

**PHYSICAL-PROPERTY, WATER-QUALITY, PLANKTON, AND BOTTOM-MATERIAL
DATA FOR DEVILS LAKE AND EAST DEVILS LAKE, NORTH DAKOTA,
SEPTEMBER 1988 THROUGH OCTOBER 1990**

By Steven K. Sando and Bradley A. Sether

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CONVERSION FACTORS

Multiply	By	To obtain
centimeter (cm)	0.3937	inch
foot (ft)	0.3048	meter
inch (in.)	25.4	millimeter
liter (L)	0.2642	gallon
micrometer (μm)	0.00003937	inch
miles (mi)	1.609	kilometer
milliliter (mL)	0.03381	ounce
millimeter (mm)	0.03947	inch
nanometer (nm)	3.937×10^{-8}	inch

To convert degrees Celsius ($^{\circ}\text{C}$) to degrees Fahrenheit ($^{\circ}\text{F}$), use the following formula: $^{\circ}\text{F} = 1.8^{\circ}\text{C} + 32$.

Micrograms per liter ($\mu\text{g/L}$) is a unit expressing the concentration of a chemical constituent in solution as weight (micrograms) of solute per unit volume (liter) of water.

Microsiemens per centimeter at 25 degrees Celsius ($\mu\text{S/cm}$) replaces micromhos per centimeter at 25 degrees Celsius used for specific conductance in older reports. The two units are equivalent.

Milligrams per kilogram (mg/kg) is a unit expressing the concentration of a chemical constituent in solid material as weight (milligrams) of chemical constituent per weight (kilogram) of dry solid material; 1 mg/kg is approximately equal to 1 ppm (part per million).

Milligrams per liter (mg/L) is a unit expressing the concentration of a chemical constituent in solution as weight (milligrams) of solute per unit volume (liter) of water; 1 mg/L equals 1,000 $\mu\text{g/L}$.

PYHICAL-PROPERTY, WATER-QUALITY, PLANKTON, AND BOTTOM-MATERIAL DATA FOR
DEVILS LAKE AND EAST DEVILS LAKE, NORTH DAKOTA,
SEPTEMBER 1988 THROUGH OCTOBER 1990

By Steven K. Sando and Bradley A. Sether

ABSTRACT

Physical-properties were measured and water-quality, plankton, and bottom-material samples were collected at 10 sites in Devils Lake and East Devils Lake during September 1988 through October 1990 to study water-quality variability and water-quality and plankton relations in Devils Lake and East Devils Lake.

Physical properties measured include specific conductance, pH, water temperature, dissolved-oxygen concentration, water transparency, and light transmission. Water-quality samples were analyzed for concentrations of major ions, selected nutrients, and selected trace elements. Plankton samples were examined for identification and enumeration of phytoplankton and zooplankton species, and bottom-material samples were analyzed for concentrations of selected nutrients. Data-collection procedures are discussed and the data are presented in tabular form.

INTRODUCTION

In 1988, the U.S. Geological Survey, in cooperation with the North Dakota Game and Fish Department, began a study of water-quality variability and water-quality and plankton relations in Devils Lake and East Devils Lake in order to provide information to aid in evaluating Devils Lake management proposals. The purpose of this report is to present physical-property, water-quality, phytoplankton, zooplankton, and bottom-material data collected during the study.

DATA COLLECTION

Physical properties (specific conductance, pH, temperature, dissolved oxygen, water transparency, and light transmission) were measured and water-quality samples were collected at 10 sites in Devils Lake and East Devils Lake (fig. 1) during September 1988 through October 1990.

During each site visit, specific conductance, pH, and dissolved oxygen were measured electrometrically using a Hydrolab multimeter and temperature was measured using a thermistor. These measurements were made at 2 to 13 approximately equally spaced depths through the entire water column (table 1).

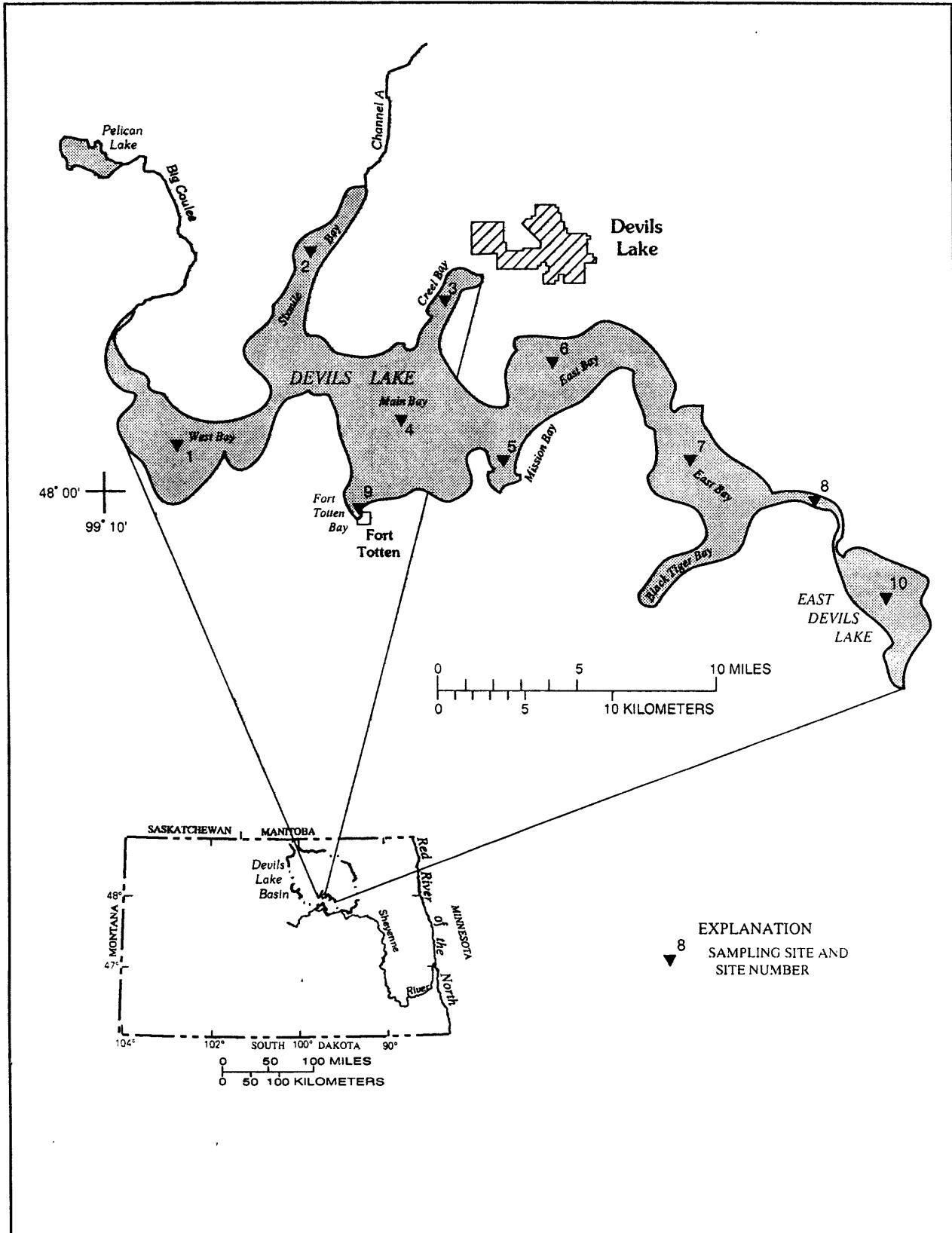


Figure 1.--Location of Devils Lake and East Devils Lake in northeastern North Dakota.

Measurements of water transparency and light transmission were used to determine the euphotic and aphotic zones in the lakes. The euphotic zone is the part of a lake where light penetration is effective and photosynthesis occurs. The aphotic zone is the part of a lake where light penetration is negligible and photosynthesis does not occur. Water transparency (table 1) was measured with a 20-cm-diameter Secchi disk by lowering and raising the disk to determine the depth where it was no longer visible. Light transmission (table 2) was measured in the 400-700-nm wavelength band (photosynthetically active radiation) using a LI-COR model 1853 photometer or a LI-COR model 1000 data logger, a model LI-190SB quantum sensor, and a LI-192SB underwater quantum sensor. Light transmission through the water column was determined by taking surface radiation measurements and corresponding subsurface measurements at 1-ft intervals to a depth where radiation was 1 percent of the surface value. The depth where radiation was 1 percent of the surface value was used to define the lower boundary of the euphotic zone. When problems were encountered in the operation of the LI-COR photometer, the Secchi disk transparency value was doubled to define the lower boundary of the euphotic zone.

Water samples were collected from the euphotic zone for analysis of chemical constituents (table 3) and identification and enumeration of phytoplankton (table 4) using either a Kemmerer sampler or a Van Dorn bottle. When the depth of the euphotic zone was greater than the length of the sampler (about 1.5 ft), samples were collected from three depths (approximately corresponding to the top, middle, and bottom of the euphotic zone) and composited in a churn splitter.

A 250-mL sample was drawn from the churn splitter and collected in a field-rinsed white polyethylene bottle for analysis of specific conductance, pH, alkalinity, and dissolved solids. Another 250-mL sample was drawn from the churn splitter and collected in a field-rinsed brown polyethylene bottle for analysis of selected nutrients. This sample was preserved by adding 1 mL of mercuric chloride and the bottle was chilled.

A 100-mL sample (a smaller volume was used during periods of large algae concentrations) was drawn from the churn splitter for analysis of chlorophyll a and b. The sample was filtered through a 0.45- μ m glass-fiber filter with suction, and the filter was folded onto itself and placed in a petri dish. The petri dish was sealed with vinyl electrical tape and frozen.

The remaining water in the churn splitter was filtered. A peristaltic pump with sample-rinsed silicone rubber tubing was used to deliver water from the churn splitter to either a 142-mm Geotech plate filter or a Geotech disposable cartridge filter. Both filters were equipped with 0.45- μ m membranes. A minimum of 125 mL of water was filtered through the plate filter, and a minimum of 500 mL of water was filtered through the cartridge filter before water was collected in the sample bottles.

A 250-mL sample was collected in a field-rinsed white polyethylene bottle for analysis of major dissolved anions. A 500-mL sample was collected in a field-rinsed, acid-rinsed, white polyethylene bottle for analysis of major dissolved cations and selected dissolved trace elements. The sample was

preserved by adding 2 mL of nitric acid. A 250-mL sample was collected in a field-rinsed brown polyethylene bottle for analysis of selected dissolved nutrients. This sample was preserved by adding 1 mL of mercuric chloride and the bottle was chilled. A 250-mL sample was collected in a field-rinsed, acid-rinsed glass bottle for analysis of dissolved mercury. This sample was preserved by adding 10 mL of potassium dichromate.

During the September and October 1990 sampling periods, water samples also were collected from the aphotic zone for analysis of selected constituents. At sites 4, 6, and 10, separate samples were collected from three to six approximately equally spaced depths for analysis of major dissolved ions and selected dissolved and total nutrients. At the other sites, samples were collected from three depths (approximately corresponding to the top, middle, and bottom of the aphotic zone) at each site and composited for analysis of selected dissolved and total nutrients. The water samples were taken from the churn splitter, processed, and preserved in the same manner as the samples from the euphotic zone.

Zooplankton samples (table 5) were collected using a Wisconsin-type plankton net (mesh size 80 μm) hauled through the entire water column. Two hauls were made at each site. After each haul, the sample contained within the net was emptied into a 250-mL polyethylene sample bottle. Soda water was added to narcotize the organisms prior to addition of about 20 mL of 40-percent formalin as a preservative.

Bottom-material samples (table 6) for analysis of nutrient concentrations were collected using a stainless-steel Ponar grab sampler. The bottom material was extruded from the sampler into a 500-mL wide-mouth baked glass jar with a Teflon lid. The samples were chilled. Samples were collected at each site during October 24-25 or November 7-8, 1989; May 8-9, 1990; August 7-8, 1990; and October 24-25, 1990.

Water-quality samples were analyzed by the U.S. Geological Survey National Water Quality Laboratory in Arvada, Colo. Properties and constituents analyzed, minimum detection limits, and analytical methods for the water-quality samples are shown in the following table. Analytical techniques used for determination of chemical constituents are described in Fishman and Friedman (1989). Phytoplankton and zooplankton were identified and enumerated by the Richard Dufford Laboratory, Fort Collins, Colo. Bottom-material samples also were analyzed by the U.S. Geological Survey National Water-Quality Laboratory in Arvada, Colo. Analytical techniques used for determination of chemical constituents in bottom-material samples are described in Fishman and Friedman (1989).

REFERENCE CITED

Fishman, M.J., and Friedman, L.C., eds., 1989, Methods for determination of inorganic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A1, 545 p.

Water-quality properties and constituents, minimum detection limits, and analytical methods
for water samples collected from Devils Lake and East Devils Lake sampling sites

[$\mu\text{S}/\text{cm}$ at 25°C, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter;
 $\mu\text{g}/\text{L}$, micrograms per liter]

Property or constituent	Minimum detection limit	Analytical method
Specific conductance (laboratory), in $\mu\text{S}/\text{cm}$ at 25°C	1	Automated electrometry
pH (laboratory), in standard units	.1	Auto glass electrode electrometry
Total alkalinity (laboratory), in mg/L as CaCO_3	1	Electrometric titrimetry
Dissolved solids, residue on evaporation at 180°C	1	Gravimetry
Major ions		
Dissolved calcium, in mg/L as Ca	.1	Direct atomic absorption
Dissolved magnesium, in mg/L as Mg	.1	Direct atomic absorption
Dissolved sodium, in mg/L as Na	.1	Direct atomic absorption
Dissolved potassium, in mg/L as K	.1	Ion chromatography
Dissolved sulfate, in mg/L as SO_4	.1	Ion chromatography
Dissolved chloride, in mg/L as Cl	.1	Ion chromatography
Dissolved fluoride, in mg/L as F	.1	Ion chromatography
Dissolved silica, in mg/L as SiO_2	.1	Auto molybdate blue colorimetry
Nutrients		
Dissolved nitrite (NO_2), in mg/L as N	.01	Auto diazotization colorimetry
Total nitrite (NO_2), in mg/L as N	.01	Auto diazotization colorimetry
Dissolved nitrite plus nitrate (NO_2+NO_3), in mg/L as N	.1	Auto diazotization colorimetry
Total nitrite plus nitrate (NO_2+NO_3), in mg/L as N	.1	Auto cadmium-reduced colorimetry
Dissolved ammonia, in mg/L as N	.01	Auto colorimetry
Total ammonia, in mg/L as N	.01	Auto colorimetry
Total ammonia plus organic nitrogen, in mg/L as N	.2	Block digest and auto colorimetry
Dissolved phosphorus, in mg/L as P	.01	Auto phosphomolybdate colorimetry
Total phosphorus, in mg/L as P	.01	Auto phosphomolybdate colorimetry
Dissolved orthophosphate, in mg/L as P	.01	Auto phosphomolybdate colorimetry
Total orthophosphate, in mg/L as P	.01	Auto phosphomolybdate colorimetry
Trace elements		
Dissolved arsenic, in $\mu\text{g}/\text{L}$ as As	1	Auto hydride atomic absorption
Dissolved boron, in $\mu\text{g}/\text{L}$ as B	10	Direct deductively coupled plasma atomic emission
Dissolved lead, in $\mu\text{g}/\text{L}$ as Pb	1	Graphite furnace atomic absorption
Dissolved lithium, in $\mu\text{g}/\text{L}$ as Li	10	Direct atomic absorption
Dissolved manganese, in $\mu\text{g}/\text{L}$ as Mn	10	Direct atomic absorption
Dissolved mercury, in $\mu\text{g}/\text{L}$ Hg	0.1	Auto flameless atomic absorption
Dissolved molybdenum, in $\mu\text{g}/\text{L}$ Mo	1	Atomic absorption, chelation extraction
Dissolved selenium, in $\mu\text{g}/\text{L}$ as Se	1	Auto hydride atomic absorption
Dissolved strontium, in $\mu\text{g}/\text{L}$ as Sr	10	Direct atomic absorption
Biological constituents		
Chlorophyll a, in $\mu\text{g}/\text{L}$.1	Chromatography and fluorometry
Chlorophyll b, in $\mu\text{g}/\text{L}$.1	Chromatography and fluorometry

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990
 [--, no data]

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
<u>Site 1, Devils Lake, West Bay</u>						
Sept. 21, 1988	(Secchi disk transparency, 7.0 inches; lake depth at site, 6.6 feet)					
	0.0	3,920	--	10.0	10.0	--
	1.6	3,920	--	10.0	9.8	--
	3.3	3,910	--	10.0	9.7	--
	6.6	3,920	--	10.0	9.6	--
Feb. 23, 1989	(Secchi disk transparency, 48.0 inches; lake depth at site, 8.2 feet; ice thickness, 2.0 feet)					
	2.0	5,070	8.6	0.5	9.1	65
	4.9	5,250	8.4	.5	7.2	52
	8.2	5,410	8.2	1.5	3.3	25
May 9, 1989	(Secchi disk transparency, 10.0 inches; lake depth at site, 7.5 feet)					
	0.0	3,580	8.7	11.0	12.7	--
	1.0	3,580	8.7	11.0	12.7	--
	2.0	3,580	8.7	11.0	12.7	--
	3.0	3,580	8.7	11.0	12.7	--
	4.0	3,590	8.7	11.0	12.8	--
	5.0	3,580	8.7	11.0	12.8	--
	7.5	3,590	8.6	11.0	13.1	--
June 21, 1989	(Secchi disk transparency, 8.0 inches; lake depth at site, 6.9 feet)					
	0.0	3,860	8.2	19.5	7.9	86
	1.5	3,860	8.2	19.5	7.9	86
	3.0	3,860	8.2	19.5	8.0	87
	4.5	3,860	8.3	19.5	8.2	90
	6.0	3,860	8.2	19.5	8.7	95
Aug. 15, 1989	(Secchi disk transparency, 12.0 inches; lake depth at site, 6.5 feet)					
	0.0	4,420	8.7	21.5	11.7	132
	1.0	4,420	8.8	22.0	12.9	147
	2.0	4,440	8.8	22.0	12.2	140
	3.0	4,430	8.7	21.5	11.2	126
	4.0	4,440	8.7	21.0	9.2	103
	5.0	4,450	8.7	20.5	8.4	93
	6.0	4,440	8.7	20.5	7.8	86
	6.5	4,440	8.7	20.5	7.1	79
Oct. 25, 1989	(Secchi disk transparency, 9.0 inches; lake depth at site, 5.8 feet)					
	0.0	4,750	8.6	8.5	12.3	107
	1.0	4,770	8.6	8.5	12.2	106
	2.0	4,780	8.6	8.5	12.2	106
	3.0	4,780	8.5	8.5	12.2	106
	4.0	4,790	8.5	8.5	12.3	107
	5.8	4,810	8.5	9.0	12.5	109

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
Site 1, Devils Lake, West Bay--Continued						
Feb. 6, 1990	(Secchi disk transparency, 18.0 inches; lake depth at site, 5.4 feet; ice thickness, 2.4 feet)					
	2.4	7,580	8.8	0.5	13.1	93
	3.5	7,530	8.9	0	13.0	92
	4.6	7,540	8.8	1.0	4.2	30
May 9, 1990	(Secchi disk transparency, 4.0 inches; lake depth at site, 6.6 feet)					
	0.0	3,900	8.7	10.0	10.6	94
	1.0	3,920	8.7	10.0	10.4	92
	2.0	3,910	8.7	10.0	10.4	92
	3.0	3,920	8.7	10.0	10.4	92
	4.0	3,910	8.7	10.0	10.5	93
	5.0	3,910	8.7	10.0	10.4	92
	6.0	3,900	8.7	10.0	10.6	94
Aug. 7, 1990	(Secchi disk transparency, 6.0 inches; lake depth at site, 5.6 feet)					
	0.0	4,880	8.5	22.5	10.4	120
	2.0	4,880	8.5	22.0	10.1	116
	3.0	4,880	8.5	22.0	10.1	116
	4.0	4,880	8.5	22.0	10.0	115
	5.0	4,880	8.5	22.0	10.0	115
Sept. 11, 1990	(Secchi disk transparency, 8.4 inches; lake depth at site, 5.0 feet)					
	0.0	5,410	8.8	20.5	12.8	145
	2.0	5,410	8.8	21.0	12.6	143
	3.0	5,410	8.7	20.0	11.3	126
	4.0	5,410	8.7	19.5	10.0	110
	5.0	5,400	8.6	18.5	5.6	61
Oct. 24, 1990	(Secchi disk transparency, 3.6 inches; lake depth at site, 4.7 feet)					
	0.0	--	8.3	4.5	12.3	--
	2.0	--	8.3	4.0	12.2	--
	3.0	--	8.3	4.0	12.3	--
	4.5	--	8.3	4.0	12.3	--
Site 2, Devils Lake, Sixmile Bay						
Sept. 21, 1988	(Secchi disk transparency, 56.0 inches; lake depth at site, 14.8 feet)					
	0.0	3,910	--	11.0	9.6	--
	1.6	3,920	--	11.0	9.5	--
	3.3	3,910	--	11.0	9.3	--
	6.6	3,910	--	11.0	9.3	--
	9.8	3,910	--	11.0	9.3	--
	13.1	3,910	--	11.0	9.2	--
	14.8	3,910	--	11.0	9.2	--

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
<u>Site 2, Devils Lake, Sixmile Bay--Continued</u>						
Jan. 30, 1989	(Secchi disk transparency, 156 inches; lake depth at site, 13.8 feet; ice thickness, 1.6 feet)					
	4.9	4,340	8.8	0.0	11.7	83
	6.6	4,380	8.7	.5	9.7	69
	9.8	4,380	8.7	.5	9.6	68
	13.8	4,410	8.5	1.5	8.3	60
May 9, 1989	(Secchi disk transparency, 28.0 inches; lake depth at site, 15.0 feet)					
	0.0	4,020	8.7	9.5	12.6	--
	3.0	4,020	8.6	9.5	12.7	--
	6.0	4,020	8.6	9.5	12.6	--
	9.0	4,020	8.6	9.5	12.6	--
	12.0	4,010	8.6	9.0	12.6	--
	15.0	4,030	8.5	9.0	11.1	--
June 21, 1989	(Secchi disk transparency, 42.0 inches; lake depth at site, 14.3 feet)					
	0.0	4,070	8.4	19.5	8.7	95
	2.0	4,070	8.4	19.5	8.7	95
	5.0	4,080	8.4	19.5	8.8	96
	8.0	4,080	8.4	19.5	9.0	98
	11.0	4,080	8.4	19.5	9.1	99
	14.3	4,090	8.4	19.5	9.2	100
Aug. 15, 1989	(Secchi disk transparency, 26.0 inches; lake depth at site, 13.6 feet)					
	0.0	4,310	8.6	22.5	12.4	143
	3.0	4,310	8.7	22.5	12.6	145
	6.0	4,310	8.7	21.5	10.3	117
	9.0	4,310	8.7	21.5	8.9	100
	12.0	4,310	8.7	21.5	8.5	96
	13.6	4,310	8.7	21.5	7.8	88
Oct. 25, 1989	(Secchi disk transparency, 43.0 inches; lake depth at site, 13.0 feet)					
	0.0	4,450	8.7	8.0	11.7	100
	3.0	4,460	8.7	8.0	11.9	101
	5.0	4,450	8.7	8.0	11.7	100
	7.0	4,460	8.6	8.0	11.8	100
	9.0	4,460	8.6	8.0	11.7	100
	11.0	4,460	8.6	8.0	11.8	101
	13.0	4,470	8.5	8.0	12.1	104
Feb. 6, 1990	(Secchi disk transparency, 70.8 inches; lake depth at site, 13.2 feet; ice thickness, 2.4 feet)					
	2.4	5,170	9.2	0.0	15.8	111
	5.0	5,140	9.3	0	15.9	111
	7.0	5,150	9.3	0	16.0	111
	9.0	5,170	9.3	0	15.6	109
	11.0	5,310	9.2	1.0	10.3	73
	12.1	5,400	9.0	2.0	7.9	58

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
<u>Site 2, Devils Lake, Sixmile Bay--Continued</u>						
May 9, 1990	(Secchi disk transparency, 36.0 inches; lake depth at site, 13.0 feet)					
	0.0	4,240	8.7	9.5	11.2	98
	3.0	4,240	8.7	9.5	11.2	98
	6.0	4,250	8.7	9.5	11.3	99
	9.0	4,250	8.7	9.5	11.2	98
	12.5	4,250	8.7	9.5	11.4	100
Aug. 7, 1990	(Secchi disk transparency, 22.8 inches; lake depth at site, 12.4 feet)					
	0.0	4,790	8.5	22.5	9.8	113
	2.0	4,790	8.5	22.5	9.7	112
	4.0	4,790	8.5	22.5	9.7	112
	6.0	4,790	8.4	22.5	9.7	112
	8.0	4,790	8.4	22.5	9.7	112
	10.0	4,790	8.4	22.5	9.6	111
	12.0	4,790	8.4	22.5	9.7	112
Sept. 11, 1990	(Secchi disk transparency, 14.4 inches; lake depth at site, 12.3 feet)					
	0.0	4,980	8.9	21.0	13.4	151
	2.0	4,980	8.9	20.5	12.7	142
	4.0	4,980	8.9	20.5	11.9	133
	6.0	4,980	8.9	20.0	11.1	124
	8.0	4,980	8.9	20.0	11.0	123
	10.0	4,980	8.9	20.0	10.6	118
	12.0	4,980	8.8	20.0	10.1	112
Oct. 24, 1990	(Secchi disk transparency, 34.8 inches; lake depth at site, 11.8 feet)					
	0.0	4,930	8.6	4.5	12.0	96
	2.0	4,930	8.6	4.5	12.1	96
	5.0	4,970	8.6	4.5	12.1	97
	7.0	4,970	8.6	4.5	12.2	97
	9.0	4,970	8.6	4.5	12.2	97
	11.0	4,980	8.6	4.5	12.3	98
<u>Site 3, Devils Lake, Creel Bay</u>						
Sept 21, 1988	(Secchi disk transparency, 90.0 inches; lake depth at site, 19.7 feet)					
	0.0	3,890	8.8	12.5	9.3	--
	1.6	3,890	8.8	12.5	9.3	--
	3.3	3,890	8.8	12.5	9.3	--
	6.6	3,890	8.8	12.5	9.3	--
	9.8	3,890	8.8	12.5	9.3	--
	13.1	3,890	8.8	12.5	9.3	--
	16.4	3,890	8.8	12.5	9.2	--
	19.7	3,900	8.8	12.5	8.7	--

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
<u>Site 3, Devils Lake, Creel Bay--Continued</u>						
Jan. 30, 1989	(Secchi disk transparency, 131 inches; lake depth at site, 19.9 feet; ice thickness, 2.5 feet)					
	4.9	4,220	8.9	0.0	11.9	81
	6.6	4,220	8.9	0	11.8	81
	9.8	4,220	8.9	0	11.8	81
	13.1	4,230	8.8	0	11.8	81
	16.4	4,230	8.7	.5	11.7	81
	19.9	4,300	8.3	1.5	5.7	41
May 8, 1989	(Secchi disk transparency, 43.0 inches; lake depth at site, 20.4 feet)					
	0.0	4,030	8.7	8.0	13.9	--
	1.0	4,030	8.7	8.0	14.2	--
	3.0	4,030	8.7	8.0	14.2	--
	5.0	4,030	8.6	8.0	14.2	--
	8.0	4,030	8.6	8.0	14.2	--
	11.0	4,030	8.6	8.0	14.1	--
	14.0	4,030	8.5	8.0	14.1	--
	17.0	4,030	8.5	7.5	13.5	--
	20.4	4,060	8.3	7.0	13.2	--
June 21, 1989	(Secchi disk transparency, 61.0 inches; lake depth at site, 20.6 feet)					
	0.0	4,120	8.5	19.0	9.4	102
	4.0	4,120	8.5	19.0	9.4	102
	8.0	4,130	8.5	19.0	9.4	102
	12.0	4,120	8.5	19.0	9.4	102
	16.0	4,110	8.5	19.0	9.2	100
	20.0	4,110	8.4	17.5	7.3	77
Aug. 15, 1989	(Secchi disk transparency, 34.0 inches; lake depth at site, 19.6 feet)					
	0.0	4,320	8.6	21.5	8.5	97
	3.0	4,320	8.7	21.5	8.2	93
	6.0	4,320	8.7	22.0	8.1	92
	9.0	4,320	8.7	22.0	8.1	92
	12.0	4,320	8.7	22.0	8.0	91
	15.0	4,320	8.7	21.5	7.5	85
	18.0	4,320	8.7	21.5	7.2	82
	19.6	4,320	8.7	21.5	6.8	77
Oct. 25, 1989	(Secchi disk transparency, 46.0 inches; lake depth at site, 19.0 feet)					
	0.0	4,410	8.8	8.0	11.6	99
	2.0	4,400	8.8	8.0	11.7	100
	4.0	4,410	8.8	8.0	11.6	99
	7.0	4,410	8.8	8.0	11.7	99
	10.0	4,410	8.8	8.0	11.7	99
	13.0	4,420	8.7	7.5	11.7	99
	16.0	4,410	8.7	7.5	11.7	99
	19.0	4,410	8.5	8.0	11.8	100

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
Site 3, Devils Lake, Creel Bay--Continued						
Feb. 6, 1990	(Secchi disk transparency, 67.0 inches; lake depth at site, 19.2 feet; ice thickness, 2.2 feet)					
	2.2	4,930	9.2	0.5	15.6	110
	4.0	4,930	9.3	.5	15.4	108
	7.0	4,940	9.3	.5	15.3	107
	10.0	4,940	9.3	0	15.3	107
	13.0	4,940	9.3	0	15.1	106
	16.0	4,960	9.3	.5	13.8	98
	18.0	5,060	9.4	.5	13.6	97
	18.3	5,050	9.4	1.0	13.1	93
May 8, 1990	(Secchi disk transparency, 36.0 inches; lake depth at site, 19.2 feet)					
	0.0	4,770	8.4	10.0	14.3	128
	2.0	4,770	8.4	10.0	14.3	128
	4.0	4,770	8.4	10.0	14.3	128
	7.0	4,760	8.3	10.0	14.2	127
	10.0	4,780	8.3	10.0	14.2	127
	13.0	4,770	8.3	10.0	14.2	127
	16.0	4,770	8.2	10.0	14.2	127
	19.0	4,770	8.2	10.0	14.1	126
Aug. 7, 1990	(Secchi disk transparency, 26.4 inches; lake depth at site, 18.2 feet)					
	0.0	4,820	8.6	22.5	10.4	120
	3.0	4,820	8.6	22.5	10.4	120
	6.0	4,820	8.6	22.0	10.2	117
	9.0	4,820	8.5	22.0	9.9	113
	12.0	4,820	8.5	22.0	9.5	109
	15.0	4,820	8.5	22.0	8.9	102
	18.0	4,820	8.5	22.0	8.8	100
Sept. 11, 1990	(Secchi disk transparency, 18.0 inches; lake depth at site, 18.8 feet)					
	0.0	4,960	8.8	21.0	11.5	130
	2.0	4,960	8.7	21.0	11.5	130
	6.0	4,960	8.7	20.5	10.0	112
	10.0	4,960	8.7	20.0	9.0	100
	14.0	4,960	8.7	20.0	7.6	84
	18.0	4,960	8.7	20.0	6.2	69
Oct. 24, 1990	(Secchi disk transparency, 55.2 inches; lake depth at site, 17.8 feet)					
	0.0	4,870	8.8	5.5	11.4	94
	3.0	4,870	8.8	5.5	11.4	93
	6.0	4,880	8.8	5.5	11.4	93
	9.0	4,880	8.8	5.5	11.4	93
	12.0	4,880	8.8	5.5	11.4	94
	15.0	4,870	8.8	5.5	11.5	95
	17.8	4,870	8.8	6.0	11.7	97

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
<u>Site 4, Devils Lake, Main Bay</u>						
Sept. 20, 1988	(Secchi disk transparency, 60.0 inches; lake depth at site, 26.2 feet)					
0.0	3,980	8.7	13.0	10.1	--	
1.6	3,960	8.7	13.0	10.0	--	
3.3	3,960	8.7	13.0	10.0	--	
4.9	3,980	8.7	13.0	9.9	--	
6.6	3,980	8.7	13.0	9.9	--	
8.2	3,980	8.7	13.0	9.8	--	
9.8	3,980	8.7	13.0	9.8	--	
11.5	3,980	8.7	13.0	9.9	--	
13.1	3,980	8.7	13.0	9.8	--	
16.4	3,990	8.7	13.0	9.8	--	
19.7	3,990	8.7	13.0	9.6	--	
23.0	3,990	8.8	13.0	9.5	--	
26.2	3,990	8.8	13.0	9.4	--	
Jan. 30, 1989	(Secchi disk transparency, 156 inches; lake depth at site, 26.8 feet; ice thickness, 1.7 feet)					
4.9	4,180	8.8	0.0	12.0	84	
9.8	4,190	8.8	0.0	12.0	85	
13.1	4,200	8.8	0.5	11.9	85	
19.7	4,230	8.5	2.0	10.7	80	
26.2	4,410	8.1	4.0	1.9	15	
May 8, 1989	(Secchi disk transparency, 32.0 inches; lake depth at site, 27.0 feet)					
0.0	--	8.8	7.5	15.2	--	
3.0	--	8.8	7.5	15.2	--	
6.0	--	8.8	7.5	15.0	--	
9.0	--	8.8	7.5	14.8	--	
12.0	--	8.8	7.5	14.5	--	
15.0	--	8.8	7.0	13.5	--	
18.0	--	8.8	7.0	13.2	--	
21.0	--	8.7	7.0	13.1	--	
24.0	--	8.7	7.0	13.2	--	
27.0	--	8.6	7.0	13.2	--	
June 21, 1989	(Secchi disk transparency, 85.0 inches; lake depth at site, 26.0 feet)					
0.0	4,090	8.5	18.0	9.2	98	
2.0	4,110	8.5	18.0	9.2	98	
6.0	4,120	8.5	18.0	9.3	99	
10.0	4,120	8.5	18.0	9.3	99	
14.0	4,120	8.5	18.0	9.3	99	
18.0	4,120	8.5	18.0	9.5	101	
22.0	4,120	8.5	18.0	9.4	100	
26.0	4,120	8.4	18.0	9.9	105	

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
Site 4, Devils Lake, Main Bay--Continued						
Aug. 15, 1989	(Secchi disk transparency, 34.0 inches; lake depth at site, 25.9 feet)					
	0.0	4,300	8.7	23.5	13.0	152
	3.0	4,330	8.7	22.5	13.1	151
	6.0	4,300	8.7	22.0	12.0	137
	9.0	4,310	8.7	22.0	10.1	115
	12.0	4,300	8.7	22.0	9.9	112
	15.0	4,300	8.7	21.5	9.7	110
	18.0	4,300	8.7	22.0	9.6	109
	21.0	4,300	8.7	22.0	9.6	109
	24.0	4,300	8.7	22.0	9.6	109
	25.9	4,300	8.7	21.5	8.7	99
Oct. 25, 1989	(Secchi disk transparency, 52.0 inches; lake depth at site, 25.1 feet)					
	0.0	4,390	8.7	8.0	11.8	101
	2.0	4,410	8.7	8.0	11.8	101
	5.0	4,410	8.7	8.0	11.8	101
	9.0	4,420	8.7	8.0	11.7	99
	13.0	4,410	8.7	8.0	11.7	99
	17.0	4,410	8.7	8.0	11.5	97
	21.0	4,420	8.7	8.0	11.7	99
	25.1	4,420	8.6	8.0	11.6	99
Feb. 6, 1990	(Secchi disk transparency, 52.0 inches; lake depth at site, 25.2 feet; ice thickness, 2.2 feet)					
	2.2	4,940	9.2	0.5	15.6	110
	5.0	4,950	9.3	.5	15.3	107
	10.0	4,980	9.4	0	15.3	107
	15.0	4,950	9.4	0	15.3	107
	17.0	4,980	9.4	1.0	14.0	100
	20.0	4,980	9.3	1.0	9.8	70
	22.0	5,300	9.2	2.5	7.6	56
	24.0	5,410	9.0	3.0	2.3	17
May 9, 1990	(Secchi disk transparency, 46.0 inches; lake depth at site, 25.5 feet)					
	0.0	4,740	8.8	8.0	12.8	108
	5.0	4,730	8.8	8.0	12.8	108
	10.0	4,730	8.8	8.0	12.8	108
	15.0	4,740	8.8	8.0	12.8	108
	20.0	4,730	8.8	8.0	12.9	109
	25.0	4,730	8.8	8.0	12.9	109

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
<u>Site 4, Devils Lake, Main Bay--Continued</u>						
Aug. 7, 1990	(Secchi disk transparency, 27.6 inches; lake depth at site, 24.5 feet)					
	0.0	4,810	8.5	22.5	10.1	117
	2.0	4,810	8.6	22.5	10.1	117
	4.0	4,810	8.5	22.0	9.8	113
	6.0	4,810	8.5	22.0	9.7	112
	8.0	4,810	8.5	22.0	9.4	108
	10.0	4,810	8.5	22.0	9.2	106
	12.0	4,810	8.5	22.0	9.2	106
	14.0	4,810	8.5	22.0	8.5	98
	16.0	4,810	8.5	22.0	8.3	95
	18.0	4,820	8.5	22.0	8.2	94
	20.0	4,810	8.5	21.5	7.4	84
	22.0	4,810	8.4	21.5	6.4	73
	24.0	4,810	8.4	21.5	6.4	73
Sept. 11, 1990	(Secchi disk transparency, 39.6 inches; lake depth at site, 24.5 feet)					
	0.0	4,930	8.8	20.5	9.6	107
	2.0	4,930	8.8	20.5	9.6	107
	4.0	4,930	8.8	20.0	9.5	106
	6.0	4,930	8.8	20.0	9.2	102
	8.0	4,920	8.8	20.0	8.8	97
	10.0	4,920	8.8	20.0	8.7	96
	12.0	4,920	8.8	20.0	8.5	94
	14.0	4,930	8.7	20.0	8.4	93
	16.0	4,930	8.7	20.0	8.3	92
	18.0	4,930	8.7	20.0	8.3	92
	20.0	4,930	8.7	20.0	8.2	91
	22.0	4,930	8.7	20.0	8.0	88
	24.0	4,930	8.7	20.0	8.0	88
Oct. 24 1990	(Secchi disk transparency, 58.8 inches; lake depth at site, 24.2 feet)					
	0.0	4,900	8.6	6.0	11.7	96
	4.0	4,920	8.6	6.0	11.7	96
	8.0	4,930	8.6	6.0	11.7	96
	12.0	4,920	8.6	5.5	11.7	96
	16.0	4,930	8.6	5.5	11.8	97
	20.0	4,930	8.6	5.5	11.8	97
	24.0	4,950	8.6	5.5	12.1	100
<u>Site 5, Devils Lake, Mission Bay</u>						
Sept. 21, 1988	(Secchi disk transparency, 60.0 inches; lake depth at site, 16.4 feet)					
	0.0	4,920	--	11.5	10.4	--
	1.6	4,930	--	11.5	10.4	--
	3.3	4,910	--	11.5	10.3	--
	6.6	4,920	--	11.5	10.3	--
	9.8	4,930	--	11.5	10.3	--
	13.1	4,950	--	11.5	10.3	--
	16.4	4,970	--	11.5	9.8	--

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
Site 5, Devils Lake, Mission Bay--Continued						
Feb. 22, 1989	(Secchi disk transparency, 89.0 inches; lake depth at site, 16.6 feet; ice thickness, 2.1 feet)					
	2.1	5,810	8.9	0.0	--	--
	9.8	6,070	8.7	1.5	8.8	65
	16.4	6,230	8.5	2.5	5.3	40
May 8, 1989	(Secchi disk transparency, 31.0 inches; lake depth at site, 17.4 feet)					
	0.0	--	--	9.5	--	--
	3.0	--	--	9.5	--	--
	5.0	--	--	9.5	--	--
	8.0	--	--	9.0	--	--
	11.0	--	--	9.0	--	--
	14.0	--	--	9.0	--	--
	17.4	--	--	8.0	--	--
June 21, 1989	(Secchi disk transparency, 55.0 inches; lake depth at site, 17.0 feet)					
	0.0	4,990	8.5	19.0	9.8	107
	2.0	4,990	8.5	19.0	9.9	108
	5.0	4,990	8.5	19.0	9.9	108
	8.0	5,010	8.5	19.0	9.9	108
	11.0	5,030	8.5	19.0	9.9	108
	14.0	5,090	8.5	19.0	9.8	107
	17.0	5,110	8.4	19.0	9.5	103
Aug. 15, 1989	(Secchi disk transparency, 38.0 inches; lake depth at site, 16.3 feet)					
	0.0	5,110	8.7	23.5	13.1	154
	3.0	5,190	8.8	22.5	14.2	163
	6.0	5,260	8.8	22.0	12.7	145
	9.0	5,280	8.8	21.5	11.0	125
	12.0	5,320	8.7	21.5	7.8	89
	15.0	5,650	8.7	21.5	2.7	31
	16.3	5,710	8.7	21.5	.3	3
Oct. 26, 1989	(Secchi disk transparency, 41.0 inches; lake depth at site, 15.6 feet)					
	0.0	5,590	8.6	8.0	12.1	104
	3.0	5,600	8.6	8.0	12.0	103
	6.0	5,600	8.6	8.0	12.0	103
	9.0	5,600	8.6	8.0	12.0	103
	12.0	5,630	8.5	8.0	11.8	101
	15.6	5,640	8.5	8.0	11.8	101
Feb. 6, 1990	(Secchi disk transparency, 74.0 inches; lake depth at site, 15.7 feet; ice thickness, 2.7 feet)					
	2.7	5,950	9.1	1.0	17.1	122
	5.0	6,330	9.1	1.0	16.2	117
	7.0	6,400	9.1	1.0	--	--
	9.0	6,530	9.1	1.5	--	--
	11.0	6,680	9.2	1.5	--	--
	13.0	6,820	9.1	2.0	--	--
	14.5	6,890	9.2	2.0	--	--

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
Site 5, Devils Lake, Mission Bay--Continued						
May 8, 1990	(Secchi disk transparency, 62.0 inches; lake depth at site, 15.6 feet)					
0.0	5,500	8.8	10.5	12.9	118	
3.0	5,490	8.8	10.5	12.9	118	
6.0	5,500	8.8	10.5	12.9	118	
9.0	5,490	8.8	10.5	12.8	117	
12.0	5,490	8.8	10.5	12.9	118	
15.0	5,480	8.6	10.5	13.0	119	
Aug. 7, 1990	(Secchi disk transparency, 18.0 inches; lake depth at site, 15.0 feet)					
0.0	5,830	8.6	22.0	11.1	128	
3.0	5,830	8.6	22.0	11.1	128	
6.0	5,830	8.6	22.0	11.1	128	
9.0	5,840	8.6	22.0	11.0	127	
12.0	5,830	8.6	22.0	10.8	125	
15.0	6,010	8.6	21.5	5.4	62	
Sept. 11, 1990	(Secchi disk transparency, 14.4 inches; lake depth at site, 14.9 feet)					
0.0	5,800	8.9	21.0	15.0	170	
2.0	5,800	8.9	21.0	15.1	171	
4.0	5,820	8.8	21.0	14.7	166	
6.0	5,990	8.8	20.0	11.2	124	
8.0	5,990	8.8	20.0	10.8	120	
10.0	5,990	8.7	19.5	10.4	115	
12.0	5,980	8.8	19.5	8.7	96	
14.0	5,980	8.8	19.0	7.3	80	
Oct. 24, 1990	(Secchi disk transparency, 32.4 inches; lake depth at site, 14.5 feet)					
0.0	5,880	8.6	5.0	12.6	102	
2.5	5,880	8.6	5.0	12.6	102	
5.0	5,880	8.6	5.0	12.6	102	
8.0	5,880	8.6	4.5	12.4	100	
11.0	5,890	8.6	4.5	12.2	98	
14.0	5,900	8.6	4.5	12.3	98	
Site 6, Devils Lake, East Bay west						
Sept. 21, 1988	(Secchi disk transparency, 12.0 inches; lake depth at site, 15.6 feet)					
0.0	6,170	--	11.5	9.3	--	
1.6	6,170	--	11.5	9.0	--	
3.3	6,170	--	11.5	9.0	--	
6.6	6,180	--	11.5	9.0	--	
9.8	6,170	--	11.5	9.0	--	
13.1	6,170	--	11.5	9.0	--	
15.6	6,170	--	11.5	8.9	--	

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
Site 6, Devils Lake, East Bay west--Continued						
Feb. 23, 1989	(Secchi disk transparency, 77.0 inches; lake depth at site, 16.9 feet; ice thickness, 2.4 feet)					
	2.4	6,800	9.0	0.0	8.9	64
	6.6	6,780	9.0	1.0	8.6	63
	9.8	6,820	8.9	1.0	7.9	58
	13.1	6,850	9.0	.5	9.0	66
	16.4	6,900	8.3	2.0	5.1	39
May 9, 1989	(Secchi disk transparency, 31.0 inches; lake depth at site, 16.6 feet)					
	0.0	6,210	8.8	10.0	13.7	--
	2.0	6,220	8.8	9.5	14.0	--
	4.0	6,210	8.8	9.0	13.9	--
	7.0	6,200	8.8	8.5	13.9	--
	10.0	6,220	8.7	8.0	13.4	--
	13.0	6,220	8.7	8.0	13.2	--
	16.6	6,290	8.6	7.5	11.3	--
June 20, 1989	(Secchi disk transparency, 25.0 inches; lake depth at site, 16.0 feet)					
	0.0	6,060	8.5	21.0	9.8	113
	4.0	6,040	8.5	19.0	10.5	115
	7.0	6,050	8.5	19.0	9.5	104
	10.0	6,060	8.5	18.5	9.3	102
	13.0	6,050	8.4	18.5	9.2	101
	16.0	6,050	8.4	18.5	9.0	98
Aug. 15, 1989	(Secchi disk transparency, 11.0 inches; lake depth at site, 15.5 feet)					
	0.0	6,480	8.9	27.0	19.5	246
	3.0	6,440	8.8	22.0	13.2	152
	6.0	6,420	8.8	22.0	9.8	112
	9.0	6,410	8.8	21.5	8.6	98
	12.0	6,410	8.8	21.5	8.1	92
	15.0	6,410	8.8	21.5	6.9	79
	15.5	6,420	8.8	21.5	6.1	69
Oct. 26, 1989	(Secchi disk transparency, 41.0 inches; lake depth at site, 14.6 feet)					
	0.0	6,680	8.7	7.5	10.7	92
	2.0	6,690	8.7	7.5	10.8	92
	4.0	6,680	8.7	7.5	10.8	92
	6.0	6,680	8.7	7.5	10.8	92
	8.0	6,690	8.6	7.5	10.8	92
	10.0	6,690	8.6	7.5	10.8	92
	12.0	6,690	8.6	7.5	10.9	93
	14.6	6,690	8.6	7.5	11.1	95

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
Site 6, Devils Lake, East Bay west--Continued						
Feb. 7, 1990	(Secchi disk transparency, 86.0 inches; lake depth at site, 14.7 feet; ice thickness, 2.7 feet)					
	2.7	7,540	8.9	0.5	9.8	70
	5.0	7,550	8.9	.5	9.4	67
	8.0	7,540	9.0	.5	9.2	65
	10.0	7,600	9.0	1.0	6.7	49
	12.0	7,660	8.9	2.0	4.0	30
	13.5	7,730	8.9	2.5	2.7	20
May 8, 1990	(Secchi disk transparency, 42.0 inches; lake depth at site, 15.0 feet)					
	0.0	6,510	8.5	10.0	12.8	116
	3.0	6,510	8.5	10.0	12.8	116
	6.0	6,510	8.5	10.0	12.8	116
	9.0	6,510	8.5	10.0	12.8	116
	12.0	6,500	8.4	10.0	12.8	116
	15.0	6,500	8.4	10.0	12.9	117
Aug. 8, 1990	(Secchi disk transparency, 28.8 inches; lake depth at site, 14.0 feet)					
	0.0	6,870	8.6	21.5	8.9	102
	2.0	6,870	8.6	21.5	8.8	101
	4.0	6,870	8.6	21.5	8.8	101
	6.0	6,870	8.6	21.5	8.8	101
	8.0	6,870	8.6	21.5	8.8	101
	10.0	6,870	8.6	21.5	8.8	101
	12.0	6,870	8.6	21.5	8.8	101
	14.0	6,870	8.6	21.5	8.8	101
Sept. 12, 1990	(Secchi disk transparency, 21.6 inches; lake depth at site, 13.9 feet)					
	0.0	7,110	8.6	19.0	6.3	69
	3.0	7,120	8.6	19.0	6.3	69
	5.0	7,120	8.6	19.0	6.4	70
	7.0	7,120	8.6	19.0	6.3	69
	9.0	7,120	8.6	19.0	6.4	70
	11.0	7,120	8.6	19.0	6.4	70
	13.0	7,120	8.5	19.0	6.5	71
Oct. 25, 1990	(Secchi disk transparency, 14.4 inches; lake depth at site, 13.9 feet)					
	0.0	7,040	8.4	4.0	12.3	98
	2.0	7,040	8.4	4.0	12.3	98
	4.0	7,040	8.4	4.0	12.4	99
	7.0	7,040	8.4	4.0	12.4	98
	10.0	7,040	8.3	4.0	12.5	99
	13.0	7,050	8.3	4.0	12.6	101

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
Site 7, Devils Lake, East Bay east						
Sept. 21, 1988	(Secchi disk transparency, 29.0 inches; lake depth at site, 16.4 feet)					
0.0	6,450	--	11.5	9.0	--	
1.6	6,440	--	11.5	9.0	--	
3.3	6,440	--	11.5	9.0	--	
6.6	6,450	--	11.5	8.9	--	
9.8	6,450	--	11.5	8.9	--	
13.1	6,440	--	11.5	9.4	--	
16.4	6,430	--	11.0	9.5	--	
Feb. 23, 1989	(Secchi disk transparency, 70.0 inches; lake depth at site, 18.5 feet; ice thickness, 1.9 feet)					
1.9	6,820	8.9	0.0	9.7	70	
6.6	6,890	8.9	0	9.4	68	
9.8	6,950	8.8	.5	10.4	75	
13.1	6,900	8.6	.5	10.0	73	
16.4	6,870	8.6	2.0	7.6	57	
18.0	6,910	8.7	2.5	1.8	14	
May 9, 1989	(Secchi disk transparency, 36.0 inches; lake depth at site, 17.4 feet)					
0.0	6,320	8.8	10.5	15.5	--	
3.0	6,300	8.8	10.0	15.4	--	
5.0	6,330	8.8	8.5	15.2	--	
8.0	6,350	8.8	8.5	13.9	--	
11.0	6,360	8.8	8.0	13.6	--	
14.0	6,380	8.7	8.0	12.5	--	
17.4	6,420	8.7	8.0	11.8	--	
June 20, 1989	(Secchi disk transparency, 24.0 inches; lake depth at site, 15.5 feet)					
0.0	6,280	8.5	20.5	9.3	105	
3.0	6,280	8.5	20.0	9.3	105	
6.0	6,300	8.5	19.5	9.2	102	
9.0	6,270	8.5	18.5	9.3	102	
12.0	6,280	8.4	18.5	9.2	100	
15.5	6,280	8.4	18.5	9.3	102	
Aug. 15, 1989	(Secchi disk transparency, 48.0 inches; lake depth at site, 10.5 feet)					
0.0	6,690	8.8	25.0	18.1	220	
2.0	6,710	8.8	25.0	17.4	211	
4.0	6,680	8.8	22.5	12.0	140	
6.0	6,700	8.8	22.0	10.1	116	
8.0	6,700	8.8	22.0	9.9	114	
10.0	6,700	8.8	21.5	9.1	104	
10.5	6,700	8.8	21.5	8.9	102	
Oct. 26, 1989	(Secchi disk transparency, 35.0 inches; lake depth at site, 15.3 feet)					
0.0	6,950	8.7	7.5	12.3	105	
3.0	6,980	8.7	8.0	12.4	107	
6.0	6,970	8.7	8.0	12.3	106	
9.0	6,980	8.7	8.0	12.4	107	
12.0	6,980	8.7	8.0	12.4	107	
15.3	6,990	8.5	8.0	12.0	103	

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
<u>Site 7, Devils Lake, East Bay east--Continued</u>						
Feb. 7, 1990	(Secchi disk transparency, 60.0 inches; lake depth at site, 13.2 feet; ice thickness, 2.4 feet)					
	2.4	7,860	8.5	0.5	11.1	79
	5.0	7,860	8.6	0	10.5	74
	7.0	7,860	8.6	0	10.5	74
	9.0	7,860	8.6	0	10.6	75
	11.0	7,880	8.7	.5	10.1	72
	12.6	7,900	8.7	1.0	8.8	64
May 8, 1990	(Secchi disk transparency, 38.0 inches; lake depth at site, 14.7 feet)					
	0.0	6,640	8.4	10.0	15.3	138
	3.0	6,690	8.4	10.0	15.3	138
	6.0	6,690	8.4	10.0	15.3	138
	9.0	6,690	8.4	10.0	15.2	137
	12.0	6,690	8.4	10.0	15.3	138
	14.0	6,680	8.3	10.0	15.3	138
Aug. 8, 1990	(Secchi disk transparency, 25.2 inches; lake depth at site, 15.0 feet)					
	0.0	7,130	8.5	21.5	9.5	109
	3.0	7,130	8.5	21.5	9.5	109
	6.0	7,130	8.5	21.5	9.4	108
	9.0	7,140	8.5	21.5	9.5	109
	12.0	7,140	8.5	21.5	9.3	107
	15.0	7,050	8.5	21.5	6.7	77
Sept. 12, 1990	(Secchi disk transparency, 27.6 inches; lake depth at site, 13.8 feet)					
	0.0	7,410	8.6	19.0	7.3	80
	2.0	7,410	8.6	19.0	7.3	80
	4.0	7,410	8.6	19.0	7.3	80
	7.0	7,410	8.6	19.0	7.2	79
	10.0	7,410	8.6	19.0	7.2	79
	13.0	7,410	8.6	19.0	7.2	79
Oct. 25, 1990	(Secchi disk transparency, 15.6 inches; lake depth at site, 14.9 feet)					
	0.0	7,300	8.4	4.0	12.3	98
	3.0	7,300	8.4	4.0	12.3	98
	6.0	7,300	8.3	4.0	12.3	98
	10.0	7,300	8.3	4.0	12.4	99
	14.0	7,300	8.2	4.0	12.5	100
<u>Site 8, East Devils Lake inlet</u>						
Sept. 21, 1988	(Secchi disk transparency, 36.0 inches; lake depth at site, 6.6 feet)					
	0.0	8,880	--	10.0	10.0	--
	1.6	8,890	--	10.0	9.7	--
	3.3	8,880	--	10.0	9.7	--
	6.6	8,880	--	10.0	9.3	--

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
Site 8, East Devils Lake inlet--Continued						
Feb. 22, 1989	(Secchi disk transparency, 60.0 inches; lake depth at site, 6.6 feet; ice thickness, 1.9 feet)					
	1.9	12,400	8.6	0.0	2.2	16
	6.6	12,600	8.3	0	2.3	17
May 9, 1989	(Secchi disk transparency, 19.0 inches; lake depth at site, 7.2 feet)					
	0.0	8,670	8.9	13.0	12.2	--
	1.0	8,680	8.9	13.0	12.1	--
	2.0	8,680	8.9	13.0	12.1	--
	3.0	8,670	8.9	13.0	12.2	--
	5.0	8,700	8.9	12.5	12.1	--
	7.2	10,100	8.8	10.5	11.2	--
June 21, 1989	(Secchi disk transparency, 22.0 inches; lake depth at site, 6.5 feet)					
	0.0	9,080	8.6	20.0	8.4	95
	1.5	9,130	8.6	20.0	8.3	94
	3.0	9,140	8.5	20.0	8.3	94
	4.5	9,170	8.5	20.5	8.4	95
	6.0	9,160	8.5	20.0	8.6	97
Aug. 15, 1989	(Secchi disk transparency, 26.0 inches; lake depth at site, 6.3 feet)					
	0.0	10,800	8.9	24.0	20.0	243
	1.0	10,800	8.9	24.0	16.3	199
	2.0	10,700	8.9	24.0	--	--
	3.0	10,800	8.9	22.5	12.4	147
	4.0	10,800	8.9	22.0	12.5	146
	5.0	10,800	8.9	22.0	11.9	139
	6.0	10,800	8.9	21.0	6.7	77
	6.3	10,800	8.9	21.0	4.5	51
Oct. 26, 1989	(Secchi disk transparency, 10.0 inches; lake depth at site, 5.4 feet)					
	0.0	11,800	8.2	10.0	11.8	109
	1.5	11,800	8.1	10.0	11.9	110
	2.5	11,800	8.1	10.0	11.8	109
	3.5	11,800	8.1	10.0	11.9	110
	4.5	11,800	8.0	10.5	11.9	111
	5.4	11,800	8.0	10.5	12.3	114
Feb. 7, 1990	(Secchi disk transparency, 17.0 inches; lake depth at site, 5.7 feet; ice thickness, 2.5 feet)					
	2.5	20,100	8.2	0.0	3.5	26
	4.0	19,900	8.3	0	2.8	21
	4.5	20,000	8.3	0	2.5	19

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
<u>Site 8, East Devils Lake inlet--Continued</u>						
May 9, 1990		(Lake depth at site, 5.5 feet)				
	0.0	9,400	8.4	9.5	11.2	--
	1.0	9,420	8.3	9.5	11.2	--
	2.0	9,420	8.3	9.5	11.3	--
	3.0	9,420	8.3	9.5	11.2	--
	4.0	9,420	8.2	9.5	11.3	--
	5.0	9,430	8.3	9.5	11.4	--
Aug. 8, 1990		(Lake depth at site, 5.0 feet)				
	0.0	11,900	8.5	23.0	8.0	--
	2.0	11,900	8.5	23.0	8.0	--
	3.0	11,900	8.5	23.0	8.0	--
	4.0	11,900	8.5	23.0	7.9	--
	5.0	11,900	8.5	23.0	7.5	--
Sept. 12, 1990		(Lake depth at site, 5.3 feet)				
	0.0	13,600	8.7	19.5	10.1	--
	2.0	13,600	8.7	19.5	10.1	--
	3.0	13,600	8.7	19.5	10.1	--
	4.0	13,600	8.7	19.0	10.2	--
	5.0	13,600	8.7	19.0	10.2	--
Oct. 25, 1990		(Lake depth at site, 4.2 feet)				
	0.0	13,900	8.6	3.5	14.0	--
	2.0	13,900	8.6	3.5	14.1	--
	3.0	13,900	8.6	3.5	14.3	--
	4.0	13,900	8.6	3.5	14.4	--
<u>Site 9, Devils Lake, Fort Totten Bay</u>						
Feb. 7, 1990		(Secchi disk transparency, 34.0 inches; lake depth at site, 7.3 feet; ice thickness, 2.2 feet)				
	2.2	3,010	8.4	2.5	17.9	132
	4.0	3,000	8.5	2.5	18.3	136
	5.0	3,060	8.5	2.5	19.9	148
	6.1	3,090	8.5	3.0	20.3	151
May 9, 1990		(Secchi disk transparency, 41.0 inches; lake depth at site, 7.6 feet)				
	0.0	1,750	8.7	11.0	11.3	102
	1.0	1,750	8.7	11.0	11.3	102
	2.0	1,750	8.6	11.0	11.3	102
	3.0	1,750	8.6	11.0	11.3	102
	4.0	1,750	8.6	11.0	11.3	101
	5.0	1,750	8.6	11.0	11.3	102
	6.0	1,750	8.6	11.0	11.2	100
	7.0	1,750	8.5	11.0	11.3	102

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
<u>Site 9, Devils Lake, Fort Totten Bay--Continued</u>						
Aug. 8, 1990	(Secchi disk transparency, 18.0 inches; lake depth at site, 6.1 feet)					
0.0	1,740	8.8	22.0	11.1	127	
2.0	1,740	8.7	22.0	11.1	126	
3.0	1,740	8.7	22.0	11.0	125	
4.0	1,740	8.7	22.0	11.0	125	
5.0	1,740	8.7	22.0	10.6	120	
6.0	1,740	8.7	21.5	9.7	110	
<u>Site 10, East Devils Lake main bay</u>						
Feb. 7, 1990	(Secchi disk transparency, 58.0 inches; lake depth at site, 26.9 feet; ice thickness, 2.5 feet)					
2.5	12,600	8.4	0.0	12.6	--	
5.0	12,600	8.4	0	12.0	--	
10.0	12,600	8.4	0	11.9	--	
15.0	12,600	8.5	0	11.9	--	
20.0	12,700	8.5	0	12.0	--	
23.0	12,700	8.5	0	12.0	--	
26.0	12,700	8.6	0	10.2	--	
May 9, 1990	(Secchi disk transparency, 43.0 inches; lake depth at site, 27.6 feet)					
0.0	12,100	8.8	7.0	14.1	121	
5.0	12,000	8.8	7.0	14.2	122	
10.0	12,100	8.7	7.0	14.1	121	
15.0	12,100	8.7	7.0	14.1	121	
20.0	12,100	8.7	7.0	14.1	121	
26.0	12,100	8.6	7.0	14.1	121	
Aug. 8, 1990	(Secchi disk transparency, 62.4 inches; lake depth at site, 28.6 feet)					
0.0	12,200	8.4	23.0	11.4	137	
4.0	12,200	8.5	23.0	11.4	137	
8.0	12,200	8.5	22.0	11.0	131	
12.0	12,200	8.4	22.0	10.4	123	
16.0	12,200	8.4	22.0	10.0	118	
20.0	12,200	8.4	22.0	9.9	117	
24.0	12,200	8.4	22.0	9.5	112	
28.0	12,200	8.4	22.0	9.5	112	
Sept. 12, 1990	(Secchi disk transparency, 52.8 inches; lake depth at site, 28.3 feet)					
0.0	12,600	8.6	20.0	7.8	88	
4.0	12,600	8.6	20.0	7.8	88	
8.0	12,600	8.6	20.0	7.8	88	
12.0	12,600	8.6	20.0	7.7	87	
16.0	12,600	8.6	20.0	7.8	88	
20.0	12,600	8.6	20.0	7.8	88	
24.0	12,600	8.6	20.0	7.7	87	
28.0	12,600	8.6	20.0	7.4	84	

Table 1.--Depth profiles of physical properties at Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date	Sampling depth (feet)	Specific conductance (microsiemens per centimeter at 25 degrees Celsius)	pH (standard units)	Temperature, water (degrees Celsius)	Oxygen, dissolved (milligrams per liter)	Oxygen, dissolved (percent saturation)
<u>Site 10, East Devils Lake main bay--Continued</u>						
Oct. 25, 1990	(Secchi disk transparency, 45.6 inches; lake depth at site, 27.5 feet)					
	0.0	12,300	8.6	6.0	11.9	102
	3.0	12,300	8.6	6.0	11.9	102
	7.0	12,300	8.6	6.0	11.9	102
	12.0	12,300	8.6	6.0	12.0	103
	17.0	12,300	8.6	6.0	12.0	103
	22.0	12,300	8.6	6.0	12.0	103
	27.0	12,300	8.6	6.0	12.1	104

Table 2.--Light-transmission data for Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990
[e, estimated]

Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in micro-einsteins per second per square meter)		Incident light, percent remaining at depth		Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in micro-einsteins per second per square meter)		Incident light, percent remaining at depth					
		Site 1, Devils Lake, West Bay	Site 1, Devils Lake, West Bay--Continued				Site 2, Devils Lake, Sixmile Bay	Site 2, Devils Lake, Sixmile Bay						
Site 1, Devils Lake, West Bay														
Sept. 21, 1988														
1004	0.0	117	100			1750	0.0	617	100					
1005	.8	135	6.2			1751	.5	587	24					
1006	1.6	130	1.9			1752	1.0	582	7.1					
May 9, 1989														
1052	0.0	1,500	100			1753	1.5	579	1.8					
1053	.5	e1,510	34			1754	2.0	574	.5					
1054	1.0	e1,520	15											
1055	1.5	e1,530	6.1											
1056	2.0	e1,540	2.2											
1057	2.5	e1,550	1.2											
1058	3.0	e1,560	.6											
1059	3.5	e1,570	.2											
1100	4.0	e1,580	.1											
June 21, 1989														
0935	0.0	175	100			1127	0.0	175	100					
0936	.5	160	19			1128	1.6	175	51					
0937	1.0	160	.6			1129	3.3	175	26					
Oct. 25, 1989														
1736	0.0	71	100			1130	4.9	180	13					
1737	.5	e71	28			1131	6.6	180	6.3					
1738	1.0	e71	11			1132	8.2	180	4.4					
1739	1.5	71	3.5			1133	9.8	200	3.1					
1740	2.0	e69	1.2											
1741	2.5	69	.5											
Aug. 7, 1990														
1626	0.0	1,460	100			May 9, 1989								
1627	.25	1,460	21			0936	0.0	1,150	100					
1628	.50	1,430	11			0937	1.0	e1,150	50					
1629	.75	1,410	4.1			0938	2.0	e1,160	37					
1630	1.0	1,420	1.0			0939	3.0	e1,160	26					
1631	1.25	1,440	.5			0940	4.0	e1,170	18					
						0941	5.0	e1,170	12					
						0942	6.0	e1,170	7.2					
						0943	7.0	e1,180	5.2					
						0944	8.0	e1,180	3.7					
						0945	9.0	e1,190	2.6					
						0946	10.0	e1,190	1.8					

Table 2.--Light-transmission data for Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in microeinsteins per square meter per second)	Incident light, percent remaining at depth	Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in microeinsteins per square meter per second)	Incident light, percent remaining at depth				
Site 2, Devils Lake, Sixmile Bay--Continued											
May 9, 1989--Continued											
0947	11.0	e1,190	1.3	Oct. 25, 1989	1638	11.0	240				
0948	12.0	e1,200	1.0		1639	12.0	.9				
June 21, 1989											
0841	0.0	140	100	May 9, 1990							
0842	.5	e138	34	1055	0.0	510	100				
0843	1.0	e137	22	1056	1.0	500	52				
0844	1.5	e135	18	1057	2.0	500	30				
0845	2.0	e133	15	1058	3.0	510	17				
0846	2.5	e132	13	1059	4.0	560	10				
0847	3.0	e130	11	1100	5.0	620	7.1				
0848	3.5	e129	8.5	1101	6.0	640	5.3				
0849	4.0	e127	7.9	1102	7.0	790	4.2				
0850	4.5	e125	6.4	1103	8.0	1,200	2.4				
0851	5.0	e124	5.6	1104	9.0	1,200	1.9				
0852	5.5	e122	4.9	1105	10.0	1,150	1.2				
0853	6.0	e121	4.1	1106	11.0	870	.8				
0854	6.5	e119	3.4	1107	12.0	820	.5				
0855	7.0	e117	3.0	Aug. 7, 1990							
0856	7.5	e116	2.6	1456	0.0	1,690	100				
0857	8.0	e114	2.2	1457	.5	1,710	50				
0858	8.5	e113	1.8	1458	1.0	1,710	35				
0859	9.0	111	1.4	1459	1.5	1,710	21				
Oct. 25, 1989											
1627	0.0	260	100	1500	2.0	1,690	13				
1628	1.0	e259	59	1501	2.5	1,710	7.0				
1629	2.0	e258	38	1502	3.0	1,730	4.6				
1630	3.0	e256	24	1503	3.5	1,710	2.5				
1631	4.0	255	16	1504	4.0	1,700	1.6				
1632	5.0	e254	10	1505	4.5	1,690	1.0				
1633	6.0	e252	7.3	1506	5.0	1,690	.7				
Sept. 11, 1990											
1634	7.0	250	5.3	1640	0.0	1,020	100				
1635	8.0	e247	3.4	1641	.5	1,020	31				
1636	9.0	e243	2.4	1642	1.0	1,010	9.0				
1637	10.0	240	1.7	1643	1.5	1,000	4.5				

Table 2--Light-transmission data for Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Intensity of incident light in the 400-700-nanometer wave-length band (in micro-einsteins per square meter per second)				Intensity of incident light in the 400-700-nanometer wave-length band (in micro-einsteins per square meter per second)			
Date/time	Sampling depth (feet)	Incident light, percent remaining at depth	Date/time	Sampling depth (feet)	Incident light, percent remaining at depth		
Site 2, Devils Lake, Sixmile Bay--Continued							
Sept. 11, 1990--Continued							
1644	2.0	1,010	1.5	1548	8.0	1,450	7.8
1645	2.5	998	.6	1549	9.0	1,350	1.6
Oct. 24, 1990							
1511	0.0	1,030	100	1550	10.0	490	3.3
1512	1.0	960	50	1551	11.0	500	4.7
1513	2.0	910	25	1552	12.0	530	3.6
1514	3.0	970	12	1553	13.0	1,500	1.9
1515	4.0	980	9.1	1554	14.0	700	2.7
1516	5.0	1,010	5.0	1555	15.0	600	1.7
1517	6.0	1,020	3.0	1556	16.0	1,500	1.1
1518	7.0	1,000	1.9	1557	17.0	1,500	.8
1519	8.0	980	1.1	1558	18.0	1,500	.7
1520	9.0	980	.8	1559	19.0	1,500	.5
Site 3, Devils Lake, Creel Bay							
May 8, 1989--Continued							
1206		0.0		1206	0.0	1,900	100
1207		.5		1207	.5	2,050	54
1208		1.0		1208	1.0	2,000	50
1209		1.5		1209	1.5	2,200	55
1210		2.0		1210	2.0	2,100	36
1211		2.5		1211	2.5	1,050	30
1212		3.0		1212	3.0	1,000	25
1213		3.5		1213	3.5	1,250	26
1214		4.0		1214	4.0	1,200	24
1215		4.5		1215	4.5	1,250	21
1216		5.0		1216	5.0	1,250	16
1217		6.0		1217	6.0	1,400	11
1218		7.0		1218	7.0	1,400	10
1219		8.0		1219	8.0	1,050	9.5
1220		9.0		1220	9.0	1,050	5.2
1221		12.0		1221	12.0	1,000	2.6
1222		15.0		1222	15.0	950	1.5
Oct. 25, 1989							
1313		0.0		1313	0.0	1,100	100
1314		.5		1314	.5	e1,050	71

Table 2.--Light-transmission data for Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band einsteins per square meter per second)	Incident light, percent remaining at depth	Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band einsteins per square meter per second)	Incident light, percent remaining at depth
<u>Site 3, Devils Lake, Creel Bay--Continued</u>							
Oct. 25, 1989--Continued							
1315	1.0	1,000	60	1801	8.0	280	2.1
1316	1.5	e1,000	53	1802	9.0	275	1.3
1317	2.0	1,000	43	1803	10.0	275	1.0
1318	2.5	e1,000	34	1804	11.0	270	.7
1319	3.0	e1,000	29				
1320	3.5	e1,000	25				
1321	4.0	1,000	21	1256	0.0	1,750	100
1322	4.5	e1,030	17	1257	1.0	1,760	36
1323	5.0	e1,050	13	1258	2.0	1,760	13
1324	5.5	e1,080	11	1259	3.0	1,740	4.6
1325	6.0	1,100	9.1	1300	4.0	1,750	2.2
1326	6.5	e1,030	8.3	1301	4.5	1,750	1.3
1327	7.0	e960	7.1	1302	5.0	1,770	.9
1328	7.5	e890	5.8	1303	6.0	1,760	.4
1329	8.0	820	5.1				
1330	8.5	e885	4.4				
1331	9.0	950	3.7	1501	0.0	1,390	100
1332	9.5	e960	3.1	1502	.5	1,400	38
1333	10.0	e980	2.7	1503	1.0	1,410	15
1334	10.5	e990	2.2	1504	1.5	1,410	7.1
1335	11.0	1,000	1.9	1505	2.0	1,410	3.2
1336	11.5	e1,020	1.7	1506	2.5	1,400	1.4
1337	12.0	e1,040	1.3	1507	3.0	1,390	.7
1338	12.5	e1,060	1.2				
1339	13.0	e1,080	1.0				
1340	13.5	1,100	.9				
May 8, 1990							
1753	0.0	350	100	1227	0.0	1,050	100
1754	1.0	330	33	1228	1.0	1,070	63
1755	2.0	325	18	1229	2.0	1,070	47
1756	3.0	310	13	1230	3.0	1,070	28
1757	4.0	300	8.4	1231	4.0	e1,070	18
1758	5.0	290	5.9	1232	5.0	1,070	12
1759	6.0	280	4.1	1233	6.0	e1,070	10
1800	7.0	280	2.9	1234	7.0	1,070	7.5
				1235	8.0	e1,070	5.2
				1236	9.0	e1,070	3.5
				1237	10.0	1,070	2.5

Table 2.--Light-transmission data for Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wave-length band (in micro-einsteins per second)	Incident light, percent remaining at depth	Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wave-length band (in micro-einsteins per second)	Incident light, percent remaining at depth				
Site 3, Devils Lake, Creel Bay--Continued											
Oct. 24, 1990--Continued											
1238	11.0	1,060	1.8	1044	3.5	650	32				
1239	12.0	1,050	1.2	1045	4.0	700	28				
1240	13.0	1,040	1.0	1046	4.5	700	25				
1241	14.0	1,020	.7	1047	5.0	740	18				
Site 4, Devils Lake, Main Bay											
Sept. 20, 1988											
1548	0.0	520	100	1052	7.5	1,500	11				
1549	1.6	520	35	1053	8.0	2,100	8.7				
1550	3.3	510	13	1054	8.5	1,900	9.1				
1551	4.9	500	7.5	1055	15.0	1,100	2.8				
1552	6.6	510	3.6	Oct. 25, 1989							
1553	8.2	515	1.8	1508	0.0	1,000	100				
1554	9.8	485	1.6	1509	1.0	890	78				
May 8, 1989											
1810	0.0	190	100	1510	2.0	770	60				
1811	1.0	190	50	1511	3.0	650	34				
1812	3.0	190	28	1512	4.0	710	15				
1813	5.0	190	16	1513	5.0	770	9.7				
1814	7.0	190	6.9	1514	6.0	820	11				
1815	9.0	190	4.4	1515	7.0	660	7.6				
1816	11.0	190	2.5	1516	8.0	510	6.1				
1817	13.0	190	1.3	1517	9.0	360	5.6				
1818	15.0	190	.8	1518	10.0	440	3.9				
1819	17.0	190	.4	1519	11.0	520	2.7				
June 21, 1989											
1037	0.0	560	100	1520	12.0	600	2.0				
1038	.5	580	78	1521	13.0	530	1.3				
1039	1.0	590	59	1522	14.0	450	1.3				
1040	1.5	590	56	1523	15.0	370	1.2				
1041	2.0	610	46	1524	16.0	320	1.0				
1042	2.5	620	40	May 9, 1990							
1043	3.0	650	37	0851	0.0	130	100				
				0852	1.0	133	33				
				0853	2.0	130	25				

Table 2.--Light-transmission data for Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in microeinsteins per square meter per second)	Incident light, percent remaining at depth	Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in microeinsteins per square meter per second)	Incident light, percent remaining at depth
Site 4, Devils Lake, Main Bay--Continued							
May 9, 1990--Continued							
0854	3.0	150	9.3	1319	4.5	1,520	5.1
0855	4.0	155	8.6	1320	5.0	1,520	3.6
0856	5.0	145	5.4	1321	5.5	1,520	3.0
0857	6.0	145	3.4	1322	6.0	1,520	2.1
0858	7.0	120	2.7	1323	6.5	1,530	1.6
0859	8.0	120	1.9	1324	7.0	1,530	1.2
0900	9.0	120	.9	1325	7.5	1,530	.9
0901	10.0	118	.4				
0902	11.0	125	.1				
Sept. 11, 1990--Continued							
Aug. 7, 1990							
1744	0.0	1,010	100	1342	0.0	1,210	100
1745	.5	1,010	58	1343	1.0	1,200	75
1746	1.0	1,040	33	1344	2.0	1,140	51
1747	1.5	1,030	24	1345	3.0	980	28
1748	2.0	1,020	13	1346	4.0	590	21
1749	2.5	1,020	9.7	1347	5.0	1,080	15
1750	3.0	988	5.7	1348	6.0	840	9.7
1751	3.5	984	3.5	1349	7.0	880	6.3
1752	4.0	989	2.7	1350	8.0	920	5.0
1753	4.5	989	1.9	1351	9.0	800	3.1
1754	5.0	980	1.4	1352	10.0	1,140	2.3
1755	5.5	983	.9	1353	11.0	1,140	1.9
1756	6.0	972	.7	1354	12.0	1,100	1.5
				1355	13.0	1,080	1.0
				1356	14.0	1,050	.7
Sept. 11, 1990							
Site 5, Devils Lake Mission Bay							
1310	0.0	1,530	100	Sept. 21, 1988			
1311	.5	1,540	67	1247	0.0	280	100
1312	1.0	1,540	46	1248	1.6	290	43
1313	1.5	1,540	35	1249	3.3	295	28
1314	2.0	1,540	21	1250	4.9	340	10
1315	2.5	1,510	15	1251	6.6	345	5.2
1316	3.0	1,520	12	1252	8.2	375	2.4
1317	3.5	1,520	8.7	1253	9.8	385	1.3
1318	4.0	1,520	6.6				

Table 2.--Light-transmission data for Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in microeinsteins per square meter per second)	Incident light, percent remaining at depth	Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in microeinsteins per square meter per second)	Incident light, percent remaining at depth
Site 5, Devils Lake Mission Bay--Continued							
May 8, 1989							
2007	0.0	230	100	1049	1.5	255	38
2008	1.0	e229	64	1050	2.0	249	27
2009	2.0	e228	41	1051	2.5	242	24
2010	3.0	e226	28	1052	3.0	235	20
2011	4.0	e225	18	1053	3.5	230	14
2012	5.0	e224	11	1054	4.0	225	12
2013	6.0	e222	8.7	1055	4.5	220	9.7
2014	7.0	e221	6.6	1056	5.0	217	8.0
2015	8.0	220	4.8	1057	5.5	213	6.2
2016	9.0	e220	3.1	1058	6.0	210	5.3
2017	10.0	e220	2.2	1059	6.5	200	4.2
2018	11.0	e220	1.6	1100	7.0	190	3.5
2019	12.0	e220	1.2	1101	7.5	180	3.0
2020	13.0	220	1.0	1102	8.0	179	2.5
				1103	8.5	177	2.0
				1104	9.0	175	1.6
June 21, 1989							
1357	0.0	1,000	100	1105	9.5	170	1.3
1358	.5	1,100	38	1106	10.0	165	1.1
1359	1.0	1,050	40	1107	10.5	160	1.0
1400	1.5	1,050	30				
1401	2.0	1,080	33	May 8, 1990			
1402	3.0	1,080	22	1316	0.0	1,900	100
1403	4.0	1,200	16	1317	1.0	1,950	56
1404	5.0	1,500	22	1318	2.0	1,970	35
1405	6.0	1,050	9.6	1319	3.0	1,960	26
1406	7.0	1,050	8.3	1320	4.0	1,970	19
1407	8.0	1,050	5.0	1321	5.0	1,960	14
1408	9.0	1,050	3.6	1322	6.0	1,970	10
1409	11.0	1,100	4.0	1323	7.0	1,960	8.1
1410	13.0	1,000	1.8	1324	8.0	1,970	5.2
1411	15.0	1,040	1.0	1325	9.0	1,970	3.9
				1326	10.0	1,980	2.9
Oct. 26, 1989							
1046	0.0	265	100	1327	11.0	1,980	2.1
1047	.5	262	62	1328	12.0	1,990	1.5
1048	1.0	258	47	1329	13.0	1,970	1.1
				1330	14.0	1,970	.9

Table 2.--Light-transmission data for Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in micro-einsteins per square meter per second)	Incident light, percent remaining at depth	Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in micro-einsteins per square meter per second)	Incident light, percent remaining at depth				
Site 5, Devils Lake Mission Bay--Continued											
Aug. 7, 1990											
1909	0.0	575	100	1338	0.8	525	54				
1910	.5	572	49	1339	1.6	515	10				
1911	1.0	569	24	1340	3.3	460	.9				
1912	1.5	564	17	Site 6, Devils Lake, East Bay west--Continued							
1913	2.0	560	8.1	Sept 21, 1988--Continued							
1914	2.5	558	5.0	1207	0.0	1,700	100				
1915	3.0	541	3.1	1208	1.0	e1,710	52				
1916	3.5	542	2.0	1209	2.0	e1,710	29				
1917	4.0	548	1.2	1210	3.0	e1,720	23				
1918	4.5	552	.7	1211	4.0	e1,730	13				
1919	5.0	557	.4	1212	5.0	e1,730	8.8				
Sept. 11, 1990											
1906	0.0	162	100	1213	6.0	e1,740	4.6				
1907	.5	166	46	1214	7.0	e1,740	2.8				
1908	1.0	161	18	1215	8.0	e1,750	1.8				
1909	1.5	156	8.1	1216	9.0	e1,760	1.1				
1910	2.0	148	3.3	1217	10.0	e1,760	.8				
1911	2.5	144	1.2	1218	11.0	e1,770	.5				
1912	3.0	139	.6	1219	12.0	e1,780	.3				
Oct. 24, 1990											
1731	0.0	210	100	1220	13.0	e1,780	.2				
1732	1.0	215	44	1221	14.0	e1,790	.1				
1733	2.0	215	21	1222	15.0	e1,790	.1				
1734	3.0	214	12	June 20, 1989							
1735	4.0	213	6.2	1357	0.0	1,250	100				
1736	5.0	207	3.6	1358	.5	e1,270	67				
1737	6.0	208	2.2	1359	1.0	e1,290	43				
1738	7.0	203	1.3	1400	1.5	e1,310	31				
1739	8.0	195	.7	1401	2.0	e1,330	26				
Site 6, Devils Lake, East Bay west											
Sept. 21, 1988											
1337	0.0	540	100	1402	2.5	e1,350	22				
				1403	3.0	e1,370	15				
				1404	3.5	e1,390	7.2				
				1405	4.0	e1,410	7.1				
				1406	4.5	e1,430	3.5				
				1407	5.0	e1,450	2.2				
				1408	5.5	e1,470	1.8				
				1409	6.0	e1,490	1.5				

Table 2.--Light-transmission data for Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in microeinsteins per square meter per second)	Incident light, percent remaining at depth	Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in microeinsteins per square meter per second)	Incident light, percent remaining at depth				
Site 6, Devils Lake, East Bay west--Continued											
June 20, 1989--Continued											
1410	6.5	e1,510	1.1	1507	11.0	620	1.1				
1411	7.0	e1,530	.9	1508	12.0	820	.7				
1412	7.5	e1,560	.7	May 8, 1990--Continued							
Oct. 26, 1989											
0953	0.0	270	100	0814	0.0	527	100				
0954	.5	e300	60	0815	.5	542	71				
0955	1.0	e330	43	0816	1.0	539	40				
0956	1.5	360	29	0817	1.5	540	28				
0957	2.0	e410	26	0818	2.0	534	19				
0958	2.5	e470	18	0819	2.5	536	13				
0959	3.0	520	13	0820	3.0	537	9.4				
1000	3.5	e520	12	0821	3.5	543	5.7				
1001	4.0	520	8.4	0822	4.0	552	4.1				
1002	4.5	e460	7.6	0823	4.5	552	2.9				
1003	5.0	e400	5.7	0824	5.0	564	1.9				
1004	5.5	330	4.6	0825	5.5	560	1.7				
1005	6.0	e330	3.3	0826	6.0	559	1.2				
1006	6.5	e330	2.7	0827	6.5	547	.8				
1007	7.0	330	2.1	Sept. 12, 1990							
1008	7.5	e340	1.7	0757	0.0	136	100				
1009	8.0	e360	1.3	0758	.5	149	52				
1010	8.5	e370	1.0	0759	1.0	148	26				
1011	9.0	380	.8	0800	1.5	136	17				
May 8, 1990											
1456	0.0	1,850	100	0801	2.0	148	10				
1457	1.0	2,050	72	0802	2.5	133	6.0				
1458	2.0	2,000	45	0803	3.0	136	3.6				
1459	3.0	2,050	28	0804	3.5	143	2.3				
1500	4.0	2,050	20	0805	4.0	123	1.4				
1501	5.0	2,060	12	0806	4.5	116	.9				
1502	6.0	2,100	7.9	Site 7, Devils Lake, East Bay east							
1503	7.0	2,050	5.4	Sept 21, 1988							
1504	8.0	580	3.1	1432	0.0	630	100				
1505	9.0	550	1.7	1433	1.6	610	21				
1506	10.0	555	1.4	1434	3.3	630	16				

Table 2.--Light-transmission data for Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in micro-einsteins per square meter per second)	Incident light, percent remaining at depth	Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in micro-einsteins per square meter per second)	Incident light, percent remaining at depth				
Site 7, Devils Lake, East Bay east--Continued											
Sept. 21, 1988--Continued											
1435	4.9	620	4.9	Oct. 26, 1989--Continued							
1436	6.6	590	1.5	0840	2.0	38	14				
1437	8.2	610	.5	0841	2.5	42	11				
May 9, 1989				0842	3.0	e44	8.1				
1437	0.0	1,900	100	0843	3.5	e46	6.1				
1438	1.0	e1,900	60	0844	4.0	47	4.1				
1439	2.0	e1,900	33	0845	4.5	e48	3.4				
1440	3.0	e1,900	21	0846	5.0	e49	2.5				
1441	4.0	e1,900	13	0847	5.5	50	2.0				
1442	5.0	e1,900	8.0	0848	6.0	e53	1.4				
1443	6.0	e1,900	4.5	0849	6.5	e56	1.1				
1444	7.0	e1,900	2.6	0850	7.0	58	.6				
1445	8.0	e1,900	1.6	May 8, 1990							
1446	9.0	e1,900	1.0	1621	0.0	1,600	100				
1447	10.0	e1,900	.7	1622	1.0	1,650	55				
June 20, 1989				1623	2.0	1,570	33				
1536	0.0	780	100	1624	3.0	1,650	20				
1537	.5	e767	46	1625	4.0	1,650	12				
1538	1.0	e751	32	1626	5.0	1,600	9.4				
1539	1.5	e735	18	1627	6.0	1,600	5.8				
1540	2.0	e719	13	1628	7.0	1,550	4.0				
1541	2.5	e702	11	1629	8.0	1,600	2.5				
1542	3.0	e685	8.0	1630	9.0	1,580	1.6				
1543	3.5	e668	5.2	1631	10.0	1,550	1.1				
1544	4.0	e652	4.0	1632	11.0	1,500	.6				
1545	4.5	e636	3.5	Aug. 8, 1990							
1546	5.0	e619	2.3	0923	0.0	951	100				
1547	5.5	e602	1.7	0924	.5	925	58				
Oct. 26, 1989				0925	1.0	965	31				
0836	0.0	30	100	0926	1.5	984	23				
0837	.5	e32	54	0927	2.0	953	12				
0838	1.0	34	42	0928	2.5	971	7.0				
0839	1.5	e36	27	0929	3.0	976	4.4				
				0930	3.5	968	3.1				
				0931	4.0	962	1.9				

Table 2.--Light-transmission data for Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in microeinsteins per square meter per second)	Incident light, percent remaining at depth	Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band (in microeinsteins per square meter per second)	Incident light, percent remaining at depth				
Site 7, Devils Lake, East Bay east--Continued											
Aug. 8, 1990--Continued											
0932	4.5	952	1.2	June 21, 1989--Continued	1636	3.0	460				
0933	5.0	979	.8		1637	3.5	460				
0934	5.5	986	.6		1638	4.0	460				
Sept. 12, 1990											
0938	0.0	759	100		1639	4.5	460				
0939	.5	785	49		1640	5.0	460				
0940	1.0	769	31		1641	5.5	460				
0941	1.5	764	18	Site 8, East Devils Lake inlet--Continued							
0942	2.0	775	10								
0943	2.5	782	7.7								
0944	3.0	779	5.0								
0945	3.5	793	3.0								
0946	4.0	788	2.1								
0947	4.5	804	1.3								
0948	5.0	804	.9	Site 9, Devils Lake, Fort Totten Bay							
Site 8, East Devils Lake inlet											
May 9, 1989											
1701	0.0	1,500	100	May 9, 1990							
1702	1.0	•1,490	50								
1703	2.0	•1,480	24								
1704	3.0	•1,460	13								
1705	4.0	•1,450	7.1								
1706	5.0	•1,440	4.0	Aug. 8, 1990							
1707	6.0	•1,430	2.0								
1708	7.0	•1,410	.9								
June 21, 1989											
1630	0.0	•525	100	1458	0.0	1,540	100				
1631	.5	490	81	1459	0.5	1,550	45				
1632	1.0	490	35	1500	1.0	1,550	24				
1633	1.5	470	27	1501	1.5	1,560	13				
1634	2.0	460	15	1502	2.0	1,560	6.4				
1635	2.5	460	14	1503	2.5	1,540	3.2				

Table 2.--Light-transmission data for Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band einsteins per square meter per second)	Incident light, percent remaining at depth	Date/time	Sampling depth (feet)	Intensity of incident light in the 400-700-nanometer wavelength band einsteins per square meter per second)	Incident light, percent remaining at depth
<u>Site 10, East Devils Lake main bay</u>							
May 9, 1990							
1751	0.0	950	100	1351	7.0	1,710	5.2
1752	1.0	350	43	1352	7.5	1,710	4.1
1753	2.0	340	30	1353	8.0	1,700	3.7
1754	3.0	290	14	1354	8.5	1,710	2.7
1755	4.0	280	9.8	1355	9.0	1,710	2.1
1756	5.0	250	6.1	1356	9.5	1,710	1.8
1757	6.0	260	4.3	1357	10.0	1,720	1.5
1758	7.0	260	3.2	1358	10.5	1,730	1.3
1759	8.0	250	2.1	1359	11.0	1,700	1.0
1800	9.0	260	1.4	1400	11.5	1,720	.7
1801	10.0	265	1.0				
1802	11.0	280	.7				
Aug. 8, 1990--Continued							
Sept. 12, 1990							
Aug. 8, 1990							
1337	0.0	1,730	100	1309	0.0	1,510	100
1338	.5	1,730	78	1310	.5	1,500	85
1339	1.0	1,720	61	1311	1.0	1,470	70
1340	1.5	1,730	49	1312	1.5	1,470	58
1341	2.0	1,720	41	1313	2.0	1,440	42
1342	2.5	1,720	34	1314	3.0	1,460	30
1343	3.0	1,710	27	1315	4.0	1,460	19
1344	3.5	1,710	23	1316	5.0	1,480	14
1345	4.0	1,690	17	1317	6.0	1,460	8.4
1346	4.5	1,720	14	1318	7.0	1,470	6.7
1347	5.0	1,720	11	1319	8.0	1,450	4.6
1348	5.5	1,710	9.6	1320	9.0	1,470	3.3
1349	6.0	1,710	7.6	1321	10.0	1,470	2.3
1350	6.5	1,710	6.4	1322	11.0	1,460	1.6
				1323	12.0	1,460	1.1
				1324	13.0	1,470	.8

Table 3.--Concentrations of water-quality constituents in water samples collected from
[$\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Specific conductance, lab ($\mu\text{S}/\text{cm}$)	pH, lab (standard units)	Alkalinity, lab (mg/L as CaCO_3)	Solids, residue on evaporation at 180 degrees Celsius, dissolved (mg/L)		Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)
						disolved (mg/L)	as Ca)	(mg/L as Mg)	(mg/L as Na)		

Site 1, Devils Lake,

1988											
Sept. 21	0.0	1.7	3,940	8.5	439	2,860	53	140	590	54	
1989											
Feb. 23	2.0	6.5	5,260	8.4	618	4,010	88	210	910	120	
May 9	.0	2.5	3,590	8.5	418	2,590	56	140	490	67	
June 21	.0	.9	3,970	8.4	452	2,890	59	130	610	75	
Aug. 15	.0	2.0	4,480	8.9	445	3,290	55	170	730	110	
Oct. 25	.0	2.1	4,980	8.6	487	3,660	58	180	850	110	
1990											
Feb. 6	2.4	3.0	7,700	8.7	798	6,280	100	300	1,300	53	
May 9	.0	5.5	3,900	--	395	2,270	49	140	640	73	
Aug. 7	.0	1.0	4,860	8.7	506	3,550	56	180	780	95	
Sept. 11	.0	1.8	5,370	8.9	511	3,960	48	190	960	110	
Sept. 11	4.0	4.5	--	--	--	--	--	--	--	--	
Oct. 24	.0	1.5	5,680	8.4	527	4,240	57	220	930	130	
Oct. 24	2.5	4.0	--	--	--	--	--	--	--	--	

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Nitro- gen, organic, total (mg/L as N)	Nitro- gen, ammonia plus organic, total (mg/L as N)	Phos- phorus, dissolved (mg/L as P)	Phos- phorus, total (mg/L as P)	Ortho- phosphate, dissolved (mg/L as P)	Ortho- phosphate, total (mg/L as P)	Arsenic, dissolved ($\mu\text{g}/\text{L}$ as As)

Site 1, Devils Lake,

1988									
Sept. 21	0.0	1.7	3.3	3.5	0.04	0.30	<0.01	--	18
1989									
Feb. 23	2.0	6.5	3.9	4.3	.32	.32	.27	--	22
May 9	.0	2.5	2.0	2.1	.05	.18	.01	--	12
June 21	.0	.9	3.6	3.7	.09	.23	.06	--	12
Aug. 15	.0	2.0	5.3	5.3	.15	.31	.09	--	24
Oct. 25	.0	2.1	5.0	5.0	.04	.16	.01	--	19
1990									
Feb. 6	2.4	3.0	4.8	5.0	--	--	--	--	30
May 9	.0	5.5	8.6	8.6	.04	.74	<.01	--	16
Aug. 7	.0	1.0	4.8	4.9	.09	.41	.03	--	31
Sept. 11	.0	1.8	--	<.20	.06	.14	.07	--	32
Sept. 11	4.0	4.5	1.7	1.7	.08	.12	.02	--	--
Oct. 24	.0	1.5	4.8	5.1	.03	.12	<.01	0.11	21
Oct. 24	2.5	4.0	4.2	4.5	.02	.10	<.01	.08	--

Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990

[per liter; µg/L, micrograms per liter; --, no data; <, less than]

Sulfate, dis- solved (mg/L as SO ₄)	Chlo- ride, dis- solved (mg/L as Cl)	Fluo- ride, dis- solved (mg/L as F)	Silica, dis- solved (mg/L as SiO ₂)	Nitrogen, nitrite, dis- solved (mg/L as N)	Nitrogen, nitrite, total (mg/L as N)	Nitrogen, nitrite, plus nitrate, dis- solved (mg/L as N)	Nitrogen, nitrite, plus nitrate, total (mg/L as N)	Nitrogen, ammonia, dis- solved (mg/L as N)	Nitrogen, ammonia, total (mg/L as N)
<u>West Bay</u>									
1,400	280	0.1	26	0.01	--	<0.10	--	0.16	0.16
2,000	420	.2	35	.01	--	.14	--	.41	.45
1,200	260	.2	18	<.01	--	<.10	--	.04	.05
1,400	290	.2	23	.08	--	.92	--	.07	.08
1,600	310	.2	31	<.01	--	<.10	--	.03	.04
1,800	330	.2	24	<.01	--	<.10	--	.05	.05
3,100	590	.2	41	.01	--	.10	--	.26	.24
1,300	220	<.1	14	<.01	--	<.10	--	.05	.04
1,700	360	.1	23	<.01	--	<.10	--	.03	.05
1,800	380	.7	23	.01	--	<.10	--	.04	.12
--	--	--	--	<.01	--	<.10	--	.10	.03
2,200	370	.4	18	.03	0.06	<.10	<0.10	.20	.32
--	--	--	--	.01	.05	<.10	<.10	.21	.29

Boron, dis- solved (µg/L as B)	Iron, dis- solved (µg/L as Fe)	Lead, dis- solved (µg/L as Pb)	Lithium, dis- solved (µg/L as Li)	Manga- nese, dis- solved (µg/L as Mn)	Mercury, dis- solved (µg/L as Hg)	Molyb- denum, dis- solved (µg/L as Mo)	Sele- nium, dis- solved (µg/L as Se)	Stron- tium, dis- solved (µg/L as Sr)	Chloro- phyll a, phyto- plank- ton (µg/L)	Chloro- phyll b, phyto- plank- ton (µg/L)
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West Bay--Continued

570	60	<5	280	<10	0.1	2	<1	430	90	1.9
720	50	<5	390	90	<.1	4	<1	570	<.40	<.10
500	30	<1	260	<10	<.1	4	<1	340	100	8.8
570	40	1	290	<10	.2	3	<1	420	34	2.3
420	30	<1	340	30	.2	1	<1	510	130	2.4
770	40	<2	340	<10	.1	5	<1	450	43	2.1
1,100	50	<1	520	30	.4	6	<1	740	8.4	.60
430	40	<1	260	<10	.3	5	<1	370	19	<.80
800	40	<2	330	10	.3	<1	<1	470	71	<1.2
850	70	1	380	<10	--	<1	<1	420	59	<.90
--	--	--	--	--	--	--	--	--	--	--
860	30	<1	390	20	.2	4	<1	560	21	.90
--	--	--	--	--	--	--	--	--	--	--

Table 3.--Concentrations of water-quality constituents in water samples collected from Devils

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Specific conductance, lab (μS/cm)	pH, lab (standard units)	Alkalinity, lab (mg/L as CaCO ₃)	Solids, residue on evaporation at 180 degrees Celsius, dissolved (mg/L)	Magnesium, dissolved (mg/L as Mg)				Sodium, dissolved (mg/L as Na)		Potassium, dissolved (mg/L as K)
							Calcium, dissolved (mg/L as Ca)	Sodium, dissolved (mg/L as Mg)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Sodium, dissolved (mg/L as Na)		Potassium, dissolved (mg/L as K)
<u>Site 2, Devils Lake,</u>													
1988													
Sept. 21	0.0	10.5	3,890	8.8	441	2,800	50	140	610	63			
1989													
Jan. 30	1.6	12.5	4,500	8.5	506	3,380	68	160	710	76			
May 8	.0	12.0	4,010	8.6	445	2,940	63	140	630	73			
June 21	.0	9.0	4,190	8.6	459	3,080	63	140	620	85			
Aug. 15	.0	4.3	4,360	8.8	431	3,290	54	160	730	100			
Oct. 25	.0	11.0	4,610	8.7	436	3,330	51	160	770	100			
1990													
Feb. 6	2.4	11.8	5,230	9.0	506	4,070	61	190	850	130			
May 8	.0	11.0	4,170	8.5	401	3,090	50	160	700	87			
Aug. 7	.0	4.5	4,780	8.8	434	3,540	56	170	750	98			
Sept. 11	.0	2.3	4,920	9.0	436	3,590	43	180	780	110			
Sept. 11	5.0	10.0	--	--	--	--	--	--	--	--			
Oct. 24	.0	8.0	5,080	8.8	461	3,790	49	190	840	110			
Oct. 24	10.0	11.0	--	--	--	--	--	--	--	--			
<u>Site 2, Devils Lake,</u>													
Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Nitrogen, organic, total (mg/L as N)	Nitrogen, ammonia plus organic, total (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphorus, total (mg/L as P)	Orthophosphate, dissolved (mg/L as P)	Orthophosphate, total (mg/L as P)	Orthophosphate, total (mg/L as P)	Arsenic, dissolved (μg/L as As)			
1988													
Sept. 21	0.0	10.5	2.3	2.3	0.24	0.31	0.19	--	--	18			
1989													
Jan. 30	1.6	12.5	2.4	2.5	.30	.30	.22	--	--	20			
May 8	.0	12.0	2.4	2.4	.20	.25	.16	--	--	15			
June 21	.0	9.0	2.6	2.7	.30	.32	.25	--	--	16			
Aug. 15	.0	4.3	4.3	4.3	.16	.28	.12	--	--	21			
Oct. 25	.0	11.0	2.1	2.1	.11	.13	.08	--	--	20			
1990													
Feb. 6	2.4	11.8	2.7	2.7	--	--	--	--	--	89			
May 8	.0	11.0	2.5	2.5	.10	.17	.08	--	--	15			
Aug. 7	.0	4.5	3.3	3.3	.19	.30	.12	--	--	21			
Sept. 11	.0	2.3	3.1	3.1	.05	.14	.01	--	--	20			
Sept. 11	5.0	10.0	3.4	3.4	.04	.16	.01	--	--	--			
Oct. 24	.0	8.0	3.1	3.2	.06	.09	.02	0.03	0.03	23			
Oct. 24	10.0	11.0	2.9	3.0	.05	.07	.02	.05	.05	--			

Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Sulfate, dis- solved (mg/L as SO ₄)	Chlo- ride, dis- solved (mg/L as Cl)	Fluo- ride, dis- solved (mg/L as F)	Silica, dis- solved (mg/L as SiO ₂)	Nitrogen, nitrite, dis- solved (mg/L as N)	Nitrogen, nitrite, total (mg/L as N)	Nitrogen, nitrite, plus nitrate, dis- solved (mg/L as N)	Nitrogen, nitrite, plus nitrate, total (mg/L as N)	Nitrogen, ammonia, dis- solved (mg/L as N)	Nitrogen, ammonia, total (mg/L as N)
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Sixmile Bay

1,300	280	0.1	27	<0.01	--	<0.10	--	<0.01	0.03
1,600	340	.2	29	<.01	--	.15	--	.17	.15
1,400	300	.2	21	<.01	--	<.10	--	.03	.03
1,500	300	.2	22	<.01	--	<.10	--	.05	.05
1,500	300	.1	28	<.01	--	<.10	--	.03	.03
1,700	310	.1	25	<.01	--	<.10	--	.05	.04
1,900	400	.2	29	<.01	--	<.10	--	.04	.03
1,700	330	<.1	21	.01	--	<.10	--	.01	.03
1,700	370	.1	15	<.01	--	<.10	--	.02	.04
1,700	350	.3	9.9	<.01	--	<.10	--	.04	.04
--	--	--	--	.01	--	<.10	--	.05	.04
2,000	340	.3	13	.02	<0.01	<.10	<0.10	.07	.09
--	--	--	--	<.01	<.01	<.10	<.10	.08	.10

Boron, dis- solved ($\mu\text{g/L}$ as B)	Iron, dis- solved ($\mu\text{g/L}$ as Fe)	Lead, dis- solved ($\mu\text{g/L}$ as Pb)	Lithium, dis- solved ($\mu\text{g/L}$ as Li)	Manga- nese, dis- solved ($\mu\text{g/L}$ as Mn)	Mercury, dis- solved ($\mu\text{g/L}$ as Hg)	Molyb- denum, dis- solved ($\mu\text{g/L}$ as Mo)	Sele- nium, dis- solved ($\mu\text{g/L}$ as Se)	Stron- tium, dis- solved ($\mu\text{g/L}$ as Sr)	Chloro- phyll a, phyto- plank- ton ($\mu\text{g/L}$)	Chloro- phyll b, phyto- plank- ton ($\mu\text{g/L}$)
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Sixmile Bay--Continued

560	60	6	270	<10	0.3	3	<1	420	12	0.40
610	20	<5	330	10	<.1	5	<1	490	<.50	<.10
560	30	<1	290	<10	<.1	4	<1	380	17	1.5
610	30	<1	300	<10	<.1	3	<1	420	5.3	.40
440	20	<1	320	20	.2	2	<1	480	73	<1.4
700	20	<2	300	<10	.1	4	<1	350	4.1	.30
770	40	<1	340	10	.2	3	<1	420	2.0	<.40
610	30	<1	280	<10	.2	4	<1	400	6.6	<.60
700	50	<2	320	10	.2	<1	<1	450	18	<.60
750	40	<1	330	20	--	1	<1	460	--	--
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780	20	<1	340	10	.2	5	<1	530	3.0	<.60
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Table 3.--Concentrations of water-quality constituents in water samples collected from Devils

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Specific conductance, lab (µS/cm)	pH, lab (standard units)	Alkalinity, lab (mg/L as CaCO ₃)	Solids, residue on evaporation at 180 degrees Celsius, dissolved (mg/L)	Site 3, Devils Lake,			
							Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)
1988										
Sept. 21	0.0	14.8	3,930	8.8	441	2,880	63	140	610	66
1989										
Jan. 30	2.5	19.0	4,370	8.6	485	3,250	66	160	680	83
May 8	.0	15.0	4,010	8.5	443	2,930	63	140	560	69
June 21	.0	15.0	4,250	8.7	461	3,120	65	150	660	85
Aug. 15	.0	5.7	4,360	8.8	462	3,160	69	160	720	100
Oct. 25	.0	13.0	4,570	8.8	435	3,340	50	170	730	98
1990										
Feb. 6	2.2	13.4	5,020	9.0	480	3,840	59	180	840	120
May 8	.0	11.0	4,810	8.5	471	3,660	57	190	810	100
Aug. 7	.0	4.8	4,820	8.5	433	3,500	49	180	740	96
Sept. 11	.0	2.8	4,900	8.9	463	3,600	53	190	820	97
Sept. 11	4.0	16.0	--	--	--	--	--	--	--	--
Oct. 24	.0	14.0	5,020	8.9	467	3,910	50	190	840	120
Oct. 24	15.0	17.0	--	--	--	--	--	--	--	--
Nitrogen, phosphorus, and arsenic										
Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Nitrogen, organic, total (mg/L as N)	Nitrogen, ammonia plus organic, total (mg/L as N)	Phosphorus, organic, total (mg/L as P)	Phosphorus, dissolved (mg/L as P)	Orthophosphate, total (mg/L as P)	Orthophosphate, dissolved (mg/L as P)	Orthophosphate, total (mg/L as P)	Arsenic, dissolved (µg/L as As)
1988										
Sept. 21	0.0	14.8	1.9	1.9	0.24	0.29	0.19	--	--	18
1989										
Jan. 30	2.5	19.0	2.2	2.4	.27	.28	.20	--	--	20
May 8	.0	15.0	.96	1.0	.24	.28	.20	--	--	16
June 21	.0	15.0	2.5	2.6	.28	.32	.22	--	--	15
Aug. 15	.0	5.7	3.3	3.3	.26	.34	.21	--	--	19
Oct. 25	.0	13.0	2.1	2.1	.08	.11	.05	--	--	21
1990										
Feb. 6	2.2	13.4	2.6	2.6	--	--	--	--	--	19
May 8	.0	11.0	3.0	3.0	.13	.20	.10	--	--	21
Aug. 7	.0	4.8	4.2	4.2	.04	.17	<.01	--	--	21
Sept. 11	.0	2.8	3.1	3.1	.09	.18	.03	--	--	21
Sept. 11	4.0	16.0	.67	.70	.10	.14	.03	--	--	--
Oct. 24	.0	14.0	2.9	3.0	.05	.06	.01	0.02	0.02	23
Oct. 24	15.0	17.0	2.6	2.7	.06	.05	.01	.03	.03	--

Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Sulfate, dis- solved (mg/L as SO ₄)	Chlo- ride, dis- solved (mg/L as Cl)	Fluo- ride, dis- solved (mg/L as F)	Silica, dis- solved (mg/L as SiO ₂)	Nitrogen, nitrite, dis- solved (mg/L as N)	Nitrogen, nitrite, total (mg/L as N)	Nitrogen, nitrite, plus nitrate, dis- solved (mg/L as N)	Nitrogen, nitrite, plus nitrate, total (mg/L as N)	Nitrogen, ammonia, dis- solved (mg/L as N)	Nitrogen, ammonia, total (mg/L as N)
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Creeel Bay

1,400	290	0.1	27	<0.01	--	<0.10	--	0.02	0.05
1,600	330	.1	29	<.01	--	.14	--	.15	.18
1,400	290	.2	23	.01	--	.12	--	.05	.04
1,500	310	.2	45	<.01	--	<.10	--	.07	.06
1,600	280	.1	26	<.01	--	<.10	--	.03	.03
1,600	350	.1	24	<.01	--	<.10	--	.02	.03
1,800	390	.2	29	<.01	--	<.10	--	.05	.03
2,000	390	<.1	26	<.01	--	<.10	--	.03	.02
1,600	360	.1	.50	<.01	--	<.10	--	.02	.04
1,700	340	.1	7.4	<.01	--	<.10	--	.05	.03
--	--	--	--	<.01	--	<.10	--	.04	.03
2,000	360	.3	12	<.01	<0.01	<.10	<0.10	.05	.07
--	--	--	--	<.01	<.01	<.10	<.10	.06	.06

Boron, dis- solved (μg/L as B)	Iron, dis- solved (μg/L as Fe)	Lead, dis- solved (μg/L as Pb)	Lithium, dis- solved (μg/L as Li)	Manga- nese, dis- solved (μg/L as Mn)	Mercury, dis- solved (μg/L as Hg)	Molyb- denum, dis- solved (μg/L as Mo)	Sele- nium, dis- solved (μg/L as Se)	Stron- tium, dis- solved (μg/L as Sr)	Chloro- phyll a, phyto- plank- ton (μg/L)	Chloro- phyll b, phyto- plank- ton (μg/L)
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Creeel Bay--Continued

590	40	<5	270	<10	0.3	2	<1	420	10	0.20
600	20	<5	320	<10	.1	6	<1	470	<.50	<.10
570	20	<1	280	10	.1	2	<1	380	20	.80
600	40	<1	300	<10	.2	3	<1	420	7.3	.40
670	20	<1	310	20	.2	2	<1	460	73	<.90
670	50	<2	290	<10	<.1	4	<1	400	5.7	.20
740	90	<1	320	<10	.2	5	<1	480	5.2	<.40
720	40	<1	330	<10	.2	4	<1	450	11	<.60
710	30	<2	320	10	.3	<1	<1	440	69	<1.2
750	40	<1	330	<10	--	2	<1	400	52	<.70
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790	10	<1	340	10	.2	4	<1	510	3.0	<.60
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Table 3.--Concentrations of water-quality constituents in water samples collected from Devils

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Spec. conductance, lab	pH, lab (standard units)	Alkalinity, lab (mg/L as CaCO ₃)	Solids, residue, on evaporation at 180 degrees Celsius, dissolved (mg/L)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)
<u>Site 4, Devils Lake,</u>										
1988										
Sept. 20	0.0	10.2	3,910	8.8	440	2,910	63	140	620	66
1989										
Jan. 30	1.7	20.0	4,340	8.5	481	3,220	70	150	720	79
May 8	.0	13.0	4,120	8.6	458	3,060	71	160	620	64
June 21	.0	16.0	4,730	8.5	458	3,090	66	150	620	90
Aug. 15	.0	5.7	4,330	8.8	430	3,160	67	160	660	100
Oct. 25	.0	16.0	4,580	8.8	434	3,340	48	160	730	100
1990										
Feb. 6	2.2	8.7	4,980	9.1	479	3,840	63	190	830	108
May 9	.0	9.0	4,670	8.5	452	3,460	54	180	800	100
Aug. 7	.0	5.4	4,800	8.6	509	3,490	54	180	760	95
Sept. 11	.0	7.5	4,880	8.9	464	3,540	54	180	740	98
Sept. 11	6.0	7.0	--	--	--	--	--	--	--	--
Sept. 11	9.0	10.0	--	--	--	--	--	--	--	--
Sept. 11	13.0	14.0	--	--	--	--	--	--	--	--
Sept. 11	17.0	18.0	--	--	--	--	--	--	--	--
Sept. 11	20.0	21.0	4,890	8.9	460	--	52	170	830	110
Sept. 11	21.0	22.0	--	--	--	--	--	--	--	--
Oct. 24	.0	13.0	5,060	8.9	466	3,850	51	190	830	110
Oct. 24	14.0	15.0	--	--	--	--	--	--	--	--
Oct. 24	16.0	17.0	--	--	--	--	--	--	--	--
Oct. 24	18.0	19.0	--	--	--	--	--	--	--	--
Oct. 24	20.0	21.0	--	--	--	--	--	--	--	--
Oct. 24	22.0	23.0	--	--	--	--	--	--	--	--

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Nitrogen, organic, total (mg/L as N)	Nitrogen, ammonia plus organic, total (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphorus, total (mg/L as P)	Orthophosphate, dissolved (mg/L as P)	Orthophosphate, total (mg/L as P)	Arsenic, dissolved (µg/L as As)
<u>Site 4, Devils Lake,</u>									
1988									
Sept. 20	0.0	10.2	2.4	2.4	0.26	0.33	0.19	--	17
1989									
Jan. 30	1.7	20.0	2.3	2.4	.27	.27	.20	--	20
May. 8	.0	13.0	2.5	2.5	.26	.31	.21	--	17
June 21	.0	16.0	2.6	2.7	.28	.30	.22	--	15
Aug. 15	.0	5.7	3.3	3.3	.23	.33	.18	--	18
Oct. 25	.0	16.0	.97	1.0	.08	.11	.05	--	18

Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Sulfate, dis- solved (mg/L as SO ₄)	Chlo- ride, dis- solved (mg/L as Cl)	Fluo- ride, dis- solved (mg/L as F)	Silica, dis- solved (mg/L as SiO ₂)	Nitrogen, nitrite, dis- solved (mg/L as N)	Nitrogen, nitrite, total (mg/L as N)	Nitrogen, nitrite, plus nitrate, dis- solved (mg/L as N)	Nitrogen, nitrite, plus nitrate, total (mg/L as N)	Nitrogen, ammonia, dis- solved (mg/L as N)	Nitrogen, ammonia, total (mg/L as N)
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Main Bay

1,400	290	0.1	27	<0.01	--	<0.10	--	0.02	0.04
1,600	320	.1	28	<.01	--	.14	--	.15	.13
1,400	310	.2	24	.01	--	.12	--	.03	.04
1,500	310	.2	23	.02	--	.11	--	.14	.11
1,500	290	.1	25	<.01	--	<.10	--	.02	.02
1,600	350	.1	25	<.01	--	<.10	--	.02	.03
1,900	390	.2	28	<.01	--	.10	--	.04	.02
2,000	380	<.1	25	<.01	--	<.10	--	.01	.02
1,500	350	.1	1.1	<.01	--	<.10	--	.02	<.01
1,700	340	.1	8.4	<.01	--	<.10	--	.03	.02
--	--	--	--	<.01	--	<.10	--	.04	.02
--	--	--	--	<.01	--	<.10	--	.03	.02
--	--	--	--	<.01	--	<.10	--	.05	.02
--	--	--	--	<.01	--	<.10	--	.09	.03
1,700	300	.1	9.0	--	--	--	--	--	--
--	--	--	--	<.01	--	<.10	--	.03	.02
2,000	350	.3	13	<.01	<0.01	<.10	<.10	.03	.04
--	--	--	--	<.01	<.01	<.10	<.10	.03	.03
--	--	--	--	<.01	<.01	<.10	<.10	.03	.04
--	--	--	--	<.01	<.01	<.10	<.10	.03	.03
--	--	--	--	<.01	<.01	<.10	<.10	.03	.03
--	--	--	--	<.01	<.01	<.10	<.10	.03	.03

Boron, dis- solved (μg/L as B)	Iron, dis- solved (μg/L as Fe)	Lead, dis- solved (μg/L as Pb)	Lithium, dis- solved (μg/L as Li)	Manga- nese, dis- solved (μg/L as Mn)	Mercury, dis- solved (μg/L as Hg)	Molyb- denu- mum, dis- solved (μg/L as Mo)	Sele- nium, dis- solved (μg/L as Se)	Stron- tium, dis- solved (μg/L as Sr)	Chloro- phyll a, phyto- plank- ton (μg/L)	Chloro- phyll b, phyto- plank- ton (μg/L)
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Main Bay--Continued

570	40	<5	270	10	0.2	2	<1	420	25	0.40
600	20	<5	320	10	<.1	6	<1	460	<.50	<.10
590	20	<1	290	<10	<.1	4	<1	400	23	1.1
610	20	<1	300	<10	.1	4	<1	420	2.8	.30
660	30	<1	320	10	.3	2	<1	500	74	<.90
670	50	<2	300	<10	.1	4	<1	350	3.7	.20

Table 3.--Concentrations of water-quality constituents in water samples collected from Devils

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Nitrogen, organic, total (mg/L as N)	Nitrogen, ammonia plus organic, total (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphorus, total (mg/L as P)	Orthophosphate, dissolved (mg/L as P)	Orthophosphate, total (mg/L as P)	Arsenic, dissolved (µg/L as As)
<u>Site 4, Devils Lake,</u>									
1990									
Feb. 6	2.2	8.7	2.5	2.5	--	--	--	--	22
May 9	.0	9.0	2.8	2.8	0.12	0.17	0.09	--	19
Aug. 7	.0	5.4	--	3.8	.07	.17	.01	--	21
Sept. 11	.0	7.5	1.1	1.1	.10	.11	.05	--	22
Sept. 11	6.0	7.0	2.9	2.9	.08	.11	.05	--	--
Sept. 11	9.0	10.0	3.2	3.2	.08	.12	.05	--	--
Sept. 11	13.0	14.0	3.0	3.0	.08	.10	.05	--	--
Sept. 11	17.0	18.0	2.9	2.9	.07	.10	.04	--	--
Sept. 11	20.0	21.0	--	--	--	--	--	--	--
Sept. 11	21.0	22.0	--	<0.20	.12	.10	.05	--	--
Oct. 24	.0	13.0	3.0	3.0	.05	.06	.02	0.02	24
Oct. 24	14.0	15.0	2.6	2.6	.03	.06	.01	.02	--
Oct. 24	16.0	17.0	2.7	2.7	.04	.05	.02	.02	--
Oct. 24	18.0	19.0	2.8	2.8	.05	.06	.01	.03	--
Oct. 24	20.0	21.0	2.9	2.9	.04	.06	.01	.03	--
Oct. 24	22.0	23.0	2.6	2.6	.04	.06	.01	.03	--

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Specific conductance, lab (µS/cm)	pH, lab (standard units)	Alkalinity, lab (mg/L as CaCO ₃)	Solids, residue on evaporation at 180 degrees Celsius, mg/L	Site 5, Devils Lake,			
							Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)
<u>Site 5, Devils Lake,</u>										
1988										
Sept. 21	0.0	9.8	4,930	8.9	468	2,910	60	180	920	85
1989										
Feb. 22	2.1	14.8	5,810	8.5	528	4,390	76	230	1,000	100
May 8	.0	13.0	4,920	8.6	452	3,700	66	180	780	88
June 21	.0	13.0	5,160	8.7	480	3,870	64	180	820	110
Aug. 15	.0	6.3	5,190	8.8	458	3,840	61	190	860	120
Oct. 26	.0	10.5	5,680	8.8	459	4,210	52	200	950	120
1990										
Feb. 6	2.7	12.3	6,080	9.0	526	4,790	65	230	1,000	150
May 8	.0	14.0	5,560	8.6	463	4,160	56	210	990	120
Aug. 7	.0	4.2	5,800	8.7	451	4,300	52	210	970	53
Sept. 11	.0	2.6	5,780	8.8	475	4,290	48	200	1,000	120
Sept. 11	5.0	12.0	--	--	--	--	--	--	--	--
Oct. 24	.0	8.0	5,990	8.8	491	4,690	55	220	1,100	130
Oct. 24	10.0	12.0	--	--	--	--	--	--	--	--

Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Boron, dis- solved ($\mu\text{g/L}$ as B)	Iron, dis- solved ($\mu\text{g/L}$ as Fe)	Lead, dis- solved ($\mu\text{g/L}$ as Pb)	Lithium, dis- solved ($\mu\text{g/L}$ as Li)	Manga- nese, dis- solved ($\mu\text{g/L}$ as Mn)	Mercury, dis- solved ($\mu\text{g/L}$ as Hg)	Molyb- denu- mum, dis- solved ($\mu\text{g/L}$ as Mo)	Selen- ium, dis- solved ($\mu\text{g/L}$ as Se)	Stron- tium, dis- solved ($\mu\text{g/L}$ as Sr)	Chloro- phyll a, phyto- plank- ton ($\mu\text{g/L}$)	Chloro- phyll b, phyto- plank- ton ($\mu\text{g/L}$)
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Main Bay--Continued

750	140	<1	320	<10	0.2	4	<1	480	3.4	<0.40
690	30	<1	320	<10	.2	3	<1	440	6.6	<.60
700	30	<2	320	10	.2	1	<1	470	38	<.60
730	40	1	330	<10	.2	<1	<1	420	12	<.60
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780	20	<1	330	10	.2	3	<1	510	1.9	<.60
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Sulfate, dis- solved (mg/L as SO_4)	Chlo- ride, dis- solved (mg/L as Cl)	Fluo- ride, dis- solved (mg/L as F)	Silica, dis- solved (mg/L as SiO_2)	Nitrogen, nitrite, dis- solved (mg/L as N)	Nitrogen, nitrite, total (mg/L as N)	Nitrogen, nitrite, plus nitrate, dis- solved (mg/L as N)	Nitrogen, nitrite, plus nitrate, total (mg/L as N)	Nitrogen, ammonia, dis- solved (mg/L as N)	Nitrogen, ammonia, total (mg/L as N)
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Mission Bay

1,800	370	0.1	21	<0.01	--	<0.10	--	0.07	0.09
2,200	480	.2	24	.02	--	.22	--	.25	.28
1,800	380	.2	17	<.01	--	<.10	--	.03	.03
1,900	410	.1	23	.01	--	<.10	--	.11	.09
1,900	370	.1	16	<.01	--	<.10	--	.01	.03
2,200	450	.1	14	.01	--	<.10	--	.06	.06
2,400	490	.2	21	<.01	--	<.10	--	.12	.10
2,500	480	<.1	16	<.01	--	<.10	--	.02	.02
2,100	330	<.1	4.7	<.01	--	<.10	--	.02	<.01
2,100	400	.9	10	<.01	--	<.10	--	.04	.03
--	--	--	--	<.01	--	<.10	--	.06	.04
2,400	430	.3	14	<.01	<0.01	<.10	<0.10	.06	.06
--	--	--	--	<.01	<.01	<.10	<.10	.06	.07

Table 3.--Concentrations of water-quality constituents in water samples collected from Devils

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Nitro- gen, organic, total (mg/L as N)	Nitro- gen, ammonia plus organic, total (mg/L as N)	Phos- phorus, dis- solved (mg/L as P)	Phos- phorus, total (mg/L as P)	Ortho- phosphate, dis- solved (mg/L as P)	Ortho- phosphate, total (mg/L as P)	Arsenic, dissolved (µg/L as As)
<u>Site 5, Devils Lake,</u>									
1988									
Sept. 21	0.0	9.8	2.7	2.8	0.18	0.27	0.12	--	20
1989									
Feb. 22	2.1	14.8	3.1	3.4	.25	.25	.20	--	22
May 8	.0	13.0	2.5	2.5	.20	.25	.16	--	16
June 21	.0	13.0	2.5	2.6	.27	.33	.23	--	16
Aug. 15	.0	6.3	3.6	3.6	.14	.25	.10	--	22
Oct. 26	.0	10.5	2.3	2.4	.04	.08	<.01	--	19
1990									
Feb. 6	2.7	12.3	3.0	3.1	--	--	--	--	19
May 8	.0	14.0	3.0	3.0	.09	.14	.06	--	19
Aug. 7	.0	4.2	--	3.8	.07	.17	.02	--	23
Sept. 11	.0	2.6	--	<.20	.06	.15	<.01	--	26
Sept. 11	5.0	12.0	--	<.20	.08	.09	<.01	--	--
Oct. 24	.0	8.0	3.3	3.4	.03	.07	<.01	0.02	27
Oct. 24	10.0	12.0	3.1	3.2	.03	.06	<.01	.02	--

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Spec- cific con- duct- ance, lab (µS/cm)	pH, lab (stand- ard units)	Alka- linity, lab (mg/L as CaCO ₃)	Solids, residue on evap- oration at 180 degrees Celsius, (mg/L as Mg)	Calcium, dis- solved (mg/L as Ca)	Magne- sium, dis- solved (mg/L as Mg)	Sodium, dis- solved (mg/L as Na)	Potas- sum, dis- solved (mg/L as K)
<u>Site 6, Devils Lake,</u>										

1988	Sept. 21	0.0	3.3	6,210	8.6	495	4,710	60	230	1,100	110
1989	Feb. 23	2.4	12.4	6,980	8.5	572	5,510	77	270	1,300	130
	May 9	.0	9.0	6,220	8.6	504	4,790	67	220	1,100	100
	June 20	.0	6.8	6,320	8.6	507	4,810	75	220	1,100	130
	Aug. 15	.0	1.8	6,570	8.7	543	4,940	72	240	1,100	140
	Oct. 26	.0	8.5	6,790	8.7	492	5,140	56	240	1,300	150
1990	Feb. 7	2.7	14.0	7,750	8.9	586	6,270	73	280	1,400	180
	May 8	.0	11.0	6,600	8.5	497	5,060	60	250	1,200	140
	Aug. 8	.0	6.3	6,810	8.7	507	5,170	60	250	1,100	140
	Sept. 12	.0	4.4	6,980	8.7	518	5,080	60	250	1,200	150
	Sept. 12	6.0	7.0	--	--	--	--	--	--	--	--
	Sept. 12	8.5	9.5	--	--	--	--	--	--	--	--
	Sept. 12	11.0	12.0	--	--	--	--	--	--	--	--
	Oct. 25	.0	2.5	7,200	8.6	527	5,590	60	270	1,300	160
	Oct. 25	3.0	4.0	--	--	--	--	--	--	--	--
	Oct. 25	6.0	7.0	--	--	--	--	--	--	--	--
	Oct. 25	9.0	10.0	--	--	--	--	--	--	--	--
	Oct. 25	12.0	13.0	--	--	--	--	--	--	--	--

Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Boron, dis- solved ($\mu\text{g/L}$ as B)	Iron, dis- solved ($\mu\text{g/L}$ as Fe)	Lead, dis- solved ($\mu\text{g/L}$ as Pb)	Lithium, dis- solved ($\mu\text{g/L}$ as Li)	Manga- nese, dis- solved ($\mu\text{g/L}$ as Mn)	Mercury, dis- solved ($\mu\text{g/L}$ as Hg)	Molyb- denum, dis- solved ($\mu\text{g/L}$ as Mo)	Selen- ium, dis- solved ($\mu\text{g/L}$ as Se)	Stron- tium, dis- solved ($\mu\text{g/L}$ as Sr)	Chloro- phyll a, phyto- plank- ton ($\mu\text{g/L}$)	Chloro- phyll b, phyto- plank- ton ($\mu\text{g/L}$)
Mission Bay--Continued										
730	40	<5	340	10	0.3	3	<1	440	48	0.50
840	100	<5	420	20	<.1	6	<1	530	<.40	<.10
700	20	<1	340	<10	.1	5	<1	390	14	.50
780	50	<1	360	<10	.1	4	<1	460	8.2	<.20
780	40	<1	370	10	.2	3	<1	530	49	<.90
840	30	<2	360	<10	<.1	6	<1	350	18	.30
910	80	<1	380	<10	.3	5	<1	500	1.5	<.40
820	30	<1	360	<10	.4	6	<1	450	4.8	<.60
880	30	<2	390	10	.2	2	<1	480	31	<.60
900	40	1	390	<10	--	2	<1	380	73	<1.5
--	--	--	--	--	--	--	--	--	--	--
930	20	<1	400	10	--	6	<1	560	6.5	<.60
--	--	--	--	--	--	--	--	--	--	--

Sulfate, dis- solved (mg/L as SO_4)	Chlo- ride, dis- solved (mg/L as Cl)	Fluo- ride, dis- solved (mg/L as F)	Silica, dis- solved (mg/L as SiO_2)	Nitrogen, nitrite, dis- solved (mg/L as N)	Nitrogen, nitrite, total (mg/L as N)	Nitrogen, nitrate, dis- solved (mg/L as N)	Nitrogen, nitrite plus nitrate, dis- solved (mg/L as N)	Nitrogen, nitrite, total (mg/L as N)	Nitrogen, ammonia, dis- solved (mg/L as N)	Nitrogen, ammonia, total (mg/L as N)
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East Bay west

2,400	520	0.1	16	0.01	--	<0.10	--	0.21	0.12
2,800	580	.2	20	.02	--	.32	--	.32	.35
2,400	510	.2	13	<.01	--	<.10	--	.03	.03
2,400	510	.1	16	.04	--	.15	--	.11	.10
2,600	500	.1	14	<.01	--	<.10	--	.03	.03
2,600	500	.1	8.6	.02	--	.12	--	.16	.18
3,100	650	.1	16	.01	--	.20	--	.44	.43
3,100	450	<.1	11	<.01	--	<.10	--	.02	.02
2,500	550	<.1	.90	<.01	--	<.10	--	.03	.13
2,500	520	.4	13	.01	--	<.10	--	.06	.05
--	--	--	--	.02	--	<.10	--	.09	.05
--	--	--	--	.01	--	<.10	--	.07	.05
--	--	--	--	.02	--	<.10	--	.10	.06
2,900	670	.4	16	.02	0.01	<.10	<0.10	.03	.04
--	--	--	--	<.01	.01	<.10	<.10	.03	.04
--	--	--	--	<.01	<.01	<.10	<.10	.03	.04
--	--	--	--	.01	.01	<.10	<.10	.03	.04
--	--	--	--	.01	.02	<.10	<.10	.03	.05

Table 3.--Concentrations of water-quality constituents in water samples collected from Devils

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Nitro- gen, organic, total (mg/L as N)	Nitro- gen, ammonia plus organic, total (mg/L as N)	Phos- phorus, dis- solved (mg/L as P)	Phos- phorus, total (mg/L as P)	Ortho- phosphate, dis- solved (mg/L as P)	Ortho- phosphate, total (mg/L as P)	Arsenic, dis- solved (µg/L as As)
<u>Site 6, Devils Lake,</u>									
1988									
Sept. 21	0.0	3.3	3.0	3.1	0.11	0.15	0.10	--	24
1989									
Feb. 23	2.4	12.4	3.5	3.8	.25	.25	.20	--	25
May 9	.0	9.0	5.6	5.6	.19	.25	.14	--	19
June 20	.0	6.8	3.0	3.1	.29	.32	.23	--	17
Aug. 15	.0	1.8	5.6	5.6	.23	.47	.16	--	23
Oct. 26	.0	8.5	3.2	3.4	.06	.09	.02	--	23
1990									
Feb. 7	2.7	14.0	3.5	3.9	--	--	--	--	19
May 8	.0	11.0	3.2	3.2	.08	.13	.04	--	20
Aug. 8	.0	6.3	3.8	3.9	.14	.21	.08	--	22
Sept. 12	.0	4.4	2.0	2.0	.10	.10	.03	--	31
Sept. 12	6.0	7.0	3.5	3.5	.07	.11	.03	--	--
Sept. 12	8.5	9.5	3.4	3.4	.08	.10	.03	--	--
Sept. 12	11.0	12.0	3.6	3.7	.07	.10	.03	--	--
Oct. 25	.0	2.5	3.9	3.9	.07	.10	.02	0.04	31
Oct. 25	3.0	4.0	3.4	3.4	.06	.08	.02	.04	--
Oct. 25	6.0	7.0	3.8	3.8	.05	.09	.02	.06	--
Oct. 25	9.0	10.0	3.5	3.5	.04	.08	.03	.06	--
Oct. 25	12.0	13.0	3.5	3.6	.04	.09	.02	.05	--

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Spec- ific con- duct- ance, lab (stand- ard units)	pH, lab	Alka- linity, lab (mg/L as CaCO ₃)	Solids, residue on evap- oration at 180 degrees Celsius, (mg/L as dissolved)	Calcium, dis- solved (mg/L as Ca)	Magne- sium, dis- solved (mg/L as Mg)	Sodium, dis- solved (mg/L as Na)	Potas- sium, dis- solved (mg/L as K)
<u>Site 7, Devils Lake,</u>										
1988										
Sept. 21	0.0	7.4	6,480	8.8	506	4,460	64	230	1,100	150
1989										
Feb. 23	1.9	13.5	7,400	8.5	598	5,890	77	280	1,200	160
May 9	.0	9.0	6,330	8.7	501	4,880	64	220	1,100	120
June 20	.0	6.0	6,550	8.6	510	4,990	70	310	1,100	130
Aug. 15	.0	8.0	6,830	8.8	529	5,200	72	250	1,200	150
Oct. 26	.0	6.6	7,100	8.7	514	5,450	60	260	1,300	150
1990										
Feb. 7	2.4	12.4	8,030	8.9	599	6,500	77	290	1,400	200
May 8	.0	10.0	6,750	8.6	503	5,260	62	250	1,200	150
Aug. 8	.0	4.8	7,110	8.6	442	5,500	58	260	1,200	150
Sept. 12	.0	4.9	7,260	8.7	526	5,510	60	270	1,300	160
Sept. 12	7.0	12.0	--	--	--	--	--	--	--	--
Oct. 25	.0	2.6	7,480	8.6	538	5,810	65	270	1,400	170
Oct. 25	6.0	12.0	--	--	--	--	--	--	--	--

Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Boron, dis- solved ($\mu\text{g/L}$ as B)	Iron, dis- solved ($\mu\text{g/L}$ as Fe)	Lead, dis- solved ($\mu\text{g/L}$ as Pb)	Lithium, dis- solved ($\mu\text{g/L}$ as Li)	Manga- nese, dis- solved ($\mu\text{g/L}$ as Mn)	Mercury, dis- solved ($\mu\text{g/L}$ as Hg)	Molyb- dium, dis- solved ($\mu\text{g/L}$ as Mo)	Sele- nium, dis- solved ($\mu\text{g/L}$ as Se)	Stron- tium, dis- solved ($\mu\text{g/L}$ as Sr)	Chloro- phyll a, phyto- plank- ton ($\mu\text{g/L}$)	Chloro- phyll b, phyto- plank- ton ($\mu\text{g/L}$)
<u>East Bay west--Continued</u>										
950	50	<5	430	10	0.2	6	<1	480	48	0.30
1,000	80	<5	500	10	.1	8	<1	550	<.40	<.10
910	20	<1	420	10	<.1	6	<1	440	24	2.1
940	40	<1	430	<10	.1	5	<1	460	11	<.20
1,000	30	<1	450	<10	.2	4	<1	550	150	<2.8
1,100	30	<2	420	10	.1	7	<1	400	4.6	<.20
1,200	30	<1	480	10	.4	6	<1	470	<.40	<.40
990	40	<1	430	<10	.2	6	<1	490	6.9	<.60
1,100	30	<2	450	10	.2	4	<1	520	21	<.60
1,100	30	<1	460	<10	--	8	<1	440	4.0	<.60
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
1,100	40	<1	480	20	.2	8	<1	600	20.0	<.50
--	--	--	--	--	--	--	--	--	--	--
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Sulfate, dis- solved (mg/L as SO_4)	Chlo- ride, dis- solved (mg/L as Cl)	Fluo- ride, dis- solved (mg/L as F)	Silica, dis- solved (mg/L as SiO_2)	Nitrogen, nitrite, dis- solved (mg/L as N)	Nitrogen, nitrite, total (mg/L as N)	Nitrogen, nitrite, dis- solved (mg/L as N)	Nitrogen, nitrite plus nitrate, dis- solved (mg/L as N)	Nitrogen, nitrite plus nitrate, total (mg/L as N)	Nitrogen, ammonia, dis- solved (mg/L as N)	Nitrogen, ammonia, total (mg/L as N)
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<u>East Bay east</u>										
2,300	460	0.1	11	0.02	--	<0.10	--	--	0.32	0.28
3,000	640	.2	19	.02	--	.32	--	--	.48	.52
2,400	500	.1	12	<.01	--	<.10	--	--	.05	.04
2,500	540	.1	15	.04	--	.13	--	--	.21	.16
2,700	520	.1	19	<.01	--	<.10	--	--	.05	.04
2,800	530	.1	14	.03	--	<.10	--	--	.16	.14
3,400	690	.2	16	.02	--	.20	--	--	.53	.51
3,200	450	<.1	12	<.01	--	<.10	--	--	.02	.02
2,600	590	<.1	4.9	<.01	--	<.10	--	--	.03	.06
2,800	590	2.1	13	.02	--	<.10	--	--	.09	.09
--	--	--	--	.03	--	<.10	--	--	.10	.09
3,200	690	.3	15	.02	0.01	<.10	<.10	<0.10	.05	.07
--	--	--	--	<.01	.02	<.10	<.10	<.10	.05	.07

Table 3.--Concentrations of water-quality constituents in water samples collected from Devils

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Nitrogen, organic, total (mg/L as N)	Nitro- gen, ammonia plus organic, total (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphorus, total (mg/L as P)	Ortho-phosphate, dissolved (mg/L as P)	Ortho-phosphate, total (mg/L as P)	Arsenic, dissolved (µg/L as As)
<u>Site 7, Devils Lake,</u>									
1988									
Sept. 21	0.0	7.4	3.4	3.7	0.17	0.25	0.11	--	24
1989									
Feb. 23	1.9	13.5	3.6	4.1	.29	.30	.24	--	5
May 9	.0	9.0	3.0	3.0	.16	.21	.11	--	20
June 20	.0	6.0	2.7	2.9	.27	.28	.21	--	18
Aug. 15	.0	8.0	4.9	4.9	.23	.30	.16	--	21
Oct. 26	.0	6.6	3.4	3.5	.07	.13	.05	--	24
1990									
Feb. 7	2.4	12.4	3.5	4.0	--	--	--	--	19
May 8	.0	10.0	3.4	3.4	.09	.15	.04	--	20
Aug. 8	.0	4.8	4.2	4.3	.11	.20	.05	--	28
Sept. 12	.0	4.9	2.3	2.4	.04	.12	<.01	--	24
Sept. 12	7.0	12.0	2.0	2.1	.06	.09	.01	--	--
Oct. 25	.0	2.6	3.8	3.9	.07	.10	.03	0.04	29
Oct. 25	6.0	12.0	3.7	3.8	.04	.08	.02	.04	--

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Specific conductance, lab (µS/cm)	pH, lab (standard units)	Alkalinity, lab (mg/L as CaCO ₃)	Solids, residue on evaporation at 180 degrees Celsius, (mg/L as Ca)	Site 8, East			
							Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)
<u>Site 8, East</u>										
1988										
Sept. 21	0.0	6.0	8,970	8.8	572	6,680	54	340	1,600	140
1989										
Feb. 22	1.9	10.0	12,700	8.3	842	11,000	110	500	2,500	290
May 9	.0	7.0	8,700	8.8	530	7,010	66	300	1,600	120
June 21	.0	6.0	9,310	8.7	602	7,450	64	180	1,700	190
Aug. 15	.0	4.3	11,000	8.9	579	9,110	66	400	2,200	250
Oct. 26	.0	2.1	11,900	8.7	650	9,860	73	430	2,400	260
1990										
Feb. 7	2.5	2.8	20,200	8.7	1,230	19,100	130	780	4,400	450

Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Boron, dis- solved ($\mu\text{g/L}$ as B)	Iron, dis- solved ($\mu\text{g/L}$ as Fe)	Lead, dis- solved ($\mu\text{g/L}$ as Pb)	Lithium, dis- solved ($\mu\text{g/L}$ as Li)	Manga- nese, dis- solved ($\mu\text{g/L}$ as Mn)	Mercury, dis- solved ($\mu\text{g/L}$ as Hg)	Molyb- denum, dis- solved ($\mu\text{g/L}$ as Mo)	Sele- nium, dis- solved ($\mu\text{g/L}$ as Se)	Stron- tium, dis- solved ($\mu\text{g/L}$ as Sr)	Chloro- phyll a, phyto- plank- ton ($\mu\text{g/L}$)	Chloro- phyll b, phyto- plank- ton ($\mu\text{g/L}$)
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East Bay east--Continued

890	40	<5	450	<10	0.2	6	<1	490	43	<0.30
1,100	70	<5	530	20	<.1	8	<1	590	<.40	<.10
930	30	<1	430	10	.1	6	<1	440	14	.50
990	50	<1	440	10	.1	6	<1	480	2.2	<.20
1,100	30	<1	470	20	.1	4	<1	530	23	<.40
1,200	40	<2	450	<10	.1	7	<1	450	38	.40
1,300	40	<1	500	20	.3	6	<1	610	<.40	<.40
1,000	40	<1	440	<10	.2	5	<1	490	12	<.60
1,100	40	<2	460	10	.3	5	<1	540	60	<1.2
1,200	30	<2	480	<10	--	6	<1	490	32	<.60
--	--	--	--	--	--	--	--	--	--	--
1,200	20	<1	480	10	.1	9	<1	600	17	<.50
--	--	--	--	--	--	--	--	--	--	--

Sulfate, dis- solved (mg/L as SO_4)	Chlo- ride, dis- solved (mg/L as Cl)	Fluo- ride, dis- solved (mg/L as F)	Silica, dis- solved (mg/L as SiO_2)	Nitrogen, nitrite, dis- solved (mg/L as N)	Nitrogen, nitrite, dis- solved (mg/L as N)	Nitrogen, nitrite, dis- solved (mg/L as N)	Nitrogen, nitrite, plus nitrate, dis- solved (mg/L as N)	Nitrogen, nitrite, plus nitrate, dis- solved (mg/L as N)	Nitrogen, ammonia, dis- solved (mg/L as N)	Nitrogen, ammonia, total (mg/L as N)
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Devils Lake inlet

3,500	710	<0.1	11	--	--	--	--	--	--	0.78
5,600	1,200	.1	16	<0.01	--	<0.10	--	--	2.40	2.60
3,700	710	.1	4.5	<.01	--	<.10	--	--	.04	.04
2,900	780	.1	19	.05	--	<.10	--	--	.32	.27
4,800	860	.1	13	<.01	--	<.10	--	--	.03	.04
5,400	1,100	.1	.70	<.01	--	<.10	--	--	.03	.05
9,800	2,000	.2	15	.01	--	<.10	--	--	1.60	1.60

Table 3.--Concentrations of water-quality constituents in water samples collected from Devils

Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Nitrogen, organic, total (mg/L as N)	Nitrogen, ammonia plus organic, total (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphorus, total (mg/L as P)	Orthophosphate, dissolved (mg/L as P)	Orthophosphate, total (mg/L as P)	Arsenic, dissolved (µg/L as As)
<u>Site 8, East</u>									
1988									
Sept. 21	0.0	6.0	4.2	5.0	0.12	0.17	--	--	33
1989									
Feb. 22	1.9	10.0	4.1	6.7	.73	.74	0.66	--	32
May 9	.0	7.0	3.8	3.8	.09	.13	.03	--	18
June 21	.0	6.0	3.9	4.2	.30	.33	.23	--	19
Aug. 15	.0	4.3	5.7	5.7	.13	.21	.08	--	40
Oct. 26	.0	2.1	8.3	8.4	.05	.17	<.01	--	18
1990									
Feb. 7	2.5	2.8	3.4	5.0	--	--	--	--	36
Solids, residue on evaporation at 180 degrees Celsius, dissolved (mg/L as Ca)									
Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Specific conductance, lab (µS/cm)	pH, lab (standard units)	Alkalinity, lab (mg/L as CaCO ₃)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)
<u>Site 9, Devils Lake,</u>									
1990									
Feb. 7	2.2	5.7	3,040	8.6	587	2,210	90	150	390
May 9	.0	6.0	1,750	8.3	333	1,200	55	78	200
Aug. 8	.0	3.5	1,770	8.4	252	1,170	33	83	220
1990									
Date	Depth to top of sample interval (feet)	Depth to bottom of sample interval (feet)	Nitrogen, organic, total (mg/L as N)	Nitrogen, ammonia plus organic, total (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphorus, total (mg/L as P)	Orthophosphate, dissolved (mg/L as P)	Orthophosphate, total (mg/L as P)	Arsenic, dissolved (µg/L as As)
<u>Site 9, Devils Lake,</u>									
1990									
Feb. 7	2.2	5.7	2.8	2.9	0.02	0.03	<0.01	--	3
May 9	.0	6.0	2.1	2.1	.02	.10	<.01	--	2
Aug. 8	.0	3.5	4.0	4.0	.05	.18	<.01	--	8

Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Boron, dis- solved ($\mu\text{g/L}$ as B)	Iron, dis- solved ($\mu\text{g/L}$ as Fe)	Lead, dis- solved ($\mu\text{g/L}$ as Pb)	Lithium, dis- solved ($\mu\text{g/L}$ as Li)	Manga- nese, dis- solved ($\mu\text{g/L}$ as Mn)	Mercury, dis- solved ($\mu\text{g/L}$ as Hg)	Molyb- denum, dis- solved ($\mu\text{g/L}$ as Mo)	Selen- ium, dis- solved ($\mu\text{g/L}$ as Se)	Stron- tium, dis- solved ($\mu\text{g/L}$ as Sr)	Chloro- phyll a, phyto- plank- ton ($\mu\text{g/L}$)	Chloro- phyll b, phyto- plank- ton ($\mu\text{g/L}$)
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Devils Lake inlet--Continued

1,200	50	<5	580	10	0.2	4	<1	430	11	<0.1
1,700	90	<5	900	170	<.1	4	<1	700	<.40	<.1
1,200	40	<1	570	20	.1	5	<1	400	14	.7
1,400	60	<1	610	20	.1	6	<1	520	5.8	1.1
1,600	50	<1	750	20	.2	5	<1	610	40	<.50
1,700	60	<4	750	10	<.1	7	<1	500	89	4.6
3,000	150	<1	1,500	170	.4	8	<1	1,200	37	6.7

Sulfate, dis- solved (mg/L as SO_4)	Chlo- ride, dis- solved (mg/L as Cl)	Fluo- ride, dis- solved (mg/L as F)	Silica, dis- solved (mg/L as SiO_2)	Nitrogen, nitrite, dis- solved (mg/L as N)	Nitrogen, nitrite, total (mg/L as N)	Nitrogen, nitrate, dis- solved (mg/L as N)	Nitrogen, nitrite plus nitrate, dis- solved (mg/L as N)	Nitrogen, nitrite plus nitrate, total (mg/L as N)	Nitrogen, ammonia, dis- solved (mg/L as N)	Nitrogen, ammonia, total (mg/L as N)
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Fort Totten Bay

980	160	0.4	8.4	<0.01	--	<0.10	--	--	0.11	0.09
530	84	.3	1.7	<.01	--	<.10	--	--	.01	.01
510	95	.2	.90	<.01	--	<.10	--	--	.02	.05

Boron, dis- solved ($\mu\text{g/L}$ as B)	Iron, dis- solved ($\mu\text{g/L}$ as Fe)	Lead, dis- solved ($\mu\text{g/L}$ as Pb)	Lithium, dis- solved ($\mu\text{g/L}$ as Li)	Manga- nese, dis- solved ($\mu\text{g/L}$ as Mn)	Mercury, dis- solved ($\mu\text{g/L}$ as Hg)	Molyb- denum, dis- solved ($\mu\text{g/L}$ as Mo)	Selen- ium, dis- solved ($\mu\text{g/L}$ as Se)	Stron- tium, dis- solved ($\mu\text{g/L}$ as Sr)	Chloro- phyll a, phyto- plank- ton ($\mu\text{g/L}$)	Chloro- phyll b, phyto- plank- ton ($\mu\text{g/L}$)
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Fort Totten Bay--Continued

660	30	1	300	40	0.4	2	<1	740	3.1	<0.40
370	7	1	160	4	.2	2	<1	430	7.1	<.60
430	8	<1	180	6	.3	<1	<1	380	24	.60

Table 3.--Concentrations of water-quality constituents in water samples collected from Devils

Date	Depth to top of sample inter- val (feet)	Depth to bot- tom of sample inter- val (feet)	Spec- cific con- duct- ance, lab (μS/cm)	(stand- ard units)	pH, lab	Alka- linity, lab (mg/L as CaCO_3)	Solids, residue on evap- oration at 180 degrees Celsius, dis- solved (mg/L)	Calcium, dis- solved (mg/L as Ca)	Magne- sium, dis- solved (mg/L as Mg)	Sodium, dis- solved (mg/L as Na)	Potas- sium, dis- solved (mg/L as K)

Site 10, East Devils

1990											
Date	Depth to top of sample inter- val (feet)	Depth to bot- tom of sample inter- val (feet)	Spec- cific con- duct- ance, lab (μS/cm)	(stand- ard units)	pH, lab	Alka- linity, lab (mg/L as CaCO_3)	Solids, residue on evap- oration at 180 degrees Celsius, dis- solved (mg/L)	Calcium, dis- solved (mg/L as Ca)	Magne- sium, dis- solved (mg/L as Mg)	Sodium, dis- solved (mg/L as Na)	Potas- sium, dis- solved (mg/L as K)
May 9	0.0	10.0	12,100	8.6	697	10,200	91	450	2,400	250	
Aug. 8	.0	11.0	12,200	8.8	703	9,940	91	470	2,300	260	
Sept. 12	.0	12.5	12,400	8.8	675	10,400	90	460	2,300	290	
Sept. 12	13.0	14.0	--	--	--	--	--	--	--	--	
Sept. 12	16.0	17.0	--	--	--	--	--	--	--	--	
Sept. 12	19.0	20.0	--	--	--	--	--	--	--	--	
Sept. 12	22.0	23.0	--	--	--	--	--	--	--	--	
Sept. 12	23.0	24.0	12,400	8.7	674	--	94	450	2,400	260	
Sept. 12	25.0	26.0	--	--	--	--	--	--	--	--	
Oct. 25	.0	7.5	12,600	8.7	706	10,800	86	470	2,400	260	
Oct. 25	8.0	9.0	--	--	--	--	--	--	--	--	
Oct. 25	12.0	13.0	--	--	--	--	--	--	--	--	
Oct. 25	16.0	17.0	--	--	--	--	--	--	--	--	
Oct. 25	20.0	21.0	--	--	--	--	--	--	--	--	
Oct. 25	24.0	25.0	--	--	--	--	--	--	--	--	

Date	Depth to top of sample inter- val (feet)	Depth to bot- tom of sample inter- val (feet)	Nitro- gen, ammonia plus organic, total (mg/L as N)	Phos- phorus, dis- solved (mg/L as P)	Phos- phorus, total (mg/L as P)	Ortho- phosphate, dis- solved (mg/L as P)	Ortho- phosphate, total (mg/L as P)	Arsenic, dis- solved (μg/L as As)

Site 10, East Devils

1990											
Date	Depth to top of sample inter- val (feet)	Depth to bot- tom of sample inter- val (feet)	Nitro- gen, ammonia plus organic, total (mg/L as N)	Phos- phorus, dis- solved (mg/L as P)	Phos- phorus, total (mg/L as P)	Ortho- phosphate, dis- solved (mg/L as P)	Ortho- phosphate, total (mg/L as P)	Arsenic, dis- solved (μg/L as As)			
May 9	0.0	10.0	4.5	4.5	0.27	0.34	0.23	--	39		
Aug. 8	.0	11.0	3.6	3.7	.37	.43	.27	--	34		
Sept. 12	.0	12.5	3.3	3.3	.28	.34	.26	--	31		
Sept. 12	13.0	14.0	1.5	1.5	.31	.33	.27	--	--		
Sept. 12	16.0	17.0	3.2	3.2	.28	.33	.27	--	--		
Sept. 12	19.0	20.0	2.5	2.5	.28	.33	.27	--	--		
Sept. 12	22.0	23.0	2.1	2.1	.30	.33	.26	--	--		
Sept. 12	23.0	24.0	--	--	--	--	--	--	--		
Sept. 12	25.0	26.0	3.3	3.3	.25	.33	.24	--	--		
Oct. 25	.0	7.5	4.5	4.5	.19	.23	.16	0.17	37		
Oct. 25	8.0	9.0	4.4	4.4	.17	.22	.15	.18	--		
Oct. 25	12.0	13.0	4.5	4.5	.18	.22	.16	.17	--		
Oct. 25	16.0	17.0	4.4	4.4	.18	.22	.16	.17	--		
Oct. 25	20.0	21.0	4.4	4.4	.18	.22	.16	.17	--		
Oct. 25	24.0	25.0	4.4	4.4	.18	.22	.16	.18	--		

Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Sulfate dis- solved (mg/L as SO ₄)	Chlo- ride, dis- solved (mg/L as Cl)	Fluo- ride, dis- solved (mg/L as F)	Silica, dis- solved (mg/L as SiO ₂)	Nitrogen, nitrite, dis- solved (mg/L as N)	Nitrogen, nitrite, total (mg/L as N)	Nitrogen, nitrite, plus nitrate, dis- solved (mg/L as N)	Nitrogen, nitrite, plus nitrate, total (mg/L as N)	Nitrogen, ammonia, dis- solved (mg/L as N)	Nitrogen, ammonia, total (mg/L as N)
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Lake main bay

4,500	1,200	<0.1	8.4	<0.01	--	<0.10	--	0.02	0.03
5,300	1,100	<.1	13	<.01	--	<.10	--	.02	.05
5,500	1,100	1.3	11	<.01	--	<.10	--	.02	.03
--	--	--	--	<.01	--	<.10	--	.02	.03
--	--	--	--	<.01	--	<.10	--	.04	.03
--	--	--	--	<.01	--	<.10	--	.02	.03
--	--	--	--	<.01	--	<.10	--	.03	.03
5,400	1,200	.2	11	--	--	--	--	--	--
--	--	--	--	<.01	--	<.10	--	.05	.03
5,700	1,200	<.1	10	.02	<0.01	<.10	<0.10	.02	.02
--	--	--	--	.02	<.01	<.10	<.10	.02	.02
--	--	--	--	<.01	<.01	<.10	<.10	.02	.02
--	--	--	--	<.01	<.01	<.10	<.10	.02	.02
--	--	--	--	<.01	<.01	<.10	<.10	.02	.02
--	--	--	--	<.01	<.01	<.10	<.10	.01	.03

Boron, dis- solved (μg/L as B)	Iron, dis- solved (μg/L as Fe)	Lead, dis- solved (μg/L as Pb)	Lithium, dis- solved (μg/L as Li)	Manga- nese, dis- solved (μg/L as Mn)	Mercury, dis- solved (μg/L as Hg)	Molyb- denu- mum, dis- solved (μg/L as Mo)	Selen- ium, dis- solved (μg/L as Se)	Stron- tium, dis- solved (μg/L as Sr)	Chloro- phyll a, phyto- plank- ton (μg/L)	Chloro- phyll b, phyto- plank- ton (μg/L)
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Lake main bay--Continued

1,800	60	<1	780	10	0.1	3	<1	570	21	1.7
1,800	50	<4	820	20	.2	<1	<1	580	8.0	<.60
1,800	70	<4	800	20	--	3	<1	490	6.0	<.60
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1,900	<10	<1	840	20	.1	4	<1	630	16	<.50
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Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and

East Devils Lake sampling sites, September 1988 through October 1990

[The first line values are the biovolume in cubic microns per milliliter; the second line values are the density in cells per milliliter; var., variety; sp., species; f., form]

Organism scientific name	Family	<u>Genus species</u>	Date								
			9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90
<u>Site 1, Devils Lake, West Bay</u>											
Bacillariophyta											
<i>Amphora veneta</i>		0	0	0	0	0	0	0	0	182,336	0
<i>Cyclotella meneghiniana</i>	58	67,228	0	705,125	23,898	145,467	0	0	0	1,673,443	3,674,358
<i>Cyclotella stelligera</i>		125	0	625	10	63	0	0	111	737	359,731
<i>Entomoensis paludososa</i>		4,129	0	0	0	0	494,900	0	41,810	0	134,323
<i>Epithemia adnata</i>		16	0	0	125	0	0	3,500	0	370	0
<i>Fragilaria capucina</i> var. <i>mesolepta</i>		0	0	0	0	0	0	0	0	0	2,816
<i>Gyrosigma spencerii</i>		0	0	157,450	0	0	0	0	0	0	0
<i>Navicula capitata</i>		0	0	0	0	0	0	0	34,336	0	0
<i>Navicula capitata</i> var. <i>capitata</i>		0	0	0	0	0	0	342,000	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Genus species	9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
Site 1, Devils Lake, West Bay--Continued													
Bacillariophyta--Continued													
<i>Navicula capitata</i> var. <i>hungarica</i>		0	0	67,500	0	0	0	0	0	0	0	0	0
<i>Navicula cincta</i>		0	0	0	0	0	0	0	0	0	0	0	9,139
<i>Navicula heufleri</i>		0	0	0	0	0	0	0	0	0	0	0	28,275
<i>Navicula miniscula</i>		0	0	0	0	0	0	0	0	0	0	0	64
<i>Navicula subminiscula</i>		0	0	0	0	0	0	24,300	0	0	0	0	36,864
<i>Navicula vaucheriae</i>		0	0	55,225	0	13,797	17,955	0	0	0	0	0	1,024
<i>Navicula ventosa</i>		0	0	250	0	438	63	0	0	0	0	0	62,208
<i>Nitzchia adaptata</i>		0	0	428,000	0	0	0	0	0	0	0	0	1,152
<i>Nitzchia frustulum</i>		0	0	0	0	0	0	0	0	101,350	0	0	0
<i>Nitzchia halophila</i>		0	0	0	0	0	0	0	0	30,938	0	0	61,440
<i>Nitzchia hungarica</i>		0	0	0	0	6,754	0	86,184	0	37	0	0	256
		0	0	0	4	0	4	0	63	148	1,273	0	123,328
												0	128

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and
East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family		9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
<u>Site 1, Devil's Lake, West Bay--Continued</u>												
Bacillariophyta--												
Cont. nited												
<u>Nitzchia</u> <u>kuetzingiana</u>	20,225	0	811,250	600	0	22,780	0	31,731	64,103	6,000	0	0
<u>Nitzchia</u> <u>lorenziana</u>	0	0	0	0	0	0	0	315,462	0	0	0	0
<u>Nitzchia</u> <u>palea</u>	0	0	0	0	0	0	0	0	74	0	0	0
<u>Nitzchia</u> <u>trybillella</u>	0	0	595,175	273	0	49,896	0	645,280	339,288	0	161,229	64
<u>Nitzchia</u> <u>umbonata</u>	0	0	0	125	4	0	63	0	148	67	0	64
<u>Melosira</u> <u>granulata</u> var. <u>angustissima</u>	0	0	0	0	28	0	0	0	0	0	0	256
<u>Stephanodiscus</u> <u>alpinus</u>	0	0	544,000	825,156	0	69,362	0	25,436,832	3,270,250	0	0	0
<u>Stephanodiscus</u> <u>dubius</u>	0	0	32,513	7,339	0	0	0	0	962	125	0	0
<u>Stephanodiscus</u> <u>hantzschii</u>	0	0	375	90	0	0	0	0	0	0	0	64
<u>Stephanodiscus</u> <u>niagareae</u>	865,876	0	0	0	0	0	0	0	0	0	0	1,130,938
	250	0	0	0	0	0	0	0	0	0	0	64

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
<u>Site 1, Devils Lake, West Bay--Continued</u>												
<u>Bacillariophyta--Continued</u>												
<u>Stephanodiscus</u> sp.	0	115	0	0	0	0	0	0	0	0	0	4,762,013
<u>Suriella ovalis</u>	0	0	0	0	0	0	0	0	0	675,602	0	0
<u>Suriella ovata</u>	0	0	685,440	0	0	0	0	0	0	0	0	0
<u>Suriella robusta</u>	0	0	16	0	0	0	0	0	0	0	0	0
<u>Synedra fasciculata</u>	21,504	0	0	0	0	0	0	0	0	0	0	0
<u>Synedra fasciculata</u> var. <u>truncata</u>	16	0	0	0	0	0	0	0	0	0	0	0
Total	978,962	115	7,868,016	879,056	159,264	1,107,377	0	44,623,588	13,811,114	5,205,638	2,302,662	
	532	1	2,391	202	501	4,846	0	3,737	2,796	438	6,464	
Chlorophyta												
<u>Ankistrodesmus</u> <u>falcatus</u> var. <u>falcatus</u>	0	0	338,538	33,956	0	141,400	0	475,000	0	0	0	0
	0	0	6,625	938	0	2,000	0	5,000	0	0	0	0
<u>Ankyra judayi</u>	0	0	0	0	0	0	0	0	0	5,198	0	0
	0	0	0	0	0	0	0	0	0	63	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus species	Date										
		9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
Site 1, Devils Lake, West Bay--Continued												
Chlorophyta--Continued												
<u>Chlamydomonas</u> sp.	0	0	0	0	0	25,350	2,407	0	0	3,812	0	0
<u>Chlorella</u> sp.	299,988 29,125	0	1,763 125	103,000 10,000	8,400 2,000	2,436,000 580,000	2,625 625	73,500 17,500	115,500 27,500	35,700 8,500	479,850 114,250	
<u>Chlorococcum</u> sp.	22,450	0	0	0	0	0	0	4,123	0	0	0	
<u>Coccomyxa</u> sp.	125	0	0	0	0	0	0	63	0	0	0	
<u>Coelastrum</u> <u>microporum</u>	0	0	0	2,336,000 1,460,000	48,800 30,500	0	0	0	0	0	0	
<u>Crucigenia</u> <u>apiculata</u>	0	0	61,800 3,000	0	0	0	0	0	0	0	0	
<u>Crucigenia</u> <u>quadriata</u>	16,275 3,875	0	0	0	15,450 750	253,800 18,000	0	0	6,438 625	72,100 3,500	39,950 4,250	
<u>Crucigenia</u> <u>tetrapedia</u>	0	0	0	0	47,700 6,625	0	0	0	0	0	0	
<u>Coenochloris</u> <u>Dyrenoidosa</u>	0	0	197,325 125	0	0	0	0	0	0	0	0	
<u>Coenochloris</u> sp.	0	0	0	0	55,750 1,250	0	0	0	0	0	0	

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Genus species	9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90	Date
Site 1, Devils Lake, West Bay--Continued														
<i>Chlorophyta</i> -- Continued														
<i>Dictyosphaerium</i> <i>ehrenbergianum</i>		0	0	0	0	0	0	0	0	0	0	0	3,938	0
<i>Dictyosphaerium</i> <i>pulchellum</i>		0	0	41,200	0	0	0	0	0	0	0	0	625	0
<i>Dunaliella</i> sp.		0	0	0	0	0	0	0	3,900	0	0	0	0	0
<i>Dysmorphococcus</i>		0	0	0	0	0	0	126,000	0	0	0	0	40,838	125
sp.		0	0	0	0	0	0	15,000	0	0	0	0	0	0
<i>Gloecystis</i> <i>gligas</i>		0	0	0	0	0	0	0	0	0	0	0	481,050	0
<i>Kirchneriella</i> <i>contorta</i>		0	0	0	0	0	0	35,000	0	0	0	0	0	0
<i>Kirchneriella</i> <i>elongata</i>		0	0	0	0	0	0	11,755	0	0	0	0	0	0
<i>Kirchneriella</i> <i>lunaris</i>		20,750 1,250	0	5,125 625	0	8,575 1,750	319,800 39,000	6,150 750	686,750 83,750	19,250 2,750	2,600 500	20,250 6,750	125,400	6,000
<i>Kirchneriella</i> <i>subsolutaria</i>		0	0	0	0	0	0	0	0	16,750 125	39,800 250	0	0	0
<i>Mesotaenium</i> sp.		0	0	0	0	0	0	6,300	0	0	0	0	0	0
<i>Microspora</i> sp.		21,250 125	0	0	0	0	0	1,000	0	0	0	0	984,250 1,250	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and
East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
<u>Site 1, Devil's Lake, West Bay--Continued</u>												
Chlorophyta--Continued												
<u>Monoraphidium contortum</u>	0	0	0	0	0	0	0	0	0	0	0	
<u>Monoraphidium minutum</u>	0	0	0	0	0	0	414,600	0	0	0	0	
<u>Monoraphidium mirabile</u>	4,175	0	0	0	0	0	357,700	0	0	0	1,768	
<u>Nannochloris</u> sp.	0	0	0	0	0	0	0	0	0	0	63	
<u>Nephrocytum agardhianum</u>	0	0	0	0	0	0	664,250	0	0	0	0	
<u>Nephrocytum limnetica</u>	0	0	0	0	0	0	2,500	0	0	0	0	
<u>Nephrocytum lunatus</u>	0	0	0	0	0	0	40,750	0	0	0	0	
<u>Nephrocytum</u> sp.	28,300	0	0	0	0	0	250	0	0	0	3,338	
<u>Oocystis borgei</u>	0	0	0	0	0	0	0	0	0	0	0	
<u>Oocystis crassa</u>	0	0	0	0	0	0	0	0	0	0	0	
<u>Oocystis pusilla</u>	81,200	57	0	0	0	0	0	0	0	0	0	

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus</u> <u>Species</u>	Date									
		9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90
<u>Site 1, Devils Lake, West Bay--Continued</u>											
Chlorophyta--Continued											
<u>Oocystis</u> sp.	42,410 1,125	0 0	89,600 2,000	0 0	0 0	9,800 1,000	0 0	0 0	36,450 375	0 0	340,050 500
<u>Pediastrum</u> <u>boryanum</u>	205,250 500	0 0	0 688	304,027 0	0 0	18,560 42	0 0	0 0	254,462 4,500	164,800 2,000	0 0
<u>Pediastrum</u> <u>duplicex</u>	0 0	0 0	9,413 375	0 0	589,063 625	1,581 63	0 0	3,138 125	0 0	1,508 16	0 0
<u>Pseudo-</u> <u>Sphaerocystis</u> <u>lacustris</u>	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	54,400 1,000
<u>Scenedesmus</u> <u>abundans</u>	5,050 500	0 0	35,200 2,750	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
<u>Scenedesmus</u> <u>acuminatus</u>	0 0	0 0	260 31	0 0	0 0	12,550 500	0 0	0 0	145,100 1,000	0 0	0 0
<u>Scenedesmus</u> <u>bicaudatus</u>	0 0	0 0	0 0	3,675 250	0 0	0 0	0 0	0 0	0 0	0 0	0 0
<u>Scenedesmus</u> <u>ecornus</u>	237 21	0 0	33,625 1,250	1,838 375	10,088 375	282,450 10,500	0 0	0 0	6,300 750	1,575 188	21,525 5,125
<u>Scenedesmus</u> <u>linearis</u>	50,312 250	0 0	202,750 2,500	1,298 16	0 0	12,775 250	0 0	0 0	0 0	0 0	0 0
<u>Scenedesmus</u> <u>opoliensis</u>	28,274 500	0 0	82,500 375	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Genus species	9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
Site 1, Devils Lake, West Bay--Continued													
Chlorophyta--													
Continued													
<u>Scenedesmus</u>		0	0	0	0	0	0	0	0	105,000	0	0	0
<u>quadricauda</u>		0	0	0	0	0	0	0	25,000	0	0	0	0
<u>Scenedesmus</u>		0	0	0	0	0	0	5,475	0	0	0	6,300	0
<u>subspicatus</u>		0	0	0	0	0	0	250	0	0	0	500	0
<u>Scenedesmus</u> sp.		20,038	0	0	0	0	0	0	0	0	0	0	0
		875	0	0	0	0	0	0	0	0	0	0	0
<u>Schroederia</u>		0	0	0	0	0	0	0	0	0	3,219	3,830	7,600
<u>setigera</u>		0	0	0	0	0	0	0	0	0	63	63	125
<u>Tetrastrum</u>		10,300	0	0	0	0	0	0	0	0	0	0	0
<u>heterocanthum</u>		1,000	0	0	0	0	0	0	0	0	0	0	0
<u>Tetrastrum</u>		0	0	6,300	0	0	0	178,250	0	0	106,000	0	0
<u>stauro-</u>		0	0	1,500	0	0	0	11,500	0	0	4,000	0	0
<u>geniaeforme</u>													
Total		856,259	57	1,687,349	2,887,244	746,476	5,230,253	600,248	8,633,819	1,706,067	813,201	1,168,831	
		41,896	2	50,031	1,480,142	36,500	694,418	210,563	1,865,188	43,189	16,517	156,188	
Cryptophyta													
<u>Chroomonas</u> sp.		0	0	0	0	0	26,132	0	0	0	0	12,000	0
		0	0	0	0	188	0	0	0	0	0	125	0
<u>Cryptomonas</u>		0	0	0	0	0	421,738	0	0	0	0	0	0
<u>marsonii</u>		0	0	0	0	0	63	0	0	0	0	0	0
Total		0	0	0	0	0	26,132	421,738	0	0	0	12,000	0
		0	0	0	188	63	0	0	0	0	0	125	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and
East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus species	Site 1, Devil's Lake, West Bay--Continued										Date
		9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	
Cyanophyta												
<i>Anacystis nidulans</i>	385,000 385,000	0 0	799,850 470,500	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
<i>Anacystis saxicola</i>	0 0	0 0	0 0	0 0	0 0	0 0	12,000 7,500	0 0	0 0	0 0	0 0	0 0
<i>Anacystis</i> sp.	0 0	2,074 1,296	0 0	600,000 500,000	24,700 19,000	73,950 25,500	1,988 1,125	0 0	0 0	38,200 23,875	698,275 410,750	119,850 67,500
<i>Aphanizomenon flos-aquae</i>	943,740 7,350	0 0	0 0	0 0	2,006,593 18,063	164,600 2,000	0 0	0 0	0 0	60,725 875	4,038,488 57,000	7,098,932 87,135
<i>Aphanocapsa delicatissima</i>	90,000 50,000	0 0	16,200 9,000	45,000 25,000	7,200 4,000	0 0	0 0	0 0	0 0	0 0	9,900 5,500	20,700 11,500
<i>Aphanocapsa elachista</i>	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	17,850 4,250	0 0	0 0
<i>Aphanocapsa elachista</i> var. <i>conferta</i>	4,969,633 1,627,500	0 0	97,500 97,500	141,250 141,250	15,500 15,500	2,500 1,250	0 0	1,320,750 733,750	0 0	407,925 226,625	0 0	0 0
<i>Chroococcus dispersus</i>	443,540 31,375	144 14	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
<i>Chroococcus minimus</i>	90,125 8,750	0 0	0 0	0 0	0 0	20,600 2,000	0 0	0 0	0 0	0 0	0 0	0 0
<i>Chroococcus</i> sp.	0 0	0 0	4,183,000 997,000	0 0	0 0	0 0	0 0	0 0	0 0	8,813 625	0 0	0 0
<i>Coeosphaerium dubium</i>	176,800 3,250	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus Species	Date									
		9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90
Cyanophyta--Continued											
<i>Coelosphaerium kuetzingianum</i>	0	0	0	0	0	0	168,000	0	0	0	0
<i>Dactyloccopsis fascicularis</i>	8,813 625	0 0	18,288 875	2,613 125	0	73,150 0	1,913 3,500	77,500 125	0	0	18,400 2,000
<i>Dactyloccopsis raphidoides</i>	2,925 1,625	0 0	0 0	0 0	0	14,700 1,000	0 0	0	0	0	0
<i>Lyngbya birgei</i>	0	0	0	0	0	3,588, 4,375	0	0	0	465,600 4,000	549,600 1,500
<i>Lyngbya limnetica</i>	0	0	0	0	0	0	0	85,000	0	0	0
<i>Marsoniella elegans</i>	0	0	1,688 625	0	0	0	0	0	0	0	2,250 0
<i>Mesomopedia tenuissima</i>	17,016 32,500	0 0	0 0	0 0	0	1,000 1,250	0	0	9,250 9,250	3,750 3,750	594 330
<i>Mesomopedia</i> sp.	0	0	0	0	24	0	0	0	0	0	0
<i>Microcystis aeruginosa</i>	1,346,760 7,830	0 0	1,884,900 22,875	770,550 6,813	9,347,291 113,438	690,100 8,375	0	2,211,451 26,838	6,802,125 70,125	8,296,250 85,250	0
<i>Microcystis incerta</i>	1,470,000 350,000	286 162	0 0	0 0	0 0	0 0	0	0	0	0	0
<i>Nodularia spumigena</i>	0	0	0	0	0	0	0	0	0	4,800,282 12,478	76,940 200

Table 4.—Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990—Continued

Organism scientific name	Family	Genus	Species	9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90	Date
Site 1, Devils Lake, West Bay--Continued															
Cyanophyta--															
Continued															
<u>Oscillatoria</u>		0	0	0	0	9,338	0	0	0	0	0	0	0	0	0
<u>subtilissima</u>		0	0	0	0	1,125	0	0	0	0	0	0	0	0	0
<u>Oscillatoria</u>		54,000	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>temuis</u> var.		2,250	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>tergestina</u>															
<u>Oscillatoria</u> sp.		154,275	0	0	0	0	0	0	0	0	0	0	0	0	0
		4,250	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>Phormidium</u>		0	0	0	0	0	19,200	0	0	0	0	0	0	3,000	0
<u>mucicola</u>		0	0	0	0	0	2,000	0	0	0	0	0	0	750	0
<u>Pseudabenia</u> sp.		1,350	0	0	0	0	0	0	0	0	0	0	0	0	0
		375	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>Rhabdoderma</u>		0	54	0	0	0	0	0	0	0	0	0	0	0	0
<u>sigmoidea</u>		0	34	0	0	0	0	0	0	0	0	0	0	0	0
<u>f. minor</u>															
<u>Synechococcus</u> sp.		0	247	0	0	0	0	0	0	0	0	0	0	0	0
		0	29	0	0	0	0	0	0	0	0	0	0	0	0
Total		10,153,977	2,805	7,001,426	1,568,751	15,029,483	1,200,000	3,901	3,694,701	7,810,488	18,401,795	7,335,416			
		2,512,680	1,535	1,598,375	674,313	178,392	98,375	1,250	784,338	339,625	578,228	168,665			

Table 4--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date												
Family	Genus	species	9-21-88	1-30-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
Site 2, Devils Lake, Sixmile Bay													
Bacillariophyta													
<i>Cyclotella</i>	0	6,110	0	0	0	0	0	0	0	0	0	0	0
<i>meneghiniana</i>	0	3	0	0	0	0	0	0	0	0	0	0	0
<i>Cyclotella</i>	0	0	0	0	0	0	0	400,838	0	0	0	0	44,900
<i>stelligera</i>	0	0	0	0	0	0	0	2,625	0	0	0	0	250
<i>Diatoma tenue</i>	0	0	0	0	0	0	0	0	0	38,437	0	0	0
<i>var. tenue</i>	0	0	0	0	0	0	0	0	0	94	0	0	0
<i>Navicula</i>	0	0	0	0	0	0	0	0	0	0	26,180	0	0
<i>cryptocephala</i>	0	0	0	0	0	0	0	0	0	0	125	0	0
<i>Navicula</i>	0	0	0	0	0	0	0	0	0	0	5,141	0	0
<i>miniscula</i>	0	0	0	0	0	0	0	0	0	0	63	0	0
<i>Navicula</i>	0	0	10,960	0	0	0	0	0	0	0	0	0	0
<i>vaucheriae</i>	0	0	188	0	0	0	0	0	0	0	0	0	0
<i>Navicula</i> sp.	0	0	0	16,538	1,985	10,935	0	0	0	0	0	0	0
				125	63	250	0	0	0	0	0	0	0
<i>Nitzchia</i>	0	0	0	88,641	0	0	0	0	0	0	0	0	0
<i>hungarica</i>	0	0	0	63	0	0	0	0	0	0	0	0	0
<i>Nitzchia</i>	2,915	0	0	0	0	0	0	0	0	17,050	0	0	0
<i>kuetzingiana</i>	16	0	0	0	0	0	0	0	0	31	0	0	0
<i>Stephanodiscus</i>	0	0	178,862	0	0	75,450	0	0	0	0	0	0	0
<i>dubius</i>	0	0	2,063	0	0	1,500	0	0	0	0	0	0	0
<i>Stephanodiscus</i>	0	0	0	0	0	0	0	0	0	0	28,345,425	2,343,213	0
sp.	0	0	0	0	0	0	0	0	0	0	375	31	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date												
Family	Genus	Species	9-21-88	1-30-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
Site 2, Devil's Lake, Sixmile Bay--Continued													
Bacillariophyta--Continued													
<u>Suriella ovata</u>	0	0	2,698	920	0	0	0	0	0	0	0	0	0
<u>Synedra acus</u>	0	0	197,400	0	0	0	0	0	0	0	0	0	0
Total	2,915	6,110	3,086,142	105,179	1,985	487,223	0	55,487	28,376,746	563	2,343,213	31	44,900
	16	3	2,439	188	63	4,375	0	125					250
Chlorophyta													
<u>Ankyra judayi</u>	0	0	0	0	20,349	0	0	0	0	0	0	0	0
<u>Chlamydomonas</u> sp.	0	0	0	0	18,325	19,063	0	0	434	20,582	40,838	0	0
<u>Chlorella</u> sp.	1,936	0	46,713	59,225	0	19,950	525	525	1,315	0	10,500	0	2,500
	188	0	3,313	5,750	0	4,750	125	125	313				
<u>Chlorogonium</u> sp.	14,038	973	0	0	0	0	0	0	0	0	0	0	0
	125	12	0	0	0	0	0	0	0	0	0	0	0
<u>Coccomyxa</u> sp.	0	0	0	0	420,000	0	0	0	0	0	0	0	0
	0	0	0	0	262,500	0	0	0	0	0	0	0	0
<u>Crucigenia quadrata</u>	17,397	0	20,938	0	0	0	0	0	0	0	0	0	0
	563	0	625	0	0	0	0	0	0	0	0	0	0
<u>Dunaliella viridis</u>	0	0	0	0	0	0	0	49,358	0	0	0	0	0
	0	0	0	0	0	0	0	125	0	0	0	0	0

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Date										
	<u>Genus</u> <u>species</u>	9-21-88	1-30-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
<u>Site 2, Devils Lake, Sixmile Bay--Continued</u>												
<u>Chlorophyta--</u>												
<u>Continued</u>												
<u>Dunaliella</u> sp.	0	0	0	0	0	0	0	5,200	0	0	0	
<u>Elakothrix</u>	0	0	0	0	0	0	0	1,000	0	0	0	
<u>viridis</u>	0	0	0	0	0	0	0	0	0	2,419	0	
<u>Kirchneriella</u>	1,560	0	2,567	0	0	81,113	300,325	1,796	50,400	0	42,750	
<u>lunaris</u>	94	0	313	0	0	12,875	36,625	219	6,000	0	14,250	
<u>Kirchneriella</u>	0	0	0	0	0	0	0	0	0	0	0	
<u>subsolitaria</u>	0	0	0	0	0	0	0	0	0	0	0	
<u>Nannochloris</u> sp.	0	0	0	0	0	0	149,813	455,000	3,455,750	138	74,938	
<u>Oocystis</u>	0	0	0	0	0	0	10,625	162,500	751,250	125	0	
<u>pusilla</u>	0	0	0	0	0	0	33,950	0	0	0	0	
<u>Oocystis</u> sp.	19,221	0	0	0	0	0	0	0	0	170,025	10,882	
	94	0	0	0	0	0	0	0	0	250	0	
<u>Pediastrum</u>	0	0	0	0	0	0	0	0	0	12,100	0	
<u>duplex</u>	0	0	0	0	0	0	0	0	0	500	0	
<u>Pseudo-</u>	0	0	0	0	0	0	0	0	0	0	0	
<u>sphaerocystis</u>	0	0	0	0	0	0	0	0	0	0	0	
<u>Scenedesmus</u>	0	0	6,725	0	0	1,047	0	0	617	0	0	
<u>ecornus</u>	0	0	250	0	0	125	0	0	63	0	0	

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and
East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-21-88	1-30-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
<u>Site 2, Devil's Lake, Sixmile Bay--Continued</u>												
Chlorophyta--Continued												
	<u>Schroederia</u> <u>setigera</u>	50,376	0	6,597	0	0	0	0	0	0	3,830	0
Total		31	0	63	0	0	0	0	0	63	0	0
	<u>104,528</u>	<u>973</u>	<u>83,540</u>	<u>517,899</u>	<u>19,063</u>	<u>285,873</u>	<u>810,408</u>	<u>3,459,122</u>	<u>260,809</u>	<u>51,720</u>	<u>277,378</u>	
	<u>1,095</u>	<u>12</u>	<u>4,564</u>	<u>270,813</u>	<u>188</u>	<u>28,875</u>	<u>200,375</u>	<u>751,688</u>	<u>7,377</u>	<u>141</u>	<u>85,579</u>	
Chrysophyta												
	<u>Chromulina</u> sp.	0	32	0	0	0	0	0	0	0	0	0
Total		0	32	0	0	0	0	0	0	0	0	0
	<u>0</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Cryptophyta												
	<u>Chroomonas</u> sp.	<u>27,225</u>	<u>489</u>	<u>0</u>	<u>26,132</u>	<u>104,250</u>	<u>36,000</u>	<u>6,048</u>	<u>0</u>	<u>12,000</u>	<u>0</u>	<u>24,000</u>
		<u>375</u>	<u>3</u>	<u>0</u>	<u>188</u>	<u>750</u>	<u>375</u>	<u>63</u>	<u>0</u>	<u>125</u>	<u>0</u>	<u>250</u>
	<u>Cryptomonas</u> <u>marsonii</u>	<u>107,108</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total		<u>16</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	<u>134,333</u>	<u>489</u>	<u>0</u>	<u>26,132</u>	<u>104,250</u>	<u>36,000</u>	<u>6,048</u>	<u>0</u>	<u>12,000</u>	<u>0</u>	<u>24,000</u>	
	<u>391</u>	<u>3</u>	<u>0</u>	<u>188</u>	<u>750</u>	<u>375</u>	<u>63</u>	<u>0</u>	<u>125</u>	<u>0</u>	<u>250</u>	

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and
East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Genus <u>species</u>	Date								
			9-21-88	1-30-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90
<u>Site 2, Devil's Lake, Sixmile Bay--Continued</u>											
Cyanophyta											
<u>Anabaena</u>		0	0	0	0	244,500	0	0	0	0	0
<u>flos aquae</u>		0	0	0	3,000	0	0	0	0	0	0
<u>Anacystis</u>		3,400	0	2,338	0	0	13,940	0	0	0	0
<u>nudians</u>		2,125	0	1,375	0	0	8,875	0	0	0	0
<u>Anacystis</u> sp.		6,124	462	33,075	0	0	0	0	0	211,725	7,200
		4,711	289	18,375	0	0	0	0	0	117,625	4,500
<u>Aphanizomenon</u>		388,446	0	0	318,858	13,207,160	538,675	0	0	490,138	17,753,400
<u>flos aquae</u>		2,488	0	0	3,063	117,600	185,750	0	0	7,063	252,000
<u>Aphanocapsa</u>		6,750	0	1,125	788	5,063	0	0	0	0	0
<u>delicatissima</u>		3,750	0	625	438	2,813	0	0	0	0	0
<u>Aphanocapsa</u>		13,244	0	10,063	37,375	250	29,750	0	0	0	0
<u>glachista</u> var. <u>conferta</u>		10,188	0	10,063	37,375	250	29,750	0	0	0	0
<u>Chroococcus</u>		9,701	25	16,000	0	0	0	0	0	0	0
<u>dispersus</u>		688	6	2,500	0	0	0	0	0	0	0
<u>Chroococcus</u> sp.		0	0	80,065	0	0	0	0	0	0	0
		0	0	19,063	0	0	0	0	0	0	0
<u>Coelosphaerium</u>		0	0	0	0	0	0	0	0	0	0
<u>collinsii</u>		0	0	0	0	0	0	0	0	0	0
<u>Coelosphaerium</u>		0	0	0	55,125	0	0	0	0	0	0
<u>naegelianum</u>		0	0	0	1,125	0	0	0	0	0	0
<u>Dactylococcopsis</u>		750	0	6,542	0	0	0	964	0	0	1,150
<u>fascicularis</u>		63	0	313	0	0	0	63	0	0	125

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and

East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus Species	9-21-88	1-30-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
<u>Site 2, Devils Lake, Sixmile Bay--Continued</u>												
Cyanophyta-- Continued												
<u>Dactylococcopsis</u> sp.	0	0	0	0	0	0	7,350	0	0	0	0	0
<u>Gomphosphaeria</u> <u>aponina</u>	0	0	0	0	0	0	0	0	0	0	287,000	0
<u>Lyngbya</u> <u>birgei</u>	0	0	0	0	0	3,389	0	0	0	0	2,000	0
<u>Marsoniella</u> <u>elegans</u>	0	0	1,183	0	0	0	0	0	0	0	5,862	0
<u>Mersonopedia</u> <u>tenuissima</u>	0	0	438	0	0	0	0	0	0	0	16	0
<u>Microcystis</u> <u>aeruginosa</u>	606,039	24,047	6,592	897,788	8,455,313	169,991	0	2,554	3,298,000	4,207,375	0	0
<u>Nodularia</u> <u>spumigena</u>	6,248	63	80	7,938	102,613	2,063	0	31	34,000	43,375	0	0
<u>Oscillatoria</u> <u>hamelei</u>	0	0	0	0	0	3,156	0	0	0	0	6,155	0
<u>Phormidium</u> <u>mucicola</u>	0	0	0	0	0	13	0	0	0	0	16	0
<u>Rhabdoderma</u> <u>sigmoidea</u> <u>f. minor</u>	0	38	0	0	0	0	14,700	0	0	0	0	0
		24	0	0	0	0	1,000	0	0	0	0	0
						10,297	13,805	0	0	0	500	0
						1,688	1,438	0	0	0	125	0
							2,438	0	785	0	0	0
							625	0	500	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-21-88	1-30-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
Site 2, Devils Lake, Sixmile Bay--Continued												
Cyanophyta--												
Continued												
<u>Rhabdoglossa</u>	0	0	0	1,988	0	0	0	0	0	0	0	0
<u>elliptoidea</u>	0	0	125	0	0	0	0	0	0	0	0	0
<u>Synechococcus</u> sp.	21,438 6,125	0	0	0	0	0	0	0	0	0	0	0
Total	1,055,892 36,386	24,572 382	158,971 52,957	1,564,731 54,627	25,076,245 229,485	776,406 230,438	1,749 563	2,554 31	4,006,225 158,829	22,261,130 301,891	291,850 32,875	

Organism scientific name		Date										
Family	Genus species	9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
Site 3, Devils Lake, Creek Bay												
Bacillariophyta												
<u>Achnanthes</u>	0	0	0	0	0	0	0	0	0	0	0	60,480
<u>clevei</u>	0	0	0	0	0	0	0	0	0	0	0	63
<u>Chaetoceros</u>	0	0	0	0	0	0	104,461	0	0	617,668	0	0
<u>elmorei</u>	0	0	0	0	0	0	31	0	0	438	0	0
<u>Chaetoceros</u> sp.	251,367	0	0	0	0	123,152	0	0	0	0	0	0
	63	0	0	0	63	0	0	0	0	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and

East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus Species	9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90	Date
Site 3, Devils Lake, Creek Bay--Continued													
Bacillariophyta--													
Continued													
<u>Cyclotella</u> <u>kutziniana</u>	0	6,785	0	0	0	0	0	0	0	0	0	0	0
<u>Cyclotella</u> <u>meneghiniana</u>	22,563	0	0	1,748,672	6,652,961	0	0	0	0	0	0	0	0
<u>Cyclotella</u> <u>stelligera</u>	16	0	0	0	31	313	0	0	0	0	0	0	0
<u>Cyclotella</u> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>Diatoma</u> <u>tenue</u>	7,322	0	0	0	0	0	0	0	0	0	0	0	0
<u>Diatoma</u> <u>tenue</u>	31	0	0	0	0	0	0	0	0	0	0	0	0
<u>Diatoma</u> <u>tenue</u> var. <u>tenue</u>	0	0	0	1,455	0	0	0	0	0	0	0	0	0
<u>Entomoeris</u> <u>alata</u>	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>Entomoeris</u> <u>paludosa</u>	1,766,794	0	0	0	0	0	0	0	0	0	0	0	0
<u>Fragilaria</u> sp.	16	0	0	0	0	0	0	0	0	0	0	0	0
<u>Navicula</u> <u>acomoda</u>	0	0	0	89,244	0	0	0	0	0	0	0	0	0
<u>Navicula</u> <u>capitata</u>	0	0	0	0	52,721	0	0	0	0	0	0	0	0
					76	0	0	0	0	0	0	0	0
					8	0	0	0	0	0	0	0	0
					4,768	0	0	0	0	0	0	0	0
					625	0	0	0	0	0	0	0	0
					76,875	0	0	0	0	0	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Genus	Species	9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90	
				Date	Site 3, Devils Lake, Creek Bay--Continued										
Bacillariophyta--Continued															
<i>Navicula</i>		<i>cryptocaphala</i>	0	0	0	0	0	0	0	0	0	0	13,040	0	0
<i>Navicula</i>		<i>miniscula</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Navicula</i> sp.			0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Nitzchia</i>		<i>kuetzingiana</i>	60,857	0	6,860	5,313	10,346	0	0	0	0	0	0	0	0
<i>Nitzchia</i>		<i>linearis</i>	376	0	35	31	63	0	0	0	0	0	0	0	0
<i>Nitzchia</i>		<i>palea</i>	0	0	12,794	0	0	0	0	0	0	0	0	0	0
<i>Nitzchia</i>		<i>reversa</i>	0	0	5	0	0	0	0	0	0	0	0	0	0
<i>Nitzchia</i>		<i>tryblioneilla</i>	0	0	8,800	0	0	0	0	0	0	0	0	0	0
<i>Stephanodiscus</i>		<i>dubius</i>	0	0	5,713,206	0	0	0	0	0	0	118,336	0	0	
<i>Stephanodiscus</i>		<i>hantzschii</i>	0	0	24,188	0	0	0	0	0	0	688	0	0	
<i>Stephanodiscus</i>		<i>tenuis</i>	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus species	Date									
		9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90
<u>Site 3, Devils Lake, Creel Bay--Continued</u>											
Bacillariophyta--											
Continued											
<u>Stephanodiscus</u>	0	0	0	0	0	0	0	0	0	37,793,900	2,343,213
sp.	0	0	0	0	0	0	0	0	500	31	0
<u>Suriella ovalis</u>	0	0	214,200	0	0	0	0	0	0	0	0
	0	0	5	0	0	0	0	0	0	0	0
<u>Suriella ovata</u>	0	0	157,902	0	0	0	0	0	0	0	0
	0	0	16	0	0	0	0	0	0	0	0
<u>Synedra acus</u>	0	0	7,896	0	0	0	0	0	48,116	0	0
	0	0	5	0	0	0	0	0	13	0	0
<u>Synedra pulchella</u>	0	0	0	22,005	0	0	0	0	0	0	0
Total	2,108,903	6,785	6,275,544	1,852,865	6,790,397	614,694	0	168,905	38,424,608	2,343,213	107,014
	502	6	24,357	693	564	4,594	0	707	1,001	31	313
Chlorophyta											
<u>Ankistrodesmus falcatus</u> var.	0	0	562	0	0	0	0	0	0	0	0
<u>falcatus</u>	0	0	11	0	0	0	0	0	0	0	0
<u>Ankyra judayi</u>	1,407	0	0	17,063	0	0	0	0	0	0	0
	16	0	0	1,625	0	0	0	0	0	0	0
<u>Chlamydomonas</u> sp.	2,260	1,110	0	21,101	0	0	0	0	61,420	0	0
	63	12	0	313	0	0	0	0	188	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus Species	Date									
		9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90
Site 3, Devils Lake, Creel Bay--Continued											
<u>Chlorophytta--</u>											
<u>Chlorella</u>		0	392	0	0	0	0	0	0	0	
<u>vulgaris</u>		0	6	0	0	0	0	0	0	0	
<u>Chlorella</u> sp.		0	0	318,250	39,913	0	31,500	1,050	24,675	1,315	
				9,500	3,875	0	7,500	250	5,875	313	
<u>Chlorococcum</u> sp.		9,921	0	0	8,175	0	0	0	0	0	
		63	0	0	125	0	0	0	0	0	
<u>Chloegenium</u> sp.		44,850	5,835	0	0	0	0	0	0	0	
		125	29	0	0	0	0	0	0	0	
<u>Closteropsis</u>		295,741	0	0	0	0	0	0	0	0	
<u>longissima</u>		31	0	0	0	0	0	0	0	0	
<u>Coccomyxa</u> sp.		0	0	0	477,800	0	0	0	0	0	
					298,625	0	0	0	0	0	
<u>Crucigenia</u>		0	0	3,149	0	0	0	0	0	0	
<u>quadrata</u>		0	0	173	0	0	0	0	0	0	
<u>Dunaliella</u>		0	0	0	0	98,715	0	123,604	0	0	
<u>viridis</u>		0	0	0	0	250	0	313	0	0	
<u>Dunaliella</u> sp.		0	0	0	0	0	9,792	0	0	61,420	
							1,875	0	0	163,350	
<u>Gloecoccus</u> sp.		0	0	0	50,647	0	0	0	0	0	
					188	0	0	0	0	188	
<u>Gloeocystis</u>		62,428	0	0	0	0	0	0	0	0	
<u>major</u>		16	0	0	0	0	0	0	0	0	

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus</u> <u>Species</u>	Date									
		9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90
Site 3, Devils Lake, Creel Bay--Continued											
Chlorophyta--Continued											
<u>Kirchneriella</u> <u>contorta</u>	0	0	0	0	0	0	12,047	0	0	0	0
<u>Kirchneriella</u> <u>lunaris</u>	0	107	0	1,325	0	58,800	219,350	59,450	0	0	32,250
<u>Monoraphidium</u> <u>contortum</u>	0	6	0	250	0	6,000	26,750	7,250	0	0	10,750
<u>Mougeotia</u> sp.	316,060	0	0	0	0	0	0	0	7,000	0	0
<u>Nannochloris</u> sp.	0	0	0	0	0	0	0	0	500	0	0
<u>Nephrocytum</u> sp.	0	0	0	0	0	0	246,800	811,300	2,553,575	0	688
<u>Oocystis</u> parva	31,427 219	0	0	0	0	3,422 188	0	0	289,750	555,125	625
<u>Oocystis</u> pusilla	0	0	0	0	0	0	0	0	0	0	0
<u>Oocystis</u> submarina	0	0	0	0	0	0	13,500 375	0	0	0	0
<u>Oocystis</u> sp.	0	0	0	0	0	0	0	70,688	0	0	0
<u>Pediastrum</u> <u>duplex</u>	0	0	0	5	59,250 125	7,750 500	75,400 0	0	0	0	0
				50	0	0	0	0	0	0	0
				2	0	0	0	0	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and
East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus</u> <u>Species</u>	Date									
		9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90
<u>Site 3, Devils Lake, Creek Bay--Continued</u>											
Chlorophyta--Continued											
<u>Scenedesmus</u>	0	0	0	0	0	0	4,729	0	0	0	0
<u>granulatus</u>	0	0	0	0	0	0	563	0	0	0	0
<u>Schroederia</u>	102,376	0	0	0	0	0	31,659	0	0	0	0
<u>setigera</u>	63	0	0	0	0	0	188	0	0	0	0
Total	866,470	7,444	381,261	627,196	75,400	568,438	1,041,492	2,768,304	62,735	62,108	239,625
	612	53	9,691	305,314	500	119,439	318,625	569,063	501	813	36,375
Cryptophyta											
<u>Chroomonas</u> sp.	96,808	0	0	17,575	8,757	42,048	6,048	504,000	6,048	0	0
	720	0	0	125	63	438	63	5,250	63	0	0
<u>Cryptomonas</u>	147,886	0	0	0	0	0	0	0	0	0	0
<u>marsotii</u>	31	0	0	0	0	0	0	0	0	0	0
Total	244,694	0	0	17,575	8,757	42,048	6,048	504,000	6,048	0	0
	751	0	0	125	63	438	63	5,250	63	0	0
Cyanophyta											
<u>Anabaena</u>	0	0	0	1,712	2,527	0	0	0	0	0	0
<u>flos aquae</u>	0	0	0	21	31	0	0	0	0	0	0
<u>Anacyclis</u>	0	0	0	0	0	1,750	0	0	0	0	0
<u>nudulans</u>	0	0	0	0	0	1,750	0	0	0	0	0
<u>Anacyclis</u> sp.	0	890	0	2,800	0	4,712	0	5,850	62,600	10,000	8,000
	0	556	0	1,750	0	4,000	0	3,250	39,125	6,250	5,000

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Site 3, Devils Lake, Creek Bay--Continued										Date
Genus species		9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
<i>Cyanophyta--Continued</i>												
<i>Aphanizomenon</i>		187,312	0	0	1,784,366	713,175	127,655	0	0	19,945,947	4,206,563	603,556
<i>flos aquae</i>		1,600	0	0	17,058	6,425	1,210	0	0	277,875	60,375	6,938
<i>Aphanocapsa</i>		0	0	2,110	0	0	11,700	2,588	3,000	7,750	9,000	7,600
<i>delicatissima</i>		0	0	1,172	0	0	6,500	1,438	3,000	7,750	5,000	4,750
<i>Aphanocapsa</i>		0	240	0	0	0	0	7,350	0	0	0	0
<i>elachista</i>		0	17	0	0	0	0	1,750	0	0	0	1,000
<i>Aphanocapsa</i>		23,663	0	0	2,316	27,313	0	0	0	0	0	0
<i>elachista</i> var.		13,146	0	0	2,316	27,313	0	0	0	0	0	0
<i>conferta</i>												
<i>Chroococcus</i>		0	124	0	0	0	0	0	0	0	0	0
<i>dispersus</i>		0	12	0	0	0	0	0	0	0	0	0
<i>Chroococcus</i> sp.		0	0	176,666	0	20,600	0	0	0	0	0	0
		0	0	2,144	0	1,000	0	0	0	0	0	0
<i>Coelosphaerium</i>		0	0	0	21,462	0	0	0	0	0	0	0
<i>naegelianum</i>		0	0	0	438	0	0	0	0	0	0	0
<i>Coelosphaerium</i>		0	0	0	0	0	0	0	0	121,025	0	0
<i>kuetzingianum</i>		0	0	0	0	0	0	0	0	5,875	0	0
<i>Dactylococcopsis</i>		0	0	19	0	0	0	0	964	0	0	0
<i>fascicularis</i>		0	0	3	0	0	0	0	63	0	0	0
<i>Dactylococcopsis</i>		0	0	0	0	0	0	0	0	0	0	0
<i>raphidioides</i>		0	0	0	0	0	0	0	0	0	0	1,145
<i>Dactylococcopsis</i>		0	0	0	0	0	0	0	17,759	0	0	125
sp.		0	0	0	0	0	0	0	2,250	0	0	0

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus species	Date										Site 3, Devil's Lake, Creek Bay--Continued
		9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90	
Cyanophyta--Continued												
<u>Gomphosphaeria</u> <u>aponina</u>	15,155 313	0	0	0	0	0	0	0	0	0	0	0
<u>Lyngeya</u> <u>birgei</u>	0	0	0	1,435,350 1,750	332,962 406	0	0	0	0	68,883 188	0	0
<u>Marssonella</u> <u>elegans</u>	0	0	0	0	0	0	0	0	0	0	0	3,150 1,750
<u>Mesomopedia</u> <u>tenuissima</u>	0	0	0	0	0	0	0	0	0	0	0	0
<u>Microcystis</u> <u>aeruginosa</u>	674,528 5,964	695,839 1,823	6,592	1,199,991	5,637,231	31,329	0	3,461	1,455,000	13,361,750	72,750	750
<u>Nodularia</u> <u>spumigena</u>	0	0	0	0	0	1,335,183	0	0	42	15,000	137,750	750
<u>Oscillatoria</u> <u>limnetica</u>	0	0	0	0	0	0	0	0	0	288,525	0	0
<u>Oscillatoria</u> <u>tenuis</u> var. <u>tergestina</u>	2,153 94	0	0	0	0	0	0	0	0	0	0	0
<u>Oscillatoria</u> sp.	0	527 23	0	0	0	0	0	0	0	0	0	0
<u>Phormidium</u> <u>mucicola</u>	0	0	0	19,063 3,125	10,205 1,063	0	0	0	0	2,000 500	6,000 1,500	0
<u>Pseudabaena</u> sp.	4,511 125	0	0	0	0	0	0	0	0	0	0	0

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date										
Family <u>Genus</u> <u>Species</u>	9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
<u>Site 3, Devils Lake, Creel Bay--Continued</u>											
Cyanophyta--Continued											
<u>Rhabdodenia</u> <u>irregularis</u>	0	0	0	0	0	1,575	0	0	0	0	0
	0	0	0	0	0	250	0	0	0	0	0
<u>Synechococcus</u> sp.	95	0	0	0	0	0	0	0	0	0	0
	63	0	0	0	0	0	0	0	0	0	0
Total	907,417 21,305	697,620 2,431	185,387 3,399	4,467,060 41,021	8,080,771 109,527	214,379 32,768	3,552 1,501	133,336 12,167	21,830,705 341,188	17,593,313 210,875	698,001 20,313
<u>Site 4, Devils Lake, Main Bay</u>											
Bacillariophyta											
<u>Chaetoceros</u> <u>elmorei</u>	0	0	0	0	0	1,263,621	0	0	0	0	0
	0	0	0	0	0	375	0	0	0	0	0
<u>Chaetoceros</u> sp.	79,763 31	0	0	0	0	31,277 16	0	0	0	0	0
<u>Cyclotella</u> <u>meneghiniana</u>	0	0	276,181 6	0	0	0	0	0	34,502 26	0	0

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus species	9-20-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90	Date
Bacillariophyta--Continued													
<i>Cyclotella</i> <u>stelligera</u>	0	0	28,862	0	3,186	607,881	62,250	172,515	0	0	0	10,843	
<i>Entomogeton</i> <u>Paludosus</u>	0	0	125	0	8	5,375	375	572	0	0	0	125	
<i>Fragilaria</i> sp.	0	0	178,488	0	0	0	0	0	0	0	0	0	
<i>Fragilaria</i> sp.	0	0	6	0	0	0	0	0	0	0	0	0	
<i>Navicula</i> <u>accomoda</u>	0	0	612,360	0	0	0	0	0	0	0	0	0	
<i>Navicula</i> <u>capitata</u>	0	0	5,683	0	0	0	0	0	0	0	0	0	
<i>Navicula</i> <u>minissula</u>	0	8,141	0	0	0	0	0	0	0	0	0	0	
<i>Navicula</i> <u>subminiscula</u>	0	15	0	0	0	0	0	0	0	0	0	0	
<i>Navicula</i> <u>vaucheriae</u>	0	0	2,121	0	0	22,780	0	0	0	0	0	0	
<i>Navicula</i> <u>ventosa</u>	0	0	6	0	0	250	0	0	0	0	0	0	
<i>Nitzchia</i> <u>acicularis</u>	0	0	4,320	8,335	0	0	0	0	0	0	0	0	
<i>Nitzchia</i> <u>dissipata</u>	0	0	16	63	0	0	0	0	0	0	0	0	

Site 4, Devils Lake, Main Bay--Continued

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and
East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-20-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
Site 4, Devil's Lake, Main Bay--Continued												
Bacillariophyta--Continued												
<u>Nitzchia frustulum</u>	0	0	3,643	0	0	0	0	0	0	4,027	0	0
<u>Nitzchia gander-</u>	0	0	900,591	0	0	0	0	0	0	0	0	0
<u>sheiniensis</u>	0	0	63	0	0	0	0	0	0	0	0	0
<u>Nitzchia halophila</u>	0	0	0	0	0	0	0	0	0	65,208	0	0
<u>Nitzchia hungarica</u>	22,775	0	0	0	0	0	0	0	0	78	0	0
<u>Nitzchia kuetzingiana</u>	125	0	0	0	0	0	0	0	0	0	0	0
<u>Nitzchia trybillella</u>	0	0	0	0	0	13,507	10,209	0	0	0	0	0
<u>Stephanodiscus alpinus</u>	0	0	0	0	0	0	30,208	0	0	0	0	0
<u>Stephanodiscus dubius</u>	0	0	1,305,269	0	0	456,538	0	0	0	0	0	0
<u>Stephanodiscus sp.</u>	0	0	15,055	0	0	16	0	0	0	52,471	0	0
<u>Surirella ovata</u>	0	0	1,328,040	0	0	0	0	0	0	44,705,493	0	0
	0	0	31	0	0	0	375	0	0	0	438	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Genus species	9-20-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90	Date
Site 4, Devils Lake, Main Bay--Continued														
Chlorophyta--Continued														
<u>Scenedesmus</u>		0	0	0	0	0	0	0	2,100	0	0	0	0	0
<u>granulatus</u>		0	0	0	0	0	0	0	250	0	0	0	0	0
<u>Schroederia</u>		0	0	0	0	0	0	0	16,650	0	6,426	0	0	0
<u>setigera</u>		0	0	0	0	0	0	0	250	0	63	0	0	0
<u>Sphaerocystis</u>		0	0	0	0	34,000	0	0	0	0	0	0	0	0
<u>schreiteri</u>		0	0	0	0	625	0	0	0	0	0	0	0	0
Total		176,623 674	1,408 7	228,910 24,814	1,394,859 101,626	182,462 126	757,513 121,845	1,534,116 496,792	4,268,680 788,939	62,619 329	102,326 376	123,444 28,313		
Chrysophyta														
<u>Chromulina</u> sp.		0	193	0	0	0	0	0	0	0	0	0	0	0
<u>Ochromonas</u> sp.		0	18	0	0	0	0	0	0	0	0	0	0	0
Total		0	193 18	0	0	0	0	0	3,865 250	0	0	0	0	0
Cryptophyta														
<u>Chroomonas</u> sp.		0	0	0	0	26,132 188	11,537 83	36,000 375	12,000 125	540,000 5,625	6,048 63	0	0	0
<u>Cryptomonas</u> <u>ovata</u>		184,159 31	0	0	0	0	0	0	0	0	0	0	0	0

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and
East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-20-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
Site 4, Devil's Lake, Main Bay--Continued												
Cryptophyta--Continued												
	<i>Cryptomonas</i> sp.	51,910	0	0	0	0	0	0	0	0	0	
Total		236,069	0	0	26,132	11,537	36,000	12,000	540,000	6,048	0	
		375	0	0	188	83	375	125	5,625	63	0	
Cyanophyta												
	<i>Anacystis</i> sp.	6,461	91	0	6,676	0	19,144	0	1,625	63,400	0	
		4,038	57	0	5,563	0	16,250	0	1,625	39,625	0	
	<i>Aphanizomenon</i> <i>flos aquae</i>	3,512,345	0	0	273,263	272,560	59,372	0	0	32,983,828	672,007	
		16,316	0	0	2,625	2,456	563	0	0	236,025	9,563	
	<i>Aphanocapsa</i> <i>delicatissima</i>	2,198	0	27,338	9,000	0	11,700	1,800	5,250	0	1,600	
		1,221	0	15,188	5,000	0	6,500	1,000	5,250	0	1,000	
	<i>Aphanocapsa</i> <i>elachista</i>	0	0	0	0	0	14,700	0	0	0	0	
		0	0	0	0	0	3,500	0	0	0	0	
	<i>Aphanocapsa</i> <i>elachista</i> var. <i>conferta</i>	36,394	0	0	3,125	32,500	103,625	0	0	0	0	
		20,219	0	0	3,125	32,500	103,625	0	0	0	0	
	<i>Chroococcus</i> <i>dispersus</i>	639	113	265	0	0	0	0	0	0	0	
		31	11	63	0	0	0	0	0	0	0	
	<i>Chroococcus</i> sp.	0	22	0	0	10,300	1,288	0	0	0	0	
		0	1	0	0	500	125	0	0	0	0	

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and
East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus species	Date									
		9-20-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90
Site 4, Devils Lake, Main Bay--Continued											
Cyanophyta--											
Continued											
<i>Coleosphaerium kuetzingianum</i>	0	0	0	0	0	0	0	0	0	46,350	0
<i>Dactylococcopsis acicularis</i>	353 31	0	0	0	0	0	0	0	0	4,500	0
<i>Dactylococcopsis fascicularis</i>	0	0	769	888	0	0	2,209	0	0	0	0
<i>Dactylococcopsis raphidioides</i>	0	0	63	125	0	0	125	0	0	0	0
<i>Dactylococcopsis sp.</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Lyngbya birgei</i>	0	0	0	1,025,250	1,859,123	0	0	0	0	0	0
<i>Marssonella</i> sp.	0	0	2,025 750	0	0	0	0	0	0	0	0
<i>Mersomopedia tenuissima</i>	0	630	1,817	0	0	0	0	0	0	0	0
<i>Microcystis aeruginosa</i>	2,218,860 14,088	148,863 390	29,205 355	226,600 2,750	3,775,568 45,820	191,139 1,690	0	1,030,000 12,500	1,104,286 20,113	1,588,375 16,375	6,111 63
<i>Oscillatoria limnetica</i>	0	3,120	0	0	0	0	124 31	0	0	0	0
<i>Oscillatoria</i> sp.	7,717 689	7,050 660	0	0	0	0	1,558 125	0	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Genus	Species	9-20-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90	Date
Cyanophyta--Continued															
<i>Phormidium</i>		0		0	0	0	0	0	10,013	0	0	0	0	0	0
<i>mucicola</i>		0		0	0	0	0	0	1,043	0	0	0	0	0	0
<i>Pseudabena</i> sp.		1,575		0	0	0	0	0	0	0	0	0	0	0	0
		250		0	0	0	0	0	0	0	0	0	0	0	0
<i>Rhabdoderma</i>		288		0	0	0	0	0	0	0	0	0	0	0	0
<i>irregulare</i>		31		0	0	0	0	0	0	0	0	0	0	0	0
<i>Rhabdoderma</i>		0		2	0	0	0	0	0	0	0	0	0	0	0
<i>signoides</i>		0		1	0	0	0	0	0	0	0	0	0	0	0
<i>f. minor</i>															
<i>Synechococcus</i>		485		0	0	0	0	0	0	0	0	0	0	0	0
		63		0	0	0	0	0	0	0	0	0	0	0	0
Total		5,787,315		159,891	61,419	1,544,802	5,960,064	404,625	4,009	1,039,178	34,197,864	2,261,982	369,004		
		56,977		2,530	18,732	20,438	84,586	132,534	1,125	19,563	300,263	26,938	25,752		

Site 4, Devil's Lake, Main Bay--Continued

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus species	Date									
		9-21-88	2-22-89	5-8-89	6-21-89	8-15-89	10-26-89	2-6-90	5-8-90	8-7-90	9-11-90
Site 5, Devils Lake, Mission Bay											
Bacillariophyta											
<u>Caloneis</u>	0	0	0	488,632	0	0	0	0	0	0	0
<u>amphibiaena</u>	0	0	0	16	0	0	0	0	0	0	0
<u>Chaetoceros</u> sp.	0	0	0	0	0	910,820	0	0	0	0	0
<u>Cyclotella</u> <u>menghiniana</u>	832,749	0	0	0	0	544,000	349,250	94,258	0	169,650	0
<u>Cyclotella</u> <u>stelligera</u>	16	0	0	0	0	125	125	438	0	250	0
<u>Diatoma</u> <u>tenue</u>	0	0	89,754	0	0	2,796,188	0	0	0	0	28,863
<u>Diatoma</u> <u>tenue</u>	0	0	313	0	0	16,875	0	0	0	0	125
<u>Diatoma</u> <u>tenue</u> var. <u>tenue</u>	0	0	57,772	0	0	0	0	0	0	0	0
<u>Entomogeton</u> <u>paludosum</u>	0	0	0	219	0	0	0	0	0	0	0
<u>Navicula</u> <u>miniscula</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Navicula</u> <u>minnewauko-</u> <u>nensis</u>	0	0	0	0	0	0	20,000	0	0	0	0
<u>Navicula</u> <u>subminiscula</u>	0	0	0	0	0	0	125	0	0	2,816	0
<u>Navicula</u> <u>vaucheriae</u>	0	0	0	0	0	0	0	0	0	16	0
						0	0	0	7,285	0	0
						0	0	0	125	0	0
						0	0	0	0	0	0
						0	0	0	0	0	0
						0	0	0	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-21-88	2-22-89	5-8-89	6-21-89	8-15-89	10-26-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
Site 5, Devils Lake, Mission Bay--Continued												
Bacillariophyta--Continued												
<u>Nitzchia</u>	<u>acicula</u>	0	0	0	0	0	0	0	0	368,000	0	0
<u>Nitzchia</u>	<u>frustulum</u>	0	0	0	0	0	0	0	0	250	0	0
<u>Nitzchia</u>	<u>kuetzingiana</u>	5,648	0	2,914	0	0	0	0	0	0	0	0
<u>Stephanodiscus</u>	<u>dubius</u>	31	0	31	0	0	0	0	0	0	0	0
<u>Stephanodiscus</u>	<u>tenulis</u>	0	0	0	0	48,493	0	0	0	53,469	0	0
<u>Stephanodiscus</u>	<u>sp.</u>	0	0	0	0	595	0	0	0	1,063	0	0
<u>Surirella</u>	<u>ovalis</u>	0	0	267,786	0	0	0	0	0	874,918	0	0
<u>Surirella</u>	<u>ovata</u>	0	0	685,440	0	0	0	0	0	2,063	0	0
<u>Synedra</u>	<u>acus</u>	0	0	0	0	0	0	0	0	109,113	0	0
<u>Synedra</u>	<u>rumpens</u>	0	0	0	47,266	0	0	0	0	63	0	0
Total		838,397	0	1,579,634	633,846	1,454,820	3,185,013	94,258	2,097,685	12,930,883	0	28,863
		47	0	626	799	250	17,250	438	4,752	391	0	125

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date												
Family	Genus	species	9-21-88	2-22-89	5-8-89	6-21-89	8-15-89	10-26-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
Site 5, Devils Lake, Mission Bay--Continued													
Chlorophyta													
<u>Ankistrodesmus</u>			0	0	0	0	0	0	0	0	1,786	0	0
<u>falcatus</u> var.			0	0	0	0	0	0	0	0	188	0	0
<u>falcatus</u>													
<u>Ankyra</u>	<u>Iudayi</u>		0	0	0	662	0	0	0	0	0	0	0
			0	0	0	63	0	0	0	0	0	0	0
<u>Chlamydomonas</u>			0	134	0	0	0	0	0	0	0	41,455	0
			0	3	0	0	0	0	0	0	0	188	0
<u>Chlorella</u> sp.			0	0	10,751	7,875	0	571,650	25,200	38,325	0	0	8,925
			0	0	376	1,875	0	55,500	6,000	9,125	0	0	2,125
<u>Chlorococcus</u> sp.			0	0	3,506	0	0	8,175	0	0	0	0	0
<u>Chlorogonium</u> sp.			5,270	0	0	0	0	0	0	0	0	0	0
			31	0	0	0	0	0	0	0	0	0	0
<u>Coccomonas</u> sp.			0	0	9,923	0	0	0	0	0	0	0	0
			0	0	63	0	0	0	0	0	0	0	0
<u>Cocconyxa</u> sp.			0	0	0	37,701	0	0	0	0	0	0	0
			0	0	0	23,563	0	0	0	0	0	0	0
<u>Green coccoid</u>			0	0	10,078	0	0	0	0	0	0	0	0
			0	0	282	0	0	0	0	0	0	0	0
<u>Coenochloris</u>			0	0	0	0	0	0	0	154,500	0	0	0
<u>pyrenoidosa</u>			0	0	0	0	0	0	0	1,875	0	0	0
<u>Dictyosphaerium</u>			0	0	0	0	0	0	0	1,048	0	0	0
<u>pulchellum</u>			0	0	0	0	0	0	0	16	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Genus species	9-21-88	2-22-89	5-8-89	6-21-89	8-15-89	10-26-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
Chlorophyta--Continued													
<i>Dunaliella</i>													
<i>Dunaliella</i> sp.		0	0	0	0	0	0	0	0	0	518,453	0	0
<i>Viridis</i>		0	0	0	0	0	0	0	0	1,313	0	0	0
<i>Gloecoccus</i> sp.		0	0	0	0	0	0	0	1,300	3,588	0	122,513	20,419
<i>Elakatothrix gelatinosa</i>		0	0	0	0	0	0	5,727	0	0	0	0	0
<i>Keratococcus</i> sp.		0	0	0	0	0	0	0	0	0	5,194	0	0
<i>Kirchneriella contorta</i>		0	0	0	0	0	0	1,336	0	0	0	0	0
<i>Kirchneriella lunaris</i>		0	0	0	0	0	0	1,175	4,200	0	0	2,100	0
<i>Monoraphidium minutum</i>		0	0	0	0	0	0	8,200	80,500	2,567	0	1,050	12,750
<i>Nannochloris</i> sp.		0	0	0	0	0	0	1,000	5,750	313	0	125	4,250
<i>Nephrocytium limnetica</i>		0	0	0	0	0	0	23,400	385,700	1,218,000	0	138	70,525
<i>Oocystis</i> sp.		0	0	0	0	0	0	14,138	0	0	0	0	0
		51,002	0	0	0	0	0	375	0	0	0	0	0
		501	0	0	0	0	0	36,300	0	4,883	0	0	0

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and
East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name							Date						
Family	Genus	species	9-21-88	2-22-89	5-8-89	6-21-89	8-15-89	10-26-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
<u>Site 5, Devils Lake, Mission Bay--Continued</u>													
Chlorophyta--Continued													
<u>Pediastrum</u>	5,273	0	0	0	0	0	0	0	0	0	0	0	0
<u>duplex</u>	94	0	0	0	0	0	0	0	0	0	0	0	0
<u>Schroederia</u>	2,592	0	0	0	0	0	0	3,536	0	0	0	0	0
<u>setigera</u>	16	0	0	0	0	0	0	21	0	0	0	0	0
<u>Sphaerocystis</u>	0	0	0	0	0	84,825	0	0	0	0	0	0	0
<u>schroeteri</u>	0	0	0	0	0	750	0	0	0	0	0	0	0
Total	13,135	134	34,258	97,240	84,825	829,185	496,900	1,792,796	41,455	125,801	112,619		
	141	3	752	26,002	750	73,141	150,250	391,815	188	875	875	60,688	
Chrysophyta													
<u>Ochromonas</u> sp.	0	0	0	0	0	0	0	27,000	0	0	0	0	0
Total	0	0	0	0	0	0	0	27,000	0	0	0	0	0
Cryptophyta													
<u>Chroomonas</u> sp.	0	0	0	0	1,815,757	34,750	432,000	18,048	162,048	0	0	0	0
<u>Cryptomonas</u>	0	0	0	0	0	250	4,500	188	1,688	0	0	0	0
<u>ovata</u>	0	0	0	0	0	0	107,631	0	0	0	0	0	0
						21	0	0	0	0	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and
East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-21-88	2-22-89	5-8-89	6-21-89	8-15-89	10-26-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
Site 5, Devil's Lake, Mission Bay--Continued												
Cryptophyta--Continued												
	<i>Cryptomonas</i> sp.	0	0	0	0	0	0	0	0	245,979	0	0
Total		0	0	0	1,815,757	34,750	539,631	18,048	408,027	0	0	0
		0	0	0	13,063	250	4,521	188	1,813	0	0	0
Cyanophyta												
99	<i>Anabaena</i> <u>flos aquae</u>	0	0	0	95,485	0	0	0	0	0	0	0
	<i>Anacystis</i> sp.	0	181	0	0	0	0	0	0	0	0	0
	<i>Aphanizomenon</i> <u>flos aquae</u>	11,192,167	0	247	1,403,623	19,332,000	2,733,525	0	0	9,247,838	36,990,225	2,928,407
	<i>Aphanocapsa</i> <u>delicatissima</u>	58,123	0	3	13,490	174,000	29,375	0	0	128,250	525,375	36,188
	<i>Aphanocapsa</i> <u>elachista</u> var. <u>conferta</u>	0	0	2,648	4,275	11,250	10,350	11,025	0	0	0	8,613
	<i>Chroococcus</i> <u>dispersus</u>	0	1,471	2,375	6,250	5,750	6,125	0	0	0	0	6,625
	<i>Chroococcus</i> sp.	0	0	0	2,379	50,500	50,000	0	20,150	0	0	0
	<i>Coeosphaerium</i> <u>kuetzingianum</u>	0	0	0	2,379	50,500	50,000	0	7,750	0	0	0
		0	101	0	0	0	0	0	0	0	0	0
		0	3	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and
East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus</u> <u>species</u>	Date									
		9-21-88	2-22-89	5-8-89	6-21-89	8-15-89	10-26-89	2-6-90	5-8-90	8-7-90	9-11-90
Site 5, Devil's Lake, Mission Bay--Continued											
Cyanophyta--											
Continued											
<u>Dactylococcus</u> <u>fascicularis</u>	0	0	0	0	0	0	3,825	0	0	0	0
<u>Dactylococcus</u> <u>raphidioides</u>	0	0	0	0	0	0	250	0	0	0	0
<u>Dactylococcus</u> sp.	0	0	0	0	0	0	0	0	0	0	0
<u>Lyngbya</u> <u>birgei</u>	0	0	0	0	0	5,228,775	0	0	0	0	0
<u>Mesomopedia</u> <u>tenuissima</u>	0	0	0	0	0	0	6,375	0	0	0	0
<u>Microcystis</u> <u>aeruginosa</u>	431,550	570,260	3,576	77,291	1,236,000	1,318	0	185,502	2,910,000	6,921,726	0
<u>Microcystis</u> sp.	2,740	1,494	43	938	15,000	16	0	2,250	30,000	71,358	0
<u>Oscillatoria</u> <u>tenuis</u>	0	0	0	0	0	0	92,250	0	0	0	0
<u>Oscillatoria</u> <u>tenuis</u> var. <u>tergestina</u>	98,905	0	0	0	0	0	52,200	0	0	0	0
<u>Oscillatoria</u> sp.	4,319	0	0	0	0	0	0	0	0	0	0
<u>Phormidium</u> <u>mucicola</u>	0	0	0	0	0	8,022	33,600	0	0	1,252	1,500
	0	0	0	0	0	1,315	3,500	0	0	313	375

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date												
Family	Genus	Species	9-21-88	2-22-89	5-8-89	6-21-89	8-15-89	10-26-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
Site 5, Devils Lake, Mission Bay--Continued													
Cyanophyta--													
Continued													
Rhabdoderma	0	714	0	0	5,850	0	0	0	0	0	0	0	0
<u>sigmoidea</u>	0	446	0	0	1,500	0	0	0	0	0	0	0	0
f. minor													
Total	11,722	622	571,256	6,471	1,591,075	30,466,313	3,051,483	11,025	210,477	12,500,128	43,924,551	2,937,020	
	65,182	2,056	1,517	21,060	269,250	193,390	6,125	15,688	371,063	603,858	42,813		
Euglenophyta													
<u>Euglena</u> sp.	0	0	23,019	0	0	0	0	0	0	0	0	0	0
	0	0	31	0	0	0	0	0	0	0	0	0	0
Total	0	0	23,019	0	0	0	0	0	0	0	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and
East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date										
	Family Genus species	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90
<u>Site 6, Devils Lake, East Bay West</u>											
Bacillariophyta											
<u>Chaetoceros</u> sp.	0	0	0	0	0	459,056	0	0	0	0	0
<u>Cyclotella</u> <u>menechtinane</u>	0	0	0	0	0	0	26,612	753,803	0	0	0
<u>Cyclotella</u> <u>stelligera</u>	0	0	85,084	0	0	51,864	0	0	0	0	0
<u>Diatoma</u> <u>tenuis</u>	0	0	73,480	0	0	0	0	0	0	0	0
<u>Diatoma</u> <u>tenuis</u> var. <u>tenue</u>	0	0	188	0	0	0	0	0	0	0	0
<u>Entomogeton</u> <u>paludosum</u>	0	0	0	0	0	0	0	0	1,226,100	0	0
<u>Navicula</u> <u>agnawai</u>	0	0	0	0	0	0	0	0	70,752	0	0
<u>Navicula</u> <u>pelluclosa</u>	0	0	0	0	0	0	0	0	47,250	0	0
<u>Nitzchia</u> <u>acicularis</u>	0	0	18,463	0	0	0	0	0	1,118,541	0	0
<u>Nitzchia</u> <u>hungarica</u>	0	0	0	125	0	0	0	0	4,813	0	0
<u>Nitzchia</u> <u>palea</u>	0	0	0	0	0	0	0	0	58,610	0	0
						0	0	50	0	0	0
						0	0	0	0	0	27,924
						0	0	0	0	0	63

Table 4.—Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990—Continued

Organism scientific name	Date										
Family <u>Genus</u> <u>Species</u>	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90
<u>Site 6, Devils Lake, East Bay West--Continued</u>											
Bacillariophyta--Continued											
<u>Stephanodiscus</u> <u>dubius</u>	0	0	580,841	183,375	0	0	0	120,125	0	0	0
<u>Stephanodiscus</u> <u>tenuis</u>	0	0	1,688	2,250	0	0	0	1,250	0	0	0
<u>Stephanodiscus</u> sp.	0	0	0	0	0	0	0	1,060,250	0	0	0
<u>Suriella ovalis</u>	0	0	0	0	0	0	0	0	2,500	0	0
Total	0	0	757,868	183,375	459,056	51,864	26,612	5,011,306	42,555,763	4,789,937	0
	0	0	2,689	2,250	63	313	102	11,873	563	126	0
Chlorophyta											
<u>Ankistrodesmus</u> <u>falcatus</u> var. <u>falcatus</u>	0	0	0	0	0	0	0	800	0	0	0
<u>Ankyra judayi</u>	0	0	0	0	15,350	0	0	0	0	0	0
<u>Chlamydomonas</u> sp.	0	373	0	4,900	6,388	0	0	0	126,702	0	0
<u>Chlorella</u> sp.	0	0	8,925	64,375	0	69,525	25	12,600	0	0	2,100
	0	0	2,125	6,250	0	6,750	6	3,000	0	0	500

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and
East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus</u> <u>species</u>	Date								<u>Site 6, Devil's Lake, East Bay West--Continued</u>	
		9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90
<u>Chlorophyta</u> -- Continued											
<u>Chlorococcum</u> sp.	0	0	0	0	10,300 125	0	0	0	0	0	0
<u>Coccomyxa</u> sp.	0	0	5,250 1,250	200,400 125,250	0	0	0	0	0	0	0
<u>Green coccoid</u>	0	0	2,126,835 313	0	0	0	0	0	0	0	0
<u>Gloeoctoccus</u> sp.	0	0	0	0	0	0	0	0	32,987 63	0	0
<u>Gloecystis</u> <u>gigas</u>	0	0	0	0	0	0	0	0	0	561,864 438	0
<u>Kontropsphaera</u>	0	0	0	0	0	0	0	18,193 6	0	0	0
<u>Keratococcus</u> sp.	0	0	0	0	0	4,007 63	0	0	0	0	0
<u>Kirchneriella</u> <u>contorta</u>	0	0	0	0	0	0	0	0	0	1,050 125	0
<u>Kirchneriella</u> <u>lunaris</u>	14	1,542 1	1,750 188	0	0	0	0	0	397 63	1,050 125	6,000 2,000
<u>Nannochloris</u> sp.	0	0	0	0	0	1,350 750	487 174	208,000 65,000	2,957 2,688	3,163 2,875	48,100 37,000
<u>Oocystis</u> <u>parva</u>	0	0	0	0	0	0	0	0	188,012 1,625	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and
East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Genus species	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90	
			Site 6, Devils Lake, East Bay West--Continued											
Chlorophyta--Continued														
<i>Oocystis</i>		0	0	227,750	0	0	0	0	0	0	0	0	0	
<i>Pyrrhularia</i>		0	0	250	0	0	0	0	0	0	0	0	0	
<i>Pyramimonas</i> sp.		0	9,472	0	0	0	0	0	0	0	0	0	0	
<i>Schroederia</i>		0	0	0	0	0	0	0	0	0	0	0	0	
<i>setigera</i>		0	0	0	0	0	0	0	0	0	0	0	0	
Total		0	9,859	2,370,302	297,075	6,388	74,882	19,139	255,412	325,668	567,127	56,200		
		0	13	4,126	132,875	63	7,563	217	68,251	5,001	3,563	39,500		
Cryptophyta														
<i>Chroomonas</i> sp.		0	0	0	1,355,250	0	84,000	3,840	801,792	6,048	0	0	0	
		0	0	0	9,750	0	875	40	8,352	63	0	0	0	
Total		0	0	0	1,355,250	0	84,000	3,840	801,792	6,048	0	0	0	
		0	0	0	9,750	0	875	40	8,352	63	0	0	0	
Cyanophyta														
<i>Anacystis</i> sp.		273,011 3,813	43 5	10,875 10,875	0	813 625	0	0	0	48,800 30,500	0	0	0	
<i>Aphanizomenon</i>		16,917,933	0	222	819,788	94,680,225	3,868,152	0	0	6,837,669 96,501	7,024,820 100,626	7,455,575	98,000	
<i>flos aquae</i>		76,313	0	2	7,875	852,975	41,688	0	0					
<i>Aphanocapsa</i>		0	0	5,625	9,000	0	450	0	0	0	0	4,000		
<i>delicatissima</i>		0	0	3,125	5,000	0	250	0	0	0	0	2,500		

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Date										
		Genus <u>species</u>	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90
<u>Site 6, Devils Lake, East Bay West--Continued</u>												
<i>Cyanophyta--</i> <i>Continued</i>												
<i>Aphanocapsa</i> <i>elachista</i> var. <i>conferta</i>		0	0	0	0	0	6,250	0	0	0	0	0
<i>Chroococcus</i> <i>dispersus</i>		0	206	9,975	0	0	0	0	0	0	0	0
<i>Dactylococcopsis</i> <i>fascicularis</i>		0	49	2,375	0	878	0	0	0	0	0	0
<i>Lynbya</i> <i>birgei</i>		0	0	0	0	0	11,726,000	0	0	0	0	0
<i>Lynbya</i> <i>limnetica</i>		0	0	0	0	0	0	0	0	5,500	0	0
<i>Marsoniella</i> <i>elegans</i>		0	0	22,613	0	0	0	0	0	1,375	0	0
<i>Microcystis</i> <i>aeruginosa</i>		0	93,898	5,150	669,500	3,296,000	8,175	0	0	939,688	200,111	72,750
<i>Microcystis</i> sp.		0	0	246	250	8,125	40,000	125	0	0	9,688	2,063
<i>Oscillatoria</i> <i>tenuis</i>		0	0	0	0	0	0	0	9,900	0	0	0
<i>Oscillatoria</i> <i>tenuis</i> var. <i>tergestina</i>		6,375	0	0	0	0	0	1,375	0	0	0	0
		750	0	0	0	0	3,750	0	0	0	0	0

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Genus	Species	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90	Date
Cyanophyta--Continued															
Site 6, Devils Lake, East Bay West--Continued															
<i>Phormidium</i>		0	0	0	0	24,400	76,800	0	0	0	0	61,155	1,500	1,500	2,500
<i>mucicola</i>		0	0	0	0	4,000	8,000	0	0	0	0	1,125	375	375	625
<i>Rhabdoderma</i>		0	149	0	0	0	0	0	0	0	0	0	0	0	0
<i>irregularare</i>		0	12	0	0	0	0	0	0	0	0	0	0	0	0
<i>Rhabdoderma</i>		0	26	0	0	0	0	0	0	0	0	0	0	0	0
<i>Sigmoididea</i>		0	16	0	0	0	0	0	0	0	0	0	0	0	0
<i>f. minor</i>															
<i>Spirulina</i> sp.		0	0	0	0	0	10,514	0	0	0	0	0	0	0	0
		0	0	0	0	0	125	0	0	0	0	0	0	0	0
<i>Synechococcus</i>		196	0	0	0	0	0	0	0	0	0	0	0	0	0
		125	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	17,197,515 81,001	94,322 328	54,460 25,002	1,523,566 25,042	109,912,477 926,025	3,891,065 45,876	0	5,500 1,375	7,887,312 137,814	7,226,431 103,064	7,538,325 102,750				

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and
East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus</u> <u>species</u>	Date									
		9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90
Site 7, Devils Lake, East Bay east											
Bacillariophyta											
<i>Cyclotella meneghiniana</i>	0	0	0	0	0	0	381,675	873	1,789,568	0	0
<i>Cyclotella stelligera</i>	0	0	0	0	0	0	375	3	47	0	0
<i>Diatoma tenua</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Diatoma tenua</i> var. <i>tenua</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Entomoensis paludososa</i>	0	0	4,712,032	0	0	0	0	0	4,634,658	0	0
<i>Navicula agnewii</i>	0	0	0	0	0	0	0	0	123,084	0	0
<i>Navicula capitata</i>	0	0	0	0	0	0	0	0	756	0	0
<i>Navicula cryptocephala</i>	0	0	0	0	0	0	0	0	187,431	0	0
<i>Navicula belluculosa</i>	0	0	0	0	0	0	0	0	378	0	0
<i>Nitzchia acicularis</i>	0	0	15,336	0	0	0	0	0	527,083	0	0
<i>Nitzchia frustulum</i>	0	0	104	0	0	0	0	0	2,268	0	0
									32,319	0	0
									189	0	0

Table 4.—Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990—Continued

Organism scientific name	Family <u>Genus</u> <u>Species</u>	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90	Date
<u>Site 7, Devils Lake, East Bay east--Continued</u>													
Bacillariophyta--Continued													
<u>Nitzchia</u>	0	0	0	0	0	0	0	0	0	0	416,613	0	0
<u>halophila</u>	0	0	0	0	0	0	0	0	0	0	378	0	0
<u>Nitzchia</u>	0	0	15,792	0	0	0	0	0	0	0	0	0	0
<u>hantzschiana</u>	0	0	42	0	0	0	0	0	0	0	0	0	0
<u>Nitzchia</u>	0	0	4,397	0	0	0	0	0	0	0	0	0	0
<u>kuetzingiana</u>	0	0	21	0	0	0	0	0	0	0	0	0	0
<u>Stephanodiscus</u>	0	0	0	763,392	0	0	0	0	0	0	0	0	0
<u>alpinus</u>	0	0	0	16	0	0	0	0	0	0	0	0	0
<u>Stephanodiscus</u>	0	0	866,100	29,550	0	443,250	0	1,404,346	0	0	0	0	0
<u>dubius</u>	0	0	2,517	500	0	7,500	0	12,096	0	0	0	0	0
<u>Surirella</u>	0	0	744,986	0	0	0	0	0	4,397,085	0	0	0	0
<u>ovalis</u>	0	0	270	0	0	0	0	0	945	0	0	0	0
<u>Surirella ovata</u>	0	0	1,988,406	0	0	0	0	0	0	0	0	0	0
<u>Synedra</u>	0	0	151,234	0	0	0	0	0	0	0	0	0	0
<u>pulchella</u>	0	0	42	0	0	0	0	0	0	0	0	0	0
<u>Synedra rumpens</u>	0	0	4,378	0	0	0	0	0	0	0	0	0	0
<u>Synedra</u>	0	0	58,630	0	0	0	0	0	0	0	0	0	0
<u>tabulata</u>	0	0	62	0	0	0	0	0	0	0	0	0	0
Total	0	0	8,877,322	792,942	0	824,925	873	13,958,452	29,716	0	489,571	0	438
	0	0	4,437	516	0	7,875	3	19,514	125	0	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and
East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus</u> <u>species</u>	Date								
		9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90
<u>Site 7, Devil's Lake, East Bay east--Continued</u>										
<u>Chlorophyta</u>										
<u>Ankyra judayi</u>	0	0	0	0	15,350 500	0	0	0	0	0
<u>Chlamydomonas</u> sp.	0	134 3	0	0	6,388 63	0	0	525 125	81,675 250	0
<u>Chlorella</u> sp.	0	0	0	0	6,150 1,250	0	6,300 1,500	0	9,450 2,250	525 125
<u>Chlorogonium</u> sp.	0	0	0	0	12,675 125	0	0	0	0	0
<u>Coccomyxa</u> sp.	0	0	0	9,425 1,500	100,000 62,500	0	0	0	0	0
<u>Green coccoid</u>	0	0	19,568 2,392	952 0	0	0	0	0	0	0
<u>Dunaliella</u> <u>viridis</u>	0	0	0	0	0	0	0	47	691,075 1,750	0
<u>Dunaliella</u> sp.	0	0	0	0	0	0	0	0	3,556 125	0
<u>Kentrosphaera</u> sp.	0	0	0	0	0	0	0	9,097 3	0	0
<u>Kirchneriella</u> <u>lunaris</u>	0	0	1,197 146	0	0	0	0	1,302 93	21,525 2,625	0
<u>Monoraphidium</u> <u>contortum</u>	0	0	0	0	0	0	0	0	15,943 875	0

Table 4.—Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and East Devil's Lake sampling sites, September 1988 through October 1990—Continued

Organism scientific name		Date										
Family <u>Genus</u> <u>Species</u>		9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90
<u>Site 7, Devil's Lake, East Bay east--Continued</u>												
Chlorophyta--Continued												
<u>Nannochloris</u> sp.	0	0	0	0	0	0	0	4,713	1,336	228,850	9,075	0
<u>Nephrocytum</u> <u>agardhianum</u>	0	0	0	0	0	0	0	375	477	49,750	8,250	0
<u>Oocystis</u> sp.	0	85	0	0	0	0	0	0	0	2,000	0	0
<u>Pediastrum</u> <u>duplicex</u>	0	0	0	0	0	0	0	200	0	0	0	0
<u>Pseudo-</u> <u>sphaerocystis</u> <u>lacustris</u>	0	0	0	0	0	0	0	8	0	0	0	0
Total	0	219	19,579,574	134,175	6,388	11,213	11,782	972,924	361,075	0	155,994	
	0	6	4,038	64,375	63	1,883	582	57,750	11,875	0	34,000	
Cryptophyta												
<u>Chroomonas</u> sp.	0	0	0	347,500	34,750	180,000	3,840	1,800,000	0	0	0	0
<u>Cryptomonas</u> <u>ovata</u>	0	0	0	0	0	0	0	30,752	0	0	0	0
<u>Cryptomonas</u> <u>cyst</u>	0	0	0	0	0	0	0	301,875	0	0	0	0

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and
East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90
Site 7, Devil's Lake, East Bay east--Continued												
Cryptophyta--												
Continued												
Cryptophyta cyst		0	0	0	0	0	0	0	4,310	0	0	0
		0	0	0	0	0	0	3	0	0	0	0
Total		0	0	0	0	347,500	34,750	180,000	38,902	2,101,875	0	0
		0	0	0	2,500	250	1,875	49	19,625	0	0	0
Cyanophyta												
<u>Anacyclis</u>		0	0	0	0	0	0	0	0	6,800	0	0
<u>nidulans</u>		0	0	0	0	0	0	0	0	4,250	0	0
<u>Anacyclis</u> sp.		0	45	1,250	0	0	0	4,817	0	0	0	0
		0	28	1,250	0	0	0	6,250	0	0	0	0
<u>Aphanizomenon</u>		21,091,032	0	265	9,785	24,046,750	7,323,902	0	0	17,572,038	14,455,847	4,729,682
<u>flos aquae</u>		96,111	0	2	94	216,500	69,681	0	0	249,625	205,438	60,001
<u>Aphanocapsa</u>		0	0	47,025	4,950	0	0	0	2,500	3,600	4,500	0
<u>delicatissima</u>		0	0	26,125	2,750	0	0	0	2,500	2,000	2,500	0
<u>Aphanocapsa</u>		0	0	0	0	5,000	0	0	0	0	0	0
<u>elachista</u> var.		0	0	0	0	5,000	0	0	0	0	0	0
<u>conferta</u>												
<u>Chroococcus</u>		0	438	10,500	1,575	0	0	0	0	0	0	0
<u>di spersus</u>		0	13	2,500	375	0	0	0	0	0	0	0
<u>Chroococcus</u> sp.		0	0	0	2,575	0	0	0	0	0	0	0
		0	0	0	250	0	0	0	0	0	0	0

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date											
Family	Genus	species	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90
Site 7, Devils Lake, East Bay east--Continued													
Cyanophyta--Continued													
	<u>Coelosphaerium</u>	<u>dubium</u>	0	0	0	0	113,400	0	0	0	0	0	0
	<u>Dactylococcopsis</u>	<u>fascicularis</u>	372	0	0	0	0	0	0	2,366	0	0	0
	<u>Marssonella</u>	<u>elegans</u>	31	0	0	0	0	0	0	375	0	0	0
	<u>Microcystis</u>	<u>aeruginosa</u>	0	0	888	41,200	14,811,400	0	0	0	267,800	402,975	0
	<u>Oscillatoria</u>	<u>tenuis</u> var. <u>tergestina</u>	5,321	0	0	11	500	179,750	0	0	0	13,000	3,563
	<u>Phormidium</u>	<u>mucicola</u>	626	0	0	0	0	0	0	0	0	0	0
	<u>Rhabdoderma</u>	<u>sigmoidea</u>	0	85	0	0	0	0	0	0	0	0	0
	<u>Synechococcus</u>	sp.	0	334	0	0	0	0	0	0	0	0	0
Total			21,096,725	902	155,653	57,510	40,051,750	7,328,719	0	4,866	17,851,738	14,864,822	4,731,032
			96,768	114	64,638	3,719	522,250	75,931	0	2,875	269,250	211,876	60,751

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and
East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date										
Family <u>Genus</u> <u>species</u>	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90
<u>Site 7, Devils Lake, East Bay east--Continued</u>											
Euglenophyta											
<i>Euglena</i> sp.	0	0	0	0	29,295	0	0	0	0	0	0
	0	0	0	0	31	0	0	0	0	0	0
Total	0	0	0	0	29,295	0	0	0	0	0	0
	0	0	0	0	31	0	0	0	0	0	0

Organism scientific name	Date							
Family <u>Genus</u> <u>species</u>	9-21-88	2-22-89	5-9-89	6-21-89	8-15-89	10-26-89	2-7-90	
<u>Site 8, East Devils Lake inlet</u>								
Bacillariophyta								
<i>Chaetoceros elmorei</i>	0	0	0	0	0	0	2,527,425	589,345
	0	0	0	0	625	750	2,000	0
<i>Chaetoceros</i> sp.	0	0	0	0	1,060,887	0	0	0
<i>Cyclotella meneghiniana</i>	0	0	0	0	0	0	3,144,375	112,397
<i>Entomoeneis paludosa</i>	0	0	0	0	0	0	2,016	125
<i>Comphonema</i> sp.	0	0	0	502,366	0	0	0	0
	0	0	0	798	0	0	0	0

Table 4--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Site 8, East Devils Lake inlet--Continued					Date
Family Genus species	9-21-88	2-22-89	5-9-89	6-21-89	8-15-89	10-26-89 2-7-90
<i>Bacillariophyta--</i> Continued						
<i>Hantzschia amphioxys</i>	0	0	0	0	0	70,400 16
<i>Navicula capitata</i> var. <i>hungarica</i>	0	0	0	159,486 293	0	0
<i>Navicula cryptocephala</i> var. <i>veneta</i>	0	0	0	0	0	15,437 16
<i>Navicula vaucheriæ</i>	0	0	2,139 76	0	0	0
<i>Nitzchia hungarica</i>	0	0	0	175,875 125	0	50,000 500
<i>Nitzchia kuetzingiana</i>	1,015 20	0	0	18,186 102	0	0
<i>Nitzchia linearis</i>	0	0	0	0	0	84,902 16
<i>Nitzchia palea</i>	6,555 10	0	0	0	0	0
<i>Nitzchia reversea</i>	0	0	0	728	0	0
<i>Stephanodiscus dubius</i>	0	0	0	0	0	1,829 31
<i>Stephanodiscus hantzschii</i>	0	0	0	0	0	2,421,500 36,250
<i>Stephanodiscus</i> sp.	1,145	50	0	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus species	9-21-88	2-22-89	5-9-89	6-21-89	8-15-89	10-26-89	2-7-90
Bacillariophyta--Continued								
Site 8, East Devils Lake inlet--Continued								
<u>Suriella ovata</u>	0	0	142,029	1,156,680	0	0	0	0
	0	0	3	27	0	0	0	0
<u>Synedra pulchella</u>	0	0	0	0	0	0	16,080	0
	0	0	0	0	0	0	8	0
<u>Synedra tabulata</u>	0	0	0	38,070	0	0	0	0
	0	0	0	27	0	0	0	0
Total	8,715	0	162,354	2,033,205	1,060,887	18,733,698	713,192	
	80	0	181	1,333	625	40,353	2,250	
Chlorophyta								
<u>Ankistrodesmus falcatus</u> var. <u>falcatus</u>	0	0	0	0	0	0	369,179	0
	0	0	0	0	0	0	10,250	0
<u>Ankyra judayi</u>	0	0	0	0	7,675	0	0	0
	0	0	0	0	250	0	0	0
<u>Chlamydomonas</u> sp.	0	588	0	6,338	0	0	0	0
	0	4	0	63	0	0	0	0
<u>Chlorella</u> sp.	206	0	0	64,050	5,775	0	0	0
	20	0	0	15,250	1,375	0	0	0
<u>Chlorococcum</u> sp.	4,896	165	0	0	0	0	65,500	0
	90	2	0	0	0	0	1,000	0
<u>Chlorogonium</u> sp.	10,764	0	0	0	0	0	0	0
	30	0	0	0	0	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus species	9-21-88	2-22-89	5-9-89	6-21-89	8-15-89	10-26-89	2-7-90
<u>Site 8, East Devils Lake Inlet--Continued</u>								
Chlorophyta--Continued								
<u>Coccomyxa</u> sp.	0	0	143,325	172,900	0	0	0	0
			22,750	133,000				
<u>Crucigenia quadrata</u>	0	0	582	0	0	0	0	0
			32	0				
<u>Dictyosphaerium</u> sp.	0	0	0	0	0	0	56,966	0
			0	0			8,000	
<u>Keratococcus</u> sp.	0	0	0	11,200	0	0	0	0
			0	500				
<u>Kirchneriella lunaris</u>	0	72	1,361	0	0	0	0	254
		4	108	0				31
<u>Mesotaenium</u> sp.	0	0	0	0	0	0	0	97,190
		0	0					4,125
<u>Monoraphidium contortum</u>	0	0	0	0	0	0	0	32,888
		0	0					500
<u>Nannochloris</u> sp.	0	0	0	0	0	0	3,166,662	7,835,725
		0	0				309,000	380,375
<u>Oocystis pusilla</u>	0	0	0	1,259	0	0	0	0
		0	0	31				
<u>Oocystis submarina</u>	0	0	0	0	0	0	11,050	0
		0	0				500	
<u>Oocystis</u> sp.	0	57	0	0	8,305	0	0	0
		0	2	0	375			
Total	15,866	882	145,268	263,422	14,080	3,669,357	7,966,057	385,031
	140	12	22,890	149,094	1,750	328,750		

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and
East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date				
Family <u>Genus</u> <u>species</u>	9-21-88	2-22-89	5-9-89	6-21-89	8-15-89	10-26-89
<u>Site 8, East Devil's Lake inlet--Continued</u>						
Cryptophyta						
<i>Chroomonas</i> sp.	0	0	0	86,875	69,500	1,224,000
	0	0	0	625	500	12,750
Total	0	0	0	86,875	69,500	1,224,000
	0	0	0	625	500	12,750
Cyanophyta						
<i>Anabaena flos aquae</i>	0	0	0	104,699	0	0
	0	0	0	1,565	0	0
<i>Anacystis</i> sp.	0	677	11,647	0	0	0
	0	431	7,250	0	0	0
<i>Aphanizomenon flos aquae</i>	2,458,476	0	0	0	272,967	0
	21,000	0	0	0	369,250	0
<i>Aphanocapsa delicatissima</i>	108	0	0	1,800	5,400	0
	60	0	0	1,000	3,000	0
<i>Aphanocapsa elachista</i>	0	0	5,145	0	0	137,550
	0	0	2,000	0	0	32,750
<i>Aphanocapsa elachista</i> var. <i>conferta</i>	0	0	0	0	2,000	0
	0	0	0	0	2,000	0
<i>Chroococcus dispersus</i>	206	3,025	19,313	0	0	344,925
	20	147	1,875	0	0	82,125
<i>Chroococcus minimus</i>	8,106	0	0	0	0	0
	1,930	0	0	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus</u> <u>species</u>	9-21-88	Site 8, East Devils Lake inlet--Continued					Date 2-21-89	Date 5-9-89	Date 6-21-89	Date 8-15-89	Date 10-26-89	Date 2-7-90
			2-22-89	5-9-89	6-21-89	8-15-89	10-26-89						
Cyanophyta--Continued													
<i>Dactylococcopsis fascicularis</i>	0	0	0	680	2,613	0	0	0	0	0	0	0	0
<i>Dactylococcopsis raphidioides</i>	420	0	0	324	125	0	0	0	0	0	0	0	0
<i>Dactylococcopsis</i> sp.	0	23	0	0	0	0	0	293,426	18,288	13,500	875		
<i>Gleocapsa</i> sp.	0	12	0	0	0	0	0	0	0	0	0	0	0
<i>Microcystis aeruginosa</i>	0	0	0	0	0	971,685	0	0	0	0	0	0	0
<i>Nodularia spumigena</i>	1,629,232	0	0	0	0	17,875	0	0	0	0	0	0	0
<i>Oscillatoria angustissima</i>	1,470	0	363	0	0	0	0	0	0	0	0	0	0
<i>Oscillatoria limnetica</i>	0	0	231	0	0	0	0	0	0	0	0	0	0
<i>Oscillatoria subtilissima</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Oscillatoria</i> sp.	144	0	0	0	0	0	0	0	0	0	0	0	0
<i>Phormidium mucicola</i>	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and
East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date	Site 8, East Devils Lake Inlet--Continued				
Family <u>Genus</u> <u>species</u>	9-21-88	2-22-89	5-9-89	6-21-89	8-15-89	10-26-89	2-7-90
Cyanophyta--Continued							
<i>Phormidium</i> sp.							
	0	0	0	0	0	3,500	0
						3,000	0
<i>Rhabdoderma</i> <u>sigmoidea</u>							
	0	121	0	0	0	0	3,400
		23					250
<i>Rhabdoderma</i> <u>sigmoidea</u>							
	282	152	0	0	0	0	0
	120	95	0	0	0	0	0
<i>Rhabdogloea</i> <u>elliptoidea</u>							
	0	0	638	0	0	0	0
	0	0	38	0	0	0	0
<i>Synechococcus</i> sp.							
	800	434	0	0	0	0	0
	510	26	0	0	0	0	0
Total	4,097,774 25,170	5,073 1,037	37,423 11,487	115,345 3,441	1,260,440 393,500	1,086,597 57,750	407,180 105,313
Euglenophyta							
<i>Euglena</i> <u>proxima</u>							
	0	20,206	0	0	0	0	0
	0	10	0	0	0	0	0
<i>Euglena</i> sp.							
	0	31,485	0	0	0	887,965	703,130
	8	0	0	0	0	250	125
<i>Trachelomonas</i> sp.							
	0	0	0	0	0	86,200	0
	0	0	0	0	0	250	0
Total	0	51,691	0	0	0	974,165	703,130
	0	18	0	0	0	500	125

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devil's Lake and East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date			Date						
	Family <u>Genus</u>	<u>species</u>	2-7-90	5-9-90	8-8-90	Family <u>Genus</u>	<u>species</u>	2-7-90	5-9-90	8-8-90
Site 9, Devil's Lake, Fort Totten Bay										
Site 9, Devil's Lake, Fort Totten Bay--Continued										
<i>Bacillariophyta</i>						<i>Bacillariophyta</i> --Continued				
<i>Achnanthes hauckiana</i>	0		5,848	0		<i>Navicula capitata</i>		101,726	18,844	0
<i>Amphora coffeeiformis</i>	86,400	0	0	0		<i>Navicula cryptocephalia</i>		63	38	0
<i>Amphora ovalis pediculus</i>	160	0	0	45	19,141	<i>Navicula tripunctata</i>		0	14,102	0
<i>Amphora veneta</i>	0	0	18,240	0		<i>Nitzchia gracilis</i>		0	54,720	0
<i>Caloneis bacillaris</i> var. <i>thermalis</i>	0	33,404	0	0		<i>Nitzchia halophila</i>		0	76	0
<i>Chaetoceros elmorei</i>	0	0	19	0	13,572	<i>Nitzchia kuetzingiana</i>		0	0	43,416
<i>Cyclotella pediculus</i>	0	0	0	45	96,962	<i>Nitzchia reverse</i>		0	0	90
<i>Cyclotella meneghiniana</i>	309,242	103,142	2,641,797	6,570		<i>Nitzchia sigmoida</i>		20	0	0
<i>Entomoeneis paludosa</i>	0	465,918	0			<i>Melosira granulata</i>		0	75,559	18,962,136
<i>Fragilaria capucina</i>	0	98,194	0					152	152	20,070
<i>Fragilaria vaucheriae</i>	0	2,687	0			<i>Stephanodiscus tenuis</i>		0	153,596	0
<i>Navicula agnewii</i>	0	28,454	0					0	893	0
					Total			316	2,899,780	1,156,475
									2,128	21,807,840
										27,045

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date		Organism scientific name		Date	
	Family <u>Genus</u>	<u>Species</u>	Family <u>Genus</u>	<u>Species</u>	2-7-90	5-9-90
<u>Site 9, Devils Lake, Fort Totten Bay--Continued</u>						
<u>Chlorophyta--Continued</u>						
<i>Actinastrum hantzschii</i>	0	0	26,800	<i>Dunaliella</i> sp.	2,146,125	223,650
	0	0	2,000		28,313	7,875
<i>Ankistrodesmus falcatus</i>	0	11,875	21,488	<i>Elakatothrix viridis</i>	0	0
<i>var. falcatus</i>	0	125	375		0	0
<i>Carteria</i> sp.	0	0	67,025	<i>Kirchneriella contorta</i>	0	0
	0	0	250		0	0
<i>Chlamydomonas</i> sp.	72,226	16,115	86,200	<i>Kirchneriella lunaris</i>	0	63,550
	1,188	375	250		0	7,750
<i>Chlorella</i> sp.	0	49,875	30,975	<i>Kirchneriella</i>	0	17,925
	0	11,875	7,375	<i>subsoltaria</i>	0	375
<i>Chlorococcum</i> sp.	0	255,125	14,138	<i>Micractinium pusillum</i>	0	41,200
	0	1,625	125		0	2,000
<i>Closterotopsis longissima</i>	0	0	549,375	<i>Monoraphidium minutum</i>	0	4,313
	0	0	625		0	125
<i>Coelastrum sphaericum</i>	0	0	54,400	<i>Nannochloris</i> sp.	700	786,025
	0	0	1,000		250	170,875
<i>Coenochloris</i> sp.	0	519	0	<i>Nephrocytum agardhianum</i>	0	138
	0	31	0		0	125
<i>Dictyosphaerium ehrenbergianum</i>	0	56,250	99,825	<i>Oocystis gloeocystiformis</i>	0	107,350
	0	1,250	2,750		0	9,500
<i>Dunaliella viridis</i>	0	1,036,613	0	<i>Oocystis lacustris</i>	0	93,750
	0	2,625	0		0	0

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and
East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date		Organism scientific name		Date		
Family	Genus species	2-7-90	5-9-90	Family	Genus species	2-7-90	5-9-90	8-8-90
<u>Site 9, Devils Lake, Fort Totten Bay--Continued</u>								
<u>Chlorophyta--Continued</u>								
<i>Pediastrum boryanum</i>	0	260	0	<i>Cryptophyta</i>				
		31	0	<i>Chroomonas</i> sp.	96,000 1,000	2,928,000 30,500		48,000 500
<i>Scenedesmus abundans</i>	0	226	0	<i>Cryptomonas marsonii</i>	0	836,782 125	0	0
		16	0	<i>Cryptomonas ovata</i>	96,615 31	0 0	0	0
<i>Scenedesmus dimorphus</i>	0	43,000	0	Total	192,615 1,031	3,764,782 30,625	52,313 625	
		1,000	0					
<i>Scenedesmus ecorius</i>	0	6,000	0					
		750	0					
<i>Scenedesmus opolensis</i>	0	14,000	0					
		1,000	0					
<i>Scenedesmus quadricauda</i>	0	18,000	0					
		250	0					
<i>Tetraedon caudatum</i>	0	9,125	0	<i>Anabaena flos aquae</i>	0	0	0	1,675,625 6,250
		125	0	<i>Anabaenopsis elenkini</i>	0	0	0	8,326,050 35,250
<i>Tetraedon minium</i>	0	30,900	0	<i>Anacyctis</i> sp.	0	0	0	285,050 176,000
		375	0					
<i>Testrarium staurigeniaeforme</i>	0	1,050	0	<i>Aphanocapsa delicatissima</i>	0	750	117,000 65,000	
		250	0					
Total	2,219,051 29,751	2,717,908 208,828		<i>Chroococcus minimus</i>	0	0	4,200 1,000	

Table 4.--Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date			Date			
	Family	Genus	Species	Family	Genus	Species	
	2-7-90	5-9-90	8-8-90		2-7-90	5-9-90	8-8-90
Site 9, Devils Lake, Fort Totten Bay--Continued							
Cyanophyta--Continued							
<u>Dactylococcus</u>	0	14,985	2,800	<u>Euglena</u>	<u>polymorpha</u>	0	58,432
<u>fascicularis</u>	0	2,375	125			0	31
<u>Dactylococcus</u> sp.	0	0	1,000	<u>Euglena</u>	sp.	0	506,410
			1,250			0	63
<u>Marsoniella elegans</u>	0	0	1,766,625	<u>Trachelomonas</u>	<u>horrida</u>	0	129,849
		0	98,125			0	31
<u>Mesomopedia tenuissima</u>	0	3,600	5,500	Total		0	694,691
	0	4,500	5,500		0	0	125
<u>Mesomopedia</u> sp.	0	3,675	0			0	79
		875					
<u>Microcystis aeruginosa</u>	0	0	2,437,125				
	0	0	25,125				
<u>Nodularia spumigena</u>	767	0	0				
	10	0	0				
<u>Oscillatoria prolifica</u>	0	0	17,785,375				
	0	0	328,750				
<u>Oscillatoria splendida</u>	0	0	31,500				
	0	0	2,500				
<u>Oscillatoria subtilissima</u>	13,275	0	0				
	1,125	0	0				
Total	14,042	23,010	32,437,850				
	1,135	8,500	743,875				

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and
East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus species	Date				Organism scientific name	Family Genus species	Date						
		5-9-90	8-8-90	9-12-90	10-25-90			5-9-90	8-8-90	9-12-90	10-25-90			
Site 10, East Devils Lake main bay														
Bacillariophyta														
Continued														
<i>Chaetoceros elmorei</i>	0	4,826	528,825	1,170,869		<i>Stephanodiscus</i> sp.	0	3,472,706	1,209,400	1,209,400	16			
	0	16	375	1,000			0	31	16		16			
<i>Cyclotella meneghiniana</i>	392,688	0	169,050	633,366		<i>Surirella ovata</i>	255,654	0	0	0	0			
	625	0	188	625			42	0	0	0	0			
<i>Diatoma tenui</i> var. <i>tenue</i>	95,804	0	0	0		Total	4,957,761	3,603,247	2,026,027	4,278,102				
	375	0	0	0			10,209	672	2,080	22,891				
<i>Entomoeneis paludosa</i>	2,316,123	0	0	0										
	167	0	0	0										
<i>Navicula capitata</i>	8,100	0	0	0		<i>Ankistrodesmus</i> <i>falcatus</i> var. <i>falcatus</i>	2,375	0	0	0	0			
	125	0	0	0			250	0	0	0	0			
<i>Navicula tripunctata</i>	1,070,410	0	0	0										
	1,375	0	0	0										
<i>Nitzchia acicularis</i>	319,550	0	0	0		<i>Chlorella</i> sp.	79,275	0	0	0	5,775			
	1,375	0	0	0			18,875	0	0	0	1,375			
<i>Nitzchia kuetzingiana</i>	0	125,715	0	0		<i>Dictyosphaerium</i> <i>ehrenbergianum</i>	47,122	0	0	0	0			
	625	0	0	0			5,625	0	0	0	0			
<i>Nitzchia palea</i>	0	0	68,024	0		<i>Gloeococcus</i> sp.	2,094,333	0	0	0	0			
	0	0	313	0			500	0	0	0	0			
<i>Stephanodiscus hantzschii</i>	0	0	50,728	652,058		<i>Kirchneriella</i> <i>lunaris</i>	1,025	0	0	0	17,625			
	0	0	1,188	20,500			125	0	0	0	5,875			
<i>Stephanodiscus tenuis</i>	499,432	0	0	612,404		<i>Monoraphidium</i> <i>contortum</i>	56,000	0	0	0	0			
	6,125	0	0	750			4,000	0	0	0	0			

Table 4.-Phytoplankton species, densities, and volumes in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date		Organism scientific name		Date	
Family	Genus species	5-9-90	8-8-90	Family	Genus species	5-9-90	8-8-90
Site 10, East Devil's Lake main bay--Continued							
Chlorophyta--Continued							
<u>Nannochloris</u> sp.	1,179,900 256,500	1,000 625	2,269 2,063	109,850 84,500	<u>Anacystis</u> sp.	0	5,000 3,125
<u>Oocystis</u> <u>eremosphaeria</u>	0	0	0	1,329,408	<u>Aphanocapsa</u> <u>delicatissima</u>	19,500 19,500	0 0
<u>Oocystis</u> <u>parva</u>	0	0	0	20,276	<u>Coelosphaerium</u> <u>collinsii</u>	0 0	0 0
<u>Oocystis</u> sp.	0	0	0	10,882	<u>Coelosphaerium</u> <u>kuetzingianum</u>	0 0	0 0
<u>Pseudosphaerocystis</u> <u>lacustris</u>	0	29,320 875	0 0	0	<u>Dactyloccopsis</u> <u>fascicularis</u>	2,750 125	0 0
<u>Schroederia</u> <u>setigera</u>	0	3,276 63	3,830 63	0	<u>Gomphosphaeria</u> <u>aponina</u>	0 0	233,188 1,625
<u>Stephanoptera</u> <u>gracilis</u>	169,418 375	0	0	0	<u>Microcystis</u> <u>aeruginosa</u>	113,094 3,375	8,942,219 164,500
Total	3,629,448 286,250	33,596 1,563	16,981 2,142	1,482,934 92,750	<u>Nodularia</u> <u>suumigena</u>	0	1,562,250 13,813
Cryptophyta	600,000 6,250	12,000 125	30,048 313	132,000 1,375	<u>Phormidium</u> <u>mucicola</u>	0 0	1,128 282
<u>Chroomonas</u> sp.	600,000 6,250	12,000 125	30,048 313	132,000 1,375	Total	135,344 23,000	9,549,337 183,655
Total	600,000 6,250	12,000 125	30,048 313	132,000 1,375		135,344 23,000	1,891,240 33,800
Site 10, East Devil's Lake main bay--Continued							
Cyanophyta							
<u>Anacystis</u> sp.	0	0	0	5,000 3,125	<u>Phormidium</u> <u>mucicola</u>	0 0	6,875 4,188
<u>Aphanocapsa</u> <u>delicatissima</u>	19,500 19,500	0 0	0 0	0 0		0 0	5,400 3,000
<u>Coelosphaerium</u> <u>collinsii</u>	0 0	0 0	0 0	0 0		0 0	673,852 107,250
<u>Coelosphaerium</u> <u>kuetzingianum</u>	0 0	0 0	0 0	0 0		0 0	0 0
<u>Dactyloccopsis</u> <u>fascicularis</u>	2,750 125	0 0	0 0	318,023 668		15,438 63	0 0
<u>Gomphosphaeria</u> <u>aponina</u>	0 0	0 0	0 0	668 63		2,296 16	0 0
<u>Microcystis</u> <u>aeruginosa</u>	113,094 3,375	8,942,219 164,500	1,562,250 13,813				162,059 7,875

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake

sampling sites, September 1988 through October 1990

[The first line values are individuals per liter; the second line values are a replicate sample; sp., species; avg., average; lghth., length; <, less than; --, no data]

Organism scientific name	Family <u>Genus species</u>	Date									
		9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90
<u>Site 1, Devils Lake, West Bay</u>											
Cladocera											
<u>Alona</u> sp.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		0	0	0	0	0	0	0	0	0	.1
<u>Cladoceran</u> juvenile		0	0	0	0	0	0	0	9.5	16.8	5.5
		0	0	0	0	0	0	11	4	6.6	0
<u>Ceriodaphnia quadrangula</u>		4.7	0	0	0	257	0	0	0	18	39.6
		8.3	0	0	0	469.4	.2	0	0	17	58.3
<u>Chydorus sphaericus</u>		169.7	0	0	1	229	1.2	0	0	56.4	66
		81.4	0	0	0	391.2	2.8	0	2.2	59	63.8
<u>Daphnia pulex</u>		23.6	0	1	26.1	369.6	2.1	2.2	26.6	34.8	15.4
		5.8	.4	1.5	4.4	335.3	1.4	2.2	28.6	41	48.4
<u>Daphnia similis</u>		0	0	0	0	0	.1	0	0	0	0
		0	0	0	0	0	.7	0	0	0	0
<u>Diaphanosoma birgei</u>		23.6	0	0	0	0	.1	0	0	208.8	22
		16.9	0	0	0	0	.2	0	0	181	55
<u>Diaphanosoma leichtenbergianum</u>		0	0	0	0	1.2	0	0	0	0	0
		0	0	0	0	1.2	0	0	0	0	0
<u>Moina affinis</u>		0	0	0	0	0	0	0	0	9.6	0
		0	0	0	0	0	0	0	0	.05	0
Total		221.6	0	1	27.1	856.8	3.5	2.2	36.1	344.4	148.5
		112.4	.4	1.5	4.4	1,197.1	5.3	2.2	41.8	311	232.15
											10.5
											15.8

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
<u>Site 1, Devils Lake, West Bay--Continued</u>												
Cladocera--Continued												
Average total Cladocera		167.0	0.2	1.25	15.75	1,026.95	4.4	2.2	38.95	327.7	190.325	13.15
Total small Cladocera (avg. lgth. < 0.7 mm)		198.0	0	0	1	487.2	1.3	0	9.5	309.6	133.1	10.3
Average total small Cladocera		106.6	0	0	0	861.8	3.2	0	13.2	270	183.75	15.5
Total large Cladocera (avg. lgth. > 0.7 mm)		152.3	0	0	.5	674.5	2.25	0	11.35	289.8	158.425	12.9
Average total large Cladocera		23.6	0	1	26.1	369.6	2.2	2.2	26.6	34.8	15.4	.2
Copepoda		5.8	.4	1.5	4.4	335.3	2.1	2.2	28.6	41	48.4	.3
Average total Cladocera		14.7	.2	1.25	15.25	352.45	2.15	2.2	27.6	37.9	31.9	.25
Acanthocyclops robustus female		0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Calanoid juvenile		0	34.6	0	52	447.3	14	13.2	72.2	108	52.8	18.6
Calanoid nauplius		0	12	0	14.8	357.8	16.1	39.6	50.6	106	103.4	40.6
Calanoid egg		0	7.3	0	13.2	0	19.6	0	98.8	45.6	16.5	5.4
Copepod juvenile		0	4.8	0	15.4	0	24.5	0	99	49	35.2	19.6

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake

sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus Species	Date									
		9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90
Site 1, Devils Lake, West Bay--Continued											
Copepoda--Continued											
<u>Copepod</u> nauplii	0.0	0.0	250	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0	0	357.9	0	0	0	0	0	0	0	0
<u>Copepod</u> egg	0	0	53	0	0	0	0	0	0	0	0
	0	0	143	0	0	0	0	0	0	0	0
<u>Cyclopoid</u> juvenile	61.3	0	0	0	0	8	2.2	1.9	14.4	4.4	1.8
	56.6	0	0	0	0	4.9	2.2	2.2	10	9.9	7
<u>Cyclopoid</u> nauplii	320.5	0	0	0	0	2	2.2	17.1	74.4	60.5	56.4
	270	0	0	0	0	7	0	22	78	104.5	94.5
<u>Diacyclops thomasi</u> male	0	0	0	0	0	0	0	0	2.2	0	0
	0	0	0	0	0	0	0	0	2.2	0	0
<u>Diacyclops thomasi</u> female	4.7	1.8	0	.3	0	0	0	0	.9	1.2	.2
	2.7	1	0	0	0	0	.5	0	0	1	0
<u>Diacyclops thomasi</u> egg	0	0	0	0	0	0	1.9	0	0	0	0
	0	0	0	0	0	0	1.9	0	0	0	0
<u>Diaptomus sicilis</u> male	89.6	83.8	5	14.6	212.3	62.3	107.8	5.7	19.2	6.6	27.6
	70.6	84.3	27.6	6.4	239.3	65.8	103.4	2.2	24	25.3	49.7
<u>Diaptomus sicilis</u> female	108.4	52.8	19	13.5	335.3	28	92.4	9.5	9.6	9.9	27
	106	57.6	24.1	8.4	287.6	34.3	70.4	6.6	13	37.4	34.3
<u>Diaptomus sicilis</u> juvenile	141.4	0	0	0	0	0	0	0	0	0	0
	39.2	0	0	0	0	0	0	0	0	0	0
<u>Diaptomus sicilis</u> egg	0	114.8	0	0	0	28	396	22.8	10.8	11	13.2
	0	109.2	0	0	0	66.5	134.2	28.6	11	42.9	19.6

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--continued

Organism scientific name	Family	Genus	Species	9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90	
				Site 1, Devils Lake, West Bay--Continued											
Copepoda--Continued															
<u>Eucyclops speratus</u> <u>female</u>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
<u>Eucyclops speratus</u> male		0	0	0	0	0	0	0	0	0	0	0	0	.3	1.4
<u>Eucyclops speratus</u> egg		0	0	0	0	0	0	0	0	0	0	0	0	.2	.1
<u>Hesperodiaptomus</u> <u>nevadensis</u> female		0	0	0	0	0	0	.2	0	0	0	0	0	0	0
<u>Hesperodiaptomus</u> sp.		0	0	1	0	0	0	0	0	0	0	0	0	0	0
<u>Mesocyclops edax</u> female		0	0	0	.3	0	0	0	0	0	0	0	0	0	0
Total Copepoda adults	202.7 179.3	138.4 142.9	24 51.7	28.7 14.8	548.4 526.9	90.3 100.6	200.2 173.8	16.1 11	31.2 38	16.8 63.9	55.9 85.5				
Average total Copepoda adults	191	140.65	37.85	21.75	537.65	95.45	187	13.55	34.6	40.35	70.7				
Total Copepoda juveniles	523.2 365.8	41.9 16.8	291 596.6	65.2 30.2	447.3 357.8	43.6 52.5	17.6 41.8	190 173.8	242.4 243	134.2 161.7	82.2 161.7				
Average total Copepoda juveniles	444.5	29.35	443.8	47.7	402.55	48.05	29.7	181.9	242.7	193.6	121.95				
Total Copepoda eggs	0	114.8 109.2	53 143	0 11.3	72.1 28	28 68.4	396 134.2	22.8 28.6	12 51	15.2 50.4	40.6 31.7				

Table 5.--Zooplankton species and densities in water samples collected from Devil's Lake and East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus species	9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90	Date
<u>Site 1, Devil's Lake, West Bay--Continued</u>													
Copepoda--Continued													
Average total Copepoda eggs		0.0	112	98	5.65	50.05	48.2	265.1	25.7	31.5	33.45	45.5	
Total <u>Calanoid</u> Copepods (Juveniles plus adults)		339.4	293.3	25	93.3	995.1	151.9	609.4	209	193.2	96.8	93	
		215.8	267.9	51.7	45	884.7	207.2	347.6	187	203	244.5	165.2	
Average total <u>Calanoid</u> Copepods		277.6	280.6	38.35	69.15	939.9	179.55	478.5	198	198.1	170.65	129.1	
Total <u>Cyclopoid</u> Copepods		386.5	1.8	0	.6	.6	10	4.4	19.9	91.2	65.2	59.5	
		329.3	1	0	0	0	12.4	2.2	26.4	89	115.6	103	
Average total <u>Cyclopoid</u> Copepods		357.9	1.4	0	.3	.3	11.2	3.3	23.15	90.1	90.4	81.25	
Rotifera													
<u>Asplanchna</u> sp.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0	0	0	0	0	.7	0	0	0	0	0	
<u>Brachionus</u> <u>havanaensis</u>		0	0	0	0	0	0	0	0	2.4	73.7	0	
		0	0	0	0	0	0	0	0	1	84.7	0	
<u>Brachionus</u> <u>urceolaris</u>		0	0	0	0	0	0	0	3.8	0	0	0	
		0	0	0	0	0	0	0	4.4	0	0	0	
<u>Epiphantes</u> sp.		0	0	0	0	0	0	13.2	20.9	0	0	<.1	
		0	0	0	0	0	2.2	24.2	0	0	0	<.1	
<u>Filinia</u> <u>longisetata</u>		56.6	.2	0	.3	0	3	0	0	0	16.5	16.2	
		22.5	0	0	0	0	14.7	0	0	0	18.7	18.9	
<u>Keratella</u> <u>cochlearis</u>		660	0	2	0	0	3	0	0	0	0	0	
		644	0	0	0	0	2.1	0	0	0	0	0	

Table 5.--Zooplankton species and densities in water samples collected from Devil's Lake and East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-21-88	2-23-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
<u>Site 1, Devil's Lake, West Bay--Continued</u>												
Rotifera--Continued												
	<u>Keratella quadrata</u>	198	0.9	9	0.3	0.0	12	11	7.6	0.0	0.0	9
		147.8	.2	0	0	0	30.1	4.4	13.2	1	0	19.6
	<u>Notholca acuminata</u>	0	0	0	0	0	0	0	3.8	0	0	4.2
		0	0	0	0	0	0	0	4.4	0	0	.7
	<u>Trichocerca</u> sp.	0	0	0	0	0	0	0	0	0	1.1	0
		0	0	0	0	0	0	0	0	0	1.1	0
Total		914.6	1.1	11	.6	0	18	24.2	36.1	2.4	91.3	29.45
		814.3	.2	0	0	0	47.6	6.6	46.2	2	104.5	39.25
Average total		864.45	.65	5.5	.3	0	32.8	15.4	41.15	2.2	97.9	34.35
Rotifera												
<u>Site 2, Devil's Lake, Sixmile Bay</u>												
Organism scientific name		Date										
Family	Genus species	9-21-88	1-30-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
Cladocera												
	<u>Cladoceran</u> juvenile	0.0	0.0	0.0	0.0	0.0	0.4	0.0	6	0.8	1.6	0.0
		0	0	0	0	0	0	0	3	1.8	2.8	.1
	<u>Ceriodaphnia quadrangula</u>	10.6	0	0	0	257.9	0	0	0	34.4	35.6	3.2
		3	0	0	0	343.9	.6	0	0	39.6	34.4	3.2

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake

sampling sites, September 1988 through October 1990--Continued

Family Genus species	Date										
	9-21-88	1-30-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
Site 2, Devils Lake, Sixmile Bay--Continued											
Cladocera--Continued											
<u>Chydorus sphaericus</u>	24.2	0.0	0.0	2.7	214.9	0.2	0.0	0.0	60.8	75.2	0.4
	38	0	0	1.2	229.5	.3	0	0	61.2	71.2	1.2
<u>Daphnia pulex</u>	41.6	3.9	7.8	3.3	128.9	.5	1	21.5	4.8	5.6	1.6
	6.8	1.1	.8	11.3	13.1	1.5	2	27.5	3.6	4.8	1.6
<u>Diaphanosoma birgei</u>	3.9	0	0	0	0	.3	0	0	65.6	18.4	.1
	2	0	0	0	0	.6	0	0	85.5	21.2	<.1
<u>Diaphanosoma leuchtenbergianum</u>	0	0	0	0	42.9	0	0	0	0	0	0
	0	0	0	0	34.4	0	0	0	0	0	0
Total	80.3	3.9	7.8	6	644.6	1.4	1	27.5	166.4	136.4	5.3
	49.8	1.1	.8	12.5	620.9	3	2	30.5	191.7	134.4	6.15
Average total Cladocera	65.05	2.5	4.3	9.25	632.75	2.2	1.5	29	179.05	135.4	5.725
Total small Cladocera (avg. lgth. < 0.7 mm)	38.7	0	0	2.7	515.7	.9	0	6	161.6	130.8	3.7
	43	0	0	1.2	607.8	1.5	0	3	188.1	129.6	4.55
Average total small Cladocera	40.85	0	0	1.95	561.75	1.2	0	4.5	174.85	130.2	4.125
Total large Cladocera (avg. lgth. > 0.7 mm)	41.6	3.9	7.8	3.3	128.9	.5	1	21.5	4.8	5.6	1.6
	6.8	1.1	.8	11.3	13.1	1.5	2	27.5	3.6	4.8	1.6
Average total large Cladocera	24.2	2.5	4.3	7.3	71	1	1.5	24.5	4.2	5.2	1.6

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus</u> <u>species</u>	Date									
		9-21-88	1-30-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90
<u>Site 2, Devils Lake, Sixmile Bay--Continued</u>											
Copepoda											
<u>Acanthocyclops robustus</u> <u>female</u>	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
<u>Calanoid Juvenile</u>	0.0	0.0	0.0	3.5	257.9	9.3	70	34.5	86.4	43.6	17.4
<u>Calanoid nauplii</u>	0.6	0	5.5	139.6	11.1	78	22	78.3	35.2	35.2	18.2
<u>Calanoid egg</u>	1.7	0	17.1	115.6	6.6	1	171.5	18	9.2	8	2.6
<u>Copepod Juvenile</u>	0.0	0	0	0	8.5	0	0	0	8	1.2	2
<u>Copepod nauplii</u>	0.0	0	3.8	21.3	0	0	0	0	23.4	1.6	0
<u>Copepod egg</u>	0.0	45.2	0	0	0	0	0	0	0	0	0
<u>Cyclopoid Juvenile</u>	1.9	0	0	0	0	.3	0	.5	4.8	12.8	.2
<u>Cyclopoid nauplii</u>	1.5	0	0	0	0	0	1.6	2	49.5	20	38.8
<u>Diacyclops thomas1 male</u>	18.4	.6	0	0	0	.1	2	72	32.4	45.2	44.8
<u>Diacyclops thomas1 female</u>	30	0	0	0	0	<.1	0	0	1.8	2.4	0

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake

sampling sites, September 1988 through October 1990--Continued

Family Genus species	Site 2, Devils Lake, Sixmile Bay--Continued										Date
	9-21-88	1-30-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	
Copepoda--Continued											
<u><i>Diacyclops thomasii</i></u> egg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.4	0.0
<u><i>Diacyclops navus</i></u> male	0	0	0	0	0	0	0	0	0	16.5	17.2
<u><i>Diacyclops navus</i></u> female	0	0	0	0	0	0	0	0	0	0	0
<u><i>Diaptomus sicilis</i></u> male	53.2	35.3	19.2	2	47.3	9.9	50	26.5	2.4	4	23.8
<u><i>Diaptomus sicilis</i></u> female	51.7	20.1	25.2	11	63.4	11.4	41	16.5	4.5	4.4	14
<u><i>Diaptomus sicilis</i></u> juvenile	60.9	20.2	36	2.8	64.8	6.6	34	23.5	3.2	2.8	13.2
<u><i>Diaptomus sicilis</i></u> egg	56	30.2	21.8	12.2	72.8	8.1	29	14.5	.9	2.8	10.6
<u><i>Eucyclops speratus</i></u> female	0	0	0	0	0	0	0	0	0	0	0
<u><i>Eucyclops speratus</i></u> male	0	0	0	0	0	0	0	0	0	0	0
<u><i>Hesperodiaptomus nevadensis</i></u> female	0	0	0	0	0	0	0	0	<.1	<.1	<.1
<u><i>Hesperodiaptomus nevadensis</i></u> egg	0	0	0	0	0	0	0	0	0	.2	0

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family Genus species		9-21-88	1-30-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
Site 2, Devils Lake, Six-mile Bay--Continued												
Copepoda--Continued												
<u>Macrocylops albidis</u> female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<.1	0.0
<u>Macrocylops albidis</u> egg	0	0	0	0	0	0	0	0	0	0	0	0
<u>Mesocyclops edax</u> female	0	0	0	0	0	0	0	0	0	0	<.1	0
<u>Mesocyclops edax</u> egg	0	0	0	0	0	0	0	0	0	0	0	0
Total Copepoda adults	115.1 108.3	55.8 50.3	55.2 47	4.8 23.2	113.3 139	16.9 19.75	84 70	51.85 31.05	8.8 7.7	9.65 10.65	37.15 24.75	
Average total Copepoda adults	111.7	53.05	51.1	14	126.15	18.325	77	41.45	8.25	10.15	30.95	
Total Copepoda Juveniles	117 44.7	25.1 23.7	157.2 343.6	5.7 22.6	386.8 255.2	14.5 18.1	72 81	290.5 266	136.8 135	104.4 105.6	63.4 59	
Average total Copepoda juveniles	80.85	24.4	250.4	14.15	321	16.3	76.5	278.25	135.9	105	61.2	
Total Copepoda eggs	0	29.6 32.3	155.4 43.2	2.6 3.8	8.5 21.3	0 4.4	70 40	64.3 34	11.2 42.4	28.9 20.6	3 4.8	
Average total Copepoda eggs	0	30.95	99.3	3.2	14.9	2.2	55	49.15	26.8	24.75	3.9	
Total Calanoid Copepods (Juveniles plus adults)	210.8 121.9	109.6 106.3	55.2 47	13.1 45.8	498.9 391.4	29.4 41.4	224 189	355.35 257.5	120.8 104.2	62 52.05	56.45 50.25	
Average total Calanoid Copepods	166.35	107.95	51.1	29.45	445.15	35.4	206.5	306.425	112.5	57.025	53.35	

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family <u>Genus species</u>		9-21-88	1-30-89	5-9-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
<u>Site 2, Devils Lake, Sixmile Bay--Continued</u>												
Copepoda--Continued												
Total <u>Cyclopoid Copepods</u>		21.3	0.9	0.0	0.0	1.2	2	49.5	28	54.45	45.15	
Average total <u>Cyclopoid Copepods</u>		31.1	0	0	0	2.8	.65	2	72.55	41	65.85	38.35
Rotifera												
<u>Brachionus havanensis</u>		0	0	0	0	0	0	0	0	0	1.2	0
<u>Brachionus satanicus</u>		0	0	0	0	0	0	0	0	0	.4	0
<u>Epiphantes</u> sp.		0	0	0	0	0	0	1	0	0	0	0
<u>Filinia longisetata</u>		1.5	0	0	0	2	1.6	0	0	1.6	13.6	2.2
<u>Keratella cochlearis</u>		0	0	0	0	0	<.1	0	0	0	7.2	12.8
<u>Keratella quadrata</u>		3.9	.6	0	0	.2	.4	1	2.5	2.4	15.6	12.2
<u>Trichocerca</u> sp.		2	0	0	0	0	2.1	3	.5	9.9	10.8	12.2
Total		4.9	.6	0	0	2	2	2.5	6	30.4	14.4	
Average total Rotifera		2.5	0	0	0	86.1	2.35	10	1	20.7	24	16.8
		3.7	.3	0	0	44.05	2.175	6	1.75	13.35	27.2	15.6

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus Species	9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
<u>Site 3, Devils Lake, Creel Bay</u>												
Amphipoda												
<i>Gammarus lacustris</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1
<i>Hyalella azteca</i>	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	<.1	0
Average total Amphipoda	0	0	0	0	0	0	0	0	0	0	<.1	<.1
Cladocera												
<i>Alona</i> sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1
<i>Cladoceran</i> juvenile	0	0	0	0	0	0	.6	0	0	4.2	3	<1
<i>Ceriodaphnia quadrangula</i>	4.7	0	0	0	0	586.7	0	0	<.1	32.4	14.5	1
	7.5	0	0	0	0	465.6	.2	0	0	34.8	15	.3
<i>Chydorus sphaericus</i>	8.4	0	0	.5	270.1	.4	0	0	5.4	65.5	.6	
	9	0	0	.3	419.1	1.2	0	0	11.4	61.5	.9	
<i>Daphnia pulex</i>	33.5	1.1	.1	.3	14.5	1	1.1	1.1	4.8	14.5	.6	
	22.6	.2	.1	.6	5.8	1.2	0	1.2	7.2	17.5	1.6	
<i>Diaphanosoma birgei</i>	3.7	0	0	0	0	.1	0	0	52.8	22.5	.2	
	2	0	0	0	0	.2	0	0	54	21	.2	

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake

sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date										
Family Genus species	9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
Site 3, Devils Lake, Creel Bay--Continued											
Cladocera--Continued											
<i>Diaphanosoma leuchtenbergianum</i>	0.0	0.0	0.0	0.0	16.3	0.0	0.0	0.0	0.0	0.0	
Total	50.3	1.1	.1	.8	887.6	2.1	1.1	1.85	99.6	120	
Average total Cladocera	45.7	.65	.1	.85	912.3	2.45	1.1	1.525	105.3	120.25	
Total small Cladocera (avg. lgth. < 0.7 mm)	16.8	0	0	.5	873.1	1.1	0	<.1	94.8	105.5	
Average total small Cladocera	18.5	0	0	.3	931.2	1.6	0	0	103.8	103	
Total large Cladocera (avg. lgth. > 0.7 mm)	33.5	1.1	.1	.3	14.5	1	1.1	1.8	4.8	14.5	
Average total large Cladocera	22.6	.2	.1	.6	5.8	1.2	1.1	1.2	7.2	17.5	
Copepoda											
<i>Acanthocyclops vernalis</i> female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
<i>Acanthocyclops vernalis</i> male	0	0	0	0	0	0	0	0	0	.2	
<i>Acanthocyclops vernalis</i> egg	0	0	0	0	0	0	0	0	0	.1	
<i>Calanoid</i> juvenile	0	0	0	3.3	232.8	19.2	58.3	20.7	54	29.5	
				5.2	172.1	21.6	60.5	24	58.8	30	
										22	
										15	

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus</u> <u>species</u>	Date									
		9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90
<u>Site 3, Devils Lake, Creel Bay--Continued</u>											
Copepoda--Continued											
<u>Calanoid</u> nauplii	0.0	0.4	0.0	1.6	361.1	2.2	0.0	61.8	4.8	23	1.2
	0	.4	0	2.3	186.3	9.8	0	57	7.2	16	.5
<u>Calanoid</u> egg	0	0	0	6.4	4.3	0	0	0	0	0	0
	0	0	0	0	20.4	0	0	0	0	0	.9
<u>Copepod</u> juvenile	0	0	8.1	0	0	0	0	0	0	0	0
	0	0	6.1	0	0	0	0	0	0	0	0
<u>Copepod</u> nauplii	0	0	53	0	0	0	0	0	0	0	0
	0	0	23.5	0	0	0	0	0	0	0	0
<u>Copepod</u> egg	0	0	24.7	0	0	0	0	0	0	0	0
	0	0	13.9	0	0	0	0	0	0	0	0
<u>Cyclopoid</u> juvenile	0	0	0	0	0	.2	0	.3	6	2.5	.6
	0	0	0	0	0	.4	0	.3	12	2	.5
<u>Cyclopoid</u> nauplii	60.2	0	0	0	0	1.8	0	24.9	110.4	57.5	48.4
	66	0	0	0	0	.4	1.1	33	130.8	37.5	31.8
<u>Diacyclops thomasi</u> male	0	0	0	0	0	0	0	<.1	1.2	.5	0
	1	0	0	0	0	0	0	0	1.8	.3	0
<u>Diacyclops thomasi</u> female	.5	0	0	0	0	0	0	<.1	1.2	1	0
	0	0	0	0	0	0	0	0	.6	.3	0
<u>Diacyclops thomasi</u> egg	0	0	0	0	0	0	0	.1	0	25	0
	0	0	0	0	0	0	0	0	0	6.9	0
<u>Diacyclops navus</u> female	0	0	0	0	2.4	0	0	0	0	0	0
	0	0	0	0	2.4	0	0	0	0	0	0

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake

sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus Species	9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90	
		Site 3, Devils Lake, Creel Bay--Continued											
		Date											
Copepoda--Continued													
<i>Diaptomus sicilis</i> male	8.4 7.7	45.8 89.6	7.9 4.6	4 7	228.7 143.1	17.6 21.8	36.3 22	9.6 9.6	6 1.8	2 1.5	18.8 18.8		
<i>Diaptomus sicilis</i> female	5.2 5.1	34.7 40	7.5 4.6	5 9.9	238.4 123.6	8 14.2	39.6 24.2	7.8 3.3	.6 3.6	3.5 4	18.2 17.4		
<i>Diaptomus sicilis</i> <u>juvenile</u>	30.9 7.9	50.4 48.1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
<i>Diaptomus sicilis</i> egg	0 0	6.9 .4	0 0	3.3 0	0 0	0 1.2	19.8 30.8	51.3 30	0 5.4	1 2	1.6 1		
<i>Hesperodiaptomus</i> <u>nevadensis</u> male	0 0	0 0	0 0	0 2.3	0 0	0 <.1	0 0	<.1 <.1	0 0	0 0	0 0	0 0	
<i>Hesperodiaptomus</i> <u>nevadensis</u> female	0 0	0 0	0 0	0 2	0 <.1	0 0	<.1 0	<.1 0	0 0	0 0	0 0	0 0	
<i>Hesperodiaptomus</i> <u>nevadensis</u> egg	0 0	0 0	0 0	0 0	0 0	1.1 1.8	0 0	.1 .2	0 0	0 0	0 0	0 0	
<i>Mesocyclops edax</i> female	0 0	0 0	0 0	0 0	0 0	0 0	0 0	<.1 0	0 0	0 0	0 0	0 0	
Total Copepoda adults	14.1 13.8	80.5 129.6	15.4 9.2	9 21.2	469.5 269.1	26.8 37.9	75.9 46.2	17.75 13.15	9 7.8	7 6.1	37.2 36.5		
Average total Copepoda adults	13.95	105.05	12.3	15.1	369.3	32.35	61.05	15.45	8.4	6.55	36.85		
Total Copepoda juveniles	91.1 73.9	50.8 48.5	61.1 29.6	4.9 7.5	593.9 358.4	23.4 32.2	58.3 61.6	107.7 114.3	175.2 208.8	112.5 85.5	72.2 47.8		
Average total Copepoda juveniles	82.5	49.65	45.35	6.2	476.15	27.8	59.95	111	192	99	60		

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus species</u>	9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
Site 3, Devils Lake, Creel Bay--Continued												
		Date										
Copepoda--Continued												
Total Copepoda eggs	0.0	6.9	24.7	3.3	4.3	1.1	19.8	51.5	0.0	26	1.9	2.8
Average total Copepoda eggs	0	.4	13.9	6.4	20.4	3	30.8	30.2	5.4	8.9		
Total <u>Calanoid</u> Copepods (juveniles plus adults)	44.5	138.2	15.4	17.2	1,061	48.2	154	151.4	65.4	59	61.8	52.7
Average total <u>Calanoid</u> Copepods	20.7	178.5	9.2	28.7	625.1	70.5	137.5	124.15	76.8	53.5		
Total Cyclopoid Copepods	32.6	158.35	12.3	22.95	843.05	59.35	145.75	137.775	71.1	56.25	57.25	
Average total Cyclopoid Copepods	60.7	0	0	0		2.4	2	0	25.35	118.8	61.5	49.1
Total Rotifera	67	0	0	0		2.4	.8	1.1	33.3	145.2	40.1	32.5
Average total Cyclopoid Copepods	63.85	0	0	0		2.4	1.4	.55	29.325	132	50.8	40.8
Rotifera												
<u>Brachionus havanaensis</u>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2	0.0
<u>Brachionus satanicus</u>	0	0	0	0	0	0	0	0	0	4.2	0	0
<u>Epiphantes</u> sp.	0	0	0	0	0	0	0	0	0	3.6	0	0
<u>Filinia longiseta</u>	1	0	0	0	23.1	2.8	0	0	3.6	1.5	0	
<u>Keratella cochlearis</u>	2.6	0	0	0	93.2	2.6	0	0	0	5.5		
	2	0	0	0	0	2	0	0	42	.2		.8
									74.4	0		
									0	0		
										0		

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake

sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date										
Family <u>Genus</u> <u>Species</u>	9-21-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
Site 3, Devils Lake, Creel Bay--Continued											
Rotifera--Continued											
<u>Keratella quadrata</u>	7.3	0.0	0.0	0.0	0.0	3.4	1	2.2	9.3	16.2	27
	3.9	0	0	0	0	3.2	0	7.5	16.2	11.5	5.4
<u>Notholca acuminate</u>	0	0	0	0	0	0	0	0	.6	0	0
	0	0	0	0	0	0	0	1.2	0	0	0
<u>Trichocerca</u> sp.	0	0	0	0	0	0	0	0	1.2	0	0
	0	0	0	0	0	0	0	0	0	0	0
Total	10.9	0	0	0	23.1	4	2.2	9.9	67.8	32.2	6.2
	7.9	0	0	0	96.6	7.8	0	8.7	94.2	21.5	4.8
Average total	9.4	0	0	0	59.85	5.9	1.1	9.3	81	26.85	5.5
Rotifera											

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus species</u>	Date									
		9-20-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90
<u>Site 4, Devils Lake, Main Bay</u>											
<u>Amphipoda</u>											
<u>Gammarus lacustris</u>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	0.0
Total	--	0	0	0	0	0	0	0	<.1	0	<.1
Average total Amphipoda	0	0	0	0	0	0	0	<.1	0	0	<.1
Cladocera											
<u>Alona sp.</u>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<u>Cladoceran juvenile</u>	0	0	0	0	0	0	0	0	.2	2	.4
<u>Ceriodaphnia quadrangula</u>	6.1	0	0	0	33.5	0	0	0	31.2	12.4	<.1
<u>Chydorus sphaericus</u>	9.3	0	0	0	59.2	.8	0	0	37.2	24	.3
<u>Daphnia pullex</u>	59.9	2	1	2.5	1	<.1	.5	.2	9.2	16.4	.6
<u>Diaphanosoma birgei</u>	2	0	0	0	0	.1	0	0	39.2	15.6	.1
	--	0	0	0	0	.2	0	0	48.8	12.8	.3

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake

sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date										
Family Genus species	9-20-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
Site 4, Devils Lake, Main Bay--Continued											
Cladocera--Continued											
<i>Diaphanosoma leuchtenbergianum</i>	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
--	0	0	0	0	.4	0	0	0	0	0	0
Total	77.3	2	1	2.5	93	.95	.2	4.4	118.8	68.8	1.05
--	1.8	.1	.3	325.3	1	<.1	2.4	135.2	58.8	2.45	
Average total Cladocera	77.3	1.9	.55	2.75	209.15	.975	.125	3.4	127	63.8	1.75
Total small Cladocera (avg. 1gth. < 0.7 mm)	17.4	0	0	0	92.9	.9	0	.2	109.6	52.4	.45
--	0	0	.1	324.3	.5	0	0	121.2	50	.95	
Average total small Cladocera	17.4	0	0	<.1	208.6	.7	0	.1	115.4	51.2	.7
Total large Cladocera (avg. 1gth. > 0.7 mm)	59.9	2	1	2.5	.1	<.1	.2	4.2	9.2	16.4	.6
--	1.8	.1	.1	2.9	1	.5	<.1	2.4	14	8.8	1.5
Average total large Cladocera	59.9	1.9	.55	2.7	.55	.275	.125	3.3	11.6	12.6	1.05
Copepoda											
<i>Acanthocyclops robustus</i> female	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
--	0	0	0	0	0	0	0	0	0	0	0
<i>Acanthocyclops vernalis</i> female	0	0	0	0	0	0	0	0	0	0	.1
--	0	0	0	0	0	0	0	0	0	0	<.1
<i>Acanthocyclops vernalis</i> male	0	0	0	0	0	0	0	0	0	0	<.1
--	0	0	0	0	0	0	0	0	0	0	<.1

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus species	Date									
		9-20-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90
Site 4, Devils Lake, Main Bay--Continued											
Copepoda--Continued											
<u>Acanthocyclops vernalis</u>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
egg	--	0	0	0	0	0	0	0	0	0	.3
<u>Calanoid juvenile</u>		0	0	0	4.6	67	4	14	18.2	66	44.4
	--	0	0	0	65.5	44.6	6.1	16.2	27.6	67.2	39.6
<u>Calanoid nauplii</u>		0	.3	0	6.9	0	18.8	1	72.6	20.8	9.2
	--	0	.3	0	47.9	22.3	9.2	.6	74.8	29.2	1.8
<u>Calanoid egg</u>		0	0	0	0	7.6	0	0	0	8	0
	--	0	0	0	2	0	0	0	0	6.4	0
<u>Copepod juvenile</u>		0	0	6	0	0	0	0	0	0	0
	--	0	0	.3	0	0	0	0	0	0	0
<u>Copepod nauplii</u>		0	0	53.2	0	0	0	0	0	0	0
	--	0	0	9.6	0	0	0	0	0	0	0
<u>Copepod egg</u>		0	0	15.6	0	0	0	0	0	0	0
	--	0	0	.3	0	0	1.2	<.1	0	4	.5
<u>Cyclopoid juvenile</u>		0	0	0	0	0	.7	<.1	0	2.8	.6
	--	0	0	0	0	0	1.4	1	13.8	56	71.6
<u>Cyclopoid nauplii</u>		9.7	0	0	0	0	1.4	.6	12	61.2	86.8
	--	0	0	0	0	0	0	0	0	4	41.4
<u>Diacyclops thomasi</u>		.8	0	0	0	0	0	0	0	.4	.1
male	--	0	0	0	0	0	0	0	0	.8	.1
<u>Diacyclops thomasi</u>		0	0	0	0	0	0	0	0	.8	.2
female	--	0	0	0	0	0	0	0	0	1.6	0

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake

sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Genus	Species	9-20-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90	Date
Site 4, Devils Lake, Main Bay--Continued															
Copepoda--Continued															
<u><i>Diacyclops thomasi</i></u> egg				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<u><i>Diacyclops navus</i></u> male				--	0	0	0	0	0	0	0	0	38.4	2.4	
<u><i>Diacyclops navus</i></u> female				--	0	0	0	.1	0	0	0	0	0	0	
<u><i>Diaptomus sicilis</i></u> male				17.4	11	5.2	6.6	51.3	4.8	10.5	5.6	9.2	2.4	3.6	
<u><i>Diaptomus sicilis</i></u> female				--	13.8	.6	35.7	13.5	5.3	18.6	3.2	11.2	1.6	5.1	
<u><i>Diaptomus sicilis</i></u> female				21.1	4.4	5	7.4	42.5	2.9	6	4	8.8	5.2	3.4	
<u><i>Diaptomus sicilis</i></u> juvenile				--	20.7	.6	29.9	10.3	3.7	10.8	1.8	7.6	2.4	4.1	
<u><i>Diaptomus sicilis</i></u> egg				32.4	12.8	0	0	0	0	0	0	0	0	0	
<u><i>Hesperodiaptomus nevadensis</i></u> male				--	31.5	0	0	0	0	0	0	0	0	0	
<u><i>Hesperodiaptomus nevadensis</i></u> female				--	0	0	2.8	0	.1	36.5	18.4	8.8	.8	.9	
<u><i>Mesocyclops edax</i></u> female				0	0	0	0	0	0	0	<.1	<.1	<.1	<.1	
Total Copepoda adults				39.3	15.4	10.2	14	93.9	7.9	18.35	10.3	19.2	7.9	7.15	
				--	34.5	1.2	65.6	24	10.4	31.3	6.2	21.3	4.3	9.3	

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date										
Family <u>Genus</u> <u>species</u>	9-20-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
<u>Site 4, Devils Lake, Main Bay--Continued</u>											
Copepoda--Continued											
Average total Copepoda adults	39.3	24.95	5.7	39.8	58.95	9.15	24.825	8.25	20.25	6.1	8.225
Total Copepoda Juveniles	42.1	13.1	59.2	111.5	67	25	16.05	104.6	146.8	127.2	33.4
--	31.8	9.9	113.4	66.9	17.4	17.45	114.4	160.4	140.4	140.4	54.3
Average total Copepoda Juveniles	42.1	22.45	34.55	62.45	66.95	21.2	16.75	109.5	153.6	133.8	43.85
Total Copepoda eggs	0	0	15.6	2.8	7.6	1.2	38.3	19	16.8	6.4	1.2
--	0	.3	2	0	1.5	29.4	14	50	2.8	2.8	.9
Average total Copepoda eggs	0	0	7.95	2.4	3.8	.85	33.85	16.5	33.4	4.6	1.05
Total Calanoid Copepods (Juveniles plus adults)	70.9	28.5	10.2	28.3	160.8	30.8	69.85	119.45	113.6	62	17.6
--	66.3	1.2	179	90.7	25.9	75.7	121.5	120.5	56	56	22.1
Average total Calanoid Copepods	70.9	47.4	5.7	103.65	125.75	28.35	72.775	120.475	117.05	59	19.85
Total Cyclopoid Copepods	10.5	0	0	0	.1	2.2	1.05	13.85	61.2	73.9	23.8
--	0	0	0	0	.2	2.1	.65	12.1	66.4	89.1	42.05
Average total Cyclopoid Copepods	10.5	0	0	0	.15	2.15	.85	12.975	63.8	81.5	32.925
Rotifera											
<u>Brachionus havanensis</u>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0
<u>Brachionus satanicus</u>	N	0	0	0	0	0	0	0	0	0	0

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Genus species	9-20-88	1-30-89	5-8-89	6-21-89	8-15-89	10-25-89	2-6-90	5-9-90	8-7-90	9-11-90	10-24-90
Site 4, Devils Lake, Main Bay--Continued													
Rotifera--Continued													
	<u>Brachionus urceolaris</u>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		--	0	0	0	0	0	0	.2	0	0	0	0
	<u>Epilpanes</u> sp.		0	0	0	0	0	0	0	0	0	.2	0
		--	0	0	0	0	0	0	0	0	0	.4	0
	<u>Filinia longisetata</u>		.4	0	0	0	0	2	0	0	23.2	.8	.6
		--	0	0	0	0	0	1.2	0	0	30.8	1.2	1.8
	<u>Keratella cochlearis</u>		.4	0	0	0	0	.8	0	0	0	0	0
		--	0	0	0	0	0	.6	0	0	0	.2	0
	<u>Keratella quadrata</u>		1.2	1	0	.1	0	2.4	6.5	8.4	5.6	9.6	2.9
		--	1	0	0	.5	.5	2.6	4.2	8.8	13.6	9.2	4.7
	<u>Trichocerca</u> sp.		0	0	0	0	0	0	0	0	.8	0	0
		--	0	0	0	0	0	0	0	0	0	0	0
Total			2	1	.2	.1	0	5.2	6.5	8.4	32	12.2	3.5
Average total			2	1	.1	.05	.25	4.8	5.35	8.7	40.8	10.8	6.5
Rotifera													

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-21-88	2-22-89	5-8-89	6-21-89	8-15-89	10-26-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
<u>Site 5, Devils Lake, Mission Bay</u>												
Amphipoda												
	<i>Gammarus lacustris</i>	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	0.0	0.0	0.0	
	<i>Hyalella azteca</i>	0	0	0	0	0	.2	0	0	0	0	
Total		0	0	0	0	0	.2	<.1	0	0	<.1	
Average total Amphipoda		0	0	0	0	.1	<.1	0	0	0	<.1	
Cladocera												
	<i>Cladoceran</i> Juvenile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	4.2	<0.1	
	<i>Ceriodaphnia quadrangula</i>	2.7	0	0	0	81.8	0	0	1.8	11.5	<.1	
	<i>Chydorus sphaericus</i>	30.6	0	0	0	25.6	.1	0	5.4	25	3.6	
	<i>Daphnia pullex</i>	29.9	0	6.2	3.7	2.5	1.8	.3	13.8	15	5.5	
	<i>Daphnia schodleri</i>	0	0	1.4	0	0	0	0	0	0	0	
	<i>Diaphanosoma birgei</i>	1.3	0	0	0	0	0	0	25.2	18	<.1	
Total		64.5	0	7.6	3.7	109.9	1.9	.3	14.4	51.6	4.95	
		126.3	.1	2.7	7.7	70.5	3	0	12.2	48.6	86.4	

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake

sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus</u> <u>species</u>	9-21-88	2-22-89	5-8-89	6-21-89	8-15-89	10-26-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90	Date
<u>Site 5, Devils Lake, Mission Bay--Continued</u>													
Cladocera--Continued													
Average total Cladocera		95.4	<0.1	4.8	5.35	90.2	2.45	0.15	13.3	50.1	73.7	6.325	
Total small Cladocera (avg. lgth. < 0.7 mm)		34.6	0	0	0	107.4	.1	0	.6	36.6	55.5	3.75	
Average total small Cladocera		72.8	0	0	.3	68.4	1	0	.4	39	77.4	5.9	
Total large Cladocera (avg. lgth. > 0.7 mm)		53.7	0	0	.15	87.9	.55	0	.5	37.8	66.45	4.825	
Average total large Cladocera		41.7	<.1	4.8	5.2	2.3	1.9	.15	12.8	12.3	7.25	1.5	
Copepoda													
<u>Acanthocyclops vernalis</u>		0.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<u>Acanthocyclops vernalis</u> female		0	0	0	0	0	0	0	0	0	0	0	.1
<u>Acanthocyclops vernalis</u> male		0	0	0	0	0	0	0	0	0	0	0	.1
<u>Calanoid</u> juvenile		0	29	0	3.8	297.8	5	2.4	11.2	117.6	51.5	37.5	
<u>Calanoid</u> nauplii		0	9.4	0	60.9	378.9	6.4	3.6	0	97.8	66.6	43.8	
<u>Calanoid</u> egg		0	2.2	0	3.8	74.4	2	0	39.6	50.4	15	4.8	
		0	.1	0	79.8	53	1.8	0	34.4	52.2	11.4	4.8	
		0	0	0	0	334.9	0	0	0	29.4	1.5	0	
		0	0	6.7	145.7	0	0	0	0	19.2	1.2	0	

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake
sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Site 5, Devils Lake, Mission Bay--Continued										
Family	Genus species	9-21-88	2-22-89	5-8-89	6-21-89	8-15-89	10-26-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
Copepoda--Continued												
<u>Copepod</u> juvenile	0	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<u>Copepod</u> nauplii	0	0	54.6	0	0	0	0	0	0	0	0	0
<u>Copepod</u> egg	0	0	36.6	0	0	0	0	0	0	0	0	0
<u>Cyclopoid</u> juvenile	1.3	0	0	0	0	0	.4	0	0	4.2	3.5	1.5
<u>Cyclopoid</u> nauplii	55.2	0	0	0	0	0	.6	.3	6.8	6	3.6	.3
<u>Cyclopoid</u> egg	37	0	0	0	0	.8	4.5	2.6	23.4	49	58.8	32.1
<u>Diacyclops thomasi</u> male	0	0	0	0	0	0	0	0	0	10.8	0	0
<u>Diacyclops thomasi</u> female	0	0	0	0	0	0	0	0	0	3.6	.2	0
<u>Diacyclops thomasi</u> egg	0	0	0	0	0	0	0	0	0	1.8	0	0
<u>Diaptomus sicilis</u> male	12.6	7.5	1	8.9	130.2	10	6.6	1.8	10.8	6	14.4	
<u>Diaptomus sicilis</u> female	15.6	11.2	4.9	34.2	132.5	12.2	7.2	1.8	12.6	5.4	15.3	

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus Species	9-21-88	2-22-89	5-8-89	6-21-89	8-15-89	10-26-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90	
		Site 5, Devils Lake, Mission Bay--Continued											
		Date											
Copepoda--Continued													
<i>Diaptomus sicilis</i>	59.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Diaptomus sicilis</i> juvenile	38.7	0	0	0	0	0	0	0	0	0	0	0	0
<i>Diaptomus sicilis</i> egg	0	22.3	0	2.9	0	1.1	16.8	8.8	7.8	6	2.4	2.5	2
<i>Hesperodiaptomus nevadensis</i> male	0	1.2	0	.1	0	0	0	<.1	0	0	0	<.1	<.1
<i>Hesperodiaptomus nevadensis</i> female	0	1	0	0	.4	.1	0	<.1	0	0	0	0	<.1
<i>Hesperodiaptomus nevadensis</i> female	0	.7	0	.9	.2	.2	0	<.1	0	0	0	0	<.1
<i>Hesperodiaptomus nevadensis</i> female	0	.4	0	0	.6	.1	0	<.1	0	0	0	0	<.1
<i>Hesperodiaptomus nevadensis</i> egg	0	7.9	0	0	0	9.3	0	.6	0	0	0	1.2	1.2
<i>Mesocyclops edax</i> female	0	6	0	0	0	13.6	0	0	0	0	0	0	2.1
Total Copepoda adults	22	23.3	3.8	20.2	242	27.9	10.2	3.3	28.2	17.6	29	30.9	30.9
Average total Copepoda adults	23	28.4	5.95	49.1	262.15	31.75	10.05	3.2	30	15.8	29.95		
Total Copepoda juveniles	115.7	31.2	62	7.6	372.2	7.8	3.9	53.4	195.6	119	75.9		
Average total Copepoda juveniles	75.7	9.5	17.2	140.7	431.9	9.6	8.4	48.8	171	140.4	81.9		
Total Copepoda eggs	0	30.2	36.6	2.9	334.9	10.4	16.8	9.4	93.6	23.1	1.7		
Average total Copepoda eggs	0	23.6	2.3	6.7	145.7	13.8	12.6	5.4	48	20.4	4.1		

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Site 5, Devils Lake, Mission Bay--continued										Date
Family	Genus species	9-21-88	2-22-89	5-8-89	6-21-89	8-15-89	10-26-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
Copepoda--Continued												
Total <u>Calanoid</u>		79.8	76.8	3.8	30.7	614.2	36	29.4	62.9	198	89	71.7
Copepods (Juveniles plus adults)		62.7	60.6	8.1	218.7	714.2	44	26.1	42.9	197.4	93.6	81.3
Average total <u>Calanoid</u> Copepods		71.25	68.7	5.95	124.7	664.2	40	27.75	52.9	197.7	91.3	76.5
Total <u>Cyclopoid</u> Copepods		57.9	0	0	0	0	.8	1.5	2.6	33.6	53.6	33.7
Average total <u>Cyclopoid</u> Copepods		37	0	0	0	0	1.4	4.8	14.4	23.4	63.2	33.4
Rotifera												
<u>Asplanchia</u> sp.		0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.6	0.0	0.0
<u>Brachionus havanaensis</u>		0	0	0	0	0	0	0	0	.6	0	0
<u>Brachionus satanicus</u>		0	0	0	0	0	0	0	0	13.2	0	0
<u>Epiphantes</u> sp.		0	0	0	0	0	0	3	0	0	0	0
<u>Filinia longiseta</u>		4	0	0	0	.2	.4	0	0	46.8	85	9.3
<u>Keratella cochlearis</u>		0	0	0	0	0	.2	0	0	45	105	5.7
<u>Keratella quadrata</u>		8	1	0	0	0	37.2	4	0	0	0	0
		1.5	.7	0	0	21.6	10.8	.3	1.6	3	5.4	8.4
												5.1

Table 5.--Zooplankton species and densities in water samples collected from Devil's Lake and East Devil's Lake sampling sites, September 1988 through October 1990--Continued

<u>Organism</u>	<u>scientific name</u>	<u>Date</u>										
<u>Family</u>	<u>Genus species</u>	9-21-88	2-22-89	5-8-89	6-21-89	8-15-89	10-26-89	2-6-90	5-8-90	8-7-90	9-11-90	10-24-90
<u>Site 5, Devil's Lake, Mission Bay--Continued</u>												
Rotifera--Continued												
	<u>Lecane</u> sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	0.0
		0	0	0	0	0	0	0	0	0	0	0
	<u>Notholca</u> <u>acuminata</u>	0	0	0	0	0	0	0	0	.2	0	0
		0	0	0	0	0	0	0	0	.2	0	0
	<u>Trichocerca</u> sp.	0	0	0	0	0	0	0	0	0	.6	.3
		0	0	0	0	0	0	0	0	0	.6	.3
Total		12.7	1	0	0	37.6	4.8	3	1.8	64.8	96.8	17.4
		1.5	.7	0	0	21.6	11.2	2.7	2.2	61.2	113.7	10.8
Average total		7.1	.85	0	0	29.6	8	2.85	2	63	105.25	14.1
Rotifera												

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90
<u>Site 6, Devils Lake, East Bay west</u>												
	<i>Amphipoda</i>											
	<i>Gammarus lacustris</i>	0.0	0.0	0.0	0.0	0.0	0.0	<.1	0.0	0.0	0.1	
		0	0	0	0	0	0	0	0	0	.1	
	<i>Hyalella azteca</i>	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	<.1	0	0	0	
Total		0	0	0	0	0	0	<.1	0	0	.1	
	Average total	0	0	0	0	0	0	<.1	0	0	.1	
	<i>Amphipoda</i>											
	<i>Cladocera</i>											
	<i>Cladoceran juvenile</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.8	0.1	
		0	0	0	0	0	0	1.2	0	1.8	.1	
	<i>Ceriodaphnia quadrangula</i>	0	0	0	0	0	0	0	0	<.1	0	
		0	0	0	0	0	0	0	0	0	0	
	<i>Chydorus sphaericus</i>	3.7	0	0	0	7	.4	0	0	.1	.2	
		4.6	0	0	0	9.5	0	0	0	1.8	.6	
	<i>Daphnia pullex</i>	15.7	.4	1.7	1.9	7.5	3.9	2.2	8.8	18.2	.6	
		37.4	.2	.3	.1	7.6	2.8	1.8	14.6	14.7	0	
	<i>Diaphanosoma birgei</i>	0	0	0	0	0	0	0	0	<.1	0	
		0	0	0	0	0	0	0	0	.1	0	
Total		19.4	.4	1.7	1.9	14.5	4	2.2	9	18.35	.9	
		42	.2	.3	.1	17.1	3.2	1.8	15.8	14.85	.7	
	Average total	30.7	.3	1	1	15.8	3.6	2	12.4	16.6	11.275	
	<i>Cladocera</i>										.8	

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake

sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus</u> <u>Species</u>	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90	Date
Site 6, Devils Lake, East Bay West--Continued													
Cladocera--Continued	Total small Cladocera (avg. lgth. < 0.7 mm)	3.7	0.0	0.0	0.0	7.0	0.1	0.0	0.2	0.15	4.95	0.3	
	4.6	0	0	0	9.5	.4	0	1.2	.15	3.7	.7		
Average total small Cladocera	4.15	0	0	0	8.25	.25	0	.7	.15	4.325	.5		
Total large Cladocera (avg. lgth. > 0.7 mm)	15.7	.4	1.7	1.9	7.5	3.9	2.2	8.8	18.2	7.6	.6		
	37.4	.2	.3	.1	7.6	2.8	1.8	14.6	14.7	6.3	0		
Average total large Cladocera	26.55	.3	1	1	7.55	3.35	2	11.7	16.45	6.95	.3		
Copepoda													
	<u>Calanoid</u> juvenile	0.0	2.3	0.0	14.4	223.3	0.8	1.2	2.6	116.9	54.8		
		0	.4	0	2	118.1	2.2	1.6	3.4	117.6	41.7	11	
	<u>Calanoid</u> nauplii	0	.1	0	11.2	37.2	1.8	0	17.8	59.5	28.8	1.8	
		0	.1	0	6.4	23.6	.8	0	17.8	54.6	21.9	1.6	
	<u>Calanoid</u> egg	0	0	0	0	89.4	0	0	0	39.9	2	0	
		0	0	0	4.9	0	0	0	0	25.9	.6	0	
	<u>Copepod</u> juvenile	0	0	21.8	0	0	0	0	0	0	0	0	
		0	0	7	0	0	0	0	0	0	0	0	
	<u>Copepod</u> nauplii	0	0	38.1	0	0	0	0	0	0	0	0	
		0	0	20.6	0	0	0	0	0	0	0	0	
	<u>Copepod</u> egg	0	0	18	0	0	0	0	0	0	0	0	
		0	0	36.5	0	0	0	0	0	0	0	0	

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Family Genus species	Organism scientific name	Date										
		9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	
Site 6, Devils Lake, East Bay West--Continued												
Copepoda--Continued												
<u>Cyclopoid</u> juvenile	<0.1	0.0	0.0	0.0	0.0	0.0	<0.1	0.7	7.6	0.6		
	0	0	0	0	0	0	0	2.1	2.1	1		
<u>Cyclopoid</u> nauplii	77.8	0	0	0	0	.3	.4	3.8	20.3	35.2	6.8	
	12.8	0	0	0	0	.4	.1	5.6	23.8	28.5	6.6	
<u>Cyclopoid</u> egg	0	0	0	0	0	0	0	0	0	0	0	
<u>Diacyclops thomasi</u> male	0	0	0	0	0	0	0	0	0	0	0	
<u>Diacyclops thomasi</u> female	0	0	0	0	0	0	0	0	0	0	0	
<u>Diacyclops thomasi</u> egg	0	0	0	0	0	0	0	0	0	0	0	
<u>Diaptomus sicilis</u> male	1.4	4.4	5.4	22.3	59.6	2.4	1.6	11.2	4.8	4.6		
	8	1.2	16	12.5	32.8	3.6	1.6	.8	7.7	2.1	3.8	
<u>Diaptomus sicilis</u> female	1.4	1.9	7.6	24	49.6	2.2	.2	1.8	12.6	5.2	5	
	8.7	1.4	12.2	13.6	34.5	3	.9	2	16.1	5.1	4.8	
<u>Diaptomus sicilis</u> juvenile	15.7	0	0	0	0	0	0	0	0	0	0	
	10.8	0	0	0	0	0	0	0	0	0	0	
<u>Diaptomus sicilis</u> egg	0	5.1	0	6.5	0	0	1.4	29.8	14.7	4.8	.1	
<u>Hesperodiaptomus nevadensis</u> male	0	3.8	0	0	0	0	.8	46.8	35.7	4.8	0	
	0	0	0	0	0	0	.4	.1	.1	.3	<.1	
	0	0	0	.1	.8	.1	.2	.1	<.1	.1	<.1	

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake

sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family <u>Genus</u> <u>Species</u>	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90	Date
<u>Site 6, Devils Lake, East Bay West--Continued</u>													
Copepoda--Continued													
<u>Hesperodiaptomus</u>		0.0	0.0	0.0	1.9	0.8	0.8	0.2	<0.1	0.1	0.4	0.1	
<u>nevadensis</u> female		0	.1	0	.1	.7	.1	.3	<.1	.1	.3	.2	
<u>Hesperodiaptomus</u>		0	0	0	0	0	5.5	15	0	0	0	3.8	
<u>nevadensis</u> egg		0	0	0	0	0	3.9	6.2	0	0	0	5.5	
<u>Hesperodiaptomus</u> sp.		0	0	.6	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	
159	Total Copepoda adults	2.8	6.3	13	48.2	110	10.9	17.4	3.55	24.3	11	13.55	
		16.7	2.7	28.2	26.3	68.8	10.7	9.2	2.95	24.35	7.8	14.35	
Average total	Copepoda adults	9.75	4.5	20.6	37.25	89.4	10.8	13.3	3.25	24.325	9.4	13.95	
Total Copepoda		94	2.4	59.9	25.6	260.5	2.9	1.65	24.25	197.4	126.4	25.2	
Juveniles		23.6	.5	27.6	8.4	141.7	3.8	1.7	26.85	198.1	94.2	20.2	
Average total	Copepoda Juveniles	58.8	1.45	43.75	17	201.1	3.35	1.675	25.55	197.75	110.3	22.7	
Total Copepoda eggs		0	5.1	18	6.5	89.4	5.5	16.4	29.8	58.8	7.6	3.9	
		0	3.8	36.5	4.9	0	3.9	7	46.8	69.5	5.7	5.5	
Average total	Copepoda eggs	0	4.45	27.25	5.7	44.7	4.7	11.7	38.3	64.15	6.65	4.7	
Total Calanoid		18.5	13.8	13.6	80.3	370.5	13.5	20	53.75	215.1	99.1	31.45	
Copepods (Juveniles plus adults)		27.5	7	28.2	34.7	210.5	13.7	11.6	70.95	231.85	76	26.95	
Average total	Calanoid Copepods	23	10.4	20.9	57.5	290.5	13.6	15.8	62.35	223.475	87.55	29.2	

Table 5.--Zooplankton species and densities in water samples collected from Devil's Lake and East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90
<u>Site 6, Devil's Lake, East Bay west--Continued</u>												
Copepoda--Continued												
Total <u>Cyclopoid</u>		78.3	0.0	0.0	0.0	0.0	0.3	0.45	3.85	21.3	43.1	7.4
Copepods		12.8	0	0	0	0	.8	.1	5.65	26.3	30.8	7.6
Average total		45.55	0	0	0	0	.55	.275	4.75	23.8	36.95	7.5
<u>Cyclopoid</u> Copepods												
Rotifera												
<u>Asplanchna</u> sp.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
<u>Brachionus</u> <u>havanaensis</u>		0	0	0	0	0	0	0	0	<.1	0	0
<u>Brachionus</u>		0	0	0	0	0	0	0	0	0	0	0
<u>quadridentatus</u>		0	0	0	0	0	0	0	0	.4	0	0
<u>Brachionus</u> <u>satanicus</u>		0	0	0	0	0	0	0	0	149.1	0	0
<u>Epiphaneia</u> sp.		0	0	0	0	0	1.6	0	0	<.1	<.1	<.1
<u>Filinia</u> <u>longiseta</u>		1.4	0	0	0	<.1	0	0	0	162.4	10	3.8
<u>Keratella</u> <u>cochlearis</u>		0	0	.2	0	0	0	0	0	184.8	4.5	4.8
<u>Keratella</u> <u>quadrata</u>		1.8	0	0	0	0	1.2	0	<.1	0	0	0
<u>Lepadella</u> sp.		0	0	0	0	0	0	0	0	.4	.3	.4
		0	0	0	0	0	0	0	0	0	0	.2

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

<u>Organism</u> <u>scientific name</u>	<u>Date</u>												
<u>Family</u>	<u>Genus</u>	<u>Species</u>	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90
<u>Site 6, Devils Lake, East Bay West--Continued</u>													
<u>Rotifera--Continued</u>													
<u>Notonematid rotifer</u> sp.	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<u>Trichocerca</u> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3.2	0	.4	0	0	0	1.5	1.6	<.1	311.6	11.65	4.4	
Average total Rotifera	2.1	0	.2	0	0	0	.975	.9	.125	319.875	8.375	4.825	

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake
Sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date										
Family Genus species	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90
<u>Site 7, Devils Lake, East Bay east</u>											
Amphipoda											
<i>Gammarus lacustris</i>											
0.0	0.0	0.0	0.0	0.0	0.0	<.1	0	0.0	0.0	<0.1	
<i>Hyalella azteca</i>											
0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	
Total	0	0	0	0	0	<.1	0	0	0	<.1	
Average total	0	0	0	0	0	<.1	0	<.1	<.1	<.1	
Cladocera											
<i>Cladoceran Juvenile</i>											
0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	2.1	0.0	1.8	
0	0	0	0	0	0	0	0	1.8	.3	2.4	
<i>Ceriodaphnia quadrangula</i>											
.3	0	0	0	0	0	0	0	0	0	<.1	
.5	0	0	0	0	0	0	0	0	0	0	
<i>Chydorus sphaericus</i>											
12.8	0	0	0	0	0	0	0	0	0	0	
17	0	0	0	0	0	0	0	0	0	0	
<i>Daphnia pulex</i>											
31.4	3.6	.3	.3	28	1.2	1	4.6	10.8	36.6	.4	
39.8	1.5	.1	.9	6.8	1.2	.2	6.5	28	37.8	.2	
<i>Daphnia similis</i>											
0	0	0	0	0	0	0	0	0	0	0	
Total	44.8	3.6	.3	.3	36.6	1.2	1	6.7	10.85	.55	
	57.3	1.5	.1	.9	6.8	1.2	.2	8.3	28.3	.35	
Average total	51.05	2.55	.2	.6	21.7	1.2	.6	7.5	19.575	.45	
Cladocera											

Table 5.--Zooplankton species and densities in water samples collected from Devil's Lake and East Devil's Lake

sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family	Genus species	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90
<u>Site 7, Devil's Lake, East Bay east--Continued</u>												
Cladocera--Continued												
Total small Cladocera (avg. lgth. < 0.7 mm)	13.1 17.5	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	2.1 1.8	<0.1 .3	3.3 3	0.15 .15	
Average total small Cladocera	15.3	0	0	0	0	0	0	1.95	.175	3.15	.15	
Total large Cladocera (avg. lgth. > 0.7 mm)	31.7 39.8	3.6 1.5	.3 .1	.3 .9	36.6 6.8	1.2 1.2	1 .2	4.6 6.5	10.8 28	36.6 37.8	.4 .2	
Average total large Cladocera	35.75	2.55	.2	.6	21.7	1.2	.6	5.55	19.4	37.2	.3	
Copepoda												
<u>Calanoid</u> juvenile	0.0 0	3.5 3.2	0.0 0	1.7 11.9	167 136.5	2.4 3.2	0.0 2.2	1.4 1.5	82.8 121.1	36 30.9	7.2 9.2	
<u>Calanoid</u> nauplii	0 0	.2 .8	0 0	1.3 17.1	15.1 0	1.2 .6	0 0	18.9 21.5	19.2 23.8	18 23.8	1.2 1	
<u>Calanoid</u> egg	0 0	0 0	0 5.2	0 196.9	0 0	0 0	0 0	0 0	.8 .3	1.2 .6	0 0	
<u>Copepod</u> juvenile	0 0	0 .3	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
<u>Copepod</u> nauplii	0 0	0 0	13.1 3.2	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
<u>Copepod</u> egg	0 0	0 0	6.8 1.7	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
<u>Cyclopoid</u> juvenile	.3 .3	0 0	0 0	0 0	0 0	.6 1.4	1.4 <.1	.2 2.4	2.4 .9	5.1 .6	4.2 .8	

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family Genus species	Date										
		9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	
Site 7, Devils Lake, East Bay east--Continued												
Copepoda--Continued												
<u>Cyclopoid</u> nauplii	31.4	0.0	0.0	0.0	0.0	0.0	0.0	0.8	6	17.4	35.7	
	8.8	0	0	0	0	<.1	.6	6.5	10.5	38.4	10	
<u>Cyclopoid</u> egg	0	0	0	0	0	0	0	0	1.2	0	0	
<u>Diacyclops thomasi</u> male	0	0	0	0	0	0	0	0	0	.1	<1	
	0	0	0	0	0	0	0	0	1.2	.2	0	
<u>Diacyclops thomasi</u> female	0	0	0	0	0	0	0	0	0	.2	.1	
	0	0	0	0	0	0	0	0	0	.6	0	
<u>Diacyclops thomasi</u> egg	0	0	0	0	0	0	0	0	0	5.6	3.7	
	0	0	0	0	0	0	0	0	0	5	3.5	
<u>Diaptomus sicilis</u> male	1.7	5.3	.4	2.6	1.4	5.2	3.5	2.1	5.4	1.5	8	
	1.1	1.3	.9	1.9	1.2	6.6	5.8	1	3.5	2.7	11	
<u>Diaptomus sicilis</u> female	3.8	3.9	.7	2.4	1.4	5.6	2.7	2.1	4.8	7.5	8.2	
	1.3	1.7	1.2	1.6	1.2	5	7	1.8	4.9	7.2	13.6	
<u>Diaptomus sicilis</u> juvenile	17.3	0	0	0	0	0	0	0	0	0	0	
	2.9	0	0	0	0	0	0	0	0	0	0	
<u>Diaptomus sicilis</u> egg	0	0	0	1	0	.4	8.4	15.6	2.5	4.8	.3	
	0	0	0	0	0	.8	18.2	39.8	2.1	1.8	<1	
<u>Hesperodiaptomus</u> <u>nevadensis</u>	0	0	0	0	0	0	0	0	0	0	0	
	0	0	.3	0	0	0	0	0	0	0	0	
<u>Hesperodiaptomus</u> <u>nevadensis</u> male	0	1	0	0	0	0	.1	<.1	.1	.1	.1	
	0	1	0	0	0	.2	.4	.1	.1	<.1	.1	

Table 5.--Zooplankton species and densities in water samples collected from Devil's Lake and East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Family	Genus species	9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90	
			Site 7, Devil's Lake, East Bay east--Continued											
Copepoda--Continued														
<i>Hesperodiaptomus nevadensis</i> female		0.0	0.7	0.0	0.1	0.0	<0.1	0.3	0.1	<0.1	<0.1	0.1	0.1	
<i>Hesperodiaptomus nevadensis</i> egg		0	0	0	0	0	0	1.3	12.2	1	0	0	3.7	
<i>Hesperodiaptomus</i> sp.		0	0	.3	0	0	0	3.6	6.8	0	0	0	3.6	
Total Copepoda adults		4.5	10.9	1.1	5.1	2.8	12.6	18.8	5.35	10.65	9.55	20.15		
Average total Copepoda adults		9.25	7.5	1.75	20.1	2.75	14.1	19.6	4.15	10.525	9.95	24.275		
Total Copepoda juveniles		49	3.7	13.3	3	182.1	4.2	2.2	26.5	121.8	94.8	19		
Average total Copepoda juveniles		30.5	3.85	8.4	16	159.3	4.725	2.525	28.025	139.05	91.05	20		
Total Copepoda eggs		0	0	6.8	1	0	1.7	20.6	16.6	10.1	9.7	4		
Average total Copepoda eggs		0	<.1	4.25	3.1	98.45	3.05	22.8	28.2	8.75	7.8	3.825		
Total Calanoid Copepods (juveniles plus adults)		21.8	14.6	1.4	9.1	184.9	16.6	27.2	41.25	114.85	67.95	28.8		
Average total Calanoid Copepods		19.35	11.35	1.9	36.6	162.05	18.4	34	53.5	135.225	62.25	33.725		

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date										
Family <u>Genus</u> <u>species</u>		9-21-88	2-23-89	5-9-89	6-20-89	8-15-89	10-26-89	2-7-90	5-8-90	8-8-90	9-12-90	10-25-90
<u>Site 7, Devils Lake, East Bay east--Continued</u>												
<u>Copepoda--Continued</u>												
Total Cyclopoid Copepods	31.7	0.0	0.0	0.0	0.0	0.6	2.2	6.2	20.1	41.2	10.65	
Average total Cyclopoid Copepods	9.1	0	0	0	0	1.45	.65	6.55	13.2	42.9	10.8	
	20.4	0	0	0	0	1.025	1.425	6.375	16.65	42.05	10.725	
<u>Rotifera</u>												
<u>Asplanchna</u> sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0
<u>Brachionus quadridentatus</u>	0	0	0	0	0	0	0	0	0	0	.3	0
<u>Brachionus satanicus</u>	0	0	0	0	0	0	0	0	0	257.4	0	0
<u>Epiphantes</u> sp.	3.1	0	0	0	0	0	0	0	0	0	0	0
<u>Filinia longisetata</u>	0	0	0	0	0	0	0	0	0	55.2	2.1	2.4
<u>Keratella quadrata</u>	.3	0	0	0	0	0	0	0	0	61.6	3	3.8
<u>Notommatid rotifer</u> sp.	0	0	0	0	0	0	0	0	0	0	3.3	0
Total Rotifera	3.7	0	0	0	0	0	.3	.1	0	313.7	5.7	2.4
Average total Rotifera	0	.1	0	0	0	0	0	0	0	353.9	4.8	4
	1.85	<.1	0	0	0	.15	<.1	0	0	333.8	5.25	3.2

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date						
Family	Genus species	9-21-88	2-22-89	5-9-89	6-21-89	8-15-89	10-26-89	2-7-90
<u>Site 8, East Devils Lake Inlet</u>								
<u>Amphipoda</u>								
	<i>Gammarus lacustris</i>	0.0	0.0	0.0	0.0	0.0	<0.1	0.0
		0	0	0	0	0	.5	0
	<i>Hyalella azteca</i>	0	0	0	0	.1	.6	0
		0	0	0	0	.1	.6	0
	Total Amphipoda sp.	0	0	0	0	0	.6	<.1
		0	0	0	0	.1	.6	.5
	Average total Amphipoda	0	0	0	<.1	.6	.275	0
<u>Cladocera</u>								
	<i>Ceriodaphnia quadrangula</i>	<0.1	1.7	0.0	0.0	0.0	0.0	0.0
		0	1.4	0	0	0	0	0
	<i>Chydorus sphaericus</i>	1	.1	0	0	0	.4	0
		3	0	0	0	0	0	0
	<i>Daphnia pulex</i>	11.1	0	0	0	0	1.1	0
		29.4	0	.1	0	0	.5	0
	<i>Daphnia similis</i>	16.4	0	.2	20	8.1	0	0
		18	0	.6	22.3	8.1	0	0
	<i>Diaphanosoma birgei</i>	0	.1	0	0	0	0	0
		0	0	0	0	0	0	0
	Total	29	1.9	.2	20	8.1	1.5	0
		50.4	1.4	.7	22.3	8.1	.5	0
	Average total Cladocera	39.7	1.65	.45	21.15	8.1	1	0

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date				
Family	Genus species	9-21-88	2-22-89	5-9-89	6-21-89	8-15-89
Site 8, East Devils Lake Inlet--Continued						
Cladocera--Continued						
Total small Cladocera (avg. 1gth. < 0.7 mm)	1.5 3	1.9 1.4	0.0 0	0.0 0	0.0 0	0.4 0
Average total small Cladocera	2.25	1.65	0	0	0	.2
Total large Cladocera (avg. 1gth. > 0.7 mm)	27.5 47.4	0 0	.2 .7	20 22.3	8.1 8.1	1.1 .5
Average total large Cladocera	37.45	0	.45	21.15	8.1	.8
Copepoda						
<u>Calanoid</u> Juvenile	0.0 0	0.2 .1	0.0 0	4.7 .1	3.8 11.9	0.5 1
<u>Calanoid</u> nauplii	0 0	0 0	0 0	3.7 44.7	0 0	0 1
<u>Calanoid</u> egg	0 0	0 0	0 0	0 111.9	0 0	0 0
<u>Copepod</u> juvenile	0 0	0 0	58.4 44.7	0 0	0 0	0 0
<u>Copepod</u> nauplii	0 0	0 0	70 13.3	0 0	0 0	0 0
<u>Copepod</u> egg	0 0	0 0	28.7 29.9	0 0	0 0	0 0
<u>Cyclopoid</u> nauplii	24.7 24.7	.1 0	0 0	0 0	0 0	0 0

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date						
Family	Genus species	9-21-88	2-22-89	5-9-89	6-21-89	8-15-89	10-26-89	2-7-90
<u>Site 8, East Devils Lake inlet--Continued</u>								
Copepoda--Continued								
	<u>Diacyclops navus</u> female	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	<u>Diacyclops navus</u> male	0	0	0	.1	0	0	0
	<u>Diaptomus sicilis</u> male	15	.1	.9	7.4	10.4	5	3.9
	<u>Diaptomus sicilis</u> male	27	.2	.6	25.5	17.4	7	5.1
	<u>Diaptomus sicilis</u> female	7.3	.3	3	7.9	10.4	6	4.2
	<u>Diaptomus sicilis</u> female	11.5	.3	1.2	29.9	10.3	7	2.4
	<u>Diaptomus sicilis</u> juvenile	30.9	0	0	0	0	0	0
	<u>Diaptomus sicilis</u> juvenile	20.7	0	0	0	0	0	0
	<u>Diaptomus sicilis</u> egg	0	0	0	34.9	0	32	12.9
	<u>Diaptomus sicilis</u> egg	0	0	0	0	0	75.5	10.8
	<u>Hesperodiaptomus nevadensis</u>	.5	0	0	0	0	0	0
	<u>Hesperodiaptomus nevadensis</u>	0	0	0	0	0	0	0
	<u>Hesperodiaptomus nevadensis</u> male	0	0	0	0	0	0	0
	<u>Hesperodiaptomus nevadensis</u> male	0	0	0	0	0	0	0
	<u>Hesperodiaptomus nevadensis</u> female	0	0	0	1.4	1.7	.7	0
	<u>Hesperodiaptomus nevadensis</u> female	0	0	0	0	1.1	.1	.3
	<u>Hesperodiaptomus nevadensis</u> egg	0	0	0	0	0	12.4	0
	<u>Mesocyclops edax</u> female	0	.1	0	0	0	0	0
	<u>Mesocyclops edax</u> female	0	0	0	.1	0	0	0
	<u>Mesocyclops edax</u> juvenile	0	.1	0	0	0	0	0
	<u>Mesocyclops edax</u> juvenile	0	0	0	0	0	0	0

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name	Date						
Family Genus species	9-21-88	2-22-89	5-3-89	6-21-89	8-15-89	10-26-89	2-7-90
Site 8, East Devils Lake inlet--Continued							
Copepoda--Continued							
<u>Mesocyclops edax</u> egg	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Total Copepoda adults	22.8	.5	3.9	16.7	22.5	24.1	8.1
Average total Copepoda adults	38.5	.5	1.8	55.6	29.4	30.9	7.8
Total Copepoda Juveniles	30.65	.5	2.85	36.15	25.95	27.5	7.95
Average total Copepoda Juveniles	45.4	.1	128.4	8.4	3.8	.5	.3
Total Copepoda eggs	55.6	.4	58	44.8	11.9	2	.3
Average total Copepoda Juveniles	50.5	.25	93.2	26.6	7.85	1.25	.3
Total Copepoda eggs	0	0	28.7	34.9	0	44.4	12.9
Average total Copepoda eggs	0	.45	29.3	111.9	0	92.1	10.8
Total Calanoid Copepods (Juveniles plus adults)	53.7	.6	29.9	73.4	0	68.25	11.85
Average total Calanoid Copepods	59.2	.6	3.9	60	26.3	56.6	21.3
Total Cyclopoid Copepods	56.45	.6	1.8	100.2	41.3	108.4	18.9
Average total Cyclopoid Copepods	24.7	.3	2.85	80.1	33.8	82.5	20.1

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name					Date			
Family	Genus species	9-21-88	2-22-89	5-9-89	6-21-89	8-15-89	10-26-89	2-7-90
Site 8, East Devils Lake inlet--Continued								
Rotifera								
	<u>Asplanchna</u> sp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0	0	0	0	0	<.1	0
	<u>Atrochus tentaculatus</u>	0	0	0	0	0	0	.5
		0	0	0	0	0	0	0
	<u>Epiphantes</u> sp.	0	0	0	0	0	0	.6
		0	0	0	0	0	0	.9
	<u>Filinia longiseta</u>	0	0	0	0	0	0	0
		1.5	0	0	0	0	0	0
	<u>Keratella quadrata</u>	0	1	.1	.5	0	.4	.1
		0	.9	0	0	0	0	0
	<u>Notholca acuminata</u>	0	0	0	0	0	.8	0
		0	0	0	0	0	0	0
Total		1	1	.1	.5	0	2	.7
		2	.9	0	0	0	.55	.9
Average total		1.5	.95	<.1	.25	0	1.275	.8
Rotifera								

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date		Organism scientific name		Date	
Family	Genus species	2-7-90	5-9-90	Family	Genus species	2-7-90	5-9-90
<u>Site 9, Devils Lake, Fort Totten Bay</u>							
<u>Site 9, Devils Lake, Fort Totten Bay--Continued</u>							
Cladocera				Cladocera--Continued			
<u>Cladoceran</u> <u>Juvenile</u>	4	.2	1.5	0.0	Total large Cladocera (avg. 1gth. > 0.7 mm)	8	2.5
<u>Chydorus sphaericus</u>	0	0	.1	<.1		8	2.05
<u>Daphnia pulex</u>	4	4.8	.5	.1	Average total large Cladocera	8	<.1
<u>Daphnia galeata mendotae</u>	0	0	0	<.1	Copepoda		
<u>Daphnia similis</u>	4	3.2	2	0	<u>Calanoid</u> Juvenile	0.0	1.5
<u>Diaphanosoma birgei</u>	0	0	0	0		0	5.5
<u>Eubosmina hagmanni</u>	.8	.8	1	<.1	<u>Calanoid</u> nauplii	22.4	52
Total	12.8	9	4.6	25.7		20.8	33.5
Average total Cladocera	10.9		4.35	27.62	<u>Calanoid</u> egg	0	24
Total small Cladocera (avg. 1gth. < 0.7 mm)	4.8	1	2.1	25.6	<u>Cyclopoid</u> Juvenile	73.6	42
Average total small Cladocera	2.9		2.075	27.55		50.4	32.5
					<u>Cyclopoid</u> nauplii	32.8	126
						16	126.5
					<u>Diacyclops thomasi</u> male	.8	88.5
						3	117.6
						4	0
					<u>Diacyclops thomasi</u> female	2.4	7
						4	0
					<u>Diacyclops thomasi</u> egg	6.5	0
						121.6	129
						48	0
							242

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date		Organism scientific name		Date	
Family	Genus species	2-7-90	5-9-90	Family	Genus species	2-7-90	5-9-90
Site 9, Devils Lake, Fort Totten Bay--Continued							
Copepoda--Continued							
				Average total Copepoda adults	59.6	14.6	39.65
<u><i>Diaptomus sicilis</i></u> male	37.6	2	12	Total Copepoda Juveniles	128.8	221.5	291
	24	1	15.4		87.2	198	375.2
<u><i>Diaptomus sicilis</i></u> female	28	3	18	Average total Copepoda Juveniles	108	209.75	333.1
	21.6	.5	25.2	Total Copepoda eggs	147.2	181.5	81
<u><i>Diaptomus sicilis</i></u> egg	25.6	52.5	57		51.3	255	106
	3.3	13	100.8	Average total Copepoda eggs	99.25	218.25	93.5
<u><i>Eucyclops speratus</i></u>	0	0	0	Total Calanoid Copepods (Juveniles plus adults)	113.6	111	271.6
female	0	.2	0		69.7	53.7	356.3
<u><i>Hesperodiaptomus nevadensis</i></u> male	0	0	<.1	Average total Calanoid Copepods	91.65	82.35	313.95
	0	0	<.1	Total Cyclopoid Copepods	109.6	179.5	112.5
<u><i>Hesperodiaptomus nevadensis</i></u> female	0	0	<.1		71.2	170.2	162.9
<u><i>Hesperodiaptomus nevadensis</i></u>	0	0	0	Average total Cyclopoid Copepods	90.4	174.85	137.7
<u><i>Mesocyclops edax</i></u> male	0	0	1.5				
	0	0	.5				
<u><i>Mesocyclops edax</i></u> female	0	1.5	4.5				
	0	.5	1.4				
<u><i>Mesocyclops edax</i></u> egg	0	0	0				
	0	0	1.8				
Total Copepoda adults	68.8 50.4	16.5 12.7	36.1 43.2				

Table 5.--Zooplankton species and densities in water samples collected from Devil's Lake and East Devil's Lake sampling sites, September 1988 through October 1990--Continued

Family Genus Species	Organism scientific name		Date 2-7-90	Date 5-9-90	Date 8-8-90	Organism scientific name	Family Genus Species	Date 5-9-90	Date 8-8-90	Date 9-12-90	Date 10-25-90
Site 9, Devil's Lake, Fort Totten Bay--Continued											
Rotifera											
<i>Brachionus havanaensis</i>	0.0	0.0	574.5	840		<i>Gammarus lacustris</i>	0.0	0.0	0.0	0.0	<.1
<i>Brachionus plicatilis</i>	0	0	79.5	247.8		<i>Hyalella azteca</i>	0	0	0	0	<.1
<i>Brachionus satanicus</i>	0	0	4.5			Total	0	0	0	0	
<i>Brachionus urceolaris</i>	2.4	4	0			Average total Amphipoda	0	0	0	0	<.1
<i>Filinia longiseta</i>	1.6	4.5	0								
<i>Keratella cochlearis</i>	0	0	108	280							
<i>Keratella quadrata</i>	.1	0	234	404.6		<i>Cladocera</i>	0.1	0.0	0.0	0.0	<.1
<i>Philodina</i> sp.	.8	<.1	1.5	0		<i>Cladoceran Juvenile</i>	0	0	.1	.1	
	3.2	0				<i>Daphnia pullex</i>	<.1	1.4	.4	.1	<.1
	0	1	0			<i>Daphnia similis</i>	.2	1.8	.2	.2	<.1
Total	3.2	5.05	1,002	1,772.4		Total	.1	4	.3	.7	0
Average total Rotifera	4.9	4.55									
	4.05	4.8	1,387.2								
						Total small Cladocera (avg. lgth. < 0.7 mm)	.1	0	0	0	<.1

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date		Organism scientific name		Date	
Family	Genus species	5-9-90	8-8-90	Family	Genus species	5-9-90	8-8-90
Site 10, East Devils Lake main bay--Continued							
Cladocera--Continued				Copepoda--Continued			
Average total small Cladocera	<0.1	0.0	<0.1	<u>Diacyclops thomasi</u> female	0.3 <.1	0.0 0	<0.1 0
Total large Cladocera (avg. lgth. > 0.7 mm)	.15 .3	5.4 7	.7 .9	<u>Diaptomus sicilis</u> male	3.9 3.4	1 2	.5 .8
Average total large Cladocera	.225	6.2	.8	<u>Diaptomus sicilis</u> female	3.2 2.5	1.6 1.2	.93 1.1
copepoda				<u>Diaptomus sicilis</u> egg	74.6 43.5	2 2.8	3.8 5.2
<u>Calanoid</u> juvenile	3.2 3	23.4 22	22.4 28.2	<u>Hesperodiaptomus nevadensis</u> male	0 0	<.1 <.1	.1 <.1
<u>Calanoid</u> nauplii	84.4 73.9	20.4 20	8.9 12.3	<u>Hesperodiaptomus nevadensis</u> female	<.1 <.1	<.1 .1	.1 .1
<u>Calanoid</u> egg	0	0	.6	<u>Hesperodiaptomus nevadensis</u> egg	.9 .4	0 0	0 0
<u>Cyclopoid</u> juvenile	1.4 .4	0 0	1.7 .2	<u>Mesocyclops edax</u> female	.1 0	0 0	0 0
<u>Cyclopoid</u> nauplii	48.1 41.3	3.6 1.4	2.1 1.3	Total Copepoda adults	8.55 6.45	2.7 3.35	14.6 9.25
<u>Cyclopoid</u> egg	1.9 0	0 0	0 0	Average total Copepoda adults	7.5	3.025	1.89
<u>Diacyclops thomasi</u> male	.1 <.1	0 0	0 <.1	Total Copepoda juveniles	137.1 118.6	47.4 43.4	33.4 42
							8.1 7.1

Table 5.--Zooplankton species and densities in water samples collected from Devils Lake and East Devils Lake sampling sites, September 1988 through October 1990--Continued

Organism scientific name		Date				Organism scientific name				Date											
Family	Genus Species	5-9-90 8-8-90 9-12-90 10-25-90				Family	Genus Species	5-9-90 8-8-90 9-12-90 10-25-90				Family	Genus Species	5-9-90 8-8-90 9-12-90 10-25-90							
<u>Site 10, East Devils Lake main bay--Continued</u>																					
Copepoda--Continued																					
Average total Copepoda juveniles		127.85	45.4	37.7	7.6	Brachionus	<u>havanensis</u>	0.0	0.2	0.0	0.0	0.0	0.0								
Total Copepoda eggs		77.4	2	5.5	1.1	Brachionus	<u>urceolaris</u>	.2	0	0	0	0	0								
Average total Copepoda eggs		43.9	3.4	7.1	1.3	Total		0	0	0	0	0	0								
Total Calanoid Copepods (Juveniles plus adults)		60.65	2.7	6.3	1.2	Average total Rotifera		.2	.2	0	0	0	0								
Total Calanoid Copepods		170.25	48.5	36.73	22.8	Total		0	0	0	0	0	0								
Average total Calanoid Copepods		126.75	48.15	47.75	16.45	Average total Rotifera		.1	.1	0	0	0	0								
Total Cyclopoid Copepods		50	3.6	2.15	0																
Average total Cyclopoid Copepods		41.8	1.4	1.55	0																
		45.9	2.5	1.85	0																

Table 6.--Concentrations of nutrient constituents in bottom-material
 samples collected from Devils Lake and East Devils Lake sampling
 sites, October 1989 through October 1990

[<, less than]

Date	Total in bottom material (milligrams per kilogram)			
	Nitrogen			
	Nitrite plus Nitrate as N	Ammonia as N	Ammonia plus organic as N	Phosphorus, as P
<u>Site 1, Devils Lake, West Bay</u>				
Nov. 7, 1989	<10	55	12,000	510
May 9, 1990	<2.0	34	7,500	700
August 7, 1990	<2.0	190	15,000	570
October 24, 1990	<2.0	140	12,000	600
<u>Site 2, Devils Lake, Sixmile Bay</u>				
October 25, 1989	26	26	6,400	710
May 9, 1990	<2.0	20	4,200	850
August 7, 1990	<2.0	110	5,900	620
October 24, 1990	<2.0	100	6,400	650
<u>Site 3, Devils Lake, Creel Bay</u>				
October 25, 1989	21	46	11,000	1,100
May 8, 1990	<2.0	25	11,000	1,000
August 7, 1990	<2.0	110	3,000	780
October 24, 1990	<2.0	200	9,100	990
<u>Site 4, Devils Lake, Main Bay</u>				
October 25, 1989	60	110	9,600	970
May 9, 1990	<2.0	41	6,800	1,100
August 7, 1990	<2.0	190	6,300	810
October 24, 1990	<2.0	100	9,600	1,000
<u>Site 5, Devils Lake, Mission Bay</u>				
October 26, 1989	<10	47	5,900	650
May 8, 1990	<2.0	24	8,000	830
August 7, 1990	<2.0	120	5,200	790
October 24, 1990	<2.0	69	6,900	790

Table 6.--Concentrations of nutrient constituents in bottom-material samples collected from Devils Lake and East Devils Lake sampling sites, October 1989 through October 1990--Continued

Date	Total in bottom material (milligrams per kilogram)			
	Nitrite plus Nitrate as N	Ammonia as N	Ammonia plus organic as N	Phosphorus, as P
<u>Site 6, Devils Lake, East Bay west</u>				
October 26, 1989	16	46	10,000	790
May 8, 1990	<2.0	20	7,800	850
August 8, 1990	<2.0	110	7,400	780
October 25, 1990	<2.0	28	8,000	800
<u>Site 7, Devils Lake, East Bay east</u>				
October 26, 1989	22	12	4,900	660
May 8, 1990	<2.0	21	4,800	910
August 8, 1990	<2.0	130	5,300	690
October 25, 1990	<2.0	71	6,600	880
<u>Site 8, East Devils Lake inlet</u>				
November 8, 1989	<10	<10	540	200
<u>Site 9, Devils Lake, Fort Totten Bay</u>				
May 9, 1990	<2.0	85	12,000	800
August 8, 1990	<2.0	210	9,200	720
<u>Site 10, East Devils Lake main bay</u>				
May 9, 1990	<2.0	6.7	6,100	690
August 8, 1990	<2.0	69	6,200	610
October 25, 1990	<2.0	4.0	7,700	660