzschia frustulum	0	0	0.003875969	0
Nitzschia gracilis	0	0	0	0
Nitzschia incognita	0	0	0	0
Nitzschia inconspicua	0	0	0	0.004
Nitzschia innominata	0	0	0	0
Nitzschia levidensis	0	0.009823183	0	0
Nitzschia linearis	0	0	0	0.002
Nitzschia marginulatus	0	0	0	0
Nitzschia microcephala	0	0	0	0
Nitzschia minuta	0	0	0	0
Nitzschia nana	0	0	0	0
Nitzschia obtusa	0	0	0	0
Nitzschia palea	0.002	0	0	0.004
Nitzschia panduriformis	0	0	0	0.006
Nitzschia pellucida	0	0	0	0
Nitzschia perminuta	0.002	0.003929273	0.005813953	0
Nitzschia proxima	0.008	0.013752456	0.005813953	0.006
Nitzschia punctata	0.014	0.023575639	0.009689922	0.004
Nitzschia pusilla	0.012	0.003929273	0	0

Percent Abundance	S3-190	S3-200	S3-210	S3-220
Nitzschia scalaris	0	0	0	0
Nitzschia sigma	0.01	0.009823183	0.003875969	0
Nitzschia sigmaformis	0	0.007858546	0	0.002
Nitzschia sociabilis	0	0	0	0
Nitzschia sp. 1	0.002	0	0	0
Nitzschia sp. 2	0	0	0	0
Nitzschia sp. 3	0	0	0	0
Nitzschia sp. 4	0	0.003929273	0.001937984	0
Nitzschia sp. 5	0.002	0	0	0
Nitzschia sp. 6	0	0	0	0
Nitzschia sp. 7	0	0	0	0
Nitzschia sp. 8	0	0	0	0
Nitzschia umbonata	0	0	0	0
Opephora martyi	0	0.011787819	0.015503876	0.002
Opephora olsenii	0	0	0	0
Opephora sp. A	0	0	0	0
Orthoseira sp. 1	0	0	0	0
Paralia sulcata	0.106	0.080550098	0.073643411	0.07
Parlibellus cf. plicatus	0	0	0	0
Parlibellus sp. 2	0	0	0	0
Pinnularia biceps	0	0	0	0
Pinnularia borealis	0	0	0	0
Pinnularia divergens	0	0	0.001937984	0.004
Pinnularia divergentissima	0	0	0	0
Pinnularia ignobilis	0	0	0	0
Pinnularia interrupta	0	0	0	0
Pinnularia marchica	0.012	0.003929273	0.003875969	0
Pinnularia microstauron	0.002	0	0.003875969	0
Pinnularia sp. 10	0	0	0	0
Pinnularia sp. 11	0	0	0	0
Pinnularia sp. 12	0.004	0	0	0
Pinnularia sp. 13	0	0	0	0
Pinnularia sp. 3	0	0	0	0
Pinnularia sp. 4	0	0	0	0
Pinnularia sp. 5	0	0	0	0
Pinnularia sp. 6	0	0	0	0
Pinnularia sp. 7	0	0	0	0
Pinnularia sp. 8	0	0	0	0
Pinnularia sp. 9	0	0	0	0
Pinnularia sp.1	0	0	0	0

Percent Abundance	S3-190	S3-200	S3-210	S3-220
Pinnularia sp.2	0	0	0	0
Pinnularia viridis	0	0	0	0
Placoneis cf. gastrum	0	0.007858546	0	0
Placoneis elginensis	0	0	0	0
Placoneis paralegali	0	0	0	0
Placoneis sp. 1	0	0	0	0
Placoneis sp. 2	0	0	0	0
Placoneis sp. 3	0	0	0	0
Plagiogramma cf. minima	0	0	0	0
Planothidium abbreviatum	0	0	0	0
Planothidium apiculatum	0	0	0	0
Planothidium biporomum	0.004	0.007858546	0.003875969	0
Planothidium dubium	0.012	0	0	0
Planothidium frequentissimum	0.004	0.003929273	0.005813953	0.006
Planothidium lanceolatum	0	0.003929273	0	0
Planothidium minutissimum	0	0	0	0
Planothidium paragali	0	0	0	0
Planothidium rostratum	0	0	0	0
Planothidium sp. 1	0	0	0	0
Planothidium sp. 2	0	0	0	0
Planothidium sp. 3	0	0	0	0
Platessa bahlsii	0	0	0	0
Platessa cf. hustedtii	0	0	0	0
Pleurosigma diverse-striatum	0	0	0	0
Psammothidium? Sp. 1	0	0	0	0
Pseudostaurosira americana	0.014	0.007858546	0.001937984	0.002
Pseudostaurosira parasitica	0	0	0	0
Pseudostaurosira brevistriata	0	0	0	0
Pseudostaurosiropsis sp. 1	0.006	0.009823183	0.011627907	0.008
Pseudostaurosiropsis sp. 1 (GV)	0	0	0	0
Punctastriata mimetica	0	0	0	0
Reimeria sinuata	0	0	0	0.004
Rexlowea sp. 1	0	0	0	0
Rhaphoneis amphiceros	0.034	0.027504912	0.019379845	0.032
Rhaphoneis tenuis	0.008	0.001964637	0	0
Rhoicosphenia cf. marina	0	0	0.003875969	0
Rhoicosphenia sp. 1	0	0	0	0
Rhopalodia acuminatum	0.002	0	0	0
Rhopolodia gibba	0	0	0	0
Rhopolodia musculus	0.024	0.00589391	0.011627907	0

Percent Abundance	S3-190	S3-200	S3-210	S3-220
Sellaphora cf. hohnii	0	0	0.007751938	0
Sellaphora laevissima	0	0	0	0
Sellaphora pulchra	0	0	0	0
Sellaphora pupula	0	0	0	0.004
Sellaphora rexii	0	0	0	0
Sellaphora bacillum	0	0.001964637	0	0
Skeletonema sp. 1	0	0	0	0
Stauroforma exiguaformis	0	0	0	0
Stauroneis agrestis	0	0	0	0
Stauroneis CA	0	0	0	0
Stauroneis cf. vandevijveri	0	0	0	0
Stauroneis circumborealis	0	0	0	0
Stauroneis conspicua	0	0	0	0
Stauroneis GV	0	0	0	0
Stauroneis kriegeri	0	0.001964637	0.005813953	0
Stauroneis sp. 1	0	0	0	0
Stauroneis sp. 2	0	0	0	0
Stauroneis sp. 3	0	0	0	0
Stauroneis sp. 4	0	0	0	0
Staurophora cf. soodensis	0	0	0	0
Staurosira construens	0	0	0	0
Staurosira construens var. binodis	0	0	0	0
Staurosirella leptosauron var. dubia	0	0.013752456	0.031007752	0
Staurosirella sp. 1	0	0	0	0
Stephanodiscus sp. 1	0	0	0	0
Surirella angusta	0	0	0	0
Surirella brebissonii	0.008	0	0.005813953	0.01
Surirella cf. iowensis	0	0	0	0
Surirella ovalis	0	0	0	0
Surirella peisonis	0	0	0	0
Surirella sp. 1	0	0	0	0
Surirella splendida	0	0	0	0
Symmetrical biraphid1	0	0	0	0
Symmetrical biraphid2	0	0	0	0
Synedra cf. fulgens	0	0	0	0
Synedra famelica	0	0	0	0
Synedra ulna var. biceps	0	0	0	0
Synedra ulna var. ramesi	0	0	0	0
Tabularia fasciculata	0	0	0	0
Tabularia ktenoeoides	0	0	0	0

Percent Abundance	S3-190	S3-200	S3-210	S3-220
Thalassionema nitzschioides	0.012	0.019646365	0.005813953	0.014
Thalassiosira baltica	0	0.025540275	0.011627907	0.016
Thalassiosira cf. lineata	0.01	0.009823183	0.01744186	0.014
Thalassiosira cf. tenera	0.002	0.00589391	0.001937984	0.004
Thalassiosira decipiens	0.01	0.021611002	0.015503876	0.008
Thalassiosira eccentrica	0.014	0.015717092	0.011627907	0.01
Thalassiosira ferelineata	0	0	0	0
Thalassiosira oestrupii	0	0	0	0
Thalassiosira proschkinae	0.004	0.001964637	0.015503876	0
Thalassiosira sp. 10 Cooper	0.004	0.009823183	0.007751938	0.006
Thalassiosira sp. 2-1 Cooper	0.002	0.003929273	0.003875969	0.008
Trachyneis aspera var. vulgaris	0	0	0	0
Triceratium sp. 2	0	0.011787819	0	0.004
Triceratium sp.1	0.004	0	0	0
Tryblionella debilis	0	0.003929273	0.007751938	0.004
Tryblionella salinarum	0	0	0	0
Tryblionella sp. 1	0.004	0	0	0
Tryblionella sp. 2	0	0	0	0
Ulnaria acus	0	0	0	0
Ulnaria ulna	0	0.003929273	0	0.008
Undulate colony??	0	0	0	0
unknown araphid	0	0	0	0
Unknown biraphid	0	0	0	0
Unknown CA	0	0	0	0
Unknown colony	0	0	0	0
Unknown GV?	0	0	0	0

Percent Abundance	S3-230	S3-240	S3-250
Achnanthes coarctaca	0	0	0
Achnanthes denticula	0.001988072	0	0.003984064
Achnanthes GV	0	0	0
Achnanthes islandica	0	0	0
Achnanthidium exiguum	0	0	0
Achnanthidium gracillimum	0	0	0
Actinocyclus normanii	0	0.001937984	0
Actinocyclus octonarius var. crassus ?	0.013916501	0.013565891	0.011952191
Actinoptychus senarius	0	0.003875969	0.011952191
Adalfia brockmannii	0	0	0.003984064
Adalfia sp. 1	0	0.001937984	0
Amphora copulata	0	0	0
Amphora granulata	0	0	0
Amphora ovalis	0	0	0
Amphora sp. 1 (girdle view)	0	0	0
Amphora sp. 2	0	0	0
Anaulus cf. balticus	0	0	0
Aneumastus pseudotusculus	0	0	0
Aneumastus sp. 1	0	0	0
Anomoeoneis sp. 1	0	0	0
Anorthoneis tenuis	0	0	0
Asterionella formosa	0	0	0
Asterionella sp. 1	0	0	0
Asymmetrical CA	0	0	0
Aulacoseira ambigua	0.033797217	0.013565891	0.017928287
Aulacoseira granulata	0	0	0
Aulacoseira granulata var. angustissima	0	0	0
Aulacoseira pusilla	0	0	0
Aulacoseira sp. 1	0	0	0
Aulacoseira sp. 2	0	0	0
Aulacoseira tenella	0.017892644	0.011627907	0.027888446
Bacillaria socialis	0.005964215	0.005813953	0.001992032
Biremis circumtexta	0	0	0.001992032
Biremis? sp. 1	0	0	0
Caloneis aemula	0	0	0.001992032
Caloneis bacillum	0	0.001937984	0.005976096
Caloneis cf. lineatus	0	0	0
Caloneis cf. ventricosa	0	0	0
Caloneis lewisii	0	0	0
Caloneis sp. 1 (girdle view)	0	0	0

Percent Abundance	S3-230	S3-240	S3-250
Caloneis sp. 2	0	0	0
Caloneis sp. 3	0	0	0
Caloneis sp. 4	0	0	0
Campylodiscus sp. 1	0	0	0
Capartogramma crucicula	0	0	0
Cavinula scutelloides	0	0	0
Cavinula sp. 1	0	0.003875969	0
Cocconeis cf. peltoides	0	0	0
Cocconeis costata var. costata	0	0	0
Cocconeis diminuta	0	0	0
Cocconeis disculoides	0	0	0
Cocconeis elongatum	0	0	0
Cocconeis placentula	0.003976143	0.011627907	0.003984064
Cocconeis scutellum	0.001988072	0	0
Coscinodiscus cf. lineatus	0.009940358	0.01744186	0.013944223
Coscinodiscus marginatus	0.021868787	0.023255814	0.017928287
Cosmoneis pusilla	0	0	0
Cosmoneis sp. 1	0	0	0
Cosmoneis sp. 2	0	0	0
Craticula cuspidata	0	0	0
Cyclostephanos sp. 1	0.003976143	0.009689922	0.001992032
Cyclostephanos sp. 2	0	0	0
Cyclotella atomus?	0.047713718	0.139534884	0.085657371
Cyclotella caspia	0.031809145	0.042635659	0.075697211
Cyclotella cyclopuncta	0.003976143	0.005813953	0.005976096
Cyclotella distinguenda	0	0	0
Cyclotella meneghiniana	0.015904573	0.025193798	0.015936255
Cyclotella rossii	0.027833002	0.027131783	0.015936255
Cyclotella sp. 2	0	0	0
Cyclotella striata	0.057654076	0.069767442	0.111553785
Cyclotella stylorum	0	0	0.003984064
Cymatopleura solea	0	0	0
Cymatosira belgica	0.023856859	0.03875969	0.027888446
Cymbella affinis	0.001988072	0	0
Cymbella cf. excisiformis	0	0	0.003984064
Cymbella janischii	0	0	0
Cymbella mexicana	0	0	0
Cymbella minuta	0	0	0
Cymbella sp. 2	0	0	0
Cymbella turgidula	0	0	0

Percent Abundance	S3-230	S3-240	S3-250
Cymbopleura A	0	0	0
Cymbopleura cuspidata	0	0	0
Cymbopleura sp. 1	0	0	0
Decussata placenta	0	0	0
Delphineis minutissima	0.027833002	0.03875969	0.015936255
Delphineis surirella	0.003976143	0.009689922	0.003984064
Denticula kuetzengii	0	0.001937984	0
Diadesmis cf. contenta	0.051689861	0.031007752	0.025896414
Diadesmis gallica	0	0	0
Diatoma mesodon	0	0	0
Diatoma moniliformis	0	0	0
Diatoma vulgaris	0	0	0
Diatomella balfouriana	0	0	0
Dimeregramma minor	0	0	0
Diploneis boldtiana	0.001988072	0	0.007968127
Diploneis cf. bombus	0	0	0.001992032
Diploneis cf. didyma	0	0	0
Diploneis elliptica	0.001988072	0	0.005976096
Diploneis pseudovalis	0	0	0
Diploneis smithii	0	0	0
Diploneis sp. 1	0	0	0
Diploneis sp. 2	0	0	0
Diploneis interrupta	0	0	0
Discostella stelligera	0	0	0
Encyonema minutum	0	0	0
Encyonema nicafei	0.005964215	0	0.003984064
Encyonema sp. 1	0	0	0
Encyonema sp. 2	0	0	0
Encyonema sp. 3	0	0	0
Encyonema sp. 4	0	0	0
Encyonema triangulum	0	0	0
Encyonopsis microcephala	0	0	0
Epithemia adnata	0.003976143	0	0.001992032
Epithemia frickei	0	0.001937984	0
Epithemia smithii	0	0	0
Epithemia sorex	0	0	0
Epithemia turgida	0.007952286	0.001937984	0.003984064
Eunotia richbuttensis	0	0	0
Eunotia sp. 1	0	0	0
Eunotia sp. 2	0	0	0

Percent Abundance	S3-230	S3-240	S3-250
Eunotia sp. 3 (GV)	0	0	0
Fallacia pygmaea	0	0.005813953	0.009960159
Fragilaria brevistriata	0	0	0.003984064
Fragilaria capucina	0	0	0
Fragilaria cf. microstriata	0	0	0
Fragilaria elliptica	0	0.005813953	0.003984064
Fragilaria schulzii	0	0	0
Fragilaria tenera	0	0	0
Fragilaria vaucheriae	0.003976143	0.005813953	0.007968127
Frickea lewisiana	0	0	0
Frustulia amphipleuroides	0	0	0
Frustulia capitata	0	0	0
Frustulia rhomboides var. viridula	0	0	0
Frustulia sp. 1	0	0	0
Frustulia vulgaris	0.003976143	0	0
Geissleria cf. kriegeri	0	0.001937984	0
Geissleria decussis	0	0	0
Gomphoneis hurculeana	0	0	0
Gomphoneis sp. 1	0.001988072	0.003875969	0
Gomphoneis sp. 3	0	0	0
Gomphonema acuminatum	0	0	0
Gomphonema innocens	0	0.003875969	0
Gomphonema kobayasii	0	0	0
Gomphonema mammilla	0	0	0
Gomphonema olivaceoides	0	0	0
Gomphonema olivaceum	0	0	0
Gomphonema sp. 1	0	0	0
Gomphonema sp. 2	0	0	0
Gomphonema sp. 3	0	0	0
Gomphonopsis exiguum	0	0	0
Gomphosphenia lingulatiformis	0	0	0
Grammatophora cf. macilenta	0	0	0
Gyrosigma temperii	0	0	0
Gyrosigma cf. balticum	0	0	0
Gyrosigma sp.1	0	0	0
Gyrosigma spencerii	0.001988072	0	0
Hantzschia sp. 1 girdle view	0	0	0
Hantzschia sp. 2 girdle view	0	0	0
Hantzschia sp. 3	0	0	0
Hantzschia sp. 4	0	0	0

Percent Abundance	S3-230	S3-240	S3-250
Hantzschia virgata	0.001988072	0.003875969	0
Hippodonta costulata	0.001988072	0	0
Hippodonta coxiae	0.015904573	0.015503876	0.013944223
Hippodonta hungarica	0.007952286	0.001937984	0.011952191
Hippodonta sp. 1	0	0	0
Hippodonta sp. 2	0	0	0
Karayevia amoena	0	0	0
Karayevia clevei	0	0	0
Kobayasiella sp. 1	0	0	0.003984064
Leptocylindrus cf. danicus	0	0	0
Luticola sp. 1	0	0	0
Luticola sp. 2	0	0.003875969	0
Luticola sp. 3	0	0	0.007968127
Luticola sp. 4	0.001988072	0	0.003984064
Luticola sp. 5	0	0	0
Mastogloia smithii	0	0	0
Mastogloia sp. 1	0	0	0
Mastogloia sp. 2	0	0	0
Melosira sp. 1	0	0	0.011952191
Melosira varians	0	0	0
Meridion circulare var. constrictum	0	0	0
Meridion sp. 1	0	0	0
Navicula A	0	0	0
Navicula abunda	0.003976143	0	0.003984064
Navicula angusta	0	0	0
Navicula antonii	0.001988072	0	0
Navicula brachium	0	0	0
Navicula cari	0.003976143	0.001937984	0.003984064
Navicula cf. capitoradiata	0.007952286	0	0.003984064
Navicula cf. galloae	0	0	0
Navicula cf. heuflerii	0	0	0
Navicula cf. ludloviana (CA)	0	0	0
Navicula cf. oblonga	0	0	0
Navicula cf. patrickii	0.001988072	0	0
Navicula cf. reichardtiana	0	0	0
Navicula cf. reinhardtii	0	0	0
Navicula cf. salinarum	0	0	0
Navicula cf. schweigeri	0	0	0.003984064
Navicula cf. subinflata	0.029821074	0.003875969	0
Navicula cf. tripunctata	0.005964215	0.003875969	0.007968127

Percent Abundance	S3-230	S3-240	S3-250
Navicula cf. zostereti	0.005964215	0.001937984	0.001992032
Navicula clementis	0	0	0
Navicula denta	0.003976143	0	0
Navicula difficillima	0.001988072	0	0
Navicula facilis	0	0	0
Navicula germainii	0	0	0
Navicula glomus	0	0	0
Navicula gregaria	0.005964215	0	0
Navicula halophila	0	0.001937984	0
Navicula kotschyi	0	0	0
Navicula lanceolata	0.02584493	0.007751938	0.011952191
Navicula marginulata	0	0	0
Navicula oculiformis	0	0	0
Navicula peregrina	0.013916501	0.007751938	0.005976096
Navicula perminuta	0	0.009689922	0.001992032
Navicula phyllepta	0.005964215	0.001937984	0
Navicula slesvicensis	0	0	0
Navicula sp. 1	0.009940358	0	0
Navicula sp. 10	0	0	0
Navicula sp. 11	0	0	0
Navicula sp. 12	0	0	0
Navicula sp. 13	0	0	0
Navicula sp. 14	0	0	0
Navicula sp. 2	0	0	0
Navicula sp. 3	0	0	0
Navicula sp. 5	0.003976143	0	0
Navicula sp. 6	0	0	0
Navicula sp. 7	0	0	0
Navicula sp. 8	0	0	0
Navicula sp. 9	0	0	0
Navicula subinflata	0	0	0
Navicula subminiscula	0	0	0
Navicula trivialis	0	0.001937984	0
Navicula vilaplanii	0	0	0
Naviculoid diatom 1	0	0	0
Naviculoid diatom 2	0	0	0
Neidiopsis sp. 1	0	0	0
Neodephaneis pelagica	0	0	0
Nitzschia amphibia	0.007952286	0	0.003984064
Nitzschia angustata	0	0	0

Percent Abundance	S3-230	S3-240	S3-250
Nitzschia biacrula	0	0	0
Nitzschia bita	0.003976143	0.003875969	0.007968127
Nitzschia brevissima	0.053677932	0.027131783	0.037848606
Nitzschia cf. agnita	0.027833002	0	0.003984064
Nitzschia cf. biremis	0	0	0
Nitzschia cf. borealis	0	0	0
Nitzschia cf. groefii	0	0	0
Nitzschia cf. laevis	0	0	0
Nitzschia cf. macilenta	0	0	0
Nitzschia cf. subacicularis	0	0	0
Nitzschia clausii	0	0	0
Nitzschia columbiana	0	0	0
Nitzschia communis	0	0	0
Nitzschia commutata	0	0	0
Nitzschia constricta	0	0	0
Nitzschia cylindrus	0	0	0
Nitzschia debilis	0	0.003875969	0.003984064
Nitzschia desertorum	0	0	0
Nitzschia dissipata	0.015904573	0.003875969	0.013944223
Nitzschia filiformis	0	0.001937984	0
Nitzschia fonticola	0	0	0
Nitzschia frustulum	0.003976143	0.003875969	0
Nitzschia gracilis	0	0	0
Nitzschia incognita	0	0	0
Nitzschia inconspicua	0	0.003875969	0
Nitzschia innominata	0	0	0
Nitzschia levidensis	0.003976143	0.013565891	0.009960159
Nitzschia linearis	0	0	0.001992032
Nitzschia marginulatus	0	0	0
Nitzschia microcephala	0.003976143	0	0
Nitzschia minuta	0	0	0
Nitzschia nana	0	0	0
Nitzschia obtusa	0	0	0
Nitzschia palea	0.007952286	0.003875969	0
Nitzschia panduriformis	0	0	0
Nitzschia pellucida	0	0	0
Nitzschia perminuta	0	0	0
Nitzschia proxima	0.009940358	0.011627907	0.001992032
Nitzschia punctata	0.013916501	0.009689922	0.011952191
Nitzschia pusilla	0.003976143	0.003875969	0.009960159

Percent Abundance	S3-230	S3-240	S3-250
Nitzschia scalaris	0.001988072	0	0.001992032
Nitzschia sigma	0	0	0
Nitzschia sigmaformis	0	0	0
Nitzschia sociabilis	0	0.003875969	0
Nitzschia sp. 1	0	0.001937984	0.001992032
Nitzschia sp. 2	0	0	0
Nitzschia sp. 3	0	0	0
Nitzschia sp. 4	0.001988072	0	0
Nitzschia sp. 5	0	0	0
Nitzschia sp. 6	0	0	0
Nitzschia sp. 7	0	0	0
Nitzschia sp. 8	0.005964215	0	0
Nitzschia umbonata	0	0	0
Opephora martyi	0	0	0
Opephora olsenii	0	0	0
Opephora sp. A	0	0	0
Orthoseira sp. 1	0	0	0
Paralia sulcata	0.049701789	0.060077519	0.049800797
Parlibellus cf. plicatus	0	0	0
Parlibellus sp. 2	0	0	0
Pinnularia biceps	0	0	0
Pinnularia borealis	0	0	0
Pinnularia divergens	0.001988072	0	0.005976096
Pinnularia divergentissima	0	0	0
Pinnularia ignobilis	0	0	0
Pinnularia interrupta	0	0	0
Pinnularia marchica	0.003976143	0.003875969	0
Pinnularia microstauron	0	0	0
Pinnularia sp. 10	0	0	0
Pinnularia sp. 11	0	0	0
Pinnularia sp. 12	0	0	0
Pinnularia sp. 13	0	0	0.001992032
Pinnularia sp. 3	0	0	0
Pinnularia sp. 4	0	0	0
Pinnularia sp. 5	0	0	0
Pinnularia sp. 6	0	0	0
Pinnularia sp. 7	0	0	0
Pinnularia sp. 8	0	0	0
Pinnularia sp. 9	0	0	0
Pinnularia sp.1	0	0	0

Percent Abundance	S3-230	S3-240	S3-250
Pinnularia sp.2	0	0	0
Pinnularia viridis	0	0	0.001992032
Placoneis cf. gastrum	0	0	0
Placoneis elginensis	0	0	0.003984064
Placoneis paralegali	0	0	0
Placoneis sp. 1	0	0	0
Placoneis sp. 2	0	0	0
Placoneis sp. 3	0	0	0
Plagiogramma cf. minima	0	0	0
Planothidium abbreviatum	0	0	0
Planothidium apiculatum	0	0	0
Planothidium biporomum	0.009940358	0.001937984	0
Planothidium dubium	0	0	0
Planothidium frequentissimum	0.005964215	0.001937984	0
Planothidium lanceolatum	0	0.001937984	0.003984064
Planothidium minutissimum	0	0	0
Planothidium paragali	0	0	0
Planothidium rostratum	0	0	0
Planothidium sp. 1	0	0	0
Planothidium sp. 2	0	0	0
Planothidium sp. 3	0	0	0
Platessa bahlsii	0	0	0
Platessa cf. hustedtii	0	0	0
Pleurosigma diverse-striatum	0	0	0
Psammothidium? Sp. 1	0	0	0
Pseudostaurosira americana	0.007952286	0	0.001992032
Pseudostaurosira parasitica	0	0.029069767	0
Pseudostaurosira brevistriata	0	0	0
Pseudostaurosiropsis sp. 1	0.013916501	0.01744186	0.027888446
Pseudostaurosiropsis sp. 1 (GV)	0	0	0
Punctastriata mimetica	0	0	0
Reimeria sinuata	0.003976143	0.003875969	0.003984064
Rexlowea sp. 1	0	0	0
Rhaphoneis amphiceros	0.017892644	0.013565891	0.015936255
Rhaphoneis tenuis	0.003976143	0.001937984	0
Rhoicosphenia cf. marina	0.003976143	0	0
Rhoicosphenia sp. 1	0	0	0
Rhopalodia acuminatum	0.007952286	0	0
Rhopolodia gibba	0	0	0
Rhopolodia musculus	0	0	0

Percent Abundance	S3-230	S3-240	S3-250
Sellaphora cf. hohnii	0.001988072	0	0
Sellaphora laevissima	0	0	0
Sellaphora pulchra	0	0	0
Sellaphora pupula	0.001988072	0.003875969	0
Sellaphora rexii	0.001988072	0.001937984	0
Sellaphora bacillum	0	0.001937984	0
Skeletonema sp. 1	0	0	0
Stauroforma exiguaformis	0	0	0
Stauroneis agrestis	0	0	0
Stauroneis CA	0	0	0
Stauroneis cf. vandevijveri	0	0	0
Stauroneis circumborealis	0	0	0
Stauroneis conspicua	0	0	0
Stauroneis GV	0	0	0
Stauroneis kriegeri	0	0	0
Stauroneis sp. 1	0	0	0
Stauroneis sp. 2	0	0	0
Stauroneis sp. 3	0	0	0
Stauroneis sp. 4	0	0	0
Staurophora cf. soodensis	0	0	0
Staurosira construens	0	0	0
Staurosira construens var. binodis	0	0	0
Staurosirella leptosauron var. dubia	0.007952286	0	0
Staurosirella sp. 1	0	0	0
Stephanodiscus sp. 1	0	0	0
Surirella angusta	0	0	0
Surirella brebissonii	0.001988072	0.001937984	0
Surirella cf. iowensis	0	0	0
Surirella ovalis	0	0	0
Surirella peisonis	0	0	0
Surirella sp. 1	0	0	0
Surirella splendida	0.001988072	0	0
Symmetrical biraphid1	0	0	0
Symmetrical biraphid2	0	0	0
Synedra cf. fulgens	0	0	0
Synedra famelica	0	0	0
Synedra ulna var. biceps	0	0	0
Synedra ulna var. ramesi	0	0	0
Tabularia fasciculata	0	0.003875969	0
Tabularia ktenoeoides	0	0	0

Percent Abundance	S3-230	S3-240	S3-250
Thalassionema nitzschioides	0.011928429	0.009689922	0.005976096
Thalassiosira baltica	0.009940358	0.025193798	0.013944223
Thalassiosira cf. lineata	0.013916501	0.003875969	0.025896414
Thalassiosira cf. tenera	0.001988072	0.007751938	0.003984064
Thalassiosira decipiens	0.007952286	0.009689922	0.015936255
Thalassiosira eccentrica	0.005964215	0.011627907	0.003984064
Thalassiosira ferelineata	0	0	0
Thalassiosira oestrupii	0	0	0
Thalassiosira proschkinae	0.005964215	0.009689922	0.015936255
Thalassiosira sp. 10 Cooper	0.003976143	0	0.003984064
Thalassiosira sp. 2-1 Cooper	0.001988072	0.011627907	0.005976096
Trachyneis aspera var. vulgaris	0	0	0
Triceratium sp. 2	0.003976143	0.011627907	0.001992032
Triceratium sp.1	0.003976143	0	0
Tryblionella debilis	0.003976143	0.003875969	0
Tryblionella salinarum	0	0	0
Tryblionella sp. 1	0	0	0
Tryblionella sp. 2	0	0	0
Ulnaria acus	0	0	0
Ulnaria ulna	0.001988072	0	0.001992032
Undulate colony??	0	0	0
unknown araphid	0	0	0
Unknown biraphid	0	0	0
Unknown CA	0	0	0
Unknown colony	0	0	0
Unknown GV?	0	0	0

Percent Abundance	S3-260
Achnanthes coarctaca	0.001976285
Achnanthes denticula	0
Achnanthes GV	0
Achnanthes islandica	0
Achnanthidium exiguum	0.003952569
Achnanthidium gracillimum	0
Actinocyclus normanii	0.001976285
Actinocyclus octonarius var. crassus ?	0.031620553
Actinoptychus senarius	0.007905138
Adalfia brockmannii	0
Adalfia sp. 1	0
Amphora copulata	0
Amphora granulata	0
Amphora ovalis	0
Amphora sp. 1 (girdle view)	0
Amphora sp. 2	0
Anaulus cf. balticus	0
Aneumastus pseudotusculus	0.003952569
Aneumastus sp. 1	0
Anomoeoneis sp. 1	0
Anorthoneis tenuis	0
Asterionella formosa	0
Asterionella sp. 1	0
Asymmetrical CA	0
Aulacoseira ambigua	0.023715415
Aulacoseira granulata	0
Aulacoseira granulata var. angustissima	0
Aulacoseira pusilla	0
Aulacoseira sp. 1	0
Aulacoseira sp. 2	0
Aulacoseira tenella	0.011857708
Bacillaria socialis	0
Biremis circumtexta	0
Biremis? sp. 1	0
Caloneis aemula	0
Caloneis bacillum	0.003952569
Caloneis cf. lineatus	0
Caloneis cf. ventricosa	0
Caloneis lewisii	0.003952569
Caloneis sp. 1 (girdle view)	0

Percent Abundance	S3-260
Caloneis sp. 2	0
Caloneis sp. 3	0
Caloneis sp. 4	0
Campylodiscus sp. 1	0
Capartogramma crucicula	0
Cavinula scutelloides	0
Cavinula sp. 1	0
Cocconeis cf. peltoides	0
Cocconeis costata var. costata	0
Cocconeis diminuta	0
Cocconeis disculoides	0
Cocconeis elongatum	0
Cocconeis placentula	0.009881423
Cocconeis scutellum	0
Coscinodiscus cf. lineatus	0.001976285
Coscinodiscus marginatus	0.019762846
Cosmoneis pusilla	0.001976285
Cosmoneis sp. 1	0
Cosmoneis sp. 2	0
Craticula cuspidata	0
Cyclostephanos sp. 1	0.009881423
Cyclostephanos sp. 2	0
Cyclotella atomus?	0.033596838
Cyclotella caspia	0.0256917
Cyclotella cyclopuncta	0.005928854
Cyclotella distinguenda	0
Cyclotella meneghiniana	0.003952569
Cyclotella rossii	0.013833992
Cyclotella sp. 2	0
Cyclotella striata	0.0256917
Cyclotella stylorum	0
Cymatopleura solea	0
Cymatosira belgica	0.037549407
Cymbella affinis	0
Cymbella cf. excisiformis	0
Cymbella janischii	0
Cymbella mexicana	0
Cymbella minuta	0
Cymbella sp. 2	0
Cymbella turgidula	0

Percent Abundance	S3-260
Cymbopleura A	0
Cymbopleura cuspidata	0
Cymbopleura sp. 1	0
Decussata placenta	0
Delphineis minutissima	0.0256917
Delphineis surirella	0.005928854
Denticula kuetzengii	0.007905138
Diadesmis cf. contenta	0.124505929
Diadesmis gallica	0
Diatoma mesodon	0
Diatoma moniliformis	0
Diatoma vulgaris	0
Diatomella balfouriana	0
Dimeregramma minor	0
Diploneis boldtiana	0.005928854
Diploneis cf. bombus	0
Diploneis cf. didyma	0
Diploneis elliptica	0
Diploneis pseudovalis	0
Diploneis smithii	0
Diploneis sp. 1	0
Diploneis sp. 2	0
Diploneis interrupta	0
Discostella stelligera	0
Encyonema minutum	0
Encyonema nicafei	0.001976285
Encyonema sp. 1	0
Encyonema sp. 2	0
Encyonema sp. 3	0
Encyonema sp. 4	0
Encyonema triangulum	0
Encyonopsis microcephala	0
Epithemia adnata	0.003952569
Epithemia frickei	0
Epithemia smithii	0
Epithemia sorex	0
Epithemia turgida	0.003952569
Eunotia richbuttensis	0
Eunotia sp. 1	0
Eunotia sp. 2	0

Percent Abundance	S3-260
Eunotia sp. 3 (GV)	0
Fallacia pygmaea	0.011857708
Fragilaria brevistriata	0
Fragilaria capucina	0
Fragilaria cf. microstriata	0
Fragilaria elliptica	0.003952569
Fragilaria schulzii	0
Fragilaria tenera	0
Fragilaria vaucheriae	0
Frickea lewisiana	0
Frustulia amphipleuroides	0
Frustulia capitata	0
Frustulia rhomboides var. viridula	0
Frustulia sp. 1	0
Frustulia vulgaris	0
Geissleria cf. kriegeri	0
Geissleria decussis	0
Gomphoneis hurculeana	0
Gomphoneis sp. 1	0.001976285
Gomphoneis sp. 3	0
Gomphonema acuminatum	0
Gomphonema innocens	0.003952569
Gomphonema kobayasii	0
Gomphonema mammilla	0
Gomphonema olivaceoides	0
Gomphonema olivaceum	0
Gomphonema sp. 1	0
Gomphonema sp. 2	0
Gomphonema sp. 3	0
Gomphonopsis exiguum	0
Gomphosphenia lingulatiformis	0
Grammatophora cf. macilenta	0
Gyrosigma temperii	0
Gyrosigma cf. balticum	0
Gyrosigma sp.1	0
Gyrosigma spencerii	0
Hantzschia sp. 1 girdle view	0
Hantzschia sp. 2 girdle view	0
Hantzschia sp. 3	0
Hantzschia sp. 4	0

Percent Abundance	S3-260
Hantzschia virgata	0
Hippodonta costulata	0
Hippodonta coxiae	0.005928854
Hippodonta hungarica	0.005928854
Hippodonta sp. 1	0
Hippodonta sp. 2	0
Karayevia amoena	0
Karayevia clevei	0
Kobayasiella sp. 1	0
Leptocylindrus cf. danicus	0
Luticola sp. 1	0
Luticola sp. 2	0.015810277
Luticola sp. 3	0
Luticola sp. 4	0
Luticola sp. 5	0.001976285
Mastogloia smithii	0
Mastogloia sp. 1	0
Mastogloia sp. 2	0
Melosira sp. 1	0
Melosira varians	0
Meridion circulare var. constrictum	0
Meridion sp. 1	0.003952569
Navicula A	0
Navicula abunda	0
Navicula angusta	0
Navicula antonii	0
Navicula brachium	0
Navicula cari	0.011857708
Navicula cf. capitoradiata	0
Navicula cf. galloae	0
Navicula cf. heuflerii	0
Navicula cf. ludloviana (CA)	0
Navicula cf. oblonga	0
Navicula cf. patrickii	0
Navicula cf. reichardtiana	0.003952569
Navicula cf. reinhardtii	0
Navicula cf. salinarum	0
Navicula cf. schweigeri	0
Navicula cf. subinflata	0.007905138
Navicula cf. tripunctata	0.017786561

Percent Abundance	S3-260
Navicula cf. zostereti	0.001976285
Navicula clementis	0
Navicula denta	0
Navicula difficillima	0
Navicula facilis	0
Navicula germainii	0
Navicula glomus	0.001976285
Navicula gregaria	0.003952569
Navicula halophila	0.005928854
Navicula kotschyi	0.001976285
Navicula lanceolata	0.001976285
Navicula marginulata	0
Navicula oculiformis	0
Navicula peregrina	0.005928854
Navicula perminuta	0.003952569
Navicula phyllepta	0
Navicula slesvicensis	0
Navicula sp. 1	0
Navicula sp. 10	0
Navicula sp. 11	0
Navicula sp. 12	0
Navicula sp. 13	0
Navicula sp. 14	0
Navicula sp. 2	0
Navicula sp. 3	0.007905138
Navicula sp. 5	0
Navicula sp. 6	0
Navicula sp. 7	0
Navicula sp. 8	0
Navicula sp. 9	0
Navicula subinflata	0
Navicula subminiscula	0
Navicula trivialis	0
Navicula vilaplanii	0
Naviculoid diatom 1	0
Naviculoid diatom 2	0
Neidiopsis sp. 1	0
Neodephaneis pelagica	0
Nitzschia amphibia	0.007905138
Nitzschia angustata	0

Percent Abundance	S3-260
Nitzschia biacrula	0
Nitzschia bita	0.003952569
Nitzschia brevissima	0.027667984
Nitzschia cf. agnita	0.013833992
Nitzschia cf. biremis	0
Nitzschia cf. borealis	0
Nitzschia cf. groefii	0
Nitzschia cf. laevis	0
Nitzschia cf. macilenta	0
Nitzschia cf. subacicularis	0
Nitzschia clausii	0.003952569
Nitzschia columbiana	0
Nitzschia communis	0
Nitzschia commutata	0
Nitzschia constricta	0
Nitzschia cylindrus	0
Nitzschia debilis	0
Nitzschia desertorum	0
Nitzschia dissipata	0.007905138
Nitzschia filiformis	0
Nitzschia fonticola	0
Nitzschia frustulum	0
Nitzschia gracilis	0
Nitzschia incognita	0
Nitzschia inconspicua	0
Nitzschia innominata	0
Nitzschia levidensis	0.005928854
Nitzschia linearis	0
Nitzschia marginulatus	0
Nitzschia microcephala	0
Nitzschia minuta	0
Nitzschia nana	0
Nitzschia obtusa	0
Nitzschia palea	0
Nitzschia panduriformis	0.003952569
Nitzschia pellucida	0.001976285
Nitzschia perminuta	0
Nitzschia proxima	0.009881423
Nitzschia punctata	0.009881423
Nitzschia pusilla	0.007905138

Percent Abundance	S3-260
Nitzschia scalaris	0
Nitzschia sigma	0.001976285
Nitzschia sigmaformis	0
Nitzschia sociabilis	0
Nitzschia sp. 1	0
Nitzschia sp. 2	0
Nitzschia sp. 3	0
Nitzschia sp. 4	0
Nitzschia sp. 5	0
Nitzschia sp. 6	0
Nitzschia sp. 7	0
Nitzschia sp. 8	0
Nitzschia umbonata	0
Opephora martyi	0
Opephora olsenii	0
Opephora sp. A	0
Orthoseira sp. 1	0
Paralia sulcata	0.055335968
Parlibellus cf. plicatus	0
Parlibellus sp. 2	0
Pinnularia biceps	0
Pinnularia borealis	0
Pinnularia divergens	0.007905138
Pinnularia divergentissima	0
Pinnularia ignobilis	0
Pinnularia interrupta	0
Pinnularia marchica	0
Pinnularia microstauron	0.001976285
Pinnularia sp. 10	0
Pinnularia sp. 11	0
Pinnularia sp. 12	0
Pinnularia sp. 13	0
Pinnularia sp. 3	0
Pinnularia sp. 4	0.001976285
Pinnularia sp. 5	0
Pinnularia sp. 6	0
Pinnularia sp. 7	0
Pinnularia sp. 8	0
Pinnularia sp. 9	0
Pinnularia sp.1	0

Percent Abundance	S3-260
Pinnularia sp.2	0
Pinnularia viridis	0
Placoneis cf. gastrum	0.001976285
Placoneis elginensis	0
Placoneis paralegali	0
Placoneis sp. 1	0
Placoneis sp. 2	0
Placoneis sp. 3	0
Plagiogramma cf. minima	0
Planothidium abbreviatum	0
Planothidium apiculatum	0
Planothidium biporomum	0.001976285
Planothidium dubium	0
Planothidium frequentissimum	0.003952569
Planothidium lanceolatum	0
Planothidium minutissimum	0
Planothidium paragali	0
Planothidium rostratum	0
Planothidium sp. 1	0
Planothidium sp. 2	0
Planothidium sp. 3	0.001976285
Platessa bahlsii	0.007905138
Platessa cf. hustedtii	0
Pleurosigma diverse-striatum	0
Psammothidium? Sp. 1	0
Pseudostaurosira americana	0.011857708
Pseudostaurosira parasitica	0
Pseudostaurosira brevistriata	0
Pseudostaurosiropsis sp. 1	0.013833992
Pseudostaurosiropsis sp. 1 (GV)	0
Punctastriata mimetica	0
Reimeria sinuata	0
Rexlowea sp. 1	0
Rhaphoneis amphiceros	0.0256917
Rhaphoneis tenuis	0
Rhoicosphenia cf. marina	0.003952569
Rhoicosphenia sp. 1	0
Rhopalodia acuminatum	0.009881423
Rhopolodia gibba	0
Rhopolodia musculus	0.009881423

Percent Abundance	S3-260
Sellaphora cf. hohnii	0
Sellaphora laevissima	0
Sellaphora pulchra	0
Sellaphora pupula	0
Sellaphora rexii	0
Sellaphora bacillum	0.001976285
Skeletonema sp. 1	0
Stauroforma exiguaformis	0
Stauroneis agrestis	0
Stauroneis CA	0
Stauroneis cf. vandevijveri	0
Stauroneis circumborealis	0
Stauroneis conspicua	0
Stauroneis GV	0
Stauroneis kriegeri	0
Stauroneis sp. 1	0
Stauroneis sp. 2	0
Stauroneis sp. 3	0
Stauroneis sp. 4	0
Staurophora cf. soodensis	0
Staurosira construens	0.007905138
Staurosira construens var. binodis	0
Staurosirella leptosauron var. dubia	0.003952569
Staurosirella sp. 1	0
Stephanodiscus sp. 1	0
Surirella angusta	0
Surirella brebissonii	0.005928854
Surirella cf. iowensis	0
Surirella ovalis	0
Surirella peisonis	0
Surirella sp. 1	0
Surirella splendida	0.001976285
Symmetrical biraphid1	0
Symmetrical biraphid2	0
Synedra cf. fulgens	0
Synedra famelica	0
Synedra ulna var. biceps	0
Synedra ulna var. ramesi	0
Tabularia fasciculata	0
Tabularia ktenoeoides	0

Percent Abundance	S3-260
Thalassionema nitzschioides	0.009881423
Thalassiosira baltica	0.009881423
Thalassiosira cf. lineata	0.007905138
Thalassiosira cf. tenera	0.005928854
Thalassiosira decipiens	0.015810277
Thalassiosira eccentrica	0.007905138
Thalassiosira ferelineata	0
Thalassiosira oestrupii	0
Thalassiosira proschkinae	0.011857708
Thalassiosira sp. 10 Cooper	0.017786561
Thalassiosira sp. 2-1 Cooper	0.013833992
Trachyneis aspera var. vulgaris	0
Triceratium sp. 2	0.005928854
Triceratium sp.1	0
Tryblionella debilis	0.003952569
Tryblionella salinarum	0
Tryblionella sp. 1	0
Tryblionella sp. 2	0
Ulnaria acus	0
Ulnaria ulna	0.003952569
Undulate colony??	0
unknown araphid	0
Unknown biraphid	0
Unknown CA	0
Unknown colony	0
Unknown GV?	0

Appendix F

CALIBRATION SET DATA

These data are collected from the Academy of Natural Sciences of Drexel University with assistance by Don Charles and Patrick Boylan.

Sample	Latitude	Longitude	TP	pH	cond	TN
GS01412800	39.4725	-75.2558	73.00	6.55	227	4.90
GS01482500	39.6436	-75.3304	334.00	7.73	202	2.60
NJAN0694	39.64868167	-75.3742733	196.50	7.07	286	4.83
BFBM000199	39.68956	-75.27306	72.40	6.96	560	0.55
BFBM000212	39.73801	-75.23289	79.30	7.03	224	1.81
NJAN0683	39.74040917	-75.2588586	158.50	6.77	194	1.83
GS01477125	39.74419	-75.28018	106.00	7.05	229	1.99
NJAN0673	39.74678639	-75.1949553	559.50	6.64	202	3.06
NJSD91	39.789173	-75.136425	104.00	6.51	225	
GS01467359	39.83448	-75.0668	141.00	6.61	172	0.88
GS01467150	39.9031	-75.0217	246.00	7.20	230	1.12
GS01465887	39.91268	-74.80709	223.00	6.73	152	1.36
GS01467027	40.01503	-74.95622	64.00	6.96	279	1.71
GS01408175	40.03338	-74.14276	28.20	6.66	150	0.62
NJSD48	40.05443992	-74.8604549	72.83	7.25	251	
GS01464577	40.06523	-74.66652	157.00	6.75	314	1.26
GS01464539	40.07739	-74.73026	27.10	6.64	261	1.11
GS01408100	40.11007	-74.2189	33.00	6.97	205	0.82
GS01408000	40.1614	-74.155	40.00	7.47	192	0.39
GS01464504	40.16722	-74.6773	143.00	7.33	209	1.20
GS01464515	40.1769	-74.5992	149.00	7.20	242	2.30
NJAN0490	40.19275583	-74.1951172	34.00	6.71	231	0.46
NJAN0489	40.20437361	-74.2563239	53.50	6.67	225	0.55
NJAN0488	40.20892222	-74.2635681	203.50	6.88	233	0.56
NJAN0118	40.21720528	-74.7663719	322.50	7.50	292	3.20
GS01407846	40.24959	-74.23484	149.00	6.84	310	10.15
GS01405340	40.29615	-74.3979	106.00	7.01	224	0.92
NJAN0448	40.31433139	-74.3617847	31.00	6.36	227	0.90
BFBM000213	40.32254	-74.35944	70.80	6.70	257	1.24
NJAN0470	40.32357806	-74.1736708	62.00	7.18	334	1.11
NJAN0466	40.33000417	-74.1721814	45.50	7.12	303	0.92
NJAN0451	40.35987722	-74.3676917	65.50	6.61	405	14.67
GS01405960	40.36554	-74.26873	133.00	7.02	196	0.64
NJSD94	40.471176	-74.419286	50.50	6.34	214	
DE-101031	39.8122249	-75.4511138	58.00	7.28	301	1.74
DE-103051	39.8065017	-75.6804627	156.00	7.41	400	4.86
DE-105071	39.7091862	-75.6550323	96.00	7.42	275	3.18
DE-105151	39.69891	-75.67261	76.00	7.53	318	3.76
DE-106141	39.637632	-75.7290117	9.00	7.37	290	1.92
DE-109081	39.4372	-75.7135	28.00	7.15	307	4.52

Sample	Latitude	Longitude	TP	pH	cond	TN
DE-114021	39.64845	-75.62173	127.31	7.02	309	1.27
DE-201161	39.30128539	-75.6409659	38.79	6.47	249	4.51
DE-205241	39.1236344	-75.5322631	76.76	7.36	212	6.20
DE-206461	39.0362162	-75.5103916	50.28	7.46	207	5.29
DE-303021	38.74269	-75.32985	77.67	7.34	298	6.06
DE-C08014	39.5638	-75.7178	32.00	7.49	290	2.31
DE-C08025	39.5317	-75.7135	229.00	7.47	353	4.06
DE-C13046	39.1739	-75.5392	75.00	6.87	402	1.26
DE-C15056	39.0169	-75.5558	159.00	6.71	209	3.98
DE-EPA03-072	39.71233	-75.66255	133.00	7.37	255	3.12
DE-EPA03-107	39.68559	-75.70956	58.00	6.99	601	3.59
DE-EPA03-128	39.65484	-75.77616	31.00	7.73	436	1.71
DE-P01092	39.7829	-75.493	42.00	7.15	221	1.17
DE-P01115	39.7628335	-75.5218413	102.50	7.75	476	1.65
DE-P03015	39.7526829	-75.6012771	85.00	7.49	751	1.09
DE-P03030	39.73982	-75.60455	57.00	7.15	691	1.25
DE-P03043	39.71595	-75.62556	29.50	7.26	299	1.98
DE-P04007	39.8180068	-75.6429281	33.00	7.42	298	2.32
DE-P05013	39.7775181	-75.6950378	23.00	7.58	257	2.98
DE-P05066	39.7199623	-75.6660852	155.00	7.25	249	3.35
DE-P06021	39.67053	-75.77275	12.50	7.66	294	2.80
DE-P06037	39.65313	-75.75374	46.00	7.03	297	2.62
DE-P06061	39.6348233	-75.7698286	108.00	6.81	253	1.33
DE-RA51	38.5559049	-75.5648356	96.50	6.35	212	9.70
MVO1480870	39.968611	-75.673611	210.00	7.80	400	6.10
MVO1581649	39.491944	-76.258889	15.00	7.50	296	3.20

Sample	TOC	DO	Hardness	Turbidity	Temp °C	Alkalinity
GS01412800		10.06	61.9	3.58	11.87	
GS01482500		8.93	42.3	23.60	20.43	
NJAN0694			102.0		20.20	
BFBM000199	1.48	9.33	222.0	11.90	15.70	60.00
BFBM000212		8.76		5.48	15.00	
NJAN0683			69.2		22.60	
GS01477125		8.60	69.8	6.26	17.60	
NJAN0673			67.7		22.00	
NJSD91		4.11	45.5	11.37	21.03	
GS01467359		4.88	34.8	19.80	20.47	
GS01467150		7.28		37.90	27.43	
GS01465887		4.96	30.0	12.65	26.13	
GS01467027		8.40		2.98	14.90	
GS01408175		7.21	18.5	3.34	25.17	
NJSD48		3.23	59.8	11.13	18.76	
GS01464577		7.93	62.8	14.57	21.47	
GS01464539		8.73	62.0	6.71	12.90	
GS01408100		9.56	34.6	7.34	12.13	
GS01408000		8.98	87.9	8.95	15.83	
GS01464504		7.70	57.3	9.98	22.10	
GS01464515		8.23	65.1	4.58	18.40	
NJAN0490			83.7		18.60	
NJAN0489			66.0		22.90	
NJAN0488			53.8		23.50	
NJAN0118		7.50				
GS01407846		9.39	96.6	9.88	11.53	
GS01405340		8.26	42.9	13.80	21.40	
NJAN0448			56.8		23.10	
BFBM000213		8.49		10.10	14.50	
NJAN0470			117.5		22.40	
NJAN0466			109.9		19.80	
NJAN0451			108.5		22.60	
GS01405960		6.70	60.2	4.54	15.10	
NJSD94		2.84	38.8	5.44	23.57	
DE-101031	6.00	8.75	65.9	5.00	20.85	44.30
DE-103051	3.30	9.62	139.0	3.00	19.00	71.20
DE-105071	4.80	8.81	81.2	11.00	21.66	43.00
DE-105151	2.80	8.40	105.0	4.00	22.21	60.30
DE-106141	4.10	7.47	70.0	3.00	15.15	32.60
DE-109081	2.00	8.67	84.5	3.00	15.44	43.70

Sample	TOC	DO	Hardness	Turbidity	Temp °C	Alkalinity
DE-114021	6.06	8.35	67.2	68.00	11.69	57.85
DE-201161		9.31	67.9	5.38	13.27	25.44
DE-205241	3.92	7.10	66.5	5.96	18.24	29.00
DE-206461	3.53	13.25	62.9	5.90	15.27	21.76
DE-303021	5.09	9.80	17.8	3.49	12.26	43.23
DE-C08014	6.00	10.00	73.3	5.00	13.14	29.70
DE-C08025	2.20	10.17	120.0	10.00	14.62	41.30
DE-C13046	3.30	9.29	98.8	4.00	15.11	66.60
DE-C15056	8.70	8.62	73.4	8.00	20.69	44.10
DE-EPA03-072	5.70	8.81	74.3	24.00	21.14	39.70
DE-EPA03-107	6.90	6.98	118.0	5.00	21.00	42.50
DE-EPA03-128	2.70	9.22	78.4	2.00	15.78	42.70
DE-P01092	3.40	8.08	57.5	2.00	19.83	39.60
DE-P01115	5.20	7.76	108.0	6.00	20.20	55.40
DE-P03015	4.50	8.47	137.0	10.00	23.68	46.80
DE-P03030	4.00	7.85	139.0	3.00	21.58	57.80
DE-P03043	3.05	7.63	78.3	2.50	19.85	55.20
DE-P04007	2.30	9.49	80.7	2.00	18.25	46.20
DE-P05013	1.50	8.58	87.8	1.00	15.57	54.70
DE-P05066	5.90	8.76	74.9	19.00	20.64	40.80
DE-P06021	1.55	9.73	70.7	1.00	15.01	28.80
DE-P06037	3.40	7.52	72.9	5.00	21.46	35.50
DE-P06061	3.80	8.15	55.4	15.00	17.35	34.10
DE-RA51	5.15	7.83	65.0	1.00	16.87	19.70
MVO1480870		9.50			20.60	
MVO1581649		7.50			22.10	

Sample	ACsubkra	ADminmur	AEtuscul	AHaffine	Ahdeflex	AHexigum	AHminuti
BFBM00019	0.00	0.00	0.00	0.00	0.00	0.00	0.80
BFBM00021	0.33	0.00	0.00	0.00	0.33	0.49	4.42
BFBM00021	0.21	0.00	0.00	0.43	0.00	0.21	5.13
DE-101031	9.17	0.00	0.00	0.00	0.00	1.50	7.00
DE-103051	0.16	0.00	0.00	0.00	0.00	0.16	0.33
DE-105071	1.80	0.00	0.00	0.00	0.00	0.00	6.21
DE-105151	0.64	0.00	0.00	0.00	0.00	0.00	4.34
DE-106141	6.55	0.00	0.00	0.00	1.47	0.65	6.71
DE-109081	0.00	0.00	0.00	0.00	0.00	0.00	13.25
DE-114021	0.00	0.00	1.17	0.00	0.00	0.00	21.83
DE-201161	0.00	0.00	0.00	0.00	0.33	1.50	15.50
DE-205241	0.00	0.00	0.50	0.00	0.50	0.17	27.67
DE-206461	0.00	0.00	0.00	0.00	0.00	0.33	47.17
DE-303021	0.00	0.00	0.83	0.00	0.00	0.00	13.83
DE-C08014	0.00	0.00	0.00	0.00	0.16	0.00	11.67
DE-C08025	0.00	2.05	0.00	0.00	0.00	0.00	2.69
DE-C13046	0.00	0.00	0.00	0.00	0.00	1.32	36.69
DE-C15056	0.00	0.00	0.00	0.00	0.00	0.11	2.74
DE-EPA03-0	2.99	0.00	0.00	0.00	0.00	0.17	0.33
DE-EPA03-1	25.95	0.00	0.00	0.00	0.00	3.03	5.31
DE-EPA03-1	0.99	0.00	0.00	0.00	0.66	0.00	11.37
DE-P01092	2.15	0.00	0.00	0.00	0.00	3.63	2.64
DE-P01115	0.16	0.00	0.00	0.00	0.00	0.16	2.47
DE-P03015	0.00	0.00	0.00	0.00	0.00	0.00	0.49
DE-P03030	0.78	0.00	0.00	0.00	0.11	0.39	24.90
DE-P03043	13.79	0.00	0.00	0.00	0.16	0.00	24.47
DE-P04007	3.36	0.00	0.00	0.00	0.00	0.16	13.76
DE-P05013	0.33	0.00	0.00	0.00	0.00	0.00	31.40
DE-P05066	7.28	0.00	0.00	0.00	0.17	0.00	2.15
DE-P06021	8.46	0.00	0.00	0.00	0.00	0.16	7.97
DE-P06037	5.89	0.00	0.00	0.00	0.16	0.33	5.73
DE-P06061	0.00	0.00	0.00	0.00	0.00	0.00	42.36
DE-RA51	0.00	0.00	0.00	0.00	0.00	0.33	6.67
GS0140534	0.00	0.00	0.00	0.00	0.00	0.00	4.68
GS0140596	0.00	0.00	0.00	0.00	0.00	0.00	9.11
GS0140784	0.00	0.00	0.00	0.00	0.00	0.33	9.50
GS0140800	0.00	0.00	0.00	0.00	0.00	0.05	9.73
GS0140810	0.00	0.00	0.00	0.16	0.00	0.65	5.88
GS0140817	0.00	0.00	0.00	0.00	0.00	0.00	8.50
GS0141280	0.00	0.00	0.00	0.00	0.00	0.58	12.22
GS0146450	0.33	0.00	0.00	0.00	0.00	0.33	2.00
GS0146451	0.00	0.00	0.00	0.00	11.44	0.33	4.72
GS0146453	0.00	0.00	0.00	0.00	0.00	0.00	2.17
GS0146457	0.00	0.00	0.00	0.00	0.67	0.00	6.50
GS0146588	0.00	0.00	0.00	0.00	0.00	1.33	1.33
GS0146702	0.83	0.00	0.00	0.00	0.00	2.83	3.33
GS0146715	3.41	0.00	0.00	0.00	0.00	0.77	2.86

GS01467359	0.33	0.00	0.00	0.00	0.00	0.33	1.67
GS01477125	0.00	0.00	0.00	0.00	0.00	0.00	3.17
GS01482500	0.00	0.00	0.00	0.00	0.00	0.33	0.00
MVO148087	0.26	0.00	0.00	0.00	0.00	0.00	8.34
MVO158164	6.22	0.00	0.00	0.00	3.11	0.00	35.25
NJAN0118	3.05	0.00	0.00	0.00	0.00	0.17	0.44
NJAN0448	0.00	0.00	0.00	0.00	0.00	0.00	3.67
NJAN0451	0.00	0.00	0.00	0.00	0.00	0.00	6.66
NJAN0466	0.00	0.00	0.00	0.00	0.00	0.00	0.99
NJAN0470	0.00	0.00	0.00	0.00	0.00	0.00	1.33
NJAN0488	0.00	0.00	0.00	0.00	0.00	0.00	6.00
NJAN0489	0.00	0.00	0.00	0.00	0.00	0.00	8.83
NJAN0490	0.33	0.00	0.00	0.00	0.00	0.00	8.00
NJAN0673	0.00	0.00	0.00	0.00	0.00	0.33	0.00
NJAN0683	0.00	0.00	0.00	0.00	0.00	0.00	1.66
NJAN0694	0.00	0.00	0.00	0.00	0.00	0.67	0.67
NJSD48	0.00	0.00	0.00	0.00	0.00	0.00	5.00
NJSD91	0.00	0.00	0.00	0.00	0.00	0.00	1.70
NJSD94	0.00	0.00	0.00	0.00	0.00	0.00	9.32

AHreimer	Ahrivula	AMcopula	AMpedcls	ASformos	AUalpige	AUambig	AUdistns
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.82	0.16	0.00	0.00	0.00	0.98	0.00
0.00	1.92	0.00	0.00	0.21	0.00	0.00	0.00
0.00	0.00	0.00	15.33	0.00	0.00	0.00	0.00
0.00	0.16	0.00	4.28	0.00	0.00	0.00	0.00
0.00	17.65	0.33	0.33	0.00	0.00	0.00	0.00
0.00	1.45	0.00	1.61	0.00	0.00	0.00	0.00
0.00	21.44	0.00	0.00	0.00	0.00	0.00	0.00
5.68	0.63	0.00	0.00	0.00	0.00	0.00	0.00
0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
0.33	0.50	0.33	0.50	0.17	0.00	16.83	2.83
0.00	0.00	0.00	0.33	0.17	0.00	1.00	0.00
0.00	1.83	0.33	0.00	0.00	0.00	0.50	0.67
21.39	1.13	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.88	0.11	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.50	0.00	11.30	0.00	0.00	0.00	0.00
0.00	0.15	0.00	1.37	0.00	0.00	0.00	0.00
0.49	20.59	0.00	0.49	0.00	0.00	0.00	0.00
0.00	0.33	0.00	23.27	0.00	0.00	0.00	0.00
0.00	0.00	0.00	2.30	0.00	0.00	0.00	0.00
0.00	0.00	0.00	23.57	0.00	0.00	0.00	0.00
0.06	2.46	0.00	5.09	0.00	0.00	0.00	0.00
0.00	1.15	0.00	3.94	0.00	0.00	0.00	0.00
0.00	20.16	0.16	2.56	0.00	0.00	0.00	0.00
0.00	20.27	0.00	0.50	0.00	0.00	0.00	0.00
0.00	16.23	0.00	5.13	0.00	0.00	0.00	0.00
0.00	38.37	0.00	2.11	0.00	0.00	0.00	0.00
0.00	23.73	0.00	0.82	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.20	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.33	0.00	0.00	0.08	0.00	1.08	0.00
0.00	1.17	0.00	0.00	0.00	0.00	0.33	0.00
0.00	1.67	0.11	0.22	0.00	0.00	0.11	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
0.00	0.33	0.00	0.00	0.00	0.00	0.17	0.00
0.00	0.33	0.50	0.00	0.00	0.00	0.00	0.00
0.00	3.67	0.33	0.00	0.00	0.00	0.17	0.00
0.00	0.05	0.14	0.02	0.00	0.00	2.13	0.00

0.00	0.67	0.33	0.17	0.00	0.00	1.00	0.00
0.00	0.17	0.83	0.00	0.00	0.00	0.17	0.00
0.00	0.00	0.17	0.00	0.00	0.00	1.67	0.00
0.00	1.59	0.00	8.87	0.00	0.00	0.00	0.00
0.00	16.34	0.00	1.06	0.00	0.00	0.00	0.00
0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.33	0.00	0.66	0.17	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00
0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.17
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.20	0.00	0.00	0.00	34.20	0.00	1.60	0.00
0.00	0.00	0.00	0.00	54.80	0.00	0.00	0.00
0.00	0.09	0.28	0.00	4.90	0.19	3.67	0.00

AUgranlt	AUgrnang	AUitalic	AUpusill	AUsubart	AUtenell	BApardxa	BRmicroc
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
0.21	0.00	0.00	0.00	0.00	0.00	1.92	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.33	1.33	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
0.00	0.00	0.11	0.00	0.00	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	9.51	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16
0.00	0.00	0.00	0.00	0.00	4.50	0.00	3.50
1.00	0.00	0.00	0.00	0.00	0.00	9.89	0.50
0.00	0.00	0.00	0.00	0.00	0.00	1.33	0.00
0.00	20.78	0.00	0.00	0.00	0.00	3.50	0.00
0.00	0.00	0.00	0.00	0.00	0.00	2.33	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.67	0.17	0.00
0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
12.11	0.00	3.72	0.00	0.00	0.00	0.48	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.00
0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00
0.07	0.00	0.00	0.00	0.00	0.00	2.45	0.00
0.50	0.00	0.00	0.00	0.61	0.00	0.00	0.00
5.33	0.00	0.00	0.00	0.00	0.00	15.33	0.50
0.00	6.49	0.00	0.00	0.00	0.00	2.83	0.00
0.00	0.00	0.00	0.00	1.82	0.00	0.33	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	4.33	0.00
0.00	0.00	0.00	0.00	0.17	0.00	0.83	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
4.83	0.00	0.00	0.00	2.00	0.00	0.00	0.00
0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.90	13.50	0.00	0.00	0.00	0.00	0.00	0.00
0.47	0.85	0.00	2.92	0.00	3.77	0.19	0.00

CAbacill	CAhyalin	CBnavicu	CCfluvtl	CCpedcls	CCplacen	CCplaeug	CCplalin
0.40	0.00	0.40	0.00	0.00	0.00	0.00	0.00
0.33	0.33	0.00	0.00	0.00	2.13	0.00	0.00
0.43	0.00	0.00	0.00	0.00	0.43	0.00	0.00
0.33	0.00	0.00	0.00	0.17	0.33	3.17	0.00
0.16	0.00	0.00	0.00	0.00	0.00	1.65	0.33
0.00	0.00	0.00	0.00	0.82	0.16	1.31	0.33
0.16	0.00	0.00	0.00	0.64	0.00	0.48	0.16
0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.33	0.00	0.00	1.00	0.00	1.00
0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	0.17	1.00	30.40	0.66
0.61	0.00	0.00	0.00	0.00	0.00	0.46	1.37
0.16	0.00	0.16	0.00	0.00	0.82	0.16	0.16
0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.49	0.00	0.00	0.00	0.33	0.00	1.15	0.00
0.65	0.00	0.00	0.00	0.00	0.33	1.47	0.00
0.00	0.00	0.00	0.00	14.27	0.06	1.90	0.00
0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	1.76	0.48	2.24	0.48
0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
0.00	0.00	0.00	0.00	0.83	0.17	8.44	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	2.29	0.00	13.26	1.64
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.37	0.00	0.00	0.00	0.19	0.00	0.00
0.74	0.00	0.25	0.00	0.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	0.00	1.33	0.00	0.00
0.60	0.00	0.22	0.00	0.00	0.00	0.00	4.81
0.16	0.00	0.49	0.00	0.00	0.65	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.17	0.17	0.00	0.17	0.00	22.19
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00
0.17	0.00	2.67	0.00	0.00	0.00	0.00	0.17
1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.33	0.00	0.00	0.00	0.00	0.17	0.00	0.00
0.33	0.00	0.00	0.00	0.00	15.17	0.00	2.83
0.07	0.00	0.09	0.00	0.02	0.00	0.02	0.32

0.17	0.00	0.00	0.00	0.00	0.17	0.00	0.33
0.17	0.00	0.50	0.00	0.00	0.83	0.00	0.17
0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00
0.20	0.00	0.13	0.00	5.30	0.00	9.01	26.16
0.07	0.00	0.00	0.00	0.07	0.00	1.52	3.84
1.39	0.00	0.00	0.17	0.00	0.00	0.00	0.44
0.00	1.33	0.00	0.00	0.00	0.00	0.00	0.67
0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.33
0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
1.00	2.66	0.00	0.00	0.00	0.00	0.00	0.83
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.33
0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.67	0.33	0.00	1.50	0.00	1.83	0.00	10.98
1.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00
0.00	0.00	0.19	0.00	0.00	1.69	0.00	0.00

CCpselin	CEpulch	CMaera	CMheterp	CPcrucic	CSinvisi	CStholif	CYatomus
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.16	0.00	0.00	0.00	0.00	0.00	0.16	0.00
0.00	0.00	0.00	0.00	2.35	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
0.00	0.82	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
0.00	0.00	0.17	0.67	0.00	0.00	0.00	0.00
0.00	0.00	0.00	1.17	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.15
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.82	0.00	0.00	0.00	0.00	0.00	0.00
0.00	2.35	0.00	0.00	0.00	0.00	0.00	0.06
0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.05	0.00	0.00	0.05	0.00	0.00	0.00
0.00	0.16	0.00	0.00	0.33	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.17	0.00	0.00	0.00	0.17	0.17	0.00
2.94	1.33	0.00	0.00	0.06	0.00	0.00	0.00
0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.09	0.02	0.00	0.48	0.11	0.00	0.52

0.00	0.17	0.00	0.00	0.00	0.17	0.00	0.00
0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.17	0.00	0.00	0.00	2.67	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	3.50	0.00	4.17	0.00	0.00	0.00
0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.17
0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

CYmenegh	DAvulg	DEkuetzi	DIconfer	DTpseuds	DTstelli	DTwolter	ECminutu
0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.82	0.00	0.00	1.15	0.00	0.16	0.00	0.00
0.21	0.00	0.00	0.43	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.49	2.97	0.00	0.00	0.00	0.00	0.00	0.00
1.63	0.00	0.00	0.00	0.00	0.00	0.00	0.33
0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.16	0.00	0.00	0.00	0.00	0.00	0.00	10.31
0.00	0.00	0.00	0.32	0.63	0.00	0.00	0.32
0.00	0.00	3.17	0.00	0.00	0.00	0.00	0.67
0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00
1.17	0.00	0.00	0.00	0.00	4.00	0.00	0.00
1.17	0.00	2.17	0.00	0.00	0.50	0.00	1.00
0.67	0.00	0.17	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
1.09	0.11	0.00	0.22	0.11	0.00	0.00	0.38
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.30
0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.16
0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.66
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00
2.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
0.32	0.64	0.00	0.00	0.00	0.00	0.00	8.80
4.65	0.00	0.00	0.00	0.00	0.00	0.00	1.83
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.98
1.47	0.00	0.00	0.00	0.00	0.00	0.00	1.15
0.00	0.33	0.17	0.00	0.00	0.00	0.00	0.00
0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.19	0.00	0.00	0.00	0.19	0.19	0.00	0.19
0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
0.05	0.00	0.00	0.00	0.00	0.00	0.00	1.15
0.16	0.00	0.00	0.16	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00
2.08	0.00	0.00	0.08	2.99	0.08	0.00	2.00
0.17	0.00	0.00	0.67	0.33	0.00	0.00	0.00
0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
0.83	0.00	0.00	3.83	0.00	0.33	0.00	0.00
0.33	0.00	0.00	0.17	0.00	0.00	0.00	0.00
0.70	0.00	0.00	5.63	0.39	0.00	0.00	0.36

2.50	0.00	0.00	3.00	0.00	0.00	0.00	0.00
0.33	0.00	0.00	4.67	0.17	0.00	0.00	0.00
35.00	0.00	0.00	0.00	1.17	2.50	0.00	0.00
0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.26
0.46	0.40	0.00	0.00	0.00	0.00	0.00	0.26
0.28	0.00	0.00	0.22	0.61	0.22	0.00	0.06
0.00	0.00	0.00	0.33	14.17	0.33	0.00	0.33
0.00	0.00	0.00	0.00	3.99	0.00	0.00	0.33
0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
0.33	0.00	0.00	0.00	0.33	0.00	0.00	0.00
3.00	0.00	0.33	0.00	0.33	0.00	0.00	0.00
0.83	0.00	0.00	0.00	0.00	0.00	0.00	1.33
0.33	0.00	0.00	0.00	0.67	0.00	0.00	1.00
0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
0.33	0.00	0.00	3.66	0.00	0.00	0.00	0.33
7.50	0.00	0.00	0.00	1.67	0.00	0.00	0.00
0.80	0.00	0.00	0.00	0.00	5.40	0.00	0.20
0.00	0.00	0.00	0.00	2.40	6.50	0.80	0.60
0.09	0.00	0.00	0.00	0.00	4.24	0.00	0.85

ECsilesi	Eolmini	EOsubmin	EUarcus	EUbilun	EUcaroli	EUexigua	EUfallax
0.00	3.59	0.00	0.00	0.80	0.00	0.00	0.00
0.33	4.58	0.33	0.00	0.00	0.00	0.16	0.00
0.00	2.14	0.00	0.00	0.64	0.00	1.50	0.00
0.33	12.67	0.00	0.00	0.00	0.00	0.00	0.00
0.00	2.64	3.62	0.00	0.00	0.00	0.00	0.00
0.00	8.17	0.00	0.00	0.00	0.00	0.00	0.00
0.48	4.50	0.32	0.00	0.00	0.00	0.00	0.00
0.00	6.22	0.00	0.00	0.00	0.00	0.00	0.00
0.00	8.36	0.00	0.00	0.32	0.00	0.00	0.00
0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	2.17	0.00	0.00	0.00
0.17	0.00	0.00	0.00	0.17	0.00	0.00	0.00
0.17	0.00	0.00	0.00	1.67	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00
0.00	8.91	0.16	0.00	1.94	0.00	0.16	0.00
0.00	21.17	0.00	0.00	0.00	0.00	0.00	0.00
0.00	12.56	0.00	0.00	0.00	0.00	0.00	0.00
0.22	27.41	0.00	0.05	1.04	0.00	0.22	0.00
0.00	0.66	0.17	0.00	0.00	0.00	0.00	0.00
0.30	11.23	0.00	0.00	0.00	0.00	0.00	0.00
0.49	12.19	0.33	0.00	0.00	0.00	0.00	0.00
17.99	5.61	0.00	0.00	0.00	0.00	0.00	0.00
0.00	32.57	0.16	0.00	0.00	0.00	0.00	0.00
0.00	3.11	0.00	0.00	0.00	0.00	0.00	0.00
0.17	15.17	0.06	0.00	0.00	0.00	0.00	0.00
0.16	5.58	0.00	0.00	0.00	0.00	0.00	0.00
6.40	2.56	0.00	0.00	0.00	0.00	0.00	0.00
1.99	15.95	0.00	0.00	0.00	0.00	0.00	0.00
0.00	7.12	0.00	0.00	0.00	0.00	0.00	0.00
0.16	10.41	0.00	0.00	0.00	0.00	0.00	0.00
2.45	4.26	0.00	0.00	0.00	0.00	0.00	0.00
0.00	3.16	0.00	0.00	0.00	0.00	0.00	0.00
0.00	45.33	0.00	0.00	2.00	0.00	0.17	0.00
0.56	0.19	0.00	0.00	2.43	0.00	10.49	0.00
0.00	0.99	0.00	0.00	0.99	0.00	2.22	0.00
0.33	2.83	0.00	0.00	0.33	0.00	0.00	0.00
0.98	1.97	0.00	0.00	0.11	0.00	0.00	0.00
0.65	0.16	0.00	0.00	1.31	0.49	0.16	0.00
0.33	0.17	0.00	0.00	0.00	7.50	0.17	0.00
2.83	0.75	0.00	0.00	0.58	0.08	0.00	0.00
0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.00
0.11	10.00	0.00	0.00	0.00	0.00	0.00	0.00
0.17	0.00	0.00	0.00	0.50	0.00	0.00	0.00
1.50	3.00	0.17	0.00	0.17	0.00	1.33	0.00
0.33	3.50	0.00	0.00	0.67	0.00	0.00	0.00
0.17	8.83	0.00	0.00	0.00	0.00	0.00	0.00
0.16	4.27	0.09	0.00	0.27	0.00	0.16	0.00

0.83	2.83	0.00	0.00	0.00	0.00	0.00	0.00
0.67	3.17	0.00	0.00	0.00	0.00	0.33	0.00
0.00	1.17	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.46	0.33	0.00	0.00	0.00	0.00	0.00
0.07	1.12	0.00	0.00	0.00	0.00	0.00	0.00
0.00	20.53	0.61	0.00	0.06	0.00	0.11	0.00
0.17	0.17	0.00	0.00	1.67	0.00	3.83	0.00
0.00	2.66	0.00	0.00	1.00	0.00	7.65	0.00
0.00	9.08	0.33	0.00	0.50	0.00	0.00	0.00
0.00	5.99	0.00	0.00	1.33	0.00	0.67	0.00
0.00	4.83	0.33	0.00	3.33	0.00	1.00	0.00
0.00	0.67	0.00	0.00	0.83	0.00	3.83	0.00
0.00	1.67	0.00	0.00	0.00	0.00	2.17	0.00
4.50	1.00	0.00	0.00	0.33	0.00	0.00	0.00
0.00	10.32	0.00	0.00	0.50	0.00	0.00	0.00
0.00	0.67	0.33	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10
1.41	0.28	0.00	0.00	1.13	0.00	0.47	0.00

EUflexuo	EUformic	EUimplic	EUincisa	EUinterm	EUmaior	EUmeistr	EUmonodo
0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.33	0.00	0.00	1.17	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
0.33	0.00	0.00	0.17	0.00	1.33	0.00	0.00
0.33	0.00	0.00	0.83	0.00	0.00	0.00	0.00
0.00	0.65	0.97	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	1.32	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.27	0.05	0.00	0.00	0.00	0.16
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	1.17	0.00	0.00	0.00	0.00
0.00	0.00	0.19	0.00	0.19	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00
0.00	0.00	6.17	0.00	0.00	0.00	0.00	3.33
0.00	0.00	0.16	0.00	0.05	0.00	0.00	0.00
0.00	0.00	0.33	2.29	0.00	0.00	0.16	0.00
0.00	0.00	1.83	0.83	3.33	0.00	0.00	0.00
0.17	0.00	0.50	2.24	0.17	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
0.00	0.11	4.00	0.00	0.00	0.00	0.00	0.33
0.00	0.00	1.17	0.00	0.00	0.00	0.17	0.00
0.00	0.00	0.17	0.00	0.00	0.00	0.17	0.00
0.00	0.00	1.17	0.67	0.00	0.00	0.00	0.00
0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00
0.00	0.02	0.07	0.02	0.00	0.00	0.00	0.00

0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.67	0.17	0.17	0.00	0.00	0.17
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.33	3.49	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00
0.00	0.83	4.33	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.00	23.67	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.19	3.11	2.45	0.00	0.00	0.00	0.00

EUpaludo	EUpectin	EUpecund	EUpirla	EUrhombo	EUsepten	EUsoleir	EUsubarc
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00
0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.17	0.33	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.17	0.00	0.00	0.17	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.05	0.00	0.11	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.15	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.33	0.00	0.00	0.33	0.00	0.00	0.00
5.50	0.67	0.33	0.33	3.33	0.00	0.00	2.50
0.00	0.42	0.00	0.00	0.17	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	3.83	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	1.33	0.67	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	1.32	0.00	0.09	0.00	0.00	0.09

EUtenell	FGbicapi	FGstrang	FGviresc	FIpelli	FRcapfra	FRcapgra	FRcapuci
0.00	0.00	0.00	0.00	0.00	0.00	0.40	12.75
0.00	0.00	0.16	0.00	0.00	0.00	0.00	4.26
5.34	0.00	0.00	0.00	0.00	0.00	0.21	0.85
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.00
0.00	0.00	0.00	0.00	0.00	0.00	6.83	0.00
0.00	0.00	0.00	0.00	0.00	1.33	13.67	0.00
0.00	0.00	0.00	0.00	0.00	0.50	2.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	9.83	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00
0.00	0.00	0.00	0.00	0.00	0.00	1.11	0.00
0.00	0.00	0.00	0.00	0.00	0.00	1.16	0.00
0.00	0.55	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.17	1.33	0.00	0.67	1.50	0.00	0.33	0.00
1.31	0.00	0.00	0.00	0.00	0.00	0.19	5.99
0.49	0.00	0.00	0.25	0.00	0.00	0.00	3.94
0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.50
0.16	0.00	0.00	0.00	0.00	0.00	0.05	0.49
0.33	0.00	0.16	1.63	0.00	0.00	1.47	2.45
0.50	0.00	2.83	8.17	0.00	0.00	0.33	1.17
0.00	0.08	0.00	0.25	0.00	0.00	0.08	2.24
0.33	0.17	0.17	0.67	0.00	0.00	0.50	2.50
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.50
4.33	0.00	0.00	0.33	0.00	0.00	0.00	1.00
0.00	0.00	0.00	0.17	0.00	0.00	1.00	3.50
0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
0.00	0.02	0.00	0.18	0.00	0.02	0.11	0.11

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
0.17	0.00	0.00	0.83	0.00	0.00	0.00	7.33
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00
0.00	0.00	0.00	0.50	0.00	0.00	1.00	0.00
0.00	0.00	0.00	0.17	0.00	0.00	0.67	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.00
0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00	0.00	0.00	0.67	0.00	0.00	9.33	0.00
0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.17	0.00	0.00	2.50	0.00
0.00	0.00	0.00	0.17	0.00	0.00	0.33	0.00
0.00	0.00	0.00	0.50	0.00	0.00	6.66	0.00
0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	5.40	0.60
0.10	0.00	0.00	0.00	0.00	0.80	1.90	0.10
0.00	0.00	0.09	1.04	0.00	2.82	1.51	1.22

FRcroton	FRmesole	FRvaucap	FRvauche	Fscrassi	FSkramme	FSvulgar	GEaccep
0.00	0.00	0.00	1.20	0.40	0.00	0.80	0.00
2.29	0.98	0.00	0.65	0.00	0.00	0.00	0.00
0.64	0.00	0.00	0.00	0.21	0.00	0.85	0.00
0.00	0.00	0.00	0.83	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.82	0.00	0.00	0.00	0.49
0.00	0.00	0.00	0.82	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
0.00	0.00	0.00	4.75	0.00	0.00	1.31	0.00
0.00	0.00	0.00	2.52	0.32	0.00	0.63	0.00
0.00	0.00	0.00	1.50	0.00	0.00	2.17	0.00
0.00	0.00	0.00	1.67	0.00	0.00	1.00	0.00
0.00	0.00	0.00	0.17	0.00	0.00	0.33	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
0.00	0.17	0.00	0.50	0.00	0.33	3.00	0.00
0.00	0.00	0.00	11.99	0.32	0.00	0.49	0.00
0.00	0.00	0.00	1.26	0.32	0.00	0.00	0.00
0.00	0.00	0.00	3.64	0.00	0.00	0.00	0.00
0.00	0.00	0.00	8.32	0.05	0.00	0.27	0.00
0.00	0.00	0.00	0.17	0.00	0.00	0.00	2.16
0.00	0.00	0.00	1.82	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.50	0.00	0.00	0.06	0.00
0.00	0.16	0.00	0.33	0.00	0.00	0.00	0.00
0.00	0.00	0.00	2.40	0.00	0.00	0.00	0.16
0.00	0.00	0.00	5.15	0.00	0.00	0.66	0.00
0.00	0.00	0.00	0.66	0.00	0.00	0.17	0.17
0.00	0.00	0.00	0.00	0.00	0.00	0.16	1.14
0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.83	0.17	0.00	0.33	0.00
1.12	0.00	0.00	0.00	0.75	0.94	1.12	0.00
0.00	0.00	0.00	0.00	0.49	0.00	1.97	0.00
0.33	0.17	0.00	0.00	0.33	0.00	1.33	0.00
0.11	0.00	0.00	0.00	0.05	0.00	1.80	0.00
0.16	0.00	0.00	0.00	0.16	0.33	1.14	0.00
0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
0.17	0.08	0.00	0.00	0.00	0.75	0.00	0.00
0.17	0.17	0.00	0.17	0.33	0.00	0.67	0.00
0.06	0.00	0.00	0.11	1.39	0.06	0.28	0.00
0.00	0.33	0.00	0.00	1.00	9.17	5.83	0.00
0.83	0.00	0.00	0.67	0.00	0.00	1.50	0.00
0.83	0.00	0.00	0.50	0.00	0.00	0.67	0.00
0.67	0.17	0.00	0.00	0.00	0.00	0.17	0.00
0.00	0.00	0.00	1.18	0.00	0.48	0.50	0.00

0.00	0.00	0.00	0.00	0.00	0.17	0.50	0.00
1.00	0.50	0.00	0.00	0.00	0.00	2.17	0.00
0.00	0.00	0.00	0.33	0.17	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.46	0.00	0.33	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.06	0.00	0.00	0.11	0.11
0.00	0.00	0.00	0.00	0.17	0.00	0.83	0.00
0.00	0.00	0.00	0.50	0.83	0.00	0.83	0.00
0.00	0.00	0.00	0.66	0.00	0.00	0.33	0.00
0.83	0.00	0.00	0.33	0.00	0.00	0.67	0.00
0.00	0.00	0.00	2.83	0.00	0.00	0.33	0.00
0.00	0.00	0.00	0.67	0.33	0.00	0.00	0.00
0.00	0.33	0.00	1.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
1.00	0.00	0.00	3.99	0.33	0.00	0.17	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	32.80	1.80	0.00	0.00	0.00	0.00	0.00
0.00	2.20	0.00	0.20	0.00	0.00	0.00	0.00
4.90	0.66	0.00	2.07	1.41	0.00	0.28	0.00

GEdecu	GOangstt	GOangust	GOgracil	GOinsign	GOkobaya	GOlage	GOmicrop
0.00	1.20	0.00	0.00	0.00	1.59	0.00	0.00
0.49	0.49	0.00	1.15	0.00	0.00	0.00	0.00
1.50	1.07	0.00	0.21	0.00	0.21	0.00	0.21
0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00
0.16	0.00	0.00	0.00	0.00	0.82	0.00	0.00
0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.65	0.00	0.00
0.00	0.00	0.00	0.32	0.00	3.00	0.00	0.00
0.00	6.50	0.00	0.50	0.00	6.83	0.00	0.00
0.00	0.83	0.00	1.00	0.50	0.33	0.00	0.17
0.00	0.17	0.00	0.33	0.00	6.00	0.00	0.00
0.00	0.67	0.00	1.17	0.00	6.83	0.00	0.00
0.00	0.33	0.00	1.17	0.00	1.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.65	0.00	0.00
0.32	0.00	0.00	0.00	0.00	1.26	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00
0.00	0.00	0.00	0.27	0.00	0.38	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.52	0.00	0.00	0.00	0.00	0.76	0.00	0.00
0.33	0.00	0.00	0.16	0.00	0.33	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.16	0.00	0.00	0.00	0.00	0.66	0.00	0.00
0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
0.00	0.00	1.33	0.00	0.00	0.00	0.00	0.00
0.00	0.94	0.00	1.69	0.37	0.00	0.19	0.00
2.22	0.25	0.00	0.00	0.00	0.00	0.00	0.99
2.33	0.00	0.00	0.67	0.00	11.00	0.00	0.00
3.12	0.00	0.00	0.05	0.00	0.33	0.00	0.00
0.98	0.49	0.00	0.16	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00
0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00
0.17	0.00	0.00	0.17	0.00	0.00	0.00	0.00
0.11	0.11	0.00	0.00	0.00	1.44	0.00	0.00
0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
0.00	0.33	0.00	0.50	0.00	0.00	0.00	0.00
0.00	0.33	0.00	0.33	0.00	0.00	0.00	0.17
0.33	0.17	0.00	0.00	0.00	1.33	0.00	0.00
0.27	0.84	0.00	0.14	0.00	0.11	0.00	0.00

0.33	0.67	0.00	0.00	1.00	0.00	0.00	0.00
0.67	0.67	0.00	0.33	0.17	1.00	0.00	0.50
0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.20	0.20	0.00
0.07	0.00	0.00	0.00	0.00	0.07	0.00	0.00
0.06	0.28	0.00	0.00	0.00	25.92	0.00	0.00
0.50	0.00	0.00	0.33	0.00	0.33	0.00	0.00
0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.49	0.00	0.00	0.00	0.00	3.63	0.00	0.00
0.33	0.00	0.00	0.50	0.00	3.00	0.00	0.00
0.00	0.00	0.00	0.83	0.00	0.00	0.00	3.67
0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00
1.17	0.00	0.00	2.00	0.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	0.00	0.33	0.00	0.00
0.33	0.00	0.00	0.67	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00
0.00	0.47	0.00	0.47	0.00	0.00	0.00	0.00

GOminutm	GOolihut	GOolivcm	GOpalius	GOparvul	GOpatric	GOpygm	GYacumin
0.80	0.00	0.00	0.00	3.98	0.00	0.00	0.00
0.33	0.00	0.00	0.00	3.76	0.00	0.00	0.00
0.21	0.00	0.00	0.00	4.70	0.00	0.00	0.00
0.83	0.00	0.00	0.00	0.33	0.00	0.33	0.00
0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00
9.80	0.00	0.00	0.00	0.16	0.00	0.82	0.00
0.16	0.00	0.00	0.00	0.00	0.00	0.16	0.00
0.00	0.16	0.00	0.00	1.15	0.00	0.00	0.00
0.00	0.00	0.00	4.26	15.14	0.00	0.00	0.00
0.00	0.00	0.00	0.00	4.67	0.00	0.00	0.00
0.00	0.00	0.00	0.00	11.17	0.00	0.00	0.00
0.00	0.00	0.00	0.00	4.67	0.00	0.00	0.00
0.00	0.00	0.00	0.00	1.83	0.00	0.00	0.00
0.00	0.00	0.00	0.00	5.33	0.00	0.00	0.00
0.00	0.00	0.00	2.43	3.89	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.95	0.00	0.00	0.00
0.00	0.00	0.00	0.17	1.82	0.00	0.00	0.00
0.00	0.00	0.00	0.49	6.02	0.00	0.00	0.00
0.00	0.17	0.00	0.00	0.17	0.00	0.17	0.00
0.00	0.00	0.00	0.00	1.37	0.00	1.37	0.00
0.00	0.00	0.00	0.00	0.99	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
0.00	0.00	0.00	0.00	1.15	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.39	0.00	0.06	0.00
0.33	0.16	0.00	0.00	0.82	0.00	4.76	0.00
2.40	0.00	0.00	0.00	0.96	0.00	0.00	0.00
0.17	0.00	0.00	0.00	1.83	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
0.00	0.16	0.00	0.00	0.49	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.66	0.00	1.66	0.00
0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00
0.00	0.00	0.00	3.37	11.80	0.56	0.00	0.00
0.00	0.00	0.00	1.97	12.81	0.00	0.00	0.00
0.00	0.00	0.00	0.00	8.33	0.17	0.00	0.00
0.66	0.00	0.00	0.00	1.86	0.00	0.00	4.32
0.33	0.00	0.00	0.16	5.88	0.33	0.00	0.00
0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
0.08	0.00	0.00	0.00	2.08	0.00	0.00	0.00
0.50	0.00	0.00	0.00	2.17	0.00	0.00	0.17
0.11	0.00	0.00	0.06	0.56	0.83	0.00	0.00
0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00
0.00	0.00	0.00	0.00	11.83	0.00	0.00	0.00
0.00	0.00	0.00	0.00	2.50	0.00	0.00	0.00
0.17	0.00	0.00	0.00	0.67	0.50	0.00	0.00
0.23	0.00	0.00	0.00	4.47	2.50	0.00	0.00

0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00
0.50	0.00	0.00	0.00	4.67	0.17	0.00	0.17
0.00	0.00	0.00	0.00	1.17	0.00	0.00	0.00
0.13	0.00	0.00	0.00	1.39	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.73	0.00	0.00	0.00
0.61	0.00	0.00	0.00	0.50	0.00	0.00	0.11
0.00	0.00	0.00	0.00	9.00	0.00	0.00	0.00
0.33	0.00	0.00	0.00	3.49	0.00	0.00	0.00
0.00	0.00	0.00	0.00	4.79	0.00	0.00	0.00
0.00	0.00	0.00	0.00	6.99	0.00	0.00	0.00
0.00	0.00	0.00	0.00	5.67	0.00	0.00	0.00
0.00	0.00	0.33	0.00	12.50	0.00	0.00	0.00
0.00	0.00	0.00	0.00	26.33	0.00	0.00	0.00
0.17	0.00	0.00	0.00	12.83	0.00	0.00	0.00
0.00	0.00	0.00	0.00	4.49	0.00	0.00	0.00
0.00	0.00	0.00	0.00	8.67	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00
0.28	0.00	0.00	1.69	0.66	0.00	0.00	0.00

HIcapita	HIhunga	KBsubtil	KVclevei	KVoblong	LUgoepp2	LUmutica	MDcircon
0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.80
1.47	0.00	0.00	0.16	0.00	0.98	0.82	0.00
0.85	0.00	0.21	0.21	3.63	0.00	0.21	0.00
0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.16	0.00	0.00	0.32	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.50
0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	0.00	0.00	0.00	1.17
0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.17
0.00	0.00	0.00	0.00	0.00	0.00	0.32	2.27
0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.47
1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.50
0.44	0.00	0.00	0.00	0.00	0.00	0.11	3.50
0.00	0.00	0.00	3.49	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.30
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	3.80	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.16
0.00	0.00	0.00	0.16	0.00	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	1.15	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.17
0.75	0.00	0.00	0.00	7.12	0.00	0.37	0.56
0.49	0.00	0.00	0.00	0.00	0.00	1.48	2.71
0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
0.44	0.00	0.00	0.00	0.27	0.38	0.00	0.05
0.49	4.58	0.33	0.00	10.46	0.00	0.16	0.33
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.17	0.00	0.00	0.00	1.16	0.00	0.33	0.17
0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00
0.11	0.00	0.00	0.00	0.06	0.00	0.00	0.00
0.00	0.00	8.33	0.00	0.00	0.00	0.33	0.17
0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.17
1.00	0.00	0.00	0.00	0.00	0.00	0.17	0.50
0.33	0.00	0.00	0.00	0.50	0.00	0.33	0.00
0.39	0.00	0.00	0.00	0.09	0.39	0.61	0.05

1.00	0.00	0.00	0.17	0.00	0.00	0.00	0.17
1.00	0.00	0.00	0.00	0.00	0.17	0.33	0.33
1.00	0.00	0.17	0.00	0.00	0.00	0.17	0.00
0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.11	0.00	0.00	0.00	0.00	4.94	0.00	0.00
0.67	0.00	0.00	0.00	0.33	0.00	0.17	0.00
0.00	0.00	0.00	0.00	12.65	0.33	0.83	0.00
0.00	0.00	0.00	0.00	0.83	0.00	0.33	0.00
0.33	0.00	0.00	0.00	0.00	0.33	0.17	0.00
0.33	0.00	0.00	0.00	0.00	0.00	3.00	0.00
0.33	0.00	0.00	0.00	0.00	0.00	0.33	0.00
0.00	0.00	0.00	0.00	0.00	0.33	0.50	0.00
1.83	0.00	0.00	0.00	0.00	0.00	0.33	0.00
0.67	0.00	0.00	0.00	0.00	0.00	0.67	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.19	0.09	0.00

MDcircul	MEvarian	MYagres	MYatomus	NAantoni	NAcaprad	NAcrypto	NAcrytds
0.00	0.80	0.80	0.00	0.00	0.40	1.20	0.00
0.00	0.49	0.00	0.00	0.00	0.00	7.53	0.00
0.00	0.21	2.14	0.00	0.00	0.00	1.71	0.00
0.00	0.33	0.00	0.00	0.50	0.00	0.17	0.00
0.16	4.78	0.00	0.00	1.48	0.00	0.00	0.00
0.00	0.82	0.00	0.00	0.00	0.00	0.65	0.00
0.00	0.16	0.00	0.00	0.32	0.16	0.00	0.00
0.00	0.49	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.63	0.00	0.16	0.00	0.00	3.94	0.00
0.00	0.17	0.00	0.00	0.00	7.83	4.00	0.00
0.00	0.00	0.00	0.00	0.00	6.83	5.67	0.00
0.00	0.17	0.00	0.00	0.00	1.50	0.50	0.00
0.00	1.33	0.00	0.00	0.00	1.17	0.00	0.00
0.00	0.67	0.00	0.00	0.00	0.33	1.83	0.00
1.94	0.00	0.00	0.16	0.00	0.00	3.24	0.00
0.00	0.00	0.00	14.69	0.00	0.00	2.05	0.00
0.50	0.50	0.00	0.00	0.00	0.00	1.49	0.00
1.15	1.37	0.00	0.11	0.00	0.00	5.47	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.15	0.00	0.00	0.30	0.00	1.06	0.00
0.00	1.15	0.00	0.00	0.16	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.16	0.00	0.33	0.00
0.00	0.00	0.00	0.00	1.15	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
0.64	0.48	0.00	0.00	1.12	0.00	0.48	0.00
0.00	0.66	0.00	0.00	0.00	0.00	1.00	0.00
0.17	0.66	0.00	0.00	0.00	0.00	0.17	0.00
0.00	0.16	0.00	0.00	0.00	0.00	0.49	0.00
0.00	1.47	0.00	0.00	0.00	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
0.17	0.33	0.17	0.00	0.00	0.00	0.17	0.00
0.00	0.00	0.00	0.75	0.00	0.00	1.12	0.00
0.00	0.00	0.00	0.00	0.00	0.00	2.96	0.00
0.00	0.00	0.50	0.00	0.00	0.17	1.33	0.00
0.00	11.59	0.11	0.00	0.00	1.09	0.33	0.00
0.00	10.29	0.00	0.33	0.00	0.00	2.29	0.49
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.33	0.08	0.17	0.00	0.00	0.33	0.91	0.00
0.00	0.00	0.17	0.00	0.17	0.00	1.33	1.00
0.00	0.28	0.06	0.00	0.00	0.00	1.94	0.72
0.00	0.00	0.17	0.00	0.00	0.00	2.50	0.50
0.33	0.67	0.17	0.00	0.00	0.00	3.33	0.00
0.00	3.00	0.17	0.00	0.00	0.00	4.50	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.50
0.05	1.11	0.02	0.00	0.00	0.02	1.39	0.00

0.00	0.17	0.00	0.00	0.00	0.17	3.50	3.00
0.00	1.33	0.17	0.00	0.00	0.00	5.67	0.33
0.00	1.17	0.00	0.00	0.00	0.33	0.67	0.00
0.13	0.26	0.00	0.00	0.07	1.26	0.07	0.00
0.13	2.31	0.00	0.07	0.13	1.32	0.53	0.00
0.00	0.06	0.06	0.00	0.00	0.06	0.11	0.00
0.17	0.00	0.00	0.00	0.00	0.00	3.00	0.00
0.33	0.17	0.00	0.33	0.00	0.00	0.33	0.00
0.66	0.17	0.00	0.00	0.33	0.00	1.98	0.00
1.00	0.83	0.00	0.00	0.00	0.00	0.00	0.00
0.67	0.00	1.67	0.17	0.00	0.00	2.17	0.00
0.00	7.83	0.00	0.67	0.00	0.00	0.33	0.00
0.33	4.33	0.00	0.00	0.00	0.00	0.83	0.00
0.00	1.17	0.00	0.00	0.00	0.00	0.00	0.00
0.33	5.99	0.00	0.00	0.00	0.00	2.33	0.00
0.00	0.00	0.00	0.50	0.00	0.00	7.83	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00
0.40	0.00	0.00	0.00	0.00	0.00	0.60	0.00
0.38	0.00	0.00	0.00	0.09	0.00	2.17	0.00

NAcryten	NAerifga	NAescamb	NAgermii	NAgregar	NAhmberg	NAlancel	NAlongcp
0.00	0.80	0.00	0.00	2.79	0.00	0.00	1.20
0.00	0.00	0.00	1.15	2.95	0.16	0.00	0.00
0.00	0.21	0.21	2.14	5.98	0.00	0.00	2.14
0.67	0.00	0.00	0.00	4.67	0.00	2.50	0.00
2.80	0.00	0.00	0.00	13.84	0.00	3.29	0.00
0.00	0.00	0.00	0.00	7.03	0.00	0.16	0.00
0.64	0.00	0.00	0.00	8.20	0.00	3.70	0.00
0.16	0.00	0.49	0.00	11.78	0.00	2.78	0.00
0.00	0.00	0.00	0.00	6.78	0.00	0.00	0.00
1.50	0.00	0.00	0.00	0.00	2.17	0.00	0.00
0.50	0.00	0.00	0.00	0.33	0.33	0.17	0.00
1.83	0.00	0.00	0.00	0.17	0.00	0.00	0.00
0.33	0.00	0.00	0.00	0.00	0.17	0.00	0.00
0.67	0.00	0.00	0.00	0.00	0.17	0.17	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	8.53	0.00	0.79	0.00
0.00	0.00	0.00	0.00	10.74	0.00	0.00	0.00
0.16	0.00	0.00	0.00	0.82	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.83	0.00	1.00	0.00
0.15	0.00	0.00	0.00	3.34	0.00	0.15	0.00
0.00	0.00	0.00	0.00	8.73	0.00	1.32	0.00
0.00	0.00	0.00	0.00	2.15	0.00	1.65	0.00
0.00	0.00	0.33	0.00	10.03	0.00	0.16	0.00
0.49	0.00	0.00	0.00	0.82	0.00	4.26	0.00
0.00	0.00	0.11	0.00	5.82	0.00	1.01	0.00
0.00	0.00	0.00	0.00	3.28	0.00	0.00	0.00
2.24	0.00	0.00	0.00	4.64	0.00	2.08	0.00
0.00	0.00	0.00	0.00	2.66	0.00	0.00	0.00
0.33	0.00	0.00	0.00	5.79	0.00	0.83	0.00
0.49	0.00	0.16	0.00	6.67	0.00	2.60	0.00
0.16	0.00	0.00	0.49	5.24	0.00	0.82	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	5.81	0.56	0.00	0.00	0.37
0.00	0.00	0.00	1.72	0.49	0.00	0.00	6.90
0.17	0.00	0.00	2.33	5.17	0.00	0.00	1.67
3.06	0.16	4.05	0.33	2.84	0.00	0.22	0.71
0.33	0.00	0.00	0.16	0.00	0.00	0.00	0.82
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
0.00	0.00	0.75	0.17	0.00	0.00	0.00	1.41
0.33	21.50	0.00	1.83	2.83	0.00	0.33	3.00
1.44	0.11	0.11	1.17	1.22	0.00	0.11	0.06
0.33	0.00	0.00	4.17	0.17	0.00	0.00	1.83
0.17	0.00	0.00	0.17	0.33	0.00	0.00	4.33
0.17	0.00	0.00	1.00	5.50	0.33	0.00	3.17
0.00	0.00	0.00	1.33	6.83	0.00	0.50	0.50
0.45	0.00	0.27	0.07	2.04	0.00	0.18	0.09

0.50	3.50	0.00	0.17	28.67	0.00	0.00	0.00
0.33	0.17	0.00	1.00	13.17	0.00	0.00	1.00
0.00	0.00	0.00	0.17	0.83	0.00	0.00	0.67
1.46	0.00	0.73	0.07	0.93	0.00	0.13	0.00
0.26	0.00	0.79	0.13	1.52	0.00	0.07	0.00
0.00	0.00	0.00	0.17	3.50	0.00	0.22	0.00
0.00	0.00	0.00	5.00	1.67	0.00	0.17	1.67
0.00	0.00	0.00	1.33	1.16	0.00	0.00	2.33
0.00	2.31	0.00	2.64	10.07	0.00	3.47	1.32
0.00	0.50	0.00	8.15	6.32	0.00	6.32	1.00
0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00
0.00	0.67	0.00	5.50	8.33	0.00	0.00	0.00
0.00	0.00	0.00	4.50	8.17	0.00	0.00	0.67
0.00	0.17	0.00	6.50	0.00	0.00	0.00	0.00
0.00	0.00	0.00	2.50	0.83	0.00	0.00	0.67
0.33	0.00	0.00	2.17	0.17	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.47	0.00	0.00	0.09	1.04	0.00	0.38	0.28

NAperegr	NApermnt	NAreichd	NArhynch	NArostel	NAsalinm	NAsubmur	NAsymtrc
0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00
0.00	0.33	0.00	0.33	0.16	0.00	1.64	0.65
0.00	0.00	0.00	1.28	1.92	0.00	0.43	0.64
0.00	0.33	0.00	0.00	0.33	0.00	0.00	0.00
0.00	0.33	0.00	0.00	0.82	0.16	0.00	0.00
0.00	3.27	0.00	0.00	1.80	0.00	0.00	0.00
0.00	0.96	0.00	0.00	1.29	0.00	0.00	0.00
0.49	6.06	0.00	0.00	0.65	0.00	0.00	0.00
0.00	0.00	0.00	7.41	0.00	0.00	0.00	0.00
0.00	0.00	0.00	1.17	0.00	0.00	0.00	0.00
0.00	0.00	0.00	2.17	0.00	0.00	0.00	0.00
0.00	0.00	0.00	1.83	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00
0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.97	0.00	0.00	0.00	0.00
0.00	5.53	0.00	2.05	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
0.00	0.00	0.00	1.59	0.11	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.15	0.46	0.00	0.15	0.15	0.00	0.00	0.00
0.00	14.99	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	2.18	0.00	0.00	0.34	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
0.00	0.83	0.00	0.00	0.17	0.00	0.00	0.00
0.00	2.76	0.00	0.00	0.49	0.00	0.00	0.00
0.00	5.56	0.00	0.00	1.47	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	4.87	0.56	0.00	0.00	1.31
0.00	0.49	0.00	3.94	1.23	0.00	0.00	0.00
0.00	0.00	0.00	1.17	7.33	0.00	0.00	3.00
0.00	0.00	0.55	2.57	2.84	0.00	0.05	0.16
0.00	0.00	0.00	3.10	0.65	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.67	0.91	0.08	0.00	0.00	0.08
0.00	0.17	0.00	0.33	2.33	0.00	0.00	1.00
1.00	0.00	0.00	0.17	2.83	0.00	0.39	0.33
0.00	0.00	0.00	6.83	1.67	0.00	0.00	0.00
0.00	0.00	0.00	5.50	0.33	0.00	0.00	0.50
0.00	1.17	0.00	2.33	0.00	0.00	0.00	0.00
0.67	2.00	0.00	0.17	0.50	0.00	2.33	0.83
0.00	0.00	2.43	1.93	0.45	0.00	0.82	0.00

0.50	0.00	0.00	0.17	1.67	3.33	0.00	0.33
0.00	0.00	0.00	1.83	0.33	0.17	0.83	0.00
0.00	0.00	0.00	0.00	0.50	0.00	0.17	0.00
0.00	0.73	0.00	0.00	0.07	0.00	0.00	0.13
0.07	0.00	0.00	0.00	0.07	0.00	0.00	0.33
0.00	0.44	0.00	0.00	0.06	0.00	0.00	0.55
0.00	0.00	0.00	0.83	2.00	0.00	0.00	0.00
0.00	0.00	0.00	1.50	1.33	0.00	0.00	0.00
0.00	0.00	0.00	0.50	4.13	0.00	0.00	0.99
0.00	0.00	0.00	1.66	3.00	0.00	0.00	2.66
0.00	0.00	0.00	1.33	0.33	0.00	0.00	0.00
0.00	0.00	0.00	1.17	1.17	0.00	0.00	1.17
0.00	0.00	0.00	2.00	0.33	0.00	0.00	2.00
0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00
0.00	0.00	0.00	0.67	0.33	0.00	0.00	0.33
0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.33
0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.47	0.09	0.00	0.00	0.00

NAtenell	NAtripun	NEalpinu	NIacidcn	NIamphib	NIarchib	NIbrevis	NIcapite
1.59	0.00	0.00	0.40	0.00	0.00	0.40	0.00
0.49	0.00	0.49	0.00	3.27	0.00	0.98	0.00
2.14	0.00	1.71	0.00	0.21	0.00	0.00	1.28
0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00
0.00	0.33	0.00	0.00	0.66	0.00	0.00	0.00
0.00	0.00	0.00	0.00	1.47	0.16	0.00	0.00
0.00	0.16	0.00	0.00	0.96	0.16	0.00	0.00
0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00
0.32	0.00	0.00	0.95	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	11.57	0.00	0.00	0.00
1.70	0.00	0.05	0.55	0.05	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.61	0.15	0.00	0.00
0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.56	0.22	0.00	0.00
0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
0.00	1.28	0.00	0.00	0.32	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.33	0.16	0.00	0.00
0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.00
0.50	0.00	1.50	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.37	0.37	0.00	0.00	0.00	0.00
0.00	0.00	1.97	0.00	0.00	0.25	0.00	0.74
0.17	0.00	0.17	0.00	1.17	0.00	0.00	0.00
0.05	0.00	0.00	0.00	0.11	0.00	0.00	0.05
0.49	0.00	0.98	0.00	0.00	0.16	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.17
3.50	0.00	0.00	0.17	0.00	0.00	0.00	0.00
0.22	0.00	0.06	0.00	1.28	0.00	0.00	0.11
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
3.00	0.00	0.33	0.00	0.00	0.00	0.17	2.83
1.00	0.00	0.50	0.00	0.17	0.00	0.00	2.00
2.67	0.00	0.00	0.00	0.50	0.00	0.00	0.17
0.09	0.11	0.00	0.00	3.11	0.00	0.05	0.07

2.17	0.17	0.00	0.00	0.50	0.00	2.67	0.33
0.33	0.00	0.00	0.17	0.33	0.00	0.67	0.00
0.00	0.00	0.00	0.00	1.67	0.00	0.00	0.00
0.00	0.79	0.00	0.00	0.86	0.00	0.00	0.00
0.00	0.13	0.00	0.00	0.40	0.00	0.00	0.00
0.00	0.00	0.00	0.17	2.11	0.00	0.00	0.00
1.50	0.00	0.00	0.00	1.00	0.00	0.00	1.00
1.33	0.00	1.33	0.00	0.00	0.00	0.00	0.67
1.32	0.00	0.00	0.00	0.33	0.00	0.00	0.00
2.00	0.00	0.33	0.00	0.33	0.00	0.00	0.67
4.00	0.00	0.33	0.00	0.00	0.67	0.00	3.00
2.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
2.33	0.00	0.33	0.00	0.33	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.67	0.00	0.00	0.00	4.16	0.00	0.00	0.00
0.33	0.00	0.00	0.00	10.83	0.00	0.00	1.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.20	0.00	0.00	0.00	0.20	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.28	0.38	0.19	0.00

NIclausi	NIdissip	NIfilifr	NIfontic	NIfrustu	NIgracil	NIincons	NIliebrt
2.79	0.40	0.40	0.00	0.00	0.00	0.40	0.00
0.33	0.00	0.33	0.00	0.00	0.33	0.00	0.00
0.64	0.85	0.00	0.00	0.00	0.43	0.21	0.00
0.00	0.83	0.00	2.17	0.67	0.00	4.17	0.00
0.00	0.49	0.00	3.62	8.57	0.00	8.24	0.00
0.00	0.16	0.00	8.50	0.98	0.00	12.42	0.00
0.00	0.64	0.00	2.73	13.02	0.00	40.35	0.00
0.00	1.64	0.00	0.16	0.65	0.00	0.16	0.00
0.00	0.00	0.00	0.47	0.63	0.00	0.00	0.00
0.00	4.00	0.17	0.00	0.00	1.00	0.00	0.00
0.00	1.83	0.00	0.00	0.00	0.67	0.00	0.00
0.00	0.83	0.00	0.00	0.00	0.33	0.00	0.00
0.00	0.17	0.00	0.00	0.00	0.50	0.00	0.00
0.00	2.17	0.00	0.00	0.00	0.67	0.00	0.00
0.00	0.32	0.00	0.65	0.65	0.00	0.00	0.00
0.00	0.95	0.00	0.63	0.00	0.00	0.00	0.00
0.00	0.00	0.00	1.65	0.33	0.00	0.00	0.00
0.00	0.55	0.00	0.77	0.66	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.17	0.00	0.83	0.00
0.00	0.00	0.00	0.00	0.30	0.00	4.55	0.00
0.00	1.15	0.00	0.82	0.33	0.00	0.33	0.00
0.00	0.00	0.00	0.17	1.82	0.00	4.79	0.00
0.00	0.49	0.00	0.16	20.07	0.00	5.76	0.00
0.00	0.00	0.00	0.00	12.60	0.00	4.26	0.00
0.00	0.00	0.00	0.73	3.64	0.00	0.78	0.00
0.00	0.00	0.00	0.16	2.63	0.00	1.97	0.00
0.00	0.32	0.00	0.16	1.12	0.00	0.48	0.00
0.00	0.50	0.00	0.66	0.83	0.00	0.00	0.00
0.00	0.33	0.00	2.32	2.81	0.00	17.72	0.00
0.00	0.65	0.00	0.16	0.33	0.00	4.23	0.00
0.00	0.00	0.00	1.15	0.49	0.00	0.33	0.00
0.00	0.00	0.00	0.00	2.16	0.00	1.16	0.00
0.00	0.00	0.00	0.83	0.17	0.00	0.00	0.00
0.75	0.37	0.00	0.00	0.00	0.00	0.00	0.00
0.49	1.23	0.25	0.00	0.00	0.00	0.25	0.00
2.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00
0.05	0.27	0.05	0.00	0.00	0.00	0.00	0.11
0.33	1.31	0.65	0.00	0.00	0.33	0.00	0.00
0.00	0.33	0.00	0.00	0.00	0.00	0.17	0.00
0.00	0.17	0.00	0.00	0.00	0.00	0.08	0.00
13.50	0.33	0.50	0.00	0.33	0.00	0.17	0.00
0.00	0.17	0.00	0.00	0.11	0.06	0.00	0.00
0.67	2.33	1.33	0.00	0.00	0.00	0.00	0.00
0.33	1.50	0.50	0.00	0.33	0.00	0.00	0.00
0.50	0.67	0.17	0.00	0.00	0.00	0.33	0.00
0.17	0.00	0.00	0.00	0.17	0.17	0.00	0.00
0.16	0.11	0.00	0.27	0.00	0.00	0.43	0.00

7.17	0.00	0.00	0.00	0.00	0.00	0.50	0.00
1.33	0.33	0.17	0.00	0.17	0.00	0.00	0.00
0.00	0.17	0.00	0.00	0.00	1.17	0.00	0.00
0.00	0.40	0.00	0.00	4.70	0.00	2.65	0.00
0.00	2.18	0.07	0.00	2.25	0.00	3.04	0.00
0.00	0.00	0.00	0.11	0.00	0.00	0.44	0.33
0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.33
1.00	0.00	0.00	0.83	1.83	0.00	0.00	0.00
0.00	1.32	0.00	0.33	0.00	0.00	1.65	0.00
0.00	3.16	0.00	0.00	0.67	0.00	0.33	0.00
0.00	0.00	0.00	0.00	6.33	0.00	0.00	0.00
0.00	0.67	0.00	1.00	1.00	0.00	0.00	0.67
0.00	0.67	0.00	0.00	0.33	0.00	0.00	0.00
0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.17
0.00	0.67	0.00	0.00	0.00	0.00	0.00	1.33
0.33	0.00	0.00	0.67	0.00	0.00	0.00	0.33
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00
0.38	0.56	0.00	0.00	1.13	0.47	0.00	0.00

NIlinear	NInana	NIpaldeb	NIpalea	NIpaleac	NIpsefon	NIrecta	NIscalpe
0.00	0.00	0.00	13.15	0.00	0.00	0.00	0.00
0.33	0.00	0.00	11.95	0.00	0.00	0.00	0.00
0.00	0.00	0.00	8.55	0.00	0.00	0.00	0.00
1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.16	0.00	0.00	0.65	0.00	0.00	0.00	0.00
0.16	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.49	0.00	0.00	0.16	0.00	0.00	0.00	0.00
1.42	0.00	0.00	0.79	0.00	3.47	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
0.33	0.50	0.00	0.00	0.00	0.00	0.00	0.00
0.33	0.00	0.00	0.17	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
0.17	0.00	0.00	0.17	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.65	0.32	0.00
1.90	0.00	0.00	1.42	0.00	3.16	0.00	0.00
2.31	0.00	0.00	0.50	0.00	0.00	0.00	0.00
0.66	0.00	0.00	1.75	0.00	1.86	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.16	0.00	0.00	0.16	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.11	0.00	0.17	0.50	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.32	0.00	0.00	0.16	0.00	0.00	0.00	0.00
0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.33	0.00	0.00	0.17	0.00	0.00	0.00	0.00
0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.65	0.00	0.00	0.33	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	1.83	0.00	0.00	0.17	0.00
0.00	0.00	0.00	8.05	0.00	0.00	0.37	0.00
0.49	0.00	0.00	7.14	0.00	0.00	1.72	0.00
0.00	0.00	0.00	2.33	0.00	0.00	0.00	0.00
0.05	0.00	0.00	2.24	0.00	0.00	0.44	0.00
0.49	0.00	0.00	6.37	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00
0.08	0.00	0.00	6.90	0.00	0.00	0.08	0.00
0.17	0.00	0.00	10.17	0.00	0.00	0.17	0.00
0.00	0.00	0.00	3.06	0.00	0.00	0.78	0.00
0.17	0.00	0.00	17.83	0.00	0.00	0.17	0.00
0.17	0.00	0.00	14.17	0.00	0.00	0.33	0.00
1.50	0.00	0.00	8.67	0.33	0.00	0.50	0.00
0.00	0.00	0.00	2.17	0.00	0.00	0.00	0.00
0.14	0.16	0.00	8.79	0.00	0.00	0.45	0.00

0.00	0.00	0.00	3.67	0.00	0.00	0.17	0.00
0.00	0.00	0.00	4.67	0.00	0.00	0.33	0.00
0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
0.00	0.00	0.20	0.60	0.26	0.00	0.00	0.00
0.00	0.00	0.00	0.07	0.40	0.00	0.00	0.00
0.00	0.00	0.00	1.66	0.00	0.00	0.17	0.00
0.00	0.67	1.67	4.17	0.33	0.00	0.17	0.00
0.33	0.50	1.16	0.67	0.00	0.00	0.00	0.00
0.33	0.33	2.64	1.82	0.00	0.00	0.00	0.00
0.33	0.00	1.00	1.66	0.00	0.00	0.00	0.00
1.00	0.00	3.67	2.83	0.00	0.00	0.00	0.00
0.00	0.67	2.33	2.17	0.00	0.00	0.00	0.00
0.00	1.83	3.33	2.00	0.00	0.00	0.00	0.00
0.00	0.00	0.17	0.17	0.00	0.00	0.33	0.00
1.16	0.33	2.00	1.50	0.00	0.00	0.67	0.00
0.00	0.00	8.17	6.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00
0.00	0.20	0.00	0.80	0.00	0.00	0.00	0.00
0.09	0.28	0.75	0.66	0.00	0.00	0.00	0.00

NIsociab	NItubcla	NUlapid	Nuneglec	NUwell	PCclemen	PDbrevis	Pdparasi
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.16	0.49	0.00	0.33	0.00	0.33	0.00
0.00	0.64	0.85	0.00	0.00	0.85	0.64	2.14
0.17	0.50	0.00	0.50	0.00	0.00	0.00	0.00
0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.64	0.16	0.49	0.00	0.00	0.00	0.00	0.00
0.00	3.79	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
0.32	9.24	0.00	0.00	0.00	0.00	0.00	0.00
0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.83	0.00	0.00	0.33	0.00	0.00	0.00
0.77	1.81	0.00	0.00	0.00	0.00	0.00	0.11
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.61	0.00	1.52	0.00	0.00	0.00	0.00
0.33	1.15	0.82	0.49	0.00	0.00	0.00	0.00
0.00	0.00	0.50	1.65	0.00	0.00	0.00	0.00
0.00	0.49	0.16	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.95	0.06	0.22	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.00
0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00
0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.16
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.33	0.17	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.49	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.17	0.33	0.00	0.83	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.82
0.00	0.16	0.00	0.00	0.00	0.33	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.25
0.00	0.33	0.17	0.00	0.00	0.00	0.00	0.33
0.00	0.00	0.11	0.00	0.11	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00
0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
0.00	0.02	0.00	0.00	0.00	0.18	0.00	0.05

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.50	0.00	0.00	0.00	0.00	0.00	0.17
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.46	0.00	0.00	0.00	0.00	0.00	0.07	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.67
0.67	1.00	0.00	0.00	0.00	3.83	0.00	0.00
0.99	0.33	0.00	0.00	0.00	0.00	0.00	0.00
0.33	0.67	0.00	0.00	0.00	0.33	0.00	0.00
0.67	0.00	0.00	0.00	0.00	0.67	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.33	0.00	0.00	0.00	0.33	0.33	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00
1.16	0.00	0.00	0.00	0.00	0.83	0.67	0.00
1.00	1.33	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.20
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.00

PIabauje	PIinterr	PImicros	PIobscur	PIsubros	PIviridi	PLconspi	PSgridao
0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00
0.00	0.16	0.82	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	5.83	0.00
0.00	0.00	0.00	0.00	0.00	0.00	2.14	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00
2.84	0.00	0.00	0.00	0.00	0.32	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	10.47	0.00
0.00	0.00	0.00	0.00	0.00	0.15	4.10	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	12.38	0.00
0.00	0.00	0.00	0.00	0.00	0.00	1.97	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.00	0.06	1.12	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	2.98	0.00
0.00	0.00	0.00	0.00	0.00	0.00	1.14	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.19	0.19	0.37	0.00	0.56	0.00	0.00	0.00
0.25	1.23	0.74	0.00	0.49	0.00	0.00	0.00
0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00
0.27	0.22	0.00	0.00	0.00	0.22	0.00	0.00
0.16	0.16	0.16	0.00	0.16	0.00	0.00	0.00
0.33	0.00	0.33	0.00	0.17	0.00	0.00	1.33
0.17	0.17	0.00	0.00	0.00	0.08	0.00	0.25
0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00
0.11	0.17	0.00	0.00	0.00	0.22	0.00	0.00
0.67	0.33	0.50	0.00	0.00	0.67	0.00	0.00
0.00	0.00	1.17	0.00	0.83	0.00	0.00	0.00
1.00	0.17	0.00	0.00	0.67	0.00	0.00	0.17
0.00	0.00	0.00	0.00	0.00	0.00	1.17	0.00
0.11	0.00	0.14	0.11	0.00	0.00	0.00	0.00

0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.67	0.00	0.00	0.17	0.00	0.33
0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00
0.00	0.33	0.00	1.33	0.00	0.00	0.00	0.00
0.00	0.00	1.16	0.00	0.67	0.00	0.00	0.00
0.00	0.00	0.33	0.00	0.66	0.00	0.00	0.00
0.00	0.00	0.50	0.83	0.00	0.00	0.00	0.00
0.00	0.00	0.50	1.67	0.00	0.33	0.00	0.00
0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.17	0.00	2.67	0.00	0.00	0.00
0.00	0.00	1.00	0.00	0.00	0.00	0.17	0.00
0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00
0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00
0.19	0.00	0.09	0.00	0.00	0.00	0.00	0.00

PShelvet	PSsubato	PSventra	PTellip	PTfreq	PThauck	PTlanceo	PTrostr
0.00	0.00	0.00	0.00	4.78	0.00	3.19	1.20
0.00	0.16	0.00	0.00	2.95	0.00	0.49	0.98
0.00	0.21	0.00	0.00	0.85	0.00	0.21	0.00
0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00
0.00	0.00	0.00	0.00	1.81	0.00	0.00	0.00
0.00	0.00	0.00	0.00	2.12	0.00	0.00	0.33
0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.00
0.00	0.00	0.00	0.00	1.47	0.00	0.00	0.00
0.00	0.00	0.00	0.00	1.10	0.00	2.52	0.63
2.83	0.00	0.00	2.83	0.00	0.00	1.67	0.00
0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.33	0.00	0.00	0.17	0.00	0.17	1.67	0.00
0.00	0.00	0.00	0.33	0.00	0.00	0.33	0.00
4.50	0.00	0.00	1.50	0.00	20.00	13.67	0.00
0.00	0.97	0.00	0.00	0.49	0.00	5.35	0.49
0.00	0.00	0.00	0.00	8.06	0.00	7.27	0.95
0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.50
0.00	0.27	0.00	0.00	2.35	0.00	7.82	2.02
0.00	0.00	0.00	0.00	6.15	0.00	0.33	0.00
0.00	0.00	0.00	0.00	15.63	0.00	0.61	0.00
0.00	0.00	0.00	0.00	2.31	0.00	0.00	0.00
0.00	0.00	0.00	0.00	2.15	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00
0.00	0.00	0.00	0.00	3.93	0.00	0.16	0.00
0.00	0.00	0.00	0.00	2.18	0.00	0.11	0.00
0.00	0.00	0.00	0.00	6.08	0.00	0.33	0.00
0.00	0.00	0.00	0.00	1.60	0.00	0.00	0.00
0.00	0.00	0.00	0.00	3.82	0.00	0.33	0.00
0.00	0.00	0.00	0.00	4.30	0.00	0.99	0.00
0.00	0.00	0.00	0.00	2.60	0.00	0.00	0.00
0.00	0.00	0.00	0.00	1.15	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.00
0.00	0.00	0.17	0.00	1.83	0.00	5.67	0.00
0.00	0.37	0.00	0.00	0.19	0.00	0.00	0.00
0.00	0.00	0.00	0.00	1.48	0.00	0.74	0.00
0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
0.00	0.66	0.00	0.00	0.22	0.00	0.38	0.00
0.00	2.29	0.00	0.00	0.98	0.00	0.16	0.00
0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.00	0.00	0.00	0.25	0.00	1.33	0.08
0.00	0.00	0.00	0.00	0.33	0.00	0.33	0.00
0.00	0.11	0.00	0.00	0.06	0.00	6.56	0.06
0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
0.00	5.33	0.17	0.00	0.83	0.00	0.83	0.00
0.00	0.33	0.00	0.00	4.67	0.00	0.83	0.17
0.00	0.00	0.00	0.00	6.83	0.00	0.83	0.50
0.00	0.11	0.00	0.00	0.05	0.00	0.75	0.11

0.00	0.00	0.00	0.00	2.83	0.00	0.00	0.67
0.00	0.00	0.00	0.00	2.67	0.00	1.17	0.17
0.00	0.00	0.00	0.00	0.33	0.00	0.50	0.00
0.00	0.00	0.00	0.00	0.73	0.00	0.66	0.00
0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.00
0.00	0.50	0.00	0.00	4.66	0.00	0.55	0.00
0.00	0.33	0.00	0.00	0.67	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.17	0.33	0.33	0.00	7.92	0.00	8.91	0.00
0.00	0.00	0.00	0.00	4.66	0.00	2.33	0.00
0.00	2.50	0.00	0.00	0.67	0.00	1.00	0.00
0.17	0.33	0.00	0.00	0.50	0.00	0.00	0.00
0.00	0.33	0.00	0.00	1.00	0.00	0.33	0.00
0.00	0.00	0.00	0.00	2.67	0.00	1.33	0.00
0.00	0.00	0.00	0.00	1.66	0.00	2.50	0.00
0.00	0.00	0.00	0.00	1.67	0.00	0.33	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.09	1.13	0.00	0.00	0.56	0.00	0.19	0.00

REsinuta	ROabbre	RSlinea	SApinnat	SFpupula	SFseminu	SOexiguf	SRconstr
0.00	0.00	0.00	0.00	3.59	3.19	0.00	0.00
0.00	0.00	0.00	1.80	2.78	0.49	0.00	0.33
0.00	0.00	0.00	0.43	0.64	1.71	0.00	1.07
1.17	16.33	0.00	0.00	0.00	0.00	0.00	0.00
6.92	15.16	0.00	0.00	0.00	0.00	0.00	0.00
6.21	0.98	0.00	0.00	0.00	0.00	0.00	0.00
4.02	0.96	0.00	0.00	0.00	0.00	0.00	0.00
0.00	3.11	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.50	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1.42	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00
22.09	1.99	0.00	0.00	0.00	0.00	0.00	0.00
0.15	1.21	0.00	0.00	0.76	0.00	0.00	0.00
0.00	9.06	0.00	0.00	0.00	0.00	0.00	0.00
0.00	3.63	0.00	0.00	0.00	0.00	0.00	0.00
0.16	10.69	0.00	0.00	0.00	0.00	0.00	0.00
0.00	32.90	0.00	0.00	0.00	0.00	0.00	0.00
0.17	2.52	0.00	0.00	0.06	0.00	0.00	0.00
19.87	5.09	0.00	0.00	0.00	0.00	0.00	0.00
6.88	1.12	0.00	0.00	0.00	0.00	0.00	0.00
0.83	0.17	0.00	0.00	0.00	0.00	0.00	0.00
7.45	1.16	0.00	0.00	0.17	0.00	0.00	0.00
0.16	3.41	0.00	0.00	0.00	0.00	0.00	0.00
0.98	6.22	0.00	0.00	0.00	0.00	0.00	0.00
0.00	44.35	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00
0.00	0.00	0.00	0.19	0.75	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.99	1.97	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00
0.44	0.22	2.52	0.05	0.27	1.80	0.00	0.00
0.00	0.00	0.00	0.00	0.82	0.49	2.29	0.00
0.00	0.00	0.00	0.00	0.83	0.00	18.67	0.00
0.00	0.17	0.33	0.00	0.08	0.58	0.25	0.00
0.00	0.00	0.00	0.00	0.67	0.50	0.00	0.50
0.00	0.00	0.00	0.00	0.28	2.50	0.00	0.22
0.00	0.00	0.00	0.00	1.83	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00
0.00	0.50	0.00	0.17	2.17	0.17	0.50	0.00
0.00	0.17	0.33	0.17	0.67	4.33	0.17	0.00
0.14	0.02	0.00	0.05	6.04	1.04	0.00	0.00

0.33	0.00	0.00	0.33	1.00	0.17	0.00	0.33
0.00	0.17	0.00	0.17	1.33	1.33	0.00	0.17
0.00	0.00	0.00	0.00	2.50	0.00	0.33	0.00
0.66	7.28	0.00	0.00	0.00	1.85	0.00	0.00
1.06	0.13	0.00	0.00	0.13	2.12	0.00	0.00
0.17	0.67	0.06	0.06	0.17	16.98	0.00	0.00
0.00	0.00	0.00	1.00	0.50	0.33	0.00	0.00
0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.67
0.33	0.33	0.00	0.66	1.65	5.78	0.00	0.00
0.00	0.17	0.00	0.00	1.66	2.00	0.00	0.00
0.00	0.00	0.00	0.00	1.50	3.67	0.00	0.00
0.00	0.00	0.00	0.00	0.83	1.83	0.00	0.00
0.00	0.00	0.00	0.00	1.17	0.50	0.00	0.00
0.00	0.00	0.00	1.00	1.00	9.00	0.00	0.33
0.33	0.00	0.00	0.50	0.83	1.66	0.00	0.00
0.00	0.00	0.00	0.00	1.00	1.17	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00
0.00	0.28	0.00	0.00	1.13	0.09	0.00	0.00

SRconven	SSanceps	SSkriege	SSsmithi	SSthermc	SThantzs	SUangust	Subrekut
0.00	0.00	0.00	3.59	2.39	0.00	0.80	0.00
2.62	0.00	0.00	0.33	0.49	0.16	0.00	0.00
0.64	0.00	0.43	1.28	0.64	0.00	0.21	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.66
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00
2.33	0.33	0.17	0.00	0.00	0.83	0.00	0.00
0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00
0.00	5.50	0.67	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.00
0.00	0.00	0.32	0.00	0.00	0.00	1.42	0.00
0.00	0.00	0.00	0.00	0.00	0.00	1.65	1.65
0.00	0.00	0.93	0.11	0.00	0.00	1.15	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.30
0.00	0.00	0.00	0.00	0.00	0.00	0.16	1.15
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.15
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.82
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.17	0.00	12.83	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.75	0.00	0.00	0.19	0.00
0.00	0.25	0.49	1.23	2.22	0.00	0.99	0.00
0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
0.33	0.00	0.00	0.11	0.05	0.00	0.00	0.00
0.16	0.33	0.00	1.80	0.16	0.00	0.00	0.00
2.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00
2.24	0.00	0.08	0.42	0.17	0.00	0.67	0.08
0.00	0.00	0.00	0.50	1.00	0.17	0.67	0.00
0.17	0.00	0.00	0.06	0.00	0.00	0.00	0.00
0.00	0.33	0.00	0.50	0.33	0.00	0.00	0.00
0.00	0.17	0.00	0.00	0.83	0.00	0.33	0.00
0.33	0.33	0.00	0.00	0.50	0.00	0.67	1.67
0.50	0.00	0.00	0.33	0.00	0.00	0.17	0.00
2.23	0.09	0.11	0.05	0.02	0.00	0.23	0.00

0.67	0.00	0.00	0.00	0.00	0.17	0.00	0.00
0.67	0.00	0.17	1.50	1.83	0.00	0.50	0.17
0.17	0.00	0.00	0.00	0.00	0.00	0.33	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00
0.00	0.00	0.00	1.33	0.00	0.00	0.17	0.00
0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.50	0.00	0.00	0.17	0.00
0.00	0.83	0.00	3.00	0.00	0.00	0.00	0.33
0.00	0.17	0.00	0.00	0.00	0.00	1.33	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.50	0.00	0.00	0.33	0.00
0.00	0.50	0.00	0.67	0.00	0.00	0.50	0.17
0.00	0.17	0.00	1.33	0.00	1.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.92	0.56	0.00	0.09	0.00	0.00	0.09	0.00

SYrumpen	TAfenest	TAfloccu	ULacus	ULdelica	UlnaUlna
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.49	0.00	0.00	0.00
0.00	0.00	0.21	0.00	0.00	0.21
0.00	0.00	0.00	0.00	0.00	0.17
0.00	0.00	0.00	0.00	0.16	0.16
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.16
0.00	0.00	0.00	0.00	0.16	0.49
0.00	0.00	0.00	0.63	0.00	0.63
0.00	0.00	0.00	0.00	0.00	0.83
3.50	0.00	1.67	0.00	0.00	9.17
1.17	0.17	0.50	0.00	0.00	0.50
2.67	0.00	0.67	0.00	1.17	2.50
0.00	1.67	2.67	0.00	0.00	0.33
0.00	0.00	0.00	0.00	0.00	0.32
0.00	0.00	0.00	0.00	0.00	0.32
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.22	0.00	1.26
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.30	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.49
0.00	0.00	0.00	0.00	0.00	0.17
0.00	0.00	0.00	0.00	0.00	1.32
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.11	0.28	0.22
0.00	0.00	0.00	0.00	0.00	0.16
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.33
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.83
0.00	0.00	0.00	0.33	0.00	1.17
0.00	0.00	0.00	0.37	0.00	0.75
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.50
0.00	0.00	0.00	0.00	0.00	0.71
0.00	0.00	0.33	0.00	0.00	0.33
0.00	0.00	8.17	0.00	0.00	0.00
0.25	0.00	0.08	0.00	0.00	0.91
0.00	0.00	0.17	0.00	0.00	0.00
0.11	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.17	0.00	0.17
0.00	0.00	0.00	0.17	0.00	0.33
0.00	0.00	0.67	0.00	0.00	1.50
0.00	0.00	0.17	0.00	0.00	0.33
0.70	0.00	0.16	0.00	0.05	1.36

0.00	0.00	0.17	0.00	0.00	0.50
0.00	0.00	0.17	0.00	0.00	0.17
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00
1.72	0.00	0.00	0.00	0.00	0.26
0.22	0.00	0.17	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.50
0.00	0.00	0.00	0.00	0.00	1.83
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	1.66
0.00	0.00	0.67	0.00	0.00	3.33
0.00	0.00	0.00	0.00	0.00	1.33
0.00	0.00	0.17	0.00	0.00	0.83
0.00	0.00	0.00	0.33	0.00	0.00
0.00	0.00	0.00	0.00	0.00	2.33
0.00	0.00	0.00	0.00	0.00	0.00
3.80	0.40	0.00	0.00	0.00	0.20
1.30	0.00	0.00	0.00	0.00	0.20
0.09	0.85	1.04	0.00	0.00	0.75

Appendix G

TOTAL PHOSPHORUS RECONSTRUCTIONS

Site 1	#		Code	Name	Count	Max	N2	Beta_C1
	1	1	ACsubkra	ACsubkra	25	13.7931	11.0209	0.951488
	2	3	AEtuscul	AEtuscul	3	1.16667	2.71084	2.27948
	3	4	AHaffine	AHaffine	2	0.42735	1.66717	1.44337
	4	5	Ahdeflex	Ahdeflex	12	11.4444	2.54677	1.80015
	5	6	AHexigum	AHexigum	31	3.63036	12.7049	1.79963
	6	7	AHminuti	AHminuti	60	47.1667	26.6003	1.36796
	7	8	AHreimer	AHreimer	7	21.3938	1.76813	0.614389
	8	9	Ahrivula	Ahrivula	38	38.374	11.6488	0.652877
	9	10	AMcopula	AMcopula	15	1	9.87814	2.84314
	10	11	AMpedcls	AMpedcls	23	23.2673	6.93953	1.7389
	11	12	ASformos	ASformos	8	54.8	2.13651	2.1117
	12	14	AUambig	AUambig	19	16.8333	3.41726	2.07224
	13	16	AUdistns	AUdistns	3	2.83333	1.5817	2.04751
	14	17	AUgranlt	AUgranlt	14	12.1054	4.212	2.72861
	15	18	AUgrnang	AUgrnang	5	20.7778	2.80077	2.50597
	16	19	AUitalic	AUitalic	2	3.72473	1.0587	3.71318
	17	22	AUsubart	AUsubart	4	2	2.74051	2.47422
	18	23	AUtenell	AUtenell	3	4.5	2.28782	0.957054
	19	24	BApardxa	BApardxa	26	15.3333	7.29571	1.20774
	20	25	BRmicroc	BRmicroc	7	3.5	2.52737	0.632174
	21	26	CAbacill	CAbacill	31	1.5	17.8249	2.48798
	22	27	CAhyalin	CAhyalin	8	2.66223	4.43536	1.5296
	23	28	CBnavicu	CBnavicu	16	2.66667	4.65723	1.04799
	24	29	CCfluvtl	CCfluvtl	3	1.4975	1.45777	3.03273
	25	30	CCpedcls	CCpedcls	11	5.29801	4.00135	2.34496
	26	31	CCplacen	CCplacen	23	15.1667	3.74783	1.8428
	27	32	CCplaeug	CCplaeug	15	30.3987	4.19354	2.35431
	28	33	CCplalin	CCplalin	25	26.1589	4.68267	2.35482
	29	34	CCpselin	CCpselin	5	4.33333	2.19569	2.18568
	30	35	CEpulch	CEpulch	20	2.79605	7.22793	1.9019
	31	36	CMaera	CMaera	5	3.5	1.61835	4.14857
	32	37	CMheterp	CMheterp	3	1.16667	2.18182	1.69133
	33	38	CPcrucic	CPcrucic	6	4.16667	2.37754	3.672
	34	39	CSinvisi	CSinvisi	4	2.66667	1.35026	4.05194
	35	40	CStholif	CStholif	2	0.166667	1.99983	2.42098
	36	41	CYatomus	CYatomus	6	10.1667	1.87271	2.80167
	37	42	CYmenegh	CYmenegh	38	35	3.9735	3.08896
	38	43	DAvulg	DAvulg	6	2.9654	2.20436	2.32856
	39	44	DEkuetzi	DEkuetzi	7	3.16667	3.16512	1.97652
	40	45	DIconfer	DIconfer	17	5.63252	6.98176	2.9714

Site 1	#	Code	Name	Count	Max	N2	Beta_C1
41	46	DTpseuds	DTpseuds	19	14.1667	4.07859	1.43323
42	47	DTstelli	DTstelli	15	6.5	6.47571	1.88883
43	49	ECminutu	ECminutu	30	10.311	6.60644	0.325959
44	50	ECsilesi	ECsilesi	32	17.9868	5.47701	1.51771
45	51	Eolmini	Eolmini	54	45.3333	21.011	2.05137
46	52	EOsubmin	EOsubmin	14	3.62438	3.69545	2.80252
47	54	EUbilun	EUbilun	30	3.33333	18.1058	1.86351
48	55	EUcaroli	EUcaroli	3	7.5	1.15366	0.358785
49	57	EUexigua	EUexigua	21	10.4869	6.37561	1.8372
50	60	EUflexuo	EUflexuo	6	0.333333	5.55473	1.35789
51	61	EUformic	EUformic	7	3.49418	2.75976	2.04832
52	62	EUimplic	EUimplic	22	23.6667	4.04909	3.40503
53	63	EUincisa	EUincisa	13	2.44821	7.18252	1.4313
54	64	EUinterm	EUinterm	7	3.33333	1.81801	0.906682
55	65	EUmaior	EUmaior	2	1.33333	1.24615	1.3111
56	66	EUmeistr	EUmeistr	3	0.166667	2.99974	1.2941
57	67	EUmonodo	EUmonodo	4	3.33333	1.41701	2.92659
58	69	EUpectin	EUpectin	14	1.15321	8.32637	0.814035
59	70	EUpecund	EUpecund	6	1.31827	4.1809	1.72908
60	71	EUpirla	EUpirla	6	3.82696	2.93671	1.92222
61	72	EUrhombo	EUrhombo	7	3.33333	2.09616	0.694954
62	74	EUsoleir	EUsoleir	2	0.333333	1.85404	2.7522
63	75	EUsubarc	EUsubarc	2	2.5	1.07522	0.361633
64	76	EUtenell	EUtenell	12	5.34188	4.35083	2.21789
65	77	FGbicapi	FGbicapi	5	1.33333	2.19431	2.50782
66	78	FGstrang	FGstrang	5	2.83333	1.44185	0.567443
67	79	FGviresc	FGviresc	19	8.16667	3.86207	1.17201
68	81	FRcapfra	FRcapfra	5	2.82486	2.82118	1.37935
69	82	FRcapgra	FRcapgra	39	13.6667	10.6661	1.92056
70	83	FRcapuci	FRcapuci	21	7.33333	10.7915	2.31047
71	84	FRcroton	FRcroton	16	4.89642	6.40851	1.97632
72	85	FRmesole	FRmesole	14	32.8	1.41789	1.80252
73	87	FRvauche	FRvauche	41	11.9935	13.042	1.47932
74	88	Fscrassi	Fscrassi	20	1.41243	11.4212	1.89252
75	89	FSkramme	FSkramme	9	9.16667	1.78197	0.756274
76	90	FSvulgar	FSvulgar	36	5.83333	16.1661	1.58907
77	91	GEaccep	GEaccep	7	2.15947	3.06078	1.76284
78	92	GEdecu	GEdecu	28	9.5	7.15744	2.81432
79	93	GOangstt	GOangstt	20	6.5	5.43284	2.36606
80	95	GOgracil	GOgracil	29	2	17.2045	1.85714

Site 1	#	Code	Name	Count	Max	N2	Beta_C1
81	96	GOinsign	GOinsign	5	1	3.68725	2.5189
82	97	GOkobaya	GOkobaya	33	25.9156	6.91109	2.62957
83	98	GOlage	GOlage	2	0.198675	1.99825	2.96268
84	99	GOmicrop	GOmicrop	6	3.66667	2.19943	3.09494
85	100	GOminutm	GOminutm	21	9.80392	3.21097	1.95824
86	101	GOolihut	GOolihut	4	0.166113	3.99985	0.706496
87	103	GOpalius	GOpalius	9	4.25868	5.02155	1.39563
88	104	GOparvul	GOparvul	60	26.3333	25.088	1.94251
89	105	GOpatric	GOpatric	7	2.4983	3.33231	2.97252
90	106	GOpygm	GOpygm	9	4.7619	2.67394	1.12699
91	107	GYacumin	GYacumin	4	4.3193	1.21191	1.07788
92	108	HIcapita	HIcapita	29	1.83333	19.6256	2.62788
93	110	KBsubtil	KBsubtil	4	8.33333	1.17387	0.385497
94	111	KVclevei	KVclevei	11	3.79538	3.76134	1.69052
95	112	KVoblong	KVoblong	13	12.6456	4.93588	1.63621
96	113	LUgoepp2	LUgoepp2	9	4.93896	2.4838	3.25076
97	114	LUmutica	LUmutica	27	3	11.4199	2.48324
98	115	MDcircon	MDcircon	22	3.50109	9.22949	1.95358
99	116	MDcircul	MDcircul	21	1.94489	11.5069	1.72377
100	117	MEvarian	MEvarian	41	11.591	11.8581	1.61593
101	118	MYagres	MYagres	14	2.13675	4.18064	2.49826
102	119	MYatomus	MYatomus	11	14.6919	1.4785	3.30788
103	120	NAantoni	NAantoni	13	1.4827	6.09492	1.69817
104	121	NAcaprad	NAcaprad	15	7.83333	4.37195	1.76255
105	122	NAcrypto	NAcrypto	51	7.83333	25.8749	2.12979
106	123	NAcrytds	NAcrytds	7	3	3.76742	2.38433
107	124	NAcryten	NAcryten	29	3.06178	14.0051	1.92087
108	125	NAerifga	NAerifga	10	21.5	1.7858	2.66851
109	126	NAescamb	NAescamb	10	4.04593	3.35243	1.08298
110	127	NAgermii	NAgermii	33	8.15308	14.9159	2.06095
111	128	NAgregar	NAgregar	50	28.6667	24.3249	1.77801
112	129	NAhmberg	NAhmberg	6	2.16667	2.21866	2.45013
113	130	NAlancel	NAlancel	28	6.3228	11.8749	1.27757
114	131	NAlongcp	NAlongcp	24	6.89655	11.9541	2.25635
115	132	NAperegr	NAperegr	5	1	3.82448	1.72088
116	133	NApermnt	NApermnt	17	14.9918	6.04093	1.0706
117	134	NAreichd	NAreichd	3	2.43016	1.99546	2.95549
118	135	NArhynch	NArhynch	38	7.41325	18.9782	1.77331
119	136	NArostel	NArostel	41	7.33333	17.018	1.90751
120	137	NAsalinm	NAsalinm	3	3.33333	1.20279	2.84473

Site 1	#	Code	Name	Count	Max	N2	Beta_C1
121	138	NAsubmur	NAsubmur	8	2.33333	4.50081	2.20513
122	139	NAsymtrc	NAsymtrc	20	4.33333	9.80673	2.27698
123	140	NAtenell	NAtenell	26	4	15.2074	2.23152
124	141	NAtripun	NAtripun	7	1.28	3.60007	1.88587
125	142	NEalpinu	NEalpinu	15	1.97044	8.49417	2.10164
126	143	NIacidcn	NIacidcn	7	0.947867	4.42663	3.02606
127	144	NIamphib	NIamphib	40	11.5702	9.20402	2.5469
128	145	NIarchib	NIarchib	7	0.666667	5.0025	2.25927
129	146	NIbrevis	NIbrevis	7	2.66667	2.76506	2.57267
130	147	NIcapite	NIcapite	19	3	8.24322	2.64812
131	148	NIclausi	NIclausi	18	13.5	3.73584	2.67981
132	149	NIdissip	NIdissip	44	4	23.0175	1.48386
133	150	NIfilifr	NIfilifr	11	1.33333	5.89981	1.54411
134	151	NIfontic	NIfontic	27	8.49673	8.78608	2.0917
135	152	NIfrustu	NIfrustu	34	20.0658	8.22442	2.14348
136	154	NIgracil	NIgracil	13	1.16667	9.25279	2.18458
137	155	NIincons	NIincons	28	40.3537	5.61381	1.999
138	156	NIliebrt	NIliebrt	7	1.33111	4.13858	2.60965
139	157	NIlinear	NIlinear	34	2.31405	17.5899	1.94901
140	158	NInana	NInana	10	1.83333	5.85114	1.16605
141	159	NIpaldeb	NIpaldeb	12	8.16667	6.46824	2.25438
142	160	NIpalea	NIpalea	50	17.8333	20.7304	2.26239
143	161	NIpaleac	NIpaleac	4	0.396825	3.92257	1.51417
144	162	NIpsefon	NIpsefon	4	3.47003	3.22349	2.02976
145	163	NIrecta	NIrecta	18	1.72414	9.94139	2.6992
146	164	NIscalpe	NIscalpe	2	0.333333	1.8	2.21068
147	165	NIsociab	NIsociab	16	1.63666	11.5876	1.56971
148	166	NItubcla	NItubcla	29	9.23825	7.40674	1.37977
149	167	NUlapid	NUlapid	11	0.854701	7.66236	1.17849
150	168	Nuneglec	Nuneglec	6	1.65017	3.36897	0.913081
151	169	NUwell	NUwell	6	0.833333	4.6192	1.79732
152	170	PCclemen	PCclemen	11	3.82696	4.06866	2.22238
153	171	PDbrevis	PDbrevis	6	0.665557	4.38231	2.13414
154	172	Pdparasi	Pdparasi	14	2.13675	6.13104	1.46327
155	173	Plabauje	Plabauje	14	2.83912	4.26694	1.25403
156	174	PIinterr	PIinterr	13	1.23153	6.60495	2.20723
157	175	PImicros	PImicros	20	1.16667	14.6883	2.38638
158	176	PIobscur	PIobscur	4	1.66667	2.95918	2.0499
159	178	PIsubros	PIsubros	10	2.66667	5.37584	1.64354
160	179	PIviridi	PIviridi	10	0.666667	7.57811	1.39401

Site 1	#	Code	Name	Count	Max	N2	Beta_C1
161	180	PLconspi	PLconspi	17	12.3762	5.72662	1.78099
162	181	PSgridao	PSgridao	4	1.33333	2.19201	1.10056
163	182	PShelvet	PShelvet	7	4.5	2.48548	2.10238
164	183	PSsubato	PSsubato	21	5.33333	7.05848	2.15877
165	184	PSventra	PSventra	3	0.330033	2.67547	1.86625
166	185	PTellip	PTellip	4	2.83333	2.24267	2.32825
167	186	PTfreq	PTfreq	52	8.05687	25.8108	2.05812
168	187	PThauck	PThauck	2	20	1.01667	1.92054
169	188	PTlanceo	PTlanceo	39	13.6667	12.7915	2.24996
170	189	PTrostr	PTrostr	14	2.02407	7.57299	2.36535
171	190	REsinuta	REsinuta	20	22.093	5.88254	1.82527
172	191	ROabbre	ROabbre	31	44.3522	6.62016	1.95089
173	192	RSlinea	RSlinea	4	2.51504	1.59906	1.10728
174	193	SApinnat	SApinnat	15	1.80033	7.78639	2.2189
175	194	SFpupula	SFpupula	36	6.04134	18.1811	2.44966
176	195	SFseminu	SFseminu	29	16.9811	8.95169	2.98104
177	196	SOexiguf	SOexiguf	6	18.6667	1.39215	0.511817
178	197	SRconstr	SRconstr	8	1.06838	5.8375	2.4219
179	198	SRconven	SRconven	17	2.91902	9.12145	1.89668
180	199	SSanceps	SSanceps	16	5.5	3.42038	1.88167
181	200	SSkriege	SSkriege	10	12.8333	1.57444	2.32784
182	201	SSsmithi	SSsmithi	23	2.99501	12.1896	1.88913
183	202	SSthermc	SSthermc	13	2.21675	6.6155	2.49598
184	203	SThantzs	SThantzs	5	1	3.05633	2.67812
185	204	SUangust	SUangust	28	1.65289	16.3683	2.55102
186	205	Subrekut	Subrekut	15	1.66667	8.64014	1.78996
187	206	SYrumpen	SYrumpen	11	3.8	5.96705	1.39946
188	207	TAfenest	TAfenest	4	1.66667	2.57653	1.72049
189	208	TAfloccu	TAfloccu	19	8.16667	4.19915	1.18088
190	209	ULacus	ULacus	7	0.630915	5.72619	2.1341
191	210	ULdelica	ULdelica	4	1.16667	1.67465	1.21384
192	211	UlnaUlna	UlnaUlna	44	9.16667	13.6691	1.80599

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
ACsubkra	0.752842	0.422964	0.290028	0.222281	1.11731	0.885285	0.688666
AEtuscul	2.9105	3.67556	4.05653	4.2317	2.19597	2.66977	3.12638
AHaffine	0.69884	-0.06784	-0.83875	-1.89755	1.43265	0.878964	0.385941
Ahdeflex	1.64079	1.54508	1.42814	1.24422	1.48273	1.20005	0.994215
AHexigum	1.64969	1.37409	1.27965	1.35153	1.80594	1.71952	1.59677
AHminuti	1.29196	1.29052	1.23983	1.11982	1.46904	1.3928	1.35853
AHreimer	0.231315	0.347431	0.370515	0.179091	0.936345	0.538454	0.430057
Ahrivula	0.450502	0.461618	0.617268	0.744769	0.890285	0.649464	0.629168
AMcopula	3.09606	3.21672	3.28934	3.35841	2.61818	2.83579	2.94003
AMpedcls	1.92255	1.59575	1.50513	1.58354	1.80796	1.94557	1.83408
ASformos	1.93096	2.15866	1.89352	2.03849	1.97839	1.82427	1.91095
AUambig	2.09333	2.1867	2.17022	2.25608	2.0665	2.09033	2.12836
AUdistns	2.21582	2.41945	2.46399	2.6121	2.21235	2.395	2.49119
AUgranlt	2.75645	2.86058	2.9073	2.99611	2.4873	2.5072	2.54474
AUgrnang	2.53429	2.77825	2.81484	2.96687	2.34164	2.33376	2.4974
AUitalic	4.40104	4.95954	5.25315	5.22539	3.02457	3.61644	4.04609
AUsubart	1.96235	1.01096	0.214707	-0.55795	2.41985	2.13047	1.56579
AUtenell	1.2993	1.39467	1.12917	1.22561	1.31859	1.6429	1.71384
BApardxa	0.590857	0.359539	0.326136	0.40127	1.38934	0.938188	0.768055
BRmicroc	1.00079	1.19215	1.01902	1.13553	0.945653	1.07759	1.04132
CAbacill	2.61662	2.65567	2.75099	2.88539	2.37653	2.50424	2.543
CAhyalin	0.899402	0.513276	0.395835	0.529729	1.60241	1.13902	0.868553
CBnavicu	0.439984	0.288205	0.186549	-0.0469	1.29591	0.901588	0.773898
CCfluvtl	3.54374	4.04576	4.47498	4.94606	2.79817	3.2319	3.53998
CCpedcls	3.09705	3.53016	3.86265	3.97025	2.23265	2.78639	3.16489
CCplacen	1.57486	1.25995	1.12379	1.22402	1.90477	1.77763	1.66591
CCplaeug	3.06512	3.17102	3.31868	3.38861	2.24253	2.71964	2.92018
CCplalin	2.7009	2.86542	2.92714	2.81227	2.23902	2.46913	2.58204
CCpselin	1.99578	1.78806	1.75669	1.98907	2.23197	2.17466	2.10201
CEpulch	1.7838	1.59021	1.42617	1.27958	1.848	1.73348	1.60098
CMaera	4.62832	4.63763	4.59403	4.57888	2.98696	3.15537	3.09961
CMheterp	1.7968	1.93411	1.86678	1.87074	1.7533	1.81991	1.91871
CPcrucic	3.91457	3.73972	3.49515	3.15323	3.09507	3.22962	3.06212
CSinvisi	4.03605	3.52093	3.31288	3.48743	3.4155	3.52866	3.35531
CStholif	2.04904	1.53902	1.00557	0.18935	2.31	2.10341	1.76709
CYatomus	2.90855	2.91459	3.07267	3.33994	2.42457	2.61843	2.71123
CYmenegh	3.06938	2.80019	2.72283	2.8712	2.61355	2.63114	2.52911
DAvulg	3.0332	3.45716	3.86776	4.27211	2.05366	2.49266	2.78068
DEkuetzi	2.50716	3.29821	3.73298	3.88716	1.94925	2.32691	2.79093
DIconfer	3.32284	3.68776	3.95504	4.10333	2.76633	3.11843	3.38662

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
DTpseuds	0.760203	0.480022	0.415629	0.563425	1.66855	1.24321	1.08492
DTstelli	1.91952	2.02887	1.82792	1.97213	1.89576	1.92208	1.97556
ECminutu	-0.21631	-0.4367	-0.45399	-0.4043	0.645457	0.141464	-0.08118
ECsilesi	1.42309	1.23663	1.35294	1.77661	1.65893	1.62564	1.5849
Eolmini	2.1487	2.10978	2.10361	2.10486	2.01709	2.10084	2.09536
EOsubmin	3.40473	3.55907	3.66371	3.68099	2.62755	3.0509	3.18302
EUbilun	1.75292	1.8724	1.96296	2.04729	1.86033	1.79605	1.86459
EUcaroli	1.13325	1.40689	1.08444	1.2094	0.806651	1.01734	0.880615
EUexigua	1.62724	1.91566	2.28034	2.68122	1.83567	1.69413	1.83395
EUflexuo	1.05804	0.99622	0.871578	0.72886	1.46731	1.23997	1.19003
EUformic	1.87146	2.01319	2.18664	2.32912	2.16997	2.08193	2.05438
EUimplic	3.81125	3.96731	4.05161	4.18313	2.89188	3.2037	3.32507
EUincisa	1.17914	0.90157	0.507494	0.122662	1.52614	1.35007	1.16078
EUinterm	1.61493	2.0124	1.91889	2.14349	1.43167	1.87762	2.02545
EUmaior	1.33635	1.62412	1.77389	1.98406	1.59755	1.62863	1.79524
EUmeistr	0.801843	0.814392	0.834231	0.656979	1.36803	0.963718	0.853578
EUmonodo	3.53277	4.39383	5.18686	5.95796	2.72541	3.28318	3.92517
EUpectin	0.66487	0.499548	0.334486	0.209128	0.98001	0.802656	0.62276
EUpecund	1.67323	1.62126	1.29766	1.09971	1.77279	1.79637	1.72678
EUpirla	1.86473	2.19214	2.54308	2.93316	1.98378	2.11326	2.37742
EUrhombo	1.08806	1.14175	0.792965	0.759785	1.06739	1.14458	0.971104
EUsoleir	3.30313	4.34149	5.34271	6.36427	2.48041	2.95451	3.65459
EUsubarc	1.21944	1.55785	1.27706	1.49071	0.919911	1.2754	1.23917
EUtenell	2.24282	2.45337	2.59946	2.62841	2.17191	2.27484	2.43058
FGbicapi	2.69323	2.75843	2.85383	3.08902	2.47313	2.73355	2.93912
FGstrang	1.21608	1.40266	1.0538	1.08475	1.07514	1.27576	1.11223
FGviresc	1.48189	1.55545	1.31105	1.27378	1.41705	1.56154	1.49
FRcapfra	0.943741	0.542716	-0.03662	-0.52071	1.54054	1.23974	1.04363
FRcapgra	1.94735	2.11369	2.09641	2.01965	1.90365	1.94699	2.04635
FRcapuci	2.3822	2.62489	2.77935	2.81172	2.2343	2.35383	2.5202
FRcroton	1.7974	1.67952	1.53081	1.39798	2.05484	2.00878	1.98532
FRmesole	1.60887	1.93156	1.77727	2.04713	1.77603	1.56562	1.55227
FRvauche	1.43872	1.61786	1.78557	1.91233	1.51813	1.45306	1.52588
Fscrassi	1.70093	1.78743	1.86806	1.92626	1.9141	1.80382	1.85083
FSkramme	-0.02808	-0.02251	0.118616	0.195351	1.27841	0.871385	0.849422
FSvulgar	1.36564	1.47986	1.57967	1.58083	1.65213	1.51971	1.58105
GEaccep	2.04841	1.70041	1.47561	1.15744	1.73884	1.77204	1.58478
GEdecu	2.89719	2.80894	2.72996	2.61279	2.50781	2.56158	2.50791
GOangstt	2.81392	3.44226	3.78779	3.8482	2.2632	2.58296	2.92024
GOgracil	1.76414	1.83181	1.83874	1.84822	1.85051	1.81328	1.85534

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
GOinsign	2.48132	2.47966	2.53896	2.65861	2.32934	2.34106	2.34674
GOkobaya	2.91829	3.05954	3.1168	3.14818	2.41321	2.63726	2.74033
GOlage	3.74381	4.50785	5.0677	5.3642	2.73402	3.2678	3.70128
GOmicrop	3.68881	4.41239	4.93472	5.25402	2.69987	3.15721	3.59935
GOminutm	2.4775	3.08802	3.67183	4.07746	1.92478	2.22606	2.55969
GOolihut	0.376342	-0.31629	-0.83288	-1.47752	0.859285	0.480448	0.121552
GOpalius	1.11461	1.1747	1.16308	0.989677	1.51357	1.31692	1.32878
GOparvul	1.73718	1.65032	1.57556	1.45822	1.8984	1.75942	1.69564
GOpatric	3.28457	3.61815	3.83125	3.89714	2.58875	2.77932	2.91924
GOpygm	1.08737	0.692517	0.389968	0.067215	1.4285	1.46898	1.3766
GYacumin	0.620275	0.686402	0.993836	1.50975	1.92976	1.76443	1.72841
HIcapita	2.75	2.84907	2.92807	2.98901	2.48508	2.61791	2.6982
KBsubtil	-0.69821	-0.88314	-0.86253	-0.92687	1.02667	0.266445	-0.07684
KVclevei	1.76512	1.1747	0.883604	0.738255	1.74358	1.77273	1.52196
KVoblong	1.22437	1.14727	1.0999	0.933772	1.7288	1.42843	1.31918
LUgoepp2	3.55785	3.4682	3.33472	3.21209	2.76634	2.9087	2.7775
LUmutica	2.6115	2.89593	3.12221	3.24203	2.32387	2.43958	2.59223
MDcircon	2.09231	2.52263	2.83569	3.05515	1.92914	2.06278	2.34501
MDcircul	1.68449	1.89343	2.12234	2.43731	1.78788	1.76039	1.88674
MEvarian	1.35976	1.20186	1.12109	1.04895	1.64476	1.42481	1.29764
MYagres	2.59641	2.80695	2.94912	2.9415	2.40624	2.60299	2.83316
MYatomus	4.05784	4.52124	4.70074	4.54635	2.68673	3.13382	3.42622
NAantoni	1.89155	1.83735	1.87472	1.93353	1.6625	1.72774	1.70116
NAcaprad	1.93756	2.19993	2.17852	1.84683	1.81988	1.95859	2.11144
NAcrypto	2.09122	2.15746	2.17323	2.09556	2.06567	2.08039	2.13934
NAcrytds	2.25906	2.21838	2.28268	2.40474	2.17108	2.05205	1.96793
NAcryten	2.13945	2.4047	2.6548	2.89714	1.94329	2.1076	2.2828
NAerifga	2.46278	2.27501	2.16997	2.00709	2.40677	2.22505	1.96875
NAescamb	0.688037	0.522123	0.487742	0.464298	1.30267	0.96585	0.731592
NAgermii	1.73367	1.5566	1.51339	1.55823	2.00315	1.77975	1.66147
NAgregar	1.67126	1.48725	1.39471	1.29599	1.75396	1.67727	1.59267
NAhmberg	3.24629	4.28813	4.89553	5.12241	2.27663	2.82022	3.41601
NAlancel	0.963741	0.430581	0.095049	-0.1774	1.35109	1.07372	0.765014
NAlongcp	2.25795	2.55703	2.85224	3.078	2.168	2.22478	2.42984
NAperegr	1.40209	1.1385	1.03133	1.055	1.60744	1.27884	1.01998
NApermnt	1.05437	1.16975	1.36327	1.46521	1.2297	1.17185	1.26393
NAreichd	3.32605	3.72456	3.98033	4.04411	2.39501	2.58922	2.75538
NArhynch	1.59217	1.71092	1.79603	1.7666	1.78444	1.68227	1.74751
NArostel	1.72123	1.63379	1.63376	1.61497	1.91004	1.80934	1.79417
NAsalinm	3.04043	3.21796	3.52693	3.9906	2.6295	2.9458	3.12969

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
NAsubmur	1.89677	1.42957	1.02978	0.588436	2.21363	2.0514	1.77087
NAsymtrc	2.06214	1.9006	1.87861	1.97533	2.16882	2.04929	1.95819
NAtenell	2.10016	2.10255	2.18214	2.31461	2.14631	2.08128	2.08128
NAtripun	2.3563	2.76311	3.19889	3.61041	2.06866	2.40678	2.62072
NEalpinu	1.97418	1.99951	1.99588	1.86314	2.05333	1.99353	2.00741
NIacidcn	3.66517	4.35077	4.8804	5.302	2.81723	3.37048	3.8564
NIamphib	2.69726	2.75603	2.84812	2.97264	2.42032	2.57602	2.63292
NIarchib	2.50048	2.73271	2.83511	2.76475	2.10024	2.29324	2.45547
NIbrevis	2.56557	2.49555	2.45619	2.37709	2.41918	2.49207	2.45089
NIcapite	2.96655	3.58308	4.16271	4.74748	2.47326	2.79735	3.23216
NIclausi	2.68425	2.82748	3.02303	3.19212	2.51478	2.61273	2.72789
NIdissip	1.29815	1.2227	1.12502	0.936627	1.54525	1.40005	1.32757
NIfilifr	1.12702	1.11909	1.11355	0.907728	1.6632	1.3897	1.32702
NIfontic	2.57493	2.95667	3.35222	3.68637	2.00781	2.36613	2.68352
NIfrustu	2.40859	2.23898	2.07785	1.85126	2.06832	2.29651	2.27452
NIgracil	2.12489	2.0042	1.77123	1.49993	2.09475	2.05893	1.99077
NIincons	2.36932	2.30303	2.32925	2.37485	1.96425	2.28741	2.40322
NIliebrt	2.65481	2.71799	2.85596	3.11033	2.44135	2.47123	2.49267
NIlinear	2.06883	2.21709	2.33721	2.37425	1.89398	1.99905	2.11588
NInana	0.3167	-0.38551	-0.93973	-1.41169	1.30832	0.674666	0.217648
NIpaldeb	1.9374	1.6177	1.4389	1.37013	2.05169	1.8035	1.57641
NIpalea	2.18275	2.29376	2.41514	2.47076	2.18307	2.16519	2.22833
NIpaleac	1.33628	1.26679	1.24168	1.15072	1.70015	1.60869	1.60904
NIpsefon	2.0877	2.10158	1.9605	1.55559	1.97844	2.11457	2.21119
NIrecta	3.00676	3.53623	3.98425	4.34601	2.58316	2.87163	3.21043
NIscalpe	3.00353	4.10628	4.77474	5.09866	2.09635	2.63661	3.27788
NIsociab	1.22803	0.861666	0.59273	0.294991	1.55582	1.27154	1.01404
NItubcla	1.16724	1.20643	1.22614	1.15795	1.51125	1.34664	1.33801
NUlapid	0.757951	0.360395	0.11414	-0.16179	1.30431	0.995828	0.758107
Nuneglec	0.594237	-0.04777	-0.26783	-0.13546	1.12086	0.904808	0.636695
NUwell	1.56562	1.61783	1.71463	1.75487	1.76929	1.62871	1.64541
PCclemen	2.09833	2.2091	2.34646	2.44668	2.25583	2.21552	2.21618
PDbrevis	2.12813	2.03741	1.84693	1.5401	2.05557	2.1102	2.05493
Pdparasi	0.99031	0.678609	0.396278	0.066293	1.55242	1.22445	1.03509
PIabauje	0.846147	0.62312	0.349181	-0.07618	1.45021	1.26874	1.21786
PIinterr	2.13013	2.37204	2.61837	2.81415	2.09748	2.05427	2.20729
PImicros	2.3668	2.44862	2.49934	2.46866	2.28559	2.30597	2.31745
PIobscur	1.86041	1.97263	2.21689	2.6094	2.00315	1.85389	1.87086
PIsubros	1.21525	0.990664	0.844272	0.712664	1.73375	1.50405	1.41539
PIviridi	0.969697	0.888802	0.764364	0.539454	1.50299	1.22897	1.151

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
PLconspi	1.97805	1.62006	1.5523	1.71557	1.78862	1.90155	1.77308
PSgridao	1.75639	2.10294	2.00589	2.18032	1.51756	2.00601	2.18936
PShelvet	2.5101	2.95111	3.05406	3.004	2.04573	2.33819	2.58983
PSsubato	2.28159	2.6551	2.94417	3.1514	2.0463	2.12223	2.27977
PSventra	1.28762	0.360994	-0.51686	-1.55772	2.00672	1.73221	1.31924
PTellip	3.07557	3.99849	4.48732	4.68843	2.18111	2.70771	3.24986
PTfreq	2.08385	1.92042	1.84115	1.79521	2.01573	2.03002	1.96047
PThauck	2.07529	2.10946	1.89251	1.75113	1.92474	2.02667	2.07555
PTlanceo	2.33654	2.33845	2.25815	2.1442	2.19842	2.29107	2.30444
PTrostr	2.60786	2.90777	3.15712	3.35795	2.24395	2.47495	2.68772
REsinuta	2.19716	2.10695	2.15181	2.25884	1.83215	2.06012	2.12382
ROabbre	2.46392	2.6798	2.83127	2.86546	1.88713	2.20196	2.31976
RSlinea	0.659839	0.679789	0.950194	1.46539	1.57569	1.29979	1.22076
SApinnat	1.8671	1.46074	1.10465	0.656148	2.15823	1.93487	1.68976
SFpupula	2.39851	2.34278	2.27623	2.19291	2.3091	2.29646	2.24826
SFseminu	3.11818	2.92727	2.73105	2.5294	2.7535	2.84978	2.69711
SOexiguf	1.18023	1.39522	1.07562	1.15959	1.02838	1.25596	1.16112
SRconstr	2.21772	2.03378	1.85307	1.52952	2.40856	2.32347	2.18537
SRconven	1.89388	1.79231	1.5519	1.3118	1.91449	1.94966	1.86297
SSanceps	1.92904	1.99497	1.91721	1.9226	1.89031	1.93084	1.96716
SSkriege	2.3441	2.08163	1.83016	1.65355	2.32987	2.4955	2.51753
SSsmithi	1.46541	1.15314	0.946325	0.753715	1.86698	1.56032	1.34195
SSthermc	2.59092	2.86424	3.03274	2.9491	2.38109	2.53552	2.73357
SThantzs	2.71236	2.72916	2.79599	2.99968	2.46377	2.53117	2.54255
SUangust	2.88465	3.30928	3.65795	3.92984	2.43512	2.74361	3.04831
Subrekut	2.02186	2.3327	2.67994	3.03845	1.75896	1.9322	2.18321
SYrumpen	1.0935	0.988922	0.62587	0.313896	1.51544	1.27993	1.15255
TAfenest	1.65886	1.60691	1.32064	1.20481	1.79005	1.74107	1.71397
TAfloccu	1.54561	1.66537	1.41979	1.3799	1.40849	1.6325	1.61862
ULacus	2.02969	2.03563	2.02382	1.93225	2.09935	2.06894	2.09542
ULdelica	1.18285	1.3381	1.41446	1.50917	1.19216	1.03372	0.9809
UlnaUlna	1.72207	1.74077	1.69733	1.59919	1.82216	1.79874	1.83237

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
ACsubkra	0.588983	0.549965	0.329925	0.363757	0.422869	0.473166	0.531162
AEtuscul	3.31457	3.41072	0.225796	0.466984	0.686568	0.835988	0.875544
AHaffine	-0.00502	-0.37361	0.404186	0.726621	1.03479	1.31553	1.59859
Ahdeflex	0.828475	0.691089	0.780757	1.05835	1.27308	1.45013	1.59973
AHexigum	1.56784	1.59392	0.181815	0.266229	0.334079	0.382399	0.419553
AHminuti	1.3062	1.25453	0.125723	0.162669	0.183448	0.194827	0.206921
AHreimer	0.36268	0.33673	0.397082	0.593454	0.857187	1.07824	1.24788
Ahrivula	0.682393	0.715907	0.302698	0.283866	0.272216	0.27826	0.30864
AMcopula	3.024	3.08219	0.315554	0.386979	0.40626	0.430035	0.4652
AMpedcls	1.76608	1.77014	0.308229	0.27804	0.324536	0.344669	0.36725
ASformos	1.81543	1.85367	0.279833	0.271784	0.416115	0.446795	0.498523
AUambig	2.13097	2.16651	0.210715	0.235759	0.293225	0.342866	0.363798
AUdistns	2.49583	2.57095	0.566069	0.747528	0.775004	0.795155	0.781685
AUgranlt	2.55341	2.57119	0.538275	0.768457	0.823308	0.796112	0.748431
AUgrnang	2.52051	2.58508	0.314237	0.362934	0.388697	0.425153	0.43696
AUitalic	4.32062	4.46669	0.642724	0.92718	1.21388	1.55241	1.89002
AUsubart	1.06397	0.686319	0.746487	1.13316	1.46471	1.79097	2.03219
AUtenell	1.74735	1.92201	0.650605	0.827273	1.1447	1.48305	1.6978
BApardxa	0.76963	0.786574	0.235383	0.347443	0.382698	0.376911	0.332114
BRmicroc	0.969581	1.02633	0.268972	0.302937	0.402368	0.458346	0.513812
CAbacill	2.5895	2.6217	0.169962	0.232313	0.306386	0.355755	0.398788
CAhyalin	0.807509	0.841061	0.213734	0.308996	0.400918	0.504894	0.613569
CBnavicu	0.72605	0.644732	0.367959	0.527346	0.582243	0.589539	0.616291
CCfluvtl	3.74749	3.90848	0.491544	0.709459	0.906276	1.08486	1.25957
CCpedcls	3.41143	3.56277	0.54696	0.645007	0.601011	0.608811	0.674478
CCplacen	1.64372	1.68895	0.192103	0.360638	0.500127	0.554898	0.549047
CCplaeug	3.05451	3.15595	0.391468	0.422098	0.439913	0.534195	0.663446
CCplalin	2.60921	2.56021	0.400532	0.532969	0.512743	0.461462	0.43712
CCpselin	2.13596	2.24285	0.414682	0.670725	0.902158	1.02946	1.09076
CEpulch	1.48151	1.3953	0.330519	0.458724	0.500956	0.545833	0.591475
CMaera	3.06669	3.06294	1.37881	1.83111	1.91838	1.90424	1.8875
CMheterp	1.94369	2.04662	0.184301	0.288966	0.421032	0.554688	0.677574
CPcrucic	2.90724	2.75781	0.917329	1.25458	1.40566	1.51694	1.65619
CSinvisi	3.35736	3.40013	0.497509	0.53015	0.539738	0.512692	0.513517
CStholif	1.43721	1.05621	0.343342	0.458135	0.670372	0.973613	1.33722
CYatomus	2.79223	2.8317	0.658916	0.723365	0.767693	0.835735	0.964507
CYmenegh	2.54475	2.57171	0.564474	0.515108	0.423122	0.442588	0.490342
DAvulg	2.95768	3.10784	0.653242	1.02569	1.27342	1.45487	1.65716
DEkuetzi	3.03478	3.14635	0.367145	0.574526	0.736469	0.824378	0.849716
DIconfer	3.5585	3.6343	0.2607	0.370766	0.457784	0.536401	0.60562

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
DTpseuds	1.07886	1.12869	0.423331	0.6121	0.648965	0.619699	0.563759
DTstelli	1.93779	2.02227	0.255115	0.152237	0.176215	0.185242	0.192885
ECminutu	-0.15297	-0.18479	0.48053	0.674263	0.8215	0.917326	0.997801
ECsilesi	1.65602	1.76902	0.385089	0.462834	0.530545	0.565936	0.567218
Eolmini	2.08429	2.09035	0.174185	0.157599	0.15802	0.17327	0.192104
EOsubmin	3.19537	3.16693	0.266407	0.446257	0.614417	0.751349	0.876875
EUbilun	1.92941	1.97497	0.199923	0.269512	0.325402	0.359509	0.378587
EUcaroli	0.675504	0.670117	0.415176	0.621883	0.89435	1.05289	1.20557
EUexigua	2.0208	2.13247	0.24571	0.360727	0.469749	0.555551	0.608829
EUflexuo	1.15035	1.13717	0.183835	0.323196	0.434184	0.512409	0.590582
EUformic	2.08342	2.10823	0.694921	0.870521	0.869914	0.882684	0.918445
EUimplic	3.43157	3.53957	0.682225	0.739673	0.655702	0.591559	0.551804
EUincisa	0.992474	0.886284	0.225175	0.36603	0.518159	0.637382	0.72257
EUinterm	2.0449	2.12282	0.678133	0.510149	0.64715	0.782521	0.804349
EUmaior	1.94014	2.11426	0.250781	0.375857	0.626287	0.874769	1.09329
EUmeistr	0.829609	0.747825	0.658178	1.0202	1.34581	1.6244	1.85522
EUmonodo	4.44837	4.80065	0.258427	0.495759	0.871542	1.18061	1.39689
EUpectin	0.51687	0.481963	0.327738	0.445346	0.558349	0.65009	0.736602
EUpecund	1.57881	1.50824	0.451693	0.574587	0.684156	0.753848	0.792843
EUpirla	2.6764	2.95664	0.404794	0.752134	1.09967	1.4242	1.74597
EUrhombo	0.799223	0.784621	0.353634	0.285117	0.426959	0.514346	0.634597
EUsoleir	4.24936	4.65987	0.339562	0.61292	0.971936	1.27579	1.50656
EUsubarc	1.10405	1.19388	0.485082	0.338346	0.472525	0.562813	0.635177
EUtenell	2.54832	2.57423	0.27107	0.482633	0.702377	0.845494	0.923675
FGbicapi	3.13915	3.33943	0.255978	0.557606	0.986841	1.35896	1.63028
FGstrang	0.879722	0.815347	0.540538	0.386818	0.482733	0.571744	0.769771
FGviresc	1.3901	1.38698	0.382202	0.269615	0.325533	0.372009	0.39737
FRcapfra	0.79286	0.648262	0.291797	0.421914	0.603784	0.741241	0.843789
FRcapgra	2.04956	2.0365	0.251034	0.316011	0.351011	0.376388	0.396782
FRcapuci	2.62965	2.62247	0.181987	0.241142	0.305084	0.341297	0.374779
FRcroton	1.96214	1.91466	0.240167	0.359275	0.460648	0.570685	0.632143
FRmesole	1.41898	1.37498	0.222402	0.392535	0.555192	0.734633	0.90144
FRvauche	1.59164	1.63691	0.292678	0.376328	0.446626	0.505145	0.558008
Fscrassi	1.9278	1.965	0.234634	0.277553	0.3334	0.381902	0.407079
FSkramme	0.941911	0.976486	0.596575	0.944926	1.08068	1.11034	1.13389
FSvulgar	1.63964	1.63684	0.242843	0.321331	0.370524	0.390011	0.412848
GEaccep	1.42955	1.27458	0.830358	1.15407	1.37574	1.53656	1.72738
GEdecu	2.47695	2.42451	0.540031	0.640832	0.650205	0.663912	0.702353
GOangstt	3.08284	3.11096	0.212426	0.388082	0.536793	0.633955	0.68327
GOgracil	1.86775	1.86961	0.175739	0.225829	0.298594	0.357896	0.397351

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
GOinsign	2.35659	2.3356	0.511852	0.666395	0.814907	1.00879	1.17506
GOkobaya	2.78122	2.8167	0.437316	0.538609	0.567231	0.604152	0.628869
GOlage	3.96058	4.06433	0.484797	0.795136	0.914165	1.02422	1.14945
GOmicrop	3.8381	3.88452	0.426791	0.676419	0.919555	1.09718	1.26939
GOminutm	2.83671	2.95285	0.248052	0.491655	0.749455	0.949575	1.08225
GOolihut	-0.15351	-0.42672	0.774731	1.07851	1.35796	1.585	1.77467
GOpalius	1.3318	1.30007	0.438352	0.65017	0.878416	1.04355	1.15841
GOparvul	1.65808	1.61071	0.200816	0.212305	0.229385	0.239161	0.238618
GOpatric	2.99992	3.0114	0.449431	0.658377	0.786152	0.839072	0.818241
GOpygm	1.25918	1.16864	0.503952	0.841599	1.1258	1.33154	1.46886
GYacumin	1.81651	1.90108	0.914927	1.22485	1.23287	1.10929	1.0038
HIcapita	2.77218	2.80985	0.181307	0.232395	0.275247	0.311293	0.339313
KBsubtil	-0.16951	-0.25169	0.742871	0.997228	1.03197	1.03445	1.03722
KVclevei	1.34637	1.21428	0.392411	0.453125	0.490006	0.606509	0.744458
KVoblong	1.27968	1.19968	0.315597	0.430282	0.545615	0.626827	0.684316
LUgoepp2	2.62113	2.48672	0.695296	1.01531	1.18343	1.31888	1.45827
LUmutica	2.68644	2.68599	0.233784	0.347686	0.445731	0.514626	0.562025
MDcircon	2.54934	2.66838	0.245604	0.333727	0.443946	0.570643	0.675601
MDcircul	2.01984	2.15716	0.234977	0.333834	0.431111	0.533891	0.634404
MEvarian	1.26456	1.25734	0.25259	0.378023	0.468862	0.51767	0.549688
MYagres	2.99471	3.04181	0.315203	0.54617	0.769404	0.961717	1.10446
MYatomus	3.51158	3.44836	0.651252	1.10104	1.3312	1.37748	1.34321
NAantoni	1.67827	1.67779	0.363228	0.568219	0.724402	0.875489	1.0609
NAcaprad	2.09122	1.98433	0.378341	0.600011	0.763229	0.871356	0.927594
NAcrypto	2.16126	2.13334	0.127991	0.138779	0.160395	0.183124	0.206699
NAcrytds	1.9633	1.95998	0.358985	0.523188	0.66932	0.7677	0.852752
NAcryten	2.41964	2.53029	0.196732	0.266538	0.289349	0.311552	0.339582
NAerifga	1.79852	1.66261	0.386473	0.609213	0.867121	1.08177	1.20511
NAescamb	0.592219	0.463127	0.39115	0.567616	0.637288	0.722001	0.838057
NAgermii	1.65426	1.6628	0.262744	0.264099	0.273244	0.281274	0.283036
NAgregar	1.54152	1.50083	0.163922	0.183472	0.184021	0.193738	0.208788
NAhmberg	3.74487	3.89476	0.365311	0.640336	0.894884	1.05644	1.16436
NAlancel	0.550228	0.404658	0.270036	0.318224	0.368099	0.420091	0.485715
NAlongcp	2.63214	2.73106	0.246618	0.317456	0.395972	0.456106	0.509517
NAperegr	0.908491	0.893202	0.659729	0.865267	1.01992	1.13969	1.21671
NApermnt	1.38021	1.46153	0.477086	0.580758	0.615898	0.631367	0.662365
NAreichd	2.85315	2.8698	0.779618	1.11499	1.24976	1.24083	1.16049
NArhynch	1.80135	1.79739	0.249	0.293021	0.344619	0.384575	0.417329
NArostel	1.82088	1.81073	0.178344	0.305501	0.441469	0.540808	0.610011
NAsalinm	3.23009	3.23715	0.257001	0.437013	0.63321	0.812927	1.05011

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
NAsubmur	1.53821	1.31196	0.330764	0.484713	0.597869	0.670807	0.758466
NAsymtrc	1.94305	1.94782	0.282477	0.389831	0.47599	0.532325	0.560989
NAtenell	2.13055	2.1761	0.212635	0.292737	0.337669	0.368088	0.379042
NAtripun	2.78056	2.90868	0.636543	0.820119	0.810916	0.791051	0.886208
NEalpinu	2.02183	1.97679	0.251741	0.363497	0.467238	0.550426	0.608174
NIacidcn	4.19215	4.37727	0.319186	0.482313	0.633416	0.827101	0.982466
NIamphib	2.68218	2.72229	0.201774	0.210423	0.236462	0.268061	0.320522
NIarchib	2.49761	2.41849	0.479333	0.751494	0.997884	1.20999	1.40765
NIbrevis	2.34084	2.15513	0.224958	0.384534	0.582531	0.806056	1.03449
NIcapite	3.60041	3.86494	0.298884	0.454511	0.597078	0.695091	0.787448
NIclausi	2.84634	2.89117	0.205739	0.2073	0.249983	0.305199	0.34328
NIdissip	1.24891	1.15933	0.15434	0.230065	0.295461	0.347279	0.380878
NIfilifr	1.3085	1.20568	0.435592	0.550291	0.605844	0.64551	0.681754
NIfontic	2.92787	3.0903	0.167654	0.299205	0.422073	0.507658	0.564482
NIfrustu	2.1657	2.06295	0.186818	0.228902	0.282	0.334245	0.386349
NIgracil	1.89763	1.82001	0.352664	0.410918	0.440332	0.491333	0.530931
NIincons	2.45613	2.51693	0.22077	0.315464	0.490007	0.649133	0.781965
NIliebrt	2.58811	2.72385	0.431099	0.624334	0.791786	0.89996	0.976882
NIlinear	2.18663	2.22242	0.209135	0.281344	0.345141	0.406125	0.462005
NInana	-0.09349	-0.30665	0.297276	0.424849	0.552039	0.681867	0.794838
NIpaldeb	1.44443	1.37168	0.431597	0.587094	0.686495	0.761142	0.806837
NIpalea	2.30434	2.31217	0.194711	0.209889	0.218866	0.230893	0.245845
NIpaleac	1.62121	1.65014	0.860345	1.46348	2.03681	2.46747	2.90131
NIpsefon	2.20325	2.15693	0.693287	1.06893	1.32857	1.53777	1.74239
NIrecta	3.48227	3.63826	0.198227	0.2459	0.329927	0.407127	0.478761
NIscalpe	3.67612	3.88252	0.43251	0.754794	1.08983	1.28566	1.38889
NIsociab	0.815537	0.643264	0.435298	0.607398	0.725292	0.817759	0.915374
NItubcla	1.34572	1.35418	0.287958	0.345795	0.375355	0.418444	0.467999
NUlapid	0.623808	0.516676	0.34194	0.448244	0.549274	0.664182	0.765959
Nuneglec	0.53084	0.553551	0.235232	0.45628	0.626103	0.762216	0.8501
NUwell	1.68395	1.65713	0.468732	0.759083	1.05453	1.27257	1.45576
PCclemen	2.24672	2.25	0.38595	0.487993	0.5122	0.555847	0.623363
PDbrevis	1.94497	1.79605	0.312459	0.472738	0.68973	0.899513	1.11657
Pdparasi	0.913589	0.805705	0.187714	0.274815	0.348747	0.42641	0.502888
PIabauje	1.19469	1.19557	0.511131	0.813378	1.16415	1.47589	1.7534
PIinterr	2.38872	2.47201	0.323624	0.43963	0.545103	0.61602	0.66113
PImicros	2.31852	2.25346	0.23038	0.261418	0.323286	0.390258	0.451103
PIobscur	1.96672	2.08243	0.763275	1.2527	1.50499	1.59254	1.60169
PIsubros	1.38507	1.33557	0.437619	0.728115	1.015	1.25329	1.4252
PIviridi	1.08007	0.985061	0.407724	0.587737	0.694595	0.763083	0.817603

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
PLconspi	1.72017	1.75468	0.311409	0.28894	0.306867	0.352722	0.425821
PSgridao	2.25992	2.37574	0.68835	0.668416	0.939216	1.24313	1.44297
PShelvet	2.62564	2.63202	0.259605	0.512924	0.729371	0.880416	0.924836
PSsubato	2.40233	2.4616	0.363471	0.546009	0.715596	0.845076	0.926858
PSventra	0.908276	0.514379	0.485611	1.0386	1.75298	2.41436	2.98666
PTellip	3.50823	3.63354	0.300017	0.555489	0.785601	0.933072	0.982555
PTfreq	1.92739	1.92137	0.163766	0.209222	0.26983	0.308754	0.344831
PThauck	2.00858	2.04055	0.090403	0.174595	0.296609	0.381084	0.406839
PTlanceo	2.26678	2.24922	0.170965	0.272825	0.358813	0.427373	0.486581
PTrostr	2.84413	2.93887	0.227291	0.350725	0.480535	0.647821	0.818351
REsinuta	2.19211	2.27847	0.387918	0.440785	0.494486	0.574077	0.636692
ROabbre	2.34089	2.35988	0.254749	0.349682	0.400988	0.422757	0.44052
RSlinea	1.33549	1.51156	0.538923	0.769998	0.847649	0.902416	0.925357
SApinnat	1.50072	1.30021	0.336601	0.439644	0.5422	0.651067	0.776228
SFpupula	2.21617	2.17129	0.207181	0.260049	0.309384	0.335008	0.350698
SFseminu	2.56051	2.4624	0.353688	0.452341	0.501525	0.53902	0.582189
SOexiguf	1.03853	1.10403	0.640469	0.710399	0.952922	1.13134	1.29341
SRconstr	2.07842	1.93267	0.328848	0.449323	0.540861	0.619129	0.690387
SRconven	1.74305	1.6422	0.275912	0.318235	0.370534	0.411711	0.451935
SSanceps	1.96039	2.02419	0.158815	0.221738	0.280899	0.326777	0.361777
SSkriege	2.48711	2.49066	0.172104	0.417595	0.704142	0.921507	1.05536
SSsmithi	1.22817	1.12338	0.220033	0.263324	0.347328	0.413649	0.473966
SSthermc	2.85237	2.8042	0.198691	0.262197	0.34953	0.415735	0.469757
SThantzs	2.55512	2.58599	0.32446	0.376408	0.442133	0.538561	0.65075
SUangust	3.27003	3.39926	0.145821	0.187904	0.220984	0.275034	0.325311
Subrekut	2.42283	2.63305	0.3074	0.485325	0.669512	0.830603	0.973542
SYrumpen	0.950485	0.805931	0.304117	0.388157	0.505977	0.643185	0.747052
TAfenest	1.60934	1.62954	0.158422	0.265109	0.348537	0.385115	0.423834
TAfloccu	1.51689	1.53999	0.324337	0.20698	0.280679	0.311068	0.353433
ULacus	2.13054	2.14907	0.583475	0.855263	1.087	1.28671	1.43905
ULdelica	0.95911	0.95393	0.969147	1.50007	1.93101	2.24809	2.56298
UlnaUlna	1.82922	1.81956	0.222205	0.297202	0.367909	0.435597	0.489016

Name 5
ACsubkra
AEtuscul
AHaffine
Ahdeflex
AHexigum
AHminuti
AHreimer
Ahrivula
AMcopula
AMpedcls
ASformos
AUambig
AUdistns
AUgranlt
AUgrnang
AUitalic
AUsubart
AUtenell
BApardxa
BRmicroc
CAbacill
CAhyalin
CBnavicu
CCfluvtl
CCpedcls
CCplacen
CCplaeug
CCplalin
CCpselin
CEpulch
CMaera
CMheterp
CPcrucic
CSinvisi
CStholif
CYatomus
CYmenegh
DAvulg
DEkuetzi
DIconfer

Name 5
DTpseuds
DTstelli
ECminutu
ECsilesi
Eolmini
EOsubmin
EUbilun
EUcaroli
EUexigua
EUflexuo
EUformic
EUimplic
EUincisa
EUinterm
EUmaior
EUmeistr
EUmonodo
EUpectin
EUpecund
EUpirla
EUrhombo
EUsoleir
EUsubarc
EUtenell
FGbicapi
FGstrang
FGviresc
FRcapfra
FRcapgra
FRcapuci
FRcroton
FRmesole
FRvauche
Fscrassi
FSkramme
FSvulgar
GEaccep
GEdecu
GOangstt
GOgracil

Name 5
GOinsign
GOkobaya
GOlage
GOmicrop
GOminutm
GOolihut
GOpalius
GOparvul
GOpatric
GOpygm
GYacumin
HIcapita
KBsubtil
KVclevei
KVoblong
LUgoepp2
LUmutica
MDcircon
MDcircul
MEvarian
MYagres
MYatomus
NAantoni
NAcaprad
NAcrypto
NAcrytds
NAcryten
NAerifga
NAescamb
NAgermii
NAgregar
NAhmberg
NAlancel
NAlongcp
NAperegr
NApermnt
NAreichd
NArhynch
NArostel
NAsalinm

Name 5
NAsubmur
NAsymtrc
NAtenell
NAtripun
NEalpinu
NIacidcn
NIamphib
NIarchib
NIbrevis
NIcapite
NIclausi
NIdissip
NIfilifr
NIfontic
NIfrustu
NIgracil
NIincons
NIliebrt
NIlinear
NInana
NIpaldeb
NIpalea
NIpaleac
NIpsefon
NIrecta
NIscalpe
NIsociab
NItubcla
NUlapid
Nuneglec
NUwell
PCclemen
PDbrevis
Pdparasi
PIabauje
PIinterr
PImicros
PIobscur
PIsubros
PIviridi

Name	5
PLconspi	
PSgridao	
PShelvet	
PSsubato	
PSventra	
PTellip	
PTfreq	
PThauck	
PTlanceo	
PTrostr	
REsinuta	
ROabbre	
RSlinea	
SApinnat	
SFpupula	
SFseminu	
SOexiguf	
SRconstr	
SRconven	
SSanceps	
SSkriege	
SSsmithi	
SSthermc	
SThantzs	
SUangust	
Subrekut	
SYrumpen	
TAfenest	
TAfloccu	
ULacus	
ULdelica	
UlnaUlna	

Site 1	#		Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
	1	1	ACsubkra	ACsubkra	-0.92711	-0.19865	-0.32988	-0.13294
	2	3	AEtuscul	AEtuscul	0.400881	0.63102	0.765056	0.380975
	3	4	AHaffine	AHaffine	-0.43523	-0.74453	-0.76668	-0.77091
	4	5	Ahdeflex	Ahdeflex	-0.07845	-0.15935	-0.09571	-0.11694
	5	6	AHexigum	AHexigum	-0.07897	-0.14994	-0.2756	-0.09445
	6	7	AHminuti	AHminuti	-0.51064	-0.076	-0.00144	-0.05068
	7	8	AHreimer	AHreimer	-1.26421	-0.38307	0.116116	0.023085
	8	9	Ahrivula	Ahrivula	-1.22572	-0.20238	0.011117	0.15565
	9	10	AMcopula	AMcopula	0.964543	0.252915	0.120659	0.072621
	10	11	AMpedcls	AMpedcls	-0.1397	0.183649	-0.32679	-0.09062
	11	12	ASformos	ASformos	0.233104	-0.18075	0.227696	-0.26514
	12	14	AUambig	AUambig	0.193641	0.021089	0.093369	-0.01648
	13	16	AUdistns	AUdistns	0.168915	0.168309	0.203626	0.044539
	14	17	AUgranlt	AUgranlt	0.850007	0.027848	0.104127	0.046716
	15	18	AUgrnang	AUgrnang	0.627376	0.028318	0.243961	0.036591
	16	19	AUitalic	AUitalic	1.83458	0.687867	0.558496	0.293613
	17	22	AUsubart	AUsubart	0.595617	-0.51187	-0.95139	-0.79625
	18	23	AUtenell	AUtenell	-0.92155	0.342251	0.095365	-0.2655
	19	24	BApardxa	BApardxa	-0.67086	-0.61689	-0.23132	-0.0334
	20	25	BRmicroc	BRmicroc	-1.24642	0.368614	0.191365	-0.17314
	21	26	CAbacill	CAbacill	0.609378	0.128639	0.039049	0.095325
	22	27	CAhyalin	CAhyalin	-0.349	-0.6302	-0.38613	-0.11744
	23	28	CBnavicu	CBnavicu	-0.83061	-0.60801	-0.15178	-0.10166
	24	29	CCfluvtl	CCfluvtl	1.15413	0.511015	0.502014	0.429221
	25	30	CCpedcls	CCpedcls	0.466364	0.75209	0.433104	0.332494
	26	31	CCplacen	CCplacen	-0.0358	-0.26794	-0.31491	-0.13616
	27	32	CCplaeug	CCplaeug	0.475711	0.710811	0.105894	0.147669
	28	33	CCplalin	CCplalin	0.476224	0.346076	0.164516	0.06172
	29	34	CCpselin	CCpselin	0.307077	-0.1899	-0.20772	-0.03136
	30	35	CEpulch	CEpulch	0.023305	-0.11811	-0.19358	-0.16405
	31	36	CMaera	CMaera	2.26997	0.479752	0.009309	-0.0436
	32	37	CMheterp	CMheterp	-0.18727	0.105472	0.137308	-0.06733
	33	38	CPcrucic	CPcrucic	1.7934	0.242572	-0.17485	-0.24458
	34	39	CSinvisi	CSinvisi	2.17334	-0.0159	-0.51512	-0.20804
	35	40	CStholif	CStholif	0.542376	-0.37194	-0.51002	-0.53345
	36	41	CYatomus	CYatomus	0.923072	0.106883	0.006037	0.158079
	37	42	CYmenegh	CYmenegh	1.21036	-0.01959	-0.26918	-0.07736
	38	43	DAvulg	DAvulg	0.449956	0.704642	0.423965	0.410598
	39	44	DEkuetzi	DEkuetzi	0.097921	0.530638	0.791056	0.434768
	40	45	DIconfer	DIconfer	1.0928	0.351443	0.364921	0.267277

Site 1	#		Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
	41	46	DTpseuds	DTpseuds	-0.44537	-0.67303	-0.28018	-0.06439
	42	47	DTstelli	DTstelli	0.010233	0.030685	0.109354	-0.20095
	43	49	ECminutu	ECminutu	-1.55264	-0.54227	-0.22039	-0.01729
	44	50	ECsilesi	ECsilesi	-0.36089	-0.09462	-0.18646	0.116312
	45	51	Eolmini	Eolmini	0.172772	0.097325	-0.03891	-0.00618
	46	52	EOsubmin	EOsubmin	0.923926	0.602201	0.154347	0.104632
	47	54	EUbilun	EUbilun	-0.01509	-0.11059	0.119478	0.090568
	48	55	EUcaroli	EUcaroli	-1.51981	0.774469	0.273636	-0.32245
	49	57	EUexigua	EUexigua	-0.0414	-0.20995	0.288414	0.364683
	50	60	EUflexuo	EUflexuo	-0.52071	-0.29985	-0.06182	-0.12464
	51	61	EUformic	EUformic	0.16972	-0.17686	0.14173	0.173451
	52	62	EUimplic	EUimplic	1.52643	0.406223	0.156057	0.084301
	53	63	EUincisa	EUincisa	-0.4473	-0.25216	-0.27757	-0.39408
	54	64	EUinterm	EUinterm	-0.97192	0.708243	0.397475	-0.09351
	55	65	EUmaior	EUmaior	-0.5675	0.02525	0.28777	0.149771
	56	66	EUmeistr	EUmeistr	-0.5845	-0.49226	0.012549	0.019838
	57	67	EUmonodo	EUmonodo	1.04799	0.606177	0.861056	0.793031
	58	69	EUpectin	EUpectin	-1.06456	-0.14917	-0.16532	-0.16506
	59	70	EUpecund	EUpecund	-0.14952	-0.05585	-0.05197	-0.3236
	60	71	EUpirla	EUpirla	0.043618	-0.05748	0.327404	0.350939
	61	72	EUrhombo	EUrhombo	-1.18365	0.393101	0.053696	-0.34879
	62	74	EUsoleir	EUsoleir	0.873604	0.550924	1.03836	1.00122
	63	75	EUsubarc	EUsubarc	-1.51697	0.857806	0.338407	-0.28079
	64	76	EUtenell	EUtenell	0.339295	0.024924	0.210549	0.146097
	65	77	FGbicapi	FGbicapi	0.629221	0.185411	0.065201	0.095395
	66	78	FGstrang	FGstrang	-1.31116	0.648632	0.18658	-0.34886
	67	79	FGviresc	FGviresc	-0.70659	0.309882	0.073556	-0.2444
	68	81	FRcapfra	FRcapfra	-0.49925	-0.43561	-0.40103	-0.57934
	69	82	FRcapgra	FRcapgra	0.041964	0.026786	0.166337	-0.01728
	70	83	FRcapuci	FRcapuci	0.431867	0.071735	0.242684	0.154461
	71	84	FRcroton	FRcroton	0.097723	-0.17892	-0.11789	-0.14871
	72	85	FRmesole	FRmesole	-0.07608	-0.19365	0.322695	-0.15429
	73	87	FRvauche	FRvauche	-0.39928	-0.0406	0.17914	0.167713
	74	88	Fscrassi	Fscrassi	0.01392	-0.19159	0.0865	0.080628
	75	89	FSkramme	FSkramme	-1.12232	-0.78436	0.005578	0.141122
	76	90	FSvulgar	FSvulgar	-0.28953	-0.22342	0.114216	0.099805
	77	91	GEaccep	GEaccep	-0.11576	0.285565	-0.348	-0.2248
	78	92	GEdecu	GEdecu	0.935717	0.082873	-0.08825	-0.07898
	79	93	GOangstt	GOangstt	0.487464	0.447853	0.628346	0.345527
	80	95	GOgracil	GOgracil	-0.02146	-0.093	0.067669	0.006924

Site 1	#	Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
81	96	GOinsign	GOinsign	0.640297	-0.03758	-0.00166	0.059295
82	97	GOkobaya	GOkobaya	0.750966	0.288724	0.141246	0.057269
83	98	GOlage	GOlage	1.08408	0.781126	0.764039	0.559853
84	99	GOmicrop	GOmicrop	1.21634	0.593868	0.723585	0.522328
85	100	GOminutm	GOminutm	0.079643	0.519261	0.610519	0.583808
86	101	GOolihut	GOolihut	-1.1721	-0.33015	-0.69263	-0.51659
87	103	GOpalius	GOpalius	-0.48297	-0.28102	0.060087	-0.01162
88	104	GOparvul	GOparvul	0.063914	-0.20534	-0.08686	-0.07476
89	105	GOpatric	GOpatric	1.09392	0.312048	0.333586	0.213098
90	106	GOpygm	GOpygm	-0.75161	-0.03962	-0.39485	-0.30255
91	107	GYacumin	GYacumin	-0.80072	-0.4576	0.066127	0.307434
92	108	HIcapita	HIcapita	0.749285	0.122113	0.099077	0.079
93	110	KBsubtil	KBsubtil	-1.4931	-1.08371	-0.18493	0.020608
94	111	KVclevei	KVclevei	-0.18808	0.074598	-0.59041	-0.2911
95	112	KVoblong	KVoblong	-0.24239	-0.41183	-0.0771	-0.04737
96	113	LUgoepp2	LUgoepp2	1.37216	0.307094	-0.08965	-0.13348
97	114	LUmutica	LUmutica	0.60464	0.128258	0.28443	0.226287
98	115	MDcircon	MDcircon	0.074983	0.138726	0.430319	0.313067
99	116	MDcircul	MDcircul	-0.15483	-0.03928	0.208948	0.228905
100	117	MEvarian	MEvarian	-0.26267	-0.25617	-0.1579	-0.08077
101	118	MYagres	MYagres	0.619665	0.098151	0.210539	0.14217
102	119	MYatomus	MYatomus	1.42928	0.749955	0.463407	0.179499
103	120	NAantoni	NAantoni	-0.18043	0.193379	-0.05419	0.037371
104	121	NAcaprad	NAcaprad	-0.11605	0.175013	0.262367	-0.02141
105	122	NAcrypto	NAcrypto	0.251193	-0.03857	0.066235	0.015767
106	123	NAcrytds	NAcrytds	0.50573	-0.12527	-0.04068	0.064308
107	124	NAcryten	NAcryten	0.042269	0.218579	0.265256	0.250096
108	125	NAerifga	NAerifga	0.789907	-0.20573	-0.18777	-0.10503
109	126	NAescamb	NAescamb	-0.79562	-0.39494	-0.16591	-0.03438
110	127	NAgermii	NAgermii	0.182349	-0.32728	-0.17707	-0.0432
111	128	NAgregar	NAgregar	-0.10059	-0.10675	-0.18401	-0.09254
112	129	NAhmberg	NAhmberg	0.571531	0.796165	1.04183	0.607396
113	130	NAlancel	NAlancel	-0.60103	-0.31383	-0.53316	-0.33553
114	131	NAlongcp	NAlongcp	0.377748	0.001598	0.299082	0.295217
115	132	NAperegr	NAperegr	-0.15772	-0.31879	-0.26359	-0.10717
116	133	NApermnt	NApermnt	-0.808	-0.01623	0.115382	0.193521
117	134	NAreichd	NAreichd	1.07689	0.370556	0.39851	0.255773
118	135	NArhynch	NArhynch	-0.10529	-0.18113	0.118749	0.08511
119	136	NArostel	NArostel	0.028915	-0.18628	-0.08744	-3.48E-05
120	137	NAsalinm	NAsalinm	0.966126	0.195701	0.177534	0.30897

Site 1	#	Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
121	138	NAsubmur	NAsubmur	0.326528	-0.30836	-0.4672	-0.39979
122	139	NAsymtrc	NAsymtrc	0.398381	-0.21484	-0.16154	-0.02199
123	140	NAtenell	NAtenell	0.352918	-0.13136	0.002395	0.079587
124	141	NAtripun	NAtripun	0.007274	0.470427	0.406807	0.43578
125	142	NEalpinu	NEalpinu	0.223039	-0.12746	0.025328	-0.00363
126	143	NIacidcn	NIacidcn	1.14747	0.639105	0.685598	0.52963
127	144	NIamphib	NIamphib	0.6683	0.150365	0.058768	0.092085
128	145	NIarchib	NIarchib	0.380675	0.241202	0.232238	0.102398
129	146	NIbrevis	NIbrevis	0.694067	-0.0071	-0.07002	-0.03937
130	147	NIcapite	NIcapite	0.769517	0.31843	0.616529	0.579638
131	148	NIclausi	NIclausi	0.801208	0.004438	0.143237	0.195549
132	149	NIdissip	NIdissip	-0.39474	-0.18571	-0.07544	-0.09769
133	150	NIfilifr	NIfilifr	-0.33449	-0.41709	-0.00793	-0.00554
134	151	NIfontic	NIfontic	0.213099	0.48323	0.381746	0.395548
135	152	NIfrustu	NIfrustu	0.264876	0.265118	-0.16962	-0.16113
136	154	NIgracil	NIgracil	0.305977	-0.05969	-0.12068	-0.23297
137	155	NIincons	NIincons	0.1204	0.370323	-0.06629	0.026217
138	156	NIliebrt	NIliebrt	0.731053	0.045153	0.063181	0.137977
139	157	NIlinear	NIlinear	0.070406	0.119828	0.148254	0.120126
140	158	NInana	NInana	-0.71255	-0.84935	-0.70221	-0.55423
141	159	NIpaldeb	NIpaldeb	0.375776	-0.31698	-0.3197	-0.1788
142	160	NIpalea	NIpalea	0.383794	-0.07965	0.111017	0.121374
143	161	NIpaleac	NIpaleac	-0.36443	-0.17789	-0.06949	-0.02512
144	162	NIpsefon	NIpsefon	0.151156	0.057945	0.013877	-0.14108
145	163	NIrecta	NIrecta	0.8206	0.307564	0.529464	0.448022
146	164	NIscalpe	NIscalpe	0.332084	0.792845	1.10275	0.668466
147	165	NIsociab	NIsociab	-0.30889	-0.34169	-0.36636	-0.26894
148	166	NItubcla	NItubcla	-0.49883	-0.21253	0.03919	0.019713
149	167	NUlapid	NUlapid	-0.70011	-0.42053	-0.39756	-0.24626
150	168	Nuneglec	Nuneglec	-0.96552	-0.31884	-0.64201	-0.22006
151	169	NUwell	NUwell	-0.08128	-0.2317	0.052203	0.096808
152	170	PCclemen	PCclemen	0.343782	-0.12405	0.110765	0.13736
153	171	PDbrevis	PDbrevis	0.255539	-0.00601	-0.09072	-0.19049
154	172	Pdparasi	Pdparasi	-0.41533	-0.47296	-0.3117	-0.28233
155	173	Plabauje	Plabauje	-0.62457	-0.40788	-0.22303	-0.27394
156	174	PIinterr	PIinterr	0.328634	-0.0771	0.241913	0.246331
157	175	PImicros	PImicros	0.507783	-0.01958	0.081815	0.050726
158	176	PIobscur	PIobscur	0.171298	-0.18949	0.112217	0.244264
159	178	PIsubros	PIsubros	-0.23506	-0.4283	-0.22458	-0.14639
160	179	PIviridi	PIviridi	-0.48459	-0.42432	-0.0809	-0.12444

Site 1	#	Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
161	180	PLconspi	PLconspi	-0.09761	0.197062	-0.35799	-0.06776
162	181	PSgridao	PSgridao	-0.77804	0.655833	0.346549	-0.09705
163	182	PShelvet	PShelvet	0.223776	0.407722	0.441014	0.102947
164	183	PSsubato	PSsubato	0.280171	0.12282	0.373514	0.289065
165	184	PSventra	PSventra	-0.01235	-0.57864	-0.92662	-0.87786
166	185	PTellip	PTellip	0.449647	0.747325	0.922923	0.488826
167	186	PTfreq	PTfreq	0.179521	0.025728	-0.16343	-0.07927
168	187	PThauck	PThauck	0.041943	0.154747	0.034168	-0.21694
169	188	PTlanceo	PTlanceo	0.371357	0.08658	0.001916	-0.0803
170	189	PTrostr	PTrostr	0.486753	0.242505	0.299911	0.249354
171	190	REsinuta	REsinuta	-0.05333	0.371899	-0.09021	0.044859
172	191	ROabbre	ROabbre	0.072296	0.513027	0.215882	0.151465
173	192	RSlinea	RSlinea	-0.77132	-0.44744	0.01995	0.270405
174	193	SApinnat	SApinnat	0.340305	-0.35181	-0.40636	-0.35609
175	194	SFpupula	SFpupula	0.571061	-0.05115	-0.05573	-0.06655
176	195	SFseminu	SFseminu	1.10244	0.137141	-0.19091	-0.19622
177	196	SOexiguf	SOexiguf	-1.36678	0.668413	0.214989	-0.3196
178	197	SRconstr	SRconstr	0.543298	-0.20418	-0.18394	-0.18071
179	198	SRconven	SRconven	0.018079	-0.0028	-0.10157	-0.24041
180	199	SSanceps	SSanceps	0.003066	0.047371	0.065929	-0.07775
181	200	SSkriege	SSkriege	0.449244	0.016259	-0.26248	-0.25146
182	201	SSsmithi	SSsmithi	0.010529	-0.42372	-0.31226	-0.20682
183	202	SSthermc	SSthermc	0.617385	0.094935	0.27332	0.1685
184	203	SThantzs	SThantzs	0.799517	0.034241	0.0168	0.066837
185	204	SUangust	SUangust	0.672421	0.333626	0.424633	0.348674
186	205	Subrekut	Subrekut	-0.08864	0.231897	0.31084	0.347249
187	206	SYrumpen	SYrumpen	-0.47914	-0.30597	-0.10458	-0.36305
188	207	TAfenest	TAfenest	-0.15811	-0.06162	-0.05195	-0.28627
189	208	TAfloccu	TAfloccu	-0.69772	0.364725	0.119759	-0.24558
190	209	ULacus	ULacus	0.255501	-0.10441	0.005938	-0.01181
191	210	ULdelica	ULdelica	-0.66476	-0.03099	0.15525	0.076357
192	211	UlnaUlna	UlnaUlna	-0.07261	-0.08392	0.018694	-0.04343

Name	WAPLS_C5
ACsubkra	-0.06775
AEtuscul	0.175166
AHaffine	-1.0588
Ahdeflex	-0.18392
AHexigum	0.071881
AHminuti	-0.12002
AHreimer	-0.19143
Ahrivula	0.127501
AMcopula	0.069075
AMpedcls	0.078401
ASformos	0.144977
AUambig	0.085861
AUdistns	0.148111
AUgranlt	0.088808
AUgrnang	0.152026
AUitalic	-0.02776
AUsubart	-0.77266
AUtenell	0.096436
BApardxa	0.075134
BRmicroc	0.116518
CAbacill	0.134396
CAhyalin	0.133894
CBnavicu	-0.23345
CCfluvtl	0.471083
CCpedcls	0.1076
CCplacen	0.100228
CCplaeug	0.069926
CCplalin	-0.11486
CCpselin	0.232373
CEpulch	-0.14659
CMaera	-0.01515
CMheterp	0.003965
CPcrucic	-0.34192
CSinvisi	0.174548
CStholif	-0.81622
CYatomus	0.267272
CYmenegh	0.14837
DAvulg	0.404348
DEkuetzi	0.154174
DIconfer	0.148295

Name	WAPLS_C5
DTpseuds	0.147796
DTstelli	0.144209
ECminutu	0.049688
ECsilesi	0.423665
Eolmini	0.001255
EOsubmin	0.01729
EUbilun	0.084328
EUcaroli	0.12496
EUexigua	0.400876
EUflexuo	-0.14272
EUformic	0.142476
EUimplic	0.131526
EUincisa	-0.38483
EUinterm	0.224604
EUmaior	0.210172
EUmeistr	-0.17725
EUmonodo	0.771098
EUpectin	-0.12536
EUpecund	-0.19795
EUpirla	0.390084
EUrhombo	-0.03318
EUsoleir	1.02156
EUsubarc	0.21365
EUtenell	0.028949
FGbicapi	0.235195
FGstrang	0.03095
FGviresc	-0.03727
FRcapfra	-0.48409
FRcapgra	-0.07676
FRcapuci	0.03237
FRcroton	-0.13283
FRmesole	0.269856
FRvauche	0.126757
Fscrassi	0.058199
FSkramme	0.076734
FSvulgar	0.001163
GEaccep	-0.31817
GEdecu	-0.11718
GOangstt	0.060409
GOgracil	0.009486

Name	WAPLS_C5
GOinsign	0.119648
GOkobaya	0.031373
GOlage	0.296493
GOmicrop	0.319301
GOminutm	0.405632
GOolihut	-0.64464
GOpalius	-0.1734
GOparvul	-0.11733
GOpatric	0.065888
GOpygm	-0.32275
GYacumin	0.515917
HIcapita	0.060933
KBsubtil	-0.06434
KVclevei	-0.14535
KVoblong	-0.16613
LUgoepp2	-0.12263
LUmutica	0.119815
MDcircon	0.219454
MDcircul	0.314966
MEvarian	-0.07214
MYagres	-0.00763
MYatomus	-0.1544
NAantoni	0.058802
NAcaprad	-0.33169
NAcrypto	-0.07767
NAcrytds	0.122055
NAcryten	0.242337
NAerifga	-0.16289
NAescamb	-0.02344
NAgermii	0.044838
NAgregar	-0.09872
NAhmberg	0.226887
NAlancel	-0.27245
NAlongcp	0.225756
NAperegr	0.023671
NApermnt	0.101941
NAreichd	0.06378
NArhynch	-0.02943
NArostel	-0.01878
NAsalinm	0.463666

Name	WAPLS_C5
NAsubmur	-0.44134
NAsymtrc	0.096719
NAtenell	0.132474
NAtripun	0.411527
NEalpinu	-0.13274
NIacidcn	0.421607
NIamphib	0.124522
NIarchib	-0.07036
NIbrevis	-0.07909
NIcapite	0.58477
NIclausi	0.169088
NIdissip	-0.18839
NIfilifr	-0.20582
NIfontic	0.334146
NIfrustu	-0.22659
NIgracil	-0.2713
NIincons	0.045603
NIliebrt	0.254363
NIlinear	0.03704
NInana	-0.47196
NIpaldeb	-0.06878
NIpalea	0.055621
NIpaleac	-0.09096
NIpsefon	-0.40492
NIrecta	0.361765
NIscalpe	0.323919
NIsociab	-0.29774
NItubcla	-0.06819
NUlapid	-0.27593
Nuneglec	0.132366
NUwell	0.040239
PCclemen	0.100227
PDbrevis	-0.30683
Pdparasi	-0.32999
PIabauje	-0.42537
PIinterr	0.195776
PImicros	-0.03069
PIobscur	0.392505
PIsubros	-0.13161
PIviridi	-0.22491

Name	WAPLS_C5
PLconspi	0.163271
PSgridao	0.174435
PShelvet	-0.05005
PSsubato	0.20723
PSventra	-1.04086
PTellip	0.201114
PTfreq	-0.04594
PThauck	-0.14138
PTlanceo	-0.11395
PTrostr	0.200827
REsinuta	0.107031
ROabbre	0.034189
RSlinea	0.5152
SApinnat	-0.44851
SFpupula	-0.08332
SFseminu	-0.20165
SOexiguf	0.083973
SRconstr	-0.32355
SRconven	-0.2401
SSanceps	0.005385
SSkriege	-0.17662
SSsmithi	-0.19261
SSthermc	-0.08364
SThantzs	0.203684
SUangust	0.271888
Subrekut	0.358506
SYrumpen	-0.31197
TAfenest	-0.11583
TAfloccu	-0.03989
ULacus	-0.09158
ULdelica	0.094713
UlnaUlna	-0.09815

Site 1	#		Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
	1	1	BFBM0002	BFBM0002	0.064271	-0.01301	-0.00043	-0.0021
	2	2	BFBM0002	BFBM0002	0.042954	-0.03222	-0.00073	0.00197
	3	3	DE-101031	DE-101031	-0.0349	0.050457	-0.02021	-0.00133
	4	4	DE-103051	DE-103051	0.017307	0.072313	-0.00554	0.007864
	5	5	DE-105071	DE-105071	-0.05568	0.044435	0.011741	0.034891
	6	6	DE-105151	DE-105151	0.010457	0.06756	-0.01886	-0.00392
	7	7	DE-106141	DE-106141	-0.17497	-0.04566	-0.01795	0.002929
	8	8	DE-109081	DE-109081	-0.0422	-0.03258	0.001668	-0.00429
	9	9	DE-114021	DE-114021	-0.02784	0.030382	0.042629	0.022779
	10	10	DE-201161	DE-201161	-0.03545	-0.01784	0.012355	-0.01179
	11	11	DE-205241	DE-205241	-0.00979	-0.00063	0.01093	-0.0102
	12	12	DE-206461	DE-206461	-0.06153	-0.0054	0.013528	-0.00587
	13	13	DE-303021	DE-303021	-0.00978	0.016798	0.013711	-0.01997
	14	14	DE-C08014	DE-C08014	-0.10535	-0.0338	0.018755	0.012375
	15	15	DE-C08025	DE-C08025	0.078474	0.049816	0.015682	0.009986
	16	16	DE-C13046	DE-C13046	-0.01773	0.002259	0.003624	0.003315
	17	17	DE-C15056	DE-C15056	0.026925	0.004291	0.007738	0.008708
	18	18	DE-EPA03-(	DE-EPA03-(	0.017621	0.113313	-0.0252	0.003831
	19	19	DE-EPA03-1	DE-EPA03-1	-0.12679	-0.00623	-0.00159	0.014829
	20	20	DE-P01092	DE-P01092	-0.04904	0.023379	-0.05191	-0.01134
	21	21	DE-P01115	DE-P01115	0.027137	0.052281	-0.01369	-0.00867
	22	22	DE-P03043	DE-P03043	-0.08172	0.024315	-0.02465	-0.01257
	23	23	DE-P04007	DE-P04007	-0.13805	-0.0077	-0.00886	0.016342
	24	24	DE-P05013	DE-P05013	-0.10308	-0.01931	-0.00562	0.005308
	25	25	DE-P05066	DE-P05066	-0.05846	0.047405	-0.01577	0.008044
	26	26	DE-P06021	DE-P06021	-0.16853	-0.02191	-0.01506	0.009981
	27	27	DE-P06037	DE-P06037	-0.08743	0.027378	-0.00202	0.022209
	28	28	DE-P06061	DE-P06061	-0.04856	0.068265	0.018156	0.011185
	29	29	DE-RA51	DE-RA51	0.043438	0.013159	-0.00978	-0.01191
	30	30	GS0140534	GS0140534	0.018244	-0.04781	0.014189	0.020343
	31	31	GS0140596	GS0140596	0.045883	-0.01642	0.019712	0.020536
	32	32	GS0140784	GS0140784	0.042064	-0.00362	0.009288	0.01685
	33	33	GS0140800	GS0140800	-0.04856	-0.05109	-0.00685	0.006081
	34	34	GS0140810	GS0140810	-0.02179	-0.03656	0.000411	-0.00731
	35	35	GS0140817	GS0140817	-0.2269	0.123526	0.031044	-0.06176
	36	36	GS0141280	GS0141280	-0.00229	-0.01401	0.00396	0.003164
	37	37	GS0146450	GS0146450	0.103744	-0.03432	-0.00174	0.008439
	38	38	GS0146451	GS0146451	0.076025	-0.0077	0.007184	-0.00032
	39	39	GS0146453	GS0146453	-0.05316	-0.10093	0.003248	0.016
	40	40	GS0146457	GS0146457	0.040453	-0.01811	0.020683	0.025341

Site 1	#		Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
	41	41	GS0146588	GS0146588	0.052906	0.001935	0.01504	0.016626
	42	42	GS0146702	GS0146702	0.023778	-0.02358	-0.02622	-0.01337
	43	43	GS0146715	GS0146715	0.114488	0.011537	0.014807	0.011833
	44	44	GS0146735	GS0146735	0.077218	-0.01135	-0.00939	0.003554
	45	45	GS0147712	GS0147712	0.060447	-0.00625	0.006855	0.007195
	46	46	GS0148250	GS0148250	0.224839	-0.01132	-0.03258	-0.01456
	47	47	MVO14808	MVO14808	0.046738	0.093135	0.011488	0.013572
	48	48	MVO15816	MVO15816	-0.12105	-0.02022	-0.00914	-0.00567
	49	49	NJAN0118	NJAN0118	0.144933	0.044517	-0.00531	-0.00789
	50	50	NJAN0448	NJAN0448	-0.02001	-0.09346	-0.0171	-0.00055
	51	51	NJAN0451	NJAN0451	0.005491	-0.0568	0.006843	0.014207
	52	52	NJAN0466	NJAN0466	0.058557	-0.01724	-0.02431	-0.02135
	53	53	NJAN0470	NJAN0470	0.027583	-0.03926	-0.02137	-0.01333
	54	54	NJAN0488	NJAN0488	0.072518	0.008957	0.016043	0.013252
	55	55	NJAN0489	NJAN0489	0.016312	-0.04202	-0.01141	-0.00385
	56	56	NJAN0490	NJAN0490	-0.002	-0.0583	-0.01853	-0.01539
	57	57	NJAN0673	NJAN0673	0.227307	0.030916	-0.00636	-0.00719
	58	58	NJAN0683	NJAN0683	0.061753	0.004836	0.005776	0.004694
	59	59	NJAN0694	NJAN0694	0.136148	-0.02115	-0.01517	-0.00204
	60	60	NJSD48	NJSD48	0.007124	-0.04888	0.044106	-0.05288
	61	61	NJSD91	NJSD91	0.062634	-0.04399	0.037671	-0.05073
	62	62	NJSD94	NJSD94	-0.01653	-0.01352	0.003965	-0.02736

Name	WAPLS_C5
BFBM0002	-0.0052
BFBM0002	-0.00723
DE-101031	0.003593
DE-103051	0.002873
DE-105071	0.017303
DE-105151	-0.0026
DE-106141	-4.96E-05
DE-109081	-0.01675
DE-114021	-0.00777
DE-201161	-0.02002
DE-205241	-0.00508
DE-206461	-0.01259
DE-303021	-0.01486
DE-C08014	-0.00821
DE-C08025	-0.00907
DE-C13046	-0.00341
DE-C15056	3.35E-05
DE-EPA03-(	0.009758
DE-EPA03-:	0.003151
DE-P01092	0.020611
DE-P01115	-0.00919
DE-P03043	-0.00671
DE-P04007	0.012723
DE-P05013	0.000956
DE-P05066	0.006886
DE-P06021	0.005193
DE-P06037	0.010939
DE-P06061	-0.00839
DE-RA51	-0.00762
GS0140534	0.00504
GS0140596	0.001391
GS0140784	0.007204
GS0140800	0.003105
GS0140810	-0.01017
GS0140817	0.006882
GS0141280	-0.00319
GS0146450	-0.00112
GS0146451	0.003333
GS0146453	-0.00057
GS0146457	0.006944

Name	WAPLS_C5
GS0146588	0.005682
GS0146702	0.001667
GS0146715	0.001276
GS0146735	0.002109
GS0147712	-0.0024
GS0148250	0.017438
MVO14808	-0.0056
MVO15816	-0.01028
NJAN0118	-0.00569
NJAN0448	0.008975
NJAN0451	0.006577
NJAN0466	-0.01482
NJAN0470	-0.00643
NJAN0488	0.003285
NJAN0489	-0.00114
NJAN0490	-0.01123
NJAN0673	-0.00152
NJAN0683	-0.00198
NJAN0694	0.00648
NJSD48	0.024101
NJSD91	0.02183
NJSD94	-0.00475

Site 1	#	Code	Name	N	N2	Obs_logTP	WAPLS_C1
1	1	BFBM0002	BFBM0002	73	21.5018	1.89927	2.1112
2	2	BFBM0002	BFBM0002	76	29.0046	1.85003	2.03405
3	3	DE-101031	DE-101031	40	10.6312	1.76343	1.75229
4	4	DE-103051	DE-103051	43	13.071	2.19312	1.94123
5	5	DE-105071	DE-105071	37	11.5604	1.98227	1.67708
6	6	DE-105151	DE-105151	43	5.05923	1.88081	1.91644
7	7	DE-106141	DE-106141	41	10.4789	0.954243	1.24538
8	8	DE-109081	DE-109081	39	13.2967	1.44716	1.72587
9	9	DE-114021	DE-114021	29	11.0285	2.10486	1.77785
10	10	DE-201161	DE-201161	43	11.1402	1.5887	1.7503
11	11	DE-205241	DE-205241	55	7.14324	1.88513	1.84318
12	12	DE-206461	DE-206461	41	3.68097	1.70137	1.65594
13	13	DE-303021	DE-303021	44	9.70492	1.89023	1.8432
14	14	DE-C08014	DE-C08014	39	9.7053	1.50515	1.49735
15	15	DE-C08025	DE-C08025	32	9.39783	2.35984	2.1626
16	16	DE-C13046	DE-C13046	33	5.36486	1.87506	1.81444
17	17	DE-C15056	DE-C15056	66	8.94258	2.2014	1.97604
18	18	DE-EPA03-(	DE-EPA03-(	27	5.80051	2.12385	1.94237
19	19	DE-EPA03-1	DE-EPA03-1	45	8.89291	1.49136	1.41974
20	20	DE-P01092	DE-P01092	28	7.64849	1.62325	1.70113
21	21	DE-P01115	DE-P01115	33	5.6095	2.01072	1.97681
22	22	DE-P03043	DE-P03043	34	7.33298	1.46982	1.58286
23	23	DE-P04007	DE-P04007	47	11.5386	1.51851	1.379
24	24	DE-P05013	DE-P05013	30	5.73563	1.36173	1.50556
25	25	DE-P05066	DE-P05066	35	10.7354	2.19033	1.66704
26	26	DE-P06021	DE-P06021	33	5.48478	1.09691	1.26869
27	27	DE-P06037	DE-P06037	43	10.0197	1.66276	1.56218
28	28	DE-P06061	DE-P06061	17	2.63418	2.03342	1.70287
29	29	DE-RA51	DE-RA51	40	3.7615	1.98453	2.0358
30	30	GS0140534	GS0140534	60	15.9442	2.02531	1.94463
31	31	GS0140596	GS0140596	52	18.3679	2.12385	2.04465
32	32	GS0140784	GS0140784	47	15.9145	2.17319	2.03083
33	33	GS0140800	GS0140800	76	17.1672	1.60206	1.70287
34	34	GS0140810	GS0140810	80	18.4439	1.51851	1.79974
35	35	GS0140817	GS0140817	40	11.3791	1.45025	1.05745
36	36	GS0141280	GS0141280	84	10.7954	1.86332	1.8703
37	37	GS0146450	GS0146450	70	10.4331	2.15534	2.25405
38	38	GS0146451	GS0146451	75	11.5273	2.17319	2.15374
39	39	GS0146453	GS0146453	50	11.9688	1.43297	1.6862
40	40	GS0146457	GS0146457	59	15.294	2.1959	2.025

Site 1	#		Code	Name	N	N2	Obs_logTP	WAPLS_C1
	41	41	GS0146588	GS0146588	74	27.4873	2.3483	2.07007
	42	42	GS0146702	GS0146702	65	15.7839	1.80618	1.96465
	43	43	GS0146715	GS0146715	106	20.2787	2.39094	2.29293
	44	44	GS0146735	GS0146735	62	8.38802	2.14922	2.15805
	45	45	GS0147712	GS0147712	85	20.855	2.02531	2.09736
	46	46	GS0148250	GS0148250	38	3.52771	2.52375	2.6923
	47	47	MVO14808	MVO14808	50	8.32464	2.32222	2.04774
	48	48	MVO15816	MVO15816	53	5.72001	1.17609	1.44053
	49	49	NJAN0118	NJAN0118	62	6.55446	2.50853	2.40312
	50	50	NJAN0448	NJAN0448	57	13.7634	1.49136	1.80619
	51	51	NJAN0451	NJAN0451	54	19.9752	1.81624	1.89847
	52	52	NJAN0466	NJAN0466	56	19.1145	1.65801	2.09052
	53	53	NJAN0470	NJAN0470	54	23.5841	1.79239	1.97842
	54	54	NJAN0488	NJAN0488	49	23.9572	2.30856	2.14104
	55	55	NJAN0489	NJAN0489	46	16.4275	1.72835	1.93763
	56	56	NJAN0490	NJAN0490	50	9.46827	1.53148	1.87137
	57	57	NJAN0673	NJAN0673	43	8.74419	2.7478	2.70123
	58	58	NJAN0683	NJAN0683	58	20.3886	2.20003	2.10209
	59	59	NJAN0694	NJAN0694	38	14.5687	2.29336	2.37132
	60	60	NJSD48	NJSD48	29	3.85871	1.86233	1.90438
	61	61	NJSD91	NJSD91	30	2.78735	2.01703	2.10527
	62	62	NJSD94	NJSD94	80	26.8904	1.70329	1.81877

Name	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5	WAPLS_C1	WAPLS_C2	WAPLS_C3
BFBM0002	2.07072	2.06875	2.06149	2.0338	2.08269	2.1022	2.13094
BFBM0002	1.93377	1.93041	1.93721	1.89872	2.02938	2.00285	2.02063
DE-101031	1.90932	1.81582	1.81123	1.83037	1.79258	1.89217	1.88882
DE-103051	2.16629	2.14064	2.16777	2.18307	1.81788	1.94018	1.95721
DE-105071	1.81537	1.8697	1.99006	2.08223	1.6553	1.68901	1.71504
DE-105151	2.1267	2.03943	2.02592	2.01207	1.88783	2.14219	2.26586
DE-106141	1.10328	1.02024	1.03035	1.03008	1.53422	1.41081	1.3555
DE-109081	1.62448	1.6322	1.6174	1.52816	1.85732	1.83726	1.88491
DE-114021	1.87241	2.06965	2.14823	2.10685	1.6589	1.61704	1.65428
DE-201161	1.69477	1.75194	1.71127	1.60464	1.88228	1.89384	1.94661
DE-205241	1.84123	1.8918	1.85663	1.82958	1.8713	1.85406	1.85356
DE-206461	1.63913	1.70173	1.68149	1.61443	1.72268	1.69635	1.70235
DE-303021	1.89547	1.95892	1.89004	1.8109	1.8517	1.87575	1.95113
DE-C08014	1.39216	1.47894	1.52163	1.4779	1.68447	1.55785	1.48959
DE-C08025	2.31764	2.3902	2.42464	2.37632	1.85341	1.8495	1.88252
DE-C13046	1.82147	1.83824	1.84967	1.83148	1.83207	1.8218	1.81731
DE-C15056	1.9894	2.0252	2.05524	2.05542	1.90011	1.89745	1.90019
DE-EPA03-(	2.29502	2.17843	2.19165	2.24363	1.73377	2.01526	2.16643
DE-EPA03-1	1.40035	1.393	1.44415	1.46094	1.59511	1.50908	1.48816
DE-P01092	1.77388	1.53368	1.49456	1.60435	1.8816	1.95561	1.91615
DE-P01115	2.13952	2.07618	2.04627	1.9973	1.92479	2.03741	2.05419
DE-P03043	1.65853	1.54449	1.50112	1.46538	1.76444	1.82019	1.82944
DE-P04007	1.35504	1.31402	1.37039	1.43817	1.51357	1.43039	1.39167
DE-P05013	1.44545	1.41946	1.43777	1.44286	1.61183	1.54928	1.53707
DE-P05066	1.81458	1.74161	1.76936	1.80604	1.61482	1.69905	1.67911
DE-P06021	1.20049	1.13081	1.16524	1.1929	1.51026	1.38972	1.36559
DE-P06037	1.64739	1.63805	1.71466	1.77293	1.64892	1.65773	1.68109
DE-P06061	1.91532	1.99933	2.03791	1.99322	1.63209	1.6637	1.66285
DE-RA51	2.07675	2.03149	1.99039	1.94978	2.02001	2.12465	2.19157
GS0140534	1.79582	1.86148	1.93165	1.9585	1.85595	1.73434	1.72376
GS0140596	1.99355	2.08476	2.1556	2.16301	1.95612	1.92935	1.97153
GS0140784	2.01958	2.06256	2.12068	2.15905	1.93284	1.89781	1.88223
GS014080(	1.54387	1.51219	1.53316	1.5497	1.881	1.79681	1.74053
GS014081(	1.68597	1.68787	1.66265	1.60845	1.95106	1.9126	1.92827
GS0140817	1.44189	1.58554	1.37251	1.40917	1.7598	1.52798	1.41662
GS014128(	1.8267	1.84502	1.85593	1.83891	1.8849	1.84959	1.82774
GS014645(	2.14722	2.13919	2.16829	2.16234	2.01833	1.93801	1.88177
GS0146451	2.12979	2.16303	2.16193	2.17969	1.85462	1.77392	1.77075
GS0146453	1.3721	1.38713	1.44232	1.43928	2.01531	1.92007	1.88779
GS0146457	1.96865	2.06435	2.15176	2.18875	1.91018	1.85516	1.8778

Name	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5	WAPLS_C1	WAPLS_C2	WAPLS_C3
GS0146588	2.07609	2.14568	2.20303	2.23329	1.95485	1.95838	1.97384
GS0146702	1.89128	1.76994	1.72383	1.73271	2.01133	2.02722	2.00958
GS0146715	2.32884	2.39735	2.43816	2.44496	2.01379	1.98983	2.01417
GS0146735	2.12272	2.07929	2.09155	2.10278	2.01319	1.99304	1.96987
GS0147712	2.07791	2.10963	2.13445	2.12168	2.05108	2.05922	2.09564
GS0148250	2.65707	2.50631	2.45608	2.54897	2.02137	2.05614	2.10714
MVO14808	2.3376	2.39075	2.43757	2.40775	1.77204	1.93754	2.0593
MVO15816	1.37761	1.3353	1.31575	1.26098	1.58909	1.52511	1.5074
NJAN0118	2.54166	2.51709	2.48987	2.45959	1.98169	2.01149	2.00455
NJAN0448	1.51532	1.43621	1.43432	1.48212	1.97264	1.85567	1.80296
NJAN0451	1.72171	1.75338	1.80238	1.83742	1.95424	1.84692	1.82719
NJAN0466	2.03687	1.92439	1.85074	1.77181	2.08002	2.09557	2.07715
NJAN0470	1.85625	1.75738	1.71141	1.67714	1.9474	1.87166	1.81839
NJAN0488	2.16892	2.24315	2.28886	2.30636	1.95469	1.9441	1.96018
NJAN0489	1.80687	1.75406	1.74076	1.73471	1.93394	1.84779	1.81482
NJAN0490	1.68992	1.60419	1.5511	1.49126	1.93932	1.84742	1.80863
NJAN0673	2.79744	2.76801	2.74322	2.7351	1.97789	1.98063	2.004
NJAN0683	2.11714	2.14386	2.16005	2.14949	1.98602	1.9989	2.00319
NJAN0694	2.3055	2.23531	2.22827	2.26279	2.08783	2.07063	2.04905
NJSD48	1.75227	1.95635	1.77396	1.90234	1.79427	1.49915	1.46324
NJSD91	1.96837	2.14268	1.96768	2.08397	1.80589	1.81354	1.72469
NJSD94	1.77668	1.79503	1.70067	1.67538	1.89467	1.90533	1.93646

Name	WAPLS_C4	WAPLS_C5_X
BFBM0002	2.16183	2.1712
BFBM0002	2.04787	2.04307
DE-101031	1.87374	1.89229
DE-103051	1.96489	1.974
DE-105071	1.76475	1.81147
DE-105151	2.34837	2.41622
DE-106141	1.3406	1.33663
DE-109081	1.9198	1.93208
DE-114021	1.65603	1.64666
DE-201161	1.95685	1.9445
DE-205241	1.81977	1.79872
DE-206461	1.67094	1.63985
DE-303021	1.98342	1.99572
DE-C08014	1.45355	1.45569
DE-C08025	1.92091	1.94432
DE-C13046	1.80495	1.79038
DE-C15056	1.89159	1.87509
DE-EPA03-(	2.2641	2.36303
DE-EPA03-1	1.48183	1.47777
DE-P01092	1.87967	1.87161
DE-P01115	2.04634	2.03849
DE-P03043	1.83272	1.83997
DE-P04007	1.38531	1.3787
DE-P05013	1.5434	1.54565
DE-P05066	1.66848	1.66799
DE-P06021	1.37259	1.39156
DE-P06037	1.71337	1.74903
DE-P06061	1.63649	1.61621
DE-RA51	2.21961	2.23209
GS0140534	1.73679	1.72344
GS0140596	2.0135	2.01802
GS0140784	1.88839	1.88911
GS0140800	1.70664	1.66671
GS0140810	1.95529	1.9616
GS0140817	1.3481	1.30901
GS0141280	1.8176	1.80087
GS0146450	1.84068	1.79013
GS0146451	1.74282	1.7321
GS0146453	1.88241	1.85859
GS0146457	1.90763	1.91256

Name	WAPLS_C4	WAPLS_C5_X
GS0146588	1.99085	1.98746
GS0146702	1.99047	1.96711
GS0146715	2.06131	2.10137
GS0146735	1.95753	1.92137
GS0147712	2.12278	2.1265
GS0148250	2.13325	2.13406
MVO14808	2.14079	2.17944
MVO15816	1.49217	1.47817
NJAN0118	1.98047	1.95332
NJAN0448	1.79274	1.77963
NJAN0451	1.84011	1.85079
NJAN0466	2.06842	2.06173
NJAN0470	1.78951	1.76086
NJAN0488	1.97046	1.96576
NJAN0489	1.8215	1.82175
NJAN0490	1.79152	1.76307
NJAN0673	2.03645	2.04866
NJAN0683	2.01091	2.00165
NJAN0694	2.03371	2.00685
NJSD48	1.24985	1.17672
NJSD91	1.72971	1.74302
NJSD94	1.92909	1.93638

Site 1	#		Code	Name	Obs_logTP	WAPLS_C1	WAPLS_C2	WAPLS_C3
	1	1	BFBM0002	BFBM0002	1.89927	0.211925	0.171445	0.169474
	2	2	BFBM0002	BFBM0002	1.85003	0.184018	0.083739	0.080379
	3	3	DE-101031	DE-101031	1.76343	-0.01114	0.145891	0.052395
	4	4	DE-103051	DE-103051	2.19312	-0.25189	-0.02684	-0.05248
	5	5	DE-105071	DE-105071	1.98227	-0.30519	-0.1669	-0.11257
	6	6	DE-105151	DE-105151	1.88081	0.035628	0.245887	0.158619
	7	7	DE-106141	DE-106141	0.954243	0.291139	0.149038	0.066001
	8	8	DE-109081	DE-109081	1.44716	0.278711	0.17732	0.18504
	9	9	DE-114021	DE-114021	2.10486	-0.327	-0.23245	-0.0352
	10	10	DE-201161	DE-201161	1.5887	0.161604	0.106075	0.163243
	11	11	DE-205241	DE-205241	1.88513	-0.04195	-0.0439	0.006669
	12	12	DE-206461	DE-206461	1.70137	-0.04543	-0.06224	0.000358
	13	13	DE-303021	DE-303021	1.89023	-0.04704	0.005243	0.068686
	14	14	DE-C08014	DE-C08014	1.50515	-0.0078	-0.11299	-0.02621
	15	15	DE-C08025	DE-C08025	2.35984	-0.19724	-0.0422	0.030362
	16	16	DE-C13046	DE-C13046	1.87506	-0.06062	-0.05359	-0.03682
	17	17	DE-C15056	DE-C15056	2.2014	-0.22536	-0.212	-0.1762
	18	18	DE-EPA03-(	DE-EPA03-(	2.12385	-0.18148	0.171168	0.054583
	19	19	DE-EPA03-1	DE-EPA03-1	1.49136	-0.07163	-0.09101	-0.09836
	20	20	DE-P01092	DE-P01092	1.62325	0.077876	0.150635	-0.08957
	21	21	DE-P01115	DE-P01115	2.01072	-0.03392	0.128792	0.065461
	22	22	DE-P03043	DE-P03043	1.46982	0.113038	0.18871	0.074665
	23	23	DE-P04007	DE-P04007	1.51851	-0.13952	-0.16348	-0.20449
	24	24	DE-P05013	DE-P05013	1.36173	0.14383	0.083723	0.057731
	25	25	DE-P05066	DE-P05066	2.19033	-0.52329	-0.37576	-0.44872
	26	26	DE-P06021	DE-P06021	1.09691	0.171781	0.103579	0.0339
	27	27	DE-P06037	DE-P06037	1.66276	-0.10057	-0.01537	-0.0247
	28	28	DE-P06061	DE-P06061	2.03342	-0.33056	-0.1181	-0.03409
	29	29	DE-RA51	DE-RA51	1.98453	0.051275	0.092227	0.046959
	30	30	GS0140534	GS0140534	2.02531	-0.08068	-0.22948	-0.16383
	31	31	GS0140596	GS0140596	2.12385	-0.0792	-0.1303	-0.03909
	32	32	GS0140784	GS0140784	2.17319	-0.14236	-0.15361	-0.11063
	33	33	GS0140800	GS0140800	1.60206	0.100813	-0.05819	-0.08987
	34	34	GS0140810	GS0140810	1.51851	0.281229	0.167456	0.169358
	35	35	GS0140817	GS0140817	1.45025	-0.39279	-0.00836	0.135287
	36	36	GS0141280	GS0141280	1.86332	0.006976	-0.03663	-0.0183
	37	37	GS0146450	GS0146450	2.15534	0.098714	-0.00811	-0.01615
	38	38	GS0146451	GS0146451	2.17319	-0.01945	-0.0434	-0.01016
	39	39	GS0146453	GS0146453	1.43297	0.253234	-0.06087	-0.04584
	40	40	GS0146457	GS0146457	2.1959	-0.1709	-0.22725	-0.13155

Site 1	#		Code	Name	Obs_logTP	WAPLS_C1	WAPLS_C2	WAPLS_C3
	41	41	GS0146588	GS0146588	2.3483	-0.27824	-0.27222	-0.20263
	42	42	GS0146702	GS0146702	1.80618	0.158472	0.085098	-0.03624
	43	43	GS0146715	GS0146715	2.39094	-0.098	-0.0621	0.006413
	44	44	GS0146735	GS0146735	2.14922	0.008835	-0.02649	-0.06993
	45	45	GS0147712	GS0147712	2.02531	0.072053	0.052604	0.084323
	46	46	GS0148250	GS0148250	2.52375	0.168549	0.133326	-0.01743
	47	47	MVO14808	MVO14808	2.32222	-0.27448	0.015378	0.068535
	48	48	MVO15816	MVO15816	1.17609	0.26444	0.201518	0.159209
	49	49	NJAN0118	NJAN0118	2.50853	-0.10541	0.033131	0.008563
	50	50	NJAN0448	NJAN0448	1.49136	0.314827	0.023954	-0.05515
	51	51	NJAN0451	NJAN0451	1.81624	0.082232	-0.09453	-0.06286
	52	52	NJAN0466	NJAN0466	1.65801	0.432507	0.37886	0.266381
	53	53	NJAN0470	NJAN0470	1.79239	0.18603	0.063856	-0.03501
	54	54	NJAN0488	NJAN0488	2.30856	-0.16752	-0.13965	-0.06542
	55	55	NJAN0489	NJAN0489	1.72835	0.209279	0.078517	0.025707
	56	56	NJAN0490	NJAN0490	1.53148	0.339887	0.158439	0.072711
	57	57	NJAN0673	NJAN0673	2.7478	-0.04657	0.049641	0.020211
	58	58	NJAN0683	NJAN0683	2.20003	-0.09794	-0.08289	-0.05617
	59	59	NJAN0694	NJAN0694	2.29336	0.077958	0.012135	-0.05805
	60	60	NJSD48	NJSD48	1.86233	0.042051	-0.11006	0.094021
	61	61	NJSD91	NJSD91	2.01703	0.088238	-0.04866	0.125645
	62	62	NJSD94	NJSD94	1.70329	0.115482	0.073393	0.091739

Name	WAPLS_C4	WAPLS_C5	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5
BFBM0002	0.162221	0.134527	0.183417	0.202927	0.231667	0.26256	0.271924
BFBM0002	0.087175	0.048686	0.17935	0.15282	0.170595	0.19784	0.193034
DE-101031	0.047804	0.066942	0.029156	0.128739	0.125393	0.110309	0.128857
DE-103051	-0.02536	-0.01005	-0.37525	-0.25294	-0.23592	-0.22824	-0.21912
DE-105071	0.007784	0.099956	-0.32697	-0.29326	-0.26723	-0.21753	-0.1708
DE-105151	0.145104	0.13126	0.007018	0.261375	0.385046	0.467559	0.535409
DE-106141	0.076103	0.075838	0.579982	0.456569	0.401255	0.386361	0.382384
DE-109081	0.170239	0.081004	0.410159	0.390106	0.437755	0.472644	0.484925
DE-114021	0.043374	0.001991	-0.44596	-0.48782	-0.45058	-0.44882	-0.45819
DE-201161	0.122572	0.015943	0.293586	0.305143	0.357912	0.368149	0.355807
DE-205241	-0.0285	-0.05555	-0.01383	-0.03108	-0.03158	-0.06536	-0.08641
DE-206461	-0.01988	-0.08693	0.021308	-0.00502	0.000976	-0.03043	-0.06152
DE-303021	-0.00019	-0.07933	-0.03853	-0.01448	0.060902	0.09319	0.105491
DE-C08014	0.016482	-0.02725	0.179321	0.052698	-0.01556	-0.0516	-0.04946
DE-C08025	0.064809	0.016485	-0.50642	-0.51034	-0.47731	-0.43893	-0.41552
DE-C13046	-0.02539	-0.04358	-0.04299	-0.05326	-0.05776	-0.07011	-0.08468
DE-C15056	-0.14616	-0.14598	-0.30128	-0.30394	-0.3012	-0.30981	-0.32631
DE-EPA03-(	0.067798	0.11978	-0.39008	-0.1086	0.042576	0.140249	0.239177
DE-EPA03-:	-0.04721	-0.03043	0.103744	0.017714	-0.0032	-0.00953	-0.01359
DE-P01092	-0.12869	-0.0189	0.258353	0.332356	0.292901	0.25642	0.248365
DE-P01115	0.035547	-0.01342	-0.08594	0.026687	0.043468	0.035615	0.027771
DE-P03043	0.031303	-0.00444	0.294621	0.350365	0.359616	0.362903	0.370148
DE-P04007	-0.14812	-0.08035	-0.00494	-0.08812	-0.12685	-0.1332	-0.13981
DE-P05013	0.07604	0.081132	0.250105	0.187555	0.175339	0.181669	0.183918
DE-P05066	-0.42097	-0.38429	-0.57551	-0.49128	-0.51122	-0.52185	-0.52234
DE-P06021	0.068328	0.095991	0.413347	0.292813	0.268685	0.275685	0.294647
DE-P06037	0.051905	0.110175	-0.01383	-0.00503	0.018332	0.050613	0.086277
DE-P06061	0.004487	-0.0402	-0.40133	-0.36972	-0.37057	-0.39693	-0.41722
DE-RA51	0.00586	-0.03475	0.035482	0.14012	0.20704	0.235084	0.247562
GS0140534	-0.09366	-0.06681	-0.16936	-0.29097	-0.30154	-0.28852	-0.30187
GS0140596	0.031744	0.039154	-0.16773	-0.1945	-0.15233	-0.11035	-0.10583
GS0140784	-0.05251	-0.01413	-0.24035	-0.27538	-0.29096	-0.2848	-0.28408
GS014080(	-0.0689	-0.05236	0.278938	0.19475	0.138465	0.104585	0.064652
GS014081(	0.14414	0.08994	0.432547	0.394088	0.409759	0.436781	0.443089
GS0140817	-0.07774	-0.04108	0.309553	0.077729	-0.03363	-0.10215	-0.14124
GS014128(	-0.00739	-0.02441	0.021582	-0.01374	-0.03558	-0.04572	-0.06245
GS014645(	0.012958	0.007	-0.13701	-0.21732	-0.27357	-0.31466	-0.36521
GS0146451	-0.01126	0.0065	-0.31857	-0.39927	-0.40244	-0.43036	-0.44108
GS0146453	0.009348	0.006311	0.582338	0.487102	0.454818	0.449438	0.425619
GS0146457	-0.04414	-0.00715	-0.28572	-0.34074	-0.3181	-0.28827	-0.28334

Name	WAPLS_C4	WAPLS_C5	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5
GS0146588	-0.14528	-0.11501	-0.39346	-0.38993	-0.37447	-0.35746	-0.36085
GS0146702	-0.08235	-0.07347	0.205148	0.221041	0.2034	0.184292	0.16093
GS0146715	0.047229	0.054025	-0.37715	-0.40111	-0.37677	-0.32962	-0.28957
GS0146735	-0.05767	-0.04644	-0.13602	-0.15618	-0.17935	-0.19169	-0.22785
GS0147712	0.109142	0.096376	0.025776	0.033913	0.070339	0.097473	0.101195
GS014825C	-0.06767	0.025221	-0.50238	-0.46761	-0.41661	-0.3905	-0.38968
MVO14808	0.115352	0.085526	-0.55018	-0.38468	-0.26292	-0.18143	-0.14278
MVO15816	0.139655	0.084885	0.413004	0.349022	0.331309	0.316079	0.302078
NJAN0118	-0.01866	-0.04894	-0.52684	-0.49704	-0.50398	-0.52806	-0.55521
NJAN0448	-0.05705	-0.00924	0.481281	0.364309	0.311597	0.301381	0.288267
NJAN0451	-0.01386	0.021175	0.137999	0.03068	0.010951	0.023873	0.034544
NJAN0466	0.192731	0.113803	0.422012	0.43756	0.419134	0.410409	0.403721
NJAN0470	-0.08098	-0.11525	0.155006	0.07927	0.025996	-0.00288	-0.03153
NJAN0488	-0.0197	-0.00221	-0.35387	-0.36447	-0.34838	-0.3381	-0.3428
NJAN0489	0.01241	0.00636	0.205583	0.119437	0.086469	0.09315	0.093394
NJAN0490	0.019616	-0.04022	0.407845	0.315939	0.277151	0.26004	0.231595
NJAN0673	-0.00458	-0.0127	-0.76991	-0.76717	-0.7438	-0.71135	-0.69914
NJAN0683	-0.03998	-0.05054	-0.21401	-0.20113	-0.19684	-0.18912	-0.19838
NJAN0694	-0.06509	-0.03057	-0.20554	-0.22273	-0.24431	-0.25966	-0.28652
NJSD48	-0.08837	0.040009	-0.06806	-0.36318	-0.39909	-0.61248	-0.68561
NJSD91	-0.04935	0.066934	-0.21114	-0.2035	-0.29235	-0.28732	-0.27402
NJSD94	-0.00262	-0.02791	0.191375	0.202038	0.233168	0.225801	0.233086

Name	_X
BFBM0002	
BFBM0002	
DE-101031	
DE-103051	
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DE-105151	
DE-106141	
DE-109081	
DE-114021	
DE-201161	
DE-205241	
DE-206461	
DE-303021	
DE-C08014	
DE-C08025	
DE-C13046	
DE-C15056	
DE-EPA03-(	
DE-EPA03-1	
DE-P01092	
DE-P01115	
DE-P03043	
DE-P04007	
DE-P05013	
DE-P05066	
DE-P06021	
DE-P06037	
DE-P06061	
DE-RA51	
GS0140534	
GS0140596	
GS0140784	
GS0140800	
GS0140810	
GS0140817	
GS0141280	
GS0146450	
GS0146451	
GS0146453	
GS0146457	

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GS0146588	
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GS0146715	
GS0146735	
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GS0148250	
MVO14808	
MVO15816	
NJAN0118	
NJAN0448	
NJAN0451	
NJAN0466	
NJAN0470	
NJAN0488	
NJAN0489	
NJAN0490	
NJAN0673	
NJAN0683	
NJAN0694	
NJSD48	
NJSD91	
NJSD94	

Site 1	#		Code	Name	Obs_logTP	WAPLS_C1	WAPLS_C2	WAPLS_C3
	1	1	BFBM0002	BFBM0002	1.89927	0.211925	0.171445	0.169474
	2	2	BFBM0002	BFBM0002	1.85003	0.184018	0.083739	0.080379
	3	3	DE-101031	DE-101031	1.76343	-0.01114	0.145891	0.052395
	4	4	DE-103051	DE-103051	2.19312	-0.25189	-0.02684	-0.05248
	5	5	DE-105071	DE-105071	1.98227	-0.30519	-0.1669	-0.11257
	6	6	DE-105151	DE-105151	1.88081	0.035628	0.245887	0.158619
	7	7	DE-106141	DE-106141	0.954243	0.291139	0.149038	0.066001
	8	8	DE-109081	DE-109081	1.44716	0.278711	0.17732	0.18504
	9	9	DE-114021	DE-114021	2.10486	-0.327	-0.23245	-0.0352
	10	10	DE-201161	DE-201161	1.5887	0.161604	0.106075	0.163243
	11	11	DE-205241	DE-205241	1.88513	-0.04195	-0.0439	0.006669
	12	12	DE-206461	DE-206461	1.70137	-0.04543	-0.06224	0.000358
	13	13	DE-303021	DE-303021	1.89023	-0.04704	0.005243	0.068686
	14	14	DE-C08014	DE-C08014	1.50515	-0.0078	-0.11299	-0.02621
	15	15	DE-C08025	DE-C08025	2.35984	-0.19724	-0.0422	0.030362
	16	16	DE-C13046	DE-C13046	1.87506	-0.06062	-0.05359	-0.03682
	17	17	DE-C15056	DE-C15056	2.2014	-0.22536	-0.212	-0.1762
	18	18	DE-EPA03-(	DE-EPA03-(	2.12385	-0.18148	0.171168	0.054583
	19	19	DE-EPA03-1	DE-EPA03-1	1.49136	-0.07163	-0.09101	-0.09836
	20	20	DE-P01092	DE-P01092	1.62325	0.077876	0.150635	-0.08957
	21	21	DE-P01115	DE-P01115	2.01072	-0.03392	0.128792	0.065461
	22	22	DE-P03043	DE-P03043	1.46982	0.113038	0.18871	0.074665
	23	23	DE-P04007	DE-P04007	1.51851	-0.13952	-0.16348	-0.20449
	24	24	DE-P05013	DE-P05013	1.36173	0.14383	0.083723	0.057731
	25	25	DE-P05066	DE-P05066	2.19033	-0.52329	-0.37576	-0.44872
	26	26	DE-P06021	DE-P06021	1.09691	0.171781	0.103579	0.0339
	27	27	DE-P06037	DE-P06037	1.66276	-0.10057	-0.01537	-0.0247
	28	28	DE-P06061	DE-P06061	2.03342	-0.33056	-0.1181	-0.03409
	29	29	DE-RA51	DE-RA51	1.98453	0.051275	0.092227	0.046959
	30	30	GS0140534	GS0140534	2.02531	-0.08068	-0.22948	-0.16383
	31	31	GS0140596	GS0140596	2.12385	-0.0792	-0.1303	-0.03909
	32	32	GS0140784	GS0140784	2.17319	-0.14236	-0.15361	-0.11063
	33	33	GS0140800	GS0140800	1.60206	0.100813	-0.05819	-0.08987
	34	34	GS0140810	GS0140810	1.51851	0.281229	0.167456	0.169358
	35	35	GS0140817	GS0140817	1.45025	-0.39279	-0.00836	0.135287
	36	36	GS0141280	GS0141280	1.86332	0.006976	-0.03663	-0.0183
	37	37	GS0146450	GS0146450	2.15534	0.098714	-0.00811	-0.01615
	38	38	GS0146451	GS0146451	2.17319	-0.01945	-0.0434	-0.01016
	39	39	GS0146453	GS0146453	1.43297	0.253234	-0.06087	-0.04584
	40	40	GS0146457	GS0146457	2.1959	-0.1709	-0.22725	-0.13155

Site 1	#		Code	Name	Obs_logTP	WAPLS_C1	WAPLS_C2	WAPLS_C3
	41	41	GS0146588	GS0146588	2.3483	-0.27824	-0.27222	-0.20263
	42	42	GS0146702	GS0146702	1.80618	0.158472	0.085098	-0.03624
	43	43	GS0146715	GS0146715	2.39094	-0.098	-0.0621	0.006413
	44	44	GS0146735	GS0146735	2.14922	0.008835	-0.02649	-0.06993
	45	45	GS0147712	GS0147712	2.02531	0.072053	0.052604	0.084323
	46	46	GS0148250	GS0148250	2.52375	0.168549	0.133326	-0.01743
	47	47	MVO14808	MVO14808	2.32222	-0.27448	0.015378	0.068535
	48	48	MVO15816	MVO15816	1.17609	0.26444	0.201518	0.159209
	49	49	NJAN0118	NJAN0118	2.50853	-0.10541	0.033131	0.008563
	50	50	NJAN0448	NJAN0448	1.49136	0.314827	0.023954	-0.05515
	51	51	NJAN0451	NJAN0451	1.81624	0.082232	-0.09453	-0.06286
	52	52	NJAN0466	NJAN0466	1.65801	0.432507	0.37886	0.266381
	53	53	NJAN0470	NJAN0470	1.79239	0.18603	0.063856	-0.03501
	54	54	NJAN0488	NJAN0488	2.30856	-0.16752	-0.13965	-0.06542
	55	55	NJAN0489	NJAN0489	1.72835	0.209279	0.078517	0.025707
	56	56	NJAN0490	NJAN0490	1.53148	0.339887	0.158439	0.072711
	57	57	NJAN0673	NJAN0673	2.7478	-0.04657	0.049641	0.020211
	58	58	NJAN0683	NJAN0683	2.20003	-0.09794	-0.08289	-0.05617
	59	59	NJAN0694	NJAN0694	2.29336	0.077958	0.012135	-0.05805
	60	60	NJSD48	NJSD48	1.86233	0.042051	-0.11006	0.094021
	61	61	NJSD91	NJSD91	2.01703	0.088238	-0.04866	0.125645
	62	62	NJSD94	NJSD94	1.70329	0.115482	0.073393	0.091739

Name	WAPLS_C4	WAPLS_C5	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5
BFBM0002	0.162221	0.134527	0.183417	0.202927	0.231667	0.26256	0.271924
BFBM0002	0.087175	0.048686	0.17935	0.15282	0.170595	0.19784	0.193034
DE-101031	0.047804	0.066942	0.029156	0.128739	0.125393	0.110309	0.128857
DE-103051	-0.02536	-0.01005	-0.37525	-0.25294	-0.23592	-0.22824	-0.21912
DE-105071	0.007784	0.099956	-0.32697	-0.29326	-0.26723	-0.21753	-0.1708
DE-105151	0.145104	0.13126	0.007018	0.261375	0.385046	0.467559	0.535409
DE-106141	0.076103	0.075838	0.579982	0.456569	0.401255	0.386361	0.382384
DE-109081	0.170239	0.081004	0.410159	0.390106	0.437755	0.472644	0.484925
DE-114021	0.043374	0.001991	-0.44596	-0.48782	-0.45058	-0.44882	-0.45819
DE-201161	0.122572	0.015943	0.293586	0.305143	0.357912	0.368149	0.355807
DE-205241	-0.0285	-0.05555	-0.01383	-0.03108	-0.03158	-0.06536	-0.08641
DE-206461	-0.01988	-0.08693	0.021308	-0.00502	0.000976	-0.03043	-0.06152
DE-303021	-0.00019	-0.07933	-0.03853	-0.01448	0.060902	0.09319	0.105491
DE-C08014	0.016482	-0.02725	0.179321	0.052698	-0.01556	-0.0516	-0.04946
DE-C08025	0.064809	0.016485	-0.50642	-0.51034	-0.47731	-0.43893	-0.41552
DE-C13046	-0.02539	-0.04358	-0.04299	-0.05326	-0.05776	-0.07011	-0.08468
DE-C15056	-0.14616	-0.14598	-0.30128	-0.30394	-0.3012	-0.30981	-0.32631
DE-EPA03-(	0.067798	0.11978	-0.39008	-0.1086	0.042576	0.140249	0.239177
DE-EPA03-:	-0.04721	-0.03043	0.103744	0.017714	-0.0032	-0.00953	-0.01359
DE-P01092	-0.12869	-0.0189	0.258353	0.332356	0.292901	0.25642	0.248365
DE-P01115	0.035547	-0.01342	-0.08594	0.026687	0.043468	0.035615	0.027771
DE-P03043	0.031303	-0.00444	0.294621	0.350365	0.359616	0.362903	0.370148
DE-P04007	-0.14812	-0.08035	-0.00494	-0.08812	-0.12685	-0.1332	-0.13981
DE-P05013	0.07604	0.081132	0.250105	0.187555	0.175339	0.181669	0.183918
DE-P05066	-0.42097	-0.38429	-0.57551	-0.49128	-0.51122	-0.52185	-0.52234
DE-P06021	0.068328	0.095991	0.413347	0.292813	0.268685	0.275685	0.294647
DE-P06037	0.051905	0.110175	-0.01383	-0.00503	0.018332	0.050613	0.086277
DE-P06061	0.004487	-0.0402	-0.40133	-0.36972	-0.37057	-0.39693	-0.41722
DE-RA51	0.00586	-0.03475	0.035482	0.14012	0.20704	0.235084	0.247562
GS0140534	-0.09366	-0.06681	-0.16936	-0.29097	-0.30154	-0.28852	-0.30187
GS0140596	0.031744	0.039154	-0.16773	-0.1945	-0.15233	-0.11035	-0.10583
GS0140784	-0.05251	-0.01413	-0.24035	-0.27538	-0.29096	-0.2848	-0.28408
GS0140800	-0.0689	-0.05236	0.278938	0.19475	0.138465	0.104585	0.064652
GS0140810	0.14414	0.08994	0.432547	0.394088	0.409759	0.436781	0.443089
GS0140817	-0.07774	-0.04108	0.309553	0.077729	-0.03363	-0.10215	-0.14124
GS0141280	-0.00739	-0.02441	0.021582	-0.01374	-0.03558	-0.04572	-0.06245
GS0146450	0.012958	0.007	-0.13701	-0.21732	-0.27357	-0.31466	-0.36521
GS0146451	-0.01126	0.0065	-0.31857	-0.39927	-0.40244	-0.43036	-0.44108
GS0146453	0.009348	0.006311	0.582338	0.487102	0.454818	0.449438	0.425619
GS0146457	-0.04414	-0.00715	-0.28572	-0.34074	-0.3181	-0.28827	-0.28334

Name	WAPLS_C4	WAPLS_C5	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5
GS0146588	-0.14528	-0.11501	-0.39346	-0.38993	-0.37447	-0.35746	-0.36085
GS0146702	-0.08235	-0.07347	0.205148	0.221041	0.2034	0.184292	0.16093
GS0146715	0.047229	0.054025	-0.37715	-0.40111	-0.37677	-0.32962	-0.28957
GS0146735	-0.05767	-0.04644	-0.13602	-0.15618	-0.17935	-0.19169	-0.22785
GS0147712	0.109142	0.096376	0.025776	0.033913	0.070339	0.097473	0.101195
GS0148250	-0.06767	0.025221	-0.50238	-0.46761	-0.41661	-0.3905	-0.38968
MVO14808	0.115352	0.085526	-0.55018	-0.38468	-0.26292	-0.18143	-0.14278
MVO15816	0.139655	0.084885	0.413004	0.349022	0.331309	0.316079	0.302078
NJAN0118	-0.01866	-0.04894	-0.52684	-0.49704	-0.50398	-0.52806	-0.55521
NJAN0448	-0.05705	-0.00924	0.481281	0.364309	0.311597	0.301381	0.288267
NJAN0451	-0.01386	0.021175	0.137999	0.03068	0.010951	0.023873	0.034544
NJAN0466	0.192731	0.113803	0.422012	0.43756	0.419134	0.410409	0.403721
NJAN0470	-0.08098	-0.11525	0.155006	0.07927	0.025996	-0.00288	-0.03153
NJAN0488	-0.0197	-0.00221	-0.35387	-0.36447	-0.34838	-0.3381	-0.3428
NJAN0489	0.01241	0.00636	0.205583	0.119437	0.086469	0.09315	0.093394
NJAN0490	0.019616	-0.04022	0.407845	0.315939	0.277151	0.26004	0.231595
NJAN0673	-0.00458	-0.0127	-0.76991	-0.76717	-0.7438	-0.71135	-0.69914
NJAN0683	-0.03998	-0.05054	-0.21401	-0.20113	-0.19684	-0.18912	-0.19838
NJAN0694	-0.06509	-0.03057	-0.20554	-0.22273	-0.24431	-0.25966	-0.28652
NJSD48	-0.08837	0.040009	-0.06806	-0.36318	-0.39909	-0.61248	-0.68561
NJSD91	-0.04935	0.066934	-0.21114	-0.2035	-0.29235	-0.28732	-0.27402
NJSD94	-0.00262	-0.02791	0.191375	0.202038	0.233168	0.225801	0.233086

Name	_X
BFBM0002	
BFBM0002	
DE-101031	
DE-103051	
DE-105071	
DE-105151	
DE-106141	
DE-109081	
DE-114021	
DE-201161	
DE-205241	
DE-206461	
DE-303021	
DE-C08014	
DE-C08025	
DE-C13046	
DE-C15056	
DE-EPA03-(	
DE-EPA03-1	
DE-P01092	
DE-P01115	
DE-P03043	
DE-P04007	
DE-P05013	
DE-P05066	
DE-P06021	
DE-P06037	
DE-P06061	
DE-RA51	
GS0140534	
GS0140596	
GS0140784	
GS0140800	
GS0140810	
GS0140817	
GS0141280	
GS0146450	
GS0146451	
GS0146453	
GS0146457	

Name	_X
GS0146588	
GS0146702	
GS0146715	
GS0146735	
GS0147712	
GS0148250	
MVO14808	
MVO15816	
NJAN0118	
NJAN0448	
NJAN0451	
NJAN0466	
NJAN0470	
NJAN0488	
NJAN0489	
NJAN0490	
NJAN0673	
NJAN0683	
NJAN0694	
NJSD48	
NJSD91	
NJSD94	

Site 1	#	Code	Name	RMSE	R2	Ave_Bias	Max_Bias
1	1	Componen	WAPLS Cor	0.196469	0.70748	-0.0027	0.26444
2	2	Componen	WAPLS Cor	0.140487	0.850386	-0.00034	0.201518
3	3	Componen	WAPLS Cor	0.113303	0.902684	-0.0003	0.159209
4	4	Componen	WAPLS Cor	0.095805	0.93042	0.000323	0.139655
5	5	Componen	WAPLS Cor	0.081883	0.949173	0.000177	0.085915

Code	Name	Boot_R2	Boot_Ave_	Boot_Max_	RMSE_s1	RMSE_s2	RMSEP
Componen	WAPLS Cor	0.216511	0.026471	0.769907	0.124929	0.323042	0.346357
Componen	WAPLS Cor	0.32205	0.041301	0.767167	0.137757	0.30254	0.332426
Componen	WAPLS Cor	0.339972	0.039419	0.743797	0.168349	0.297689	0.341994
Componen	WAPLS Cor	0.320594	0.038172	0.711353	0.192325	0.303213	0.359064
Componen	WAPLS Cor	0.30304	0.04026	0.699139	0.213389	0.309574	0.375993

Code	Name	%Change	Rand. t-test
Componen	WAPLS Cor	...	...
Componen	WAPLS Cor	4.022	0.026
Componen	WAPLS Cor	-2.87809	0.172
Componen	WAPLS Cor	-4.99137	0.741
Componen	WAPLS Cor	-4.71485	0.946

Site 1	#	Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5
1	1	S1-0	S1-0	2.40451	2.43541	2.40164	2.48065	2.61852
2	2	S1-10	S1-10	2.36355	2.32552	2.24708	2.2926	2.41279
3	3	S1-20	S1-20	2.25263	2.24053	2.1595	2.16739	2.22444
4	4	S1-30	S1-30	2.23349	2.25032	2.27985	2.28932	2.33652
5	5	S1-40	S1-40	2.28457	2.27715	2.2822	2.26512	2.30561
6	6	S1-50	S1-50	2.34269	2.34703	2.37697	2.39629	2.4616
7	7	S1-60	S1-60	2.18473	2.18639	2.10214	2.11192	2.21765
8	8	S1-70	S1-70	2.1765	2.10854	2.0479	2.04991	2.13181
9	9	S1-80	S1-80	2.27924	2.28851	2.25241	2.29143	2.40816
10	10	S1-90	S1-90	2.20763	2.20349	2.20958	2.21198	2.27847
11	11	S1-100	S1-100	2.17099	2.23034	2.25568	2.32616	2.42568
12	12	S1-110	S1-110	2.3277	2.32226	2.31454	2.35037	2.40603
13	13	S1-120	S1-120	2.29818	2.3063	2.36586	2.44133	2.53611
14	14	S1-130	S1-130	2.2107	2.19692	2.1991	2.2465	2.29926
15	15	S1-140	S1-140	2.24041	2.20495	2.18962	2.22288	2.29768
16	16	S1-150	S1-150	2.12193	2.1691	2.26241	2.32231	2.32672
17	17	S1-160	S1-160	2.19185	2.18391	2.19903	2.24645	2.3427
18	18	S1-170	S1-170	2.20112	2.19972	2.21273	2.23075	2.2309
19	19	S1-180	S1-180	1.93469	1.8277	1.76479	1.7741	1.83673
20	20	S1-190	S1-190	2.11062	2.01413	1.95623	1.95663	1.97699
21	21	S1-200	S1-200	2.11806	2.03039	1.99917	1.99976	2.01205
22	22	S1-210	S1-210	2.20662	2.17162	2.16491	2.18803	2.20326
23	23	S1-220	S1-220	1.89352	1.83922	1.83638	1.88253	1.9711
24	24	S1-230	S1-230	2.07333	1.96013	1.8805	1.88843	1.92793

Name	WAPLS_C1_X	WAPLS_C2_X	WAPLS_C3_X	WAPLS_C4_X	WAPLS_C5_X
S1-0	2.19655	2.28369	2.3065	2.32897	2.32469
S1-10	2.16374	2.19038	2.17987	2.19492	2.18951
S1-20	2.11862	2.14576	2.12613	2.12317	2.10698
S1-30	2.15124	2.19059	2.20495	2.19639	2.17866
S1-40	2.18677	2.20973	2.21296	2.19991	2.18922
S1-50	2.21826	2.25134	2.27316	2.28528	2.29019
S1-60	2.04315	2.05366	2.01958	2.02295	2.04752
S1-70	2.05811	2.02043	1.98644	1.98951	2.01004
S1-80	2.13027	2.17001	2.17336	2.19325	2.20978
S1-90	2.11395	2.1404	2.15156	2.15295	2.15721
S1-100	2.09262	2.16907	2.20555	2.23266	2.24705
S1-110	2.21163	2.24495	2.24509	2.24194	2.21353
S1-120	2.2119	2.26316	2.30347	2.33318	2.3356
S1-130	2.12712	2.15613	2.1655	2.16946	2.14503
S1-140	2.12531	2.11613	2.09755	2.10157	2.10543
S1-150	2.09478	2.15803	2.2155	2.24024	2.2295
S1-160	2.12637	2.14546	2.15009	2.16174	2.17025
S1-170	2.1307	2.163	2.17519	2.17398	2.14549
S1-180	1.9071	1.83332	1.78675	1.77904	1.77957
S1-190	2.02758	1.97629	1.93441	1.91574	1.88826
S1-200	2.04325	2.00614	1.9858	1.97823	1.95678
S1-210	2.12542	2.13629	2.13449	2.12273	2.0804
S1-220	1.89767	1.86116	1.84817	1.85784	1.87007
S1-230	1.98761	1.91612	1.86253	1.85819	1.8547

Site 1	#	Code	Name	SEB_WAPLS_C1	SEB_WAPLS_C2	SEB_WAPLS_C3	SEB_WAPLS_C4
1	1	S1-0	S1-0	0.329611	0.364391	0.3905	0.431771
2	2	S1-10	S1-10	0.254159	0.278995	0.301756	0.3371
3	3	S1-20	S1-20	0.12364	0.131275	0.147873	0.182293
4	4	S1-30	S1-30	0.120073	0.144644	0.167305	0.212008
5	5	S1-40	S1-40	0.152188	0.191574	0.205603	0.222955
6	6	S1-50	S1-50	0.173163	0.223627	0.231264	0.22836
7	7	S1-60	S1-60	0.163051	0.186407	0.220783	0.254599
8	8	S1-70	S1-70	0.138789	0.1801	0.224133	0.255197
9	9	S1-80	S1-80	0.152937	0.15942	0.17754	0.202757
10	10	S1-90	S1-90	0.127415	0.140296	0.164536	0.191481
11	11	S1-100	S1-100	0.142606	0.162884	0.170484	0.182792
12	12	S1-110	S1-110	0.0917776	0.13317	0.17803	0.226866
13	13	S1-120	S1-120	0.105297	0.121673	0.127956	0.153406
14	14	S1-130	S1-130	0.0945336	0.122996	0.147741	0.186322
15	15	S1-140	S1-140	0.14283	0.194818	0.23992	0.276485
16	16	S1-150	S1-150	0.119234	0.180005	0.215403	0.246608
17	17	S1-160	S1-160	0.0903336	0.125769	0.159341	0.188147
18	18	S1-170	S1-170	0.0744386	0.110419	0.141852	0.179007
19	19	S1-180	S1-180	0.106395	0.143655	0.166441	0.184126
20	20	S1-190	S1-190	0.123095	0.176651	0.215081	0.254797
21	21	S1-200	S1-200	0.0905225	0.116839	0.13858	0.168094
22	22	S1-210	S1-210	0.082349	0.127258	0.172371	0.229789
23	23	S1-220	S1-220	0.099012	0.129986	0.144863	0.162274
24	24	S1-230	S1-230	0.142122	0.182493	0.214346	0.24168

Name	SEB_WAPLS_C5	eSEP_WAPLS_C1	eSEP_WAPLS_C2	eSEP_WAPLS_C3
S1-0	0.508066	0.461518	0.473615	0.491028
S1-10	0.398239	0.411039	0.411544	0.423881
S1-20	0.227761	0.345894	0.329793	0.332393
S1-30	0.255419	0.344635	0.335339	0.341481
S1-40	0.239412	0.357095	0.358094	0.361789
S1-50	0.227733	0.366526	0.376217	0.376964
S1-60	0.286375	0.361858	0.355356	0.370626
S1-70	0.282852	0.351594	0.352088	0.372632
S1-80	0.237993	0.357415	0.341972	0.34661
S1-90	0.214277	0.347261	0.333487	0.340133
S1-100	0.213558	0.353118	0.343601	0.34305
S1-110	0.280348	0.335826	0.330552	0.346862
S1-120	0.184742	0.33977	0.32609	0.324024
S1-130	0.233733	0.336589	0.326586	0.332334
S1-140	0.309699	0.353209	0.35984	0.382335
S1-150	0.277614	0.344344	0.35204	0.367447
S1-160	0.217478	0.335434	0.32764	0.337651
S1-170	0.217189	0.331507	0.32206	0.329758
S1-180	0.202945	0.340111	0.334914	0.341059
S1-190	0.293712	0.3457	0.350337	0.367258
S1-200	0.198868	0.335485	0.324317	0.328364
S1-210	0.290262	0.333373	0.328215	0.343992
S1-220	0.189002	0.337875	0.329282	0.331065
S1-230	0.267923	0.352923	0.353319	0.366828

Name	eSEP_WAPLS_C4	eSEP_WAPLS_C5
S1-0	0.527602	0.594952
S1-10	0.453404	0.504411
S1-20	0.353792	0.384332
S1-30	0.36998	0.401341
S1-40	0.37636	0.391349
S1-50	0.379587	0.384316
S1-60	0.395928	0.421719
S1-70	0.396312	0.419334
S1-80	0.364758	0.390483
S1-90	0.358613	0.376498
S1-100	0.354049	0.376089
S1-110	0.37869	0.41765
S1-120	0.339811	0.360507
S1-130	0.355885	0.387901
S1-140	0.410344	0.437892
S1-150	0.390837	0.415819
S1-160	0.356844	0.378329
S1-170	0.35211	0.378163
S1-180	0.35474	0.370166
S1-190	0.396055	0.426735
S1-200	0.34669	0.367946
S1-210	0.380448	0.424368
S1-220	0.343905	0.362709
S1-230	0.387746	0.409413

Site 1	#		Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
	1	1	ACislan	ACislan	2	1.46421	0.77821	0
	2	2	AMgranu	AMgranu	5	4.76722	0.4	0
	3	3	AMsp1	AMsp1	5	4.65698	1.8	0
	4	4	AMsp2	AMsp2	2	1.7757	0.395257	0
	5	5	ANbalti	ANbalti	4	2.9339	1.2	0
	6	6	AOsp1	AOsp1	3	1.55313	2.10728	0
	7	7	ARtenuis	ARtenuis	3	2.69744	0.383877	0
	8	8	ATnorman	ATnorman	21	8.60314	7.95229	0
	9	9	ATocto	ATocto	21	14.5757	4.45736	0
	10	10	AUambig	AUambig	20	7.77984	17.2147	19
	11	11	AUgranlt	AUgranlt	5	2.97166	8.42912	14
	12	12	AUpusill	AUpusill	2	1.52485	1.35397	0
	13	13	AUtenell	AUtenell	3	2.91755	1.14943	3
	14	14	AYsen	AYsen	20	12.2473	3.19549	0
	15	15	BApardxa	BApardxa	20	9.84845	5.4	26
	16	16	BM1?	BM1?	4	3.3985	0.8	0
	17	17	BMcircum	BMcircum	2	1.99912	0.583658	0
	18	18	CAaemul	CAaemul	6	4.46685	0.798403	0
	19	19	CAbacill	CAbacill	23	14.6108	3.81125	31
	20	20	CAlewisi	CAlewisi	3	2.12314	0.994036	0
	21	21	CAsp1?	CAsp1?	3	2.28716	4.4	0
	22	22	CAsp3?	CAsp3?	2	1.78959	0.396825	0
	23	23	CCcfpel	CCcfpel	4	3.99911	0.2	0
	24	24	CCcostco	CCcostco	2	1.82651	0.37594	0
	25	25	Ccneod	Ccneod	2	1.78206	0.397614	0
	26	26	CCplacen	CCplacen	17	10.6123	1.78926	23
	27	27	CCscutel	CCscutel	2	2	0.198807	0
	28	28	CIsp1?	CIsp1?	2	1.9995	0.2	0
	29	29	CJpusill	CJpusill	12	5.98162	3.35306	0
	30	30	CJsp1	CJsp1	4	3.64199	0.387597	0
	31	31	CMaffins	CMaffins	16	7.40768	2.18688	0
	32	32	CMexici	CMexici	5	4.403	0.397614	0
	33	33	CMmexica	CMmexica	7	4.56495	0.776699	0
	34	34	CRbelgic	CRbelgic	13	6.77663	3.07102	0
	35	35	CScflin	CScflin	11	7.94825	2.9703	0
	36	36	CSmargin	CSmargin	15	11.3524	1.78926	0
	37	37	Csspec1?	Csspec1?	3	2.5598	0.6	0
	38	38	CYatomus	CYatomus	24	6.19173	21.4	6
	39	39	CYcaspia	CYcaspia	9	5.38692	1.1976	0
	40	40	CYcyclop	CYcyclop	17	14.9166	8.36576	0

Site 1	#		Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
	41	41	CYdistin	CYdistin	4	3.68877	0.775194	0
	42	42	CYmenegh	CYmenegh	14	8.60794	4.4	38
	43	43	CYsp2Coo	CYsp2Coo	7	2.53406	3.2	0
	44	44	CYstriat	CYstriat	24	14.3702	14.9402	0
	45	45	CYstylor	CYstylor	19	12.663	4.65116	0
	46	46	DAmonilf	DAmonilf	17	10.9861	1.6	0
	47	47	DAvulg	DAvulg	2	1.58634	0.580271	6
	48	48	DCplacen	DCplacen	10	8.01265	1.16732	0
	49	49	DEkuetzi	DEkuetzi	4	2.89808	0.793651	7
	50	50	DHsurirl	DHsurirl	6	4.05129	0.968992	0
	51	51	DPboldti	DPboldti	17	8.79988	6.2	0
	52	52	DPbombus	DPbombus	7	5.98344	0.583658	0
	53	53	DPdidyma	DPdidyma	2	1.99998	0.2	0
	54	54	DPellipt	DPellipt	15	8.17777	9.07298	0
	55	55	DPpsudov	DPpsudov	16	10.0361	2.98211	0
	56	56	DPsmithi	DPsmithi	20	12.7679	1.97239	0
	57	57	ECnicafe	ECnicafe	4	3.23199	0.583658	0
	58	58	ECSP1	ECSP1	15	8.00321	2.87356	0
	59	59	ECSP2	ECSP2	6	2.44142	2.7833	0
	60	60	EPadnata	EPadnata	3	2.78192	0.4	0
	61	61	EPfricke	EPfricke	4	2.19383	1.39165	0
	62	62	EPturgid	EPturgid	7	3.88097	1.19284	0
	63	63	EUSP1	EUSP1	18	12.3745	1.5873	0
	64	64	EUSP2	EUSP2	6	4.34202	1.8	0
	65	65	EYmicroc	EYmicroc	5	3.44882	0.8	0
	66	66	FApygmae	FApygmae	13	8.24151	3.17164	0
	67	67	Fklewis	Fklewis	2	1.78992	0.383877	0
	68	68	FRcapuci	FRcapuci	5	4.42609	0.4	21
	69	69	FRschulzi	FRschulzi	2	1.99977	0.19802	0
	70	70	FRvauche	FRvauche	2	1.70624	0.959693	41
	71	71	FSamphi	FSamphi	10	5.59687	4.83559	0
	72	72	FSerifu	FSerifu	5	4.43062	0.397614	0
	73	73	FSSP1	FSSP1	6	4.91905	0.796813	0
	74	74	FSvulgar	FSvulgar	9	7.78735	0.795229	36
	75	75	Gedecu	Gedecu	5	4.43301	0.399202	28
	76	76	GEkriege	GEkriege	12	6.7251	2.6	0
	77	77	GOinnoce	GOinnoce	3	1.56724	1.38614	0
	78	78	GOolivcm	GOolivcm	3	2.76624	0.397614	0
	79	79	GOSP1	GOSP1	4	2.54341	1.35397	0
	80	80	Gpexiguu	Gpexiguu	3	2.9995	0.198807	0

Site 1	#	Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
81	81	GRcfmaci	GRcfmaci	3	1.5869	1.35397	0
82	82	GSsp1	GSsp1	3	2.5613	0.6	0
83	83	GYcfbalt	GYcfbalt	8	6.35317	0.8	0
84	84	GYSP1	GYSP1	2	1.47059	0.8	0
85	85	GYspence	GYspence	4	3.40049	0.725953	0
86	86	HASP1	HASP1	4	3.17626	3	0
87	87	HASP2	HASP2	7	5.42991	1.59046	0
88	88	Havirga	Havirga	14	10.506	1.39721	0
89	89	HIcostu	HIcostu	9	5.97675	1	0
90	90	HICoxiae	HICoxiae	10	6.9278	1.38889	0
91	91	HISP1	HISP1	6	4.49132	1.16279	0
92	92	HISP2	HISP2	2	1.79905	0.395257	0
93	93	Kchaloph	Kchaloph	2	1.99999	0.194553	0
94	94	Kvamoena	Kvamoena	14	9.50474	1.36187	0
95	95	Lphungar	Lphungar	2	1.80093	0.386847	0
96	96	LUSP1	LUSP1	3	2.78192	0.4	0
97	97	LUSP2	LUSP2	10	6.51746	1.18812	0
98	98	Mamarty	Mamarty	3	2.55607	0.6	0
99	99	MDSP1	MDSP1	4	3.84462	0.592885	0
100	100	MEvarian	MEvarian	3	2.78089	0.4	41
101	101	MSSP1	MSSP1	24	18.2442	4.4	0
102	102	Naabunda	Naabunda	4	2.57139	0.77821	0
103	103	NAantoni	NAantoni	10	6.83013	0.994036	13
104	104	Nabrach	Nabrach	11	7.35641	4.40613	0
105	105	NAcaprad	NAcaprad	13	7.71372	2.52427	15
106	106	NAcari	NAcari	3	2.56897	0.6	0
107	107	Nagalloa	Nagalloa	8	3.7782	5.4	0
108	108	NAgregar	NAgregar	8	5.52262	1.79283	50
109	109	Naheufler	Naheufler	2	1.81763	0.383142	0
110	110	NAlancel	NAlancel	14	7.64379	2.39044	28
111	111	NAoblong	NAoblong	8	6.31111	0.598802	0
112	112	Napatrick	Napatrick	6	4.45272	0.792079	0
113	113	NAperegr	NAperegr	24	17.2873	3.18091	5
114	114	NApermnt	NApermnt	5	3.04365	1.4	17
115	115	NAphylpt	NAphylpt	5	3.49547	1.8	0
116	116	NAreichd	NAreichd	3	2.56444	0.595238	3
117	117	NAsalinm	NAsalinm	12	10.5911	0.766284	3
118	118	Naschweig	Naschweig	8	4.31876	1.94553	0
119	119	NASP1	NASP1	5	3.92682	1.2	0
120	120	NASP2	NASP2	2	1.99998	0.4	0

Site 1	#	Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
121	121	NASP3	NASP3	10	8.2452	0.798403	0
122	122	NASP5	NASP5	3	2.08209	0.725953	0
123	123	Nasubin	Nasubin	8	4.09822	4.7619	0
124	124	Nasubinfla	Nasubinfla	7	4.54277	0.994036	0
125	125	Nasubmin	Nasubmin	2	1.81392	0.383877	0
126	126	NAtripun	NAtripun	14	9.25002	2.32558	7
127	127	Nazostere	Nazostere	9	6.26439	1.16054	0
128	128	NIagnita	NIagnita	7	4.42941	1.78571	0
129	129	NIamphib	NIamphib	8	6.37908	0.793651	40
130	130	Niboreal	Niboreal	8	5.0914	1.98413	0
131	131	NIbrevis	NIbrevis	22	12.4072	9.67118	7
132	132	NIclausi	NIclausi	16	8.45454	4.94071	18
133	133	Nicolumbi	Nicolumbi	14	10.2077	1.99637	0
134	134	NIcommun	NIcommun	14	10.7615	1.16732	0
135	135	NIcomtat	NIcomtat	4	2.73352	1.35922	0
136	136	Nicylind	Nicylind	2	1.81673	0.383877	0
137	137	Nidesert	Nidesert	6	5.5167	0.399202	0
138	138	NIdissip	NIdissip	5	4.2705	0.574713	44
139	139	NIfilifr	NIfilifr	13	11.0117	0.6	11
140	140	NIfrustu	NIfrustu	7	3.52473	1.8	34
141	141	NIincgnt	NIincgnt	7	5.09212	1.53551	0
142	142	NIincons	NIincons	7	2.54804	2.98805	28
143	143	NIlaevis	NIlaevis	3	1.52968	2.29885	0
144	144	NIlinear	NIlinear	12	6.46358	2.70793	34
145	145	Nimacile	Nimacile	15	10.6213	1.31579	0
146	146	NImicroc	NImicroc	6	4.1304	0.8	0
147	147	NInana	NInana	7	3.42915	1.91571	10
148	148	NIobtusa	NIobtusa	5	2.82481	5.37428	0
149	149	NIpalea	NIpalea	19	10.0104	3.91791	50
150	150	Nipandur	Nipandur	11	8.04765	0.8	0
151	151	NIpelluc	NIpelluc	3	2.99934	0.4	0
152	152	NIpermin	NIpermin	7	5.7511	0.795229	0
153	153	Niproxima	Niproxima	5	4.24542	1.1976	0
154	154	Nipunctata	Nipunctata	14	11.1901	1.38889	0
155	155	NIpusill	NIpusill	3	2.27465	1.69173	0
156	156	NIsigma	NIsigma	11	7.68529	0.994036	0
157	157	Nisigmafor	Nisigmafor	6	5.54825	0.4	0
158	158	NISP1	NISP1	18	10.942	6.1144	0
159	159	NISP4	NISP4	13	6.97985	10	0
160	160	NIumbona	NIumbona	2	1.99945	0.198413	0

Site 1	#	Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
161	161	OpspA	OpspA	2	1.99967	0.198807	0
162	162	ORSP1	ORSP1	8	5.07832	2.11132	0
163	163	PAsulc	PAsulc	24	18.9328	17.5097	0
164	164	Pbplicat	Pbplicat	4	3.75804	0.397614	0
165	165	PCgastru	PCgastru	13	6.75	3.49515	0
166	166	PCSP1	PCSP1	3	2.66783	0.998004	0
167	167	Pdamericar	Pdamericar	7	4.74998	1.16732	0
168	168	PDbrevis	PDbrevis	6	4.35289	0.725953	6
169	169	Pdparasi	Pdparasi	2	1.80285	0.395257	14
170	170	Pgminima	Pgminima	11	8.34536	1.77515	0
171	171	PIdiverg	PIdiverg	5	2.99041	1.53257	0
172	172	PIdivtis	PIdivtis	17	4.85255	12.253	0
173	173	Pimarchi	Pimarchi	15	8.29488	4.46602	0
174	174	PImicros	PImicros	4	2.83447	0.967118	20
175	175	PISP1	PISP1	2	1.58594	0.59761	0
176	176	PISP2	PISP2	2	1.7594	0.394477	0
177	177	PISP4	PISP4	4	3.58283	0.8	0
178	178	PISP5	PISP5	2	1.84084	0.362976	0
179	179	PISP6	PISP6	13	8.09089	2.95858	0
180	180	PIviridi	PIviridi	2	1.39093	0.972763	10
181	181	PIdivers	PIdivers	5	4.48289	0.6	0
182	182	Ptdelica	Ptdelica	2	1.99951	0.199601	0
183	183	PTfreq	PTfreq	7	5.19071	1.30597	52
184	184	PTlanceo	PTlanceo	8	5.46173	0.968992	39
185	185	PTperaga	PTperaga	3	2.72572	0.362976	0
186	186	PTSP1	PTSP1	8	4.44097	2.58964	0
187	187	PTSP2	PTSP2	2	1.37564	0.994036	0
188	188	RAamphic	RAamphic	21	15.6308	9.21053	0
189	189	RATen	RATen	15	12.2869	1.18812	0
190	190	REsinuta	REsinuta	9	6.42677	0.775194	20
191	191	RhoSp1	RhoSp1	2	1.99995	0.399202	0
192	192	ROabbre	ROabbre	6	4.79503	1.6	31
193	193	Rpacumin	Rpacumin	14	6.35726	7.29783	0
194	194	RPgibba	RPgibba	4	3.5887	0.397614	0
195	195	RPmuscul	RPmuscul	17	8.81252	9.32039	0
196	196	SAlepdub	SAlepdub	7	6.44106	0.596421	0
197	197	SFbacill	SFbacill	3	2.32903	0.775194	0
198	198	Sfhohnii	Sfhohnii	2	1.47713	0.77821	0
199	199	SFlaevis	SFlaevis	2	1.48045	0.776699	0
200	200	SFpupula	SFpupula	7	5.98423	0.795229	36

Site 1	#	Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
201	201	Sfrexii	Sfrexii	4	1.57715	3.55731	0
202	202	SRconstr	SRconstr	3	2.99911	0.389105	8
203	203	Srellip	Srellip	7	5.43147	0.992063	0
204	204	SSagrest	SSagrest	4	3.9995	0.199601	0
205	205	SSCASP	SSCASP	7	5.5519	0.591716	0
206	206	SSkriege	SSkriege	3	2.47904	0.766284	10
207	207	Sssoodensi	Sssoodensi	3	2.64008	0.4	0
208	208	SUangust	SUangust	2	1.7554	1.6791	28
209	209	SUbreb	SUbreb	5	3.80526	0.580271	0
210	210	Suiowen	Suiowen	3	2.99998	0.2	0
211	211	SUovalis	SUovalis	2	1.99999	0.194175	0
212	212	SUpeison	SUpeison	6	3.77433	0.968992	0
213	213	SUSP1	SUSP1	2	1.99759	0.4	0
214	214	Susplen	Susplen	7	2.88418	2.87356	0
215	215	SYulnram	SYulnram	2	1.98153	0.967118	0
216	216	Tafascicu	Tafascicu	3	2.33511	1.14943	0
217	217	Taktenoeo	Taktenoeo	2	1.67832	2.38569	0
218	218	Thbaltica	Thbaltica	2	1.99995	0.2	0
219	219	THcflin	THcflin	7	5.07904	0.988142	0
220	220	Thdecipien	Thdecipien	19	11.287	3.87597	0
221	221	THeccent	THeccent	18	11.4632	2.77228	0
222	222	Thferelinea	Thferelinea	15	4.90764	8.3499	0
223	223	Thoestrup	Thoestrup	14	4.64164	6.95825	0
224	224	THprskin	THprskin	12	6.22441	2.58449	0
225	225	THSp10Coc	THSp10Coc	7	4.54438	1.36187	0
226	226	THSp2-1Co	THSp2-1Co	13	7.81189	2.77778	0
227	227	Thtenera	Thtenera	22	13.9579	3.30739	0
228	228	TLnitzsc	TLnitzsc	21	15.8519	4.57256	0
229	229	TrSp2	TrSp2	4	3.25213	0.581395	0
230	230	TYdebili	TYdebili	18	10.7546	4.78088	0
231	231	Tygracil	Tygracil	5	4.49824	0.59761	0
232	232	Tylevide	Tylevide	7	4.75287	1.77515	0
233	233	Tyscala	Tyscala	14	9.32561	2.52918	0
234	234	ULacus	ULacus	3	1.79986	0.990099	7
235	235	ULcfulna	ULcfulna	21	11.5516	5.74257	0
236	236	UndColony	UndColony	2	1.81123	0.775194	0

Name	N2_Moder	Max_Modern
ACislan	0	0
AMgranu	0	0
AMsp1	0	0
AMsp2	0	0
ANbalti	0	0
AOsp1	0	0
ARtenuis	0	0
ATnorman	0	0
ATocto	0	0
AUambig	3.41726	16.8333
AUgranlt	4.212	12.1054
AUpusill	0	0
AUtenell	2.28782	4.5
AYsen	0	0
BApardxa	7.29571	15.3333
BM1?	0	0
BMcircum	0	0
CAaemul	0	0
CAbacill	17.8249	1.5
CAlewisi	0	0
CAsp1?	0	0
CAsp3?	0	0
CCcfpel	0	0
CCcostco	0	0
Ccneod	0	0
CCplacen	3.74783	15.1667
CCscutel	0	0
CIsp1?	0	0
CJpusill	0	0
CJsp1	0	0
CMaffins	0	0
CMexici	0	0
CMmexica	0	0
CRbelgic	0	0
CScflin	0	0
CSmargin	0	0
Csspec1?	0	0
CYatomus	1.87271	10.1667
CYcaspia	0	0
CYcyclop	0	0

Name	N2_Moder	Max_Modern
CYdistin	0	0
CYmenegh	3.9735	35
CYsp2Coo	0	0
CYstriat	0	0
CYstylor	0	0
DAmonilf	0	0
DAvulg	2.20436	2.9654
DCplacen	0	0
DEkuetzi	3.16512	3.16667
DHsurirl	0	0
DPboldti	0	0
DPbombus	0	0
DPdidyma	0	0
DPellipt	0	0
DPpsudov	0	0
DPsmithi	0	0
ECnicafe	0	0
ECSP1	0	0
ECSP2	0	0
EPadnata	0	0
EPfricke	0	0
EPturgid	0	0
EUSP1	0	0
EUSP2	0	0
EYmicroc	0	0
FApygmae	0	0
Fklewis	0	0
FRcapuci	10.7915	7.33333
FRschulzi	0	0
FRvauche	13.042	11.9935
FSamphi	0	0
FSerifu	0	0
FSSP1	0	0
FSvulgar	16.1661	5.83333
Gedecu	7.15744	9.5
GEkriege	0	0
GOinnoce	0	0
GOolivcm	0	0
GOSP1	0	0
Gpexiguu	0	0

Name	N2_Moder	Max_Modern
GRcfmaci	0	0
GSsp1	0	0
GYcfbalt	0	0
GYSP1	0	0
GYspence	0	0
HASP1	0	0
HASP2	0	0
Havirga	0	0
HIcostu	0	0
HICoxiae	0	0
HISP1	0	0
HISP2	0	0
Kchaloph	0	0
Kvamoena	0	0
Lphungar	0	0
LUSP1	0	0
LUSP2	0	0
Mamarty	0	0
MDSP1	0	0
MEvarian	11.8581	11.591
MSSP1	0	0
Naabunda	0	0
NAantoni	6.09492	1.4827
Nabrach	0	0
NAcaprad	4.37195	7.83333
NAcari	0	0
Nagalloa	0	0
NAgregar	24.3249	28.6667
Naheufler	0	0
NAlancel	11.8749	6.3228
NAoblong	0	0
Napatrick	0	0
NAperegr	3.82448	1
NApermnt	6.04093	14.9918
NAphylpt	0	0
NAreichd	1.99546	2.43016
NAsalinm	1.20279	3.33333
Naschweig	0	0
NASP1	0	0
NASP2	0	0

Name	N2_Moder	Max_Modern
NASP3	0	0
NASP5	0	0
Nasubin	0	0
Nasubinfla	0	0
Nasubmin	0	0
NAtripun	3.60007	1.28
Nazostere	0	0
NIagnita	0	0
NIamphib	9.20402	11.5702
Niboreal	0	0
NIbrevis	2.76506	2.66667
NIclausi	3.73584	13.5
Nicolumbi	0	0
NIcommun	0	0
NIcomtat	0	0
Nicylind	0	0
Nidesert	0	0
NIdissip	23.0175	4
NIfilifr	5.89981	1.33333
NIfrustu	8.22442	20.0658
NIincgnt	0	0
NIincons	5.61381	40.3537
NIlaevis	0	0
NIlinear	17.5899	2.31405
Nimacile	0	0
NImicroc	0	0
NInana	5.85114	1.83333
NIobtusa	0	0
NIpalea	20.7304	17.8333
Nipandur	0	0
NIpelluc	0	0
NIpermin	0	0
Niproxima	0	0
Nipunctata	0	0
NIpusill	0	0
NIsigma	0	0
Nisigmafor	0	0
NISP1	0	0
NISP4	0	0
NIumbona	0	0

Name	N2_Moder	Max_Modern
OpspA	0	0
ORSP1	0	0
PAsulc	0	0
Pbplicat	0	0
PCgastru	0	0
PCSP1	0	0
Pdamericar	0	0
PDbrevis	4.38231	0.665557
Pdparasi	6.13104	2.13675
Pgminima	0	0
PIdiverg	0	0
PIdivtis	0	0
Pimarchi	0	0
PImicros	14.6883	1.16667
PISP1	0	0
PISP2	0	0
PISP4	0	0
PISP5	0	0
PISP6	0	0
PIviridi	7.57811	0.666667
PIdivers	0	0
Ptdelica	0	0
PTfreq	25.8108	8.05687
PTlanceo	12.7915	13.6667
PTperaga	0	0
PTSP1	0	0
PTSP2	0	0
RAamphic	0	0
RATen	0	0
REsinuta	5.88254	22.093
RhoSp1	0	0
ROabbre	6.62016	44.3522
Rpacumin	0	0
RPgibba	0	0
RPmuscul	0	0
SAlepdub	0	0
SFbacill	0	0
Sfhohnii	0	0
SFlaevis	0	0
SFpupula	18.1811	6.04134

Name	N2_Moder	Max_Modern
Sfrexii	0	0
SRconstr	5.8375	1.06838
Srellip	0	0
SSagrest	0	0
SSCASP	0	0
SSkriege	1.57444	12.8333
Sssoodensi	0	0
SUangust	16.3683	1.65289
SUbreb	0	0
Suiowen	0	0
SUovalis	0	0
SUpeison	0	0
SUSP1	0	0
Susplen	0	0
SYulnram	0	0
Tafascicu	0	0
Taktenoeo	0	0
Thbaltica	0	0
THcflin	0	0
Thdecipien	0	0
THeccent	0	0
Thferelinea	0	0
Thoestrup	0	0
THprskin	0	0
THSp10Coc	0	0
THSp2-1Co	0	0
Thtenera	0	0
TLnitzsc	0	0
TrSp2	0	0
TYdebili	0	0
Tygracil	0	0
Tylevide	0	0
Tyscala	0	0
ULacus	5.72619	0.630915
ULcfulna	0	0
UndColony	0	0

Site 1	#	Code	Name	N_Fossil	N2_Fossil	Sum_Fossil	N_In_Mode
1	1	S1-0	S1-0	59	13.794	99.4	16
2	2	S1-10	S1-10	75	17.6103	99.2	22
3	3	S1-20	S1-20	75	21.1955	98.2072	21
4	4	S1-30	S1-30	79	17.4125	98.4526	24
5	5	S1-40	S1-40	81	19.491	100	24
6	6	S1-50	S1-50	88	31.5052	98.8806	24
7	7	S1-60	S1-60	72	20.4754	99.2048	16
8	8	S1-70	S1-70	83	20.2132	99.604	21
9	9	S1-80	S1-80	80	31.2156	98.8072	19
10	10	S1-90	S1-90	88	24.5315	99.6109	23
11	11	S1-100	S1-100	102	45.6602	95.5426	23
12	12	S1-110	S1-110	74	21.0358	99.0079	14
13	13	S1-120	S1-120	75	20.5688	99.0119	18
14	14	S1-130	S1-130	85	24.6814	100	21
15	15	S1-140	S1-140	75	30.4258	97.2056	11
16	16	S1-150	S1-150	74	25.6909	98.2524	13
17	17	S1-160	S1-160	67	22.6366	99.211	15
18	18	S1-170	S1-170	81	20.534	98.7296	18
19	19	S1-180	S1-180	75	20.3433	100	17
20	20	S1-190	S1-190	83	20.8021	99.0602	16
21	21	S1-200	S1-200	91	26.6354	99.4036	18
22	22	S1-210	S1-210	84	24.8401	98.8095	22
23	23	S1-220	S1-220	73	16.0675	99.8054	10
24	24	S1-230	S1-230	81	22.543	97.6	11

Name	Sum_In_Modern
S1-0	42.2
S1-10	46.4
S1-20	37.0518
S1-30	50.677
S1-40	51.341
S1-50	34.3284
S1-60	15.9046
S1-70	14.0594
S1-80	19.2843
S1-90	29.1829
S1-100	19.9612
S1-110	15.873
S1-120	20.751
S1-130	20.6759
S1-140	12.1756
S1-150	9.70874
S1-160	10.2564
S1-170	16.6969
S1-180	10.7486
S1-190	10.5263
S1-200	13.5189
S1-210	16.4683
S1-220	4.0856
S1-230	6.4

Site 2	#		Code	Name	Count	Max	N2	Beta_C1
	1	1	ACsubkra	ACsubkra	25	13.7931	11.0209	0.951488
	2	3	AEtuscul	AEtuscul	3	1.16667	2.71084	2.27948
	3	4	AHaffine	AHaffine	2	0.42735	1.66717	1.44337
	4	5	Ahdeflex	Ahdeflex	12	11.4444	2.54677	1.80015
	5	6	AHexigum	AHexigum	31	3.63036	12.7049	1.79963
	6	7	AHminuti	AHminuti	60	47.1667	26.6003	1.36796
	7	8	AHreimer	AHreimer	7	21.3938	1.76813	0.614389
	8	9	Ahrivula	Ahrivula	38	38.374	11.6488	0.652877
	9	10	AMcopula	AMcopula	15	1	9.87814	2.84314
	10	11	AMpedcls	AMpedcls	23	23.2673	6.93953	1.7389
	11	12	ASformos	ASformos	8	54.8	2.13651	2.1117
	12	14	AUambig	AUambig	19	16.8333	3.41726	2.07224
	13	16	AUdistns	AUdistns	3	2.83333	1.5817	2.04751
	14	17	AUgranlt	AUgranlt	14	12.1054	4.212	2.72861
	15	18	AUgrnang	AUgrnang	5	20.7778	2.80077	2.50597
	16	19	AUitalic	AUitalic	2	3.72473	1.0587	3.71318
	17	22	AUsubart	AUsubart	4	2	2.74051	2.47422
	18	23	AUtenell	AUtenell	3	4.5	2.28782	0.957054
	19	24	BApardxa	BApardxa	26	15.3333	7.29571	1.20774
	20	25	BRmicroc	BRmicroc	7	3.5	2.52737	0.632174
	21	26	CAbacill	CAbacill	31	1.5	17.8249	2.48798
	22	27	CAhyalin	CAhyalin	8	2.66223	4.43536	1.5296
	23	28	CBnavicu	CBnavicu	16	2.66667	4.65723	1.04799
	24	29	CCfluvtl	CCfluvtl	3	1.4975	1.45777	3.03273
	25	30	CCpedcls	CCpedcls	11	5.29801	4.00135	2.34496
	26	31	CCplacen	CCplacen	23	15.1667	3.74783	1.8428
	27	32	CCplaeug	CCplaeug	15	30.3987	4.19354	2.35431
	28	33	CCplalin	CCplalin	25	26.1589	4.68267	2.35482
	29	34	CCpselin	CCpselin	5	4.33333	2.19569	2.18568
	30	35	CEpulch	CEpulch	20	2.79605	7.22793	1.9019
	31	36	CMaera	CMaera	5	3.5	1.61835	4.14857
	32	37	CMheterp	CMheterp	3	1.16667	2.18182	1.69133
	33	38	CPcrucic	CPcrucic	6	4.16667	2.37754	3.672
	34	39	CSinvisi	CSinvisi	4	2.66667	1.35026	4.05194
	35	40	CStholif	CStholif	2	0.166667	1.99983	2.42098
	36	41	CYatomus	CYatomus	6	10.1667	1.87271	2.80167
	37	42	CYmenegh	CYmenegh	38	35	3.9735	3.08896
	38	43	DAvulg	DAvulg	6	2.9654	2.20436	2.32856
	39	44	DEkuetzi	DEkuetzi	7	3.16667	3.16512	1.97652
	40	45	DIconfer	DIconfer	17	5.63252	6.98176	2.9714

Site 2	#	Code	Name	Count	Max	N2	Beta_C1
41	46	DTpseuds	DTpseuds	19	14.1667	4.07859	1.43323
42	47	DTstelli	DTstelli	15	6.5	6.47571	1.88883
43	49	ECminutu	ECminutu	30	10.311	6.60644	0.325959
44	50	ECsilesi	ECsilesi	32	17.9868	5.47701	1.51771
45	51	Eolmini	Eolmini	54	45.3333	21.011	2.05137
46	52	EOsubmin	EOsubmin	14	3.62438	3.69545	2.80252
47	54	EUbilun	EUbilun	30	3.33333	18.1058	1.86351
48	55	EUcaroli	EUcaroli	3	7.5	1.15366	0.358785
49	57	EUexigua	EUexigua	21	10.4869	6.37561	1.8372
50	60	EUflexuo	EUflexuo	6	0.333333	5.55473	1.35789
51	61	EUformic	EUformic	7	3.49418	2.75976	2.04832
52	62	EUimplic	EUimplic	22	23.6667	4.04909	3.40503
53	63	EUincisa	EUincisa	13	2.44821	7.18252	1.4313
54	64	EUinterm	EUinterm	7	3.33333	1.81801	0.906682
55	65	EUmaior	EUmaior	2	1.33333	1.24615	1.3111
56	66	EUmeistr	EUmeistr	3	0.166667	2.99974	1.2941
57	67	EUmonodo	EUmonodo	4	3.33333	1.41701	2.92659
58	69	EUpectin	EUpectin	14	1.15321	8.32637	0.814035
59	70	EUpecund	EUpecund	6	1.31827	4.1809	1.72908
60	71	EUpirla	EUpirla	6	3.82696	2.93671	1.92222
61	72	EUrhombo	EUrhombo	7	3.33333	2.09616	0.694954
62	74	EUsoleir	EUsoleir	2	0.333333	1.85404	2.7522
63	75	EUsubarc	EUsubarc	2	2.5	1.07522	0.361633
64	76	EUtenell	EUtenell	12	5.34188	4.35083	2.21789
65	77	FGbicapi	FGbicapi	5	1.33333	2.19431	2.50782
66	78	FGstrang	FGstrang	5	2.83333	1.44185	0.567443
67	79	FGviresc	FGviresc	19	8.16667	3.86207	1.17201
68	81	FRcapfra	FRcapfra	5	2.82486	2.82118	1.37935
69	82	FRcapgra	FRcapgra	39	13.6667	10.6661	1.92056
70	83	FRcapuci	FRcapuci	21	7.33333	10.7915	2.31047
71	84	FRcroton	FRcroton	16	4.89642	6.40851	1.97632
72	85	FRmesole	FRmesole	14	32.8	1.41789	1.80252
73	87	FRvauche	FRvauche	41	11.9935	13.042	1.47932
74	88	Fscrassi	Fscrassi	20	1.41243	11.4212	1.89252
75	89	FSkramme	FSkramme	9	9.16667	1.78197	0.756274
76	90	FSvulgar	FSvulgar	36	5.83333	16.1661	1.58907
77	91	GEaccep	GEaccep	7	2.15947	3.06078	1.76284
78	92	GEdecu	GEdecu	28	9.5	7.15744	2.81432
79	93	GOangstt	GOangstt	20	6.5	5.43284	2.36606
80	95	GOgracil	GOgracil	29	2	17.2045	1.85714

Site 2	#	Code	Name	Count	Max	N2	Beta_C1
81	96	GOinsign	GOinsign	5	1	3.68725	2.5189
82	97	GOkobaya	GOkobaya	33	25.9156	6.91109	2.62957
83	98	GOlage	GOlage	2	0.198675	1.99825	2.96268
84	99	GOmicrop	GOmicrop	6	3.66667	2.19943	3.09494
85	100	GOminutm	GOminutm	21	9.80392	3.21097	1.95824
86	101	GOolihut	GOolihut	4	0.166113	3.99985	0.706496
87	103	GOpalius	GOpalius	9	4.25868	5.02155	1.39563
88	104	GOparvul	GOparvul	60	26.3333	25.088	1.94251
89	105	GOpatric	GOpatric	7	2.4983	3.33231	2.97252
90	106	GOpygm	GOpygm	9	4.7619	2.67394	1.12699
91	107	GYacumin	GYacumin	4	4.3193	1.21191	1.07788
92	108	HIcapita	HIcapita	29	1.83333	19.6256	2.62788
93	110	KBsubtil	KBsubtil	4	8.33333	1.17387	0.385497
94	111	KVclevei	KVclevei	11	3.79538	3.76134	1.69052
95	112	KVoblong	KVoblong	13	12.6456	4.93588	1.63621
96	113	LUgoepp2	LUgoepp2	9	4.93896	2.4838	3.25076
97	114	LUmutica	LUmutica	27	3	11.4199	2.48324
98	115	MDcircon	MDcircon	22	3.50109	9.22949	1.95358
99	116	MDcircul	MDcircul	21	1.94489	11.5069	1.72377
100	117	MEvarian	MEvarian	41	11.591	11.8581	1.61593
101	118	MYagres	MYagres	14	2.13675	4.18064	2.49826
102	119	MYatomus	MYatomus	11	14.6919	1.4785	3.30788
103	120	NAantoni	NAantoni	13	1.4827	6.09492	1.69817
104	121	NAcaprad	NAcaprad	15	7.83333	4.37195	1.76255
105	122	NAcrypto	NAcrypto	51	7.83333	25.8749	2.12979
106	123	NAcrytds	NAcrytds	7	3	3.76742	2.38433
107	124	NAcryten	NAcryten	29	3.06178	14.0051	1.92087
108	125	NAerifga	NAerifga	10	21.5	1.7858	2.66851
109	126	NAescamb	NAescamb	10	4.04593	3.35243	1.08298
110	127	NAgermii	NAgermii	33	8.15308	14.9159	2.06095
111	128	NAgregar	NAgregar	50	28.6667	24.3249	1.77801
112	129	NAhmberg	NAhmberg	6	2.16667	2.21866	2.45013
113	130	NAlancel	NAlancel	28	6.3228	11.8749	1.27757
114	131	NAlongcp	NAlongcp	24	6.89655	11.9541	2.25635
115	132	NAperegr	NAperegr	5	1	3.82448	1.72088
116	133	NApermnt	NApermnt	17	14.9918	6.04093	1.0706
117	134	NAreichd	NAreichd	3	2.43016	1.99546	2.95549
118	135	NArhynch	NArhynch	38	7.41325	18.9782	1.77331
119	136	NArostel	NArostel	41	7.33333	17.018	1.90751
120	137	NAsalinm	NAsalinm	3	3.33333	1.20279	2.84473

Site 2	#	Code	Name	Count	Max	N2	Beta_C1
121	138	NAsubmur	NAsubmur	8	2.33333	4.50081	2.20513
122	139	NAsymtrc	NAsymtrc	20	4.33333	9.80673	2.27698
123	140	NAtenell	NAtenell	26	4	15.2074	2.23152
124	141	NAtripun	NAtripun	7	1.28	3.60007	1.88587
125	142	NEalpinu	NEalpinu	15	1.97044	8.49417	2.10164
126	143	NIacidcn	NIacidcn	7	0.947867	4.42663	3.02606
127	144	NIamphib	NIamphib	40	11.5702	9.20402	2.5469
128	145	NIarchib	NIarchib	7	0.666667	5.0025	2.25927
129	146	NIbrevis	NIbrevis	7	2.66667	2.76506	2.57267
130	147	NIcapite	NIcapite	19	3	8.24322	2.64812
131	148	NIclausi	NIclausi	18	13.5	3.73584	2.67981
132	149	NIdissip	NIdissip	44	4	23.0175	1.48386
133	150	NIfilifr	NIfilifr	11	1.33333	5.89981	1.54411
134	151	NIfontic	NIfontic	27	8.49673	8.78608	2.0917
135	152	NIfrustu	NIfrustu	34	20.0658	8.22442	2.14348
136	154	NIgracil	NIgracil	13	1.16667	9.25279	2.18458
137	155	NIincons	NIincons	28	40.3537	5.61381	1.999
138	156	NIliebrt	NIliebrt	7	1.33111	4.13858	2.60965
139	157	NIlinear	NIlinear	34	2.31405	17.5899	1.94901
140	158	NInana	NInana	10	1.83333	5.85114	1.16605
141	159	NIpaldeb	NIpaldeb	12	8.16667	6.46824	2.25438
142	160	NIpalea	NIpalea	50	17.8333	20.7304	2.26239
143	161	NIpaleac	NIpaleac	4	0.396825	3.92257	1.51417
144	162	NIpsefon	NIpsefon	4	3.47003	3.22349	2.02976
145	163	NIrecta	NIrecta	18	1.72414	9.94139	2.6992
146	164	NIscalpe	NIscalpe	2	0.333333	1.8	2.21068
147	165	NIsociab	NIsociab	16	1.63666	11.5876	1.56971
148	166	NItubcla	NItubcla	29	9.23825	7.40674	1.37977
149	167	NUlapid	NUlapid	11	0.854701	7.66236	1.17849
150	168	Nuneglec	Nuneglec	6	1.65017	3.36897	0.913081
151	169	NUwell	NUwell	6	0.833333	4.6192	1.79732
152	170	PCclemen	PCclemen	11	3.82696	4.06866	2.22238
153	171	PDbrevis	PDbrevis	6	0.665557	4.38231	2.13414
154	172	Pdparasi	Pdparasi	14	2.13675	6.13104	1.46327
155	173	Plabauje	Plabauje	14	2.83912	4.26694	1.25403
156	174	PIinterr	PIinterr	13	1.23153	6.60495	2.20723
157	175	PImicros	PImicros	20	1.16667	14.6883	2.38638
158	176	PIobscur	PIobscur	4	1.66667	2.95918	2.0499
159	178	PIsubros	PIsubros	10	2.66667	5.37584	1.64354
160	179	PIviridi	PIviridi	10	0.666667	7.57811	1.39401

Site 2	#	Code	Name	Count	Max	N2	Beta_C1
161	180	PLconspi	PLconspi	17	12.3762	5.72662	1.78099
162	181	PSgridao	PSgridao	4	1.33333	2.19201	1.10056
163	182	PShelvet	PShelvet	7	4.5	2.48548	2.10238
164	183	PSsubato	PSsubato	21	5.33333	7.05848	2.15877
165	184	PSventra	PSventra	3	0.330033	2.67547	1.86625
166	185	PTellip	PTellip	4	2.83333	2.24267	2.32825
167	186	PTfreq	PTfreq	52	8.05687	25.8108	2.05812
168	187	PThauck	PThauck	2	20	1.01667	1.92054
169	188	PTlanceo	PTlanceo	39	13.6667	12.7915	2.24996
170	189	PTrostr	PTrostr	14	2.02407	7.57299	2.36535
171	190	REsinuta	REsinuta	20	22.093	5.88254	1.82527
172	191	ROabbre	ROabbre	31	44.3522	6.62016	1.95089
173	192	RSlinea	RSlinea	4	2.51504	1.59906	1.10728
174	193	SApinnat	SApinnat	15	1.80033	7.78639	2.2189
175	194	SFpupula	SFpupula	36	6.04134	18.1811	2.44966
176	195	SFseminu	SFseminu	29	16.9811	8.95169	2.98104
177	196	SOexiguf	SOexiguf	6	18.6667	1.39215	0.511817
178	197	SRconstr	SRconstr	8	1.06838	5.8375	2.4219
179	198	SRconven	SRconven	17	2.91902	9.12145	1.89668
180	199	SSanceps	SSanceps	16	5.5	3.42038	1.88167
181	200	SSkriege	SSkriege	10	12.8333	1.57444	2.32784
182	201	SSsmithi	SSsmithi	23	2.99501	12.1896	1.88913
183	202	SSthermc	SSthermc	13	2.21675	6.6155	2.49598
184	203	SThantzs	SThantzs	5	1	3.05633	2.67812
185	204	SUangust	SUangust	28	1.65289	16.3683	2.55102
186	205	Subrekut	Subrekut	15	1.66667	8.64014	1.78996
187	206	SYrumpen	SYrumpen	11	3.8	5.96705	1.39946
188	207	TAfenest	TAfenest	4	1.66667	2.57653	1.72049
189	208	TAfloccu	TAfloccu	19	8.16667	4.19915	1.18088
190	209	ULacus	ULacus	7	0.630915	5.72619	2.1341
191	210	ULdelica	ULdelica	4	1.16667	1.67465	1.21384
192	211	UlnaUlna	UlnaUlna	44	9.16667	13.6691	1.80599

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
ACsubkra	0.752842	0.422964	0.290028	0.222281	1.05376	0.812531	0.612995
AEtuscul	2.9105	3.67556	4.05653	4.2317	2.14948	2.57997	2.98257
AHaffine	0.69884	-0.06784	-0.83875	-1.89755	1.4633	0.911771	0.364148
Ahdeflex	1.64079	1.54508	1.42814	1.24422	1.36213	1.06427	0.841252
AHexigum	1.64969	1.37409	1.27965	1.35153	1.84689	1.77302	1.66776
AHminuti	1.29196	1.29052	1.23983	1.11982	1.44326	1.37136	1.34549
AHreimer	0.231315	0.347431	0.370515	0.179091	0.970782	0.556225	0.372743
Ahrivula	0.450502	0.461618	0.617268	0.744769	0.826571	0.581325	0.573625
AMcopula	3.09606	3.21672	3.28934	3.35841	2.668	2.88821	2.98873
AMpedcls	1.92255	1.59575	1.50513	1.58354	1.82131	1.95996	1.80422
ASformos	1.93096	2.15866	1.89352	2.03849	1.93853	1.80432	1.83776
AUambig	2.09333	2.1867	2.17022	2.25608	2.09998	2.13907	2.17661
AUdistns	2.21582	2.41945	2.46399	2.6121	2.22999	2.44925	2.56772
AUgranlt	2.75645	2.86058	2.9073	2.99611	2.49031	2.51674	2.57753
AUgrnang	2.53429	2.77825	2.81484	2.96687	2.29825	2.30638	2.45161
AUitalic	4.40104	4.95954	5.25315	5.22539	3.1301	3.74525	4.27595
AUsubart	1.96235	1.01096	0.214707	-0.55795	2.32595	1.96282	1.32261
AUtenell	1.2993	1.39467	1.12917	1.22561	1.30605	1.62038	1.63812
BApardxa	0.590857	0.359539	0.326136	0.40127	1.32288	0.864664	0.711118
BRmicroc	1.00079	1.19215	1.01902	1.13553	0.906038	1.08444	1.03245
CAbacill	2.61662	2.65567	2.75099	2.88539	2.37876	2.49508	2.54543
CAhyalin	0.899402	0.513276	0.395835	0.529729	1.61302	1.15822	0.901606
CBnavicu	0.439984	0.288205	0.186549	-0.0469	1.31285	0.90449	0.768097
CCfluvtl	3.54374	4.04576	4.47498	4.94606	2.7465	3.1569	3.48558
CCpedcls	3.09705	3.53016	3.86265	3.97025	2.23183	2.76772	3.12328
CCplacen	1.57486	1.25995	1.12379	1.22402	1.88943	1.74641	1.61921
CCplaeug	3.06512	3.17102	3.31868	3.38861	2.27091	2.7479	2.8876
CCplalin	2.7009	2.86542	2.92714	2.81227	2.26021	2.51587	2.63534
CCpselin	1.99578	1.78806	1.75669	1.98907	2.18163	2.06952	1.96372
CEpulch	1.7838	1.59021	1.42617	1.27958	1.83016	1.70917	1.59149
CMaera	4.62832	4.63763	4.59403	4.57888	3.21759	3.44046	3.40111
CMheterp	1.7968	1.93411	1.86678	1.87074	1.74546	1.83928	1.93983
CPcrucic	3.91457	3.73972	3.49515	3.15323	3.20079	3.38959	3.24722
CSinvisi	4.03605	3.52093	3.31288	3.48743	3.40165	3.46512	3.30429
CStholif	2.04904	1.53902	1.00557	0.18935	2.35194	2.16378	1.87749
CYatomus	2.90855	2.91459	3.07267	3.33994	2.49763	2.6936	2.81878
CYmenegh	3.06938	2.80019	2.72283	2.8712	2.67149	2.67546	2.59002
DAvulg	3.0332	3.45716	3.86776	4.27211	1.96821	2.36856	2.6621
DEkuetzi	2.50716	3.29821	3.73298	3.88716	1.86269	2.203	2.63932
DIconfer	3.32284	3.68776	3.95504	4.10333	2.78797	3.11174	3.37185

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
DTpseuds	0.760203	0.480022	0.415629	0.563425	1.60616	1.16279	1.01761
DTstelli	1.91952	2.02887	1.82792	1.97213	1.85514	1.94411	1.96074
ECminutu	-0.21631	-0.4367	-0.45399	-0.4043	0.632199	0.153314	-0.0456
ECsilesi	1.42309	1.23663	1.35294	1.77661	1.6372	1.60294	1.57884
Eolmini	2.1487	2.10978	2.10361	2.10486	2.03162	2.11157	2.12372
EOsubmin	3.40473	3.55907	3.66371	3.68099	2.60349	2.98787	3.08869
EUbilun	1.75292	1.8724	1.96296	2.04729	1.87001	1.81028	1.88286
EUcaroli	1.13325	1.40689	1.08444	1.2094	0.769466	0.983396	0.764386
EUexigua	1.62724	1.91566	2.28034	2.68122	1.81425	1.64819	1.78553
EUflexuo	1.05804	0.99622	0.871578	0.72886	1.42611	1.21864	1.20866
EUformic	1.87146	2.01319	2.18664	2.32912	2.12564	2.02182	2.02521
EUimplic	3.81125	3.96731	4.05161	4.18313	2.92763	3.24353	3.38205
EUincisa	1.17914	0.90157	0.507494	0.122662	1.51558	1.37363	1.18113
EUinterm	1.61493	2.0124	1.91889	2.14349	1.4371	1.89565	1.99509
EUmaior	1.33635	1.62412	1.77389	1.98406	1.5961	1.66187	1.85032
EUmeistr	0.801843	0.814392	0.834231	0.656979	1.29268	0.819322	0.706538
EUmonodo	3.53277	4.39383	5.18686	5.95796	2.7555	3.30042	3.98922
EUpectin	0.66487	0.499548	0.334486	0.209128	1.00908	0.885547	0.736295
EUpecund	1.67323	1.62126	1.29766	1.09971	1.7689	1.83774	1.7445
EUpirla	1.86473	2.19214	2.54308	2.93316	1.96177	2.03597	2.26193
EUrhombo	1.08806	1.14175	0.792965	0.759785	1.05308	1.17776	0.969196
EUsoleir	3.30313	4.34149	5.34271	6.36427	2.55976	3.05034	3.852
EUsubarc	1.21944	1.55785	1.27706	1.49071	0.912706	1.27248	1.16606
EUtenell	2.24282	2.45337	2.59946	2.62841	2.13294	2.21449	2.36782
FGbicapi	2.69323	2.75843	2.85383	3.08902	2.52736	2.80193	3.02709
FGstrang	1.21608	1.40266	1.0538	1.08475	1.06438	1.28827	1.09175
FGviresc	1.48189	1.55545	1.31105	1.27378	1.4127	1.60075	1.50298
FRcapfra	0.943741	0.542716	-0.03662	-0.52071	1.56469	1.29025	1.09409
FRcapgra	1.94735	2.11369	2.09641	2.01965	1.91133	1.96241	2.05821
FRcapuci	2.3822	2.62489	2.77935	2.81172	2.2661	2.37842	2.54455
FRcroton	1.7974	1.67952	1.53081	1.39798	2.02608	1.95105	1.90938
FRmesole	1.60887	1.93156	1.77727	2.04713	1.74626	1.55847	1.48645
FRvauche	1.43872	1.61786	1.78557	1.91233	1.55354	1.5122	1.6057
Fscrassi	1.70093	1.78743	1.86806	1.92626	1.90019	1.77384	1.82592
FSkramme	-0.02808	-0.02251	0.118616	0.195351	1.24374	0.786773	0.731346
FSvulgar	1.36564	1.47986	1.57967	1.58083	1.65392	1.49969	1.54833
GEaccep	2.04841	1.70041	1.47561	1.15744	1.82562	1.9727	1.829
GEdecu	2.89719	2.80894	2.72996	2.61279	2.53682	2.58979	2.55404
GOangstt	2.81392	3.44226	3.78779	3.8482	2.25935	2.53312	2.82636
GOgracil	1.76414	1.83181	1.83874	1.84822	1.86073	1.82468	1.86813

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
GOinsign	2.48132	2.47966	2.53896	2.65861	2.39986	2.37939	2.37503
GOkobaya	2.91829	3.05954	3.1168	3.14818	2.42593	2.62791	2.72597
GOlage	3.74381	4.50785	5.0677	5.3642	2.73956	3.28425	3.69302
GOmicrop	3.68881	4.41239	4.93472	5.25402	2.73202	3.16142	3.58584
GOminutm	2.4775	3.08802	3.67183	4.07746	1.96899	2.27658	2.64374
GOolihut	0.376342	-0.31629	-0.83288	-1.47752	0.873797	0.518578	0.118691
GOpalius	1.11461	1.1747	1.16308	0.989677	1.54388	1.32547	1.31323
GOparvul	1.73718	1.65032	1.57556	1.45822	1.92857	1.78117	1.71257
GOpatric	3.28457	3.61815	3.83125	3.89714	2.66141	2.85893	3.02128
GOpygm	1.08737	0.692517	0.389968	0.067215	1.42511	1.49301	1.4151
GYacumin	0.620275	0.686402	0.993836	1.50975	1.65293	1.42863	1.42101
HIcapita	2.75	2.84907	2.92807	2.98901	2.50732	2.6363	2.73135
KBsubtil	-0.69821	-0.88314	-0.86253	-0.92687	0.948786	0.12046	-0.25174
KVclevei	1.76512	1.1747	0.883604	0.738255	1.75222	1.79141	1.49996
KVoblong	1.22437	1.14727	1.0999	0.933772	1.7322	1.41902	1.31787
LUgoepp2	3.55785	3.4682	3.33472	3.21209	2.73664	2.8801	2.78725
LUmutica	2.6115	2.89593	3.12221	3.24203	2.34786	2.45563	2.61282
MDcircon	2.09231	2.52263	2.83569	3.05515	1.97502	2.11952	2.4171
MDcircul	1.68449	1.89343	2.12234	2.43731	1.76804	1.73223	1.84258
MEvarian	1.35976	1.20186	1.12109	1.04895	1.6416	1.43047	1.33012
MYagres	2.59641	2.80695	2.94912	2.9415	2.43453	2.6158	2.84336
MYatomus	4.05784	4.52124	4.70074	4.54635	2.75171	3.17976	3.48743
NAantoni	1.89155	1.83735	1.87472	1.93353	1.68593	1.74149	1.68689
NAcaprad	1.93756	2.19993	2.17852	1.84683	1.74734	1.83998	1.94339
NAcrypto	2.09122	2.15746	2.17323	2.09556	2.09825	2.10461	2.1584
NAcrytds	2.25906	2.21838	2.28268	2.40474	2.24404	2.13788	2.08409
NAcryten	2.13945	2.4047	2.6548	2.89714	1.91655	2.0696	2.24317
NAerifga	2.46278	2.27501	2.16997	2.00709	2.43136	2.27154	2.05962
NAescamb	0.688037	0.522123	0.487742	0.464298	1.22609	0.881804	0.679404
NAgermii	1.73367	1.5566	1.51339	1.55823	2.0171	1.77619	1.65123
NAgregar	1.67126	1.48725	1.39471	1.29599	1.75859	1.66098	1.56845
NAhmberg	3.24629	4.28813	4.89553	5.12241	2.24244	2.73405	3.29711
NAlancel	0.963741	0.430581	0.095049	-0.1774	1.3445	1.05359	0.715652
NAlongcp	2.25795	2.55703	2.85224	3.078	2.18803	2.21987	2.42134
NAperegr	1.40209	1.1385	1.03133	1.055	1.53058	1.17398	0.895049
NApermnt	1.05437	1.16975	1.36327	1.46521	1.24702	1.19799	1.32124
NAreichd	3.32605	3.72456	3.98033	4.04411	2.38423	2.56959	2.77003
NArhynch	1.59217	1.71092	1.79603	1.7666	1.80348	1.67914	1.73461
NArostel	1.72123	1.63379	1.63376	1.61497	1.89505	1.76838	1.74635
NAsalinm	3.04043	3.21796	3.52693	3.9906	2.6509	2.96447	3.17774

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
NAsubmur	1.89677	1.42957	1.02978	0.588436	2.21732	2.01981	1.71519
NAsymtrc	2.06214	1.9006	1.87861	1.97533	2.16067	2.00951	1.91335
NAtenell	2.10016	2.10255	2.18214	2.31461	2.15333	2.06969	2.0615
NAtripun	2.3563	2.76311	3.19889	3.61041	2.05296	2.36145	2.54033
NEalpinu	1.97418	1.99951	1.99588	1.86314	2.09169	2.03829	2.0753
NIacidcn	3.66517	4.35077	4.8804	5.302	2.83537	3.35238	3.84264
NIamphib	2.69726	2.75603	2.84812	2.97264	2.42801	2.58393	2.66965
NIarchib	2.50048	2.73271	2.83511	2.76475	2.11097	2.30519	2.46365
NIbrevis	2.56557	2.49555	2.45619	2.37709	2.43124	2.47818	2.4297
NIcapite	2.96655	3.58308	4.16271	4.74748	2.49632	2.79971	3.24197
NIclausi	2.68425	2.82748	3.02303	3.19212	2.55478	2.63522	2.76334
NIdissip	1.29815	1.2227	1.12502	0.936627	1.51288	1.34078	1.24472
NIfilifr	1.12702	1.11909	1.11355	0.907728	1.69708	1.40957	1.35129
NIfontic	2.57493	2.95667	3.35222	3.68637	2.02995	2.3874	2.72618
NIfrustu	2.40859	2.23898	2.07785	1.85126	2.0798	2.29969	2.27388
NIgracil	2.12489	2.0042	1.77123	1.49993	2.08657	2.02559	1.92686
NIincons	2.36932	2.30303	2.32925	2.37485	1.94048	2.24455	2.34594
NIliebrt	2.65481	2.71799	2.85596	3.11033	2.4143	2.43462	2.47403
NIlinear	2.06883	2.21709	2.33721	2.37425	1.93815	2.04542	2.18176
NInana	0.3167	-0.38551	-0.93973	-1.41169	1.30407	0.681403	0.220516
NIpaldeb	1.9374	1.6177	1.4389	1.37013	2.08626	1.83987	1.59851
NIpalea	2.18275	2.29376	2.41514	2.47076	2.21457	2.18341	2.25359
NIpaleac	1.33628	1.26679	1.24168	1.15072	1.60354	1.46359	1.36867
NIpsefon	2.0877	2.10158	1.9605	1.55559	2.03438	2.12228	2.19413
NIrecta	3.00676	3.53623	3.98425	4.34601	2.59148	2.86444	3.20758
NIscalpe	3.00353	4.10628	4.77474	5.09866	2.00865	2.47307	3.03893
NIsociab	1.22803	0.861666	0.59273	0.294991	1.61306	1.36102	1.12249
NItubcla	1.16724	1.20643	1.22614	1.15795	1.53369	1.35855	1.32923
NUlapid	0.757951	0.360395	0.11414	-0.16179	1.2775	0.956994	0.751894
Nuneglec	0.594237	-0.04777	-0.26783	-0.13546	1.08154	0.85329	0.582328
NUwell	1.56562	1.61783	1.71463	1.75487	1.79596	1.65006	1.72814
PCclemen	2.09833	2.2091	2.34646	2.44668	2.2347	2.17626	2.20268
PDbrevis	2.12813	2.03741	1.84693	1.5401	2.05474	2.13762	2.0945
Pdparasi	0.99031	0.678609	0.396278	0.066293	1.51414	1.1964	1.02225
PIabauje	0.846147	0.62312	0.349181	-0.07618	1.45018	1.20013	1.06599
PIinterr	2.13013	2.37204	2.61837	2.81415	2.14309	2.10538	2.28098
PImicros	2.3668	2.44862	2.49934	2.46866	2.28635	2.28161	2.28179
PIobscur	1.86041	1.97263	2.21689	2.6094	2.04908	1.94625	1.9934
PIsubros	1.21525	0.990664	0.844272	0.712664	1.7323	1.45037	1.29851
PIviridi	0.969697	0.888802	0.764364	0.539454	1.48869	1.17965	1.07292

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
PLconspi	1.97805	1.62006	1.5523	1.71557	1.81672	1.95309	1.79202
PSgridao	1.75639	2.10294	2.00589	2.18032	1.48549	1.96178	2.06155
PShelvet	2.5101	2.95111	3.05406	3.004	1.99008	2.22276	2.40073
PSsubato	2.28159	2.6551	2.94417	3.1514	2.04754	2.13092	2.30478
PSventra	1.28762	0.360994	-0.51686	-1.55772	1.92174	1.55364	1.03123
PTellip	3.07557	3.99849	4.48732	4.68843	2.13674	2.61611	3.09387
PTfreq	2.08385	1.92042	1.84115	1.79521	2.04033	2.04069	1.95433
PThauck	2.07529	2.10946	1.89251	1.75113	1.91139	2.03967	2.10705
PTlanceo	2.33654	2.33845	2.25815	2.1442	2.20628	2.27515	2.2621
PTrostr	2.60786	2.90777	3.15712	3.35795	2.2941	2.52413	2.76758
REsinuta	2.19716	2.10695	2.15181	2.25884	1.85996	2.11168	2.15571
ROabbre	2.46392	2.6798	2.83127	2.86546	1.91082	2.26783	2.42331
RSlinea	0.659839	0.679789	0.950194	1.46539	1.43859	1.14973	1.12638
SApinnat	1.8671	1.46074	1.10465	0.656148	2.19175	1.96199	1.70694
SFpupula	2.39851	2.34278	2.27623	2.19291	2.31988	2.29098	2.23349
SFseminu	3.11818	2.92727	2.73105	2.5294	2.72775	2.80131	2.64187
SOexiguf	1.18023	1.39522	1.07562	1.15959	1.02379	1.29562	1.16289
SRconstr	2.21772	2.03378	1.85307	1.52952	2.42667	2.32935	2.21105
SRconven	1.89388	1.79231	1.5519	1.3118	1.88299	1.94031	1.84422
SSanceps	1.92904	1.99497	1.91721	1.9226	1.88473	1.92999	1.97186
SSkriege	2.3441	2.08163	1.83016	1.65355	2.34319	2.50268	2.52178
SSsmithi	1.46541	1.15314	0.946325	0.753715	1.918	1.62496	1.42078
SSthermc	2.59092	2.86424	3.03274	2.9491	2.4125	2.54269	2.74751
SThantzs	2.71236	2.72916	2.79599	2.99968	2.53195	2.61746	2.64551
SUangust	2.88465	3.30928	3.65795	3.92984	2.45737	2.74978	3.0672
Subrekut	2.02186	2.3327	2.67994	3.03845	1.77859	1.96622	2.26545
SYrumpen	1.0935	0.988922	0.62587	0.313896	1.44906	1.21248	1.05616
TAfenest	1.65886	1.60691	1.32064	1.20481	1.74306	1.69679	1.61306
TAfloccu	1.54561	1.66537	1.41979	1.3799	1.39971	1.67879	1.64766
ULacus	2.02969	2.03563	2.02382	1.93225	2.13691	2.05851	2.04163
ULdelica	1.18285	1.3381	1.41446	1.50917	1.23657	1.09499	1.05517
UlnaUlna	1.72207	1.74077	1.69733	1.59919	1.83186	1.81159	1.86067

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
ACsubkra	0.521703	0.48907	0.313421	0.368251	0.405594	0.452079	0.505942
AEtuscul	3.12076	3.19831	0.251195	0.482963	0.713666	0.853521	0.914048
AHaffine	-0.07879	-0.50946	0.405836	0.736476	1.15137	1.52823	1.89541
Ahdeflex	0.673684	0.516912	0.858448	1.12592	1.34947	1.48549	1.59297
AHexigum	1.6353	1.66423	0.200818	0.271854	0.342265	0.3853	0.424477
AHminuti	1.29473	1.24807	0.118177	0.147534	0.150912	0.152377	0.163957
AHreimer	0.23004	0.13526	0.423932	0.645958	0.953294	1.157	1.32542
Ahrivula	0.627687	0.656224	0.282375	0.277248	0.26701	0.278658	0.303348
AMcopula	3.05065	3.07098	0.324276	0.385438	0.430786	0.480843	0.523475
AMpedcls	1.72323	1.72721	0.281055	0.300101	0.335493	0.345022	0.364968
ASformos	1.75316	1.76807	0.313327	0.388785	0.510288	0.580485	0.629044
AUambig	2.19279	2.21854	0.238376	0.233165	0.31023	0.337777	0.331212
AUdistns	2.59638	2.65173	0.632049	0.810714	0.85248	0.869887	0.847173
AUgranlt	2.59581	2.57829	0.575656	0.765126	0.792112	0.756532	0.711444
AUgrnang	2.48748	2.52884	0.369162	0.453538	0.512773	0.566898	0.603477
AUitalic	4.61095	4.79134	0.531038	0.746633	1.07796	1.47946	1.88812
AUsubart	0.78965	0.351658	0.669771	1.04581	1.45622	1.81331	2.14325
AUtenell	1.68473	1.84404	0.639684	0.763204	1.11504	1.48251	1.82691
BApardxa	0.713972	0.733477	0.216316	0.287935	0.311704	0.308417	0.2974
BRmicroc	1.0086	1.0647	0.255295	0.294917	0.359853	0.430833	0.48072
CAbacill	2.61436	2.67339	0.192013	0.253148	0.322378	0.376206	0.417669
CAhyalin	0.836309	0.86464	0.263596	0.364071	0.459361	0.614185	0.744025
CBnavicu	0.714429	0.61975	0.327711	0.489446	0.526114	0.532137	0.554172
CCfluvtl	3.7067	3.89668	0.502663	0.738289	0.956108	1.14837	1.28468
CCpedcls	3.34306	3.4935	0.561992	0.683897	0.649116	0.630806	0.683553
CCplacen	1.59226	1.64202	0.173828	0.287289	0.372755	0.401601	0.37857
CCplaeug	3.00285	3.1024	0.352087	0.38132	0.432087	0.543247	0.642719
CCplalin	2.65096	2.63145	0.386201	0.474662	0.384457	0.30082	0.261862
CCpselin	1.9673	2.05769	0.423814	0.63167	0.795616	0.836736	0.793369
CEpulch	1.46558	1.36582	0.399182	0.544755	0.606008	0.655755	0.69272
CMaera	3.3836	3.36942	1.28412	1.75781	1.90766	1.92098	1.87573
CMheterp	1.95499	2.0413	0.201594	0.329856	0.517444	0.669512	0.758653
CPcrucic	3.09745	2.91977	0.952993	1.30255	1.50286	1.64233	1.7822
CSinvisi	3.31843	3.37005	0.489514	0.494861	0.481741	0.516208	0.54336
CStholif	1.57864	1.25092	0.311328	0.442691	0.724221	1.01806	1.34582
CYatomus	2.90141	2.91204	0.648656	0.689508	0.828508	1.04884	1.30213
CYmenegh	2.60777	2.63243	0.512895	0.475306	0.386295	0.391295	0.422801
DAvulg	2.83876	2.99123	0.666352	1.00691	1.23318	1.43404	1.66184
DEkuetzi	2.83795	2.94643	0.450493	0.704792	0.886479	0.966953	1.00351
DIconfer	3.51937	3.56052	0.228902	0.31525	0.430734	0.500887	0.546608

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
DTpseuds	1.01782	1.05127	0.43123	0.578353	0.629795	0.615109	0.592571
DTstelli	1.95063	2.02565	0.333552	0.238344	0.309924	0.336843	0.388334
ECminutu	-0.11212	-0.13247	0.450926	0.630787	0.805134	0.927173	1.01987
ECsilesi	1.67405	1.80929	0.361377	0.442149	0.524761	0.570596	0.587447
Eolmini	2.113	2.11983	0.151695	0.144963	0.14447	0.160713	0.175226
EOsubmin	3.07597	3.0377	0.302134	0.482194	0.674135	0.831266	0.960376
EUbilun	1.94369	1.991	0.189909	0.236066	0.27349	0.296124	0.308907
EUcaroli	0.584007	0.545224	0.378874	0.664084	0.952026	1.19777	1.38008
EUexigua	1.98303	2.12373	0.207952	0.299112	0.417243	0.513174	0.592216
EUflexuo	1.1901	1.18964	0.239749	0.347081	0.469744	0.572343	0.646149
EUformic	2.08291	2.09974	0.63298	0.760311	0.714642	0.693959	0.72663
EUimplic	3.51609	3.6106	0.638947	0.707542	0.667179	0.624603	0.587882
EUincisa	1.00903	0.898443	0.236025	0.366239	0.517693	0.631874	0.726308
EUinterm	2.05616	2.1161	0.680328	0.501436	0.665459	0.758456	0.769849
EUmaior	1.99644	2.16475	0.254576	0.383811	0.651782	0.914612	1.11895
EUmeistr	0.730848	0.667731	0.671209	1.0875	1.42219	1.64163	1.82826
EUmonodo	4.57593	4.98953	0.185442	0.412646	0.78421	1.18972	1.51056
EUpectin	0.658867	0.641765	0.364252	0.483839	0.557513	0.619708	0.668097
EUpecund	1.6215	1.54709	0.511013	0.649054	0.805555	0.879437	0.882016
EUpirla	2.51101	2.71094	0.390382	0.663263	0.897608	1.06824	1.23076
EUrhombo	0.828528	0.791569	0.358631	0.288913	0.395019	0.543206	0.663023
EUsoleir	4.60204	5.15491	0.303302	0.585685	0.933604	1.28823	1.52144
EUsubarc	1.06186	1.11062	0.474486	0.346921	0.485116	0.627353	0.718777
EUtenell	2.49501	2.53679	0.251105	0.467673	0.701568	0.865338	0.963427
FGbicapi	3.2141	3.43232	0.319793	0.557074	0.906151	1.23441	1.50447
FGstrang	0.909636	0.847396	0.541737	0.436576	0.582726	0.748039	0.874751
FGviresc	1.42765	1.4019	0.415457	0.245255	0.296761	0.333293	0.363591
FRcapfra	0.842702	0.69555	0.42471	0.596473	0.821098	0.975361	1.07679
FRcapgra	2.06083	2.05372	0.243103	0.304465	0.358736	0.394245	0.412619
FRcapuci	2.6556	2.65792	0.166352	0.250797	0.327725	0.374558	0.408655
FRcroton	1.88178	1.85312	0.265962	0.374368	0.497393	0.598704	0.659468
FRmesole	1.38003	1.33323	0.231545	0.403847	0.522692	0.666004	0.772876
FRvauche	1.67417	1.74104	0.278057	0.363859	0.427406	0.481024	0.543821
Fscrassi	1.89936	1.92663	0.254222	0.33677	0.391983	0.454599	0.488321
FSkramme	0.826586	0.872452	0.610138	0.949444	1.05919	1.06657	1.08559
FSvulgar	1.6016	1.59975	0.200649	0.278565	0.298806	0.304826	0.321864
GEaccep	1.70918	1.60845	0.739962	1.09223	1.31254	1.50287	1.71084
GEdecu	2.54433	2.49777	0.546816	0.636682	0.636989	0.650541	0.665843
GOangstt	2.95121	2.97217	0.212174	0.406491	0.599909	0.700553	0.759636
GOgracil	1.89528	1.92466	0.172838	0.227484	0.304546	0.35988	0.410309

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
GOinsign	2.39967	2.41358	0.537251	0.682085	0.822386	1.0259	1.24375
GOkobaya	2.77045	2.81094	0.423514	0.523977	0.551154	0.590931	0.630895
GOlage	3.90896	4.05245	0.494806	0.84879	1.0226	1.12945	1.25812
GOmicrop	3.80673	3.82778	0.398757	0.665272	0.941894	1.15132	1.32192
GOminutm	2.88838	2.96544	0.298397	0.511341	0.772733	0.944419	1.02691
GOolihut	-0.1815	-0.43903	0.728572	1.06099	1.26723	1.46387	1.61699
GOpalius	1.28216	1.22277	0.381442	0.544491	0.743869	0.914607	1.04616
GOparvul	1.67817	1.63656	0.17935	0.208559	0.229157	0.237927	0.23688
GOpatric	3.11002	3.10368	0.455752	0.644372	0.771326	0.826117	0.824327
GOpygm	1.29958	1.2338	0.527109	0.86756	1.12893	1.2684	1.37473
GYacumin	1.55879	1.7209	0.749957	0.987887	1.00528	0.929466	0.861337
HIcapita	2.80747	2.84741	0.196518	0.241795	0.2807	0.313816	0.342999
KBsubtil	-0.36226	-0.48535	0.611381	0.795442	0.817079	0.870288	0.970148
KVclevei	1.31812	1.20179	0.394223	0.473236	0.489492	0.64258	0.837801
KVoblong	1.2788	1.2008	0.275009	0.404407	0.569649	0.679872	0.733443
LUgoepp2	2.68007	2.61358	0.708353	1.04257	1.24451	1.36851	1.48505
LUmutica	2.71344	2.71888	0.22273	0.321511	0.415412	0.46575	0.504936
MDcircon	2.63061	2.78191	0.324334	0.432241	0.545145	0.672417	0.798927
MDcircul	1.96101	2.10478	0.260598	0.341884	0.43285	0.526825	0.621032
MEvarian	1.31144	1.3113	0.238024	0.336327	0.409815	0.464978	0.515182
MYagres	2.99511	3.03282	0.325488	0.575392	0.78794	0.937743	1.05473
MYatomus	3.55325	3.48074	0.656445	1.09285	1.35163	1.39363	1.33856
NAantoni	1.62416	1.58732	0.372581	0.564274	0.747469	0.929073	1.12852
NAcaprad	1.89589	1.79359	0.431835	0.654617	0.795985	0.864737	0.901131
NAcrypto	2.17245	2.14386	0.143748	0.177454	0.19736	0.217503	0.236631
NAcrytds	2.08821	2.09126	0.323228	0.475774	0.588378	0.690535	0.771602
NAcryten	2.37093	2.47675	0.2431	0.336949	0.346816	0.351696	0.368158
NAerifga	1.91101	1.78169	0.332735	0.491851	0.686224	0.872521	1.01575
NAescamb	0.569349	0.499254	0.341064	0.480788	0.548562	0.644188	0.759564
NAgermii	1.6412	1.64919	0.247318	0.278894	0.27235	0.276254	0.284118
NAgregar	1.50374	1.45365	0.169079	0.207813	0.225937	0.241118	0.264934
NAhmberg	3.58376	3.76802	0.440209	0.738268	1.07646	1.32228	1.49906
NAlancel	0.472185	0.310464	0.247989	0.300322	0.405175	0.47261	0.543979
NAlongcp	2.62104	2.71702	0.19307	0.302651	0.384278	0.451033	0.486726
NAperegr	0.746855	0.697474	0.74114	1.01242	1.22513	1.40839	1.5514
NApermnt	1.44941	1.53923	0.412227	0.478041	0.49844	0.513066	0.543625
NAreichd	2.89446	2.92509	0.822487	1.14847	1.30863	1.29108	1.16594
NArhynch	1.78488	1.77784	0.210636	0.262875	0.291241	0.325679	0.35885
NArostel	1.77204	1.75993	0.161131	0.274883	0.392826	0.487714	0.557378
NAsalinm	3.34061	3.44159	0.261509	0.477769	0.714555	0.963014	1.18445

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
NAsubmur	1.46311	1.22458	0.315835	0.4297	0.496314	0.55903	0.645246
NAsymtrc	1.90765	1.93109	0.240669	0.345588	0.427874	0.488151	0.519556
NAtenell	2.1055	2.156	0.174062	0.252618	0.321639	0.356728	0.380141
NAtripun	2.64254	2.71675	0.660975	0.869963	0.860077	0.886493	1.04929
NEalpinu	2.09527	2.04916	0.213912	0.336299	0.438819	0.498463	0.539714
NIacidcn	4.16157	4.36669	0.294357	0.410716	0.56714	0.771267	0.960636
NIamphib	2.72727	2.76915	0.19672	0.188908	0.208013	0.248133	0.297626
NIarchib	2.50917	2.44666	0.435241	0.628545	0.821717	0.977928	1.14021
NIbrevis	2.33271	2.19169	0.241126	0.425906	0.656072	0.908228	1.16329
NIcapite	3.61851	3.88325	0.26523	0.40537	0.53936	0.624051	0.695798
NIclausi	2.88994	2.94592	0.144754	0.169705	0.239992	0.310582	0.329059
NIdissip	1.15474	1.06716	0.177061	0.257737	0.333481	0.379927	0.425124
NIfilifr	1.3471	1.25616	0.445564	0.607076	0.664654	0.697444	0.740309
NIfontic	2.95291	3.09172	0.152233	0.269363	0.390683	0.454403	0.468959
NIfrustu	2.15235	2.05382	0.200271	0.23624	0.269801	0.326724	0.379672
NIgracil	1.8144	1.72717	0.358542	0.411246	0.467431	0.537204	0.577842
NIincons	2.38029	2.42821	0.212345	0.326324	0.468321	0.628653	0.750601
NIliebrt	2.5761	2.68575	0.472712	0.655587	0.796797	0.907418	0.996368
NIlinear	2.25186	2.28065	0.219965	0.298813	0.347626	0.388987	0.437186
NInana	-0.0818	-0.29284	0.284061	0.415222	0.557506	0.698243	0.82834
NIpaldeb	1.45224	1.35216	0.375638	0.508705	0.628996	0.708719	0.763044
NIpalea	2.33486	2.35089	0.179963	0.212939	0.204934	0.209201	0.224076
NIpaleac	1.28855	1.22839	0.878354	1.42768	1.90513	2.26522	2.57294
NIpsefon	2.12344	2.00874	0.735683	1.13192	1.43031	1.63045	1.7924
NIrecta	3.47319	3.61746	0.196089	0.26257	0.34068	0.406367	0.471369
NIscalpe	3.36637	3.56179	0.451611	0.780218	1.12768	1.35933	1.50477
NIsociab	0.928285	0.773298	0.435032	0.614368	0.742991	0.816717	0.859351
NItubcla	1.30841	1.29316	0.281329	0.315969	0.339457	0.37605	0.400178
NUlapid	0.635664	0.546546	0.378641	0.424764	0.472553	0.550513	0.632762
Nuneglec	0.493503	0.530669	0.229918	0.43331	0.656699	0.889793	1.0639
NUwell	1.85674	1.91734	0.449653	0.781441	1.06765	1.31626	1.51917
PCclemen	2.25041	2.25138	0.389965	0.504563	0.553967	0.589911	0.622878
PDbrevis	2.01664	1.90108	0.32449	0.474654	0.704834	0.889031	1.05811
Pdparasi	0.914629	0.824231	0.218822	0.271841	0.331753	0.394969	0.462439
PIabauje	0.954574	0.847637	0.494799	0.808113	1.1507	1.4776	1.76882
PIinterr	2.47686	2.56908	0.305533	0.418279	0.479881	0.529542	0.555649
PImicros	2.29224	2.23566	0.207553	0.243456	0.310222	0.372517	0.432437
PIobscur	2.08897	2.19198	0.788974	1.2285	1.50536	1.61249	1.61164
PIsubros	1.22999	1.16734	0.409572	0.68069	0.990786	1.22987	1.39508
PIviridi	0.987661	0.869681	0.383345	0.574783	0.685866	0.765798	0.851

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
PLconspi	1.74081	1.78933	0.289037	0.346215	0.377898	0.421494	0.495933
PSgridao	2.11785	2.18721	0.674045	0.576046	0.77344	0.925506	1.0332
PShelvet	2.37979	2.34548	0.327124	0.645795	0.961499	1.1414	1.25389
PSsubato	2.45441	2.5371	0.295082	0.448039	0.615755	0.737871	0.820397
PSventra	0.556147	0.08297	0.516919	1.12983	1.98364	2.71118	3.39582
PTellip	3.28584	3.39878	0.31237	0.576075	0.851108	1.01876	1.08933
PTfreq	1.90325	1.88485	0.157153	0.204385	0.27135	0.324765	0.369114
PThauck	2.07295	2.1166	0.100223	0.191254	0.330368	0.418692	0.460782
PTlanceo	2.19943	2.16097	0.184974	0.273992	0.37615	0.464016	0.527728
PTrostr	2.93045	3.05826	0.285053	0.414069	0.545114	0.678969	0.830511
REsinuta	2.22324	2.31968	0.364595	0.450486	0.519067	0.55717	0.58225
ROabbre	2.45083	2.48226	0.261663	0.330694	0.374805	0.390722	0.396749
RSlinea	1.28694	1.52157	0.492048	0.688019	0.765072	0.807304	0.839555
SApinnat	1.50814	1.29757	0.424693	0.564191	0.66618	0.791971	0.925157
SFpupula	2.19253	2.13415	0.216017	0.259405	0.316632	0.346707	0.36378
SFseminu	2.50798	2.40766	0.349516	0.431091	0.466186	0.505811	0.541811
SOexiguf	1.07897	1.11256	0.634679	0.665725	0.832491	0.990171	1.12392
SRconstr	2.11012	1.96259	0.291965	0.373111	0.429416	0.500596	0.573879
SRconven	1.72795	1.62185	0.274242	0.265432	0.347401	0.388851	0.405561
SSanceps	1.9824	2.0539	0.14772	0.226498	0.304046	0.345782	0.371828
SSkriege	2.46817	2.46012	0.187271	0.384503	0.652135	0.859744	1.01566
SSsmithi	1.30999	1.20583	0.191796	0.253446	0.32651	0.397005	0.462928
SSthermc	2.86757	2.82079	0.187371	0.285048	0.351014	0.427184	0.486987
SThantzs	2.66374	2.67558	0.378313	0.453927	0.577583	0.683969	0.808903
SUangust	3.28475	3.41549	0.172773	0.211405	0.239719	0.276667	0.303748
Subrekut	2.51938	2.73259	0.372956	0.548545	0.714599	0.841873	0.94833
SYrumpen	0.854389	0.709703	0.351845	0.527923	0.70055	0.853775	0.95198
TAfenest	1.50313	1.50292	0.197781	0.350705	0.473972	0.547084	0.599974
TAfloccu	1.58365	1.60393	0.404287	0.241308	0.30741	0.309996	0.321386
ULacus	2.03442	2.01989	0.578406	0.824286	1.02714	1.21663	1.36904
ULdelica	1.02021	1.02889	0.887444	1.43933	1.9017	2.21937	2.47467
UlnaUlna	1.86734	1.87391	0.191848	0.240608	0.300816	0.36396	0.420328

Name 5
ACsubkra
AEtuscul
AHaffine
Ahdeflex
AHexigum
AHminuti
AHreimer
Ahrivula
AMcopula
AMpedcls
ASformos
AUambig
AUdistns
AUgranlt
AUgrnang
AUitalic
AUsubart
AUtenell
BApardxa
BRmicroc
CAbacill
CAhyalin
CBnavicu
CCfluvtl
CCpedcls
CCplacen
CCplaeug
CCplalin
CCpselin
CEpulch
CMaera
CMheterp
CPcrucic
CSinvisi
CStholif
CYatomus
CYmenegh
DAvulg
DEkuetzi
DIconfer

Name 5
DTpseuds
DTstelli
ECminutu
ECsilesi
Eolmini
EOsubmin
EUbilun
EUcaroli
EUexigua
EUflexuo
EUformic
EUimplic
EUincisa
EUinterm
EUmaior
EUmeistr
EUmonodo
EUpectin
EUpecund
EUpirla
EUrhombo
EUsoleir
EUsubarc
EUtenell
FGbicapi
FGstrang
FGviresc
FRcapfra
FRcapgra
FRcapuci
FRcroton
FRmesole
FRvauche
Fscrassi
FSkramme
FSvulgar
GEaccep
GEdecu
GOangstt
GOgracil

Name 5
GOinsign
GOkobaya
GOlage
GOmicrop
GOminutm
GOolihut
GOpalius
GOparvul
GOpatric
GOpygm
GYacumin
HIcapita
KBsubtil
KVclevei
KVoblong
LUgoepp2
LUmutica
MDcircon
MDcircul
MEvarian
MYagres
MYatomus
NAantoni
NAcaprad
NAcrypto
NAcrytds
NAcryten
NAerifga
NAescamb
NAgermii
NAgregar
NAhmberg
NAlancel
NAlongcp
NAperegr
NApermnt
NAreichd
NArhynch
NArostel
NAsalinm

Name 5
NAsubmur
NAsymtrc
NAtenell
NAtripun
NEalpinu
NIacidcn
NIamphib
NIarchib
NIbrevis
NIcapite
NIclausi
NIdissip
NIfilifr
NIfontic
NIfrustu
NIgracil
NIincons
NIliebrt
NIlinear
NInana
NIpaldeb
NIpalea
NIpaleac
NIpsefon
NIrecta
NIscalpe
NIsociab
NItubcla
NUlapid
Nuneglec
NUwell
PCclemen
PDbrevis
Pdparasi
PIabauje
PIinterr
PImicros
PIobscur
PIsubros
PIviridi

Name 5
PLconspi
PSgridao
PShelvet
PSsubato
PSventra
PTellip
PTfreq
PThauck
PTlanceo
PTrostr
REsinuta
ROabbre
RSlinea
SApinnat
SFpupula
SFseminu
SOexiguf
SRconstr
SRconven
SSanceps
SSkriege
SSsmithi
SSthermc
SThantzs
SUangust
Subrekut
SYrumpen
TAfenest
TAfloccu
ULacus
ULdelica
UlnaUlna

Site 2	#		Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
	1	1	ACsubkra	ACsubkra	-0.92711	-0.19865	-0.32988	-0.13294
	2	3	AEtuscul	AEtuscul	0.400881	0.63102	0.765056	0.380975
	3	4	AHaffine	AHaffine	-0.43523	-0.74453	-0.76668	-0.77091
	4	5	Ahdeflex	Ahdeflex	-0.07845	-0.15935	-0.09571	-0.11694
	5	6	AHexigum	AHexigum	-0.07897	-0.14994	-0.2756	-0.09445
	6	7	AHminuti	AHminuti	-0.51064	-0.076	-0.00144	-0.05068
	7	8	AHreimer	AHreimer	-1.26421	-0.38307	0.116116	0.023085
	8	9	Ahrivula	Ahrivula	-1.22572	-0.20238	0.011117	0.15565
	9	10	AMcopula	AMcopula	0.964543	0.252915	0.120659	0.072621
	10	11	AMpedcls	AMpedcls	-0.1397	0.183649	-0.32679	-0.09062
	11	12	ASformos	ASformos	0.233104	-0.18075	0.227696	-0.26514
	12	14	AUambig	AUambig	0.193641	0.021089	0.093369	-0.01648
	13	16	AUdistns	AUdistns	0.168915	0.168309	0.203626	0.044539
	14	17	AUgranlt	AUgranlt	0.850007	0.027848	0.104127	0.046716
	15	18	AUgrnang	AUgrnang	0.627376	0.028318	0.243961	0.036591
	16	19	AUitalic	AUitalic	1.83458	0.687867	0.558496	0.293613
	17	22	AUsubart	AUsubart	0.595617	-0.51187	-0.95139	-0.79625
	18	23	AUtenell	AUtenell	-0.92155	0.342251	0.095365	-0.2655
	19	24	BApardxa	BApardxa	-0.67086	-0.61689	-0.23132	-0.0334
	20	25	BRmicroc	BRmicroc	-1.24642	0.368614	0.191365	-0.17314
	21	26	CAbacill	CAbacill	0.609378	0.128639	0.039049	0.095325
	22	27	CAhyalin	CAhyalin	-0.349	-0.6302	-0.38613	-0.11744
	23	28	CBnavicu	CBnavicu	-0.83061	-0.60801	-0.15178	-0.10166
	24	29	CCfluvtl	CCfluvtl	1.15413	0.511015	0.502014	0.429221
	25	30	CCpedcls	CCpedcls	0.466364	0.75209	0.433104	0.332494
	26	31	CCplacen	CCplacen	-0.0358	-0.26794	-0.31491	-0.13616
	27	32	CCplaeug	CCplaeug	0.475711	0.710811	0.105894	0.147669
	28	33	CCplalin	CCplalin	0.476224	0.346076	0.164516	0.06172
	29	34	CCpselin	CCpselin	0.307077	-0.1899	-0.20772	-0.03136
	30	35	CEpulch	CEpulch	0.023305	-0.11811	-0.19358	-0.16405
	31	36	CMaera	CMaera	2.26997	0.479752	0.009309	-0.0436
	32	37	CMheterp	CMheterp	-0.18727	0.105472	0.137308	-0.06733
	33	38	CPcrucic	CPcrucic	1.7934	0.242572	-0.17485	-0.24458
	34	39	CSinvisi	CSinvisi	2.17334	-0.0159	-0.51512	-0.20804
	35	40	CStholif	CStholif	0.542376	-0.37194	-0.51002	-0.53345
	36	41	CYatomus	CYatomus	0.923072	0.106883	0.006037	0.158079
	37	42	CYmenegh	CYmenegh	1.21036	-0.01959	-0.26918	-0.07736
	38	43	DAvulg	DAvulg	0.449956	0.704642	0.423965	0.410598
	39	44	DEkuetzi	DEkuetzi	0.097921	0.530638	0.791056	0.434768
	40	45	DIconfer	DIconfer	1.0928	0.351443	0.364921	0.267277

Site 2	#		Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
	41	46	DTpseuds	DTpseuds	-0.44537	-0.67303	-0.28018	-0.06439
	42	47	DTstelli	DTstelli	0.010233	0.030685	0.109354	-0.20095
	43	49	ECminutu	ECminutu	-1.55264	-0.54227	-0.22039	-0.01729
	44	50	ECsilesi	ECsilesi	-0.36089	-0.09462	-0.18646	0.116312
	45	51	Eolmini	Eolmini	0.172772	0.097325	-0.03891	-0.00618
	46	52	EOsubmin	EOsubmin	0.923926	0.602201	0.154347	0.104632
	47	54	EUbilun	EUbilun	-0.01509	-0.11059	0.119478	0.090568
	48	55	EUcaroli	EUcaroli	-1.51981	0.774469	0.273636	-0.32245
	49	57	EUexigua	EUexigua	-0.0414	-0.20995	0.288414	0.364683
	50	60	EUflexuo	EUflexuo	-0.52071	-0.29985	-0.06182	-0.12464
	51	61	EUformic	EUformic	0.16972	-0.17686	0.14173	0.173451
	52	62	EUimplic	EUimplic	1.52643	0.406223	0.156057	0.084301
	53	63	EUincisa	EUincisa	-0.4473	-0.25216	-0.27757	-0.39408
	54	64	EUinterm	EUinterm	-0.97192	0.708243	0.397475	-0.09351
	55	65	EUmaior	EUmaior	-0.5675	0.02525	0.28777	0.149771
	56	66	EUmeistr	EUmeistr	-0.5845	-0.49226	0.012549	0.019838
	57	67	EUmonodo	EUmonodo	1.04799	0.606177	0.861056	0.793031
	58	69	EUpectin	EUpectin	-1.06456	-0.14917	-0.16532	-0.16506
	59	70	EUpecund	EUpecund	-0.14952	-0.05585	-0.05197	-0.3236
	60	71	EUpirla	EUpirla	0.043618	-0.05748	0.327404	0.350939
	61	72	EUrhombo	EUrhombo	-1.18365	0.393101	0.053696	-0.34879
	62	74	EUsoleir	EUsoleir	0.873604	0.550924	1.03836	1.00122
	63	75	EUsubarc	EUsubarc	-1.51697	0.857806	0.338407	-0.28079
	64	76	EUtenell	EUtenell	0.339295	0.024924	0.210549	0.146097
	65	77	FGbicapi	FGbicapi	0.629221	0.185411	0.065201	0.095395
	66	78	FGstrang	FGstrang	-1.31116	0.648632	0.18658	-0.34886
	67	79	FGviresc	FGviresc	-0.70659	0.309882	0.073556	-0.2444
	68	81	FRcapfra	FRcapfra	-0.49925	-0.43561	-0.40103	-0.57934
	69	82	FRcapgra	FRcapgra	0.041964	0.026786	0.166337	-0.01728
	70	83	FRcapuci	FRcapuci	0.431867	0.071735	0.242684	0.154461
	71	84	FRcroton	FRcroton	0.097723	-0.17892	-0.11789	-0.14871
	72	85	FRmesole	FRmesole	-0.07608	-0.19365	0.322695	-0.15429
	73	87	FRvauche	FRvauche	-0.39928	-0.0406	0.17914	0.167713
	74	88	Fscrassi	Fscrassi	0.01392	-0.19159	0.0865	0.080628
	75	89	FSkramme	FSkramme	-1.12232	-0.78436	0.005578	0.141122
	76	90	FSvulgar	FSvulgar	-0.28953	-0.22342	0.114216	0.099805
	77	91	GEaccep	GEaccep	-0.11576	0.285565	-0.348	-0.2248
	78	92	GEdecu	GEdecu	0.935717	0.082873	-0.08825	-0.07898
	79	93	GOangstt	GOangstt	0.487464	0.447853	0.628346	0.345527
	80	95	GOgracil	GOgracil	-0.02146	-0.093	0.067669	0.006924

Site 2	#	Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
81	96	GOinsign	GOinsign	0.640297	-0.03758	-0.00166	0.059295
82	97	GOkobaya	GOkobaya	0.750966	0.288724	0.141246	0.057269
83	98	GOlage	GOlage	1.08408	0.781126	0.764039	0.559853
84	99	GOmicrop	GOmicrop	1.21634	0.593868	0.723585	0.522328
85	100	GOminutm	GOminutm	0.079643	0.519261	0.610519	0.583808
86	101	GOolihut	GOolihut	-1.1721	-0.33015	-0.69263	-0.51659
87	103	GOpalius	GOpalius	-0.48297	-0.28102	0.060087	-0.01162
88	104	GOparvul	GOparvul	0.063914	-0.20534	-0.08686	-0.07476
89	105	GOpatric	GOpatric	1.09392	0.312048	0.333586	0.213098
90	106	GOpygm	GOpygm	-0.75161	-0.03962	-0.39485	-0.30255
91	107	GYacumin	GYacumin	-0.80072	-0.4576	0.066127	0.307434
92	108	HIcapita	HIcapita	0.749285	0.122113	0.099077	0.079
93	110	KBsubtil	KBsubtil	-1.4931	-1.08371	-0.18493	0.020608
94	111	KVclevei	KVclevei	-0.18808	0.074598	-0.59041	-0.2911
95	112	KVoblong	KVoblong	-0.24239	-0.41183	-0.0771	-0.04737
96	113	LUgoepp2	LUgoepp2	1.37216	0.307094	-0.08965	-0.13348
97	114	LUmutica	LUmutica	0.60464	0.128258	0.28443	0.226287
98	115	MDcircon	MDcircon	0.074983	0.138726	0.430319	0.313067
99	116	MDcircul	MDcircul	-0.15483	-0.03928	0.208948	0.228905
100	117	MEvarian	MEvarian	-0.26267	-0.25617	-0.1579	-0.08077
101	118	MYagres	MYagres	0.619665	0.098151	0.210539	0.14217
102	119	MYatomus	MYatomus	1.42928	0.749955	0.463407	0.179499
103	120	NAantoni	NAantoni	-0.18043	0.193379	-0.05419	0.037371
104	121	NAcaprad	NAcaprad	-0.11605	0.175013	0.262367	-0.02141
105	122	NAcrypto	NAcrypto	0.251193	-0.03857	0.066235	0.015767
106	123	NAcrytds	NAcrytds	0.50573	-0.12527	-0.04068	0.064308
107	124	NAcryten	NAcryten	0.042269	0.218579	0.265256	0.250096
108	125	NAerifga	NAerifga	0.789907	-0.20573	-0.18777	-0.10503
109	126	NAescamb	NAescamb	-0.79562	-0.39494	-0.16591	-0.03438
110	127	NAgermii	NAgermii	0.182349	-0.32728	-0.17707	-0.0432
111	128	NAgregar	NAgregar	-0.10059	-0.10675	-0.18401	-0.09254
112	129	NAhmberg	NAhmberg	0.571531	0.796165	1.04183	0.607396
113	130	NAlancel	NAlancel	-0.60103	-0.31383	-0.53316	-0.33553
114	131	NAlongcp	NAlongcp	0.377748	0.001598	0.299082	0.295217
115	132	NAperegr	NAperegr	-0.15772	-0.31879	-0.26359	-0.10717
116	133	NApermnt	NApermnt	-0.808	-0.01623	0.115382	0.193521
117	134	NAreichd	NAreichd	1.07689	0.370556	0.39851	0.255773
118	135	NArhynch	NArhynch	-0.10529	-0.18113	0.118749	0.08511
119	136	NArostel	NArostel	0.028915	-0.18628	-0.08744	-3.48E-05
120	137	NAsalinm	NAsalinm	0.966126	0.195701	0.177534	0.30897

Site 2	#	Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
121	138	NAsubmur	NAsubmur	0.326528	-0.30836	-0.4672	-0.39979
122	139	NAsymtrc	NAsymtrc	0.398381	-0.21484	-0.16154	-0.02199
123	140	NAtenell	NAtenell	0.352918	-0.13136	0.002395	0.079587
124	141	NAtripun	NAtripun	0.007274	0.470427	0.406807	0.43578
125	142	NEalpinu	NEalpinu	0.223039	-0.12746	0.025328	-0.00363
126	143	NIacidcn	NIacidcn	1.14747	0.639105	0.685598	0.52963
127	144	NIamphib	NIamphib	0.6683	0.150365	0.058768	0.092085
128	145	NIarchib	NIarchib	0.380675	0.241202	0.232238	0.102398
129	146	NIbrevis	NIbrevis	0.694067	-0.0071	-0.07002	-0.03937
130	147	NIcapite	NIcapite	0.769517	0.31843	0.616529	0.579638
131	148	NIclausi	NIclausi	0.801208	0.004438	0.143237	0.195549
132	149	NIdissip	NIdissip	-0.39474	-0.18571	-0.07544	-0.09769
133	150	NIfilifr	NIfilifr	-0.33449	-0.41709	-0.00793	-0.00554
134	151	NIfontic	NIfontic	0.213099	0.48323	0.381746	0.395548
135	152	NIfrustu	NIfrustu	0.264876	0.265118	-0.16962	-0.16113
136	154	NIgracil	NIgracil	0.305977	-0.05969	-0.12068	-0.23297
137	155	NIincons	NIincons	0.1204	0.370323	-0.06629	0.026217
138	156	NIliebrt	NIliebrt	0.731053	0.045153	0.063181	0.137977
139	157	NIlinear	NIlinear	0.070406	0.119828	0.148254	0.120126
140	158	NInana	NInana	-0.71255	-0.84935	-0.70221	-0.55423
141	159	NIpaldeb	NIpaldeb	0.375776	-0.31698	-0.3197	-0.1788
142	160	NIpalea	NIpalea	0.383794	-0.07965	0.111017	0.121374
143	161	NIpaleac	NIpaleac	-0.36443	-0.17789	-0.06949	-0.02512
144	162	NIpsefon	NIpsefon	0.151156	0.057945	0.013877	-0.14108
145	163	NIrecta	NIrecta	0.8206	0.307564	0.529464	0.448022
146	164	NIscalpe	NIscalpe	0.332084	0.792845	1.10275	0.668466
147	165	NIsociab	NIsociab	-0.30889	-0.34169	-0.36636	-0.26894
148	166	NItubcla	NItubcla	-0.49883	-0.21253	0.03919	0.019713
149	167	NUlapid	NUlapid	-0.70011	-0.42053	-0.39756	-0.24626
150	168	Nuneglec	Nuneglec	-0.96552	-0.31884	-0.64201	-0.22006
151	169	NUwell	NUwell	-0.08128	-0.2317	0.052203	0.096808
152	170	PCclemen	PCclemen	0.343782	-0.12405	0.110765	0.13736
153	171	PDbrevis	PDbrevis	0.255539	-0.00601	-0.09072	-0.19049
154	172	Pdparasi	Pdparasi	-0.41533	-0.47296	-0.3117	-0.28233
155	173	Plabauje	Plabauje	-0.62457	-0.40788	-0.22303	-0.27394
156	174	PIinterr	PIinterr	0.328634	-0.0771	0.241913	0.246331
157	175	PImicros	PImicros	0.507783	-0.01958	0.081815	0.050726
158	176	PIobscur	PIobscur	0.171298	-0.18949	0.112217	0.244264
159	178	PIsubros	PIsubros	-0.23506	-0.4283	-0.22458	-0.14639
160	179	PIviridi	PIviridi	-0.48459	-0.42432	-0.0809	-0.12444

Site 2	#	Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
161	180	PLconspi	PLconspi	-0.09761	0.197062	-0.35799	-0.06776
162	181	PSgridao	PSgridao	-0.77804	0.655833	0.346549	-0.09705
163	182	PShelvet	PShelvet	0.223776	0.407722	0.441014	0.102947
164	183	PSsubato	PSsubato	0.280171	0.12282	0.373514	0.289065
165	184	PSventra	PSventra	-0.01235	-0.57864	-0.92662	-0.87786
166	185	PTellip	PTellip	0.449647	0.747325	0.922923	0.488826
167	186	PTfreq	PTfreq	0.179521	0.025728	-0.16343	-0.07927
168	187	PThauck	PThauck	0.041943	0.154747	0.034168	-0.21694
169	188	PTlanceo	PTlanceo	0.371357	0.08658	0.001916	-0.0803
170	189	PTrostr	PTrostr	0.486753	0.242505	0.299911	0.249354
171	190	REsinuta	REsinuta	-0.05333	0.371899	-0.09021	0.044859
172	191	ROabbre	ROabbre	0.072296	0.513027	0.215882	0.151465
173	192	RSlinea	RSlinea	-0.77132	-0.44744	0.01995	0.270405
174	193	SApinnat	SApinnat	0.340305	-0.35181	-0.40636	-0.35609
175	194	SFpupula	SFpupula	0.571061	-0.05115	-0.05573	-0.06655
176	195	SFseminu	SFseminu	1.10244	0.137141	-0.19091	-0.19622
177	196	SOexiguf	SOexiguf	-1.36678	0.668413	0.214989	-0.3196
178	197	SRconstr	SRconstr	0.543298	-0.20418	-0.18394	-0.18071
179	198	SRconven	SRconven	0.018079	-0.0028	-0.10157	-0.24041
180	199	SSanceps	SSanceps	0.003066	0.047371	0.065929	-0.07775
181	200	SSkriege	SSkriege	0.449244	0.016259	-0.26248	-0.25146
182	201	SSsmithi	SSsmithi	0.010529	-0.42372	-0.31226	-0.20682
183	202	SSthermc	SSthermc	0.617385	0.094935	0.27332	0.1685
184	203	SThantzs	SThantzs	0.799517	0.034241	0.0168	0.066837
185	204	SUangust	SUangust	0.672421	0.333626	0.424633	0.348674
186	205	Subrekut	Subrekut	-0.08864	0.231897	0.31084	0.347249
187	206	SYrumpen	SYrumpen	-0.47914	-0.30597	-0.10458	-0.36305
188	207	TAfenest	TAfenest	-0.15811	-0.06162	-0.05195	-0.28627
189	208	TAfloccu	TAfloccu	-0.69772	0.364725	0.119759	-0.24558
190	209	ULacus	ULacus	0.255501	-0.10441	0.005938	-0.01181
191	210	ULdelica	ULdelica	-0.66476	-0.03099	0.15525	0.076357
192	211	UlnaUlna	UlnaUlna	-0.07261	-0.08392	0.018694	-0.04343

Name	WAPLS_C5
ACsubkra	-0.06775
AEtuscul	0.175166
AHaffine	-1.0588
Ahdeflex	-0.18392
AHexigum	0.071881
AHminuti	-0.12002
AHreimer	-0.19143
Ahrivula	0.127501
AMcopula	0.069075
AMpedcls	0.078401
ASformos	0.144977
AUambig	0.085861
AUdistns	0.148111
AUgranlt	0.088808
AUgrnang	0.152026
AUitalic	-0.02776
AUsubart	-0.77266
AUtenell	0.096436
BApardxa	0.075134
BRmicroc	0.116518
CAbacill	0.134396
CAhyalin	0.133894
CBnavicu	-0.23345
CCfluvtl	0.471083
CCpedcls	0.1076
CCplacen	0.100228
CCplaeug	0.069926
CCplalin	-0.11486
CCpselin	0.232373
CEpulch	-0.14659
CMaera	-0.01515
CMheterp	0.003965
CPcrucic	-0.34192
CSinvisi	0.174548
CStholif	-0.81622
CYatomus	0.267272
CYmenegh	0.14837
DAvulg	0.404348
DEkuetzi	0.154174
DIconfer	0.148295

Name	WAPLS_C5
DTpseuds	0.147796
DTstelli	0.144209
ECminutu	0.049688
ECsilesi	0.423665
Eolmini	0.001255
EOsubmin	0.01729
EUbilun	0.084328
EUcaroli	0.12496
EUexigua	0.400876
EUflexuo	-0.14272
EUformic	0.142476
EUimplic	0.131526
EUincisa	-0.38483
EUinterm	0.224604
EUmaior	0.210172
EUmeistr	-0.17725
EUmonodo	0.771098
EUpectin	-0.12536
EUpecund	-0.19795
EUpirla	0.390084
EUrhombo	-0.03318
EUsoleir	1.02156
EUsubarc	0.21365
EUtenell	0.028949
FGbicapi	0.235195
FGstrang	0.03095
FGviresc	-0.03727
FRcapfra	-0.48409
FRcapgra	-0.07676
FRcapuci	0.03237
FRcroton	-0.13283
FRmesole	0.269856
FRvauche	0.126757
Fscrassi	0.058199
FSkramme	0.076734
FSvulgar	0.001163
GEaccep	-0.31817
GEdecu	-0.11718
GOangstt	0.060409
GOgracil	0.009486

Name	WAPLS_C5
GOinsign	0.119648
GOkobaya	0.031373
GOlage	0.296493
GOmicrop	0.319301
GOminutm	0.405632
GOolihut	-0.64464
GOpalius	-0.1734
GOparvul	-0.11733
GOpatric	0.065888
GOpygm	-0.32275
GYacumin	0.515917
HIcapita	0.060933
KBsubtil	-0.06434
KVclevei	-0.14535
KVoblong	-0.16613
LUgoepp2	-0.12263
LUmutica	0.119815
MDcircon	0.219454
MDcircul	0.314966
MEvarian	-0.07214
MYagres	-0.00763
MYatomus	-0.1544
NAantoni	0.058802
NAcaprad	-0.33169
NAcrypto	-0.07767
NAcrytds	0.122055
NAcryten	0.242337
NAerifga	-0.16289
NAescamb	-0.02344
NAgermii	0.044838
NAgregar	-0.09872
NAhmberg	0.226887
NAlancel	-0.27245
NAlongcp	0.225756
NAperegr	0.023671
NApermnt	0.101941
NAreichd	0.06378
NArhynch	-0.02943
NArostel	-0.01878
NAsalinm	0.463666

Name	WAPLS_C5
NAsubmur	-0.44134
NAsymtrc	0.096719
NAtenell	0.132474
NAtripun	0.411527
NEalpinu	-0.13274
NIacidcn	0.421607
NIamphib	0.124522
NIarchib	-0.07036
NIbrevis	-0.07909
NIcapite	0.58477
NIclausi	0.169088
NIdissip	-0.18839
NIfilifr	-0.20582
NIfontic	0.334146
NIfrustu	-0.22659
NIgracil	-0.2713
NIincons	0.045603
NIliebrt	0.254363
NIlinear	0.03704
NInana	-0.47196
NIpaldeb	-0.06878
NIpalea	0.055621
NIpaleac	-0.09096
NIpsefon	-0.40492
NIrecta	0.361765
NIscalpe	0.323919
NIsociab	-0.29774
NItubcla	-0.06819
NUlapid	-0.27593
Nuneglec	0.132366
NUwell	0.040239
PCclemen	0.100227
PDbrevis	-0.30683
Pdparasi	-0.32999
PIabauje	-0.42537
PIinterr	0.195776
PImicros	-0.03069
PIobscur	0.392505
PIsubros	-0.13161
PIviridi	-0.22491

Name	WAPLS_C5
PLconspi	0.163271
PSgridao	0.174435
PShelvet	-0.05005
PSsubato	0.20723
PSventra	-1.04086
PTellip	0.201114
PTfreq	-0.04594
PThauck	-0.14138
PTlanceo	-0.11395
PTrostr	0.200827
REsinuta	0.107031
ROabbre	0.034189
RSlinea	0.5152
SApinnat	-0.44851
SFpupula	-0.08332
SFseminu	-0.20165
SOexiguf	0.083973
SRconstr	-0.32355
SRconven	-0.2401
SSanceps	0.005385
SSkriege	-0.17662
SSsmithi	-0.19261
SSthermc	-0.08364
SThantzs	0.203684
SUangust	0.271888
Subrekut	0.358506
SYrumpen	-0.31197
TAfenest	-0.11583
TAfloccu	-0.03989
ULacus	-0.09158
ULdelica	0.094713
UlnaUlna	-0.09815

Site 2	#		Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
	1	1	BFBM0002	BFBM0002	0.064271	-0.01301	-0.00043	-0.0021
	2	2	BFBM0002	BFBM0002	0.042954	-0.03222	-0.00073	0.00197
	3	3	DE-101031	DE-101031	-0.0349	0.050457	-0.02021	-0.00133
	4	4	DE-103051	DE-103051	0.017307	0.072313	-0.00554	0.007864
	5	5	DE-105071	DE-105071	-0.05568	0.044435	0.011741	0.034891
	6	6	DE-105151	DE-105151	0.010457	0.06756	-0.01886	-0.00392
	7	7	DE-106141	DE-106141	-0.17497	-0.04566	-0.01795	0.002929
	8	8	DE-109081	DE-109081	-0.0422	-0.03258	0.001668	-0.00429
	9	9	DE-114021	DE-114021	-0.02784	0.030382	0.042629	0.022779
	10	10	DE-201161	DE-201161	-0.03545	-0.01784	0.012355	-0.01179
	11	11	DE-205241	DE-205241	-0.00979	-0.00063	0.01093	-0.0102
	12	12	DE-206461	DE-206461	-0.06153	-0.0054	0.013528	-0.00587
	13	13	DE-303021	DE-303021	-0.00978	0.016798	0.013711	-0.01997
	14	14	DE-C08014	DE-C08014	-0.10535	-0.0338	0.018755	0.012375
	15	15	DE-C08025	DE-C08025	0.078474	0.049816	0.015682	0.009986
	16	16	DE-C13046	DE-C13046	-0.01773	0.002259	0.003624	0.003315
	17	17	DE-C15056	DE-C15056	0.026925	0.004291	0.007738	0.008708
	18	18	DE-EPA03-(	DE-EPA03-(	0.017621	0.113313	-0.0252	0.003831
	19	19	DE-EPA03-1	DE-EPA03-1	-0.12679	-0.00623	-0.00159	0.014829
	20	20	DE-P01092	DE-P01092	-0.04904	0.023379	-0.05191	-0.01134
	21	21	DE-P01115	DE-P01115	0.027137	0.052281	-0.01369	-0.00867
	22	22	DE-P03043	DE-P03043	-0.08172	0.024315	-0.02465	-0.01257
	23	23	DE-P04007	DE-P04007	-0.13805	-0.0077	-0.00886	0.016342
	24	24	DE-P05013	DE-P05013	-0.10308	-0.01931	-0.00562	0.005308
	25	25	DE-P05066	DE-P05066	-0.05846	0.047405	-0.01577	0.008044
	26	26	DE-P06021	DE-P06021	-0.16853	-0.02191	-0.01506	0.009981
	27	27	DE-P06037	DE-P06037	-0.08743	0.027378	-0.00202	0.022209
	28	28	DE-P06061	DE-P06061	-0.04856	0.068265	0.018156	0.011185
	29	29	DE-RA51	DE-RA51	0.043438	0.013159	-0.00978	-0.01191
	30	30	GS0140534	GS0140534	0.018244	-0.04781	0.014189	0.020343
	31	31	GS0140596	GS0140596	0.045883	-0.01642	0.019712	0.020536
	32	32	GS0140784	GS0140784	0.042064	-0.00362	0.009288	0.01685
	33	33	GS0140800	GS0140800	-0.04856	-0.05109	-0.00685	0.006081
	34	34	GS0140810	GS0140810	-0.02179	-0.03656	0.000411	-0.00731
	35	35	GS0140817	GS0140817	-0.2269	0.123526	0.031044	-0.06176
	36	36	GS0141280	GS0141280	-0.00229	-0.01401	0.00396	0.003164
	37	37	GS0146450	GS0146450	0.103744	-0.03432	-0.00174	0.008439
	38	38	GS0146451	GS0146451	0.076025	-0.0077	0.007184	-0.00032
	39	39	GS0146453	GS0146453	-0.05316	-0.10093	0.003248	0.016
	40	40	GS0146457	GS0146457	0.040453	-0.01811	0.020683	0.025341

Site 2	#		Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
	41	41	GS0146588	GS0146588	0.052906	0.001935	0.01504	0.016626
	42	42	GS0146702	GS0146702	0.023778	-0.02358	-0.02622	-0.01337
	43	43	GS0146715	GS0146715	0.114488	0.011537	0.014807	0.011833
	44	44	GS0146735	GS0146735	0.077218	-0.01135	-0.00939	0.003554
	45	45	GS0147712	GS0147712	0.060447	-0.00625	0.006855	0.007195
	46	46	GS0148250	GS0148250	0.224839	-0.01132	-0.03258	-0.01456
	47	47	MVO14808	MVO14808	0.046738	0.093135	0.011488	0.013572
	48	48	MVO15816	MVO15816	-0.12105	-0.02022	-0.00914	-0.00567
	49	49	NJAN0118	NJAN0118	0.144933	0.044517	-0.00531	-0.00789
	50	50	NJAN0448	NJAN0448	-0.02001	-0.09346	-0.0171	-0.00055
	51	51	NJAN0451	NJAN0451	0.005491	-0.0568	0.006843	0.014207
	52	52	NJAN0466	NJAN0466	0.058557	-0.01724	-0.02431	-0.02135
	53	53	NJAN0470	NJAN0470	0.027583	-0.03926	-0.02137	-0.01333
	54	54	NJAN0488	NJAN0488	0.072518	0.008957	0.016043	0.013252
	55	55	NJAN0489	NJAN0489	0.016312	-0.04202	-0.01141	-0.00385
	56	56	NJAN0490	NJAN0490	-0.002	-0.0583	-0.01853	-0.01539
	57	57	NJAN0673	NJAN0673	0.227307	0.030916	-0.00636	-0.00719
	58	58	NJAN0683	NJAN0683	0.061753	0.004836	0.005776	0.004694
	59	59	NJAN0694	NJAN0694	0.136148	-0.02115	-0.01517	-0.00204
	60	60	NJSD48	NJSD48	0.007124	-0.04888	0.044106	-0.05288
	61	61	NJSD91	NJSD91	0.062634	-0.04399	0.037671	-0.05073
	62	62	NJSD94	NJSD94	-0.01653	-0.01352	0.003965	-0.02736

Name	WAPLS_C5
BFBM0002	-0.0052
BFBM0002	-0.00723
DE-101031	0.003593
DE-103051	0.002873
DE-105071	0.017303
DE-105151	-0.0026
DE-106141	-4.96E-05
DE-109081	-0.01675
DE-114021	-0.00777
DE-201161	-0.02002
DE-205241	-0.00508
DE-206461	-0.01259
DE-303021	-0.01486
DE-C08014	-0.00821
DE-C08025	-0.00907
DE-C13046	-0.00341
DE-C15056	3.35E-05
DE-EPA03-(	0.009758
DE-EPA03-:	0.003151
DE-P01092	0.020611
DE-P01115	-0.00919
DE-P03043	-0.00671
DE-P04007	0.012723
DE-P05013	0.000956
DE-P05066	0.006886
DE-P06021	0.005193
DE-P06037	0.010939
DE-P06061	-0.00839
DE-RA51	-0.00762
GS0140534	0.00504
GS0140596	0.001391
GS0140784	0.007204
GS0140800	0.003105
GS0140810	-0.01017
GS0140817	0.006882
GS0141280	-0.00319
GS0146450	-0.00112
GS0146451	0.003333
GS0146453	-0.00057
GS0146457	0.006944

Name	WAPLS_C5
GS0146588	0.005682
GS0146702	0.001667
GS0146715	0.001276
GS0146735	0.002109
GS0147712	-0.0024
GS0148250	0.017438
MVO14808	-0.0056
MVO15816	-0.01028
NJAN0118	-0.00569
NJAN0448	0.008975
NJAN0451	0.006577
NJAN0466	-0.01482
NJAN0470	-0.00643
NJAN0488	0.003285
NJAN0489	-0.00114
NJAN0490	-0.01123
NJAN0673	-0.00152
NJAN0683	-0.00198
NJAN0694	0.00648
NJSD48	0.024101
NJSD91	0.02183
NJSD94	-0.00475

Site 2	#	Code	Name	N	N2	Obs_logTP	WAPLS_C1
1	1	BFBM0002	BFBM0002	73	21.5018	1.89927	2.1112
2	2	BFBM0002	BFBM0002	76	29.0046	1.85003	2.03405
3	3	DE-101031	DE-101031	40	10.6312	1.76343	1.75229
4	4	DE-103051	DE-103051	43	13.071	2.19312	1.94123
5	5	DE-105071	DE-105071	37	11.5604	1.98227	1.67708
6	6	DE-105151	DE-105151	43	5.05923	1.88081	1.91644
7	7	DE-106141	DE-106141	41	10.4789	0.954243	1.24538
8	8	DE-109081	DE-109081	39	13.2967	1.44716	1.72587
9	9	DE-114021	DE-114021	29	11.0285	2.10486	1.77785
10	10	DE-201161	DE-201161	43	11.1402	1.5887	1.7503
11	11	DE-205241	DE-205241	55	7.14324	1.88513	1.84318
12	12	DE-206461	DE-206461	41	3.68097	1.70137	1.65594
13	13	DE-303021	DE-303021	44	9.70492	1.89023	1.8432
14	14	DE-C08014	DE-C08014	39	9.7053	1.50515	1.49735
15	15	DE-C08025	DE-C08025	32	9.39783	2.35984	2.1626
16	16	DE-C13046	DE-C13046	33	5.36486	1.87506	1.81444
17	17	DE-C15056	DE-C15056	66	8.94258	2.2014	1.97604
18	18	DE-EPA03-(	DE-EPA03-(	27	5.80051	2.12385	1.94237
19	19	DE-EPA03-1	DE-EPA03-1	45	8.89291	1.49136	1.41974
20	20	DE-P01092	DE-P01092	28	7.64849	1.62325	1.70113
21	21	DE-P01115	DE-P01115	33	5.6095	2.01072	1.97681
22	22	DE-P03043	DE-P03043	34	7.33298	1.46982	1.58286
23	23	DE-P04007	DE-P04007	47	11.5386	1.51851	1.379
24	24	DE-P05013	DE-P05013	30	5.73563	1.36173	1.50556
25	25	DE-P05066	DE-P05066	35	10.7354	2.19033	1.66704
26	26	DE-P06021	DE-P06021	33	5.48478	1.09691	1.26869
27	27	DE-P06037	DE-P06037	43	10.0197	1.66276	1.56218
28	28	DE-P06061	DE-P06061	17	2.63418	2.03342	1.70287
29	29	DE-RA51	DE-RA51	40	3.7615	1.98453	2.0358
30	30	GS0140534	GS0140534	60	15.9442	2.02531	1.94463
31	31	GS0140596	GS0140596	52	18.3679	2.12385	2.04465
32	32	GS0140784	GS0140784	47	15.9145	2.17319	2.03083
33	33	GS0140800	GS0140800	76	17.1672	1.60206	1.70287
34	34	GS0140810	GS0140810	80	18.4439	1.51851	1.79974
35	35	GS0140817	GS0140817	40	11.3791	1.45025	1.05745
36	36	GS0141280	GS0141280	84	10.7954	1.86332	1.8703
37	37	GS0146450	GS0146450	70	10.4331	2.15534	2.25405
38	38	GS0146451	GS0146451	75	11.5273	2.17319	2.15374
39	39	GS0146453	GS0146453	50	11.9688	1.43297	1.6862
40	40	GS0146457	GS0146457	59	15.294	2.1959	2.025

Site 2	#		Code	Name	N	N2	Obs_logTP	WAPLS_C1
	41	41	GS0146588	GS0146588	74	27.4873	2.3483	2.07007
	42	42	GS0146702	GS0146702	65	15.7839	1.80618	1.96465
	43	43	GS0146715	GS0146715	106	20.2787	2.39094	2.29293
	44	44	GS0146735	GS0146735	62	8.38802	2.14922	2.15805
	45	45	GS0147712	GS0147712	85	20.855	2.02531	2.09736
	46	46	GS0148250	GS0148250	38	3.52771	2.52375	2.6923
	47	47	MVO14808	MVO14808	50	8.32464	2.32222	2.04774
	48	48	MVO15816	MVO15816	53	5.72001	1.17609	1.44053
	49	49	NJAN0118	NJAN0118	62	6.55446	2.50853	2.40312
	50	50	NJAN0448	NJAN0448	57	13.7634	1.49136	1.80619
	51	51	NJAN0451	NJAN0451	54	19.9752	1.81624	1.89847
	52	52	NJAN0466	NJAN0466	56	19.1145	1.65801	2.09052
	53	53	NJAN0470	NJAN0470	54	23.5841	1.79239	1.97842
	54	54	NJAN0488	NJAN0488	49	23.9572	2.30856	2.14104
	55	55	NJAN0489	NJAN0489	46	16.4275	1.72835	1.93763
	56	56	NJAN0490	NJAN0490	50	9.46827	1.53148	1.87137
	57	57	NJAN0673	NJAN0673	43	8.74419	2.7478	2.70123
	58	58	NJAN0683	NJAN0683	58	20.3886	2.20003	2.10209
	59	59	NJAN0694	NJAN0694	38	14.5687	2.29336	2.37132
	60	60	NJSD48	NJSD48	29	3.85871	1.86233	1.90438
	61	61	NJSD91	NJSD91	30	2.78735	2.01703	2.10527
	62	62	NJSD94	NJSD94	80	26.8904	1.70329	1.81877

Name	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5	WAPLS_C1	WAPLS_C2	WAPLS_C3
BFBM0002	2.07072	2.06875	2.06149	2.0338	2.08161	2.0933	2.12383
BFBM0002	1.93377	1.93041	1.93721	1.89872	2.02765	1.99279	2.01461
DE-101031	1.90932	1.81582	1.81123	1.83037	1.78359	1.88088	1.86648
DE-103051	2.16629	2.14064	2.16777	2.18307	1.81064	1.93705	1.95033
DE-105071	1.81537	1.8697	1.99006	2.08223	1.67271	1.68389	1.70285
DE-105151	2.1267	2.03943	2.02592	2.01207	1.90574	2.13016	2.25039
DE-106141	1.10328	1.02024	1.03035	1.03008	1.50544	1.37964	1.33373
DE-109081	1.62448	1.6322	1.6174	1.52816	1.87652	1.86135	1.90795
DE-114021	1.87241	2.06965	2.14823	2.10685	1.66556	1.62761	1.66144
DE-201161	1.69477	1.75194	1.71127	1.60464	1.86337	1.85333	1.89707
DE-205241	1.84123	1.8918	1.85663	1.82958	1.89059	1.87124	1.85086
DE-206461	1.63913	1.70173	1.68149	1.61443	1.69546	1.66984	1.67156
DE-303021	1.89547	1.95892	1.89004	1.8109	1.82975	1.858	1.91253
DE-C08014	1.39216	1.47894	1.52163	1.4779	1.7096	1.5593	1.46259
DE-C08025	2.31764	2.3902	2.42464	2.37632	1.82808	1.79492	1.80855
DE-C13046	1.82147	1.83824	1.84967	1.83148	1.82445	1.82332	1.83391
DE-C15056	1.9894	2.0252	2.05524	2.05542	1.91652	1.90276	1.91141
DE-EPA03-(	2.29502	2.17843	2.19165	2.24363	1.75403	2.04661	2.173
DE-EPA03-1	1.40035	1.393	1.44415	1.46094	1.57116	1.51518	1.49826
DE-P01092	1.77388	1.53368	1.49456	1.60435	1.91499	2.00834	1.94932
DE-P01115	2.13952	2.07618	2.04627	1.9973	1.933	2.06197	2.08067
DE-P03043	1.65853	1.54449	1.50112	1.46538	1.74171	1.82355	1.8433
DE-P04007	1.35504	1.31402	1.37039	1.43817	1.49149	1.41952	1.36723
DE-P05013	1.44545	1.41946	1.43777	1.44286	1.59431	1.53229	1.52481
DE-P05066	1.81458	1.74161	1.76936	1.80604	1.62511	1.69374	1.67702
DE-P06021	1.20049	1.13081	1.16524	1.1929	1.45062	1.35155	1.31632
DE-P06037	1.64739	1.63805	1.71466	1.77293	1.62464	1.64525	1.65775
DE-P06061	1.91532	1.99933	2.03791	1.99322	1.62185	1.68586	1.71354
DE-RA51	2.07675	2.03149	1.99039	1.94978	2.04565	2.13165	2.19364
GS0140534	1.79582	1.86148	1.93165	1.9585	1.89701	1.77362	1.76238
GS0140596	1.99355	2.08476	2.1556	2.16301	1.96684	1.91335	1.95313
GS0140784	2.01958	2.06256	2.12068	2.15905	1.9233	1.86507	1.85324
GS0140800	1.54387	1.51219	1.53316	1.5497	1.88161	1.78861	1.73739
GS0140810	1.68597	1.68787	1.66265	1.60845	1.90601	1.86875	1.89468
GS0140817	1.44189	1.58554	1.37251	1.40917	1.75661	1.52883	1.42318
GS0141280	1.8267	1.84502	1.85593	1.83891	1.90735	1.88462	1.86329
GS0146450	2.14722	2.13919	2.16829	2.16234	2.04902	1.96672	1.89624
GS0146451	2.12979	2.16303	2.16193	2.17969	1.80352	1.69309	1.66985
GS0146453	1.3721	1.38713	1.44232	1.43928	2.04283	1.9315	1.87603
GS0146457	1.96865	2.06435	2.15176	2.18875	1.95595	1.89288	1.91056

Name	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5	WAPLS_C1	WAPLS_C2	WAPLS_C3
GS0146588	2.07609	2.14568	2.20303	2.23329	1.9865	1.97831	2.00032
GS0146702	1.89128	1.76994	1.72383	1.73271	2.00574	2.00086	1.97242
GS0146715	2.32884	2.39735	2.43816	2.44496	1.99338	1.97979	2.0211
GS0146735	2.12272	2.07929	2.09155	2.10278	2.02724	1.99222	1.97475
GS0147712	2.07791	2.10963	2.13445	2.12168	2.0612	2.06146	2.093
GS0148250	2.65707	2.50631	2.45608	2.54897	2.08962	2.13058	2.19458
MVO14808	2.3376	2.39075	2.43757	2.40775	1.78614	1.94631	2.06905
MVO15816	1.37761	1.3353	1.31575	1.26098	1.56708	1.50844	1.49186
NJAN0118	2.54166	2.51709	2.48987	2.45959	1.98758	1.99731	1.98535
NJAN0448	1.51532	1.43621	1.43432	1.48212	1.99293	1.85255	1.79716
NJAN0451	1.72171	1.75338	1.80238	1.83742	1.93343	1.82536	1.79503
NJAN0466	2.03687	1.92439	1.85074	1.77181	2.09121	2.09362	2.08018
NJAN0470	1.85625	1.75738	1.71141	1.67714	1.95742	1.87916	1.81606
NJAN0488	2.16892	2.24315	2.28886	2.30636	1.99139	1.9755	1.98991
NJAN0489	1.80687	1.75406	1.74076	1.73471	1.90826	1.81801	1.80296
NJAN0490	1.68992	1.60419	1.5511	1.49126	1.93714	1.82939	1.79374
NJAN0673	2.79744	2.76801	2.74322	2.7351	1.95917	1.95166	1.97627
NJAN0683	2.11714	2.14386	2.16005	2.14949	2.01896	2.02702	2.0295
NJAN0694	2.3055	2.23531	2.22827	2.26279	2.11507	2.09016	2.06219
NJSD48	1.75227	1.95635	1.77396	1.90234	1.75902	1.48856	1.43366
NJSD91	1.96837	2.14268	1.96768	2.08397	1.79044	1.75083	1.68214
NJSD94	1.77668	1.79503	1.70067	1.67538	1.88699	1.90193	1.92927

Name	WAPLS_C4	WAPLS_C5_X
BFBM0002	2.14665	2.15219
BFBM0002	2.03765	2.03237
DE-101031	1.85287	1.87428
DE-103051	1.94401	1.95056
DE-105071	1.73234	1.78088
DE-105151	2.31778	2.36177
DE-106141	1.32437	1.32414
DE-109081	1.93303	1.94132
DE-114021	1.66295	1.65206
DE-201161	1.89909	1.89262
DE-205241	1.82055	1.80218
DE-206461	1.64445	1.62371
DE-303021	1.9222	1.92219
DE-C08014	1.40302	1.37272
DE-C08025	1.8301	1.84674
DE-C13046	1.82571	1.8114
DE-C15056	1.89987	1.88545
DE-EPA03-(	2.26933	2.38193
DE-EPA03-1	1.49572	1.49365
DE-P01092	1.91337	1.90563
DE-P01115	2.06125	2.05313
DE-P03043	1.83662	1.84677
DE-P04007	1.35244	1.34861
DE-P05013	1.52548	1.53084
DE-P05066	1.66412	1.66512
DE-P06021	1.31782	1.33449
DE-P06037	1.68633	1.72053
DE-P06061	1.7045	1.6949
DE-RA51	2.21749	2.23367
GS0140534	1.7726	1.75813
GS0140596	1.9944	2.00285
GS0140784	1.85248	1.84681
GS0140800	1.70908	1.67983
GS0140810	1.93361	1.94276
GS0140817	1.33935	1.29978
GS0141280	1.86168	1.86081
GS0146450	1.86198	1.81151
GS0146451	1.63568	1.61879
GS0146453	1.86146	1.82404
GS0146457	1.93971	1.94472

Name	WAPLS_C4	WAPLS_C5_X
GS0146588	2.02756	2.02656
GS0146702	1.94897	1.92381
GS0146715	2.07463	2.11552
GS0146735	1.96242	1.92665
GS0147712	2.12588	2.12375
GS0148250	2.22981	2.23275
MVO14808	2.15551	2.20066
MVO15816	1.48219	1.47503
NJAN0118	1.95689	1.92291
NJAN0448	1.78575	1.77745
NJAN0451	1.80436	1.81006
NJAN0466	2.07319	2.06693
NJAN0470	1.77888	1.74792
NJAN0488	2.00216	2.00224
NJAN0489	1.80942	1.81219
NJAN0490	1.77191	1.74336
NJAN0673	2.02483	2.04311
NJAN0683	2.02251	2.01378
NJAN0694	2.0413	2.00103
NJSD48	1.24744	1.18871
NJSD91	1.65514	1.65059
NJSD94	1.92705	1.93156

Site 2	#		Code	Name	Obs_logTP	WAPLS_C1	WAPLS_C2	WAPLS_C3
	1	1	BFBM0002	BFBM0002	1.89927	0.211925	0.171445	0.169474
	2	2	BFBM0002	BFBM0002	1.85003	0.184018	0.083739	0.080379
	3	3	DE-101031	DE-101031	1.76343	-0.01114	0.145891	0.052395
	4	4	DE-103051	DE-103051	2.19312	-0.25189	-0.02684	-0.05248
	5	5	DE-105071	DE-105071	1.98227	-0.30519	-0.1669	-0.11257
	6	6	DE-105151	DE-105151	1.88081	0.035628	0.245887	0.158619
	7	7	DE-106141	DE-106141	0.954243	0.291139	0.149038	0.066001
	8	8	DE-109081	DE-109081	1.44716	0.278711	0.17732	0.18504
	9	9	DE-114021	DE-114021	2.10486	-0.327	-0.23245	-0.0352
	10	10	DE-201161	DE-201161	1.5887	0.161604	0.106075	0.163243
	11	11	DE-205241	DE-205241	1.88513	-0.04195	-0.0439	0.006669
	12	12	DE-206461	DE-206461	1.70137	-0.04543	-0.06224	0.000358
	13	13	DE-303021	DE-303021	1.89023	-0.04704	0.005243	0.068686
	14	14	DE-C08014	DE-C08014	1.50515	-0.0078	-0.11299	-0.02621
	15	15	DE-C08025	DE-C08025	2.35984	-0.19724	-0.0422	0.030362
	16	16	DE-C13046	DE-C13046	1.87506	-0.06062	-0.05359	-0.03682
	17	17	DE-C15056	DE-C15056	2.2014	-0.22536	-0.212	-0.1762
	18	18	DE-EPA03-(	DE-EPA03-(	2.12385	-0.18148	0.171168	0.054583
	19	19	DE-EPA03-1	DE-EPA03-1	1.49136	-0.07163	-0.09101	-0.09836
	20	20	DE-P01092	DE-P01092	1.62325	0.077876	0.150635	-0.08957
	21	21	DE-P01115	DE-P01115	2.01072	-0.03392	0.128792	0.065461
	22	22	DE-P03043	DE-P03043	1.46982	0.113038	0.18871	0.074665
	23	23	DE-P04007	DE-P04007	1.51851	-0.13952	-0.16348	-0.20449
	24	24	DE-P05013	DE-P05013	1.36173	0.14383	0.083723	0.057731
	25	25	DE-P05066	DE-P05066	2.19033	-0.52329	-0.37576	-0.44872
	26	26	DE-P06021	DE-P06021	1.09691	0.171781	0.103579	0.0339
	27	27	DE-P06037	DE-P06037	1.66276	-0.10057	-0.01537	-0.0247
	28	28	DE-P06061	DE-P06061	2.03342	-0.33056	-0.1181	-0.03409
	29	29	DE-RA51	DE-RA51	1.98453	0.051275	0.092227	0.046959
	30	30	GS0140534	GS0140534	2.02531	-0.08068	-0.22948	-0.16383
	31	31	GS0140596	GS0140596	2.12385	-0.0792	-0.1303	-0.03909
	32	32	GS0140784	GS0140784	2.17319	-0.14236	-0.15361	-0.11063
	33	33	GS0140800	GS0140800	1.60206	0.100813	-0.05819	-0.08987
	34	34	GS0140810	GS0140810	1.51851	0.281229	0.167456	0.169358
	35	35	GS0140817	GS0140817	1.45025	-0.39279	-0.00836	0.135287
	36	36	GS0141280	GS0141280	1.86332	0.006976	-0.03663	-0.0183
	37	37	GS0146450	GS0146450	2.15534	0.098714	-0.00811	-0.01615
	38	38	GS0146451	GS0146451	2.17319	-0.01945	-0.0434	-0.01016
	39	39	GS0146453	GS0146453	1.43297	0.253234	-0.06087	-0.04584
	40	40	GS0146457	GS0146457	2.1959	-0.1709	-0.22725	-0.13155

Site 2	#		Code	Name	Obs_logTP	WAPLS_C1	WAPLS_C2	WAPLS_C3
	41	41	GS0146588	GS0146588	2.3483	-0.27824	-0.27222	-0.20263
	42	42	GS0146702	GS0146702	1.80618	0.158472	0.085098	-0.03624
	43	43	GS0146715	GS0146715	2.39094	-0.098	-0.0621	0.006413
	44	44	GS0146735	GS0146735	2.14922	0.008835	-0.02649	-0.06993
	45	45	GS0147712	GS0147712	2.02531	0.072053	0.052604	0.084323
	46	46	GS0148250	GS0148250	2.52375	0.168549	0.133326	-0.01743
	47	47	MVO14808	MVO14808	2.32222	-0.27448	0.015378	0.068535
	48	48	MVO15816	MVO15816	1.17609	0.26444	0.201518	0.159209
	49	49	NJAN0118	NJAN0118	2.50853	-0.10541	0.033131	0.008563
	50	50	NJAN0448	NJAN0448	1.49136	0.314827	0.023954	-0.05515
	51	51	NJAN0451	NJAN0451	1.81624	0.082232	-0.09453	-0.06286
	52	52	NJAN0466	NJAN0466	1.65801	0.432507	0.37886	0.266381
	53	53	NJAN0470	NJAN0470	1.79239	0.18603	0.063856	-0.03501
	54	54	NJAN0488	NJAN0488	2.30856	-0.16752	-0.13965	-0.06542
	55	55	NJAN0489	NJAN0489	1.72835	0.209279	0.078517	0.025707
	56	56	NJAN0490	NJAN0490	1.53148	0.339887	0.158439	0.072711
	57	57	NJAN0673	NJAN0673	2.7478	-0.04657	0.049641	0.020211
	58	58	NJAN0683	NJAN0683	2.20003	-0.09794	-0.08289	-0.05617
	59	59	NJAN0694	NJAN0694	2.29336	0.077958	0.012135	-0.05805
	60	60	NJSD48	NJSD48	1.86233	0.042051	-0.11006	0.094021
	61	61	NJSD91	NJSD91	2.01703	0.088238	-0.04866	0.125645
	62	62	NJSD94	NJSD94	1.70329	0.115482	0.073393	0.091739

Name	WAPLS_C4	WAPLS_C5	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5
BFBM0002	0.162221	0.134527	0.182335	0.19403	0.224553	0.247378	0.252913
BFBM0002	0.087175	0.048686	0.177612	0.142753	0.164578	0.187612	0.182332
DE-101031	0.047804	0.066942	0.020166	0.11745	0.103047	0.089439	0.11085
DE-103051	-0.02536	-0.01005	-0.38249	-0.25608	-0.2428	-0.24911	-0.24256
DE-105071	0.007784	0.099956	-0.30956	-0.29839	-0.27942	-0.24993	-0.20139
DE-105151	0.145104	0.13126	0.02493	0.249345	0.369578	0.436964	0.480955
DE-106141	0.076103	0.075838	0.551198	0.425393	0.379489	0.370124	0.369894
DE-109081	0.170239	0.081004	0.429362	0.414191	0.460794	0.485874	0.494162
DE-114021	0.043374	0.001991	-0.4393	-0.47724	-0.44342	-0.4419	-0.4528
DE-201161	0.122572	0.015943	0.274677	0.264637	0.308377	0.310389	0.303919
DE-205241	-0.0285	-0.05555	0.005453	-0.01389	-0.03427	-0.06458	-0.08296
DE-206461	-0.01988	-0.08693	-0.00591	-0.03153	-0.02981	-0.05692	-0.07766
DE-303021	-0.00019	-0.07933	-0.06048	-0.03223	0.022301	0.031967	0.031963
DE-C08014	0.016482	-0.02725	0.204452	0.05415	-0.04256	-0.10213	-0.13243
DE-C08025	0.064809	0.016485	-0.53176	-0.56492	-0.55129	-0.52974	-0.5131
DE-C13046	-0.02539	-0.04358	-0.05061	-0.05174	-0.04115	-0.04935	-0.06366
DE-C15056	-0.14616	-0.14598	-0.28488	-0.29864	-0.28999	-0.30152	-0.31595
DE-EPA03-(	0.067798	0.11978	-0.36982	-0.07724	0.049145	0.145479	0.258078
DE-EPA03-:	-0.04721	-0.03043	0.0798	0.023818	0.006894	0.004355	0.002289
DE-P01092	-0.12869	-0.0189	0.291744	0.385087	0.326067	0.290122	0.28238
DE-P01115	0.035547	-0.01342	-0.07772	0.051243	0.069948	0.05053	0.042404
DE-P03043	0.031303	-0.00444	0.271885	0.353728	0.373481	0.366795	0.376952
DE-P04007	-0.14812	-0.08035	-0.02702	-0.09899	-0.15129	-0.16608	-0.16991
DE-P05013	0.07604	0.081132	0.232581	0.170558	0.163079	0.163753	0.169113
DE-P05066	-0.42097	-0.38429	-0.56522	-0.49659	-0.51331	-0.52621	-0.52521
DE-P06021	0.068328	0.095991	0.35371	0.254636	0.219414	0.220913	0.237583
DE-P06037	0.051905	0.110175	-0.03812	-0.01751	-0.00501	0.023567	0.057772
DE-P06061	0.004487	-0.0402	-0.41157	-0.34756	-0.31988	-0.32892	-0.33852
DE-RA51	0.00586	-0.03475	0.061122	0.147124	0.209117	0.232967	0.249142
GS0140534	-0.09366	-0.06681	-0.1283	-0.25168	-0.26292	-0.2527	-0.26718
GS0140596	0.031744	0.039154	-0.15701	-0.2105	-0.17073	-0.12945	-0.121
GS0140784	-0.05251	-0.01413	-0.24988	-0.30812	-0.31994	-0.32071	-0.32638
GS0140800	-0.0689	-0.05236	0.279546	0.186554	0.135326	0.107024	0.077769
GS0140810	0.14414	0.08994	0.387493	0.350235	0.376162	0.415092	0.424241
GS0140817	-0.07774	-0.04108	0.306359	0.078579	-0.02707	-0.1109	-0.15047
GS0141280	-0.00739	-0.02441	0.044024	0.021297	-3.41E-05	-0.00164	-0.00251
GS0146450	0.012958	0.007	-0.10632	-0.18862	-0.2591	-0.29335	-0.34382
GS0146451	-0.01126	0.0065	-0.36967	-0.4801	-0.50334	-0.53751	-0.5544
GS0146453	0.009348	0.006311	0.609861	0.498531	0.443065	0.428492	0.391071
GS0146457	-0.04414	-0.00715	-0.23995	-0.30302	-0.28534	-0.25619	-0.25118

Name	WAPLS_C4	WAPLS_C5	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5
GS0146588	-0.14528	-0.11501	-0.3618	-0.36999	-0.34798	-0.32075	-0.32175
GS0146702	-0.08235	-0.07347	0.199559	0.194684	0.166243	0.142795	0.117629
GS0146715	0.047229	0.054025	-0.39755	-0.41114	-0.36984	-0.31631	-0.27541
GS0146735	-0.05767	-0.04644	-0.12198	-0.157	-0.17447	-0.1868	-0.22257
GS0147712	0.109142	0.096376	0.035893	0.036153	0.067693	0.100574	0.098446
GS0148250	-0.06767	0.025221	-0.43412	-0.39316	-0.32917	-0.29394	-0.291
MVO14808	0.115352	0.085526	-0.53608	-0.37591	-0.25317	-0.16671	-0.12156
MVO15816	0.139655	0.084885	0.390991	0.332353	0.315771	0.306099	0.298943
NJAN0118	-0.01866	-0.04894	-0.52095	-0.51122	-0.52318	-0.55164	-0.58562
NJAN0448	-0.05705	-0.00924	0.501564	0.361189	0.305803	0.29439	0.286084
NJAN0451	-0.01386	0.021175	0.117188	0.009122	-0.02122	-0.01188	-0.00618
NJAN0466	0.192731	0.113803	0.433198	0.435611	0.422166	0.415177	0.40892
NJAN0470	-0.08098	-0.11525	0.165033	0.086766	0.023667	-0.01351	-0.04447
NJAN0488	-0.0197	-0.00221	-0.31718	-0.33306	-0.31865	-0.3064	-0.30632
NJAN0489	0.01241	0.00636	0.179905	0.089659	0.074604	0.081065	0.083832
NJAN0490	0.019616	-0.04022	0.405664	0.297909	0.262265	0.240428	0.211876
NJAN0673	-0.00458	-0.0127	-0.78863	-0.79614	-0.77153	-0.72297	-0.70469
NJAN0683	-0.03998	-0.05054	-0.18107	-0.17301	-0.17053	-0.17752	-0.18625
NJAN0694	-0.06509	-0.03057	-0.1783	-0.20321	-0.23117	-0.25206	-0.29233
NJSD48	-0.08837	0.040009	-0.10331	-0.37378	-0.42867	-0.61489	-0.67362
NJSD91	-0.04935	0.066934	-0.22659	-0.26621	-0.3349	-0.36189	-0.36644
NJSD94	-0.00262	-0.02791	0.183695	0.198635	0.225974	0.223763	0.228267

Name	_X
BFBM0002	
BFBM0002	
DE-101031	
DE-103051	
DE-105071	
DE-105151	
DE-106141	
DE-109081	
DE-114021	
DE-201161	
DE-205241	
DE-206461	
DE-303021	
DE-C08014	
DE-C08025	
DE-C13046	
DE-C15056	
DE-EPA03-(	
DE-EPA03-1	
DE-P01092	
DE-P01115	
DE-P03043	
DE-P04007	
DE-P05013	
DE-P05066	
DE-P06021	
DE-P06037	
DE-P06061	
DE-RA51	
GS0140534	
GS0140596	
GS0140784	
GS0140800	
GS0140810	
GS0140817	
GS0141280	
GS0146450	
GS0146451	
GS0146453	
GS0146457	

Name	_X
GS0146588	
GS0146702	
GS0146715	
GS0146735	
GS0147712	
GS0148250	
MVO14808	
MVO15816	
NJAN0118	
NJAN0448	
NJAN0451	
NJAN0466	
NJAN0470	
NJAN0488	
NJAN0489	
NJAN0490	
NJAN0673	
NJAN0683	
NJAN0694	
NJSD48	
NJSD91	
NJSD94	

Site 2	#		Code	Name	SEB_WAPL	SEB_WAPL	SEB_WAPL	SEB_WAPL
	1	1	BFBM0002	BFBM0002	0.065119	0.064976	0.063066	0.067226
	2	2	BFBM0002	BFBM0002	0.077588	0.081362	0.094809	0.106431
	3	3	DE-101031	DE-101031	0.123495	0.100207	0.101623	0.117789
	4	4	DE-103051	DE-103051	0.103075	0.098366	0.091079	0.106025
	5	5	DE-105071	DE-105071	0.098461	0.086603	0.095308	0.119348
	6	6	DE-105151	DE-105151	0.161114	0.192525	0.234877	0.313208
	7	7	DE-106141	DE-106141	0.093603	0.105697	0.109443	0.1111
	8	8	DE-109081	DE-109081	0.100432	0.108308	0.118959	0.136014
	9	9	DE-114021	DE-114021	0.086425	0.089778	0.096655	0.103019
	10	10	DE-201161	DE-201161	0.083975	0.10061	0.113621	0.123814
	11	11	DE-205241	DE-205241	0.098757	0.104018	0.120436	0.120922
	12	12	DE-206461	DE-206461	0.090051	0.115858	0.119397	0.11924
	13	13	DE-303021	DE-303021	0.063902	0.100675	0.149211	0.18274
	14	14	DE-C08014	DE-C08014	0.172188	0.276892	0.386098	0.452637
	15	15	DE-C08025	DE-C08025	0.079193	0.092807	0.131021	0.150457
	16	16	DE-C13046	DE-C13046	0.056851	0.058141	0.051779	0.057009
	17	17	DE-C15056	DE-C15056	0.093969	0.10853	0.106102	0.112881
	18	18	DE-EPA03-(	DE-EPA03-(	0.189158	0.212955	0.257218	0.318975
	19	19	DE-EPA03-1	DE-EPA03-1	0.147607	0.155713	0.15167	0.148328
	20	20	DE-P01092	DE-P01092	0.122573	0.153686	0.172712	0.21694
	21	21	DE-P01115	DE-P01115	0.119748	0.102974	0.109234	0.128812
	22	22	DE-P03043	DE-P03043	0.108282	0.102423	0.097378	0.106976
	23	23	DE-P04007	DE-P04007	0.099293	0.087803	0.09956	0.110476
	24	24	DE-P05013	DE-P05013	0.099632	0.083313	0.080133	0.08141
	25	25	DE-P05066	DE-P05066	0.094302	0.079762	0.079499	0.0825
	26	26	DE-P06021	DE-P06021	0.16515	0.150418	0.140664	0.145378
	27	27	DE-P06037	DE-P06037	0.117113	0.100218	0.105354	0.123887
	28	28	DE-P06061	DE-P06061	0.138941	0.151511	0.147816	0.160802
	29	29	DE-RA51	DE-RA51	0.088585	0.116528	0.154076	0.189749
	30	30	GS0140534	GS0140534	0.093525	0.084261	0.097956	0.11241
	31	31	GS0140596	GS0140596	0.075031	0.082687	0.083894	0.094967
	32	32	GS0140784	GS0140784	0.073656	0.083302	0.08231	0.085724
	33	33	GS0140800	GS0140800	0.083098	0.101999	0.122413	0.12783
	34	34	GS0140810	GS0140810	0.078138	0.066542	0.085094	0.089085
	35	35	GS0140817	GS0140817	0.252288	0.36172	0.464555	0.560151
	36	36	GS0141280	GS0141280	0.101099	0.125785	0.113449	0.101918
	37	37	GS0146450	GS0146450	0.113451	0.179777	0.220456	0.282762
	38	38	GS0146451	GS0146451	0.093821	0.134804	0.191553	0.223192
	39	39	GS0146453	GS0146453	0.109374	0.125663	0.152583	0.172767
	40	40	GS0146457	GS0146457	0.070639	0.07701	0.081724	0.088246

Site 2	#		Code	Name	SEB_WAPL	SEB_WAPL	SEB_WAPL	SEB_WAPL
	41	41	GS0146588	GS0146588	0.052729	0.049039	0.054031	0.05275
	42	42	GS0146702	GS0146702	0.050537	0.067653	0.085377	0.098156
	43	43	GS0146715	GS0146715	0.071743	0.081045	0.089977	0.101695
	44	44	GS0146735	GS0146735	0.062445	0.079244	0.104487	0.123923
	45	45	GS0147712	GS0147712	0.055972	0.065983	0.080394	0.086564
	46	46	GS0148250	GS0148250	0.165343	0.202422	0.235533	0.259889
	47	47	MVO14808	MVO14808	0.123275	0.13303	0.118016	0.136318
	48	48	MVO15816	MVO15816	0.088085	0.082963	0.079704	0.080046
	49	49	NJAN0118	NJAN0118	0.090479	0.12796	0.170857	0.208814
	50	50	NJAN0448	NJAN0448	0.063572	0.07205	0.084741	0.090408
	51	51	NJAN0451	NJAN0451	0.108907	0.12209	0.13995	0.149605
	52	52	NJAN0466	NJAN0466	0.075671	0.08475	0.092141	0.091018
	53	53	NJAN0470	NJAN0470	0.071488	0.080757	0.095849	0.098418
	54	54	NJAN0488	NJAN0488	0.060401	0.055084	0.075049	0.090184
	55	55	NJAN0489	NJAN0489	0.094969	0.097332	0.084073	0.075193
	56	56	NJAN0490	NJAN0490	0.066835	0.076248	0.088991	0.10045
	57	57	NJAN0673	NJAN0673	0.101394	0.121457	0.146099	0.165637
	58	58	NJAN0683	NJAN0683	0.078289	0.086331	0.084505	0.080694
	59	59	NJAN0694	NJAN0694	0.139907	0.152778	0.187545	0.22843
	60	60	NJSD48	NJSD48	0.266129	0.301108	0.42047	0.454276
	61	61	NJSD91	NJSD91	0.18433	0.334615	0.379632	0.478388
	62	62	NJSD94	NJSD94	0.099442	0.083468	0.123893	0.135153

Name	SEB_WAPL	SEP_WAPL	SEP_WAPL	SEP_WAPL	SEP_WAPL	SEP_WAPL	eSEP_WAP
BFBM0002	0.070733	0.19334	0.204363	0.233028	0.25613	0.262379	0.32458
BFBM0002	0.116429	0.193449	0.163831	0.189369	0.215073	0.215587	0.327309
DE-101031	0.126317	0.123738	0.153648	0.143914	0.146827	0.166976	0.341119
DE-103051	0.120887	0.395797	0.273877	0.258918	0.270219	0.270343	0.334269
DE-105071	0.147961	0.324437	0.310373	0.29481	0.276269	0.248714	0.332875
DE-105151	0.382872	0.160524	0.313178	0.435926	0.534763	0.611006	0.356467
DE-106141	0.114297	0.558845	0.43793	0.394482	0.385939	0.386623	0.331471
DE-109081	0.154924	0.440605	0.427703	0.475451	0.503997	0.517175	0.333464
DE-114021	0.105719	0.447525	0.485422	0.453589	0.453481	0.464697	0.329516
DE-201161	0.131762	0.286912	0.282659	0.328139	0.333584	0.330579	0.328882
DE-205241	0.118176	0.097566	0.103539	0.123642	0.135638	0.143074	0.332963
DE-206461	0.124855	0.089142	0.1187	0.121642	0.130812	0.145736	0.330485
DE-303021	0.21152	0.087386	0.104472	0.148965	0.183193	0.211223	0.324338
DE-C08014	0.50608	0.265944	0.278804	0.383729	0.4586	0.517115	0.361608
DE-C08025	0.161374	0.537416	0.572221	0.566102	0.549954	0.537009	0.327693
DE-C13046	0.062919	0.075507	0.077208	0.065558	0.074787	0.088874	0.323022
DE-C15056	0.120153	0.299514	0.317166	0.308219	0.321342	0.337356	0.331574
DE-EPA03-(	0.378986	0.413998	0.223278	0.257763	0.345871	0.453433	0.36999
DE-EPA03-:	0.153283	0.16569	0.155022	0.149363	0.145981	0.150808	0.35057
DE-P01092	0.269148	0.315768	0.413807	0.367827	0.360401	0.38744	0.340787
DE-P01115	0.135267	0.141499	0.113861	0.128555	0.136862	0.140135	0.339781
DE-P03043	0.117701	0.292112	0.367873	0.385635	0.381671	0.394426	0.335912
DE-P04007	0.113845	0.101729	0.131609	0.18044	0.198719	0.203747	0.333122
DE-P05013	0.088525	0.252519	0.189349	0.18125	0.182408	0.190355	0.333224
DE-P05066	0.074432	0.572864	0.502816	0.519294	0.532497	0.530344	0.331669
DE-P06021	0.157709	0.38942	0.294709	0.259604	0.263374	0.283981	0.35831
DE-P06037	0.143671	0.121604	0.100356	0.104001	0.124407	0.152989	0.338861
DE-P06061	0.17706	0.433773	0.378309	0.35152	0.365142	0.380887	0.34701
DE-RA51	0.223285	0.106794	0.186857	0.258708	0.299099	0.332858	0.330089
GS0140534	0.11729	0.157977	0.265031	0.280088	0.275923	0.291112	0.331449
GS0140596	0.100686	0.173496	0.225669	0.189627	0.15964	0.156368	0.326713
GS0140784	0.093709	0.260165	0.318816	0.330019	0.331598	0.339135	0.3264
GS0140800	0.133171	0.291227	0.211772	0.181056	0.165019	0.15222	0.328659
GS0140810	0.091732	0.395079	0.356327	0.385406	0.424284	0.433776	0.32744
GS0140817	0.627246	0.394355	0.364592	0.458039	0.562371	0.635441	0.405907
GS0141280	0.092548	0.109009	0.125888	0.111905	0.100544	0.091323	0.333665
GS0146450	0.342878	0.153819	0.258078	0.337327	0.4035	0.480704	0.337613
GS0146451	0.254358	0.381073	0.498174	0.537632	0.580845	0.608526	0.331533
GS0146453	0.198435	0.619289	0.513645	0.467825	0.461	0.43713	0.336265
GS0146457	0.091705	0.249874	0.312409	0.29652	0.27059	0.266998	0.325732

Name	SEB_WAPL	SEP_WAPL	SEP_WAPL	SEP_WAPL	SEP_WAPL	SEP_WAPL	eSEP_WAP
GS0146588	0.054952	0.365528	0.373146	0.352044	0.324947	0.326287	0.322323
GS0146702	0.107094	0.205664	0.205757	0.186274	0.172406	0.157947	0.321971
GS0146715	0.119501	0.403801	0.418843	0.380339	0.331835	0.299577	0.325973
GS0146735	0.148516	0.136649	0.175382	0.202634	0.223236	0.266451	0.324054
GS0147712	0.093929	0.065815	0.074407	0.104215	0.131888	0.135138	0.322869
GS014825C	0.280606	0.463749	0.440959	0.402901	0.39002	0.401611	0.358399
MVO14808	0.144071	0.549635	0.398057	0.278547	0.213995	0.186775	0.34104
MVO15816	0.089732	0.400468	0.342216	0.32535	0.316055	0.311689	0.329955
NJAN0118	0.22886	0.528509	0.526504	0.549541	0.588679	0.627444	0.330602
NJAN0448	0.094971	0.505463	0.368104	0.317003	0.30758	0.301008	0.324273
NJAN0451	0.15722	0.159096	0.120972	0.139892	0.14829	0.155459	0.336113
NJAN0466	0.095459	0.439566	0.443541	0.431815	0.42475	0.419596	0.32686
NJAN0470	0.099788	0.179467	0.117787	0.097462	0.098014	0.108008	0.325917
NJAN0488	0.102112	0.322747	0.337483	0.327171	0.319102	0.322518	0.323666
NJAN0489	0.077686	0.20261	0.131002	0.111231	0.109618	0.113311	0.331859
NJAN0490	0.106255	0.410985	0.307257	0.276566	0.260044	0.236382	0.324928
NJAN0673	0.17175	0.794907	0.805047	0.784784	0.741082	0.724638	0.333755
NJAN0683	0.086779	0.196867	0.192858	0.189841	0.19457	0.205003	0.327476
NJAN0694	0.270628	0.225495	0.253021	0.296119	0.338144	0.39594	0.347398
NJSD48	0.49384	0.282361	0.477606	0.596771	0.761116	0.831589	0.414652
NJSD91	0.519956	0.29071	0.42446	0.502837	0.595292	0.631028	0.367544
NJSD94	0.163786	0.208276	0.215045	0.256944	0.260515	0.27972	0.333167

Name	eSEP_WAP	eSEP_WAP	eSEP_WAP	eSEP_WAPLS_C5
BFBM0002	0.308318	0.303475	0.309053	0.315415
BFBM0002	0.312182	0.311622	0.319878	0.328693
DE-101031	0.317615	0.313762	0.323835	0.332324
DE-103051	0.317039	0.310508	0.319744	0.330298
DE-105071	0.313589	0.311774	0.324405	0.341139
DE-105151	0.357636	0.378533	0.434849	0.490993
DE-106141	0.31939	0.316382	0.321462	0.327944
DE-109081	0.320263	0.319798	0.330899	0.344216
DE-114021	0.31448	0.312189	0.318759	0.325054
DE-201161	0.317743	0.317851	0.326074	0.334432
DE-205241	0.318838	0.32035	0.324987	0.329316
DE-206461	0.322895	0.319961	0.324365	0.331771
DE-303021	0.317763	0.33224	0.352688	0.373127
DE-C08014	0.409277	0.487023	0.543944	0.592115
DE-C08025	0.315359	0.324478	0.337093	0.347167
DE-C13046	0.30695	0.301331	0.306993	0.313755
DE-C15056	0.320338	0.315242	0.322082	0.33003
DE-EPA03-(	0.369036	0.392786	0.439021	0.487969
DE-EPA03-:	0.339241	0.333352	0.336148	0.343481
DE-P01092	0.338315	0.343437	0.371561	0.408564
DE-P01115	0.318499	0.316309	0.328005	0.335828
DE-P03043	0.318321	0.312413	0.32006	0.329146
DE-P04007	0.313922	0.3131	0.321247	0.327787
DE-P05013	0.312696	0.307475	0.312445	0.319875
DE-P05066	0.311769	0.30731	0.312731	0.316265
DE-P06021	0.336843	0.32849	0.334857	0.345479
DE-P06037	0.317619	0.314991	0.326102	0.3393
DE-P06061	0.337333	0.331616	0.341836	0.35473
DE-RA51	0.323136	0.334453	0.35637	0.37992
GS0140534	0.31295	0.312594	0.321917	0.328999
GS0140596	0.31253	0.308476	0.316249	0.323452
GS0140784	0.312693	0.308049	0.313597	0.321348
GS0140800	0.318185	0.321099	0.32762	0.334989
GS0140810	0.308651	0.308805	0.314533	0.320777
GS0140817	0.470829	0.5513	0.63621	0.698514
GS0141280	0.326588	0.317789	0.318405	0.321012
GS0146450	0.350938	0.369757	0.413459	0.460488
GS0146451	0.330167	0.353287	0.375246	0.398976
GS0146453	0.326541	0.333768	0.347625	0.365868
GS0146457	0.311076	0.307893	0.314296	0.32077

Name	eSEP_WAP	eSEP_WAP	eSEP_WAP	eSEP_WAPLS_C5
GS0146588	0.305357	0.301727	0.30623	0.312255
GS0146702	0.308893	0.308883	0.317221	0.325503
GS0146715	0.3121	0.310186	0.318334	0.329794
GS0146735	0.311637	0.314701	0.326116	0.34138
GS0147712	0.308531	0.307543	0.313828	0.321412
GS0148250	0.36306	0.37894	0.398167	0.416201
MVO14808	0.329446	0.319449	0.331025	0.33947
MVO15816	0.312603	0.307363	0.312093	0.320211
NJAN0118	0.327432	0.342508	0.366876	0.383223
NJAN0448	0.309886	0.308708	0.31491	0.321718
NJAN0451	0.325183	0.328185	0.336714	0.345255
NJAN0466	0.313082	0.310821	0.315086	0.321863
NJAN0470	0.312025	0.31194	0.317302	0.323173
NJAN0488	0.306386	0.306189	0.314846	0.323899
NJAN0489	0.31672	0.308525	0.310884	0.317046
NJAN0490	0.310889	0.309902	0.317938	0.325228
NJAN0673	0.324946	0.330854	0.344137	0.35211
NJAN0683	0.313514	0.308643	0.31226	0.319396
NJAN0694	0.337904	0.35113	0.378384	0.40954
NJSD48	0.426033	0.514699	0.545308	0.581689
NJSD91	0.450339	0.481913	0.565553	0.604018
NJSD94	0.312738	0.321666	0.330547	0.348294

Site 2	#	Code	Name	RMSE	R2	Ave_Bias	Max_Bias
1	1	Componen	WAPLS Cor	0.196469	0.70748	-0.0027	0.26444
2	2	Componen	WAPLS Cor	0.140487	0.850386	-0.00034	0.201518
3	3	Componen	WAPLS Cor	0.113303	0.902684	-0.0003	0.159209
4	4	Componen	WAPLS Cor	0.095805	0.93042	0.000323	0.139655
5	5	Componen	WAPLS Cor	0.081883	0.949173	0.000177	0.085915

Code	Name	Boot_R2	Boot_Ave_	Boot_Max_	RMSE_s1	RMSE_s2	RMSEP
Componen	WAPLS Cor	0.239888	0.025357	0.788631	0.112624	0.31798	0.337336
Componen	WAPLS Cor	0.327576	0.044242	0.796141	0.134615	0.301393	0.33009
Componen	WAPLS Cor	0.347457	0.044815	0.771526	0.161153	0.296849	0.337772
Componen	WAPLS Cor	0.334452	0.046016	0.722967	0.187396	0.301653	0.355122
Componen	WAPLS Cor	0.319666	0.048411	0.704688	0.209653	0.307381	0.372072

Code	Name	%Change	Rand. t-test
Componen	WAPLS Cor	...	...
Componen	WAPLS Cor	2.14808	0.069
Componen	WAPLS Cor	-2.32724	0.21
Componen	WAPLS Cor	-5.13677	0.736
Componen	WAPLS Cor	-4.77302	0.956

Site 2	#	Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5
1	1	S2-0	S2-0	2.33857	2.38869	2.37876	2.4458	2.55291
2	2	S2-10	S2-10	2.39895	2.43345	2.39362	2.43397	2.52654
3	3	S2-20	S2-20	2.25463	2.2382	2.18689	2.21006	2.29132
4	4	S2-30	S2-30	2.05183	2.01791	2.02111	2.03628	2.04798
5	5	S2-40	S2-40	2.15399	2.20241	2.27223	2.32449	2.36694
6	6	S2-50	S2-50	2.12295	2.14264	2.16532	2.17808	2.17372
7	7	S2-60	S2-60	2.12529	2.16296	2.19844	2.22635	2.2304
8	8	S2-70	S2-70	2.21825	2.16428	2.09009	2.11054	2.19117
9	9	S2-80	S2-80	2.27033	2.27679	2.24377	2.27406	2.36029
10	10	S2-90	S2-90	2.31552	2.30231	2.25251	2.26909	2.32152
11	11	S2-100	S2-100	2.26035	2.30707	2.34754	2.39916	2.48049
12	12	S2-110	S2-110	2.14365	2.10934	2.09156	2.08736	2.11767
13	13	S2-120	S2-120	2.31951	2.27494	2.2464	2.24837	2.28342
14	14	S2-130	S2-130	2.14532	2.13266	2.12505	2.13316	2.2277
15	15	S2-140	S2-140	2.28698	2.31353	2.3046	2.31792	2.41988
16	16	S2-150	S2-150	2.2302	2.23216	2.19631	2.21264	2.27493
17	17	S2-160	S2-160	2.24661	2.25251	2.29096	2.31325	2.40012
18	18	S2-170	S2-170	2.37125	2.35645	2.28069	2.27808	2.38557
19	19	S2-180	S2-180	2.01761	2.03296	1.99846	1.99149	2.03644
20	20	S2-190	S2-190	2.16376	2.19056	2.18494	2.17813	2.25223
21	21	S2-200	S2-200	2.23938	2.36828	2.52065	2.64556	2.73319
22	22	S2-210	S2-210	2.21181	2.24174	2.28769	2.35336	2.43616
23	23	S2-220	S2-220	2.2281	2.17112	2.1147	2.09689	2.09934
24	24	S2-230	S2-230	2.27975	2.2716	2.2432	2.25059	2.27404
25	25	S2-240	S2-240	2.30819	2.23231	2.24076	2.28291	2.32017
26	26	S2-250	S2-250	2.30802	2.27446	2.23966	2.28009	2.35583
27	27	S2-260	S2-260	2.50706	2.52046	2.44864	2.47169	2.55783

Name	WAPLS_C1_X	WAPLS_C2_X	WAPLS_C3_X	WAPLS_C4_X	WAPLS_C5_X
S2-0	2.19153	2.26852	2.30623	2.32477	2.31415
S2-10	2.24129	2.3026	2.31974	2.33135	2.31906
S2-20	2.13785	2.14833	2.14462	2.153	2.1485
S2-30	2.00178	1.98441	1.98989	1.99449	1.98321
S2-40	2.09954	2.14799	2.19625	2.22019	2.22562
S2-50	2.05836	2.0845	2.09946	2.08514	2.05645
S2-60	2.04068	2.07923	2.09996	2.09119	2.06442
S2-70	2.0914	2.05764	2.02297	2.01857	2.00983
S2-80	2.16293	2.18196	2.17237	2.17356	2.16402
S2-90	2.18035	2.17745	2.14688	2.1285	2.09968
S2-100	2.16169	2.21423	2.24722	2.26283	2.26093
S2-110	2.07054	2.05531	2.03438	2.01833	1.99809
S2-120	2.19464	2.17764	2.15788	2.15241	2.12862
S2-130	2.05395	2.06088	2.06059	2.07023	2.08239
S2-140	2.17309	2.22813	2.24947	2.28087	2.2986
S2-150	2.11084	2.13408	2.138	2.14383	2.13287
S2-160	2.1517	2.17725	2.2109	2.23061	2.24165
S2-170	2.21881	2.24915	2.2501	2.27132	2.28325
S2-180	1.97794	2.01812	2.03919	2.05845	2.07291
S2-190	2.09235	2.13111	2.13128	2.13401	2.13033
S2-200	2.13533	2.23222	2.319	2.3552	2.35945
S2-210	2.11564	2.16172	2.20058	2.21989	2.21718
S2-220	2.13007	2.10504	2.06584	2.02757	1.97654
S2-230	2.17007	2.18136	2.17255	2.16025	2.13523
S2-240	2.21021	2.1881	2.19564	2.21044	2.18801
S2-250	2.19553	2.1996	2.19998	2.22066	2.22176
S2-260	2.3325	2.37216	2.35829	2.3652	2.3537

Site 2	#	Code	Name	SEB_WAPLS_C1	SEB_WAPLS_C2	SEB_WAPLS_C3	SEB_WAPLS_C4
1	1	S2-0	S2-0	0.219474	0.24739	0.324585	0.420218
2	2	S2-10	S2-10	0.18329	0.199312	0.25927	0.336609
3	3	S2-20	S2-20	0.133694	0.138843	0.176698	0.226626
4	4	S2-30	S2-30	0.0880458	0.0967906	0.112387	0.13217
5	5	S2-40	S2-40	0.100594	0.129542	0.148873	0.166271
6	6	S2-50	S2-50	0.121491	0.176941	0.231729	0.284505
7	7	S2-60	S2-60	0.13949	0.200241	0.244143	0.276909
8	8	S2-70	S2-70	0.144046	0.182889	0.235225	0.290729
9	9	S2-80	S2-80	0.142091	0.160354	0.195427	0.238578
10	10	S2-90	S2-90	0.14133	0.189331	0.25241	0.318219
11	11	S2-100	S2-100	0.135642	0.164983	0.200254	0.24235
12	12	S2-110	S2-110	0.115174	0.158637	0.206302	0.251457
13	13	S2-120	S2-120	0.127899	0.158169	0.200708	0.251615
14	14	S2-130	S2-130	0.137377	0.169554	0.219025	0.267378
15	15	S2-140	S2-140	0.164442	0.164482	0.207337	0.257578
16	16	S2-150	S2-150	0.16358	0.179695	0.221478	0.274899
17	17	S2-160	S2-160	0.143748	0.147937	0.181063	0.214257
18	18	S2-170	S2-170	0.190401	0.181663	0.211239	0.267125
19	19	S2-180	S2-180	0.148855	0.161216	0.198051	0.248282
20	20	S2-190	S2-190	0.151781	0.166215	0.20981	0.260269
21	21	S2-200	S2-200	0.149208	0.220332	0.276318	0.320792
22	22	S2-210	S2-210	0.118645	0.16424	0.220748	0.27559
23	23	S2-220	S2-220	0.115655	0.179194	0.255473	0.338819
24	24	S2-230	S2-230	0.0881453	0.125248	0.166687	0.211117
25	25	S2-240	S2-240	0.100041	0.130718	0.169089	0.203975
26	26	S2-250	S2-250	0.129656	0.151369	0.207251	0.26213
27	27	S2-260	S2-260	0.144819	0.160442	0.210072	0.269107

Name	SEB_WAPLS_C5	eSEP_WAPLS_C1	eSEP_WAPLS_C2	eSEP_WAPLS_C3
S2-0	0.527837	0.386368	0.389922	0.439858
S2-10	0.426409	0.367024	0.361335	0.394133
S2-20	0.285002	0.344943	0.331836	0.345459
S2-30	0.159133	0.329945	0.316554	0.317412
S2-40	0.188816	0.333512	0.328053	0.332089
S2-50	0.343618	0.340399	0.349494	0.376587
S2-60	0.313315	0.347231	0.361849	0.384351
S2-70	0.348423	0.349086	0.352543	0.378748
S2-80	0.292878	0.348283	0.341396	0.355403
S2-90	0.383801	0.347974	0.355927	0.389654
S2-100	0.298199	0.345702	0.343595	0.35808
S2-110	0.297196	0.338196	0.340593	0.361497
S2-120	0.302167	0.342738	0.340375	0.358334
S2-130	0.317493	0.346387	0.345813	0.368906
S2-140	0.315387	0.357984	0.343354	0.362089
S2-150	0.33508	0.357589	0.350896	0.370367
S2-160	0.248039	0.348963	0.335743	0.347711
S2-170	0.33156	0.370627	0.351908	0.364337
S2-180	0.305304	0.351097	0.341802	0.356853
S2-190	0.314132	0.352348	0.344188	0.36351
S2-200	0.371723	0.351247	0.373342	0.40555
S2-210	0.334673	0.339394	0.343238	0.369932
S2-220	0.424375	0.33836	0.35064	0.391645
S2-230	0.261587	0.329971	0.326382	0.340447
S2-240	0.239868	0.333346	0.32852	0.341629
S2-250	0.317847	0.343398	0.337269	0.36204
S2-260	0.334775	0.349405	0.341437	0.363661

Name	eSEP_WAPLS_C4	eSEP_WAPLS_C5
S2-0	0.51728	0.610816
S2-10	0.451996	0.52565
S2-20	0.377298	0.419177
S2-30	0.329338	0.346131
S2-40	0.344443	0.360742
S2-50	0.414654	0.461039
S2-60	0.409479	0.438919
S2-70	0.418949	0.464631
S2-80	0.384596	0.424571
S2-90	0.438472	0.491718
S2-100	0.386947	0.428259
S2-110	0.392715	0.427562
S2-120	0.392816	0.431032
S2-130	0.403095	0.441911
S2-140	0.396662	0.440401
S2-150	0.408122	0.454711
S2-160	0.370001	0.394977
S2-170	0.402927	0.452123
S2-180	0.39069	0.433237
S2-190	0.398415	0.439502
S2-200	0.440343	0.48235
S2-210	0.408588	0.454411
S2-220	0.453644	0.524002
S2-230	0.368192	0.403622
S2-240	0.364143	0.389898
S2-250	0.399633	0.442166
S2-260	0.404244	0.454486

Site 2	#		Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
	1	1	ACislan	ACislan	20	12.6769	1.91939	0
	2	2	AHgraci	AHgraci	7	4.27955	1.79641	0
	3	3	ANbalti	ANbalti	9	8.14177	0.798403	0
	4	4	ANpseudo	ANpseudo	3	2.45963	1.1976	0
	5	5	ANsp1	ANsp1	2	1.99993	0.39604	0
	6	6	ASformos	ASformos	2	1.79905	0.396825	8
	7	7	ATnorman	ATnorman	24	11.2188	6.12648	0
	8	8	ATocto	ATocto	27	20.0248	3.94477	0
	9	9	AUambig	AUambig	24	14.4373	11.8343	19
	10	10	AUgranlt	AUgranlt	13	11.3858	2.17822	14
	11	11	AUgrnang	AUgrnang	2	1.30171	2.5641	5
	12	12	AUtenell	AUtenell	5	4.68725	1.78571	3
	13	13	AYsen	AYsen	25	19.4803	2.8	0
	14	14	BApardxa	BApardxa	21	11.9077	2.58964	26
	15	15	BMcircum	BMcircum	8	5.86724	1.19048	0
	16	16	CAaemul	CAaemul	7	4.94623	1.19284	0
	17	17	CAbacill	CAbacill	20	9.29215	6.13861	31
	18	18	CAlewisi	CAlewisi	2	1.16204	2.37624	0
	19	19	CCcfpel	CCcfpel	2	1.9999	0.198807	0
	20	20	Ccneod	Ccneod	3	2.99998	0.197239	0
	21	21	CCplacen	CCplacen	23	16.7823	1.79641	23
	22	22	CJpusill	CJpusill	4	2.98329	0.59761	0
	23	23	CMaffins	CMaffins	8	5.22634	0.988142	0
	24	24	CMexici	CMexici	2	1.59156	0.592885	0
	25	25	CMjanis	CMjanis	6	5.31109	0.399202	0
	26	26	CMmexica	CMmexica	2	1.99993	0.198413	0
	27	27	CPcrucic	CPcrucic	4	3.20336	0.6	6
	28	28	CRbelgic	CRbelgic	27	19.9602	5.4902	0
	29	29	CScflin	CScflin	27	19.5472	3.5503	0
	30	30	CSmargin	CSmargin	27	17.8678	5.29412	0
	31	31	Csspec1?	Csspec1?	23	17.6008	1.56863	0
	32	32	CVsp1	CVsp1	2	1.80287	0.397614	0
	33	33	CYatomus	CYatomus	27	11.2144	18.6408	6
	34	34	CYcaspia	CYcaspia	6	4.05318	1.39442	0
	35	35	CYcyclop	CYcyclop	22	12.3592	7.95229	0
	36	36	CYdistin	CYdistin	4	2.68892	1.17647	0
	37	37	CYmenegh	CYmenegh	26	16.9268	7.90514	38
	38	38	CYrossi	CYrossi	16	12.3958	1.94932	0
	39	39	CYsp2Coo	CYsp2Coo	10	5.49095	2.30326	0
	40	40	CYstriat	CYstriat	27	22.2315	12.3506	0

Site 2	#		Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
	41	41	CYstylor	CYstylor	20	14.2747	3.57853	0
	42	42	DAmonilf	DAmonilf	10	5.24883	1.59046	0
	43	43	DAvulg	DAvulg	2	1.99972	0.397614	6
	44	44	DCplacen	DCplacen	5	2.78555	0.994036	0
	45	45	DEkuetzi	DEkuetzi	12	5.54026	5.37849	7
	46	46	DHmin	DHmin	17	11.9585	1.76471	0
	47	47	DHsurirl	DHsurirl	10	7.23673	1.75439	0
	48	48	DPboldti	DPboldti	16	11.3393	0.996016	0
	49	49	DPbombus	DPbombus	9	6.11476	0.994036	0
	50	50	DPellipt	DPellipt	13	6.78341	2.7451	0
	51	51	DPpsudov	DPpsudov	7	4.41652	0.994036	0
	52	52	DPsmithi	DPsmithi	7	4.94422	0.968992	0
	53	53	ECminutu	ECminutu	3	2.67717	0.393701	30
	54	54	ECnicafe	ECnicafe	20	7.50123	6.78643	0
	55	55	ECSP1	ECSP1	2	1.37771	0.990099	0
	56	56	ECSP2	ECSP2	4	3.28576	0.587084	0
	57	57	ECtriang	ECtriang	2	1.92167	0.594059	0
	58	58	EPadnata	EPadnata	2	1.81019	0.383877	0
	59	59	EPfricke	EPfricke	2	1.99999	0.2	0
	60	60	EPsmith	EPsmith	2	1.99999	0.399202	0
	61	61	EPsorex	EPsorex	3	2.68391	0.387597	0
	62	62	EPturgid	EPturgid	22	12.9678	1.8	0
	63	63	EUrichbu	EUrichbu	3	2.79774	0.779727	0
	64	64	EUSP1	EUSP1	7	6.42637	0.6	0
	65	65	EUSP2	EUSP2	5	4.58091	0.4	0
	66	66	EUSP3	EUSP3	5	3.76727	1.19522	0
	67	67	FApygmae	FApygmae	17	5.79129	17.2277	0
	68	68	Fklewis	Fklewis	3	2.22774	1.58416	0
	69	69	FRcapuci	FRcapuci	2	1.54236	1.98413	21
	70	70	Frfamel	Frfamel	3	2.78095	0.396825	0
	71	71	FRtenera	FRtenera	2	2	0.196078	0
	72	72	FRvauche	FRvauche	16	8.73945	3.39321	41
	73	73	Fserifu	Fserifu	2	1.79618	0.399202	0
	74	74	FSvulgar	FSvulgar	8	6.0437	1.18812	36
	75	75	GEdecu	GEdecu	5	3.82788	0.798403	28
	76	76	GEkriege	GEkriege	15	8.16859	1.79283	0
	77	77	GOinnoce	GOinnoce	11	7.27447	1.38067	0
	78	78	GOkobaya	GOkobaya	2	1.5532	1.9802	33
	79	79	GOolivcm	GOolivcm	4	3.26922	0.996016	0
	80	80	GOSP1	GOSP1	3	2.99991	0.399202	0

Site 2	#	Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
81	81	GRcfmaci	GRcfmaci	3	2.99967	0.198807	0
82	82	GSsp1	GSsp1	4	3.26	0.59761	0
83	83	GSsp3	GSsp3	2	1.38745	1.9802	0
84	84	GYcfbalt	GYcfbalt	5	4.48948	0.399202	0
85	85	GYSP1	GYSP1	2	1.79246	0.394477	0
86	86	GYspence	GYspence	17	10.4736	1.76125	0
87	87	Havirga	Havirga	14	10.539	1.55039	0
88	88	HIcostu	HIcostu	14	8.49155	2.5641	0
89	89	HICoxiae	HICoxiae	22	10.9803	3.83877	0
90	90	HIhunga	HIhunga	3	2.57533	1.18812	0
91	91	KCcuspid	KCcuspid	7	4.18073	1.38614	0
92	92	Kchaloph	Kchaloph	2	1.99998	0.39604	0
93	93	Kvamoena	Kvamoena	16	12.4977	1.34357	0
94	94	Lphungar	Lphungar	10	8.00631	0.598802	0
95	95	LUSP1	LUSP1	4	3.5609	0.39604	0
96	96	Mamarty	Mamarty	6	4.21068	0.775194	0
97	97	MEvarian	MEvarian	6	5.08607	0.796813	41
98	98	MSsmithi	MSsmithi	5	4.1699	0.792079	0
99	99	MSSP1	MSSP1	5	4.4003	1.77515	0
100	100	Naabunda	Naabunda	24	19.1113	2.75591	0
101	101	NAantoni	NAantoni	9	5.90322	1.3834	13
102	102	Nabrach	Nabrach	2	1.3723	0.994036	0
103	103	NAcaprad	NAcaprad	16	8.29496	5.74257	15
104	104	NAcari	NAcari	24	12.8609	2.91262	0
105	105	NAgregar	NAgregar	7	5.65249	0.988142	50
106	106	Naheufler	Naheufler	6	4.58002	1.35922	0
107	107	NAlancel	NAlancel	15	8.15471	2.52427	28
108	108	NAoblong	NAoblong	7	4.79921	0.792079	0
109	109	Napatrick	Napatrick	12	10.2294	0.787402	0
110	110	NAperegr	NAperegr	27	16.6782	3.5503	5
111	111	NApermnt	NApermnt	22	13.3082	3.2	17
112	112	NAphylpt	NAphylpt	5	4.49347	0.598802	0
113	113	NAreichd	NAreichd	3	2.77533	0.396825	3
114	114	Nareinha	Nareinha	3	2.43987	1.38067	0
115	115	NAsalinm	NAsalinm	13	6.33251	2.9703	3
116	116	Naschweig	Naschweig	15	9.49788	1.78218	0
117	117	NASP1	NASP1	4	3.55278	0.396825	0
118	118	NASP10	NASP10	2	1.46648	0.798403	0
119	119	NASP5	NASP5	3	2.65869	0.399202	0
120	120	Nasubin	Nasubin	21	12.1063	4.38247	0

Site 2	#	Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
121	121	Nasubinfla	Nasubinfla	10	5.40872	2.59481	0
122	122	NAtripun	NAtripun	21	14.7291	2.39044	7
123	123	Navilaplanr	Navilaplanr	6	4.17274	1.9802	0
124	124	Nazostere	Nazostere	11	7.37546	2.56917	0
125	125	NIagnita	NIagnita	18	11.4681	2.37154	0
126	126	NIamphib	NIamphib	12	8.35447	1.5534	40
127	127	Niboreal	Niboreal	4	3.77587	0.397614	0
128	128	NIbrevis	NIbrevis	26	17.0415	10.2913	7
129	129	NIclausi	NIclausi	17	8.61721	2.94118	18
130	130	Nicolumbi	Nicolumbi	23	13.229	2.58964	0
131	131	NIcommun	NIcommun	6	3.59763	1.1811	0
132	132	Nidesert	Nidesert	4	3.5592	0.798403	0
133	133	NIdissip	NIdissip	4	3.01477	0.587084	44
134	134	NIfilifr	NIfilifr	10	6.5389	1.36452	11
135	135	NIfrustu	NIfrustu	3	2.78762	0.792079	34
136	136	Nigroefi	Nigroefi	3	2.99953	0.399202	0
137	137	NIincgnt	NIincgnt	5	2.85528	1.39165	0
138	138	NIincons	NIincons	11	7.06642	1.16505	28
139	139	NIlinear	NIlinear	7	5.77954	0.587084	34
140	140	Nimacile	Nimacile	19	13.3754	1.2	0
141	141	NImicroc	NImicroc	2	1.46489	0.793651	0
142	142	NInana	NInana	14	11.514	0.795229	10
143	143	NIpalea	NIpalea	25	18.8774	1.59681	50
144	144	Nipandur	Nipandur	8	7.15055	0.4	0
145	145	NIpermin	NIpermin	4	3.45819	0.986193	0
146	146	Niproxima	Niproxima	18	12.2973	1.79283	0
147	147	Nipunctata	Nipunctata	16	9.97932	2.95858	0
148	148	NIpusill	NIpusill	14	8.97283	2.78884	0
149	149	NIsigma	NIsigma	17	9.67079	2.99401	0
150	150	Nisigmafor	Nisigmafor	7	4.5395	0.996016	0
151	151	NISP1	NISP1	9	6.41354	1.39165	0
152	152	NISP4	NISP4	18	14.0129	0.994036	0
153	153	PAsulc	PAsulc	27	19.1064	27.4354	0
154	154	PCgastru	PCgastru	13	8.30787	1.4	0
155	155	Pdamericar	Pdamericar	17	13.7348	1.18343	0
156	156	PDbrevis	PDbrevis	3	2.45155	0.792079	6
157	157	Pdparasi	Pdparasi	4	3.59991	0.38835	14
158	158	PDSP1	PDSP1	23	12.6024	7.38523	0
159	159	PIbiceps	PIbiceps	9	6.91828	0.798403	0
160	160	PIboreal	PIboreal	2	1.99997	0.199601	0

Site 2	#	Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
161	161	PIdiverg	PIdiverg	15	11.0746	1.1976	0
162	162	PIdivtis	PIdivtis	5	3.78202	0.990099	0
163	163	PIignob	PIignob	2	1.62862	2.79441	0
164	164	PIinterr	PIinterr	3	2.41785	1.79641	13
165	165	Pimarchi	Pimarchi	15	8.9433	2.71318	0
166	166	PImicros	PImicros	10	6.55997	1.56863	20
167	167	PISP7	PISP7	2	1.99957	0.399202	0
168	168	PISP9	PISP9	2	1.69363	0.990099	0
169	169	PIviridi	PIviridi	18	10.8602	1.59681	10
170	170	Ptdelica	Ptdelica	2	1.99963	0.197239	0
171	171	PTfreq	PTfreq	18	12.8638	2.19561	52
172	172	PTlanceo	PTlanceo	5	4.16097	1.19284	39
173	173	RAamphic	RAamphic	27	19.3668	11.1332	0
174	174	RATen	RATen	17	13.1283	0.796813	0
175	175	REsinuta	REsinuta	7	5.50437	0.776699	20
176	176	ROabbre	ROabbre	7	6.99928	0.4	31
177	177	Rpacumin	Rpacumin	15	8.47248	2.58964	0
178	178	RPgibba	RPgibba	2	1.99998	0.394477	0
179	179	RPmuscul	RPmuscul	11	6.46181	2.54902	0
180	180	RXSP1	RXSP1	2	1.99997	0.398406	0
181	181	SAlepdub	SAlepdub	10	7.00416	0.793651	0
182	182	SFbacill	SFbacill	4	2.90416	0.795229	0
183	183	Sfhohnii	Sfhohnii	2	1.91665	0.598802	0
184	184	SFpupula	SFpupula	11	9.31918	0.788955	36
185	185	Sfrexii	Sfrexii	5	3.86063	0.779727	0
186	186	SKSP1	SKSP1	2	1.59717	1.18343	0
187	187	SOexiguf	SOexiguf	2	1.58699	1.18343	6
188	188	SRconstr	SRconstr	4	3.55586	0.4	8
189	189	Srellip	Srellip	22	11.6807	2.57426	0
190	190	SSagrest	SSagrest	3	2.77287	0.798403	0
191	191	SSCASP	SSCASP	3	2.66313	0.397614	0
192	192	SSkriege	SSkriege	4	3.45869	1.59681	10
193	193	Sssoodensi	Sssoodensi	3	2.55841	0.6	0
194	194	SSSP3	SSSP3	1	1	0.598802	0
195	195	SUbreb	SUbreb	11	5.83631	2.16963	0
196	196	Susplen	Susplen	13	6.24487	4.19162	0
197	197	SYulnram	SYulnram	2	1.79618	0.398406	0
198	198	SYulnram1	SYulnram1	3	3	0.199601	0
199	199	Tafascicu	Tafascicu	27	21.4278	4.97018	0
200	200	THcflin	THcflin	25	18.6071	3.32681	0

Site 2	#	Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
201	201	Thdecipien	Thdecipien	23	14.811	3.45489	0
202	202	THeccent	THeccent	26	18.2585	4.09357	0
203	203	Thferelinea	Thferelinea	10	6.60318	1.16279	0
204	204	Thoestrup	Thoestrup	16	8.31663	2.77778	0
205	205	THprskin	THprskin	17	9.24107	1.76471	0
206	206	THSp10Coc	THSp10Coc	21	17.4443	1.1976	0
207	207	THSp2-1Co	THSp2-1Co	25	17.3562	2.76134	0
208	208	Thtenera	Thtenera	11	5.64185	1.77515	0
209	209	TRaspe	TRaspe	2	1.79047	0.399202	0
210	210	TrSp1	TrSp1	3	2.66489	0.4	0
211	211	TrSp2	TrSp2	15	12.5107	0.595238	0
212	212	TYdebili	TYdebili	21	13.3344	2.71845	0
213	213	Tygracil	Tygracil	4	3.76323	0.399202	0
214	214	Tylevide	Tylevide	13	9.20157	1.72745	0
215	215	Tyscala	Tyscala	10	7.51018	1.19284	0
216	216	ULacus	ULacus	2	1.68568	0.998004	7
217	217	ULcfulna	ULcfulna	24	13.4739	3.79242	0

Name	N2_Moder	Max_Modern
ACislan	0	0
AHgraci	0	0
ANbalti	0	0
ANpseudo	0	0
ANsp1	0	0
ASformos	2.13651	54.8
ATnorman	0	0
ATocto	0	0
AUambig	3.41726	16.8333
AUgranlt	4.212	12.1054
AUgrnang	2.80077	20.7778
AUtenell	2.28782	4.5
AYsen	0	0
BApardxa	7.29571	15.3333
BMcircum	0	0
CAaemul	0	0
CAbacill	17.8249	1.5
CAlewisi	0	0
CCcfpel	0	0
Ccneod	0	0
CCplacen	3.74783	15.1667
CJpusill	0	0
CMaffins	0	0
CMexici	0	0
CMjanis	0	0
CMmexica	0	0
CPcrucic	2.37754	4.16667
CRbelgic	0	0
CScflin	0	0
CSmargin	0	0
Csspec1?	0	0
CVsp1	0	0
CYatomus	1.87271	10.1667
CYcaspia	0	0
CYcyclop	0	0
CYdistin	0	0
CYmenegh	3.9735	35
CYrossi	0	0
CYsp2Coo	0	0
CYstriat	0	0

Name	N2_Moder	Max_Modern
CYstylor	0	0
DAmonilf	0	0
DAvulg	2.20436	2.9654
DCplacen	0	0
DEkuetzi	3.16512	3.16667
DHmin	0	0
DHsurirl	0	0
DPboldti	0	0
DPbombus	0	0
DPellipt	0	0
DPpsudov	0	0
DPsmithi	0	0
ECminutu	6.60644	10.311
ECnicafe	0	0
ECSP1	0	0
ECSP2	0	0
ECtriang	0	0
EPadnata	0	0
EPfricke	0	0
EPsmith	0	0
EPsorex	0	0
EPturgid	0	0
EUrichbu	0	0
EUSP1	0	0
EUSP2	0	0
EUSP3	0	0
FApygmae	0	0
Fklewis	0	0
FRcapuci	10.7915	7.33333
Frfamel	0	0
FRtenera	0	0
FRvauche	13.042	11.9935
Fserifu	0	0
FSvulgar	16.1661	5.83333
GEdecu	7.15744	9.5
GEkriege	0	0
GOinnoce	0	0
GOkobaya	6.91109	25.9156
GOolivcm	0	0
GOSP1	0	0

Name	N2_Moder	Max_Modern
GRcfmaci	0	0
GSsp1	0	0
GSsp3	0	0
GYcfbalt	0	0
GYSP1	0	0
GYspence	0	0
Havirga	0	0
HIcostu	0	0
HICoxiae	0	0
HIhunga	0	0
KCcuspid	0	0
Kchaloph	0	0
Kvamoena	0	0
Lphungar	0	0
LUSP1	0	0
Mamarty	0	0
MEvarian	11.8581	11.591
MSsmithi	0	0
MSSP1	0	0
Naabunda	0	0
NAantoni	6.09492	1.4827
Nabrach	0	0
NAcaprad	4.37195	7.83333
NAcari	0	0
NAgregar	24.3249	28.6667
Naheufler	0	0
NAlancel	11.8749	6.3228
NAoblong	0	0
Napatrick	0	0
NAperegr	3.82448	1
NApermnt	6.04093	14.9918
NAphylpt	0	0
NAreichd	1.99546	2.43016
Nareinha	0	0
NAsalinm	1.20279	3.33333
Naschweig	0	0
NASP1	0	0
NASP10	0	0
NASP5	0	0
Nasubin	0	0

Name	N2_Moder	Max_Modern
Nasubinfla	0	0
NAtripun	3.60007	1.28
Navilaplanı	0	0
Nazostere	0	0
NIagnita	0	0
NIamphib	9.20402	11.5702
Niboreal	0	0
NIbrevis	2.76506	2.66667
NIclausi	3.73584	13.5
Nicolumbi	0	0
NIcommun	0	0
Nidesert	0	0
NIdissip	23.0175	4
NIfilifr	5.89981	1.33333
NIfrustu	8.22442	20.0658
Nigroefi	0	0
NIincgnt	0	0
NIincons	5.61381	40.3537
NIlinear	17.5899	2.31405
Nimacile	0	0
NImicroc	0	0
NInana	5.85114	1.83333
NIpalea	20.7304	17.8333
Nipandur	0	0
NIpermin	0	0
Niproxima	0	0
Nipunctata	0	0
NIpusill	0	0
NIsigma	0	0
Nisigmafor	0	0
NISP1	0	0
NISP4	0	0
PAsulc	0	0
PCgastru	0	0
Pdamericar	0	0
PDbrevis	4.38231	0.665557
Pdparasi	6.13104	2.13675
PDSP1	0	0
PIbiceps	0	0
PIboreal	0	0

Name	N2_Moder	Max_Modern
PIdiverg	0	0
PIdivtis	0	0
PIignob	0	0
PIinterr	6.60495	1.23153
Pimarchi	0	0
PImicros	14.6883	1.16667
PISP7	0	0
PISP9	0	0
PIviridi	7.57811	0.666667
Ptdelica	0	0
PTfreq	25.8108	8.05687
PTlanceo	12.7915	13.6667
RAamphic	0	0
RATen	0	0
REsinuta	5.88254	22.093
ROabbre	6.62016	44.3522
Rpacumin	0	0
RPgibba	0	0
RPmuscul	0	0
RXSP1	0	0
SAlepdub	0	0
SFbacill	0	0
Sfhohnii	0	0
SFpupula	18.1811	6.04134
Sfrexii	0	0
SKSP1	0	0
SOexiguf	1.39215	18.6667
SRconstr	5.8375	1.06838
Srellip	0	0
SSagrest	0	0
SSCASP	0	0
SSkriege	1.57444	12.8333
Sssoodensi	0	0
SSSP3	0	0
SUbreb	0	0
Susplen	0	0
SYulnram	0	0
SYulnram1	0	0
Tafascicu	0	0
THcflin	0	0

Name	N2_Moder	Max_Modern
Thdecipien	0	0
THeccent	0	0
Thferelinea	0	0
Thoestrup	0	0
THprskin	0	0
THSp10Coc	0	0
THSp2-1Co	0	0
Thtenera	0	0
TRaspe	0	0
TrSp1	0	0
TrSp2	0	0
TYdebili	0	0
Tygracil	0	0
Tylevide	0	0
Tyscala	0	0
ULacus	5.72619	0.630915
ULcfulna	0	0

Site 2	#		Code	Name	N_Fossil	N2_Fossil	Sum_Fossil	N_In_Mode
	1	1	S2-0	S2-0	79	16.3812	100.583	29
	2	2	S2-10	S2-10	92	23.329	97.8261	30
	3	3	S2-20	S2-20	79	27.4353	98.6056	28
	4	4	S2-30	S2-30	94	47.3071	97.4052	27
	5	5	S2-40	S2-40	102	50.3196	97.2277	33
	6	6	S2-50	S2-50	96	38.3137	99.6008	20
	7	7	S2-60	S2-60	86	20.4654	99.802	23
	8	8	S2-70	S2-70	80	20.2516	99.002	19
	9	9	S2-80	S2-80	89	20.4716	97.4806	21
	10	10	S2-90	S2-90	86	41.1409	100	18
	11	11	S2-100	S2-100	84	28.9915	98.6275	18
	12	12	S2-110	S2-110	102	37.9425	99.8028	25
	13	13	S2-120	S2-120	79	25.4153	99.4152	14
	14	14	S2-130	S2-130	82	34.257	99.4048	20
	15	15	S2-140	S2-140	72	28.689	99.6032	19
	16	16	S2-150	S2-150	78	33.2759	99.8081	19
	17	17	S2-160	S2-160	75	26.0619	100.394	22
	18	18	S2-170	S2-170	73	24.4286	99.6008	19
	19	19	S2-180	S2-180	86	36.0019	98.6	20
	20	20	S2-190	S2-190	85	28.6763	98.6193	19
	21	21	S2-200	S2-200	78	22.1789	99.6016	25
	22	22	S2-210	S2-210	91	22.7377	98.2283	24
	23	23	S2-220	S2-220	80	22.0333	98.2072	19
	24	24	S2-230	S2-230	93	21.0494	99.006	25
	25	25	S2-240	S2-240	75	11.3855	99.6078	14
	26	26	S2-250	S2-250	70	9.52457	99.6024	17
	27	27	S2-260	S2-260	78	12.6062	98.4	16

Name	Sum_In_Modern
S2-0	58.835
S2-10	50
S2-20	39.243
S2-30	36.3273
S2-40	37.0297
S2-50	26.5469
S2-60	26.9307
S2-70	20.9581
S2-80	16.6667
S2-90	25.636
S2-100	22.549
S2-110	30.1775
S2-120	14.23
S2-130	20.0397
S2-140	25.3968
S2-150	15.547
S2-160	35.503
S2-170	27.3453
S2-180	17.4
S2-190	14.5957
S2-200	24.9004
S2-210	22.6378
S2-220	17.7291
S2-230	17.0974
S2-240	12.549
S2-250	10.5368
S2-260	15

Site 3	#		Code	Name	Count	Max	N2	Beta_C1
	1	1	ACsubkra	ACsubkra	25	13.7931	11.0209	0.951488
	2	3	AEtuscul	AEtuscul	3	1.16667	2.71084	2.27948
	3	4	AHaffine	AHaffine	2	0.42735	1.66717	1.44337
	4	5	Ahdeflex	Ahdeflex	12	11.4444	2.54677	1.80015
	5	6	AHexigum	AHexigum	31	3.63036	12.7049	1.79963
	6	7	AHminuti	AHminuti	60	47.1667	26.6003	1.36796
	7	8	AHreimer	AHreimer	7	21.3938	1.76813	0.614389
	8	9	Ahrivula	Ahrivula	38	38.374	11.6488	0.652877
	9	10	AMcopula	AMcopula	15	1	9.87814	2.84314
	10	11	AMpedcls	AMpedcls	23	23.2673	6.93953	1.7389
	11	12	ASformos	ASformos	8	54.8	2.13651	2.1117
	12	14	AUambig	AUambig	19	16.8333	3.41726	2.07224
	13	16	AUdistns	AUdistns	3	2.83333	1.5817	2.04751
	14	17	AUgranlt	AUgranlt	14	12.1054	4.212	2.72861
	15	18	AUgrnang	AUgrnang	5	20.7778	2.80077	2.50597
	16	19	AUitalic	AUitalic	2	3.72473	1.0587	3.71318
	17	22	AUsubart	AUsubart	4	2	2.74051	2.47422
	18	23	AUtenell	AUtenell	3	4.5	2.28782	0.957054
	19	24	BApardxa	BApardxa	26	15.3333	7.29571	1.20774
	20	25	BRmicroc	BRmicroc	7	3.5	2.52737	0.632174
	21	26	CAbacill	CAbacill	31	1.5	17.8249	2.48798
	22	27	CAhyalin	CAhyalin	8	2.66223	4.43536	1.5296
	23	28	CBnavicu	CBnavicu	16	2.66667	4.65723	1.04799
	24	29	CCfluvtl	CCfluvtl	3	1.4975	1.45777	3.03273
	25	30	CCpedcls	CCpedcls	11	5.29801	4.00135	2.34496
	26	31	CCplacen	CCplacen	23	15.1667	3.74783	1.8428
	27	32	CCplaeug	CCplaeug	15	30.3987	4.19354	2.35431
	28	33	CCplalin	CCplalin	25	26.1589	4.68267	2.35482
	29	34	CCpselin	CCpselin	5	4.33333	2.19569	2.18568
	30	35	CEpulch	CEpulch	20	2.79605	7.22793	1.9019
	31	36	CMaera	CMaera	5	3.5	1.61835	4.14857
	32	37	CMheterp	CMheterp	3	1.16667	2.18182	1.69133
	33	38	CPcrucic	CPcrucic	6	4.16667	2.37754	3.672
	34	39	CSinvisi	CSinvisi	4	2.66667	1.35026	4.05194
	35	40	CStholif	CStholif	2	0.166667	1.99983	2.42098
	36	41	CYatomus	CYatomus	6	10.1667	1.87271	2.80167
	37	42	CYmenegh	CYmenegh	38	35	3.9735	3.08896
	38	43	DAvulg	DAvulg	6	2.9654	2.20436	2.32856
	39	44	DEkuetzi	DEkuetzi	7	3.16667	3.16512	1.97652
	40	45	DIconfer	DIconfer	17	5.63252	6.98176	2.9714

Site 3	#	Code	Name	Count	Max	N2	Beta_C1
41	46	DTpseuds	DTpseuds	19	14.1667	4.07859	1.43323
42	47	DTstelli	DTstelli	15	6.5	6.47571	1.88883
43	49	ECminutu	ECminutu	30	10.311	6.60644	0.325959
44	50	ECsilesi	ECsilesi	32	17.9868	5.47701	1.51771
45	51	Eolmini	Eolmini	54	45.3333	21.011	2.05137
46	52	EOsubmin	EOsubmin	14	3.62438	3.69545	2.80252
47	54	EUbilun	EUbilun	30	3.33333	18.1058	1.86351
48	55	EUcaroli	EUcaroli	3	7.5	1.15366	0.358785
49	57	EUexigua	EUexigua	21	10.4869	6.37561	1.8372
50	60	EUflexuo	EUflexuo	6	0.333333	5.55473	1.35789
51	61	EUformic	EUformic	7	3.49418	2.75976	2.04832
52	62	EUimplic	EUimplic	22	23.6667	4.04909	3.40503
53	63	EUincisa	EUincisa	13	2.44821	7.18252	1.4313
54	64	EUinterm	EUinterm	7	3.33333	1.81801	0.906682
55	65	EUmaior	EUmaior	2	1.33333	1.24615	1.3111
56	66	EUmeistr	EUmeistr	3	0.166667	2.99974	1.2941
57	67	EUmonodo	EUmonodo	4	3.33333	1.41701	2.92659
58	69	EUpectin	EUpectin	14	1.15321	8.32637	0.814035
59	70	EUpecund	EUpecund	6	1.31827	4.1809	1.72908
60	71	EUpirla	EUpirla	6	3.82696	2.93671	1.92222
61	72	EUrhombo	EUrhombo	7	3.33333	2.09616	0.694954
62	74	EUsoleir	EUsoleir	2	0.333333	1.85404	2.7522
63	75	EUsubarc	EUsubarc	2	2.5	1.07522	0.361633
64	76	EUtenell	EUtenell	12	5.34188	4.35083	2.21789
65	77	FGbicapi	FGbicapi	5	1.33333	2.19431	2.50782
66	78	FGstrang	FGstrang	5	2.83333	1.44185	0.567443
67	79	FGviresc	FGviresc	19	8.16667	3.86207	1.17201
68	81	FRcapfra	FRcapfra	5	2.82486	2.82118	1.37935
69	82	FRcapgra	FRcapgra	39	13.6667	10.6661	1.92056
70	83	FRcapuci	FRcapuci	21	7.33333	10.7915	2.31047
71	84	FRcroton	FRcroton	16	4.89642	6.40851	1.97632
72	85	FRmesole	FRmesole	14	32.8	1.41789	1.80252
73	87	FRvauche	FRvauche	41	11.9935	13.042	1.47932
74	88	Fscrassi	Fscrassi	20	1.41243	11.4212	1.89252
75	89	FSkramme	FSkramme	9	9.16667	1.78197	0.756274
76	90	FSvulgar	FSvulgar	36	5.83333	16.1661	1.58907
77	91	GEaccep	GEaccep	7	2.15947	3.06078	1.76284
78	92	GEdecu	GEdecu	28	9.5	7.15744	2.81432
79	93	GOangstt	GOangstt	20	6.5	5.43284	2.36606
80	95	GOgracil	GOgracil	29	2	17.2045	1.85714

Site 3	#	Code	Name	Count	Max	N2	Beta_C1
81	96	GOinsign	GOinsign	5	1	3.68725	2.5189
82	97	GOkobaya	GOkobaya	33	25.9156	6.91109	2.62957
83	98	GOlage	GOlage	2	0.198675	1.99825	2.96268
84	99	GOmicrop	GOmicrop	6	3.66667	2.19943	3.09494
85	100	GOminutm	GOminutm	21	9.80392	3.21097	1.95824
86	101	GOolihut	GOolihut	4	0.166113	3.99985	0.706496
87	103	GOpalius	GOpalius	9	4.25868	5.02155	1.39563
88	104	GOparvul	GOparvul	60	26.3333	25.088	1.94251
89	105	GOpatric	GOpatric	7	2.4983	3.33231	2.97252
90	106	GOpygm	GOpygm	9	4.7619	2.67394	1.12699
91	107	GYacumin	GYacumin	4	4.3193	1.21191	1.07788
92	108	HIcapita	HIcapita	29	1.83333	19.6256	2.62788
93	110	KBsubtil	KBsubtil	4	8.33333	1.17387	0.385497
94	111	KVclevei	KVclevei	11	3.79538	3.76134	1.69052
95	112	KVoblong	KVoblong	13	12.6456	4.93588	1.63621
96	113	LUgoepp2	LUgoepp2	9	4.93896	2.4838	3.25076
97	114	LUmutica	LUmutica	27	3	11.4199	2.48324
98	115	MDcircon	MDcircon	22	3.50109	9.22949	1.95358
99	116	MDcircul	MDcircul	21	1.94489	11.5069	1.72377
100	117	MEvarian	MEvarian	41	11.591	11.8581	1.61593
101	118	MYagres	MYagres	14	2.13675	4.18064	2.49826
102	119	MYatomus	MYatomus	11	14.6919	1.4785	3.30788
103	120	NAantoni	NAantoni	13	1.4827	6.09492	1.69817
104	121	NAcaprad	NAcaprad	15	7.83333	4.37195	1.76255
105	122	NAcrypto	NAcrypto	51	7.83333	25.8749	2.12979
106	123	NAcrytds	NAcrytds	7	3	3.76742	2.38433
107	124	NAcryten	NAcryten	29	3.06178	14.0051	1.92087
108	125	NAerifga	NAerifga	10	21.5	1.7858	2.66851
109	126	NAescamb	NAescamb	10	4.04593	3.35243	1.08298
110	127	NAgermii	NAgermii	33	8.15308	14.9159	2.06095
111	128	NAgregar	NAgregar	50	28.6667	24.3249	1.77801
112	129	NAhmberg	NAhmberg	6	2.16667	2.21866	2.45013
113	130	NAlancel	NAlancel	28	6.3228	11.8749	1.27757
114	131	NAlongcp	NAlongcp	24	6.89655	11.9541	2.25635
115	132	NAperegr	NAperegr	5	1	3.82448	1.72088
116	133	NApermnt	NApermnt	17	14.9918	6.04093	1.0706
117	134	NAreichd	NAreichd	3	2.43016	1.99546	2.95549
118	135	NArhynch	NArhynch	38	7.41325	18.9782	1.77331
119	136	NArostel	NArostel	41	7.33333	17.018	1.90751
120	137	NAsalinm	NAsalinm	3	3.33333	1.20279	2.84473

Site 3	#	Code	Name	Count	Max	N2	Beta_C1
121	138	NAsubmur	NAsubmur	8	2.33333	4.50081	2.20513
122	139	NAsymtrc	NAsymtrc	20	4.33333	9.80673	2.27698
123	140	NAtenell	NAtenell	26	4	15.2074	2.23152
124	141	NAtripun	NAtripun	7	1.28	3.60007	1.88587
125	142	NEalpinu	NEalpinu	15	1.97044	8.49417	2.10164
126	143	NIacidcn	NIacidcn	7	0.947867	4.42663	3.02606
127	144	NIamphib	NIamphib	40	11.5702	9.20402	2.5469
128	145	NIarchib	NIarchib	7	0.666667	5.0025	2.25927
129	146	NIbrevis	NIbrevis	7	2.66667	2.76506	2.57267
130	147	NIcapite	NIcapite	19	3	8.24322	2.64812
131	148	NIclausi	NIclausi	18	13.5	3.73584	2.67981
132	149	NIdissip	NIdissip	44	4	23.0175	1.48386
133	150	NIfilifr	NIfilifr	11	1.33333	5.89981	1.54411
134	151	NIfontic	NIfontic	27	8.49673	8.78608	2.0917
135	152	NIfrustu	NIfrustu	34	20.0658	8.22442	2.14348
136	154	NIgracil	NIgracil	13	1.16667	9.25279	2.18458
137	155	NIincons	NIincons	28	40.3537	5.61381	1.999
138	156	NIliebrt	NIliebrt	7	1.33111	4.13858	2.60965
139	157	NIlinear	NIlinear	34	2.31405	17.5899	1.94901
140	158	NInana	NInana	10	1.83333	5.85114	1.16605
141	159	NIpaldeb	NIpaldeb	12	8.16667	6.46824	2.25438
142	160	NIpalea	NIpalea	50	17.8333	20.7304	2.26239
143	161	NIpaleac	NIpaleac	4	0.396825	3.92257	1.51417
144	162	NIpsefon	NIpsefon	4	3.47003	3.22349	2.02976
145	163	NIrecta	NIrecta	18	1.72414	9.94139	2.6992
146	164	NIscalpe	NIscalpe	2	0.333333	1.8	2.21068
147	165	NIsociab	NIsociab	16	1.63666	11.5876	1.56971
148	166	NItubcla	NItubcla	29	9.23825	7.40674	1.37977
149	167	NUlapid	NUlapid	11	0.854701	7.66236	1.17849
150	168	Nuneglec	Nuneglec	6	1.65017	3.36897	0.913081
151	169	NUwell	NUwell	6	0.833333	4.6192	1.79732
152	170	PCclemen	PCclemen	11	3.82696	4.06866	2.22238
153	171	PDbrevis	PDbrevis	6	0.665557	4.38231	2.13414
154	172	Pdparasi	Pdparasi	14	2.13675	6.13104	1.46327
155	173	Plabauje	Plabauje	14	2.83912	4.26694	1.25403
156	174	PIinterr	PIinterr	13	1.23153	6.60495	2.20723
157	175	PImicros	PImicros	20	1.16667	14.6883	2.38638
158	176	PIobscur	PIobscur	4	1.66667	2.95918	2.0499
159	178	PIsubros	PIsubros	10	2.66667	5.37584	1.64354
160	179	PIviridi	PIviridi	10	0.666667	7.57811	1.39401

Site 3	#	Code	Name	Count	Max	N2	Beta_C1
161	180	PLconspi	PLconspi	17	12.3762	5.72662	1.78099
162	181	PSgridao	PSgridao	4	1.33333	2.19201	1.10056
163	182	PShelvet	PShelvet	7	4.5	2.48548	2.10238
164	183	PSsubato	PSsubato	21	5.33333	7.05848	2.15877
165	184	PSventra	PSventra	3	0.330033	2.67547	1.86625
166	185	PTellip	PTellip	4	2.83333	2.24267	2.32825
167	186	PTfreq	PTfreq	52	8.05687	25.8108	2.05812
168	187	PThauck	PThauck	2	20	1.01667	1.92054
169	188	PTlanceo	PTlanceo	39	13.6667	12.7915	2.24996
170	189	PTrostr	PTrostr	14	2.02407	7.57299	2.36535
171	190	REsinuta	REsinuta	20	22.093	5.88254	1.82527
172	191	ROabbre	ROabbre	31	44.3522	6.62016	1.95089
173	192	RSlinea	RSlinea	4	2.51504	1.59906	1.10728
174	193	SApinnat	SApinnat	15	1.80033	7.78639	2.2189
175	194	SFpupula	SFpupula	36	6.04134	18.1811	2.44966
176	195	SFseminu	SFseminu	29	16.9811	8.95169	2.98104
177	196	SOexiguf	SOexiguf	6	18.6667	1.39215	0.511817
178	197	SRconstr	SRconstr	8	1.06838	5.8375	2.4219
179	198	SRconven	SRconven	17	2.91902	9.12145	1.89668
180	199	SSanceps	SSanceps	16	5.5	3.42038	1.88167
181	200	SSkriege	SSkriege	10	12.8333	1.57444	2.32784
182	201	SSsmithi	SSsmithi	23	2.99501	12.1896	1.88913
183	202	SSthermc	SSthermc	13	2.21675	6.6155	2.49598
184	203	SThantzs	SThantzs	5	1	3.05633	2.67812
185	204	SUangust	SUangust	28	1.65289	16.3683	2.55102
186	205	Subrekut	Subrekut	15	1.66667	8.64014	1.78996
187	206	SYrumpen	SYrumpen	11	3.8	5.96705	1.39946
188	207	TAfenest	TAfenest	4	1.66667	2.57653	1.72049
189	208	TAfloccu	TAfloccu	19	8.16667	4.19915	1.18088
190	209	ULacus	ULacus	7	0.630915	5.72619	2.1341
191	210	ULdelica	ULdelica	4	1.16667	1.67465	1.21384
192	211	UlnaUlna	UlnaUlna	44	9.16667	13.6691	1.80599

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
ACsubkra	0.752842	0.422964	0.290028	0.222281	1.14918	0.93728	0.726077
AEtuscul	2.9105	3.67556	4.05653	4.2317	2.17313	2.65099	3.09261
AHaffine	0.69884	-0.06784	-0.83875	-1.89755	1.47411	0.930604	0.453948
Ahdeflex	1.64079	1.54508	1.42814	1.24422	1.55022	1.30097	1.10936
AHexigum	1.64969	1.37409	1.27965	1.35153	1.80432	1.72474	1.60335
AHminuti	1.29196	1.29052	1.23983	1.11982	1.44873	1.36454	1.34012
AHreimer	0.231315	0.347431	0.370515	0.179091	0.914372	0.531653	0.458798
Ahrivula	0.450502	0.461618	0.617268	0.744769	0.877438	0.645634	0.615612
AMcopula	3.09606	3.21672	3.28934	3.35841	2.59541	2.80743	2.9237
AMpedcls	1.92255	1.59575	1.50513	1.58354	1.80521	1.95715	1.83005
ASformos	1.93096	2.15866	1.89352	2.03849	1.9542	1.82773	1.86947
AUambig	2.09333	2.1867	2.17022	2.25608	2.06258	2.09102	2.13261
AUdistns	2.21582	2.41945	2.46399	2.6121	2.22501	2.45207	2.57846
AUgranlt	2.75645	2.86058	2.9073	2.99611	2.50587	2.53172	2.56884
AUgrnang	2.53429	2.77825	2.81484	2.96687	2.32715	2.33446	2.4904
AUitalic	4.40104	4.95954	5.25315	5.22539	3.10429	3.67933	4.09528
AUsubart	1.96235	1.01096	0.214707	-0.55795	2.32235	1.88857	1.26561
AUtenell	1.2993	1.39467	1.12917	1.22561	1.34777	1.61821	1.68023
BApardxa	0.590857	0.359539	0.326136	0.40127	1.35937	0.911309	0.748886
BRmicroc	1.00079	1.19215	1.01902	1.13553	0.961604	1.10732	1.10021
CAbacill	2.61662	2.65567	2.75099	2.88539	2.37775	2.48855	2.52254
CAhyalin	0.899402	0.513276	0.395835	0.529729	1.65164	1.19623	0.933559
CBnavicu	0.439984	0.288205	0.186549	-0.0469	1.2789	0.882137	0.779
CCfluvtl	3.54374	4.04576	4.47498	4.94606	2.84088	3.30683	3.6639
CCpedcls	3.09705	3.53016	3.86265	3.97025	2.1864	2.70932	3.05008
CCplacen	1.57486	1.25995	1.12379	1.22402	1.88635	1.75539	1.65981
CCplaeug	3.06512	3.17102	3.31868	3.38861	2.27185	2.7674	2.94115
CCplalin	2.7009	2.86542	2.92714	2.81227	2.25629	2.49066	2.62245
CCpselin	1.99578	1.78806	1.75669	1.98907	2.21959	2.16518	2.10587
CEpulch	1.7838	1.59021	1.42617	1.27958	1.88685	1.78836	1.67613
CMaera	4.62832	4.63763	4.59403	4.57888	2.88442	3.04176	3.01478
CMheterp	1.7968	1.93411	1.86678	1.87074	1.70628	1.81501	1.95764
CPcrucic	3.91457	3.73972	3.49515	3.15323	2.95354	3.04027	2.89902
CSinvisi	4.03605	3.52093	3.31288	3.48743	3.42414	3.45969	3.31692
CStholif	2.04904	1.53902	1.00557	0.18935	2.33973	2.1091	1.81985
CYatomus	2.90855	2.91459	3.07267	3.33994	2.45127	2.59756	2.65714
CYmenegh	3.06938	2.80019	2.72283	2.8712	2.65655	2.63732	2.54899
DAvulg	3.0332	3.45716	3.86776	4.27211	2.01873	2.45616	2.77188
DEkuetzi	2.50716	3.29821	3.73298	3.88716	1.88648	2.25713	2.71167
DIconfer	3.32284	3.68776	3.95504	4.10333	2.7958	3.13631	3.39437

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
DTpseuds	0.760203	0.480022	0.415629	0.563425	1.65438	1.22178	1.04342
DTstelli	1.91952	2.02887	1.82792	1.97213	1.86368	1.89864	1.92701
ECminutu	-0.21631	-0.4367	-0.45399	-0.4043	0.698867	0.256073	0.06503
ECsilesi	1.42309	1.23663	1.35294	1.77661	1.53353	1.475	1.4363
Eolmini	2.1487	2.10978	2.10361	2.10486	2.02226	2.09962	2.09508
EOsubmin	3.40473	3.55907	3.66371	3.68099	2.61636	3.02457	3.13758
EUbilun	1.75292	1.8724	1.96296	2.04729	1.84875	1.7841	1.85181
EUcaroli	1.13325	1.40689	1.08444	1.2094	0.825946	0.986265	0.806913
EUexigua	1.62724	1.91566	2.28034	2.68122	1.84019	1.69564	1.83318
EUflexuo	1.05804	0.99622	0.871578	0.72886	1.4287	1.20215	1.16131
EUformic	1.87146	2.01319	2.18664	2.32912	2.04922	1.97299	2.03768
EUimplic	3.81125	3.96731	4.05161	4.18313	2.82385	3.13256	3.28804
EUincisa	1.17914	0.90157	0.507494	0.122662	1.52891	1.3672	1.19589
EUinterm	1.61493	2.0124	1.91889	2.14349	1.46826	1.8798	2.02055
EUmaior	1.33635	1.62412	1.77389	1.98406	1.56464	1.60839	1.79564
EUmeistr	0.801843	0.814392	0.834231	0.656979	1.40979	1.03347	0.999228
EUmonodo	3.53277	4.39383	5.18686	5.95796	2.71956	3.26965	3.91622
EUpectin	0.66487	0.499548	0.334486	0.209128	1.00978	0.822083	0.620166
EUpecund	1.67323	1.62126	1.29766	1.09971	1.73034	1.71397	1.63044
EUpirla	1.86473	2.19214	2.54308	2.93316	2.05912	2.20981	2.50042
EUrhombo	1.08806	1.14175	0.792965	0.759785	1.09569	1.18807	1.02672
EUsoleir	3.30313	4.34149	5.34271	6.36427	2.49395	2.99049	3.76525
EUsubarc	1.21944	1.55785	1.27706	1.49071	0.935587	1.2423	1.19903
EUtenell	2.24282	2.45337	2.59946	2.62841	2.16777	2.23656	2.37418
FGbicapi	2.69323	2.75843	2.85383	3.08902	2.46613	2.68552	2.84782
FGstrang	1.21608	1.40266	1.0538	1.08475	1.12701	1.28261	1.1084
FGviresc	1.48189	1.55545	1.31105	1.27378	1.49174	1.64285	1.5831
FRcapfra	0.943741	0.542716	-0.03662	-0.52071	1.49102	1.16722	0.946633
FRcapgra	1.94735	2.11369	2.09641	2.01965	1.93604	1.98649	2.08135
FRcapuci	2.3822	2.62489	2.77935	2.81172	2.23002	2.3238	2.47939
FRcroton	1.7974	1.67952	1.53081	1.39798	2.00289	1.92345	1.8915
FRmesole	1.60887	1.93156	1.77727	2.04713	1.77746	1.5879	1.56271
FRvauche	1.43872	1.61786	1.78557	1.91233	1.55931	1.52583	1.61787
Fscrassi	1.70093	1.78743	1.86806	1.92626	1.88629	1.76406	1.81328
FSkramme	-0.02808	-0.02251	0.118616	0.195351	1.26231	0.874039	0.883269
FSvulgar	1.36564	1.47986	1.57967	1.58083	1.63566	1.4831	1.53545
GEaccep	2.04841	1.70041	1.47561	1.15744	1.80594	1.92488	1.77453
GEdecu	2.89719	2.80894	2.72996	2.61279	2.41676	2.44406	2.40276
GOangstt	2.81392	3.44226	3.78779	3.8482	2.26556	2.55211	2.85326
GOgracil	1.76414	1.83181	1.83874	1.84822	1.88132	1.853	1.89749

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
GOinsign	2.48132	2.47966	2.53896	2.65861	2.41336	2.37831	2.37103
GOkobaya	2.91829	3.05954	3.1168	3.14818	2.42203	2.63546	2.74075
GOlage	3.74381	4.50785	5.0677	5.3642	2.74776	3.28701	3.69566
GOmicrop	3.68881	4.41239	4.93472	5.25402	2.73663	3.17952	3.61495
GOminutm	2.4775	3.08802	3.67183	4.07746	1.87736	2.16839	2.52991
GOolihut	0.376342	-0.31629	-0.83288	-1.47752	0.917309	0.526205	0.058076
GOpalius	1.11461	1.1747	1.16308	0.989677	1.43429	1.18781	1.15866
GOparvul	1.73718	1.65032	1.57556	1.45822	1.9225	1.78248	1.71814
GOpatric	3.28457	3.61815	3.83125	3.89714	2.66246	2.87488	3.02876
GOpygm	1.08737	0.692517	0.389968	0.067215	1.39476	1.39803	1.25622
GYacumin	0.620275	0.686402	0.993836	1.50975	1.80014	1.56281	1.51165
HIcapita	2.75	2.84907	2.92807	2.98901	2.48123	2.60974	2.70178
KBsubtil	-0.69821	-0.88314	-0.86253	-0.92687	1.07503	0.340582	0.055811
KVclevei	1.76512	1.1747	0.883604	0.738255	1.71387	1.72811	1.43797
KVoblong	1.22437	1.14727	1.0999	0.933772	1.69405	1.37309	1.27331
LUgoepp2	3.55785	3.4682	3.33472	3.21209	2.7545	2.88518	2.79388
LUmutica	2.6115	2.89593	3.12221	3.24203	2.35321	2.48052	2.65618
MDcircon	2.09231	2.52263	2.83569	3.05515	1.89906	2.0277	2.30578
MDcircul	1.68449	1.89343	2.12234	2.43731	1.75916	1.74214	1.87693
MEvarian	1.35976	1.20186	1.12109	1.04895	1.71375	1.54867	1.4697
MYagres	2.59641	2.80695	2.94912	2.9415	2.41938	2.58225	2.78456
MYatomus	4.05784	4.52124	4.70074	4.54635	2.6912	3.09805	3.36793
NAantoni	1.89155	1.83735	1.87472	1.93353	1.66119	1.73068	1.71393
NAcaprad	1.93756	2.19993	2.17852	1.84683	1.76997	1.84663	1.94158
NAcrypto	2.09122	2.15746	2.17323	2.09556	2.0777	2.07411	2.11895
NAcrytds	2.25906	2.21838	2.28268	2.40474	2.24933	2.14401	2.09636
NAcryten	2.13945	2.4047	2.6548	2.89714	1.91695	2.08095	2.25332
NAerifga	2.46278	2.27501	2.16997	2.00709	2.4172	2.19903	1.97514
NAescamb	0.688037	0.522123	0.487742	0.464298	1.3003	0.958995	0.739019
NAgermii	1.73367	1.5566	1.51339	1.55823	1.99547	1.74963	1.62504
NAgregar	1.67126	1.48725	1.39471	1.29599	1.78963	1.70814	1.61326
NAhmberg	3.24629	4.28813	4.89553	5.12241	2.21991	2.70387	3.21898
NAlancel	0.963741	0.430581	0.095049	-0.1774	1.37925	1.1058	0.774042
NAlongcp	2.25795	2.55703	2.85224	3.078	2.16083	2.19261	2.39114
NAperegr	1.40209	1.1385	1.03133	1.055	1.66032	1.33249	1.0565
NApermnt	1.05437	1.16975	1.36327	1.46521	1.21305	1.1195	1.15209
NAreichd	3.32605	3.72456	3.98033	4.04411	2.44561	2.66983	2.87966
NArhynch	1.59217	1.71092	1.79603	1.7666	1.77689	1.659	1.71698
NArostel	1.72123	1.63379	1.63376	1.61497	1.87511	1.74279	1.70899
NAsalinm	3.04043	3.21796	3.52693	3.9906	2.63065	2.91176	3.09453

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
NAsubmur	1.89677	1.42957	1.02978	0.588436	2.24262	2.09031	1.85442
NAsymtrc	2.06214	1.9006	1.87861	1.97533	2.20415	2.04702	1.93841
NAtenell	2.10016	2.10255	2.18214	2.31461	2.19602	2.13684	2.15281
NAtripun	2.3563	2.76311	3.19889	3.61041	1.97702	2.28642	2.50883
NEalpinu	1.97418	1.99951	1.99588	1.86314	2.07275	2.01795	2.0524
NIacidcn	3.66517	4.35077	4.8804	5.302	2.80015	3.32973	3.82022
NIamphib	2.69726	2.75603	2.84812	2.97264	2.42797	2.57638	2.64168
NIarchib	2.50048	2.73271	2.83511	2.76475	2.10979	2.29908	2.46823
NIbrevis	2.56557	2.49555	2.45619	2.37709	2.40179	2.43003	2.39212
NIcapite	2.96655	3.58308	4.16271	4.74748	2.49983	2.79479	3.19891
NIclausi	2.68425	2.82748	3.02303	3.19212	2.52716	2.58628	2.70408
NIdissip	1.29815	1.2227	1.12502	0.936627	1.54167	1.37785	1.28766
NIfilifr	1.12702	1.11909	1.11355	0.907728	1.69291	1.42964	1.41245
NIfontic	2.57493	2.95667	3.35222	3.68637	2.03821	2.41486	2.72225
NIfrustu	2.40859	2.23898	2.07785	1.85126	2.09392	2.32712	2.30021
NIgracil	2.12489	2.0042	1.77123	1.49993	2.0778	2.00612	1.93224
NIincons	2.36932	2.30303	2.32925	2.37485	1.98876	2.31775	2.39875
NIliebrt	2.65481	2.71799	2.85596	3.11033	2.53017	2.62215	2.68533
NIlinear	2.06883	2.21709	2.33721	2.37425	1.91598	2.01733	2.12989
NInana	0.3167	-0.38551	-0.93973	-1.41169	1.38348	0.7812	0.332839
NIpaldeb	1.9374	1.6177	1.4389	1.37013	2.15791	1.92632	1.71188
NIpalea	2.18275	2.29376	2.41514	2.47076	2.21216	2.19055	2.26399
NIpaleac	1.33628	1.26679	1.24168	1.15072	1.65964	1.51689	1.41488
NIpsefon	2.0877	2.10158	1.9605	1.55559	1.94444	2.00381	2.04933
NIrecta	3.00676	3.53623	3.98425	4.34601	2.56272	2.83539	3.16056
NIscalpe	3.00353	4.10628	4.77474	5.09866	2.01175	2.50282	3.08174
NIsociab	1.22803	0.861666	0.59273	0.294991	1.69068	1.45277	1.2147
NItubcla	1.16724	1.20643	1.22614	1.15795	1.4893	1.31583	1.3079
NUlapid	0.757951	0.360395	0.11414	-0.16179	1.27042	0.920842	0.646384
Nuneglec	0.594237	-0.04777	-0.26783	-0.13546	1.06796	0.810395	0.483319
NUwell	1.56562	1.61783	1.71463	1.75487	1.74112	1.60274	1.68119
PCclemen	2.09833	2.2091	2.34646	2.44668	2.22176	2.20093	2.27615
PDbrevis	2.12813	2.03741	1.84693	1.5401	2.11881	2.18306	2.14285
Pdparasi	0.99031	0.678609	0.396278	0.066293	1.52434	1.18702	1.00304
PIabauje	0.846147	0.62312	0.349181	-0.07618	1.38784	1.11616	0.974161
PIinterr	2.13013	2.37204	2.61837	2.81415	2.09161	2.03057	2.18732
PImicros	2.3668	2.44862	2.49934	2.46866	2.27371	2.27667	2.30995
PIobscur	1.86041	1.97263	2.21689	2.6094	2.06304	1.93548	1.95908
PIsubros	1.21525	0.990664	0.844272	0.712664	1.7723	1.52915	1.41937
PIviridi	0.969697	0.888802	0.764364	0.539454	1.48437	1.18274	1.10025

Name	Beta_C2	Beta_C3	Beta_C4	Beta_C5	Beta_C1_X	Beta_C2_X	Beta_C3_X
PLconspi	1.97805	1.62006	1.5523	1.71557	1.80773	1.95722	1.81941
PSgridao	1.75639	2.10294	2.00589	2.18032	1.56474	2.00773	2.16432
PShelvet	2.5101	2.95111	3.05406	3.004	1.97895	2.21423	2.39941
PSsubato	2.28159	2.6551	2.94417	3.1514	2.06617	2.15507	2.34015
PSventra	1.28762	0.360994	-0.51686	-1.55772	1.96259	1.63345	1.17958
PTellip	3.07557	3.99849	4.48732	4.68843	2.13255	2.65851	3.18372
PTfreq	2.08385	1.92042	1.84115	1.79521	2.01334	2.01328	1.93003
PThauck	2.07529	2.10946	1.89251	1.75113	1.90796	2.04529	2.12521
PTlanceo	2.33654	2.33845	2.25815	2.1442	2.18832	2.26224	2.2622
PTrostr	2.60786	2.90777	3.15712	3.35795	2.22612	2.4394	2.66272
REsinuta	2.19716	2.10695	2.15181	2.25884	1.85021	2.10054	2.16456
ROabbre	2.46392	2.6798	2.83127	2.86546	1.89908	2.23411	2.35795
RSlinea	0.659839	0.679789	0.950194	1.46539	1.53878	1.25426	1.20433
SApinnat	1.8671	1.46074	1.10465	0.656148	2.13413	1.89116	1.64461
SFpupula	2.39851	2.34278	2.27623	2.19291	2.33578	2.31894	2.28356
SFseminu	3.11818	2.92727	2.73105	2.5294	2.71239	2.77783	2.63411
SOexiguf	1.18023	1.39522	1.07562	1.15959	1.13765	1.36931	1.27177
SRconstr	2.21772	2.03378	1.85307	1.52952	2.3624	2.25588	2.16365
SRconven	1.89388	1.79231	1.5519	1.3118	1.90728	1.93523	1.85994
SSanceps	1.92904	1.99497	1.91721	1.9226	1.88466	1.93332	1.9949
SSkriege	2.3441	2.08163	1.83016	1.65355	2.34318	2.49078	2.51182
SSsmithi	1.46541	1.15314	0.946325	0.753715	1.89502	1.58314	1.37748
SSthermc	2.59092	2.86424	3.03274	2.9491	2.39016	2.5229	2.73589
SThantzs	2.71236	2.72916	2.79599	2.99968	2.56256	2.59977	2.58689
SUangust	2.88465	3.30928	3.65795	3.92984	2.41618	2.70697	3.01197
Subrekut	2.02186	2.3327	2.67994	3.03845	1.77302	1.94324	2.17538
SYrumpen	1.0935	0.988922	0.62587	0.313896	1.53626	1.31015	1.18198
TAfenest	1.65886	1.60691	1.32064	1.20481	1.709	1.64164	1.58869
TAfloccu	1.54561	1.66537	1.41979	1.3799	1.4236	1.63344	1.61539
ULacus	2.02969	2.03563	2.02382	1.93225	2.02656	1.9426	1.91497
ULdelica	1.18285	1.3381	1.41446	1.50917	1.46901	1.49845	1.57602
UlnaUlna	1.72207	1.74077	1.69733	1.59919	1.84895	1.82639	1.8564

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
ACsubkra	0.620543	0.584814	0.329798	0.417369	0.501361	0.570776	0.645858
AEtuscul	3.25683	3.3207	0.287653	0.582154	0.894032	1.07008	1.12182
AHaffine	0.037543	-0.37653	0.411306	0.745142	1.05991	1.39326	1.7401
Ahdeflex	0.939836	0.792097	0.801408	1.06212	1.22132	1.3546	1.45673
AHexigum	1.57968	1.60958	0.208393	0.297271	0.387393	0.457881	0.515204
AHminuti	1.29261	1.24444	0.133333	0.178293	0.190015	0.195389	0.20312
AHreimer	0.394298	0.312428	0.414971	0.603306	0.823258	1.01009	1.1596
Ahrivula	0.669345	0.70932	0.301007	0.304403	0.304301	0.312564	0.34389
AMcopula	3.0163	3.05944	0.31706	0.38584	0.413339	0.44896	0.483064
AMpedcls	1.76633	1.77494	0.286831	0.312318	0.358233	0.372762	0.384488
ASformos	1.77058	1.80439	0.267713	0.328953	0.482669	0.537491	0.564427
AUambig	2.14151	2.16796	0.21632	0.238702	0.307046	0.34464	0.374715
AUdistns	2.60412	2.67275	0.641011	0.874968	0.927075	0.958104	0.937092
AUgranlt	2.56979	2.57348	0.546173	0.708934	0.744681	0.718992	0.681472
AUgrnang	2.5177	2.5693	0.302642	0.388075	0.386398	0.400802	0.394894
AUitalic	4.30769	4.37433	0.603878	0.839757	1.09338	1.30864	1.51325
AUsubart	0.723536	0.33028	0.77614	1.21648	1.55324	1.91185	2.20595
AUtenell	1.72083	1.92279	0.657201	0.845617	1.18538	1.55356	1.91005
BApardxa	0.736926	0.747975	0.233469	0.272709	0.310183	0.316062	0.301788
BRmicroc	1.05766	1.10617	0.291672	0.302785	0.375997	0.434584	0.498054
CAbacill	2.58636	2.63945	0.188019	0.257687	0.318043	0.377783	0.430331
CAhyalin	0.862938	0.899345	0.290413	0.407458	0.528134	0.662163	0.771135
CBnavicu	0.733476	0.636882	0.365182	0.517833	0.532395	0.507386	0.510089
CCfluvtl	3.90539	4.07203	0.389424	0.54153	0.754934	1.00341	1.21521
CCpedcls	3.31887	3.49097	0.55526	0.681965	0.698853	0.692903	0.736582
CCplacen	1.65437	1.69837	0.180676	0.324253	0.434764	0.460907	0.453143
CCplaeug	3.06583	3.15567	0.323577	0.335655	0.429011	0.576746	0.705103
CCplalin	2.65627	2.62769	0.386104	0.457865	0.399283	0.343545	0.317097
CCpselin	2.14183	2.21613	0.382492	0.586704	0.737257	0.763246	0.740815
CEpulch	1.55998	1.47012	0.312899	0.440522	0.497651	0.558687	0.614552
CMaera	3.0131	3.01747	1.30516	1.77383	1.88892	1.89457	1.88341
CMheterp	1.99366	2.08671	0.215756	0.316437	0.470682	0.607019	0.692365
CPcrucic	2.74622	2.57594	0.95799	1.32773	1.46854	1.60075	1.68433
CSinvisi	3.32705	3.36772	0.485093	0.440608	0.46601	0.51129	0.534126
CStholif	1.50278	1.10158	0.338248	0.467772	0.722462	1.02077	1.35038
CYatomus	2.77661	2.85194	0.675751	0.707439	0.755847	0.850701	0.986117
CYmenegh	2.56453	2.5947	0.567956	0.511374	0.40785	0.400407	0.43585
DAvulg	3.02171	3.21614	0.655533	1.01152	1.2965	1.53933	1.79987
DEkuetzi	2.93954	3.03016	0.421697	0.663781	0.842169	0.919522	0.951661
DIconfer	3.55578	3.60848	0.225697	0.307372	0.384124	0.463047	0.526188

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
DTpseuds	1.01321	1.04732	0.439376	0.578481	0.647723	0.650064	0.627391
DTstelli	1.89033	1.9649	0.302355	0.200215	0.24333	0.231562	0.259015
ECminutu	0.015747	0.000635	0.464442	0.638132	0.801625	0.922111	1.00921
ECsilesi	1.55222	1.71593	0.344019	0.409782	0.446948	0.488042	0.52343
Eolmini	2.08468	2.09385	0.125068	0.111666	0.115462	0.122896	0.127929
EOsubmin	3.13368	3.09452	0.288828	0.467365	0.655729	0.837097	1.00562
EUbilun	1.90905	1.95696	0.195449	0.242894	0.294542	0.330505	0.341336
EUcaroli	0.561075	0.504182	0.420981	0.650358	0.959378	1.23918	1.50402
EUexigua	2.03533	2.16697	0.272204	0.391328	0.486812	0.561517	0.619159
EUflexuo	1.10115	1.06584	0.183475	0.312737	0.453748	0.602666	0.718976
EUformic	2.11898	2.13686	0.676296	0.849366	0.843509	0.825489	0.85677
EUimplic	3.43213	3.53452	0.694234	0.769957	0.709031	0.669631	0.649314
EUincisa	1.01459	0.90673	0.19961	0.314129	0.455467	0.566652	0.630244
EUinterm	2.05812	2.13925	0.683901	0.517096	0.660234	0.785555	0.791436
EUmaior	1.93601	2.10613	0.271239	0.385357	0.604782	0.808376	0.965917
EUmeistr	1.03162	0.957411	0.740032	1.21026	1.55412	1.90279	2.17518
EUmonodo	4.48198	4.85267	0.235906	0.521451	0.965431	1.35758	1.66125
EUpectin	0.485137	0.425378	0.33292	0.451237	0.533483	0.616514	0.683065
EUpecund	1.47321	1.41427	0.410835	0.543658	0.628685	0.710827	0.751718
EUpirla	2.79901	3.00266	0.420758	0.734546	0.982432	1.18048	1.33439
EUrhombo	0.848902	0.807617	0.389812	0.257723	0.376505	0.495974	0.622117
EUsoleir	4.50114	5.01673	0.327123	0.661365	1.11429	1.5142	1.75929
EUsubarc	1.06502	1.14681	0.464711	0.352043	0.46183	0.567083	0.635449
EUtenell	2.48668	2.52882	0.278942	0.480141	0.665334	0.821694	0.918437
FGbicapi	2.98701	3.16639	0.249913	0.486779	0.845089	1.11007	1.32445
FGstrang	0.872858	0.774522	0.566249	0.42717	0.580426	0.743919	0.932631
FGviresc	1.48559	1.47391	0.431693	0.31782	0.35682	0.423587	0.465932
FRcapfra	0.677832	0.546088	0.26152	0.385991	0.541436	0.6789	0.754148
FRcapgra	2.07944	2.06943	0.243752	0.289905	0.31719	0.342159	0.356142
FRcapuci	2.57898	2.56429	0.178022	0.240939	0.329984	0.40235	0.455268
FRcroton	1.85567	1.81167	0.249252	0.373192	0.477388	0.567065	0.621673
FRmesole	1.44522	1.41111	0.18971	0.352979	0.470479	0.600795	0.744567
FRvauche	1.69782	1.74785	0.303575	0.375059	0.426176	0.469419	0.519675
Fscrassi	1.88547	1.91601	0.24166	0.315031	0.361413	0.411858	0.448507
FSkramme	0.996629	1.01719	0.688047	1.04577	1.15085	1.14665	1.16593
FSvulgar	1.58881	1.57705	0.223478	0.292138	0.328941	0.343305	0.371538
GEaccep	1.62641	1.48484	0.788152	1.17008	1.40721	1.60655	1.83474
GEdecu	2.38527	2.33319	0.557177	0.66086	0.665418	0.673275	0.690293
GOangstt	2.98549	2.98213	0.202694	0.397821	0.583097	0.679195	0.731517
GOgracil	1.91701	1.92501	0.163772	0.240911	0.312783	0.362543	0.396869

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
GOinsign	2.40266	2.4103	0.490324	0.597431	0.770157	0.999269	1.17555
GOkobaya	2.78912	2.82279	0.449185	0.508545	0.510571	0.53945	0.573973
GOlage	3.94839	4.06912	0.529048	0.842523	1.01062	1.16835	1.33943
GOmicrop	3.85924	3.93604	0.448533	0.716759	0.962214	1.15959	1.31006
GOminutm	2.83215	2.96637	0.270872	0.531594	0.784993	0.958225	1.04084
GOolihut	-0.33873	-0.7214	0.685928	1.00227	1.30986	1.59584	1.82562
GOpalius	1.11458	1.03115	0.427115	0.641794	0.861456	1.02842	1.13939
GOparvul	1.67866	1.63047	0.177263	0.221789	0.251156	0.271495	0.279468
GOpatric	3.09883	3.08519	0.49225	0.70935	0.841223	0.891039	0.896201
GOpygm	1.09247	0.956632	0.491182	0.799086	1.09131	1.32692	1.5021
GYacumin	1.58315	1.65457	0.869763	1.12229	1.12074	1.0171	0.894911
HIcapita	2.78415	2.8192	0.203618	0.252875	0.303301	0.352708	0.392861
KBsubtil	-0.0067	-0.12324	0.926756	1.21019	1.19478	1.20524	1.29799
KVclevei	1.23458	1.09129	0.376478	0.424106	0.450143	0.569534	0.763413
KVoblong	1.22773	1.11979	0.309747	0.45276	0.613898	0.727188	0.775442
LUgoepp2	2.68201	2.58914	0.705465	1.05	1.23385	1.36884	1.51458
LUmutica	2.76721	2.78155	0.210137	0.320115	0.420925	0.472151	0.522952
MDcircon	2.51172	2.64569	0.303485	0.420298	0.534026	0.662549	0.773951
MDcircul	2.02039	2.17113	0.241407	0.311458	0.390083	0.468715	0.540276
MEvarian	1.45726	1.45537	0.256378	0.379424	0.445943	0.493853	0.541948
MYagres	2.92102	2.94732	0.345526	0.590136	0.782647	0.926452	1.04983
MYatomus	3.44669	3.39093	0.711774	1.20298	1.48336	1.58829	1.61179
NAantoni	1.71312	1.71863	0.347789	0.516064	0.640843	0.781138	0.966853
NAcaprad	1.88246	1.75204	0.3838	0.616105	0.759886	0.833409	0.875077
NAcrypto	2.13145	2.09394	0.127067	0.156972	0.176596	0.208636	0.230291
NAcrytds	2.11041	2.10082	0.333811	0.475823	0.579533	0.687594	0.791839
NAcryten	2.40442	2.52329	0.205382	0.284993	0.298482	0.30795	0.335699
NAerifga	1.80902	1.6494	0.393489	0.614644	0.867716	1.11995	1.32137
NAescamb	0.595973	0.482921	0.383172	0.510157	0.59532	0.703284	0.822596
NAgermii	1.61309	1.62075	0.278364	0.32249	0.319915	0.330307	0.3469
NAgregar	1.55189	1.50294	0.166118	0.191111	0.202705	0.2234	0.239162
NAhmberg	3.49484	3.59106	0.414331	0.775588	1.11687	1.33371	1.4737
NAlancel	0.528594	0.36911	0.206469	0.275121	0.335568	0.420483	0.496757
NAlongcp	2.59696	2.6991	0.192387	0.285098	0.354951	0.407881	0.45395
NAperegr	0.902109	0.807048	0.754605	1.09068	1.39749	1.70125	2.01494
NApermnt	1.22861	1.27698	0.38796	0.49219	0.567007	0.648775	0.701616
NAreichd	2.98587	2.99341	0.754485	1.02839	1.16471	1.17479	1.12383
NArhynch	1.76307	1.74467	0.215249	0.27206	0.301428	0.340004	0.375004
NArostel	1.7246	1.70738	0.176167	0.295044	0.428592	0.532522	0.59905
NAsalinm	3.24696	3.34157	0.275059	0.445827	0.663978	0.895996	1.12591

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
NAsubmur	1.62581	1.3713	0.351976	0.532258	0.639376	0.701141	0.783108
NAsymtrc	1.93743	1.96286	0.237497	0.333329	0.401374	0.452549	0.478485
NAtenell	2.21652	2.26948	0.19205	0.286947	0.360254	0.39701	0.416139
NAtripun	2.7182	2.87378	0.626291	0.82109	0.820549	0.80366	0.908149
NEalpinu	2.07473	2.03893	0.203442	0.317896	0.400555	0.467376	0.514604
NIacidcn	4.16894	4.37657	0.324592	0.439808	0.57437	0.739557	0.919129
NIamphib	2.70984	2.76697	0.17352	0.183578	0.222931	0.27191	0.31792
NIarchib	2.5098	2.456	0.474858	0.736273	0.971163	1.16252	1.32621
NIbrevis	2.29754	2.12685	0.263733	0.401573	0.588592	0.787776	1.01717
NIcapite	3.57829	3.85152	0.262531	0.408344	0.511316	0.586572	0.654767
NIclausi	2.83748	2.88885	0.202737	0.209151	0.259179	0.304941	0.342938
NIdissip	1.19113	1.09328	0.162908	0.24805	0.324856	0.372666	0.411338
NIfilifr	1.42001	1.30455	0.444106	0.610303	0.675764	0.741979	0.819948
NIfontic	2.96349	3.11573	0.149636	0.278758	0.385807	0.452672	0.497632
NIfrustu	2.18339	2.0735	0.201359	0.230293	0.287183	0.356268	0.423702
NIgracil	1.82343	1.72343	0.35224	0.404519	0.466275	0.504947	0.557236
NIincons	2.4328	2.48032	0.196423	0.318179	0.470349	0.614588	0.737008
NIliebrt	2.81617	2.95384	0.450001	0.665255	0.84624	0.99949	1.12972
NIlinear	2.20434	2.23514	0.240848	0.337834	0.394116	0.434428	0.472484
NInana	0.002099	-0.2189	0.280929	0.435272	0.596445	0.716469	0.815546
NIpaldeb	1.58342	1.51931	0.372728	0.492575	0.566114	0.631195	0.660079
NIpalea	2.34605	2.35234	0.198744	0.232016	0.223475	0.230633	0.248094
NIpaleac	1.36003	1.31016	0.832468	1.37226	1.79368	2.14761	2.45814
NIpsefon	1.97081	1.83472	0.73791	1.13024	1.41049	1.64635	1.90148
NIrecta	3.43069	3.58915	0.162337	0.218815	0.278642	0.338795	0.393708
NIscalpe	3.42034	3.57618	0.490251	0.879631	1.23766	1.43914	1.54156
NIsociab	1.01272	0.836372	0.464117	0.655677	0.798197	0.892886	0.966224
NItubcla	1.31176	1.30319	0.283717	0.329101	0.348037	0.376076	0.40421
NUlapid	0.471182	0.328126	0.351707	0.400312	0.477998	0.599038	0.739682
Nuneglec	0.356096	0.368453	0.22946	0.441461	0.562544	0.75371	0.942706
NUwell	1.79897	1.8243	0.493142	0.798812	1.06785	1.28346	1.45773
PCclemen	2.36129	2.37814	0.340941	0.453755	0.473652	0.523312	0.589763
PDbrevis	2.04714	1.90952	0.320737	0.494242	0.680124	0.886487	1.10272
Pdparasi	0.876446	0.768747	0.221145	0.292771	0.36388	0.444562	0.548344
PIabauje	0.849673	0.715652	0.504937	0.843441	1.15898	1.4634	1.73857
PIinterr	2.38206	2.48241	0.316884	0.396994	0.478395	0.553923	0.607852
PImicros	2.32551	2.26663	0.169689	0.216906	0.269411	0.338866	0.428004
PIobscur	2.04008	2.16292	0.780053	1.28571	1.59508	1.72541	1.72957
PIsubros	1.37071	1.30701	0.380327	0.691743	0.98985	1.214	1.36527
PIviridi	1.01576	0.907223	0.342813	0.506109	0.583435	0.663069	0.746469

Name	Beta_C4_X	Beta_C5_X	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C	SE_Beta_C
PLconspi	1.77013	1.80567	0.317157	0.370351	0.414153	0.442535	0.472971
PSgridao	2.20706	2.2883	0.696666	0.639277	0.870723	1.08091	1.21007
PShelvet	2.35269	2.2676	0.391909	0.828503	1.24398	1.52879	1.72634
PSsubato	2.48591	2.56774	0.353903	0.553222	0.717445	0.861564	0.953064
PSventra	0.682236	0.273986	0.498662	1.042	1.75293	2.40411	3.02868
PTellip	3.41936	3.51081	0.383947	0.694394	0.984099	1.13939	1.19236
PTfreq	1.88316	1.86992	0.163869	0.213241	0.271239	0.322612	0.369308
PThauck	2.06846	2.09811	0.081826	0.150161	0.280982	0.380977	0.427933
PTlanceo	2.2041	2.16954	0.181138	0.281726	0.401811	0.49717	0.578318
PTrostr	2.81812	2.8868	0.270712	0.390048	0.523075	0.680914	0.847376
REsinuta	2.23928	2.3357	0.351266	0.406296	0.499268	0.595464	0.709449
ROabbre	2.40363	2.42382	0.218797	0.288381	0.354376	0.377365	0.385705
RSlinea	1.32893	1.50603	0.626997	0.838142	0.87239	0.863953	0.841999
SApinnat	1.43123	1.20195	0.375212	0.514574	0.607785	0.724599	0.86148
SFpupula	2.24984	2.19617	0.220101	0.280385	0.342356	0.37346	0.398283
SFseminu	2.50438	2.41063	0.401159	0.497687	0.532759	0.567111	0.604947
SOexiguf	1.15151	1.20715	0.73785	0.778394	1.02741	1.29189	1.52144
SRconstr	2.08291	1.93408	0.261751	0.368203	0.43276	0.502017	0.555795
SRconven	1.74001	1.62996	0.263118	0.276184	0.334642	0.361778	0.3925
SSanceps	2.01166	2.09038	0.139503	0.234255	0.312647	0.365709	0.411318
SSkriege	2.46087	2.46835	0.203298	0.389268	0.653607	0.849157	0.977909
SSsmithi	1.26137	1.16696	0.213432	0.278638	0.328811	0.405932	0.472728
SSthermc	2.86479	2.82685	0.175623	0.237368	0.30419	0.378389	0.448545
SThantzs	2.61656	2.64806	0.351656	0.400922	0.493201	0.607827	0.716385
SUangust	3.24613	3.38829	0.162119	0.213455	0.262065	0.305378	0.34771
Subrekut	2.41541	2.62313	0.298562	0.446958	0.591959	0.743662	0.855369
SYrumpen	0.971434	0.839454	0.326828	0.452641	0.607774	0.748675	0.854887
TAfenest	1.46465	1.47191	0.178689	0.338422	0.41396	0.492342	0.545858
TAfloccu	1.51794	1.52789	0.343517	0.220784	0.256462	0.301677	0.316908
ULacus	1.89834	1.87219	0.550565	0.775048	0.953628	1.1076	1.26868
ULdelica	1.60125	1.64261	0.824459	1.29964	1.66509	1.95119	2.17086
UlnaUlna	1.84476	1.83897	0.197957	0.271607	0.339926	0.421791	0.474187

Name 5
ACsubkra
AEtuscul
AHaffine
Ahdeflex
AHexigum
AHminuti
AHreimer
Ahrivula
AMcopula
AMpedcls
ASformos
AUambig
AUdistns
AUgranlt
AUgrnang
AUitalic
AUsubart
AUtenell
BApardxa
BRmicroc
CAbacill
CAhyalin
CBnavicu
CCfluvtl
CCpedcls
CCplacen
CCplaeug
CCplalin
CCpselin
CEpulch
CMaera
CMheterp
CPcrucic
CSinvisi
CStholif
CYatomus
CYmenegh
DAvulg
DEkuetzi
DIconfer

Name 5
DTpseuds
DTstelli
ECminutu
ECsilesi
Eolmini
EOsubmin
EUbilun
EUcaroli
EUexigua
EUflexuo
EUformic
EUimplic
EUincisa
EUinterm
EUmaior
EUmeistr
EUmonodo
EUpectin
EUpecund
EUpirla
EUrhombo
EUsoleir
EUsubarc
EUtenell
FGbicapi
FGstrang
FGviresc
FRcapfra
FRcapgra
FRcapuci
FRcroton
FRmesole
FRvauche
Fscrassi
FSkramme
FSvulgar
GEaccep
GEdecu
GOangstt
GOgracil

Name 5
GOinsign
GOkobaya
GOlage
GOmicrop
GOminutm
GOolihut
GOpalius
GOparvul
GOpatric
GOpygm
GYacumin
HIcapita
KBsubtil
KVclevei
KVoblong
LUgoepp2
LUmutica
MDcircon
MDcircul
MEvarian
MYagres
MYatomus
NAantoni
NAcaprad
NAcrypto
NAcrytds
NAcryten
NAerifga
NAescamb
NAgermii
NAgregar
NAhmberg
NAlancel
NAlongcp
NAperegr
NApermnt
NAreichd
NArhynch
NArostel
NAsalinm

Name 5
NAsubmur
NAsymtrc
NAtenell
NAtripun
NEalpinu
NIacidcn
NIamphib
NIarchib
NIbrevis
NIcapite
NIclausi
NIdissip
NIfilifr
NIfontic
NIfrustu
NIgracil
NIincons
NIliebrt
NIlinear
NInana
NIpaldeb
NIpalea
NIpaleac
NIpsefon
NIrecta
NIscalpe
NIsociab
NItubcla
NUlapid
Nuneglec
NUwell
PCclemen
PDbrevis
Pdparasi
PIabauje
PIinterr
PImicros
PIobscur
PIsubros
PIviridi

Name 5
PLconspi
PSgridao
PShelvet
PSsubato
PSventra
PTellip
PTfreq
PThauck
PTlanceo
PTrostr
REsinuta
ROabbre
RSlinea
SApinnat
SFpupula
SFseminu
SOexiguf
SRconstr
SRconven
SSanceps
SSkriege
SSsmithi
SSthermc
SThantzs
SUangust
Subrekut
SYrumpen
TAfenest
TAfloccu
ULacus
ULdelica
UlnaUlna

Site 3	#		Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
	1	1	ACsubkra	ACsubkra	-0.92711	-0.19865	-0.32988	-0.13294
	2	3	AEtuscul	AEtuscul	0.400881	0.63102	0.765056	0.380975
	3	4	AHaffine	AHaffine	-0.43523	-0.74453	-0.76668	-0.77091
	4	5	Ahdeflex	Ahdeflex	-0.07845	-0.15935	-0.09571	-0.11694
	5	6	AHexigum	AHexigum	-0.07897	-0.14994	-0.2756	-0.09445
	6	7	AHminuti	AHminuti	-0.51064	-0.076	-0.00144	-0.05068
	7	8	AHreimer	AHreimer	-1.26421	-0.38307	0.116116	0.023085
	8	9	Ahrivula	Ahrivula	-1.22572	-0.20238	0.011117	0.15565
	9	10	AMcopula	AMcopula	0.964543	0.252915	0.120659	0.072621
	10	11	AMpedcls	AMpedcls	-0.1397	0.183649	-0.32679	-0.09062
	11	12	ASformos	ASformos	0.233104	-0.18075	0.227696	-0.26514
	12	14	AUambig	AUambig	0.193641	0.021089	0.093369	-0.01648
	13	16	AUdistns	AUdistns	0.168915	0.168309	0.203626	0.044539
	14	17	AUgranlt	AUgranlt	0.850007	0.027848	0.104127	0.046716
	15	18	AUgrnang	AUgrnang	0.627376	0.028318	0.243961	0.036591
	16	19	AUitalic	AUitalic	1.83458	0.687867	0.558496	0.293613
	17	22	AUsubart	AUsubart	0.595617	-0.51187	-0.95139	-0.79625
	18	23	AUtenell	AUtenell	-0.92155	0.342251	0.095365	-0.2655
	19	24	BApardxa	BApardxa	-0.67086	-0.61689	-0.23132	-0.0334
	20	25	BRmicroc	BRmicroc	-1.24642	0.368614	0.191365	-0.17314
	21	26	CAbacill	CAbacill	0.609378	0.128639	0.039049	0.095325
	22	27	CAhyalin	CAhyalin	-0.349	-0.6302	-0.38613	-0.11744
	23	28	CBnavicu	CBnavicu	-0.83061	-0.60801	-0.15178	-0.10166
	24	29	CCfluvtl	CCfluvtl	1.15413	0.511015	0.502014	0.429221
	25	30	CCpedcls	CCpedcls	0.466364	0.75209	0.433104	0.332494
	26	31	CCplacen	CCplacen	-0.0358	-0.26794	-0.31491	-0.13616
	27	32	CCplaeug	CCplaeug	0.475711	0.710811	0.105894	0.147669
	28	33	CCplalin	CCplalin	0.476224	0.346076	0.164516	0.06172
	29	34	CCpselin	CCpselin	0.307077	-0.1899	-0.20772	-0.03136
	30	35	CEpulch	CEpulch	0.023305	-0.11811	-0.19358	-0.16405
	31	36	CMaera	CMaera	2.26997	0.479752	0.009309	-0.0436
	32	37	CMheterp	CMheterp	-0.18727	0.105472	0.137308	-0.06733
	33	38	CPcrucic	CPcrucic	1.7934	0.242572	-0.17485	-0.24458
	34	39	CSinvisi	CSinvisi	2.17334	-0.0159	-0.51512	-0.20804
	35	40	CStholif	CStholif	0.542376	-0.37194	-0.51002	-0.53345
	36	41	CYatomus	CYatomus	0.923072	0.106883	0.006037	0.158079
	37	42	CYmenegh	CYmenegh	1.21036	-0.01959	-0.26918	-0.07736
	38	43	DAvulg	DAvulg	0.449956	0.704642	0.423965	0.410598
	39	44	DEkuetzi	DEkuetzi	0.097921	0.530638	0.791056	0.434768
	40	45	DIconfer	DIconfer	1.0928	0.351443	0.364921	0.267277

Site 3	#		Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
	41	46	DTpseuds	DTpseuds	-0.44537	-0.67303	-0.28018	-0.06439
	42	47	DTstelli	DTstelli	0.010233	0.030685	0.109354	-0.20095
	43	49	ECminutu	ECminutu	-1.55264	-0.54227	-0.22039	-0.01729
	44	50	ECsilesi	ECsilesi	-0.36089	-0.09462	-0.18646	0.116312
	45	51	Eolmini	Eolmini	0.172772	0.097325	-0.03891	-0.00618
	46	52	EOsubmin	EOsubmin	0.923926	0.602201	0.154347	0.104632
	47	54	EUbilun	EUbilun	-0.01509	-0.11059	0.119478	0.090568
	48	55	EUcaroli	EUcaroli	-1.51981	0.774469	0.273636	-0.32245
	49	57	EUexigua	EUexigua	-0.0414	-0.20995	0.288414	0.364683
	50	60	EUflexuo	EUflexuo	-0.52071	-0.29985	-0.06182	-0.12464
	51	61	EUformic	EUformic	0.16972	-0.17686	0.14173	0.173451
	52	62	EUimplic	EUimplic	1.52643	0.406223	0.156057	0.084301
	53	63	EUincisa	EUincisa	-0.4473	-0.25216	-0.27757	-0.39408
	54	64	EUinterm	EUinterm	-0.97192	0.708243	0.397475	-0.09351
	55	65	EUmaior	EUmaior	-0.5675	0.02525	0.28777	0.149771
	56	66	EUmeistr	EUmeistr	-0.5845	-0.49226	0.012549	0.019838
	57	67	EUmonodo	EUmonodo	1.04799	0.606177	0.861056	0.793031
	58	69	EUpectin	EUpectin	-1.06456	-0.14917	-0.16532	-0.16506
	59	70	EUpecund	EUpecund	-0.14952	-0.05585	-0.05197	-0.3236
	60	71	EUpirla	EUpirla	0.043618	-0.05748	0.327404	0.350939
	61	72	EUrhombo	EUrhombo	-1.18365	0.393101	0.053696	-0.34879
	62	74	EUsoleir	EUsoleir	0.873604	0.550924	1.03836	1.00122
	63	75	EUsubarc	EUsubarc	-1.51697	0.857806	0.338407	-0.28079
	64	76	EUtenell	EUtenell	0.339295	0.024924	0.210549	0.146097
	65	77	FGbicapi	FGbicapi	0.629221	0.185411	0.065201	0.095395
	66	78	FGstrang	FGstrang	-1.31116	0.648632	0.18658	-0.34886
	67	79	FGviresc	FGviresc	-0.70659	0.309882	0.073556	-0.2444
	68	81	FRcapfra	FRcapfra	-0.49925	-0.43561	-0.40103	-0.57934
	69	82	FRcapgra	FRcapgra	0.041964	0.026786	0.166337	-0.01728
	70	83	FRcapuci	FRcapuci	0.431867	0.071735	0.242684	0.154461
	71	84	FRcroton	FRcroton	0.097723	-0.17892	-0.11789	-0.14871
	72	85	FRmesole	FRmesole	-0.07608	-0.19365	0.322695	-0.15429
	73	87	FRvauche	FRvauche	-0.39928	-0.0406	0.17914	0.167713
	74	88	Fscrassi	Fscrassi	0.01392	-0.19159	0.0865	0.080628
	75	89	FSkramme	FSkramme	-1.12232	-0.78436	0.005578	0.141122
	76	90	FSvulgar	FSvulgar	-0.28953	-0.22342	0.114216	0.099805
	77	91	GEaccep	GEaccep	-0.11576	0.285565	-0.348	-0.2248
	78	92	GEdecu	GEdecu	0.935717	0.082873	-0.08825	-0.07898
	79	93	GOangstt	GOangstt	0.487464	0.447853	0.628346	0.345527
	80	95	GOgracil	GOgracil	-0.02146	-0.093	0.067669	0.006924

Site 3	#	Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
81	96	GOinsign	GOinsign	0.640297	-0.03758	-0.00166	0.059295
82	97	GOkobaya	GOkobaya	0.750966	0.288724	0.141246	0.057269
83	98	GOlage	GOlage	1.08408	0.781126	0.764039	0.559853
84	99	GOmicrop	GOmicrop	1.21634	0.593868	0.723585	0.522328
85	100	GOminutm	GOminutm	0.079643	0.519261	0.610519	0.583808
86	101	GOolihut	GOolihut	-1.1721	-0.33015	-0.69263	-0.51659
87	103	GOpalius	GOpalius	-0.48297	-0.28102	0.060087	-0.01162
88	104	GOparvul	GOparvul	0.063914	-0.20534	-0.08686	-0.07476
89	105	GOpatric	GOpatric	1.09392	0.312048	0.333586	0.213098
90	106	GOpygm	GOpygm	-0.75161	-0.03962	-0.39485	-0.30255
91	107	GYacumin	GYacumin	-0.80072	-0.4576	0.066127	0.307434
92	108	HIcapita	HIcapita	0.749285	0.122113	0.099077	0.079
93	110	KBsubtil	KBsubtil	-1.4931	-1.08371	-0.18493	0.020608
94	111	KVclevei	KVclevei	-0.18808	0.074598	-0.59041	-0.2911
95	112	KVoblong	KVoblong	-0.24239	-0.41183	-0.0771	-0.04737
96	113	LUgoepp2	LUgoepp2	1.37216	0.307094	-0.08965	-0.13348
97	114	LUmutica	LUmutica	0.60464	0.128258	0.28443	0.226287
98	115	MDcircon	MDcircon	0.074983	0.138726	0.430319	0.313067
99	116	MDcircul	MDcircul	-0.15483	-0.03928	0.208948	0.228905
100	117	MEvarian	MEvarian	-0.26267	-0.25617	-0.1579	-0.08077
101	118	MYagres	MYagres	0.619665	0.098151	0.210539	0.14217
102	119	MYatomus	MYatomus	1.42928	0.749955	0.463407	0.179499
103	120	NAantoni	NAantoni	-0.18043	0.193379	-0.05419	0.037371
104	121	NAcaprad	NAcaprad	-0.11605	0.175013	0.262367	-0.02141
105	122	NAcrypto	NAcrypto	0.251193	-0.03857	0.066235	0.015767
106	123	NAcrytds	NAcrytds	0.50573	-0.12527	-0.04068	0.064308
107	124	NAcryten	NAcryten	0.042269	0.218579	0.265256	0.250096
108	125	NAerifga	NAerifga	0.789907	-0.20573	-0.18777	-0.10503
109	126	NAescamb	NAescamb	-0.79562	-0.39494	-0.16591	-0.03438
110	127	NAgermii	NAgermii	0.182349	-0.32728	-0.17707	-0.0432
111	128	NAgregar	NAgregar	-0.10059	-0.10675	-0.18401	-0.09254
112	129	NAhmberg	NAhmberg	0.571531	0.796165	1.04183	0.607396
113	130	NAlancel	NAlancel	-0.60103	-0.31383	-0.53316	-0.33553
114	131	NAlongcp	NAlongcp	0.377748	0.001598	0.299082	0.295217
115	132	NAperegr	NAperegr	-0.15772	-0.31879	-0.26359	-0.10717
116	133	NApermnt	NApermnt	-0.808	-0.01623	0.115382	0.193521
117	134	NAreichd	NAreichd	1.07689	0.370556	0.39851	0.255773
118	135	NArhynch	NArhynch	-0.10529	-0.18113	0.118749	0.08511
119	136	NArostel	NArostel	0.028915	-0.18628	-0.08744	-3.48E-05
120	137	NAsalinm	NAsalinm	0.966126	0.195701	0.177534	0.30897

Site 3	#	Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
121	138	NAsubmur	NAsubmur	0.326528	-0.30836	-0.4672	-0.39979
122	139	NAsymtrc	NAsymtrc	0.398381	-0.21484	-0.16154	-0.02199
123	140	NAtenell	NAtenell	0.352918	-0.13136	0.002395	0.079587
124	141	NAtripun	NAtripun	0.007274	0.470427	0.406807	0.43578
125	142	NEalpinu	NEalpinu	0.223039	-0.12746	0.025328	-0.00363
126	143	NIacidcn	NIacidcn	1.14747	0.639105	0.685598	0.52963
127	144	NIamphib	NIamphib	0.6683	0.150365	0.058768	0.092085
128	145	NIarchib	NIarchib	0.380675	0.241202	0.232238	0.102398
129	146	NIbrevis	NIbrevis	0.694067	-0.0071	-0.07002	-0.03937
130	147	NIcapite	NIcapite	0.769517	0.31843	0.616529	0.579638
131	148	NIclausi	NIclausi	0.801208	0.004438	0.143237	0.195549
132	149	NIdissip	NIdissip	-0.39474	-0.18571	-0.07544	-0.09769
133	150	NIfilifr	NIfilifr	-0.33449	-0.41709	-0.00793	-0.00554
134	151	NIfontic	NIfontic	0.213099	0.48323	0.381746	0.395548
135	152	NIfrustu	NIfrustu	0.264876	0.265118	-0.16962	-0.16113
136	154	NIgracil	NIgracil	0.305977	-0.05969	-0.12068	-0.23297
137	155	NIincons	NIincons	0.1204	0.370323	-0.06629	0.026217
138	156	NIliebrt	NIliebrt	0.731053	0.045153	0.063181	0.137977
139	157	NIlinear	NIlinear	0.070406	0.119828	0.148254	0.120126
140	158	NInana	NInana	-0.71255	-0.84935	-0.70221	-0.55423
141	159	NIpaldeb	NIpaldeb	0.375776	-0.31698	-0.3197	-0.1788
142	160	NIpalea	NIpalea	0.383794	-0.07965	0.111017	0.121374
143	161	NIpaleac	NIpaleac	-0.36443	-0.17789	-0.06949	-0.02512
144	162	NIpsefon	NIpsefon	0.151156	0.057945	0.013877	-0.14108
145	163	NIrecta	NIrecta	0.8206	0.307564	0.529464	0.448022
146	164	NIscalpe	NIscalpe	0.332084	0.792845	1.10275	0.668466
147	165	NIsociab	NIsociab	-0.30889	-0.34169	-0.36636	-0.26894
148	166	NItubcla	NItubcla	-0.49883	-0.21253	0.03919	0.019713
149	167	NUlapid	NUlapid	-0.70011	-0.42053	-0.39756	-0.24626
150	168	Nuneglec	Nuneglec	-0.96552	-0.31884	-0.64201	-0.22006
151	169	NUwell	NUwell	-0.08128	-0.2317	0.052203	0.096808
152	170	PCclemen	PCclemen	0.343782	-0.12405	0.110765	0.13736
153	171	PDbrevis	PDbrevis	0.255539	-0.00601	-0.09072	-0.19049
154	172	Pdparasi	Pdparasi	-0.41533	-0.47296	-0.3117	-0.28233
155	173	Plabauje	Plabauje	-0.62457	-0.40788	-0.22303	-0.27394
156	174	PIinterr	PIinterr	0.328634	-0.0771	0.241913	0.246331
157	175	PImicros	PImicros	0.507783	-0.01958	0.081815	0.050726
158	176	PIobscur	PIobscur	0.171298	-0.18949	0.112217	0.244264
159	178	PIsubros	PIsubros	-0.23506	-0.4283	-0.22458	-0.14639
160	179	PIviridi	PIviridi	-0.48459	-0.42432	-0.0809	-0.12444

Site 3	#	Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
161	180	PLconspi	PLconspi	-0.09761	0.197062	-0.35799	-0.06776
162	181	PSgridao	PSgridao	-0.77804	0.655833	0.346549	-0.09705
163	182	PShelvet	PShelvet	0.223776	0.407722	0.441014	0.102947
164	183	PSsubato	PSsubato	0.280171	0.12282	0.373514	0.289065
165	184	PSventra	PSventra	-0.01235	-0.57864	-0.92662	-0.87786
166	185	PTellip	PTellip	0.449647	0.747325	0.922923	0.488826
167	186	PTfreq	PTfreq	0.179521	0.025728	-0.16343	-0.07927
168	187	PThauck	PThauck	0.041943	0.154747	0.034168	-0.21694
169	188	PTlanceo	PTlanceo	0.371357	0.08658	0.001916	-0.0803
170	189	PTrostr	PTrostr	0.486753	0.242505	0.299911	0.249354
171	190	REsinuta	REsinuta	-0.05333	0.371899	-0.09021	0.044859
172	191	ROabbre	ROabbre	0.072296	0.513027	0.215882	0.151465
173	192	RSlinea	RSlinea	-0.77132	-0.44744	0.01995	0.270405
174	193	SApinnat	SApinnat	0.340305	-0.35181	-0.40636	-0.35609
175	194	SFpupula	SFpupula	0.571061	-0.05115	-0.05573	-0.06655
176	195	SFseminu	SFseminu	1.10244	0.137141	-0.19091	-0.19622
177	196	SOexiguf	SOexiguf	-1.36678	0.668413	0.214989	-0.3196
178	197	SRconstr	SRconstr	0.543298	-0.20418	-0.18394	-0.18071
179	198	SRconven	SRconven	0.018079	-0.0028	-0.10157	-0.24041
180	199	SSanceps	SSanceps	0.003066	0.047371	0.065929	-0.07775
181	200	SSkriege	SSkriege	0.449244	0.016259	-0.26248	-0.25146
182	201	SSsmithi	SSsmithi	0.010529	-0.42372	-0.31226	-0.20682
183	202	SSthermc	SSthermc	0.617385	0.094935	0.27332	0.1685
184	203	SThantzs	SThantzs	0.799517	0.034241	0.0168	0.066837
185	204	SUangust	SUangust	0.672421	0.333626	0.424633	0.348674
186	205	Subrekut	Subrekut	-0.08864	0.231897	0.31084	0.347249
187	206	SYrumpen	SYrumpen	-0.47914	-0.30597	-0.10458	-0.36305
188	207	TAfenest	TAfenest	-0.15811	-0.06162	-0.05195	-0.28627
189	208	TAfloccu	TAfloccu	-0.69772	0.364725	0.119759	-0.24558
190	209	ULacus	ULacus	0.255501	-0.10441	0.005938	-0.01181
191	210	ULdelica	ULdelica	-0.66476	-0.03099	0.15525	0.076357
192	211	UlnaUlna	UlnaUlna	-0.07261	-0.08392	0.018694	-0.04343

Name	WAPLS_C5
ACsubkra	-0.06775
AEtuscul	0.175166
AHaffine	-1.0588
Ahdeflex	-0.18392
AHexigum	0.071881
AHminuti	-0.12002
AHreimer	-0.19143
Ahrivula	0.127501
AMcopula	0.069075
AMpedcls	0.078401
ASformos	0.144977
AUambig	0.085861
AUdistns	0.148111
AUgranlt	0.088808
AUgrnang	0.152026
AUitalic	-0.02776
AUsubart	-0.77266
AUtenell	0.096436
BApardxa	0.075134
BRmicroc	0.116518
CAbacill	0.134396
CAhyalin	0.133894
CBnavicu	-0.23345
CCfluvtl	0.471083
CCpedcls	0.1076
CCplacen	0.100228
CCplaeug	0.069926
CCplalin	-0.11486
CCpselin	0.232373
CEpulch	-0.14659
CMaera	-0.01515
CMheterp	0.003965
CPcrucic	-0.34192
CSinvisi	0.174548
CStholif	-0.81622
CYatomus	0.267272
CYmenegh	0.14837
DAvulg	0.404348
DEkuetzi	0.154174
DIconfer	0.148295

Name	WAPLS_C5
DTpseuds	0.147796
DTstelli	0.144209
ECminutu	0.049688
ECsilesi	0.423665
Eolmini	0.001255
EOsubmin	0.01729
EUbilun	0.084328
EUcaroli	0.12496
EUexigua	0.400876
EUflexuo	-0.14272
EUformic	0.142476
EUimplic	0.131526
EUincisa	-0.38483
EUinterm	0.224604
EUmaior	0.210172
EUmeistr	-0.17725
EUmonodo	0.771098
EUpectin	-0.12536
EUpecund	-0.19795
EUpirla	0.390084
EUrhombo	-0.03318
EUsoleir	1.02156
EUsubarc	0.21365
EUtenell	0.028949
FGbicapi	0.235195
FGstrang	0.03095
FGviresc	-0.03727
FRcapfra	-0.48409
FRcapgra	-0.07676
FRcapuci	0.03237
FRcroton	-0.13283
FRmesole	0.269856
FRvauche	0.126757
Fscrassi	0.058199
FSkramme	0.076734
FSvulgar	0.001163
GEaccep	-0.31817
GEdecu	-0.11718
GOangstt	0.060409
GOgracil	0.009486

Name	WAPLS_C5
GOinsign	0.119648
GOkobaya	0.031373
GOlage	0.296493
GOmicrop	0.319301
GOminutm	0.405632
GOolihut	-0.64464
GOpalius	-0.1734
GOparvul	-0.11733
GOpatric	0.065888
GOpygm	-0.32275
GYacumin	0.515917
HIcapita	0.060933
KBsubtil	-0.06434
KVclevei	-0.14535
KVoblong	-0.16613
LUgoepp2	-0.12263
LUmutica	0.119815
MDcircon	0.219454
MDcircul	0.314966
MEvarian	-0.07214
MYagres	-0.00763
MYatomus	-0.1544
NAantoni	0.058802
NAcaprad	-0.33169
NAcrypto	-0.07767
NAcrytds	0.122055
NAcryten	0.242337
NAerifga	-0.16289
NAescamb	-0.02344
NAgermii	0.044838
NAgregar	-0.09872
NAhmberg	0.226887
NAlancel	-0.27245
NAlongcp	0.225756
NAperegr	0.023671
NApermnt	0.101941
NAreichd	0.06378
NArhynch	-0.02943
NArostel	-0.01878
NAsalinm	0.463666

Name	WAPLS_C5
NAsubmur	-0.44134
NAsymtrc	0.096719
NAtenell	0.132474
NAtripun	0.411527
NEalpinu	-0.13274
NIacidcn	0.421607
NIamphib	0.124522
NIarchib	-0.07036
NIbrevis	-0.07909
NIcapite	0.58477
NIclausi	0.169088
NIdissip	-0.18839
NIfilifr	-0.20582
NIfontic	0.334146
NIfrustu	-0.22659
NIgracil	-0.2713
NIincons	0.045603
NIliebrt	0.254363
NIlinear	0.03704
NInana	-0.47196
NIpaldeb	-0.06878
NIpalea	0.055621
NIpaleac	-0.09096
NIpsefon	-0.40492
NIrecta	0.361765
NIscalpe	0.323919
NIsociab	-0.29774
NItubcla	-0.06819
NUlapid	-0.27593
Nuneglec	0.132366
NUwell	0.040239
PCclemen	0.100227
PDbrevis	-0.30683
Pdparasi	-0.32999
PIabauje	-0.42537
PIinterr	0.195776
PImicros	-0.03069
PIobscur	0.392505
PIsubros	-0.13161
PIviridi	-0.22491

Name	WAPLS_C5
PLconspi	0.163271
PSgridao	0.174435
PShelvet	-0.05005
PSsubato	0.20723
PSventra	-1.04086
PTellip	0.201114
PTfreq	-0.04594
PThauck	-0.14138
PTlanceo	-0.11395
PTrostr	0.200827
REsinuta	0.107031
ROabbre	0.034189
RSlinea	0.5152
SApinnat	-0.44851
SFpupula	-0.08332
SFseminu	-0.20165
SOexiguf	0.083973
SRconstr	-0.32355
SRconven	-0.2401
SSanceps	0.005385
SSkriege	-0.17662
SSsmithi	-0.19261
SSthermc	-0.08364
SThantzs	0.203684
SUangust	0.271888
Subrekut	0.358506
SYrumpen	-0.31197
TAfenest	-0.11583
TAfloccu	-0.03989
ULacus	-0.09158
ULdelica	0.094713
UlnaUlna	-0.09815

Site 3	#		Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
	1	1	BFBM0002	BFBM0002	0.064271	-0.01301	-0.00043	-0.0021
	2	2	BFBM0002	BFBM0002	0.042954	-0.03222	-0.00073	0.00197
	3	3	DE-101031	DE-101031	-0.0349	0.050457	-0.02021	-0.00133
	4	4	DE-103051	DE-103051	0.017307	0.072313	-0.00554	0.007864
	5	5	DE-105071	DE-105071	-0.05568	0.044435	0.011741	0.034891
	6	6	DE-105151	DE-105151	0.010457	0.06756	-0.01886	-0.00392
	7	7	DE-106141	DE-106141	-0.17497	-0.04566	-0.01795	0.002929
	8	8	DE-109081	DE-109081	-0.0422	-0.03258	0.001668	-0.00429
	9	9	DE-114021	DE-114021	-0.02784	0.030382	0.042629	0.022779
	10	10	DE-201161	DE-201161	-0.03545	-0.01784	0.012355	-0.01179
	11	11	DE-205241	DE-205241	-0.00979	-0.00063	0.01093	-0.0102
	12	12	DE-206461	DE-206461	-0.06153	-0.0054	0.013528	-0.00587
	13	13	DE-303021	DE-303021	-0.00978	0.016798	0.013711	-0.01997
	14	14	DE-C08014	DE-C08014	-0.10535	-0.0338	0.018755	0.012375
	15	15	DE-C08025	DE-C08025	0.078474	0.049816	0.015682	0.009986
	16	16	DE-C13046	DE-C13046	-0.01773	0.002259	0.003624	0.003315
	17	17	DE-C15056	DE-C15056	0.026925	0.004291	0.007738	0.008708
	18	18	DE-EPA03-(	DE-EPA03-(	0.017621	0.113313	-0.0252	0.003831
	19	19	DE-EPA03-1	DE-EPA03-1	-0.12679	-0.00623	-0.00159	0.014829
	20	20	DE-P01092	DE-P01092	-0.04904	0.023379	-0.05191	-0.01134
	21	21	DE-P01115	DE-P01115	0.027137	0.052281	-0.01369	-0.00867
	22	22	DE-P03043	DE-P03043	-0.08172	0.024315	-0.02465	-0.01257
	23	23	DE-P04007	DE-P04007	-0.13805	-0.0077	-0.00886	0.016342
	24	24	DE-P05013	DE-P05013	-0.10308	-0.01931	-0.00562	0.005308
	25	25	DE-P05066	DE-P05066	-0.05846	0.047405	-0.01577	0.008044
	26	26	DE-P06021	DE-P06021	-0.16853	-0.02191	-0.01506	0.009981
	27	27	DE-P06037	DE-P06037	-0.08743	0.027378	-0.00202	0.022209
	28	28	DE-P06061	DE-P06061	-0.04856	0.068265	0.018156	0.011185
	29	29	DE-RA51	DE-RA51	0.043438	0.013159	-0.00978	-0.01191
	30	30	GS0140534	GS0140534	0.018244	-0.04781	0.014189	0.020343
	31	31	GS0140596	GS0140596	0.045883	-0.01642	0.019712	0.020536
	32	32	GS0140784	GS0140784	0.042064	-0.00362	0.009288	0.01685
	33	33	GS0140800	GS0140800	-0.04856	-0.05109	-0.00685	0.006081
	34	34	GS0140810	GS0140810	-0.02179	-0.03656	0.000411	-0.00731
	35	35	GS0140817	GS0140817	-0.2269	0.123526	0.031044	-0.06176
	36	36	GS0141280	GS0141280	-0.00229	-0.01401	0.00396	0.003164
	37	37	GS0146450	GS0146450	0.103744	-0.03432	-0.00174	0.008439
	38	38	GS0146451	GS0146451	0.076025	-0.0077	0.007184	-0.00032
	39	39	GS0146453	GS0146453	-0.05316	-0.10093	0.003248	0.016
	40	40	GS0146457	GS0146457	0.040453	-0.01811	0.020683	0.025341

Site 3	#		Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4
	41	41	GS0146588	GS0146588	0.052906	0.001935	0.01504	0.016626
	42	42	GS0146702	GS0146702	0.023778	-0.02358	-0.02622	-0.01337
	43	43	GS0146715	GS0146715	0.114488	0.011537	0.014807	0.011833
	44	44	GS0146735	GS0146735	0.077218	-0.01135	-0.00939	0.003554
	45	45	GS0147712	GS0147712	0.060447	-0.00625	0.006855	0.007195
	46	46	GS0148250	GS0148250	0.224839	-0.01132	-0.03258	-0.01456
	47	47	MVO14808	MVO14808	0.046738	0.093135	0.011488	0.013572
	48	48	MVO15816	MVO15816	-0.12105	-0.02022	-0.00914	-0.00567
	49	49	NJAN0118	NJAN0118	0.144933	0.044517	-0.00531	-0.00789
	50	50	NJAN0448	NJAN0448	-0.02001	-0.09346	-0.0171	-0.00055
	51	51	NJAN0451	NJAN0451	0.005491	-0.0568	0.006843	0.014207
	52	52	NJAN0466	NJAN0466	0.058557	-0.01724	-0.02431	-0.02135
	53	53	NJAN0470	NJAN0470	0.027583	-0.03926	-0.02137	-0.01333
	54	54	NJAN0488	NJAN0488	0.072518	0.008957	0.016043	0.013252
	55	55	NJAN0489	NJAN0489	0.016312	-0.04202	-0.01141	-0.00385
	56	56	NJAN0490	NJAN0490	-0.002	-0.0583	-0.01853	-0.01539
	57	57	NJAN0673	NJAN0673	0.227307	0.030916	-0.00636	-0.00719
	58	58	NJAN0683	NJAN0683	0.061753	0.004836	0.005776	0.004694
	59	59	NJAN0694	NJAN0694	0.136148	-0.02115	-0.01517	-0.00204
	60	60	NJSD48	NJSD48	0.007124	-0.04888	0.044106	-0.05288
	61	61	NJSD91	NJSD91	0.062634	-0.04399	0.037671	-0.05073
	62	62	NJSD94	NJSD94	-0.01653	-0.01352	0.003965	-0.02736

Name	WAPLS_C5
BFBM0002	-0.0052
BFBM0002	-0.00723
DE-101031	0.003593
DE-103051	0.002873
DE-105071	0.017303
DE-105151	-0.0026
DE-106141	-4.96E-05
DE-109081	-0.01675
DE-114021	-0.00777
DE-201161	-0.02002
DE-205241	-0.00508
DE-206461	-0.01259
DE-303021	-0.01486
DE-C08014	-0.00821
DE-C08025	-0.00907
DE-C13046	-0.00341
DE-C15056	3.35E-05
DE-EPA03-(	0.009758
DE-EPA03-:	0.003151
DE-P01092	0.020611
DE-P01115	-0.00919
DE-P03043	-0.00671
DE-P04007	0.012723
DE-P05013	0.000956
DE-P05066	0.006886
DE-P06021	0.005193
DE-P06037	0.010939
DE-P06061	-0.00839
DE-RA51	-0.00762
GS0140534	0.00504
GS0140596	0.001391
GS0140784	0.007204
GS0140800	0.003105
GS0140810	-0.01017
GS0140817	0.006882
GS0141280	-0.00319
GS0146450	-0.00112
GS0146451	0.003333
GS0146453	-0.00057
GS0146457	0.006944

Name	WAPLS_C5
GS0146588	0.005682
GS0146702	0.001667
GS0146715	0.001276
GS0146735	0.002109
GS0147712	-0.0024
GS0148250	0.017438
MVO14808	-0.0056
MVO15816	-0.01028
NJAN0118	-0.00569
NJAN0448	0.008975
NJAN0451	0.006577
NJAN0466	-0.01482
NJAN0470	-0.00643
NJAN0488	0.003285
NJAN0489	-0.00114
NJAN0490	-0.01123
NJAN0673	-0.00152
NJAN0683	-0.00198
NJAN0694	0.00648
NJSD48	0.024101
NJSD91	0.02183
NJSD94	-0.00475

Site 3	#	Code	Name	N	N2	Obs_logTP	WAPLS_C1
1	1	BFBM0002	BFBM0002	73	21.5018	1.89927	2.1112
2	2	BFBM0002	BFBM0002	76	29.0046	1.85003	2.03405
3	3	DE-101031	DE-101031	40	10.6312	1.76343	1.75229
4	4	DE-103051	DE-103051	43	13.071	2.19312	1.94123
5	5	DE-105071	DE-105071	37	11.5604	1.98227	1.67708
6	6	DE-105151	DE-105151	43	5.05923	1.88081	1.91644
7	7	DE-106141	DE-106141	41	10.4789	0.954243	1.24538
8	8	DE-109081	DE-109081	39	13.2967	1.44716	1.72587
9	9	DE-114021	DE-114021	29	11.0285	2.10486	1.77785
10	10	DE-201161	DE-201161	43	11.1402	1.5887	1.7503
11	11	DE-205241	DE-205241	55	7.14324	1.88513	1.84318
12	12	DE-206461	DE-206461	41	3.68097	1.70137	1.65594
13	13	DE-303021	DE-303021	44	9.70492	1.89023	1.8432
14	14	DE-C08014	DE-C08014	39	9.7053	1.50515	1.49735
15	15	DE-C08025	DE-C08025	32	9.39783	2.35984	2.1626
16	16	DE-C13046	DE-C13046	33	5.36486	1.87506	1.81444
17	17	DE-C15056	DE-C15056	66	8.94258	2.2014	1.97604
18	18	DE-EPA03-(	DE-EPA03-(	27	5.80051	2.12385	1.94237
19	19	DE-EPA03-1	DE-EPA03-1	45	8.89291	1.49136	1.41974
20	20	DE-P01092	DE-P01092	28	7.64849	1.62325	1.70113
21	21	DE-P01115	DE-P01115	33	5.6095	2.01072	1.97681
22	22	DE-P03043	DE-P03043	34	7.33298	1.46982	1.58286
23	23	DE-P04007	DE-P04007	47	11.5386	1.51851	1.379
24	24	DE-P05013	DE-P05013	30	5.73563	1.36173	1.50556
25	25	DE-P05066	DE-P05066	35	10.7354	2.19033	1.66704
26	26	DE-P06021	DE-P06021	33	5.48478	1.09691	1.26869
27	27	DE-P06037	DE-P06037	43	10.0197	1.66276	1.56218
28	28	DE-P06061	DE-P06061	17	2.63418	2.03342	1.70287
29	29	DE-RA51	DE-RA51	40	3.7615	1.98453	2.0358
30	30	GS0140534	GS0140534	60	15.9442	2.02531	1.94463
31	31	GS0140596	GS0140596	52	18.3679	2.12385	2.04465
32	32	GS0140784	GS0140784	47	15.9145	2.17319	2.03083
33	33	GS0140800	GS0140800	76	17.1672	1.60206	1.70287
34	34	GS0140810	GS0140810	80	18.4439	1.51851	1.79974
35	35	GS0140817	GS0140817	40	11.3791	1.45025	1.05745
36	36	GS0141280	GS0141280	84	10.7954	1.86332	1.8703
37	37	GS0146450	GS0146450	70	10.4331	2.15534	2.25405
38	38	GS0146451	GS0146451	75	11.5273	2.17319	2.15374
39	39	GS0146453	GS0146453	50	11.9688	1.43297	1.6862
40	40	GS0146457	GS0146457	59	15.294	2.1959	2.025

Site 3	#		Code	Name	N	N2	Obs_logTP	WAPLS_C1
	41	41	GS0146588	GS0146588	74	27.4873	2.3483	2.07007
	42	42	GS0146702	GS0146702	65	15.7839	1.80618	1.96465
	43	43	GS0146715	GS0146715	106	20.2787	2.39094	2.29293
	44	44	GS0146735	GS0146735	62	8.38802	2.14922	2.15805
	45	45	GS0147712	GS0147712	85	20.855	2.02531	2.09736
	46	46	GS0148250	GS0148250	38	3.52771	2.52375	2.6923
	47	47	MVO14808	MVO14808	50	8.32464	2.32222	2.04774
	48	48	MVO15816	MVO15816	53	5.72001	1.17609	1.44053
	49	49	NJAN0118	NJAN0118	62	6.55446	2.50853	2.40312
	50	50	NJAN0448	NJAN0448	57	13.7634	1.49136	1.80619
	51	51	NJAN0451	NJAN0451	54	19.9752	1.81624	1.89847
	52	52	NJAN0466	NJAN0466	56	19.1145	1.65801	2.09052
	53	53	NJAN0470	NJAN0470	54	23.5841	1.79239	1.97842
	54	54	NJAN0488	NJAN0488	49	23.9572	2.30856	2.14104
	55	55	NJAN0489	NJAN0489	46	16.4275	1.72835	1.93763
	56	56	NJAN0490	NJAN0490	50	9.46827	1.53148	1.87137
	57	57	NJAN0673	NJAN0673	43	8.74419	2.7478	2.70123
	58	58	NJAN0683	NJAN0683	58	20.3886	2.20003	2.10209
	59	59	NJAN0694	NJAN0694	38	14.5687	2.29336	2.37132
	60	60	NJSD48	NJSD48	29	3.85871	1.86233	1.90438
	61	61	NJSD91	NJSD91	30	2.78735	2.01703	2.10527
	62	62	NJSD94	NJSD94	80	26.8904	1.70329	1.81877

Name	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5	WAPLS_C1	WAPLS_C2	WAPLS_C3
BFBM0002	2.07072	2.06875	2.06149	2.0338	2.08835	2.09306	2.12814
BFBM0002	1.93377	1.93041	1.93721	1.89872	2.019	1.98912	1.99875
DE-101031	1.90932	1.81582	1.81123	1.83037	1.8179	1.92768	1.92641
DE-103051	2.16629	2.14064	2.16777	2.18307	1.82359	1.96206	1.97519
DE-105071	1.81537	1.8697	1.99006	2.08223	1.64577	1.68037	1.69856
DE-105151	2.1267	2.03943	2.02592	2.01207	1.94022	2.18066	2.29108
DE-106141	1.10328	1.02024	1.03035	1.03008	1.52795	1.40646	1.34537
DE-109081	1.62448	1.6322	1.6174	1.52816	1.86675	1.86755	1.91813
DE-114021	1.87241	2.06965	2.14823	2.10685	1.69258	1.64651	1.67104
DE-201161	1.69477	1.75194	1.71127	1.60464	1.86304	1.86388	1.90551
DE-205241	1.84123	1.8918	1.85663	1.82958	1.85396	1.84586	1.84164
DE-206461	1.63913	1.70173	1.68149	1.61443	1.72183	1.69017	1.69934
DE-303021	1.89547	1.95892	1.89004	1.8109	1.84709	1.861	1.91584
DE-C08014	1.39216	1.47894	1.52163	1.4779	1.72616	1.57674	1.49087
DE-C08025	2.31764	2.3902	2.42464	2.37632	1.84864	1.82646	1.83607
DE-C13046	1.82147	1.83824	1.84967	1.83148	1.81347	1.80571	1.81145
DE-C15056	1.9894	2.0252	2.05524	2.05542	1.894	1.88649	1.88519
DE-EPA03-(	2.29502	2.17843	2.19165	2.24363	1.74179	2.07501	2.19084
DE-EPA03-1	1.40035	1.393	1.44415	1.46094	1.50217	1.44582	1.40927
DE-P01092	1.77388	1.53368	1.49456	1.60435	1.91546	2.01987	1.96391
DE-P01115	2.13952	2.07618	2.04627	1.9973	1.95233	2.08407	2.09815
DE-P03043	1.65853	1.54449	1.50112	1.46538	1.75717	1.83253	1.85135
DE-P04007	1.35504	1.31402	1.37039	1.43817	1.52726	1.45434	1.41874
DE-P05013	1.44545	1.41946	1.43777	1.44286	1.61305	1.55468	1.5328
DE-P05066	1.81458	1.74161	1.76936	1.80604	1.6472	1.69627	1.66432
DE-P06021	1.20049	1.13081	1.16524	1.1929	1.5078	1.41037	1.36449
DE-P06037	1.64739	1.63805	1.71466	1.77293	1.6516	1.67167	1.66042
DE-P06061	1.91532	1.99933	2.03791	1.99322	1.61944	1.68273	1.68432
DE-RA51	2.07675	2.03149	1.99039	1.94978	2.03623	2.13006	2.20892
GS0140534	1.79582	1.86148	1.93165	1.9585	1.87987	1.76702	1.75486
GS0140596	1.99355	2.08476	2.1556	2.16301	1.95305	1.91317	1.95048
GS0140784	2.01958	2.06256	2.12068	2.15905	1.92645	1.87778	1.86466
GS0140800	1.54387	1.51219	1.53316	1.5497	1.87636	1.78664	1.7375
GS0140810	1.68597	1.68787	1.66265	1.60845	1.94163	1.90031	1.92458
GS0140817	1.44189	1.58554	1.37251	1.40917	1.78584	1.59028	1.48743
GS0141280	1.8267	1.84502	1.85593	1.83891	1.90055	1.84528	1.82859
GS0146450	2.14722	2.13919	2.16829	2.16234	2.01743	1.89321	1.79824
GS0146451	2.12979	2.16303	2.16193	2.17969	1.82373	1.72009	1.72183
GS0146453	1.3721	1.38713	1.44232	1.43928	2.06828	1.97263	1.94122
GS0146457	1.96865	2.06435	2.15176	2.18875	1.92773	1.85918	1.89174

Name	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5	WAPLS_C1	WAPLS_C2	WAPLS_C3
GS0146588	2.07609	2.14568	2.20303	2.23329	1.98092	1.96962	1.99211
GS0146702	1.89128	1.76994	1.72383	1.73271	2.02285	2.03025	2.00682
GS0146715	2.32884	2.39735	2.43816	2.44496	1.9883	1.96393	1.98554
GS0146735	2.12272	2.07929	2.09155	2.10278	2.01965	1.99438	1.97718
GS0147712	2.07791	2.10963	2.13445	2.12168	2.04383	2.05234	2.08975
GS0148250	2.65707	2.50631	2.45608	2.54897	2.02779	2.07267	2.13111
MVO14808	2.3376	2.39075	2.43757	2.40775	1.82041	1.98986	2.09552
MVO15816	1.37761	1.3353	1.31575	1.26098	1.5697	1.50941	1.49343
NJAN0118	2.54166	2.51709	2.48987	2.45959	1.98829	2.00215	1.99665
NJAN0448	1.51532	1.43621	1.43432	1.48212	2.00322	1.86032	1.81161
NJAN0451	1.72171	1.75338	1.80238	1.83742	1.97185	1.86432	1.84111
NJAN0466	2.03687	1.92439	1.85074	1.77181	2.10196	2.10471	2.09082
NJAN0470	1.85625	1.75738	1.71141	1.67714	1.96428	1.89066	1.83804
NJAN0488	2.16892	2.24315	2.28886	2.30636	1.97099	1.95466	1.97104
NJAN0489	1.80687	1.75406	1.74076	1.73471	1.94592	1.86529	1.84453
NJAN0490	1.68992	1.60419	1.5511	1.49126	1.93896	1.84505	1.80627
NJAN0673	2.79744	2.76801	2.74322	2.7351	1.95435	1.94072	1.9793
NJAN0683	2.11714	2.14386	2.16005	2.14949	2.01013	2.01405	2.0344
NJAN0694	2.3055	2.23531	2.22827	2.26279	2.07519	2.04694	2.02577
NJSD48	1.75227	1.95635	1.77396	1.90234	1.77337	1.52547	1.45372
NJSD91	1.96837	2.14268	1.96768	2.08397	1.79137	1.75884	1.63516
NJSD94	1.77668	1.79503	1.70067	1.67538	1.89689	1.91088	1.94383

Name	WAPLS_C4	WAPLS_C5_X
BFBM0002	2.15623	2.1569
BFBM0002	2.02307	2.01317
DE-101031	1.91614	1.93803
DE-103051	1.98376	1.99006
DE-105071	1.75196	1.80286
DE-105151	2.37022	2.42976
DE-106141	1.33222	1.32938
DE-109081	1.95443	1.96468
DE-114021	1.67106	1.64967
DE-201161	1.91481	1.89614
DE-205241	1.81332	1.79235
DE-206461	1.67593	1.64921
DE-303021	1.92177	1.91426
DE-C08014	1.44433	1.42187
DE-C08025	1.84765	1.84915
DE-C13046	1.80723	1.79569
DE-C15056	1.87982	1.86454
DE-EPA03-(	2.32249	2.43461
DE-EPA03-1	1.40453	1.38573
DE-P01092	1.93614	1.93691
DE-P01115	2.0848	2.06471
DE-P03043	1.86518	1.88558
DE-P04007	1.40863	1.40507
DE-P05013	1.53117	1.53586
DE-P05066	1.65389	1.64995
DE-P06021	1.36734	1.38613
DE-P06037	1.70142	1.74053
DE-P06061	1.67164	1.65252
DE-RA51	2.24513	2.25716
GS0140534	1.76627	1.74573
GS0140596	1.99003	1.9871
GS0140784	1.87381	1.87
GS0140800	1.71137	1.67576
GS0140810	1.96427	1.96435
GS0140817	1.40252	1.35948
GS0141280	1.83629	1.84245
GS0146450	1.74398	1.68094
GS0146451	1.69979	1.68534
GS0146453	1.92964	1.88819
GS0146457	1.92133	1.92188

Name	WAPLS_C4	WAPLS_C5_X
GS0146588	2.01843	2.01597
GS0146702	1.98177	1.95393
GS0146715	2.02501	2.05076
GS0146735	1.95924	1.92681
GS0147712	2.11877	2.11484
GS0148250	2.16474	2.15576
MVO14808	2.18491	2.22271
MVO15816	1.48155	1.46691
NJAN0118	1.97779	1.94815
NJAN0448	1.80247	1.79421
NJAN0451	1.844	1.84056
NJAN0466	2.08147	2.07338
NJAN0470	1.8026	1.77105
NJAN0488	1.97992	1.97882
NJAN0489	1.84833	1.84418
NJAN0490	1.78472	1.75674
NJAN0673	2.02991	2.04878
NJAN0683	2.04387	2.03665
NJAN0694	2.00599	1.97758
NJSD48	1.26529	1.19178
NJSD91	1.58587	1.61359
NJSD94	1.94358	1.95191

Site 3	#		Code	Name	Obs_logTP	WAPLS_C1	WAPLS_C2	WAPLS_C3
	1	1	BFBM0002	BFBM0002	1.89927	0.211925	0.171445	0.169474
	2	2	BFBM0002	BFBM0002	1.85003	0.184018	0.083739	0.080379
	3	3	DE-101031	DE-101031	1.76343	-0.01114	0.145891	0.052395
	4	4	DE-103051	DE-103051	2.19312	-0.25189	-0.02684	-0.05248
	5	5	DE-105071	DE-105071	1.98227	-0.30519	-0.1669	-0.11257
	6	6	DE-105151	DE-105151	1.88081	0.035628	0.245887	0.158619
	7	7	DE-106141	DE-106141	0.954243	0.291139	0.149038	0.066001
	8	8	DE-109081	DE-109081	1.44716	0.278711	0.17732	0.18504
	9	9	DE-114021	DE-114021	2.10486	-0.327	-0.23245	-0.0352
	10	10	DE-201161	DE-201161	1.5887	0.161604	0.106075	0.163243
	11	11	DE-205241	DE-205241	1.88513	-0.04195	-0.0439	0.006669
	12	12	DE-206461	DE-206461	1.70137	-0.04543	-0.06224	0.000358
	13	13	DE-303021	DE-303021	1.89023	-0.04704	0.005243	0.068686
	14	14	DE-C08014	DE-C08014	1.50515	-0.0078	-0.11299	-0.02621
	15	15	DE-C08025	DE-C08025	2.35984	-0.19724	-0.0422	0.030362
	16	16	DE-C13046	DE-C13046	1.87506	-0.06062	-0.05359	-0.03682
	17	17	DE-C15056	DE-C15056	2.2014	-0.22536	-0.212	-0.1762
	18	18	DE-EPA03-(	DE-EPA03-(	2.12385	-0.18148	0.171168	0.054583
	19	19	DE-EPA03-1	DE-EPA03-1	1.49136	-0.07163	-0.09101	-0.09836
	20	20	DE-P01092	DE-P01092	1.62325	0.077876	0.150635	-0.08957
	21	21	DE-P01115	DE-P01115	2.01072	-0.03392	0.128792	0.065461
	22	22	DE-P03043	DE-P03043	1.46982	0.113038	0.18871	0.074665
	23	23	DE-P04007	DE-P04007	1.51851	-0.13952	-0.16348	-0.20449
	24	24	DE-P05013	DE-P05013	1.36173	0.14383	0.083723	0.057731
	25	25	DE-P05066	DE-P05066	2.19033	-0.52329	-0.37576	-0.44872
	26	26	DE-P06021	DE-P06021	1.09691	0.171781	0.103579	0.0339
	27	27	DE-P06037	DE-P06037	1.66276	-0.10057	-0.01537	-0.0247
	28	28	DE-P06061	DE-P06061	2.03342	-0.33056	-0.1181	-0.03409
	29	29	DE-RA51	DE-RA51	1.98453	0.051275	0.092227	0.046959
	30	30	GS0140534	GS0140534	2.02531	-0.08068	-0.22948	-0.16383
	31	31	GS0140596	GS0140596	2.12385	-0.0792	-0.1303	-0.03909
	32	32	GS0140784	GS0140784	2.17319	-0.14236	-0.15361	-0.11063
	33	33	GS0140800	GS0140800	1.60206	0.100813	-0.05819	-0.08987
	34	34	GS0140810	GS0140810	1.51851	0.281229	0.167456	0.169358
	35	35	GS0140817	GS0140817	1.45025	-0.39279	-0.00836	0.135287
	36	36	GS0141280	GS0141280	1.86332	0.006976	-0.03663	-0.0183
	37	37	GS0146450	GS0146450	2.15534	0.098714	-0.00811	-0.01615
	38	38	GS0146451	GS0146451	2.17319	-0.01945	-0.0434	-0.01016
	39	39	GS0146453	GS0146453	1.43297	0.253234	-0.06087	-0.04584
	40	40	GS0146457	GS0146457	2.1959	-0.1709	-0.22725	-0.13155

Site 3	#		Code	Name	Obs_logTP	WAPLS_C1	WAPLS_C2	WAPLS_C3
	41	41	GS0146588	GS0146588	2.3483	-0.27824	-0.27222	-0.20263
	42	42	GS0146702	GS0146702	1.80618	0.158472	0.085098	-0.03624
	43	43	GS0146715	GS0146715	2.39094	-0.098	-0.0621	0.006413
	44	44	GS0146735	GS0146735	2.14922	0.008835	-0.02649	-0.06993
	45	45	GS0147712	GS0147712	2.02531	0.072053	0.052604	0.084323
	46	46	GS0148250	GS0148250	2.52375	0.168549	0.133326	-0.01743
	47	47	MVO14808	MVO14808	2.32222	-0.27448	0.015378	0.068535
	48	48	MVO15816	MVO15816	1.17609	0.26444	0.201518	0.159209
	49	49	NJAN0118	NJAN0118	2.50853	-0.10541	0.033131	0.008563
	50	50	NJAN0448	NJAN0448	1.49136	0.314827	0.023954	-0.05515
	51	51	NJAN0451	NJAN0451	1.81624	0.082232	-0.09453	-0.06286
	52	52	NJAN0466	NJAN0466	1.65801	0.432507	0.37886	0.266381
	53	53	NJAN0470	NJAN0470	1.79239	0.18603	0.063856	-0.03501
	54	54	NJAN0488	NJAN0488	2.30856	-0.16752	-0.13965	-0.06542
	55	55	NJAN0489	NJAN0489	1.72835	0.209279	0.078517	0.025707
	56	56	NJAN0490	NJAN0490	1.53148	0.339887	0.158439	0.072711
	57	57	NJAN0673	NJAN0673	2.7478	-0.04657	0.049641	0.020211
	58	58	NJAN0683	NJAN0683	2.20003	-0.09794	-0.08289	-0.05617
	59	59	NJAN0694	NJAN0694	2.29336	0.077958	0.012135	-0.05805
	60	60	NJSD48	NJSD48	1.86233	0.042051	-0.11006	0.094021
	61	61	NJSD91	NJSD91	2.01703	0.088238	-0.04866	0.125645
	62	62	NJSD94	NJSD94	1.70329	0.115482	0.073393	0.091739

Name	WAPLS_C4	WAPLS_C5	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5
BFBM0002	0.162221	0.134527	0.189081	0.193791	0.228863	0.256961	0.257629
BFBM0002	0.087175	0.048686	0.16897	0.139087	0.148715	0.173039	0.163133
DE-101031	0.047804	0.066942	0.054476	0.164251	0.162978	0.152716	0.174599
DE-103051	-0.02536	-0.01005	-0.36954	-0.23107	-0.21793	-0.20936	-0.20307
DE-105071	0.007784	0.099956	-0.3365	-0.3019	-0.28372	-0.23031	-0.17941
DE-105151	0.145104	0.13126	0.059405	0.299844	0.410266	0.489409	0.548949
DE-106141	0.076103	0.075838	0.57371	0.452221	0.391126	0.377974	0.375142
DE-109081	0.170239	0.081004	0.419591	0.420397	0.470974	0.507271	0.517522
DE-114021	0.043374	0.001991	-0.41228	-0.45834	-0.43381	-0.43379	-0.45519
DE-201161	0.122572	0.015943	0.274339	0.275185	0.316816	0.326111	0.307447
DE-205241	-0.0285	-0.05555	-0.03118	-0.03927	-0.0435	-0.07182	-0.09278
DE-206461	-0.01988	-0.08693	0.020456	-0.0112	-0.00203	-0.02544	-0.05216
DE-303021	-0.00019	-0.07933	-0.04314	-0.02924	0.025613	0.031541	0.02403
DE-C08014	0.016482	-0.02725	0.221013	0.071592	-0.01428	-0.06082	-0.08328
DE-C08025	0.064809	0.016485	-0.5112	-0.53337	-0.52377	-0.51219	-0.51069
DE-C13046	-0.02539	-0.04358	-0.06159	-0.06935	-0.06361	-0.06783	-0.07938
DE-C15056	-0.14616	-0.14598	-0.3074	-0.3149	-0.31621	-0.32158	-0.33686
DE-EPA03-(	0.067798	0.11978	-0.38206	-0.04885	0.066993	0.198638	0.310758
DE-EPA03-:	-0.04721	-0.03043	0.010807	-0.04554	-0.08209	-0.08684	-0.10563
DE-P01092	-0.12869	-0.0189	0.29221	0.396625	0.340659	0.312895	0.313664
DE-P01115	0.035547	-0.01342	-0.05839	0.073348	0.08743	0.074075	0.05399
DE-P03043	0.031303	-0.00444	0.287348	0.362708	0.381524	0.395354	0.415755
DE-P04007	-0.14812	-0.08035	0.008744	-0.06417	-0.09977	-0.10989	-0.11344
DE-P05013	0.07604	0.081132	0.25132	0.192951	0.171068	0.169445	0.174134
DE-P05066	-0.42097	-0.38429	-0.54313	-0.49407	-0.52602	-0.53644	-0.54039
DE-P06021	0.068328	0.095991	0.410893	0.313464	0.267584	0.270433	0.289221
DE-P06037	0.051905	0.110175	-0.01116	0.008914	-0.00234	0.038667	0.077768
DE-P06061	0.004487	-0.0402	-0.41398	-0.35069	-0.34911	-0.36178	-0.3809
DE-RA51	0.00586	-0.03475	0.0517	0.145529	0.224388	0.260605	0.272631
GS0140534	-0.09366	-0.06681	-0.14543	-0.25829	-0.27045	-0.25904	-0.27958
GS0140596	0.031744	0.039154	-0.1708	-0.21068	-0.17337	-0.13382	-0.13675
GS0140784	-0.05251	-0.01413	-0.24673	-0.2954	-0.30852	-0.29938	-0.30318
GS0140800	-0.0689	-0.05236	0.274297	0.184581	0.135442	0.109306	0.073701
GS0140810	0.14414	0.08994	0.42312	0.381791	0.406071	0.445759	0.445838
GS0140817	-0.07774	-0.04108	0.335592	0.140035	0.03718	-0.04773	-0.09077
GS0141280	-0.00739	-0.02441	0.037228	-0.01804	-3.47E-02	-0.02704	-0.02088
GS0146450	0.012958	0.007	-0.13791	-0.26213	-0.35709	-0.41136	-0.47439
GS0146451	-0.01126	0.0065	-0.34946	-0.45309	-0.45135	-0.4734	-0.48784
GS0146453	0.009348	0.006311	0.635306	0.539663	0.508246	0.496674	0.455224
GS0146457	-0.04414	-0.00715	-0.26817	-0.33672	-0.30416	-0.27457	-0.27402

Name	WAPLS_C4	WAPLS_C5	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5
GS0146588	-0.14528	-0.11501	-0.36739	-0.37869	-0.35619	-0.32987	-0.33234
GS0146702	-0.08235	-0.07347	0.216665	0.224071	0.200638	0.17559	0.147753
GS0146715	0.047229	0.054025	-0.40263	-0.42701	-0.40539	-0.36593	-0.34018
GS0146735	-0.05767	-0.04644	-0.12957	-0.15484	-0.17203	-0.18998	-0.22241
GS0147712	0.109142	0.096376	0.018525	0.027038	0.064444	0.093461	0.089535
GS014825C	-0.06767	0.025221	-0.49595	-0.45108	-0.39264	-0.359	-0.36799
MVO14808	0.115352	0.085526	-0.50181	-0.33236	-0.2267	-0.13731	-0.09951
MVO15816	0.139655	0.084885	0.393612	0.333315	0.317338	0.305456	0.29082
NJAN0118	-0.01866	-0.04894	-0.52024	-0.50638	-0.51188	-0.53074	-0.56038
NJAN0448	-0.05705	-0.00924	0.511862	0.368962	0.320244	0.311109	0.302846
NJAN0451	-0.01386	0.021175	0.155609	0.048076	0.024865	0.027761	0.024319
NJAN0466	0.192731	0.113803	0.443948	0.4467	0.432804	0.423454	0.415373
NJAN0470	-0.08098	-0.11525	0.171884	0.098272	0.045651	0.010205	-0.02134
NJAN0488	-0.0197	-0.00221	-0.33757	-0.35391	-0.33753	-0.32864	-0.32975
NJAN0489	0.01241	0.00636	0.217565	0.136932	0.116176	0.119979	0.115822
NJAN0490	0.019616	-0.04022	0.407485	0.313568	0.274787	0.253239	0.225264
NJAN0673	-0.00458	-0.0127	-0.79345	-0.80708	-0.7685	-0.71789	-0.69902
NJAN0683	-0.03998	-0.05054	-0.1899	-0.18598	-0.16563	-0.15616	-0.16338
NJAN0694	-0.06509	-0.03057	-0.21818	-0.24642	-0.2676	-0.28738	-0.31578
NJSD48	-0.08837	0.040009	-0.08896	-0.33686	-0.40861	-0.59704	-0.67055
NJSD91	-0.04935	0.066934	-0.22566	-0.25819	-0.38187	-0.43117	-0.40344
NJSD94	-0.00262	-0.02791	0.193601	0.207585	0.240535	0.240288	0.248619

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DE-105151	
DE-106141	
DE-109081	
DE-114021	
DE-201161	
DE-205241	
DE-206461	
DE-303021	
DE-C08014	
DE-C08025	
DE-C13046	
DE-C15056	
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DE-EPA03-1	
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DE-P01115	
DE-P03043	
DE-P04007	
DE-P05013	
DE-P05066	
DE-P06021	
DE-P06037	
DE-P06061	
DE-RA51	
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GS0140596	
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GS0140817	
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GS0146450	
GS0146451	
GS0146453	
GS0146457	

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NJAN0489	
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NJAN0683	
NJAN0694	
NJSD48	
NJSD91	
NJSD94	

Site 3	#		Code	Name	SEB_WAPL	SEB_WAPL	SEB_WAPL	SEB_WAPL
	1	1	BFBM0002	BFBM0002	0.049339	0.067045	0.066664	0.068787
	2	2	BFBM0002	BFBM0002	0.083076	0.086927	0.104819	0.111227
	3	3	DE-101031	DE-101031	0.106237	0.119984	0.140951	0.152449
	4	4	DE-103051	DE-103051	0.085221	0.072235	0.09446	0.101693
	5	5	DE-105071	DE-105071	0.074962	0.088546	0.103175	0.127833
	6	6	DE-105151	DE-105151	0.13564	0.180581	0.232207	0.274442
	7	7	DE-106141	DE-106141	0.108381	0.082364	0.079589	0.079966
	8	8	DE-109081	DE-109081	0.106086	0.12945	0.136183	0.148659
	9	9	DE-114021	DE-114021	0.089387	0.088244	0.092277	0.098822
	10	10	DE-201161	DE-201161	0.095426	0.119296	0.124127	0.126283
	11	11	DE-205241	DE-205241	0.089548	0.088644	0.088741	0.091611
	12	12	DE-206461	DE-206461	0.094585	0.114459	0.107936	0.113451
	13	13	DE-303021	DE-303021	0.061575	0.113857	0.182537	0.21596
	14	14	DE-C08014	DE-C08014	0.196165	0.322979	0.424444	0.4888
	15	15	DE-C08025	DE-C08025	0.100422	0.133515	0.193169	0.239924
	16	16	DE-C13046	DE-C13046	0.054987	0.074471	0.082822	0.084007
	17	17	DE-C15056	DE-C15056	0.087646	0.085955	0.092424	0.095753
	18	18	DE-EPA03-(	DE-EPA03-(	0.176238	0.1955	0.24977	0.317724
	19	19	DE-EPA03-1	DE-EPA03-1	0.137791	0.141563	0.144193	0.152533
	20	20	DE-P01092	DE-P01092	0.145671	0.144257	0.195159	0.227516
	21	21	DE-P01115	DE-P01115	0.099866	0.1026	0.124853	0.141656
	22	22	DE-P03043	DE-P03043	0.111063	0.105024	0.129107	0.142913
	23	23	DE-P04007	DE-P04007	0.138226	0.135456	0.146613	0.149673
	24	24	DE-P05013	DE-P05013	0.101789	0.087427	0.088319	0.08803
	25	25	DE-P05066	DE-P05066	0.108398	0.077269	0.081073	0.070515
	26	26	DE-P06021	DE-P06021	0.151213	0.137503	0.142751	0.147783
	27	27	DE-P06037	DE-P06037	0.132552	0.127815	0.133732	0.136748
	28	28	DE-P06061	DE-P06061	0.108666	0.150424	0.173241	0.178214
	29	29	DE-RA51	DE-RA51	0.091805	0.113984	0.148107	0.172091
	30	30	GS0140534	GS0140534	0.111417	0.115001	0.118278	0.127488
	31	31	GS0140596	GS0140596	0.072946	0.082757	0.09322	0.09306
	32	32	GS0140784	GS0140784	0.094899	0.099343	0.098561	0.100647
	33	33	GS0140800	GS0140800	0.079283	0.08968	0.092737	0.102414
	34	34	GS0140810	GS0140810	0.065724	0.073494	0.09185	0.092183
	35	35	GS0140817	GS0140817	0.266532	0.409485	0.548307	0.69408
	36	36	GS0141280	GS0141280	0.107311	0.139734	0.125903	0.10958
	37	37	GS0146450	GS0146450	0.149438	0.223514	0.294098	0.388013
	38	38	GS0146451	GS0146451	0.086327	0.124622	0.16858	0.190306
	39	39	GS0146453	GS0146453	0.132621	0.170043	0.193237	0.221324
	40	40	GS0146457	GS0146457	0.083117	0.091863	0.101975	0.107362

Site 3	#		Code	Name	SEB_WAPL	SEB_WAPL	SEB_WAPL	SEB_WAPL
	41	41	GS0146588	GS0146588	0.054491	0.05416	0.057239	0.05771
	42	42	GS0146702	GS0146702	0.064087	0.078408	0.087115	0.096919
	43	43	GS0146715	GS0146715	0.07643	0.076338	0.094224	0.115624
	44	44	GS0146735	GS0146735	0.069049	0.068138	0.085172	0.097852
	45	45	GS0147712	GS0147712	0.058607	0.065233	0.086286	0.093259
	46	46	GS0148250	GS0148250	0.182515	0.217154	0.230288	0.247668
	47	47	MVO14808	MVO14808	0.094838	0.127983	0.147671	0.166408
	48	48	MVO15816	MVO15816	0.087086	0.089898	0.101823	0.109108
	49	49	NJAN0118	NJAN0118	0.090649	0.117825	0.152143	0.183123
	50	50	NJAN0448	NJAN0448	0.071779	0.086743	0.110515	0.11701
	51	51	NJAN0451	NJAN0451	0.12264	0.158372	0.18931	0.197536
	52	52	NJAN0466	NJAN0466	0.073382	0.08772	0.092633	0.091314
	53	53	NJAN0470	NJAN0470	0.080309	0.100407	0.113365	0.11725
	54	54	NJAN0488	NJAN0488	0.062356	0.062678	0.067288	0.073484
	55	55	NJAN0489	NJAN0489	0.09327	0.107932	0.10759	0.105637
	56	56	NJAN0490	NJAN0490	0.08559	0.107711	0.117793	0.124759
	57	57	NJAN0673	NJAN0673	0.110761	0.143617	0.187777	0.220084
	58	58	NJAN0683	NJAN0683	0.086715	0.098206	0.09201	0.08705
	59	59	NJAN0694	NJAN0694	0.14012	0.15716	0.16353	0.182698
	60	60	NJSD48	NJSD48	0.216407	0.258232	0.39214	0.429278
	61	61	NJSD91	NJSD91	0.141527	0.292127	0.357064	0.447651
	62	62	NJSD94	NJSD94	0.096097	0.087333	0.122964	0.140685

Name	SEB_WAPL	SEP_WAPL	SEP_WAPL	SEP_WAPL	SEP_WAPL	SEP_WAPL	eSEP_WAP
BFBM0002	0.076045	0.195235	0.204748	0.238108	0.265754	0.26831	0.328308
BFBM0002	0.114025	0.187792	0.163393	0.181125	0.204889	0.198148	0.335042
DE-101031	0.159027	0.117903	0.202298	0.214028	0.214095	0.234487	0.341523
DE-103051	0.123858	0.378961	0.241788	0.236988	0.232116	0.236938	0.335581
DE-105071	0.157478	0.344525	0.314271	0.301402	0.262542	0.237276	0.333123
DE-105151	0.330959	0.146184	0.348609	0.469685	0.559068	0.638404	0.351781
DE-106141	0.08131	0.583585	0.459461	0.398927	0.386117	0.38362	0.342196
DE-109081	0.165861	0.43233	0.439195	0.489592	0.527858	0.542546	0.341476
DE-114021	0.109808	0.421629	0.466563	0.443288	0.444645	0.467938	0.336663
DE-201161	0.13027	0.290014	0.299252	0.339617	0.349056	0.33318	0.338316
DE-205241	0.09399	0.093757	0.095935	0.097827	0.1155	0.131231	0.336705
DE-206461	0.121796	0.095514	0.113456	0.106487	0.114763	0.130973	0.33808
DE-303021	0.247892	0.074611	0.11629	0.182259	0.215809	0.246235	0.330368
DE-C08014	0.547479	0.293334	0.32552	0.417554	0.484417	0.544681	0.379252
DE-C08025	0.280296	0.520696	0.54938	0.557326	0.564179	0.580675	0.339759
DE-C13046	0.086107	0.081886	0.100751	0.10321	0.106755	0.115932	0.329204
DE-C15056	0.099193	0.319346	0.326141	0.329111	0.335188	0.350808	0.336205
DE-EPA03-(	0.39655	0.41966	0.1987	0.255026	0.370725	0.499197	0.369339
DE-EPA03-:	0.157101	0.135981	0.146517	0.163889	0.173368	0.187198	0.352616
DE-P01092	0.270039	0.325384	0.421194	0.390925	0.384554	0.410843	0.355769
DE-P01115	0.162544	0.114481	0.124958	0.150994	0.158102	0.16912	0.339595
DE-P03043	0.177562	0.307475	0.377177	0.402168	0.419676	0.451058	0.343055
DE-P04007	0.160664	0.136184	0.147835	0.175307	0.183658	0.194478	0.352787
DE-P05013	0.096862	0.270634	0.211346	0.191973	0.190398	0.198624	0.340166
DE-P05066	0.06378	0.553563	0.499914	0.532065	0.540937	0.544038	0.342202
DE-P06021	0.170403	0.437128	0.34155	0.302371	0.307219	0.334516	0.358074
DE-P06037	0.169122	0.130724	0.125908	0.131427	0.139822	0.183476	0.350602
DE-P06061	0.185122	0.427664	0.380849	0.388764	0.402307	0.422491	0.342286
DE-RA51	0.204996	0.104179	0.183817	0.267658	0.310901	0.339286	0.337313
GS0140534	0.125575	0.182398	0.282174	0.294617	0.288041	0.30587	0.34317
GS0140596	0.094492	0.185356	0.225967	0.196275	0.162317	0.16553	0.332675
GS0140784	0.110138	0.263916	0.311254	0.323499	0.315433	0.322086	0.338168
GS014080(	0.11061	0.285243	0.20471	0.163476	0.148887	0.13173	0.334122
GS014081(	0.097544	0.428054	0.388608	0.416048	0.454932	0.456094	0.331167
GS0140817	0.803711	0.426249	0.427352	0.541915	0.686035	0.797651	0.41999
GS014128(	0.097841	0.11176	0.138397	0.128422	0.110951	0.09832	0.341859
GS014645(	0.472865	0.201225	0.341682	0.459003	0.560338	0.663363	0.357328
GS0146451	0.205275	0.359646	0.469418	0.480912	0.509139	0.528065	0.335863
GS0146453	0.258337	0.648625	0.565108	0.542787	0.542502	0.521644	0.350628
GS0146457	0.108885	0.280413	0.348691	0.320348	0.294266	0.2943	0.335053

Name	SEB_WAPL	SEP_WAPL	SEP_WAPL	SEP_WAPL	SEP_WAPL	SEP_WAPL	eSEP_WAP
GS0146588	0.05699	0.371305	0.382446	0.360649	0.334756	0.337066	0.329122
GS0146702	0.111361	0.225692	0.237034	0.218252	0.19991	0.184086	0.330846
GS0146715	0.131324	0.409608	0.433576	0.415874	0.38323	0.363926	0.333457
GS0146735	0.113644	0.146412	0.168827	0.191491	0.213138	0.249117	0.331843
GS0147712	0.102407	0.060612	0.069695	0.106643	0.131029	0.134855	0.329828
GS0148250	0.271152	0.527596	0.499316	0.453568	0.434187	0.454858	0.372375
MVO14808	0.17552	0.51044	0.355489	0.269399	0.213902	0.19957	0.338151
MVO15816	0.1178	0.402896	0.344933	0.332885	0.323899	0.313219	0.336059
NJAN0118	0.201237	0.527838	0.519506	0.533353	0.560542	0.594383	0.337
NJAN0448	0.117349	0.516731	0.378746	0.338276	0.331813	0.324198	0.332421
NJAN0451	0.200766	0.197099	0.163448	0.188383	0.196816	0.199522	0.346976
NJAN0466	0.095617	0.449801	0.45499	0.44233	0.432912	0.42593	0.332771
NJAN0470	0.124653	0.189247	0.139496	0.120742	0.116059	0.124748	0.334367
NJAN0488	0.074015	0.343131	0.359265	0.343989	0.336543	0.337732	0.330515
NJAN0489	0.104582	0.236306	0.173611	0.157529	0.159079	0.155271	0.337714
NJAN0490	0.129111	0.416189	0.331179	0.298476	0.281715	0.258957	0.335675
NJAN0673	0.233003	0.800951	0.819446	0.790547	0.750063	0.735908	0.342958
NJAN0683	0.091488	0.208164	0.209551	0.188722	0.178075	0.186502	0.335963
NJAN0694	0.199901	0.258243	0.291094	0.312422	0.339169	0.372246	0.353533
NJSD48	0.461786	0.231101	0.422202	0.562443	0.731759	0.81043	0.390107
NJSD91	0.478378	0.265191	0.386437	0.518975	0.61647	0.620046	0.354093
NJSD94	0.15802	0.21547	0.224677	0.269267	0.27733	0.29326	0.338506

Name	eSEP_WAP	eSEP_WAP	eSEP_WAP	eSEP_WAPLS_C5
BFBM0002	0.31637	0.314005	0.320383	0.329137
BFBM0002	0.321172	0.324256	0.332092	0.339926
DE-101031	0.331649	0.337672	0.348073	0.357544
DE-103051	0.31751	0.321057	0.329022	0.34335
DE-105071	0.321614	0.323729	0.338017	0.356858
DE-105151	0.358056	0.384805	0.416212	0.460524
DE-106141	0.319967	0.317001	0.322968	0.330393
DE-109081	0.33519	0.33571	0.34643	0.360636
DE-114021	0.321531	0.320422	0.328146	0.338535
DE-201161	0.331401	0.331003	0.337433	0.345714
DE-205241	0.321641	0.319421	0.326047	0.33374
DE-206461	0.329691	0.325278	0.332844	0.342611
DE-303021	0.329482	0.357036	0.380201	0.404968
DE-C08014	0.447113	0.523744	0.580378	0.634257
DE-C08025	0.336781	0.362587	0.394306	0.425575
DE-C13046	0.318027	0.317828	0.323992	0.331606
DE-C15056	0.32091	0.320464	0.327235	0.335242
DE-EPA03-(	0.365807	0.395652	0.44594	0.509706
DE-EPA03-:	0.340051	0.339038	0.34811	0.356692
DE-P01092	0.341182	0.363651	0.386882	0.418891
DE-P01115	0.325763	0.331276	0.343483	0.359122
DE-P03043	0.326535	0.332902	0.344003	0.366165
DE-P04007	0.337555	0.340074	0.346866	0.358275
DE-P05013	0.321307	0.319305	0.325059	0.33456
DE-P05066	0.318693	0.317377	0.320759	0.326521
DE-P06021	0.338382	0.338427	0.346055	0.362747
DE-P06037	0.334562	0.334723	0.341488	0.362147
DE-P06061	0.343835	0.352374	0.360103	0.36989
DE-RA51	0.329526	0.340721	0.357112	0.380226
GS0140534	0.329879	0.328854	0.337886	0.343973
GS0140596	0.320068	0.320695	0.326457	0.333882
GS0140784	0.324752	0.322288	0.3287	0.338642
GS0140800	0.321928	0.320555	0.329245	0.338796
GS0140810	0.317799	0.320299	0.326208	0.334758
GS0140817	0.513101	0.628328	0.761355	0.865158
GS0141280	0.339294	0.331673	0.331545	0.334845
GS0146450	0.381515	0.425028	0.498466	0.571095
GS0146451	0.333355	0.350106	0.366238	0.380376
GS0146453	0.352859	0.362623	0.383273	0.411444
GS0146457	0.322543	0.323348	0.330818	0.338237

Name	eSEP_WAP	eSEP_WAP	eSEP_WAP	eSEP_WAPLS_C5
GS0146588	0.313892	0.31214	0.318189	0.325263
GS0146702	0.318971	0.318974	0.327578	0.339042
GS0146715	0.318469	0.320988	0.333591	0.346113
GS0146735	0.316603	0.318449	0.327855	0.339799
GS0147712	0.315991	0.318748	0.326514	0.336207
GS0148250	0.377824	0.38365	0.399066	0.419609
MVO14808	0.334626	0.340532	0.354409	0.365178
MVO15816	0.321989	0.3233	0.331389	0.341211
NJAN0118	0.330874	0.342495	0.362558	0.378212
NJAN0448	0.321122	0.326142	0.334074	0.341056
NJAN0451	0.347385	0.360546	0.370046	0.377962
NJAN0466	0.321387	0.320525	0.325963	0.334202
NJAN0470	0.325079	0.327119	0.334158	0.343637
NJAN0488	0.315473	0.314138	0.321425	0.328674
NJAN0489	0.327482	0.325163	0.330262	0.336876
NJAN0490	0.327409	0.32868	0.336866	0.345279
NJAN0673	0.340912	0.359743	0.382558	0.396029
NJAN0683	0.324406	0.320345	0.324795	0.333044
NJAN0694	0.346834	0.347703	0.362343	0.377503
NJSD48	0.402838	0.497925	0.531219	0.561956
NJSD91	0.425362	0.470797	0.546173	0.575668
NJSD94	0.321282	0.330568	0.343083	0.357097

Site 3	#	Code	Name	RMSE	R2	Ave_Bias	Max_Bias
	1	1	Componen	WAPLS Cor	0.196469	0.70748	-0.0027	0.26444
	2	2	Componen	WAPLS Cor	0.140487	0.850386	-0.00034	0.201518
	3	3	Componen	WAPLS Cor	0.113303	0.902684	-0.0003	0.159209
	4	4	Componen	WAPLS Cor	0.095805	0.93042	0.000323	0.139655
	5	5	Componen	WAPLS Cor	0.081883	0.949173	0.000177	0.085915

Name	Boot_R2	Boot_Ave_	Boot_Max_	RMSE_s1	RMSE_s2	RMSEP	%Change
WAPLS Cor	0.205385	0.021629	0.793449	0.112763	0.324579	0.343609	...
WAPLS Cor	0.28607	0.037171	0.807082	0.140566	0.309184	0.339638	1.15581
WAPLS Cor	0.300314	0.039242	0.768496	0.173233	0.306847	0.35237	-3.74887
WAPLS Cor	0.285815	0.037711	0.717892	0.20102	0.312912	0.371918	-5.54746
WAPLS Cor	0.269222	0.04218	0.699019	0.226421	0.320231	0.392192	-5.45134

Name	Rand. t-test
WAPLS Cor ...	
WAPLS Cor	0.085
WAPLS Cor	0.353
WAPLS Cor	0.803
WAPLS Cor	0.962

Site 3	#	Code	Name	WAPLS_C1	WAPLS_C2	WAPLS_C3	WAPLS_C4	WAPLS_C5
1	1	S3-0	S3-0	2.52614	2.59255	2.58597	2.68254	2.84179
2	10	S3-10	S3-10	2.30791	2.30817	2.25697	2.2695	2.32434
3	20	S3-20	S3-20	2.28161	2.2997	2.2877	2.31115	2.35424
4	30	S3-30	S3-30	2.27934	2.2453	2.22065	2.21599	2.23671
5	40	S3-40	S3-40	2.04663	2.08303	2.13503	2.134	2.17747
6	50	S3-50	S3-50	2.12943	2.03904	1.93393	1.92208	1.9839
7	60	S3-60	S3-60	2.12444	2.04762	2.08426	2.15861	2.25065
8	70	S3-70	S3-70	2.43747	2.42324	2.29105	2.27281	2.37413
9	80	S3-80	S3-80	2.22927	2.16852	2.06302	2.02874	2.09752
10	90	S3-90	S3-90	2.20423	2.19628	2.16328	2.17225	2.25073
11	##	S3-100	S3-100	2.13933	2.1414	2.15197	2.14636	2.19611
12	##	S3-110	S3-110	2.14165	2.13713	2.13608	2.16259	2.23831
13	##	S3-120	S3-120	2.19323	2.2066	2.19295	2.22064	2.29948
14	##	S3-130	S3-130	2.27592	2.28794	2.2638	2.29317	2.39332
15	##	S3-140	S3-140	2.29557	2.32072	2.31449	2.32582	2.34928
16	##	S3-150	S3-150	2.36696	2.34965	2.29345	2.29912	2.35581
17	##	S3-160	S3-160	2.04253	2.05195	2.00506	1.9516	1.96119
18	##	S3-170	S3-170	2.10984	2.15099	2.14447	2.14097	2.19689
19	##	S3-180	S3-180	2.1281	2.24717	2.32519	2.36853	2.43732
20	##	S3-190	S3-190	2.19444	2.26752	2.27583	2.28548	2.34314
21	##	S3-200	S3-200	2.34197	2.35263	2.31552	2.3158	2.35453
22	##	S3-210	S3-210	2.09337	2.11922	2.08094	2.03521	2.08433
23	##	S3-220	S3-220	2.44478	2.46803	2.40138	2.44273	2.5575
24	##	S3-230	S3-230	2.14073	2.1529	2.09389	2.06099	2.08512
25	##	S3-240	S3-240	2.39006	2.44012	2.40549	2.45915	2.60564
26	##	S3-250	S3-250	2.25317	2.31936	2.29809	2.31402	2.42264
27	##	S3-260	S3-260	2.2062	2.29828	2.34334	2.39164	2.48727

Name	WAPLS_C1_X	WAPLS_C2_X	WAPLS_C3_X	WAPLS_C4_X	WAPLS_C5_X
S3-0	2.2878	2.37963	2.41002	2.47444	2.50321
S3-10	2.15821	2.1655	2.15434	2.16541	2.15566
S3-20	2.15315	2.17498	2.18025	2.19037	2.17373
S3-30	2.17123	2.15806	2.14276	2.12721	2.09056
S3-40	2.03824	2.06029	2.0716	2.07143	2.06187
S3-50	2.03103	1.95931	1.89301	1.87459	1.85872
S3-60	2.04204	1.98512	2.0076	2.0615	2.08144
S3-70	2.24355	2.2324	2.1801	2.18143	2.18708
S3-80	2.10123	2.05052	1.98053	1.95369	1.93526
S3-90	2.09986	2.09965	2.08384	2.08623	2.08214
S3-100	2.08373	2.09481	2.09999	2.10293	2.10389
S3-110	2.07114	2.07907	2.08695	2.10252	2.10444
S3-120	2.09079	2.09262	2.07915	2.08276	2.07557
S3-130	2.15173	2.16085	2.14615	2.15566	2.15663
S3-140	2.19417	2.23082	2.23679	2.22811	2.18955
S3-150	2.22639	2.23052	2.21454	2.21719	2.19761
S3-160	2.00491	2.01138	1.97974	1.95737	1.94256
S3-170	2.06082	2.10401	2.10365	2.10201	2.09176
S3-180	2.05821	2.15698	2.21092	2.23892	2.24597
S3-190	2.12424	2.19575	2.20834	2.2124	2.1994
S3-200	2.19893	2.22362	2.21323	2.20243	2.16321
S3-210	2.03396	2.06473	2.04322	2.02988	2.02639
S3-220	2.23976	2.29095	2.27938	2.30314	2.30477
S3-230	2.06146	2.08208	2.05322	2.03329	2.00981
S3-240	2.2032	2.27125	2.28204	2.33027	2.36099
S3-250	2.13106	2.20661	2.21477	2.24245	2.26477
S3-260	2.12056	2.20891	2.24741	2.28164	2.29849

Site 3	#	Code	Name	SEB_WAPLS_C1	SEB_WAPLS_C2	SEB_WAPLS_C3	SEB_WAPLS_C4
1	1	S3-0	S3-0	0.42515	0.446826	0.48115	0.550079
2	10	S3-10	S3-10	0.166349	0.162462	0.161102	0.191926
3	20	S3-20	S3-20	0.129599	0.134562	0.14632	0.182685
4	30	S3-30	S3-30	0.112585	0.133965	0.168508	0.211483
5	40	S3-40	S3-40	0.0899612	0.106067	0.137303	0.168203
6	50	S3-50	S3-50	0.189939	0.239563	0.287067	0.351632
7	60	S3-60	S3-60	0.14765	0.172631	0.199059	0.233186
8	70	S3-70	S3-70	0.247319	0.249001	0.247081	0.291606
9	80	S3-80	S3-80	0.24648	0.311506	0.375329	0.464307
10	90	S3-90	S3-90	0.161477	0.188348	0.222304	0.27809
11	##	S3-100	S3-100	0.125074	0.136053	0.164825	0.195868
12	##	S3-110	S3-110	0.120516	0.140151	0.163969	0.202876
13	##	S3-120	S3-120	0.169555	0.199184	0.224206	0.273762
14	##	S3-130	S3-130	0.184022	0.218048	0.249125	0.308596
15	##	S3-140	S3-140	0.106777	0.153671	0.218152	0.289251
16	##	S3-150	S3-150	0.130819	0.157296	0.195475	0.254192
17	##	S3-160	S3-160	0.132482	0.190224	0.242935	0.306001
18	##	S3-170	S3-170	0.153526	0.203077	0.257845	0.335558
19	##	S3-180	S3-180	0.148112	0.197879	0.249324	0.310973
20	##	S3-190	S3-190	0.156131	0.200507	0.252909	0.329731
21	##	S3-200	S3-200	0.159585	0.203056	0.263599	0.34659
22	##	S3-210	S3-210	0.17968	0.230696	0.289139	0.371304
23	##	S3-220	S3-220	0.339239	0.359978	0.39375	0.461886
24	##	S3-230	S3-230	0.150701	0.176775	0.212281	0.27296
25	##	S3-240	S3-240	0.333105	0.352747	0.383651	0.449502
26	##	S3-250	S3-250	0.25395	0.284747	0.326653	0.398258
27	##	S3-260	S3-260	0.172115	0.20383	0.234426	0.285212

Name	SEB_WAPLS_C5	eSEP_WAPLS_C1	eSEP_WAPLS_C2	eSEP_WAPLS_C3
S3-0	0.640023	0.534887	0.543367	0.570667
S3-10	0.231351	0.364724	0.349269	0.346567
S3-20	0.230491	0.349496	0.337197	0.339948
S3-30	0.260897	0.343551	0.336959	0.350072
S3-40	0.197608	0.336816	0.326872	0.336166
S3-50	0.418632	0.37607	0.391133	0.420194
S3-60	0.27157	0.356584	0.354114	0.365759
S3-70	0.346774	0.408067	0.396984	0.39396
S3-80	0.554066	0.407559	0.438898	0.484796
S3-90	0.334014	0.362528	0.362036	0.378912
S3-100	0.226511	0.347844	0.337795	0.348314
S3-110	0.244627	0.346231	0.339466	0.347909
S3-120	0.330618	0.366198	0.36779	0.380031
S3-130	0.375019	0.373116	0.378339	0.395244
S3-140	0.365097	0.341691	0.345268	0.376491
S3-150	0.318333	0.349951	0.346896	0.363821
S3-160	0.360334	0.350576	0.363015	0.391373
S3-170	0.414102	0.359057	0.369912	0.400799
S3-180	0.370556	0.356776	0.367085	0.39537
S3-190	0.406624	0.360179	0.368508	0.39764
S3-200	0.434348	0.361689	0.369901	0.404524
S3-210	0.444644	0.370994	0.385766	0.421612
S3-220	0.545118	0.469505	0.474531	0.499193
S3-230	0.331568	0.357858	0.356152	0.37312
S3-240	0.527327	0.465092	0.469069	0.491267
S3-250	0.471314	0.412119	0.420328	0.448171
S3-260	0.341388	0.36739	0.370326	0.386148

Name	eSEP_WAPLS_C4	eSEP_WAPLS_C5
S3-0	0.632852	0.715665
S3-10	0.367082	0.395059
S3-20	0.362336	0.394556
S3-30	0.377676	0.413056
S3-40	0.355255	0.376294
S3-50	0.470701	0.527068
S3-60	0.390243	0.419879
S3-70	0.427725	0.472017
S3-80	0.559906	0.639951
S3-90	0.418626	0.462724
S3-100	0.369159	0.392244
S3-110	0.372924	0.402977
S3-120	0.415764	0.460279
S3-130	0.439483	0.49314
S3-140	0.426122	0.485638
S3-150	0.403147	0.451535
S3-160	0.437665	0.482067
S3-170	0.458817	0.523477
S3-180	0.441156	0.489755
S3-190	0.454573	0.517583
S3-200	0.466946	0.539636
S3-210	0.485572	0.547957
S3-220	0.557901	0.63222
S3-230	0.415236	0.460961
S3-240	0.547692	0.616946
S3-250	0.506481	0.569812
S3-260	0.423391	0.468074

Site 3	#		Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
	1	1	ACcoarct	ACcoarct	2	1.99993	0.2	0
	2	2	ACislan	ACislan	11	7.67022	1.19284	0
	3	3	AHexigum	AHexigum	3	2.55307	0.6	31
	4	4	AHgraci	AHgraci	5	3.57144	0.798403	0
	5	5	AMovalis	AMovalis	2	1.79045	0.4	0
	6	6	ANbalti	ANbalti	4	3.65776	0.790514	0
	7	7	ANpseudo	ANpseudo	3	2.78138	0.792079	0
	8	8	ASformos	ASformos	2	1.99993	0.196464	8
	9	9	ATnorman	ATnorman	22	6.84215	8.18363	0
	10	10	ATocto	ATocto	26	19.261	3.2	0
	11	11	AUambig	AUambig	27	17.6874	12.6214	19
	12	12	AUgranlt	AUgranlt	3	1.94604	3.16832	14
	13	13	AUtenell	AUtenell	11	8.52805	4.26357	3
	14	14	AYsen	AYsen	24	19.3801	1.99601	0
	15	15	BApardxa	BApardxa	25	15.8623	1.79641	26
	16	16	BM1?	BM1?	2	2	0.4	0
	17	17	BMcircum	BMcircum	5	4.48644	0.4	0
	18	18	CAaemul	CAaemul	5	4.55357	0.591716	0
	19	19	CAbacill	CAbacill	21	13.6558	3.16832	31
	20	20	CAlewisi	CAlewisi	3	2.89023	0.588235	0
	21	21	CAsp1?	CAsp1?	3	2.69169	0.387597	0
	22	22	CBspA	CBspA	3	2.784	0.392157	0
	23	23	CCplacen	CCplacen	24	16.4124	2.18688	23
	24	24	CCscutel	CCscutel	2	1.99967	0.198807	0
	25	25	CJpusill	CJpusill	5	4.49097	0.4	0
	26	26	CJsp1	CJsp1	22	16.1513	1.74419	0
	27	27	CM2?	CM2?	2	1.80937	0.776699	0
	28	28	CMaffins	CMaffins	8	5.39841	1.59681	0
	29	29	CMexici	CMexici	3	2.77925	0.399202	0
	30	30	CMjanis	CMjanis	9	7.09286	0.795229	0
	31	31	CMmexica	CMmexica	3	2.67364	0.392157	0
	32	32	CMtumida	CMtumida	3	2.79667	0.795229	0
	33	33	CPcrucic	CPcrucic	3	1.98873	0.790514	6
	34	34	CRbelgic	CRbelgic	27	21.1659	3.92927	0
	35	35	CScflin	CScflin	26	17.8701	2.4	0
	36	36	CSmargin	CSmargin	26	17.5746	7.35586	0
	37	37	CYatomus	CYatomus	25	6.53665	42.0543	6
	38	38	CYcaspia	CYcaspia	19	12.1299	7.56972	0
	39	39	CYcyclop	CYcyclop	26	20.0507	2.2	0
	40	40	CYdistin	CYdistin	2	1.99998	0.8	0

Site 3	#		Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
	41	41	CYmenegh	CYmenegh	27	14.4012	10.1796	38
	42	42	CYrossi	CYrossi	25	17.8105	4.4	0
	43	43	CYsp2Coo	CYsp2Coo	2	1.8	0.798403	0
	44	44	CYstriat	CYstriat	27	21.5025	16.1034	0
	45	45	CYstylor	CYstylor	4	3.60471	0.398406	0
	46	46	DAmesodo	DAmesodo	2	1.47139	0.775194	0
	47	47	DCplacen	DCplacen	3	2.32889	0.8	0
	48	48	DEkuetzi	DEkuetzi	12	6.06185	2.7833	7
	49	49	DGminor	DGminor	2	1.19725	2	0
	50	50	DHmin	DHmin	18	12.5504	3.87597	0
	51	51	DHsurirl	DHsurirl	20	14.7783	1.8	0
	52	52	DIconten	DIconten	20	10.4928	12.4506	0
	53	53	DMbalfou	DMbalfou	2	1.45845	0.798403	0
	54	54	DPboldti	DPboldti	11	7.70672	1.2	0
	55	55	DPbombus	DPbombus	9	6.52867	0.795229	0
	56	56	DPellipt	DPellipt	16	10.4797	1.37255	0
	57	57	DPpsudov	DPpsudov	5	3.89652	0.796813	0
	58	58	DPsmithi	DPsmithi	8	5.42505	1.2	0
	59	59	ECnicafe	ECnicafe	23	12.8062	3.8835	0
	60	60	ECSP1	ECSP1	2	1.60849	0.582524	0
	61	61	EPadnata	EPadnata	13	8.51945	1.35659	0
	62	62	EPfricke	EPfricke	3	2.54787	0.6	0
	63	63	EPturgid	EPturgid	25	16.3957	1.6	0
	64	64	EUrichbu	EUrichbu	2	1.47224	0.795229	0
	65	65	EUSP1	EUSP1	5	4.43013	0.4	0
	66	66	EUSP2	EUSP2	6	4.86071	0.596421	0
	67	67	EUSP3	EUSP3	3	2.99994	0.398406	0
	68	68	Eyminutu	Eyminutu	2	1.99999	0.198807	0
	69	69	FApygmae	FApygmae	16	12.1819	1.98807	0
	70	70	Fklewis	Fklewis	6	2.33063	3.36634	0
	71	71	FRvauche	FRvauche	22	15.3321	2.18688	41
	72	72	Fserifu	Fserifu	3	2.99977	0.395257	0
	73	73	FSvulgar	FSvulgar	14	7.4239	2.56917	36
	74	74	GEkriege	GEkriege	7	5.74888	0.596421	0
	75	75	GOinnoce	GOinnoce	19	10.8996	2.39044	0
	76	76	GOolivcm	GOolivcm	2	1.6	0.598802	0
	77	77	GOSP3	GOSP3	3	2.17662	1.19284	0
	78	78	GSsp1	GSsp1	7	5.47296	0.776699	0
	79	79	GSsp3	GSsp3	4	3.56279	0.594059	0
	80	80	GYcfbalt	GYcfbalt	5	4.56037	0.4	0

Site 3	#		Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
	81	81	GYSP1	GYSP1	2	1.79714	0.397614	0
	82	82	GYspence	GYspence	15	10.9771	1.59681	0
	83	83	Havirga	Havirga	16	10.5354	1.2	0
	84	84	HIcostu	HIcostu	8	4.76782	1.35922	0
	85	85	HIhunga	HIhunga	8	6.48278	1.19522	0
	86	86	HIhunga1	HIhunga1	17	11.6373	2.71318	0
	87	87	KCcuspid	KCcuspid	2	1.91665	0.598802	0
	88	88	Kchaloph	Kchaloph	12	9.25882	0.798403	0
	89	89	KOsp1	KOsp1	3	2.57919	0.592885	0
	90	90	Kvamoena	Kvamoena	8	5.98936	0.596421	0
	91	91	Lphungar	Lphungar	12	8.86649	1	0
	92	92	LUSP1	LUSP1	4	2.99885	0.8	0
	93	93	LUSP2	LUSP2	9	6.8426	2.94118	0
	94	94	LUSP3	LUSP3	12	10.3573	1.2	0
	95	95	LUSP4	LUSP4	9	5.16096	2.18688	0
	96	96	Mamarty	Mamarty	14	9.2062	1.55039	0
	97	97	MDSP1	MDSP1	2	1.80571	0.395257	0
	98	98	MESP1	MESP1	7	3.92781	1.19522	0
	99	99	MEvarian	MEvarian	2	1.91528	0.594059	41
	100	100	Naabunda	Naabunda	13	9.11475	1.39721	0
	101	101	NAantoni	NAantoni	8	5.04109	1.19284	13
	102	102	NAcaprad	NAcaprad	12	9.5014	0.968992	15
	103	103	NAcari	NAcari	26	18.0798	2.13178	0
	104	104	Nadenta	Nadenta	6	5.25026	0.596421	0
	105	105	Nafacili	Nafacili	2	1.99997	0.397614	0
	106	106	NAgregar	NAgregar	8	6.54467	0.596421	50
	107	107	Naheufler	Naheufler	9	7.55572	0.591716	0
	108	108	NAlancel	NAlancel	20	11.7544	3.19361	28
	109	109	Naoculif	Naoculif	3	2.66491	0.394477	0
	110	110	Napatrick	Napatrick	10	7.36868	0.788955	0
	111	111	NAperegr	NAperegr	27	17.6335	4.37376	5
	112	112	NApermnt	NApermnt	18	13.3449	1.59681	17
	113	113	NAphylpt	NAphylpt	8	6.77976	0.795229	0
	114	114	NAreichd	NAreichd	4	3.58664	0.399202	3
	115	115	Nareinha	Nareinha	6	4.03894	0.968992	0
	116	116	NAsalinm	NAsalinm	8	7.03735	0.582524	3
	117	117	NASP1	NASP1	8	4.86391	1.2	0
	118	118	NASP10	NASP10	3	2.56801	0.596421	0
	119	119	NASP11	NASP11	5	3.46865	2.71845	0
	120	120	NASP14	NASP14	2	1.79905	0.395257	0

Site 3	#	Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
121	121	NASP5	NASP5	8	6.04641	0.994036	0
122	122	NASP8	NASP8	4	2.38288	2.2	0
123	123	Nasubin	Nasubin	17	10.6563	2.98211	0
124	124	Nasubmin	Nasubmin	8	5.20035	2.32558	0
125	125	NAtripun	NAtripun	25	16.7813	2.59481	7
126	126	NAtrivls	NAtrivls	2	1.2191	1.74757	0
127	127	Navilaplanr	Navilaplanr	3	2.99992	0.4	0
128	128	Nazostere	Nazostere	26	19.3523	1.97628	0
129	129	NIagnita	NIagnita	15	8.70285	2.7833	0
130	130	NIamphib	NIamphib	20	12.1398	2.51938	40
131	131	Nibiacru	Nibiacru	2	1.47389	0.788955	0
132	132	Nibirem	Nibirem	2	1.60762	0.589391	0
133	133	NIbita	NIbita	12	10.0171	0.968992	0
134	134	Niboreal	Niboreal	5	4.47349	0.4	0
135	135	NIbrevis	NIbrevis	27	21.0388	8.71287	7
136	136	NIclausi	NIclausi	12	9.07697	0.970874	18
137	137	Nicolumbi	Nicolumbi	10	8.39101	0.6	0
138	138	NIfilifr	NIfilifr	8	6.42849	0.790514	11
139	139	NIfrustu	NIfrustu	13	10.841	0.8	34
140	140	NIincgnt	NIincgnt	3	2.76856	0.39604	0
141	141	NIincons	NIincons	9	6.55785	1.1976	28
142	142	NIlinear	NIlinear	10	5.02351	1.94175	34
143	143	Nimacile	Nimacile	2	1.80476	0.39604	0
144	144	NInana	NInana	4	2.57542	1.58416	10
145	145	NIpalea	NIpalea	14	11.4502	0.994036	50
146	146	Nipandur	Nipandur	8	7.04149	0.6	0
147	147	NIpelluc	NIpelluc	2	2	0.197628	0
148	148	NIpermin	NIpermin	9	5.98888	1.35922	0
149	149	Niproxima	Niproxima	13	10.5572	1.38067	0
150	150	Nipunctata	Nipunctata	19	13.164	2.35756	0
151	151	NIpusill	NIpusill	9	6.86535	1.2	0
152	152	NIsigma	NIsigma	21	14.2396	1.58103	0
153	153	Nisigmafor	Nisigmafor	8	5.58417	0.795229	0
154	154	NISP1	NISP1	8	7.36087	0.395257	0
155	155	NISP4	NISP4	13	10.212	0.8	0
156	156	NISP6	NISP6	2	1.91381	0.596421	0
157	157	PAsulc	PAsulc	9	3.07046	3.55731	0
158	158	Pbplicat	Pbplicat	27	22.1501	17.4	0
159	159	Pccleme	Pccleme	5	4.56428	0.4	0
160	160	PCgastru	PCgastru	4	3.24976	0.59761	0

Site 3	#	Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
161	161	Pcparalega	Pcparalega	12	4.81075	3.92157	0
162	162	Pdamericar	Pdamericar	2	1.79522	0.399202	0
163	163	PDbrevis	PDbrevis	16	10.9546	1.55039	6
164	164	Pdparasi	Pdparasi	3	2.6693	0.788955	14
165	165	PDSP1	PDSP1	5	2.15858	2.90698	0
166	166	PIbiceps	PIbiceps	26	20.5542	2.78884	0
167	167	PIboreal	PIboreal	2	1.80095	0.395257	0
168	168	PIdiverg	PIdiverg	6	4.46254	0.8	0
169	169	PIdivtis	PIdivtis	14	8.34701	1.8	0
170	170	PIinterr	PIinterr	6	1.29931	9.74155	13
171	171	Pimarchi	Pimarchi	2	1.9999	0.198807	0
172	172	PImicros	PImicros	21	7.27285	11.8447	20
173	173	PISP9	PISP9	15	9.43553	1.6	0
174	174	PIviridi	PIviridi	4	2.60298	0.784314	10
175	175	PTbipo	PTbipo	12	4.81192	3.72549	0
176	176	Ptdelica	Ptdelica	7	5.37158	0.994036	0
177	177	PTfreq	PTfreq	6	4.15877	0.8	52
178	178	PTlanceo	PTlanceo	17	13.6543	0.970874	39
179	179	RAamphic	RAamphic	12	9.38072	1	0
180	180	RATen	RATen	27	21.983	5.8	0
181	181	REsinuta	REsinuta	15	10.908	1.2	20
182	182	ROabbre	ROabbre	13	10.5682	0.990099	31
183	183	Rpacumin	Rpacumin	7	6.43555	0.775194	0
184	184	RPmuscul	RPmuscul	16	9.59123	2.54902	0
185	185	SAlepdub	SAlepdub	13	7.76349	4.34783	0
186	186	SFbacill	SFbacill	8	5.00602	3.10078	0
187	187	Sfhohnii	Sfhohnii	9	3.23649	4.31373	0
188	188	SFpupula	SFpupula	4	3.27358	0.775194	36
189	189	Sfrexii	Sfrexii	13	5.76982	2.54902	0
190	190	SOexiguf	SOexiguf	4	1.35462	3.49515	6
191	191	SRconstr	SRconstr	2	1.24902	1.58103	8
192	192	Srellip	Srellip	4	3.66392	0.790514	0
193	193	SSCASP	SSCASP	20	13.7081	2.35294	0
194	194	Ssconspic	Ssconspic	2	2	0.4	0
195	195	SSkriege	SSkriege	3	2.67801	0.392157	10
196	196	SUbreb	SUbreb	10	8.65382	0.6	0
197	197	Susplen	Susplen	14	9.97204	1	0
198	198	Tafascicu	Tafascicu	16	6.91058	2.57426	0
199	199	Thbaltica	Thbaltica	3	2.3342	0.775194	0
200	200	THcflin	THcflin	8	6.62866	2.55403	0

Site 3	#	Code	Name	N_Fossil	N2_Fossil	Max_Fossil	N_Modern
201	201	Thdecipien	Thdecipien	19	13.02	2.58964	0
202	202	THeccent	THeccent	25	18.1764	2.7833	0
203	203	Thferelinea	Thferelinea	26	17.9941	3	0
204	204	Thoestrup	Thoestrup	4	3.65872	0.795229	0
205	205	THprskin	THprskin	5	3.66433	1.18343	0
206	206	THSp10Coc	THSp10Coc	17	12.0595	1.59363	0
207	207	THSp2-1Co	THSp2-1Co	23	16.281	1.77866	0
208	208	Thtenera	Thtenera	22	17.2736	1.3834	0
209	209	TLnitzsc	TLnitzsc	17	13.7799	1	0
210	210	TrSp1	TrSp1	26	20.2549	3.18725	0
211	211	TrSp2	TrSp2	3	2.77628	0.4	0
212	212	TYdebili	TYdebili	16	10.3747	1.17878	0
213	213	TYdebili1	TYdebili1	25	15.7368	3.9604	0
214	214	Tylevide	Tylevide	6	5.19173	1.35659	0
215	215	TYsalina	TYsalina	2	1.79331	0.8	0
216	216	Tyscala	Tyscala	8	5.57928	0.994036	0
217	217	TYSP1	TYSP1	5	4.43611	0.4	0
218	218	ULcfulna	ULcfulna	18	12.3773	1.97628	0

Name	N2_Moder	Max_Modern
ACcoarct	0	0
ACislan	0	0
AHexigum	12.7049	3.63036
AHgraci	0	0
AMovalis	0	0
ANbalti	0	0
ANpseudo	0	0
ASformos	2.13651	54.8
ATnorman	0	0
ATocto	0	0
AUambig	3.41726	16.8333
AUgranlt	4.212	12.1054
AUtenell	2.28782	4.5
AYsen	0	0
BApardxa	7.29571	15.3333
BM1?	0	0
BMcircum	0	0
CAaemul	0	0
CAbacill	17.8249	1.5
CAlewisi	0	0
CAsp1?	0	0
CBspA	0	0
CCplacen	3.74783	15.1667
CCscutel	0	0
CJpusill	0	0
CJsp1	0	0
CM2?	0	0
CMaffins	0	0
CMexici	0	0
CMjanis	0	0
CMmexica	0	0
CMtumida	0	0
CPcrucic	2.37754	4.16667
CRbelgic	0	0
CScflin	0	0
CSmargin	0	0
CYatomus	1.87271	10.1667
CYcaspia	0	0
CYcyclop	0	0
CYdistin	0	0

Name	N2_Moder	Max_Modern
CYmenegh	3.9735	35
CYrossi	0	0
CYsp2Coo	0	0
CYstriat	0	0
CYstylor	0	0
DAmesodo	0	0
DCplacen	0	0
DEkuetzi	3.16512	3.16667
DGminor	0	0
DHmin	0	0
DHsurirl	0	0
DIconten	0	0
DMbalfou	0	0
DPboldti	0	0
DPbombus	0	0
DPellipt	0	0
DPpsudov	0	0
DPsmithi	0	0
ECnicafe	0	0
ECSP1	0	0
EPadnata	0	0
EPfricke	0	0
EPturgid	0	0
EUrichbu	0	0
EUSP1	0	0
EUSP2	0	0
EUSP3	0	0
Eyminutu	0	0
FApygmae	0	0
Fklewis	0	0
FRvauche	13.042	11.9935
Fserifu	0	0
FSvulgar	16.1661	5.83333
GEkriege	0	0
GOinnoce	0	0
GOolivcm	0	0
GOSP3	0	0
GSsp1	0	0
GSsp3	0	0
GYcfbalt	0	0

Name	N2_Moder	Max_Modern
GYSP1	0	0
GYspence	0	0
Havirga	0	0
HIcostu	0	0
HIhunga	0	0
HIhunga1	0	0
KCcuspid	0	0
Kchaloph	0	0
KOsp1	0	0
Kvamoena	0	0
Lphungar	0	0
LUSP1	0	0
LUSP2	0	0
LUSP3	0	0
LUSP4	0	0
Mamarty	0	0
MDSP1	0	0
MESP1	0	0
MEvarian	11.8581	11.591
Naabunda	0	0
NAantoni	6.09492	1.4827
NAcaprad	4.37195	7.83333
NAcari	0	0
Nadenta	0	0
Nafacili	0	0
NAgregar	24.3249	28.6667
Naheufler	0	0
NAlancel	11.8749	6.3228
Naoculif	0	0
Napatrick	0	0
NAperegr	3.82448	1
NApermnt	6.04093	14.9918
NAphylpt	0	0
NAreichd	1.99546	2.43016
Nareinha	0	0
NAsalinm	1.20279	3.33333
NASP1	0	0
NASP10	0	0
NASP11	0	0
NASP14	0	0

Name	N2_Moder	Max_Modern
NASP5	0	0
NASP8	0	0
Nasubin	0	0
Nasubmin	0	0
NAtripun	3.60007	1.28
NAtrivls	0	0
Navilaplanr	0	0
Nazostere	0	0
NIagnita	0	0
NIamphib	9.20402	11.5702
Nibiacru	0	0
Nibirem	0	0
NIbita	0	0
Niboreal	0	0
NIbrevis	2.76506	2.66667
NIclausi	3.73584	13.5
Nicolumbi	0	0
NIfilifr	5.89981	1.33333
NIfrustu	8.22442	20.0658
NIincgnt	0	0
NIincons	5.61381	40.3537
NIlinear	17.5899	2.31405
Nimacile	0	0
NInana	5.85114	1.83333
NIpalea	20.7304	17.8333
Nipandur	0	0
NIpelluc	0	0
NIpermin	0	0
Niproxima	0	0
Nipunctata	0	0
NIpusill	0	0
NIsigma	0	0
Nisigmafor	0	0
NISP1	0	0
NISP4	0	0
NISP6	0	0
PAsulc	0	0
Pbplicat	0	0
Pccleme	0	0
PCgastru	0	0

Name	N2_Moder	Max_Modern
Pcparalega	0	0
Pdamericar	0	0
PDbrevis	4.38231	0.665557
Pdparasi	6.13104	2.13675
PDSP1	0	0
PIbiceps	0	0
PIboreal	0	0
PIdiverg	0	0
PIdivtis	0	0
PIinterr	6.60495	1.23153
Pimarchi	0	0
PImicros	14.6883	1.16667
PISP9	0	0
PIviridi	7.57811	0.666667
PTbipo	0	0
Ptdelica	0	0
PTfreq	25.8108	8.05687
PTlanceo	12.7915	13.6667
RAamphic	0	0
RATen	0	0
REsinuta	5.88254	22.093
ROabbre	6.62016	44.3522
Rpacumin	0	0
RPmuscul	0	0
SAlepdub	0	0
SFbacill	0	0
Sfhohnii	0	0
SFpupula	18.1811	6.04134
Sfrexii	0	0
SOexiguf	1.39215	18.6667
SRconstr	5.8375	1.06838
Srellip	0	0
SSCASP	0	0
Ssconspic	0	0
SSkriege	1.57444	12.8333
SUbreb	0	0
Susplen	0	0
Tafascicu	0	0
Thbaltica	0	0
THcflin	0	0

Name	N2_Moder	Max_Modern
Thdecipien	0	0
THeccent	0	0
Thferelinea	0	0
Thoestrup	0	0
THprskin	0	0
THSp10Coc	0	0
THSp2-1Co	0	0
Thtenera	0	0
TLnitzsc	0	0
TrSp1	0	0
TrSp2	0	0
TYdebili	0	0
TYdebili1	0	0
Tylevide	0	0
TYsalina	0	0
Tyscala	0	0
TYSP1	0	0
ULcfulna	0	0

Site 3	#	Code	Name	N_Fossil	N2_Fossil	Sum_Fossil	N_In_Mode
1	1	S3-0	S3-0	66	4.92982	95.7364	23
2	10	S3-10	S3-10	80	25.7212	99.4012	29
3	20	S3-20	S3-20	98	34.4018	97.4308	28
4	30	S3-30	S3-30	87	29.8626	97.2277	26
5	40	S3-40	S3-40	89	22.3558	96.5049	23
6	50	S3-50	S3-50	87	39.6013	93.8406	21
7	60	S3-60	S3-60	91	32.7549	99.6024	22
8	70	S3-70	S3-70	90	27.9095	99.6	21
9	80	S3-80	S3-80	74	17.567	98.8072	15
10	90	S3-90	S3-90	85	18.3169	99	21
11	100	S3-100	S3-100	82	20.1393	99.4	17
12	110	S3-110	S3-110	81	17.6534	99.4024	21
13	120	S3-120	S3-120	88	26.0146	99.2016	22
14	130	S3-130	S3-130	88	26.9785	98.4032	19
15	140	S3-140	S3-140	93	21.0702	99	23
16	150	S3-150	S3-150	84	27.4375	98.8235	15
17	160	S3-160	S3-160	85	24.2951	98.419	19
18	170	S3-170	S3-170	94	29.2359	99.6055	20
19	180	S3-180	S3-180	91	30.845	99.8012	26
20	190	S3-190	S3-190	79	27.8927	98	19
21	200	S3-200	S3-200	84	30.3576	99.4106	23
22	210	S3-210	S3-210	86	34.8685	100	22
23	220	S3-220	S3-220	76	22.5008	99.6	18
24	230	S3-230	S3-230	93	38.7708	98.8072	26
25	240	S3-240	S3-240	82	23.7111	99.4186	23
26	250	S3-250	S3-250	82	25.6633	99.004	21
27	260	S3-260	S3-260	89	30.3243	97.4308	19

Name	Sum_In_Modern
S3-0	68.0233
S3-10	41.9162
S3-20	48.0237
S3-30	45.7426
S3-40	48.5437
S3-50	25.0533
S3-60	33.996
S3-70	25.6
S3-80	17.2962
S3-90	17.8
S3-100	16.8
S3-110	18.1275
S3-120	27.5449
S3-130	22.7545
S3-140	19.4
S3-150	15.2941
S3-160	21.7391
S3-170	23.6686
S3-180	30.8151
S3-190	25
S3-200	24.3615
S3-210	29.0698
S3-220	29.2
S3-230	30.0199
S3-240	30.0388
S3-250	26.0956
S3-260	19.17