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Lake Ontario Long Term Biological Monitoring Program: 1981, 1982 Data Base

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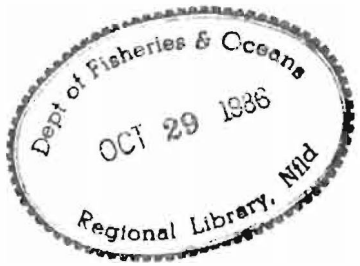

Lake Ontario Long Term

Biological Monitoring Program:

1981, 1982 Data Base

by

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ABSTRACT

Johannsson, Ora E., R. M. Dermott, R. Feldkamp, and J. E. Moore, 1985. Lake Ontario Long Term Biological Monitoring Program: 1981, 1982 data base. Can. Data Rep. Fish. Aquat. Sci. 552 i-iv, 1-103.

The Bioindex, or Long Term Biological Monitoring Program, was developed to: 1) determine normal seasonal patterns and annual ranges of abundance, community structure, and when possible, productivity of the biological components - phytoplankton, zooplankton, and benthos; 2) relate the biological components to variations in the physical, nutrient, and biological environment; and, 3) assess the adopted sampling strategy for long term monitoring. The data bases from the first two years are summarized in this document.

RESUME

Johannsson, Ora E., R. M. Dermott, R. Feldkamp, and J. E. Moore, 1985. Lake Ontario Long Term Biological Monitoring Program: 1981, 1982 data base. Can. Data Rep. Fish. Aquat. Sci. 552.

Le Bioindex, ou programme de surveillance biologique à longue date, a trois objectifs principaux: 1) déterminer les tendances saisonnières normales et les variations annuelles de la quantité, de la structure des communautés et, si c'est possible, de la productivité des composants biologiques (phytoplancton, zooplancton et benthos); 2) établir la relation entre les composants biologiques et les variations de l'environnement physique, biologique et chemique; 3) évaluer la valeur de la méthode d'échantillonnage utilisée pour la surveillance à long terme. Les données récoltées au cours des deux premières années de l'étude sont résumées dans ce rapport.

INTRODUCTION

The Bioindex, or Long Term Biological Monitoring Program is a preliminary or experimental program in biological monitoring on Lake Ontario. The attempt to conduct more intensive biological monitoring was prompted by the International Joint Commission's acceptance in 1978, of a broader definition of lake health encompassing all components of the ecosystem. Biological monitoring is an integrative monitoring strategy. Ecosystems respond to stress with compensatory changes in community structure and function mediated at the population level e.g., Boesch and Rosenberg (1981). Therefore, changes in ecosystem health (or state) can be detected by monitoring changes in the biotic communities (Nicholls et al., 1980; Dillon et al., 1978).

An analysis of the first two years of data and assessment of the program is presented by Johannsson et al. (1985). The present report summarizes the data on which that report is based.

METHODS

STATION SELECTION

Four Bioindex sampling stations were selected to represent distinct regions or influences within the open water area of Lake Ontario based on the earlier work of Patalas (1969), Munawar and Nauwerck (1971), Stadelmann et al. (1974), and El-Shaarawi and Kwiatkowski (1977). Station 41 is located in the more stable, less productive, mid-lake region; station 12, is in the area of upwelling events on the north shore of the western basin; station 81 is in the more productive eastern basin; station 93 is within the influence of the Niagara River, the single largest source (84 percent) to the lake (Fig. 1). In order to maximize the continuity of data in the Federal Government data base on Lake Ontario, the exact locations were chosen to coincide with permanent, long-term surveillance stations.

SAMPLING PROGRAM

During the 1970s the Inland Waters Directorate (IWD) conducted several spatially-intensive, seasonal (monthly) surveys of Lake Ontario for physical, chemical, and biological parameters. The biological parameters measured were particulate organic carbon (POC), particulate organic nitrogen (PON), and chlorophyll a (CHLA). The results of these surveys indicated that there was much more variability in the temporal than in the spatial data (El-Shaarawi and Kwiatkowski, 1977). Minns (1984) obtained a similar result with zooplankton data. Consequently, the Bioindex Program was formulated to study a few sites in detail. Samples were collected weekly from mid-March until the

end of November. Table 1 presents an overview of the sampling regime, and indicates the parameters measured, the sampling depths, and the type of samples collected. All physical and chemical parameter measurements were obtained from discrete depth samples, while zooplankton and phytoplankton were collected with integrating samplers. Chemical biomass indicators such as POC, PON and CHLA were measured in both discrete and integrated samples.

All samples were collected in duplicate. The filtering and sample preparations were completed on board ship and the chemical analyses were performed later by the Great Lakes Water Quality Laboratory (IWD). In May 1982, GF/C filters used to measure chlorophyll concentrations were replaced by the more efficient Millipore filters (Munawar et al., 1982). The analyses were then conducted by personnel of the Great Lakes Fisheries Research Branch. Zooplankton were identified and enumerated by Dr. W. T. Geiling, phytoplankton by Mr. D. Beliveau, and benthos by Dr. S. Kakonge.

The following is a list of the parameters studied with their methods of measurement. All chemical determinations are described in much greater detail in Philbert and Traversy (1973) or Inland Waters Directorate (1979).

A) **Physical Parameters**

Temperature: (EBT) a temperature profile from surface to bottom was obtained with an electronic bathythermograph (°C).

Sounding Depth: The water depth was determined acoustically with an echo sounder. (m)

Dissolved Oxygen: ($DISSO_2$) The oxygen concentration of the water was determined by Winkler titration using the modified Winkler iodometric measure. ($gO_2.m^{-3}$)

Euphotic Depth: (EU) a vertical profile of horizontal transparency was obtained with a transmissometer using a 0.25 m pathlength (CSS Bayfield) or a 1 m pathlength (CSS Limnos) and Wratten 45 blue-green filters. The following relationships, developed by Dr. J. Jerome (National Water Research Institute, Burlington, Ontario, pers. comm.), were used to calculate beam and light attenuation:

Beam attenuation (C) = $\text{Ln}\left(\frac{100}{T}\right)^{1/P}$ where: T = transmission reading
P = pathlength

To convert $C_{1.0}$ to $C_{.25}$:

TRANS |30% $C_{.25} = 0.882 * C_{1.0} - 0.431$

TRANS 30% $C_{.25} = 0.984 * C_{1.0} - 0.947$

Light Attenuation (K) = $0.185 * C_{.25} + 0.02$

The depth of one percent light penetration was then calculated from the following equation:

$EU = \frac{\ln(Io) - \ln x\ (Ieu)}{K}$ where: Io = 100% subsurface radiation

Ieu = % radiation at depth EU (1%)

Secchi Disc Depth: (SECCHI) The vertical transparency was measured as the depth of disappearance of a 30 cm diameter white disc. (m)

Conductivity: (COND) Specific conductance was measured with a conductivity meter at ambient temperature and converted to 25°C. (umhos.cm^{-1})

pH: (pH) Measurements were made with a radiometer model pH52 digital readout pH meter.

Alkalinity: (ALKA) The sample was filtered through a GF/C filter, mixed with HCl, and then mixed with oxygen. The resulting CO_2 was separated from the liquid phase and measured with an infrared detector. ($gCaCO_3.m^{-3}$)

Chloride: (CL) The chloride concentrations of filtered samples (0.45 u membrane filters) were determined using the autoanalyzer mercuric thiocyanate method. ($gCl.m^{-3}$)

B) Nutrient Parameters

Total Phosphorus: (TP) A 110 ml water sample was preserved with 1 ml of 30% H_2SO_4 and later digested in acid persulfate. The phosphorous concentration was determined colorimetrically using the ammonium molybdate-stannous chloride method. ($gP.m^{-3}$)

Soluble Reactive Phosphorus: (SRP) A 110 ml sample was filtered through a 0.45 u membrane filter and stored at 5°C. On return to the laboratory it was analyzed in the autoanalyzer using the ammonium molybdate-stannous chloride method. ($gP.m^{-3}$)

Total Filtered Phosphorus: (TFP) A 110 ml water sample was filtered through a 0.45 u membrane filter, preserved with 1 ml of 30% H_2SO_4, and analyzed as per TP. ($gP.m^{-3}$)

Total Kjeldahl Nitrogen: (TKJN) A 110 ml water sample was filtered through a 0.45 u membrane filter. The filtrate was digested with H_2SO_4 and an oxidant at 300°C in an autoanalyzer system. The concentration of the resultant $(NHK_4)_2SO_4$ was determined colorimetrically using salicylate and dichloroisocyanurate. ($gN.m^{-3}$)

Ammonia: (NH_3) A 110 ml sample was filtered through a 0.45 u membrane filter and the N content determined by an automated alkaline phenol method. ($gN.m^{-3}$)

Nitrate Nitrite: (NO_3NO_2) The sample was filtered through a 0.45 u membrane filter and the N content determined by the autoanalyzer cadmium reduction method. ($gN.m^{-3}$)

Soluble Reactive Silica: (SRS) The sample was filtered through a 0.45 u membrane filter and the Si concentration determined by the autoanalyzer heteropoly-blue method. ($gSiO_2.m^{-3}$)

C) Biological Parameters

Dissolved Organic Carbon: (DOC) The concentration of DOC in a GF/C-filtered sample was determined by an automated ultraviolet method. ($gC.m^{-3}$)

Particulate Organic Carbon: (POC) The sample was filtered through a precombusted (500°C) GF/C filter. The carbon residue on the filter was analyzed using a Hewlett-Packard model 185 CHN Analyzer. ($gC.m^{-3}$)

Particulate Organic Nitrogen: (PON) The particulate nitrogen concentration was determined on the same filter, using the same equipment as the POC. ($gN.m^{-3}$)

Seston Dry Weight: (SDW) Dry weight was determined for integrated epilimnetic samples. The particulate matter retained by a precombusted (500°C) GF/C filter was dried to constant weight at 105°C. ($g.m^{-3}$)

Suspended Inorganic Matter: (SIM) The filter in the above analysis (SDW) was combusted at 550°C, cooled and weighed. The SIM was calculated from the difference. ($g.m^{-3}$)

Chlorophyll a Uncorrected (CHLAU): Two methods were employed. From March 1981 until May, 1982, the GF/C filtration/acetone extraction method described by Strickland and Parsons (1968) was used. After that date the samples were filtered through 0.45 u Millipore filters which required the acetone extraction period to be extended to 17 h. ($mg.m^{-3}$)

Chlorophyll a Corrected (CHLAC): The phaeophytin concentration was determined by acidification of the above sample (Strickland and Parsons, 1968), and the CHLAC concentration determined by difference (CHLAU-phaeophytins). ($mg.m^{-3}$)

Phytoplankton: Integrated 250 ml whole-water samples were preserved with Lugol's solution, and the phytoplankton identified and enumerated using the Utermöhl inverted microscope technique (Utermöhl 1958, in Munawar et al., 1974). A 15 ml aliquot was settled and examined using light/dark illumination and a Prior 29331 microscope fitted with Wild optics and condenser. At least 200 units/sample were counted at 300 x, 600 x, and 1500 x magnification by the strip method providing an estimate of total cell numbers within ± 14 percent (Lund et al., 1958), and cell measurements taken. Phytoplankton volumes were calculated using approximations to geometric shapes, and converted to biomass assuming a density of one. The standard deviation of the total biomass of replicate hauls

was ± 22.8 percent in 1982 (N=33 pairs) and ± 15.8 percent in 1981 (N=17 pairs). The most commonly used taxonomic references were Anton and Duthie (1981), Findlay and Kling (1979), Haworth and Barber (1981), Hustedt (1930), Lind and Brook (1980), Nygaard (1977), Patrick and Reimer (1966, 1975), Prescott (1970), Prescott et al., (1975), Schoeman and Archibald (1976-1979), Smith (1950), Taft and Taft (1971) and Webber (1971).

Zooplankton: Samples were collected with a 30 cm diameter 70 u nitex mesh net. This net was lost in September, 1982 and replaced by a 25 cm diameter 64 u mesh net for the remainder of the year. The net was lowered to the same depth as the phytoplankton samples, and hauled vertically through the water column at 0.5 $m.sec^{-1}$. The zooplankton were preserved in four percent sugared formaldehyde, and identified under a dissecting microscope using a stratified counting system (Cooley et al., 1986). The adult calanoids and cyclopoids, and the cladocera were identified, and the number of individuals and eggs/species recorded. The calanoid and cyclopoid nauplii and copepodites were counted, but not identified to species.

Benthos: During 1981 and 1982 three stations were sampled monthly: stations 81, 93a (Niagara - 70 m), and 41. During 1983, samples were only collected during April, July, and November. Stations 12 and 93 were also included. Five Ponar grab samples were collected each date and sieved using a 250 u screen. Samples collected during April, July, and November were examined to enumerate all species present, and determine their dry biomasses.

Pontoporeia sp. was enumerated in all samples and sorted into 1 mm size classes. The average length of each 1 mm size class of Pontoporeia sp. was measured, and length-weight relationships calculated for each station. Enumeration also included the number of gravid females present, numbers of eggs per female, and number of young present each month.

Using the mean lengths, growth rates of the young of the year were calculated. From the monthly numbers and weights of each size class, the biomass (standing stock) at each station was calculated as well as the total production of the populations based on the size frequency method (Krueger and Martin, 1980).

The respiration rates of different-sized Pontoporeia sp. were measured in laboratory experiments. Populations from each station were maintained in their native sediments at 5 and 10°C for several weeks. Respiration was measured using the micro-Winkler technique and was related to animal size and temperature.

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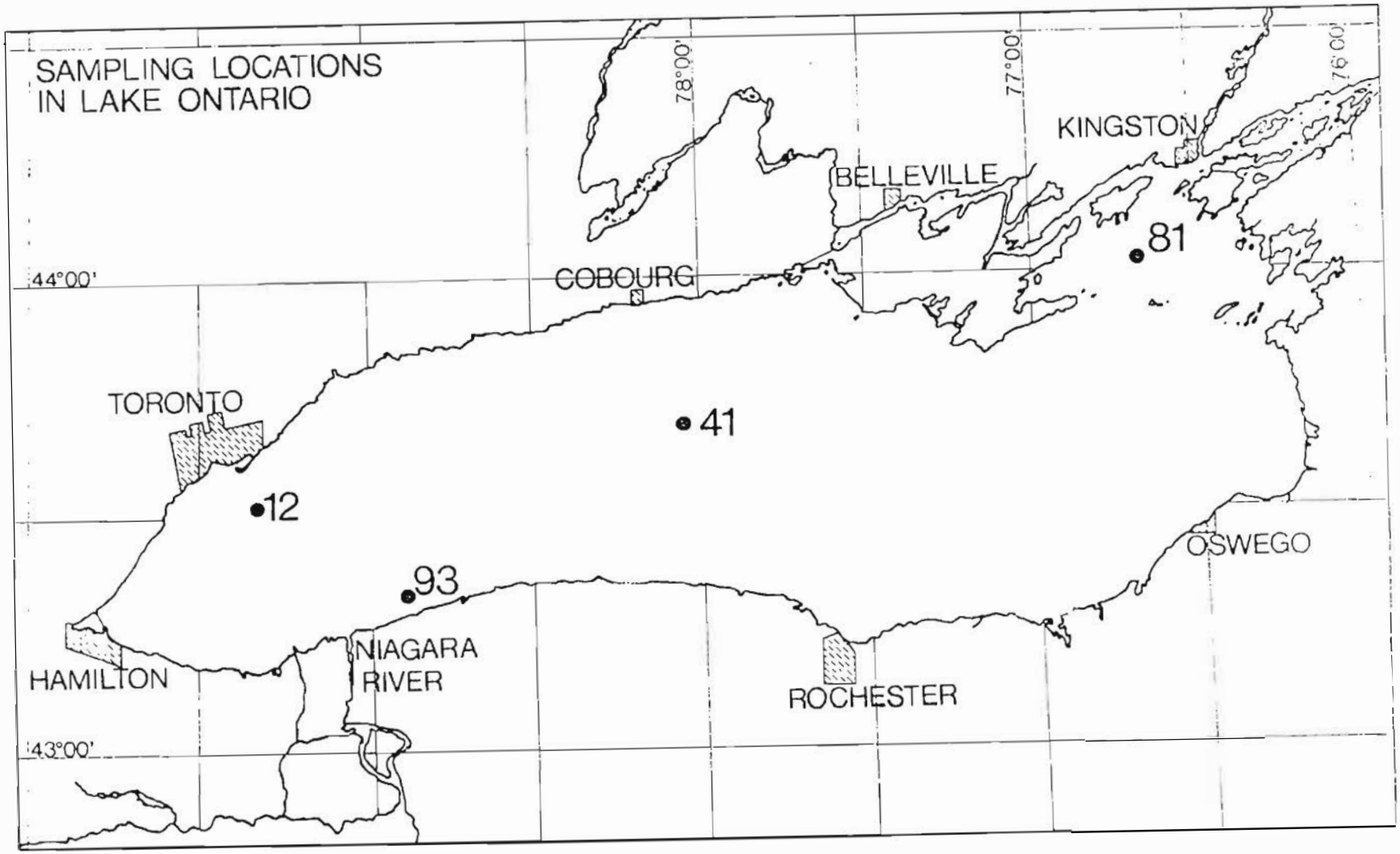

Figure 1. Location of Bioindex sampling sites in Lake Ontario.

TABLE 1: Bioindex sampling regime and number of samples at stations 12, 41, 81 and 93 in 1981 and 1982. Group A parameters were measured from integrated water samples. Group B parameters were taken with a rosette sampler at discrete depths.

Sampling Regime	Sampling Depth(m)	Station No. and Sounding Depth 12 110m	41 128m	81 37m	93 17-20m
Isothermal Conditions					
Discrete Depth Samples	1	2	2	2	2
	10	2	2	2	2
	25	2	2	-	-
Integrated Samples	0 to 20	2	2	2	2
Stratified Conditions					
Discrete Depth Samples	1	2	2	2	2
	1 m above thermocline	2	2	2	2
Integrated Samples	0 to 1 m above thermocline or 0 to 20 m whichever was less	2	2	2	2

Group A: Phytoplankton, Zooplankton, Chla, POC, PON, Ash W, Dry W.
Group B: pH;, Alka, Cond, TP, TFP, SRP, TKJN, PON, NH_3, NO_3NO_2, Cl, SRS, Chla, POC.

TABLE 2a. Mean epilimnetic values of the physical parameters measured at four stations in 1981 and 1982.

Year	Station	Julian Date	EBT °C	Alka G·M^{-3}	DissO_2 G·M^{-3}	CL G·M^{-3}	Mixing Depth M	Euphotic Depth M	Ratio DZDM
1981	12								
		75	1.7	94.6	13.6	26.5	102.0	-99.9	-99.9
		83	1.8	96.0	13.7	26.2	102.0	37.5	.4
		89	2.0	96.4	13.9	27.3	102.0	30.9	.3
		96	2.6	97.0	14.0	27.5	102.0	27.9	.3
		105	2.4	96.7	13.6	27.4	102.0	29.2	.3
		111	2.8	97.9	13.7	27.1	102.0	32.9	.3
		117	3.0	97.7	13.6	27.2	102.0	29.2	.3
		124	2.9	91.0	13.7	26.9	102.0	32.9	.3
		131	3.3	91.7	13.6	26.7	102.0	27.6	.3
		140	3.9	94.3	13.6	27.1	102.0	26.2	.3
		149	6.8	93.2	14.3	26.7	7.0	26.2	3.7
		154	9.4	93.8	14.7	26.8	6.0	16.8	3.0
		160	10.7	92.8	14.0	27.2	7.0	11.9	1.7
		166	10.8	87.7	15.1	26.9	6.5	9.1	1.4
		173	15.9	81.8	13.8	26.8	6.0	8.9	1.5
		182	13.4	92.3	13.6	27.4	7.0	12.7	1.8
		187	20.2	86.5	11.9	26.1	3.0	19.8	6.6
		194	19.9	87.5	12.6	27.8	6.0	16.2	2.7
		202	15.0	90.5	13.1	27.1	4.0	9.7	2.4
		208	19.9	81.7	10.4	26.1	6.0	7.5	1.3
		216	21.0	80.5	11.9	26.2	4.0	8.4	2.1
		222	20.2	84.5	10.9	26.2	9.0	7.0	.8
		229	19.4	85.9	9.1	28.3	10.0	10.0	1.0
		236	20.7	84.7	10.2	26.8	11.0	9.1	.8
		245	21.0	85.2	9.9	25.5	12.0	15.1	1.3
		251	20.1	82.8	10.4	26.2	20.0	13.6	.7
		257	20.0	83.9	11.1	26.3	12.0	13.5	1.1
		266	15.0	90.6	10.1	26.9	31.0	14.6	.5
		272	14.2	90.5	10.2	26.3	26.0	16.2	.6
		286	7.0	96.4	11.6	27.1	102.0	19.0	.2
		292	7.7	95.1	11.8	26.3	102.0	20.7	.2
		299	6.7	95.2	11.7	26.9	102.0	23.7	.2
		306	8.4	92.9	11.8	26.6	33.0	18.2	.6
		314	7.6	94.2	11.8	26.6	102.0	13.6	.1
		321	6.6	95.3	12.2	26.7	102.0	24.9	.2
		327	5.5	93.1	12.1	26.9	102.0	21.1	.2
		334	5.1	94.1	12.0	27.1	102.0	26.2	.3
		341	5.3	94.0	12.1	27.1	102.0	19.9	.2

TABLE 2a. Continuing

Year	Station	Julian Date	EBT °C	Alka G·M^{-3}	DissO_2 G·M^{-3}	CL G·M^{-3}	Mixing Depth M	Euphotic Depth M	Ratio DZDM
1981	41								
		78	1.2	96.0	14.2	26.2	126.0	-99.9	-99.9
		82	1.4	97.0	14.0	26.0	126.0	27.6	.2
		90	1.4	96.9	14.3	27.3	126.0	22.6	.2
		99	1.7	96.0	14.2	27.1	126.0	45.0	.4
		106	2.0	98.0	14.2	27.4	126.0	26.2	.2
		112	2.1	98.0	14.0	26.2	126.0	23.7	.2
		118	2.4	97.0	13.8	27.0	126.0	26.4	.2
		125	2.6	92.2	14.0	26.8	126.0	29.2	.2
		133	3.1	92.3	13.5	26.6	126.0	27.6	.2
		141	3.6	94.8	13.4	27.7	126.0	27.8	.2
		147	3.7	93.9	13.7	26.8	126.0	30.9	.2
		154	4.9	92.0	13.5	26.8	126.0	25.0	.2
		161	11.2	92.5	13.1	27.0	7.0	12.7	1.8
		167	13.2	88.0	13.4	27.0	9.5	15.7	1.7
		174	9.8	94.0	12.9	26.6	11.0	14.6	1.3
		181	15.2	92.5	12.5	27.2	14.0	14.6	1.0
		188	18.1	86.4	12.6	27.5	6.0	11.6	1.9
		194	18.2	89.3	11.8	27.4	5.0	13.9	2.8
		203	18.2	84.7	11.7	26.2	6.0	12.3	2.1
		208	19.3	85.0	11.4	26.6	7.0	10.3	1.5
		217	20.5	80.0	9.9	26.2	9.0	7.5	.8
		223	22.0	81.4	9.8	26.5	5.0	7.8	1.6
		231	19.8	95.4	9.4	26.9	6.0	10.0	1.7
		237	20.3	83.6	9.7	26.3	9.0	12.3	1.4
		244	20.9	83.5	10.0	26.2	10.0	10.9	1.1
		259	18.1	85.6	10.4	18.0	12.0	16.2	1.4
		268	14.0	91.8	10.5	18.8	22.0	19.8	.9
		272	13.6	91.0	10.3	26.6	30.0	19.0	.6
		279	10.6	92.5	10.4	26.9	28.0	18.1	.6
		287	9.2	93.3	11.3	26.7	28.0	20.7	.7
		294	9.1	92.4	11.2	26.4	46.0	21.6	.5
		300	8.7	92.9	11.1	26.7	63.0	24.9	.4
		307	9.4	91.3	11.5	26.5	43.0	22.6	.5
		315	8.1	94.3	11.9	26.5	50.5	24.9	.5
		322	8.6	92.9	11.5	26.5	41.0	20.8	.5
		328	7.9	91.0	11.5	26.7	52.5	22.1	.4
		335	6.5	91.4	11.6	27.0	126.0	29.2	.2
		345	6.0	93.0	12.0	27.8	126.0	19.9	.2

TABLE 2a. Continuing

Year	Station	Julian Date	EBT °C	Alka $G \cdot M^{-3}$	DissO_2 $G \cdot M^{-3}$	CL $G \cdot M^{-3}$	Mixing Depth M	Euphotic Depth M	Ratio DZDM
1981	81								
		75	.3	96.3	15.6	24.3	35.0	22.8	.7
		83	.6	96.0	14.7	25.0	35.0	12.3	.4
		90	1.4	96.7	15.0	26.5	35.0	16.0	.5
		98	2.2	97.0	14.7	26.1	35.0	25.3	.7
		107	3.4	98.0	13.9	26.2	35.0	15.1	.4
		112	4.0	97.4	13.6	26.2	29.5	15.1	.5
		118	4.1	97.0	13.4	26.5	35.0	16.2	.5
		125	5.5	92.2	13.5	26.3	35.0	22.6	.6
		132	6.2	92.7	12.9	26.4	35.0	22.6	.6
		142	8.6	95.4	12.4	27.0	35.0	14.8	.4
		148	11.9	93.0	12.3	25.8	7.0	14.6	2.1
		155	12.1	97.3	12.4	26.1	13.2	14.6	1.1
		161	11.5	93.8	11.7	25.6	10.0	15.6	1.6
		167	14.0	90.9	11.7	25.7	6.8	16.3	2.4
		174	13.5	93.7	11.1	25.1	16.0	17.5	1.1
		181	15.5	93.1	11.2	25.5	19.0	14.1	.7
		188	19.5	86.3	12.1	25.7	5.0	11.6	2.3
		195	20.1	87.7	10.4	25.7	10.0	10.2	1.0
		204	17.0	84.5	9.9	24.5	9.0	7.3	.8
		211	19.6	85.0	9.1	25.9	18.0	15.1	.8
		217	21.0	82.0	9.6	26.0	15.0	8.0	.5
		223	22.0	83.6	9.3	26.0	14.5	12.0	.9
		230	20.0	84.5	8.6	27.3	15.0	16.2	1.1
		237	20.5	81.9	9.3	27.5	19.0	15.1	.8
		244	20.3	85.0	9.2	26.2	18.0	15.1	.8
		252	19.0	84.4	9.3	26.2	26.0	18.2	.7
		258	19.0	88.6	10.3	18.9	15.0	18.2	1.2
		267	15.3	92.5	9.5	20.7	28.5	19.8	.7
		273	13.6	91.3	10.5	26.4	27.0	16.2	.6
		278	13.7	93.8	9.9	25.4	35.0	13.8	.4
		287	12.1	91.3	10.4	26.2	35.0	17.5	.5
		293	11.6	90.9	10.6	25.8	35.0	10.6	.3
		300	10.9	92.0	10.4	26.5	35.0	19.8	.6
		307	10.3	91.7	11.1	26.1	35.0	19.8	.6
		315	9.2	93.2	11.2	26.3	31.0	17.5	.6
		322	8.7	93.3	10.9	26.2	35.0	16.9	.5
		328	7.8	91.1	11.6	26.5	31.0	16.8	.5
		335	6.4	92.0	11.6	26.8	35.0	16.2	.5
		342	5.7	93.0	12.0	26.8	35.0	13.0	.4

TABLE 2a. Continuing

Year	Station	Julian Date	EBT °C	Alka G·M^{-3}	DissO_2 G·M^{-3}	CL G·M^{-3}	Mixing Depth M	Euphotic Depth M	Ratio DZDM
1981	93								
		78	.3	97.6	14.7	23.6	17.0	7.4	.4
		82	.6	98.0	14.8	19.1	13.5	6.4	.5
		89	2.7	97.0	14.8	24.3	17.0	11.9	.7
		98	3.7	96.7	14.1	27.0	22.0	31.6	1.4
		104	1.2	96.8	13.8	25.2	18.5	16.8	.9
		112	1.6	88.9	14.2	18.1	19.5	7.3	.4
		117	1.4	85.9	14.8	17.2	20.2	6.5	.3
		124	6.2	86.5	13.7	18.5	17.0	7.5	.4
		134	7.4	88.6	13.2	18.3	18.0	6.1	.3
		141	10.5	93.1	12.7	21.7	16.0	9.4	.6
		146	12.2	90.8	12.5	18.9	18.0	10.6	.6
		153	13.5	92.6	11.9	21.1	7.1	12.3	1.9
		162	15.2	92.4	10.6	21.9	18.5	10.9	.6
		166	17.7	91.0	10.7	21.9	12.0	10.6	.9
		175	18.3	93.8	9.6	19.5	12.0	8.4	.7
		180	18.3	93.3	10.7	20.6	10.0	8.0	.8
		189	20.9	90.5	10.4	20.5	10.0	13.6	1.4
		195	22.8	90.3	9.8	19.9	15.5	15.6	1.0
		204	21.7	87.7	9.7	19.1	7.0	16.8	2.4
		211	19.8	87.0	10.7	27.2	3.0	11.2	3.7
		218	22.6	87.5	9.3	20.8	15.0	11.6	.8
		224	22.6	90.8	9.2	21.0	15.5	11.8	.7
		229	21.0	89.3	8.7	23.9	14.5	14.1	1.0
		238	21.2	87.4	8.3	22.8	13.0	15.6	1.2
		243	20.8	87.8	9.6	22.7	20.5	14.1	.7
		257	21.0	88.4	9.9	22.3	13.5	11.7	.9
		268	16.6	94.7	10.6	19.7	15.0	8.9	.6
		279	13.4	94.4	10.3	27.2	20.5	9.7	.5
		288	11.0	95.7	10.9	22.9	5.0	14.1	2.8
		294	11.3	96.4	10.9	19.2	11.0	4.7	.4
		301	9.0	95.5	11.4	22.8	17.5	13.2	.8
		307	9.7	95.6	12.0	20.9	17.0	12.7	.7
		315	8.8	97.2	11.8	20.5	17.0	8.6	.5
		322	9.0	98.6	11.5	18.8	18.0	11.0	.6
		329	6.2	95.3	12.2	22.1	17.5	10.8	.6
		336	5.6	94.8	12.2	24.7	19.0	7.3	.4
		346	3.0	96.0	13.1	24.4	20.0	3.6	.2

TABLE 2a. Continuing

Year	Station	Julian Date	EBT °C	Alka G·M^{-3}	Cond umhos	pH	DissO_2 G·M^{-3}	CL G·M^{-3}	Mixing Depth M	Euphotic Depth M	Ratio DZDM
1982	12										
		67	1.8	96.1	283.4	8.1	13.6	26.6	102.0	-99.9	-99.9
		76	1.3	97.7	324.0	7.9	13.5	26.9	102.0	-99.9	-99.9
		83	1.3	93.6	300.1	-99.9	13.6	28.0	102.0	-99.9	-99.9
		90	1.3	95.6	318.5	8.1	13.5	26.5	102.0	37.5	.4
		97	1.4	96.9	297.4	8.1	13.5	26.7	102.0	-99.9	-99.9
		105	1.5	95.3	296.3	8.0	13.5	27.1	102.0	37.5	.4
		116	1.9	95.9	294.1	8.0	13.8	26.3	102.0	-99.9	-99.9
		124	2.2	98.7	323.5	7.2	13.7	26.4	102.0	43.4	.4
		130	2.6	93.7	310.8	7.2	13.8	26.8	102.0	32.9	.3
		141	2.8	96.0	305.8	8.1	13.9	26.6	102.0	45.0	.4
		147	3.4	96.3	340.7	-99.9	13.8	26.9	102.0	30.9	.3
		151	3.3	89.7	338.8	7.4	14.1	27.2	102.0	37.5	.4
		158	3.8	88.7	339.3	7.2	14.3	26.6	102.0	32.9	.3
		168	9.2	95.0	354.5	8.5	14.0	26.4	8.0	-99.9	-99.9
		172	8.9	95.4	340.6	7.5	13.4	26.4	2.0	15.1	7.5
		179	12.7	91.5	334.0	8.2	14.9	25.8	12.0	9.4	.8
		186	16.0	87.3	322.5	8.1	13.3	26.1	6.0	10.9	1.8
		197	11.3	93.3	339.0	8.5	13.7	26.7	10.5	14.5	1.4
		203	18.6	87.0	330.5	7.9	12.4	27.2	3.0	20.7	6.9
		207	16.4	90.3	331.5	8.1	13.4	27.5	4.0	18.2	4.6
		215	18.4	86.2	319.4	7.8	10.5	26.0	7.0	15.6	2.2
		221	20.9	86.1	320.0	7.8	10.1	25.0	7.0	8.9	1.3
		231	15.2	93.7	326.0	8.5	11.2	26.9	5.0	6.5	1.3
		235	9.9	77.3	334.8	7.7	12.5	26.7	5.0	-99.9	-99.9
		242	10.7	86.5	333.0	7.4	12.5	29.1	11.0	14.6	1.3
		250	10.5	88.4	320.2	7.6	11.9	26.8	15.0	16.8	1.1
		260	13.7	94.2	346.9	8.2	11.6	25.1	11.5	10.6	.9
		266	14.4	97.1	329.9	7.7	11.2	25.3	12.0	15.1	1.3
		271	14.2	93.3	322.9	7.5	11.2	24.0	18.0	11.2	.6
		277	13.9	91.4	334.7	7.6	11.1	24.8	21.0	10.6	.5
		287	13.6	89.4	328.8	8.0	10.2	25.5	35.0	-99.9	-99.9
		291	13.6	84.1	331.4	7.3	9.9	-99.9	38.0	18.2	.5
		298	10.0	94.5	328.5	7.7	11.0	28.5	4.0	29.2	7.3
		305	4.6	98.1	338.6	7.6	12.6	26.1	102.0	-99.9	-99.9
		313	5.7	96.3	331.8	-99.9	12.2	25.9	102.0	29.2	.3
		322	5.9	98.7	336.5	7.9	12.6	25.9	102.0	21.8	.2
		326	5.8	87.5	331.0	-99.9	12.4	28.5	102.0	-99.9	-99.9

TABLE 2a. Continuing

Year	Station	Julian Date	EBT °C	Alka G·M^{-3}	Cond umhos	pH	DissO_2 G·M^{-3}	CL G·M^{-3}	Mixing Depth M	Euphotic Depth M	Ratio DZDM
1982	41										
		69	.9	95.4	314.0	8.2	13.6	26.7	126.0	-99.9	-99.9
		77	.7	97.2	319.5	8.3	13.8	26.9	126.0	-99.9	-99.9
		84	.9	97.6	330.5	-99.9	13.8	26.2	126.0	-99.9	-99.9
		91	.9	96.2	320.0	8.1	13.8	26.6	126.0	27.6	.2
		104	1.2	95.2	298.4	8.0	13.6	26.9	126.0	26.6	.2
		119	1.7	96.2	304.5	8.2	13.9	26.5	126.0	36.6	.3
		124	2.2	96.7	314.4	7.3	13.9	26.5	126.0	30.9	.2
		131	2.6	92.5	318.3	7.3	13.9	26.6	126.0	32.9	.3
		138	2.4	97.7	305.7	8.1	14.0	26.8	126.0	45.0	.4
		146	2.5	83.4	353.8	-99.9	13.8	-99.9	126.0	35.0	.3
		152	2.8	95.6	322.5	7.6	13.9	26.9	126.0	43.4	.3
		158	3.2	88.4	337.6	7.2	14.1	26.6	126.0	35.0	.3
		166	3.4	95.7	316.7	8.2	13.8	26.6	126.0	-99.9	-99.9
		173	4.1	94.6	336.2	7.3	14.0	26.6	126.0	-99.9	-99.9
		180	12.4	94.0	336.3	8.1	13.3	26.0	14.0	10.9	.8
		187	14.9	93.3	328.0	8.2	12.7	26.5	2.5	11.9	4.8
		194	14.6	93.4	326.1	8.5	12.5	26.3	10.0	14.5	1.4
		202	20.6	87.3	298.0	8.0	11.9	26.6	5.0	18.2	3.6
		207	20.5	81.5	322.5	8.1	11.0	26.4	8.0	29.2	3.6
		216	19.4	83.7	318.3	7.9	10.2	26.6	8.0	16.2	2.0
		221	-99.9	-99.9	-99.9	-99.9	-99.9	-99.9	5.0	-99.9	-99.9
		229	18.9	89.1	325.5	8.5	10.2	26.4	9.0	8.6	1.0
		236	13.9	73.4	337.5	7.6	13.1	25.3	6.0	10.9	1.8
		242	15.1	86.5	325.8	7.7	10.8	25.8	11.0	10.9	1.0
		251	14.5	90.8	329.0	7.5	10.6	26.6	21.0	11.6	.6
		257	19.1	93.7	323.0	8.5	11.3	23.7	21.0	12.5	.6
		266	15.9	96.1	322.7	7.5	10.4	25.3	19.0	22.1	1.2
		271	15.4	87.2	323.2	7.5	10.1	25.7	20.0	11.6	.6
		278	15.7	84.6	320.4	7.5	10.4	25.3	21.0	24.9	1.2
		286	14.9	88.4	312.6	8.3	10.3	25.7	26.0	12.5	.5
		292	9.3	84.6	320.9	7.2	11.1	26.0	24.0	32.9	1.4
		298	6.8	97.0	334.0	7.7	11.9	26.7	126.0	35.0	.3
		306	8.9	95.9	332.5	7.8	11.8	25.8	126.0	35.0	.3
		313	6.7	95.7	333.5	-99.9	11.9	26.0	126.0	8.2	.1
		320	5.2	97.7	327.5	7.9	12.7	26.3	126.0	15.0	.1
		326	7.2	89.4	328.7	-99.9	11.8	25.9	126.0	-99.9	-99.9

TABLE 2a. Continuing

Year	Station	Julian Date	EBT °C	Alka G·M^{-3}	Cond umhos	pH	DissO_2 G·M^{-3}	CL G·M^{-3}	Mixing Depth M	Euphotic Depth M	Ratio DZDM
1982	81										
		90	.2	97.0	348.9	8.1	14.4	26.8	35.0	17.5	.5
		118	2.6	97.8	305.2	8.2	14.2	25.4	35.0	18.3	.5
		125	3.9	91.9	314.8	7.5	14.3	25.4	35.0	19.0	.5
		131	4.6	88.6	327.8	7.5	14.1	26.0	35.0	20.7	.6
		140	7.7	96.4	321.0	8.4	14.2	26.4	16.0	21.8	1.4
		147	9.4	97.4	337.3	-99.9	12.7	25.7	16.0	19.8	1.2
		152	10.4	91.0	324.6	7.6	13.2	26.7	7.0	20.7	3.0
		159	10.6	87.9	338.1	7.7	12.1	26.5	20.0	19.0	.9
		167	12.3	93.6	326.8	8.6	11.9	26.1	10.5	19.9	1.9
		173	12.2	95.5	340.7	7.6	11.8	26.0	10.0	14.1	1.4
		180	14.1	96.8	334.2	7.9	11.5	24.3	9.0	17.5	1.9
		187	15.1	95.6	302.0	8.1	11.8	25.6	7.0	16.8	2.4
		196	15.8	92.4	317.8	8.6	11.6	25.8	17.0	18.3	1.1
		202	19.6	91.3	330.6	8.0	10.8	26.0	6.5	19.0	2.9
		208	20.7	92.7	318.4	7.9	9.9	25.5	9.5	11.9	1.3
		216	20.1	84.5	309.0	7.8	9.2	25.5	15.0	11.6	.8
		222	20.9	85.7	320.0	7.8	9.5	24.8	18.0	10.9	.6
		230	20.4	87.8	312.0	8.6	9.6	25.9	11.0	7.8	.7
		236	18.4	77.9	329.4	7.5	8.8	24.5	24.5	11.9	.5
		243	18.8	85.3	316.4	7.5	9.4	25.9	26.0	17.5	.7
		251	18.0	88.2	328.7	7.4	9.4	26.5	23.0	-99.9	-99.9
		259	17.6	89.5	332.6	8.2	9.5	25.8	25.0	13.9	.6
		266	16.0	90.7	327.0	7.6	10.3	25.9	19.0	24.9	1.3
		272	15.5	87.6	326.5	7.5	10.2	26.1	21.0	11.9	.6
		278	15.4	91.3	331.8	7.3	9.9	25.5	23.0	19.8	.9
		287	12.6	92.7	309.5	7.9	10.4	26.3	29.5	11.7	.4
		292	12.1	84.8	330.5	7.3	10.1	26.1	21.0	21.6	1.0
		299	11.4	90.1	331.3	7.9	10.5	26.0	35.0	16.8	.5
		306	11.4	92.6	331.6	8.0	10.9	25.7	35.0	19.8	.6
		313	10.3	94.9	322.9	-99.9	10.7	25.4	35.0	14.6	.4
		321	9.0	97.3	318.5	8.0	11.9	25.9	35.0	14.5	.5
		327	8.6	77.6	332.1	-99.9	11.3	25.8	35.0	23.7	.7

TABLE 2a. Continuing

Year	Station	Julian Date	EBT °C	Alka G·M^{-3}	Cond umhos	pH	DissO_2 G·M^{-3}	CL G·M^{-3}	Mixing Depth M	Euphotic Depth M	Ratio DZDM
1982	93										
		70	.4	97.9	273.0	8.1	14.1	25.6	15.5	15.1	1.0
		77	1.2	94.7	311.4	8.2	14.0	28.7	20.0	-99.9	-99.9
		83	1.2	93.4	303.1	-99.9	14.2	24.1	20.0	7.3	.4
		89	.8	75.3	308.9	8.1	14.5	23.0	20.0	9.7	.5
		95	.6	96.9	272.2	8.1	15.5	20.6	11.0	2.3	.2
		104	.9	94.7	269.6	8.0	14.4	20.0	21.0	17.5	.8
		120	1.7	92.6	260.0	8.2	14.7	18.1	21.0	17.5	.8
		125	2.3	83.8	276.3	7.3	14.7	19.7	21.0	17.5	.8
		131	1.4	69.4	244.9	7.0	15.0	18.2	17.0	5.3	.3
		138	1.9	-99.9	256.2	8.1	14.9	18.6	17.5	6.5	.4
		147	6.3	91.7	299.9	-99.9	13.9	20.0	18.5	9.4	.5
		152	9.1	88.8	291.8	8.1	13.1	19.5	19.0	9.7	.5
		159	8.0	86.5	320.3	7.5	12.9	22.8	16.0	10.3	.6
		166	11.8	92.1	300.4	8.5	12.1	20.5	19.0	12.5	.7
		173	13.3	96.7	329.9	7.5	11.4	23.2	21.0	17.5	.8
		180	17.6	93.8	315.5	7.8	11.6	20.8	21.0	17.5	.8
		188	19.2	92.5	302.3	8.1	12.3	25.7	8.0	9.1	1.1
		194	19.9	84.3	295.0	8.5	9.8	19.9	18.5	13.9	.8
		202	20.8	89.1	247.0	7.9	10.5	23.1	6.5	14.6	2.2
		208	22.5	93.0	302.2	7.8	9.5	21.4	6.0	13.6	2.3
		216	18.5	86.9	319.5	7.7	10.0	21.7	6.0	10.3	1.7
		221	22.1	90.2	306.8	7.7	9.3	20.9	17.0	8.2	.5
		229	20.8	91.3	324.0	8.5	9.4	23.1	15.0	8.6	.6
		235	19.8	86.0	317.5	7.6	9.9	21.5	19.0	13.6	.7
		243	17.1	91.3	317.9	7.6	10.9	22.5	7.5	13.6	1.8
		252	9.4	97.7	326.0	7.1	11.3	26.4	3.5	10.2	5.2
		257	13.8	92.0	337.9	8.1	11.6	24.6	21.0	17.5	.8
		265	14.6	96.1	331.0	7.4	11.0	23.6	4.0	20.7	5.2
		272	15.5	94.1	317.2	7.6	10.8	22.7	7.0	9.4	1.3
		277	15.3	89.8	329.3	7.5	10.4	22.8	17.0	13.2	.8
		285	15.6	94.6	301.9	8.3	11.4	20.2	18.0	9.4	.5
		291	13.5	81.2	317.9	7.4	10.1	21.8	17.0	7.5	.4
		299	11.7	94.3	323.7	7.9	10.5	22.4	19.0	23.7	1.2
		305	11.9	97.7	327.1	8.0	10.9	21.3	16.5	16.2	1.0
		312	10.1	93.9	304.6	-99.9	11.2	18.2	19.0	1.9	.1
		320	8.9	96.6	289.9	8.0	11.9	18.6	6.0	2.3	.4
		327	5.1	92.0	328.5	-99.9	12.1	25.7	16.0	16.2	1.0

TABLE 2b. Mean epilimnetic values of the chemical parameters measured at four stations in 1981 and 1982.

Year	Station	Julian Date	TP $G \cdot M^{-3}$	TFP $G \cdot M^{-3}$	TKJN $G \cdot M^{-3}$	NH_3 $G \cdot M^{-3}$	NO_3NO_2 $G \cdot M^{-3}$	SRS $G \cdot M^{-3}$
1981	12							
		75	.015	.010	.170	.002	.350	.491
		83	.013	.009	.151	.002	.350	.477
		89	.014	.009	.166	.004	.339	.520
		96	.015	.007	.161	.004	.330	.344
		105	.013	.009	.181	.002	.361	.439
		111	.015	.008	.152	.004	.350	.340
		117	.015	.008	.199	.019	.343	.292
		124	.013	.009	.205	.018	.372	.414
		131	.013	.009	.181	.009	.353	.371
		140	.013	.010	.172	.010	.333	.342
		149	.020	.007	.182	.011	.302	.287
		153	.020	.008	.228	.008	.205	.229
		160	.020	.010	.275	.034	.196	.161
		166	.022	.008	.229	.011	.118	.158
		173	.019	.009	.236	.018	.014	.115
		182	.016	.009	.170	.013	.194	.121
		187	.011	.008	.235	.004	.068	.075
		194	.016	.008	.257	.032	.149	.078
		202	.015	.007	.330	.030	.175	.108
		208	.013	.006	.246	.008	.107	.061
		216	.031	.009	.231	.009	.040	.177
		222	.021	.009	.222	.016	.045	.124
		229	.019	.007	.211	.020	.069	.114
		236	.016	.008	.292	.028	.041	.169
		245	.017	.007	.229	.006	.062	.114
		251	.019	.009	.289	.021	.067	.171
		257	.021	.009	.253	.013	.030	.206
		269	.015	.007	.284	.008	.138	.229
		272	.014	.006	.214	.008	.169	.203
		286	.012	.007	.130	.001	.333	.426
		292	.010	.006	.188	.003	.297	.413
		299	.011	.005	.178	.001	.304	.511
		306	.010	.005	.231	.007	.258	.300
		314	.012	.006	.204	.010	.272	.301
		321	.010	.005	.180	.011	.305	.257
		327	.011	.007	.193	.014	.326	.431
		334	.011	.008	.200	.011	.332	.485
		341	.010	.008	.161	.002	.337	.388

TABLE 2b. Continuing

Year	Station	Julian Date	TP $G \cdot M^{-3}$	TFP $G \cdot M^{-3}$	TKJN $G \cdot M^{-3}$	NH_3 $G \cdot M^{-3}$	NO_3NO_2 $G \cdot M^{-3}$	SRS $G \cdot M^{-3}$
1981	41							
		78	.014	.010	.172	.003	.343	.418
		82	.014	.009	.177	.003	.338	.372
		90	.013	.007	.177	-99.900	.334	.279
		99	.014	.007	.161	.004	.336	-99.900
		106	.015	.008	.153	.004	.348	.320
		112	.013	.007	.165	.002	.335	.203
		118	.013	.007	.170	.007	.340	.215
		125	.013	.007	.180	-99.900	.354	.216
		133	.013	.008	.193	.008	.354	.261
		141	.012	.008	.193	.009	.304	.179
		147	.012	.008	.168	.012	.327	.186
		154	.014	.006	.165	.006	.335	.189
		161	.017	.008	.228	.010	.197	.042
		167	.016	.007	.213	.012	.115	.055
		174	.015	.008	.191	.005	.221	.060
		181	.015	.007	.210	.009	.168	.075
		188	.017	.007	.211	.007	.053	.068
		194	.014	.010	.235	.008	.139	.106
		203	.015	.007	.252	.013	.030	.065
		208	.014	.006	.207	.003	.063	.062
		217	.017	.006	.215	.007	.044	.060
		223	.016	.006	.219	.005	.026	.066
		231	.017	.007	.197	.006	.063	.119
		237	.015	.008	.255	.006	.051	.097
		244	.020	.008	.219	.004	.050	.094
		259	.012	.006	.202	.003	.085	.216
		268	.011	.006	.249	.004	.165	.135
		272	.012	.006	.211	.002	.182	.261
		279	.011	.005	.204	.008	.224	.267
		287	.011	.006	.201	.001	.265	.273
		294	.011	.006	.218	.003	.246	.311
		300	.013	.006	.197	.004	.227	.263
		307	.011	.005	.214	.005	.235	.201
		315	.010	.006	.177	.005	.261	.227
		322	.013	.007	.199	.006	.241	.198
		328	.010	.006	.180	.004	.259	.227
		335	.012	.008	.198	.005	.295	.376
		345	.011	.008	.176	.002	.300	.345

TABLE 2b. Continuing

Year	Station	Julian Date	TP $G \cdot M^{-3}$	TFP $G \cdot M^{-3}$	TKJN $G \cdot M^{-3}$	NH_3 $G \cdot M^{-3}$	NO_3NO_2 $G \cdot M^{-3}$	SRS $G \cdot M^{-3}$
1981	81							
		80	.015	.006	.244	.006	.293	.394
		83	.013	.005	.186	.002	.287	.197
		90	.013	.005	.184	-99.900	.266	.067
		98	.013	.006	.181	.006	.244	.052
		107	.013	.005	.170	.009	.258	.067
		112	.015	.005	.181	.005	.259	.032
		118	.012	.005	.183	.008	.261	.034
		125	.013	.005	.190	.006	.269	.043
		132	.011	.005	.197	.012	.268	.046
		142	.011	.006	.177	.012	.242	.033
		148	.009	.005	.189	.016	.229	.030
		155	.012	.006	.203	.009	.222	-99.900
		161	.012	.005	.219	.009	.212	.046
		167	.011	.005	.227	.010	.137	.049
		174	.010	.007	.256	.024	.186	.064
		181	.017	.008	.221	.009	.164	.123
		188	.018	.009	.248	.006	.080	.086
		195	.018	.008	.258	.018	.083	.106
		204	.020	.008	.261	.017	.033	.100
		211	.016	.009	.274	.035	.066	.141
		217	.017	.009	.243	.011	.037	.166
		223	.016	.007	.250	.008	.031	.148
		230	.015	.007	.244	.021	.063	.171
		237	.014	.007	.243	.009	.031	.184
		244	.016	.007	.232	.007	.071	.154
		252	.014	.007	.280	.013	.090	.127
		258	.013	.007	.208	.003	.065	.239
		267	.014	.008	.270	.005	.133	.350
		273	.013	.007	.210	.002	.177	.371
		278	.017	.010	.233	.008	.189	.420
		287	.014	.009	.226	.007	.182	.316
		293	.018	.008	.221	.003	.157	.326
		300	.017	.008	.221	.012	.164	.336
		307	.014	.008	.226	.011	.184	.348
		315	.014	.007	.193	.005	.213	.267
		322	.014	.008	.191	.006	.206	.323
		328	.014	.008	.198	.010	.207	.332
		335	.014	.008	.234	.015	.231	.311
		342	.014	.008	.180	.003	.256	.322

TABLE 2b. Continuing

Year	Station	Julian Date	TP $G \cdot M^{-3}$	TFP $G \cdot M^{-3}$	TKJN $G \cdot M^{-3}$	NH_3 $G \cdot M^{-3}$	NO_3NO_2 $G \cdot M^{-3}$	SRS $G \cdot M^{-3}$
1981	93	78	.020	.008	.173	.013	.314	.266
		82	.013	.006	.230	.022	.243	.152
		89	.015	.005	.182	.005	.309	.184
		99	.014	.005	.162	.001	.299	.254
		103	.014	.007	.214	.013	.321	.222
		112	.020	.006	.216	.028	.310	.166
		117	.023	.007	.234	.030	.339	.096
		124	.021	.006	.220	.015	.437	.087
		134	.021	.005	.221	.032	.351	.063
		142	.016	.006	.198	.016	.279	.041
		146	.017	.007	.215	.030	.289	.049
		153	.014	.006	.195	.012	.275	.071
		162	.015	.006	.248	.033	.232	.120
		166	.016	.011	.232	.019	.185	.128
		175	.024	.011	.263	.042	.263	.196
		180	.019	.008	.226	.010	.220	.206
		189	.015	.007	.263	.035	.188	.144
		195	.012	.006	.256	.027	.175	.118
		204	.014	.007	.182	.014	.115	.150
		211	.015	.007	.230	.017	.135	.089
		218	.016	.007	.236	.014	.106	.226
		224	.019	.008	.245	.018	.099	.240
		229	.015	.007	.235	.025	.096	.234
		238	.013	.006	.224	.008	.075	.152
		243	.016	.007	.277	.041	.135	.171
		257	.016	.007	.224	-99.900	.069	.222
		268	.018	.007	.275	.008	.119	.316
		279	.012	.006	.206	.007	.142	.221
		288	.013	.006	.196	.002	.212	.307
		294	.020	.006	.277	.027	.093	.231
		301	.014	.006	.211	.011	.188	.250
		307	.013	.005	.239	.014	.175	.176
		315	.015	.007	.242	.028	.120	.123
		316	.016	.006	.257	.026	.127	.128
		322	.027	.010	.252	.030	.145	.164
		329	.018	.006	.243	.027	.190	.223
		336	.014	.006	.224	.020	.261	.285
		346	.019	.005	.188	.004	.302	.202

TABLE 2b. Continuing

Year	Station	Julian Date	TP $G \cdot M^{-3}$	TFP $G \cdot M^{-3}$	SRP $G \cdot M^{-3}$	TKJN $G \cdot M^{-3}$	NH_3 $G \cdot M^{-3}$	NO_3NO_2 $G \cdot M^{-3}$	SRS $G \cdot M^{-3}$
1982	12	67	.013	.010	.007	-99.900	.003	.362	.503
		76	.016	.011	-99.900	.233	.004	.287	.555
		83	.012	.010	.003	.190	.004	.346	.530
		92	.014	.010	.004	.206	.005	.364	.517
		95	.012	.010	.002	.185	.029	.352	.535
		105	.012	.009	.002	.193	.001	.359	.490
		116	.012	.009	.006	-99.900	.003	.364	.467
		124	-99.900	-99.900	.002	.190	.001	.331	.597
		130	-99.900	-99.900	.001	.198	.019	.342	.466
		141	.013	.009	.001	.210	.046	.333	.409
		148	-99.900	-99.900	.004	.273	.012	.345	.396
		151	-99.900	-99.900	.002	.278	.011	.332	.397
		158	.012	.007	.001	.277	.007	.325	.443
		168	.014	.006	.001	.219	.016	.253	.230
		172	.016	.008	.001	.330	.018	.259	.186
		179	.022	.007	.001	.282	.004	.104	.125
		186	.015	.007	.001	.294	.012	.106	.087
		197	.015	.007	.001	.215	.009	.234	.093
		203	.012	.007	.002	.327	.044	.160	.085
		207	.012	.008	.003	.308	.017	.219	.280
		215	.011	.006	.002	.291	.030	.141	.284
		221	.011	.006	2.00E-004	.373	.032	.127	.085
		231	.016	.006	.001	.283	.032	.204	.363
		235	.014	.007	4.00E-004	.251	.019	.135	.177
		242	.015	.005	3.00E-004	.400	.050	.258	.215
		250	.016	.007	3.00E-004	.463	.096	.289	.263
		260	.018	.007	.001	.282	.013	.194	.136
		266	.013	.006	2.00E-004	.367	.028	.237	.248
		271	.018	.006	.001	.371	.048	.199	.192
		277	.017	.008	.001	.394	.056	.189	.117
		287	.015	.010	.003	.332	.043	.176	.196
		291	.017	.007	.001	.360	.059	.178	.164
		298	.012	.006	4.00E-004	.252	.014	.264	.265
		305	.018	.010	.005	.447	.024	.386	.627
		313	.012	.006	.001	.321	.017	.340	.590
		322	.011	.006	.001	.243	.030	.331	.358
		326	.011	.008	.002	.352	.040	.346	.482

TABLE 2b. Continuing

Year	Station	Julian Date	TP $G \cdot M^{-3}$	TFP $G \cdot M^{-3}$	SRP $G \cdot M^{-3}$	TKJN $G \cdot M^{-3}$	NH_3 $G \cdot M^{-3}$	NO_3NO_2 $G \cdot M^{-3}$	SRS $G \cdot M^{-3}$
1982	41	69	.013	.010	.006	.185	.005	.325	.510
		77	.013	.011	.002	.194	.003	.278	.480
		84	.012	.011	.002	.162	.004	.335	.435
		91	.013	.010	.004	.167	.006	.367	.428
		104	.013	.010	.002	.194	.002	.360	.448
		119	.013	.009	.005	-99.900	.002	.365	.414
		124	-99.900	-99.900	.004	.190	.005	.319	.430
		131	-99.900	-99.900	.001	.200	.003	.332	.415
		138	.013	.009	.001	.202	.023	.344	.391
		148	-99.900	-99.900	.005	.272	.022	.355	.385
		152	-99.900	-99.900	.002	.257	.009	.334	.445
		158	.013	.007	.002	.313	.009	.322	.360
		166	.012	.009	.003	.182	.015	.312	.328
		173	.013	.009	.002	.208	.017	.334	.329
		180	.017	.006	.001	.276	.008	.159	.077
		187	.023	.009	.003	.298	.001	.206	.115
		194	.011	.007	.001	.180	.004	.216	.198
		202	.010	.009	.002	.330	.024	.111	.090
		207	.008	.007	.002	.321	.028	.116	.077
		216	.014	.004	.001	.271	.068	.094	.083
		229	.014	.011	.001	.264	.029	.121	.091
		236	.014	.007	2.00E-004	.239	.078	.195	.062
		242	.017	.005	4.00E-004	.416	.063	.144	.140
		251	.021	.010	2.00E-004	.428	.028	.179	.133
		257	.012	.009	.001	.246	.003	.157	.120
		266	.017	.009	2.00E-004	.371	.015	.220	.190
		271	.017	.008	.001	.398	.070	.137	.129
		278	.011	.006	.001	.517	.049	.143	.486
		286	.013	.008	.002	.287	.035	.142	.118
		292	.016	.010	2.00E-004	.375	.038	.242	.322
		298	.011	.007	.002	.251	.005	.320	.540
		306	.011	.008	.001	.279	.007	.268	.210
		313	.011	.006	.001	.311	.029	.300	.425
		320	.013	.010	.003	.318	.037	.357	.525
		326	.011	.006	4.00E-004	.346	.028	.294	.298

TABLE 2b. Continuing

Year	Station	Julian Date	TP $G \cdot M^{-3}$	TFP $G \cdot M^{-3}$	SRP $G \cdot M^{-3}$	TKJN $G \cdot M^{-3}$	NH_3 $G \cdot M^{-3}$	NO_3NO_2 $G \cdot M^{-3}$	SRS $G \cdot M^{-3}$
1982	81	90	.013	.005	4.00E-004	-99.900	.004	.321	.224
		118	.013	.006	.001	-99.900	.003	.302	.196
		125	-99.900	-99.900	.001	.205	.010	.261	.165
		131	-99.900	-99.900	2.00E-004	.224	.010	.265	.111
		140	.012	.005	2.00E-004	.263	.001	.260	.068
		147	-99.900	-99.900	3.00E-004	.293	.015	.276	.112
		152	-99.900	-99.900	.001	.266	.014	.245	.116
		159	.011	.005	.001	.322	.031	.241	.047
		167	.012	.007	.001	.225	.018	.193	.066
		173	.012	.006	4.00E-004	.267	.010	.203	.077
		180	.013	.007	.001	.287	.004	.160	.050
		187	.015	.006	.001	.353	.002	.164	.080
		196	.015	.007	.001	.215	.020	.180	.292
		202	.012	.007	.001	.330	.023	.191	.098
		208	.015	.008	.001	.357	.069	.128	.095
		216	.015	.007	.002	.271	.034	.086	.104
		222	.018	.010	2.00E-004	.363	.123	.078	.155
		230	.020	.012	4.00E-004	.275	.036	.045	.293
		236	.017	.008	2.00E-004	.298	.080	.098	.247
		243	.015	.005	.001	.407	.041	.076	.238
		251	.020	.012	2.00E-004	.409	.035	.116	.390
		259	.015	.007	4.00E-004	.252	.017	.095	.256
		266	.023	.015	8.00E-004	.359	.051	.110	.267
		272	.016	.008	-99.900	.372	.075	.121	.281
		278	.013	.007	4.00E-004	.339	.035	.111	.263
		287	.016	.009	.002	.218	.014	.249	.571
		292	.022	.009	.001	.345	.036	.169	.565
		299	.016	.007	.001	.338	.022	.193	.345
		306	.019	.006	.001	.396	.050	.163	.347
		313	.017	.007	.002	.348	.044	.173	.525
		320	.018	.012	.002	.237	.036	.212	.574
		327	.015	.009	.002	.503	.024	.211	.551

TABLE 2b. Continuing

Year	Station	Julian Date	TP $G \cdot M^{-3}$	TFP $G \cdot M^{-3}$	SRP $G \cdot M^{-3}$	TKJN $G \cdot M^{-3}$	NH_3 $G \cdot M^{-3}$	NO_3NO_2 $G \cdot M^{-3}$	SRS $G \cdot M^{-3}$
1982	93	70	.015	.010	.003	.199	.007	.282	.439
		77	.018	.011	.006	.226	.016	.291	.466
		83	.016	.008	.001	.218	.013	.346	.457
		89	.017	.006	4.00E-004	.202	.007	.339	.332
		95	.025	.008	.001	.203	.024	.354	.326
		104	.015	.008	.001	.263	.031	.336	.310
		120	.017	.008	.004	-99.900	.028	-99.900	.220
		125	.021	.010	.003	.230	.040	.328	.339
		131	-99.900	-99.900	.001	.243	.055	.348	.272
		138	.024	-99.900	-99.900	-99.900	-99.900	-99.900	-99.900
		140	.021	.009	2.00E-004	.207	.022	.322	.178
		141	.021	.006	2.00E-004	.270	.074	.321	.188
		147	-99.900	-99.900	.001	.389	.063	.336	.197
		152	-99.900	-99.900	.001	.319	.036	.281	.118
		159	.016	.005	.001	.355	.032	.207	.209
		166	.016	.009	.001	.261	.040	.282	.096
		173	.015	.007	4.00E-004	.286	.011	.237	.089
		180	.016	.007	.001	.278	.003	.151	.097
		188	.017	.007	.004	.307	.005	.103	-99.900
		194	.014	.009	.001	.220	.009	.228	.182
		202	.014	.007	.001	.319	.046	.163	.205
		208	.012	.008	.001	.405	.092	.168	.129
		216	.014	.006	.002	.384	.026	.188	.105
		221	.016	.007	2.00E-004	.312	.108	.155	.163
		229	.015	.014	.001	.288	.061	.176	.231
		235	.017	.008	2.00E-004	.264	.046	.179	.202
		243	.015	.006	2.00E-004	.424	.064	.190	.238
		252	.019	.016	2.00E-004	.338	.012	.316	.420
		257	.013	.006	4.00E-004	.246	.021	.232	.151
		265	.014	.007	3.00E-004	.423	.045	.211	.170
		272	.018	.008	.001	.364	.049	.183	.201
		277	.016	.009	.001	.389	.057	.177	.266
		285	.015	.010	.001	.381	.047	.183	.373
		291	.017	.009	.001	.381	.061	.171	.290
		299	.013	.006	4.00E-004	.343	.037	.203	.278
		305	.022	.011	.001	.385	.035	.210	.243
		312	.030	.018	.002	.450	.072	.218	.550
		320	.026	.012	.004	.281	.050	.225	.425
		327	.012	.008	.002	.519	.036	.358	.655

TABLE 2c. Mean epilimnetic values of the biological parameters measured at four stations in 1981 and 1982.

Year	Station	Julian Date	IPON $G \cdot M^{-3}$	IPOC $G \cdot M^{-3}$	ICHLAU $MG \cdot M^{-3}$	ICHLAC $MG \cdot M^{-3}$	DOC $G \cdot M^{-3}$	DRY $G \cdot M^{-3}$	LOI $G \cdot M^{-3}$
1981	12	75	.019	.131	-99.9	-99.9	2.044	-99.900	-99.900
		83	.024	.168	2.3	2.2	2.000	.100	0
		89	.029	.191	2.1	2.0	2.068	.700	.600
		96	.059	.302	6.4	6.1	2.200	-99.900	-99.900
		105	.041	.287	2.2	2.0	2.140	2.100	1.100
		111	.030	.193	2.9	2.6	1.800	.800	-99.900
		117	.035	.233	2.5	2.0	2.763	-99.900	-99.900
		124	.028	.215	1.7	1.5	2.000	1.100	.500
		131	.040	.205	1.7	1.5	2.160	1.000	.500
		140	.050	.292	1.7	1.6	2.188	-99.900	-99.900
		149	.060	.381	2.5	2.4	2.200	-99.900	-99.900
		153	.135	.820	6.3	6.0	2.350	.100	-.200
		160	.138	.860	5.0	4.6	2.225	2.200	1.600
		166	.189	1.140	11.4	10.9	2.193	3.300	3.000
		173	.158	.949	6.8	6.5	2.100	2.900	2.500
		182	.125	.675	6.4	6.3	2.175	1.800	-99.900
		187	.071	.410	2.2	2.1	2.267	1.800	1.200
		194	-99.900	.469	2.2	1.4	2.250	2.100	1.700
		202	.121	.713	5.2	5.0	2.300	2.500	2.200
		208	.091	.511	2.4	2.2	2.225	3.900	1.600
		216	.175	.937	8.9	8.0	2.625	4.800	3.200
		222	.199	1.020	8.0	7.4	2.467	5.100	3.300
		229	.080	.436	3.8	3.3	2.405	2.300	1.700
		236	.138	.859	5.4	2.7	3.350	3.500	2.700
		245	.145	.634	2.9	2.3	2.836	1.300	-99.900
		251	-99.900	-99.900	-99.9	-99.9	2.924	-99.900	-99.900
		257	.122	.759	10.7	9.6	2.845	2.200	-99.900
		269	.092	.570	5.4	4.2	2.150	1.700	-99.900
		272	.085	.460	6.5	5.8	2.165	1.700	-99.900
		286	.052	.350	3.6	3.3	2.144	1.300	1.100
		292	.054	.295	3.9	3.6	1.936	1.200	1.000
		299	.053	.334	3.5	3.0	2.006	1.200	.800
		306	.051	.543	4.2	3.6	1.936	1.100	.900
		314	.045	.267	3.9	2.4	2.000	1.100	.800
		321	.049	.264	4.6	4.0	2.051	.800	-99.900
		327	.035	.221	2.5	2.1	1.958	1.000	.600
		334	-99.900	-99.900	1.9	1.3	1.950	1.100	.600
		341	-99.900	-99.900	-99.9	-99.9	2.000	-99.900	-99.900

TABLE 2c. Continuing

Year	Station	Julian Date	IPON G·M^{-3}	IPOC G·M^{-3}	ICHLAU MG·M^{-3}	ICHLAC MG·M^{-3}	DOC G·M^{-3}	DRY G·M^{-3}	LOI G·M^{-3}
1981	41	78	.027	.184	3.0	2.8	2.108	-99.900	-99.900
		82	.032	.211	3.4	3.3	2.014	.100	0
		90	.043	.270	5.9	5.5	2.303	.100	0
		99	.041	.230	5.2	4.7	2.128	-99.900	-99.900
		106	.024	.168	2.9	2.6	2.300	.100	-99.900
		112	-99.900	-99.900	-99.9	-99.9	2.390	-99.900	-99.900
		118	.035	.207	2.6	2.2	2.000	-99.900	-99.900
		125	.040	.196	2.1	1.9	2.140	.900	.500
		133	.035	.210	1.8	1.5	2.164	1.100	.500
		141	.030	.217	1.8	1.7	2.169	-99.900	-99.900
		147	.035	.238	1.7	1.5	2.206	-99.900	-99.900
		154	-99.900	-99.900	-99.9	-99.9	2.350	-99.900	-99.900
		161	.122	.758	5.3	5.2	2.150	.900	-99.900
		167	-99.900	-99.900	3.6	3.4	2.132	1.500	-99.900
		174	.090	.666	4.7	4.8	2.000	1.400	-99.900
		181	.105	.642	4.1	4.0	2.100	1.700	-99.900
		188	.127	.682	6.5	6.4	2.114	3.400	2.500
		194	.077	.551	1.9	1.8	2.300	1.800	1.500
		203	.117	.753	5.6	5.5	2.371	5.300	2.400
		208	.093	.578	2.4	2.3	2.150	3.800	1.900
		217	.105	.540	3.7	3.4	2.478	3.300	2.000
		223	.108	.680	2.9	2.9	2.360	3.700	2.200
		231	.123	.642	3.4	2.9	2.432	2.500	2.100
		237	.090	.545	3.4	2.9	3.156	2.200	2.000
		244	.112	.811	3.6	3.0	2.886	1.800	-99.900
		259	.078	.557	5.4	4.8	2.715	1.500	-99.900
		260	.069	.422	2.1	1.6	2.078	.800	-99.900
		272	.073	.451	5.8	5.1	2.064	1.200	-99.900
		279	.067	.465	6.0	5.6	2.200	1.300	-99.900
		287	.069	.392	5.7	5.7	2.188	1.100	-99.900
		294	.060	.337	3.7	3.5	1.926	1.100	.900
		300	.053	.288	3.8	3.8	2.000	.900	.800
		307	.057	.385	5.3	4.9	1.936	1.000	-99.900
		315	.049	.338	4.3	3.9	2.000	1.900	1.800
		322	.061	.401	6.3	4.6	2.136	1.000	.900
		328	.040	.237	3.7	3.1	2.050	.700	-99.900
		335	-99.900	-99.900	-99.9	-99.9	2.036	-99.900	-99.900
		345	-99.900	-99.900	-99.9	-99.9	2.800	-99.900	-99.900

TABLE 2c. Continuing

Year	Station	Julian Date	IPON G·M^{-3}	IPOC G·M^{-3}	ICHLAU MG·M^{-3}	ICHLAC MG·M^{-3}	DOC G·M^{-3}	DRY G·M^{-3}	LOI G·M^{-3}
1981	81	80	.076	.509	-99.9	-99.9	2.000	-99.900	-99.900
		83	.077	.432	8.7	8.6	2.000	2.200	1.900
		90	.075	.524	9.0	8.7	2.488	1.400	1.300
		98	.081	.520	8.8	8.7	2.473	-99.900	-99.900
		107	.093	.583	7.1	6.8	2.528	1.900	1.500
		112	.081	.533	6.3	6.0	2.865	2.100	1.700
		118	.075	.481	4.5	3.9	2.200	-99.900	-99.900
		125	.081	.421	4.0	3.6	2.200	1.800	1.000
		132	.089	.459	3.2	3.0	2.244	1.400	1.000
		142	.091	.560	2.8	2.8	2.274	-99.900	-99.900
		148	.080	.541	2.9	3.0	2.450	-99.900	-99.900
		155	.083	.527	4.2	4.1	2.200	1.800	1.600
		161	.093	.585	3.7	3.4	2.350	1.300	1.200
		167	.098	.576	5.2	5.1	2.371	1.200	-99.900
		174	.108	.518	5.5	5.2	2.177	1.600	1.300
		181	.141	.725	10.4	10.1	2.368	1.600	-99.900
		188	.113	.617	6.9	6.5	2.375	3.600	2.400
		195	.112	.579	5.1	4.5	2.540	2.600	1.900
		204	.118	.632	7.6	7.0	2.550	4.900	2.300
		211	.086	.375	6.6	5.5	2.289	2.100	1.600
		217	.131	.609	9.2	8.3	2.700	3.100	2.200
		223	.143	.651	5.2	4.7	2.500	4.100	2.500
		230	.097	.413	5.9	5.6	2.400	1.700	1.400
		237	.084	.496	7.1	6.3	3.171	2.100	1.700
		244	.091	.586	3.0	2.6	2.945	1.300	-99.900
		252	.076	.471	3.8	4.3	2.833	1.200	-99.900
		258	.088	.548	7.3	6.4	2.725	1.300	-99.900
		267	.047	.301	2.9	2.0	1.968	-99.900	-99.900
		273	.075	.472	6.2	5.6	2.200	1.300	-99.900
		278	.035	.213	5.0	4.6	2.225	1.700	1.500
		287	.078	.421	7.6	7.0	2.306	1.500	1.200
		293	.088	.466	5.6	5.2	2.000	4.100	1.600
		300	.065	.353	5.3	3.6	2.144	1.600	1.000
		307	.056	.349	4.5	4.0	1.930	1.600	.900
		315	.065	.349	5.8	5.2	2.100	1.600	.900
		322	.054	.304	5.2	3.4	2.106	1.400	.800
		328	.055	.326	4.9	4.0	2.030	1.800	.900
		335	.040	.297	4.7	3.7	1.956	2.300	1.800
		342	.047	.276	7.4	7.3	2.000	1.900	.900

TABLE 2c. Continuing

Year	Station	Julian Date	IPON G·M^{-3}	IPOC G·M^{-3}	ICHLAU MG·M^{-3}	ICHLAC MG·M^{-3}	DOC G·M^{-3}	DRY G·M^{-3}	LOI G·M^{-3}
1981	93	78	.059	.375	3.4	3.2	2.013	-99.900	-99.900
		82	.049	.300	2.1	1.9	2.000	3.100	1.700
		89	.067	.453	5.7	5.5	2.224	2.700	1.800
		99	.075	.400	6.2	5.9	2.100	-99.900	-99.900
		103	-99.900	-99.900	4.1	3.6	2.997	3.700	2.300
		112	.067	.394	3.7	3.7	2.041	4.500	1.400
		117	.092	.535	4.5	3.8	2.338	-99.900	-99.900
		124	.180	.878	9.3	8.7	2.329	4.300	2.100
		134	.130	.651	6.7	6.2	2.236	6.200	1.800
		142	.098	.530	4.4	4.1	2.261	-99.900	-99.900
		146	.134	.697	5.6	5.5	2.361	-99.900	-99.900
		153	.068	.434	3.6	3.6	2.468	-99.900	-99.900
		162	.089	.513	3.2	3.0	2.088	2.700	1.000
		166	.093	.536	3.7	3.3	2.285	2.400	1.200
		175	.058	.354	3.1	2.7	2.013	3.600	1.100
		180	-99.900	-99.900	-99.9	-99.9	2.275	-99.900	-99.900
		189	-99.900	-99.900	-99.9	-99.9	2.350	-99.900	-99.900
		195	.071	.453	2.5	2.2	2.252	1.800	1.300
		204	-99.900	-99.900	-99.9	-99.9	2.350	-99.900	-99.900
		211	-99.900	-99.900	-99.9	-99.9	2.483	-99.900	-99.900
		218	.100	.482	4.9	4.2	2.460	2.500	1.400
		224	.157	.582	5.7	5.0	2.350	3.200	1.700
		229	.105	.595	4.8	4.4	2.474	1.800	1.400
		238	.067	.410	4.2	3.4	2.965	1.600	1.200
		243	-99.900	-99.900	-99.9	-99.9	2.653	-99.900	-99.900
		257	-99.900	-99.900	-99.9	-99.9	2.522	-99.900	-99.900
		268	.074	.489	4.3	3.6	2.132	3.400	1.700
		279	-99.900	-99.900	-99.9	-99.9	2.255	-99.900	-99.900
		288	-99.900	-99.900	-99.9	-99.9	2.375	-99.900	-99.900
		294	-99.900	-99.900	-99.9	-99.9	2.032	-99.900	-99.900
		301	-99.900	-99.900	-99.9	-99.9	2.000	-99.900	-99.900
		307	.065	.421	5.0	4.9	1.957	2.400	1.100
		315	.065	.409	5.7	4.7	2.200	5.200	1.700
		316	.069	.457	5.2	4.2	2.227	5.600	1.400
		322	.093	.611	5.1	3.7	2.409	11.000	1.900
		329	-99.900	-99.900	-99.9	-99.9	2.187	-99.900	-99.900
		336	-99.900	-99.900	-99.9	-99.9	2.015	-99.900	-99.900
		346	-99.900	-99.900	-99.9	-99.9	2.000	-99.900	-99.900

TABLE 2c. Continuing

Year	Station	Julian Date	IPON G·M^{-3}	IPOC G·M^{-3}	DOC G·M^{-3}	DRY G·M^{-3}	LOI G·M^{-3}
1982	12	67	.017	.149	2.050	-99.900	-99.900
		76	.015	.128	1.950	.800	-99.900
		83	.017	.144	1.988	-99.900	-99.900
		92	-99.900	-99.900	2.000	-99.900	-99.900
		95	.021	.148	1.814	-99.900	-99.900
		105	.017	.117	1.900	.800	-99.900
		116	.021	.136	2.014	.800	-99.900
		124	.024	.168	2.100	.700	.500
		130	-99.900	-99.900	1.936	7.900	-99.900
		141	.024	.135	2.161	.600	-99.900
		148	.027	.182	1.950	1.000	.600
		151	-99.900	-99.900	1.986	1.000	.700
		158	.027	.183	2.131	1.200	.700
		168	.069	.525	1.900	1.300	-99.900
		172	.113	.823	2.000	1.500	1.300
		179	.158	.795	2.250	2.700	2.400
		186	.132	.820	2.283	2.900	2.200
		197	-99.900	-99.900	2.450	-99.900	-99.900
		203	-99.900	-99.900	2.500	-99.900	-99.900
		207	-99.900	-99.900	2.150	-99.900	-99.900
		215	.069	.410	2.157	2.200	1.500
		221	.060	.353	2.900	3.000	1.800
		231	.096	.559	2.000	1.900	1.400
		235	.094	.532	2.313	2.200	1.700
		242	.085	.483	1.900	1.600	1.500
		250	.051	.252	2.200	1.800	1.600
		260	-99.900	-99.900	2.074	-99.900	-99.900
		266	.080	.426	2.150	2.100	1.600
		271	.079	.388	2.367	1.500	1.100
		277	.106	.545	2.100	2.300	2.000
		287	.053	.297	2.313	2.800	1.000
		291	.052	.369	2.056	1.600	1.100
		298	.027	.299	2.250	1.200	.900
		305	.015	.120	2.073	.600	.500
		313	.032	.210	2.260	.900	.700
		322	.033	.239	2.028	1.100	1.000
		326	.035	.411	2.013	.800	.700

TABLE 2c. Continuing

Year	Station	Julian Date	IPON G·M^{-3}	IPOC G·M^{-3}	DOC G·M^{-3}	DRY G·M^{-3}	LOI G·M^{-3}
1982	41	69	.016	.127	2.000	-99.900	-99.900
		77	.015	.124	2.000	1.600	1.000
		84	.018	.130	2.050	1.400	.600
		91	.017	.093	1.900	.600	-99.900
		104	.016	.100	1.930	.400	-99.900
		119	.023	.115	2.100	.400	-99.900
		124	.031	.200	2.100	.400	-99.900
		131	.033	.195	1.920	.300	-.300
		138	.026	.151	1.994	-99.900	-99.900
		148	.024	.154	2.205	.900	.600
		152	.017	.141	1.943	.800	.600
		158	.018	.105	2.000	.600	-99.900
		166	.030	.193	1.900	.400	-99.900
		173	-99.900	-99.900	1.970	1.100	.700
		180	.110	.596	2.230	1.700	-99.900
		187	.097	.554	2.150	2.000	1.800
		194	.088	.553	2.245	1.700	1.000
		202	-99.900	-99.900	2.450	-99.900	-99.900
		207	.081	.275	2.166	1.400	1.300
		216	.085	.444	2.100	1.500	1.000
		229	.067	.378	2.050	1.600	1.100
		236	.063	.463	2.200	2.100	1.700
		242	.098	.584	2.075	3.200	2.600
		251	.045	.279	2.050	2.000	1.500
		257	-99.900	-99.900	3.100	-99.900	-99.900
		266	.076	.432	2.174	1.900	1.700
		271	.060	.352	2.250	1.500	1.300
		278	.056	.372	2.248	1.100	1.000
		286	.062	.432	2.663	1.000	.900
		292	.033	.258	2.036	1.000	.900
		298	.026	.193	2.500	.900	.800
		306	.038	.245	2.350	.800	.700
		313	.032	.207	2.250	.800	.700
		320	.023	.142	2.400	.600	.400
		326	.035	.216	2.100	.500	.400

TABLE 2c. Continuing

Year	Station	Julian Date	IPON $G \cdot M^{-3}$	IPOC $G \cdot M^{-3}$	DOC $G \cdot M^{-3}$	DRY $G \cdot M^{-3}$	LOI $G \cdot M^{-3}$
1982	81						
		90	.045	.262	2.125	1.800	1.200
		118	.067	.359	2.200	-99.900	-99.900
		125	.075	.509	2.538	1.400	1.100
		131	.058	.332	2.276	1.300	1.000
		140	.073	.470	2.316	3.000	2.000
		147	.059	.410	2.467	1.200	-99.900
		152	.074	.301	2.029	1.200	-99.900
		159	.054	.297	2.126	1.200	1.100
		167	.101	.643	2.100	1.300	-99.900
		173	.103	.474	2.316	1.400	-99.900
		180	-99.900	-99.900	2.583	-99.900	-99.900
		187	.111	.661	2.850	1.700	-99.900
		196	-99.900	-99.900	2.516	-99.900	-99.900
		202	.031	.187	2.619	1.500	1.400
		208	.117	.398	2.297	2.700	1.600
		216	.077	.421	2.280	2.100	1.500
		222	.081	.404	2.450	1.800	1.300
		230	.075	.494	2.096	3.700	2.700
		236	.112	.631	2.430	2.400	1.900
		243	.087	.483	2.274	1.400	1.300
		251	.034	.260	2.230	1.700	1.200
		259	.074	.424	2.190	1.600	1.500
		266	.080	.494	2.108	1.800	1.600
		272	.067	.400	2.258	1.500	1.400
		278	.040	.241	2.255	1.200	1.100
		287	-99.900	-99.900	2.313	-99.900	-99.900
		292	.058	.355	2.050	1.500	1.100
		299	.030	.199	2.893	1.000	.900
		306	.104	.462	2.450	1.700	1.400
		313	.069	.440	2.448	3.300	.800
		320	.057	.368	2.349	1.200	.700
		327	.053	.309	2.224	1.300	.900

TABLE 2c. Continuing

Year	Station	Julian Date	IPON G·M^{-3}	IPOC G·M^{-3}	DOC G·M^{-3}	DRY G·M^{-3}	LOI G·M^{-3}
1982	93						
		70	-99.900	-99.900	2.000	-99.900	-99.900
		77	.034	.252	1.951	5.000	1.400
		83	.037	.265	2.200	5.600	1.600
		89	.043	.232	2.614	1.400	.800
		95	.031	.202	1.900	17.000	2.600
		104	.034	.238	2.031	3.400	1.200
		120	.032	.190	2.064	-99.900	-99.900
		125	.052	.338	2.369	2.800	.800
		131	.046	.284	2.174	2.600	.700
		138	.057	.261	-99.900	-99.900	-99.900
		140	.059	.362	2.130	3.200	1.600
		141	.062	.387	2.350	4.200	1.600
		147	.092	.560	2.274	2.800	1.200
		152	.077	.451	2.420	3.000	1.800
		159	.084	.425	2.389	2.300	1.300
		166	.074	.444	2.093	1.300	1.000
		173	.091	.515	2.200	2.600	1.400
		180	.084	.450	2.150	2.400	1.700
		188	.147	.832	2.566	4.000	2.300
		194	.070	.407	2.526	2.100	1.200
		202	-99.900	-99.900	2.650	-99.900	-99.900
		208	.125	.406	2.200	2.500	1.400
		216	.078	.464	2.350	2.600	1.600
		221	.087	.474	2.271	3.700	2.300
		229	.064	.380	2.180	2.600	1.700
		235	.078	.413	2.478	2.000	1.500
		243	.096	.555	2.123	2.400	1.800
		252	.020	.139	2.000	1.500	.900
		257	.071	.429	2.105	3.100	2.200
		265	.078	.383	2.100	2.300	1.600
		272	.084	.525	2.107	2.100	1.600
		277	.044	.273	2.274	1.800	1.500
		285	.066	.396	2.553	2.100	1.200
		291	.055	.376	2.169	4.400	1.200
		299	.037	.272	3.050	1.700	1.600
		305	.059	.476	2.350	2.200	1.200
		312	.093	.756	3.079	17.000	2.200
		320	.024	.163	2.292	20.300	4.900
		327	.027	.193	1.952	1.900	.800

TABLE 3. List of phytoplankton species observed at the Bioindex stations, which contributed more than one percent of the sample biomass at some time.

	1981	1982
CHRYSOPHYTA		
BACILLARIOPHYCEAE		
Asterionella spp.	x	x
A. formosa	x	x
Cyclotella spp.	x	-
Cymatopleura solea	x	-
Diatoma elongata	x	x
Fragilaria capucina	x	x
F. crotonensis	x	x
Melosira binderana	x	x
M. islandica	x	x
Nitzschia acicularis	x	x
N. linearis	x	x
Stephanodiscus astrea var. minutula	x	x
S. niagarae	x	x
S. hantzschii	x	x
Synedra acus	x	x
S. ulna	x	x
Tabellaria fenestrata	x	x
T. flocculosa	x	x
CHRYSOPHYCEAE		
Chrysochromulina parva	x	x
Dinobryon divergens	x	x
D. sertularia	x	x
D. sertularia var. protuberans	-	x
D. sociale	-	x
PYRROPHYTA		
CRYPTOPHYCEAE		
Cryptomonas spp.	-	x
C. curvata	-	x
C. erosa	x	x
C. reflexa	-	x
Katablepharis ovalis	x	x
Rhodomonas minuta	x	x
DINOPHYCEAE		
Ceratium hirudinella	x	x
Glenodinium spp.	x	x
Gymnodinium helveticum	x	x
G. uberrimum	x	x
Peridinium aciculiferum	x	x
P. cinctum	x	x
CYANOPHYTA		
CYANOPHYCEAE		
Anabaena spp.	x	x
Merismopedia spp.	-	x
Oscillatoria limnetica	x	x
O. minima	x	-
CHLOROPHYTA		
CHLOROPHYCEAE		
Ankistrodesmus convolutus	-	x
Closterium aciculare	x	x
C. microporum	x	x
Cosmarium spp.	-	x
Mougeotia spp.	x	x
Oocystis spp.	-	x
O. borgei	x	-
Pandorina morum	x	-
Pediastrum duplex var. clathratum	x	x
P. simplex var. duodenarium	x	x
Scenedesmus bijuga	x	x
S. ecornis	x	-
Sphaerocystis schroeteri	x	x
Staurastrum paradoxum	x	X
Ulothrix spp.	-	x
U. variabilis	x	-
EUGLENOPHYTA		
EUGLENOPHYCEAE		
Phacus spp.	-	x
Lepocinclis fusiformis	-	x

TABLE 4. Mean epilimnetic concentrations of algal classes at four stations in Lake Ontario in 1981 and 1982.

Year	Station	Julian Date	CHLORO G·M^{-3}	EUGLENO G·M^{-3}	CYANO G·M^{-3}	CRYPTO G·M^{-3}	DINO G·M^{-3}	CHRYSO G·M^{-3}	BACILL G·M^{-3}	TOTAL G·M^{-3}
1981	12	75	.0044	0	.0029	.0787	.0614	0	.2404	.3878
		83	.0188	.0019	.0026	.0952	.1170	.0011	.2970	.5335
		89	.0204	.0023	.0024	.0549	.0787	0	.2098	.4485
		96	.0092	0	.0068	.1086	.1060	.0050	.8504	1.0860
		105	.0155	0	.0099	.0651	.1267	0	.2812	.4983
		111	.0099	.0674	.0014	.1084	.2000	0	.4543	.8413
		117	.0193	0	.0015	.0959	.2240	0	.5215	.8621
		124	.0206	0	.0033	.0805	.1726	0	.1694	.4464
		131	.0214	0	.0057	.0855	.1314	.0010	.2648	.5098
		140	.0087	0	.0042	.0653	.1391	.0010	.2795	.4977
		149	.0132	0	.0029	.2410	.3966	.0008	.2462	.9007
		153	.0471	0	.0084	.5580	.8230	.0116	.1829	1.6310
		160	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		166	.0405	0	.0083	.3250	.0950	.5480	.0466	1.0635
		173	.1856	0	.0519	.5069	.4421	.1845	.0620	1.4330
		182	.0643	0	.1217	.7340	.3843	.0787	.1915	1.5745
		187	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		194	.0361	0	.0131	.0516	.0499	.0785	.0131	.2423
		202	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		208	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		216	.1274	0	.0043	.9617	.6451	0	.0347	1.7731
		222	.1482	0	.0048	.6400	.1472	0	.0005	.9408
		229	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		236	.1429	0	.0062	.2843	.1755	0	.0105	.6194
		245	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		251	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		257	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		269	.2640	0	.0163	.7850	.6046	.0045	.1314	1.8058
		272	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		286	.0229	0	.0045	.6082	.1336	.0015	.0869	.8577
		292	.0770	0	.0070	.3816	.1711	.0020	.2282	.8677
		299	.0605	.0038	.0059	.2642	.1110	0	.3650	.8304
		306	.0656	0	.0081	.5298	.1108	0	.2102	.9245
		314	.0767	0	.0080	.5238	.1470	.0007	.3189	1.0751
		321	.1244	.0038	.0102	.3280	.0907	0	.1612	.7182
		327	.0262	0	.0120	.2114	.0270	0	.1223	.3989
		334	.0184	0	.0041	.0778	.0593	0	.1146	.2742
		341	.0205	.0039	.0057	.0837	.0774	.0020	.1132	.3063

TABLE 4. Continuing

Year	Station	Julian Date	CHLORO G·M^{-3}	EUGLENO G·M^{-3}	CYANO G·M^{-3}	CRYPTO G·M^{-3}	DINO G·M^{-3}	CHRYSO G·M^{-3}	BACILL G·M^{-3}	TOTAL G·M^{-3}
1981	41	78	.0157	.0021	.0022	.0546	.0541	0	.4751	.6037
		82	.0282	0	.0016	.0785	.0768	0	.7860	.9711
		90	.0093	0	.0053	.0513	.1416	.0003	.9063	1.1140
		99	.0163	0	.0032	.0447	.0705	0	.9468	1.0835
		106	.0106	0	.0013	.0493	.0737	0	.3923	.5272
		112	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		118	.0136	0	.0017	.0662	.3261	0	.5922	.9997
		125	.0151	0	.0015	.0345	.2321	0	.2517	.5348
		133	.0153	0	.0029	.0418	.1838	.0007	.2103	.4539
		141	.0605	0	.0056	.0780	.2226	0	.2548	.6215
		147	.0062	0	.0027	.0462	.1323	0	.1391	.3285
		154	.0370	0	.0152	.1221	.5399	.0042	.2436	.9620
		161	.0344	0	.0273	.1806	.3822	.2235	.1948	1.0427
		167	.0163	0	.0855	.2113	.3209	.2362	.2225	1.0946
		174	.0429	0	.1045	.3104	.1904	.0207	.1822	.8511
		181	.0585	0	.1133	.4620	.6254	.4345	.1589	1.8525
		188	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		194	.0974	0	.0247	.2740	.0431	.1136	.0095	.5623
		203	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		208	.0255	0	.0017	.1726	.0356	.0058	.0023	.2434
		217	.0443	0	.2046	.1991	.1550	0	.0332	.6363
		223	.0752	0	.0107	.1512	.2023	0	.0047	.4441
		231	-99.9000	-99.9800	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		237	.1374	0	.0017	.3460	.1613	0	.0043	.6507
		244	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		259	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		268	.1281	0	.0091	.3640	.0589	.0030	.0359	.5990
		272	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		279	.1612	0	.0166	.4850	.1107	.0113	.2477	1.0324
		287	.1160	0	.0092	.5140	.1779	.0045	.1195	.9410
		294	.0591	0	.0184	.5017	.1062	.0014	.0839	.7706
		300	.1169	0	.0120	.3757	.0330	0	.2477	.7853
		307	.0788	0	.0069	.7096	.0903	0	.1478	1.0335
		315	.0665	0	.0078	.5705	.0985	.0007	.2044	.9564
		322	.0648	0	.0107	.5623	.0828	0	.0894	.8101
		328	.1218	0	.0199	.3479	.1172	0	.1822	.7890
		335	.0563	0	.0028	.1804	.0125	0	.1018	.4338
		345	.0227	0	.0036	.1447	.0730	0	.0355	.2794

TABLE 4. Continuing

Year	Station	Julian Date	CHLORO G·M^{-3}	EUGLENO G·M^{-3}	CYANO G·M^{-3}	CRYPTO G·M^{-3}	DINO G·M^{-3}	CHRYSO G·M^{-3}	BACILL G·M^{-3}	TOTAL G·M^{-3}
1981	81	80	.8978	0	.0037	.1183	.3602	.0105	1.9090	2.5075
		83	.0511	0	.0013	.0608	.2500	.0399	2.0204	2.4403
		90	.0235	.0050	.0064	.1136	.3062	.0100	1.4301	1.9835
		98	.0191	0	.0083	.1619	.5206	.0146	1.4420	2.1673
		107	.0297	.0025	.0146	.1463	.3534	.0331	.6050	1.2655
		112	.0336	0	.0236	.2059	.3004	.0653	.6771	1.3860
		118	.0641	0	.0097	.1545	.7364	.1525	.5300	1.6470
		125	.0569	0	.0342	.0997	.6943	.0650	.4087	1.3589
		132	.0195	0	.0805	.0592	.6017	.0872	.2520	1.1000
		142	.0506	0	.0454	.0588	.1453	.0597	.0622	.4220
		148	.1336	0	.0290	.1007	.3445	.1188	.1077	.8424
		155	.1390	0	.0775	.3190	.4727	.4360	.1266	1.5716
		161	.0812	0	.2258	.3990	.3931	.0759	.1434	1.3183
		167	.0566	0	.0632	.4435	.5103	.3390	.0981	1.5107
		174	.1166	0	.0400	.3120	.2903	.1396	.0972	.9956
		181	.4793	0	.0415	.3680	.3170	.1610	.0826	1.4493
		188	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		195	.3556	0	.0772	.2774	.0649	.2258	.0223	1.0232
		204	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		211	.1499	0	.0259	.5007	.0378	0	.0161	.7304
		217	.2978	0	.1722	.7794	.3651	.0099	.0397	1.6642
		223	.3214	0	.0294	.1137	.1799	0	.0162	.6605
		230	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		237	.4271	0	.0166	.3720	.1092	0	.0209	1.0259
		244	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		252	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		258	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		267	.1510	0	.0156	.2933	.0754	.0011	.1003	.6367
		273	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		278	.2278	0	.0548	.5860	.2779	.0015	.1469	1.2950
		287	.1991	0	.0297	.6900	.1846	0	.1571	1.2607
		293	.0983	0	.0120	.2989	.1188	.0018	.1809	.7091
		300	.0972	0	.0087	.4631	.1817	0	.0945	.8452
		307	.1111	0	.0094	.3052	.0322	0	.1564	.6143
		315	.0968	0	.0066	.6265	.0289	.0007	.2234	.9829
		322	.0609	0	.0076	.4042	.0672	0	.1898	.7377
		328	.0556	0	.0040	.3806	.0360	0	.0895	.5737
		335	.0480	0	.0052	.3314	.0567	0	.1505	.5518
		342	.0239	0	.0110	.2763	.0340	0	.0361	.3812

TABLE 4. Continuing

Year	Station	Julian Date	CHLORO G·M^{-3}	EUGLENO G·M^{-3}	CYANO G·M^{-3}	CRYPTO G·M^{-3}	DINO G·M^{-3}	CHRYSO G·M^{-3}	BACILL G·M^{-3}	TOTAL G·M^{-3}
1981	93	78	.0356	0	.0037	.1819	.1323	.0012	1.3694	1.7241
		82	.0366	0	.0007	.0307	.2578	.0006	.1908	.5172
		89	.0309	.0035	.0042	.1009	.4501	0	1.1223	1.7119
		99	.0176	0	.0050	.1929	.2911	0	1.0495	1.5560
		103	.0167	0	.0028	.0878	.2524	.0022	.3795	.7413
		112	.0169	0	.0068	.0343	.3275	.0036	.5339	.9230
		117	.0503	0	.0090	.0975	.4434	.0582	.5089	1.1673
		124	.1930	0	.0598	.0929	1.0387	.0500	.3437	1.7781
		134	.1300	0	.0019	.3020	.6336	.3875	.4185	1.8735
		142	.0814	0	.0167	.4663	1.0965	.3817	.2091	2.2717
		146	.1115	0	.0095	.2880	.3808	.8920	.2085	1.8903
		153	.1469	0	.0691	1.1010	.7819	.5722	.3234	2.9944
		162	.0336	0	.0070	.2120	.2629	.0100	.0449	.5705
		166	.0651	0	.0148	.3561	.3785	.0269	.0152	.8587
		175	.1089	0	.0074	.1594	.0143	.0030	.0535	.3465
		180	.3105	0	.0341	.4230	.1421	.0440	.1131	1.0668
		189	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		195	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		204	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		211	.0385	0	.0024	.1275	.0687	.0066	.0057	.2494
		218	.1159	0	.4427	.3180	.1110	0	.0337	1.0213
		224	.1318	0	.0165	.6370	.5865	.0051	.0267	1.4036
		229	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		238	.3400	0	.0118	.0682	.2230	.0010	.0650	.7090
		243	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		257	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		268	.2206	0	.1390	.3269	.1448	.0175	.1648	1.0136
		279	.1640	0	.0192	.1509	.0056	.0102	.1833	.5412
		288	.0375	0	.0152	.1229	.0164	.0008	.0987	.2915
		294	.0774	0	.0357	.1417	.0759	.0023	.2507	.5837
		301	.0973	0	.0195	.5751	.0713	.0015	.3992	1.1638
		307	.0383	0	.0140	.5438	.0306	0	.5135	1.1403
		315	.0607	0	.0174	.3462	.1096	0	.3770	.9110
		316	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		322	4.0416	0	.0016	.1805	.0748	.0076	.7352	5.0413
		329	.0308	0	.0317	.2459	.1121	0	.6507	1.0711
		336	.0249	0	.0212	.1619	.0533	0	.3576	.6189
		346	.0222	0	.0168	.1590	.0433	.0012	.5548	.7965

TABLE 4. Continuing

Year	Station	Julian Date	CHLORO G·M^{-3}	EUGLENO G·M^{-3}	CYANO G·M^{-3}	CRYPTO G·M^{-3}	DINO G·M^{-3}	CHRYSO G·M^{-3}	BACILL G·M^{-3}	TOTAL G·M^{-3}
1982	12									
		67	.0229	0	.0037	.0807	.0769	0	.0773	.2614
		76	.0029	.0080	.0019	.0156	.0083	0	.0389	.0677
		83	.0135	0	.0034	.0756	.0193	0	.0544	.1662
		92	.0173	0	.0032	.1028	.0543	0	.0568	.2343
		95	.0081	0	.0022	.0636	.0397	0	.0631	.1767
		105	.0167	0	.0034	.0793	.0426	.0002	.0745	.2166
		116	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		124	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		130	.0363	0	.0009	.0916	.0297	0	.2069	.3653
		141	.0158	0	.0027	.0759	.0532	.0002	.2724	.4202
		148	.0355	0	.0022	.0485	.0147	0	.3448	.4456
		151	.0503	0	.0015	.0572	.0516	.0001	.5154	.6761
		158	.0435	0	.0038	.0920	.0884	0	.5394	.7671
		168	.1218	0	.0190	.3520	.3838	.4834	.1597	1.5197
		172	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		179	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		186	.1680	0	.0393	.3077	.2421	.4305	.0527	1.2402
		197	.0806	0	.0946	.3539	.0934	.1018	.3500	1.0743
		203	.1276	0	.0680	.4270	.3186	.0289	.6788	1.6489
		207	.0821	0	.1441	.2066	.4994	.0429	.4607	1.4357
		215	.0952	0	.0665	.1324	.2527	.0364	.0221	.6053
		221	.2063	0	.0464	.0995	.1113	.0230	.0028	.4894
		231	.0995	0	.0421	.2642	.0196	.0086	.0945	.5286
		235	.1092	0	.1532	.3914	.0814	.0048	.1456	.8056
		242	.0891	0	.0233	.5324	.1303	.0003	.0566	.8320
		250	.0957	0	.0179	.5212	.0184	0	.0734	.7266
		260	.1040	0	.0358	.4348	.0731	.0011	.1291	.7779
		266	.2548	0	.0311	.4707	.0974	.0004	.0786	.9329
		271	.1051	0	.0235	.7382	.1276	.0027	.1017	1.0987
		277	.1139	0	.0166	.3727	.0685	.0009	.0262	.5988
		287	.1765	0	.0103	.2048	.0297	.0011	.0475	.4698
		291	.1961	0	.0062	.2858	.0428	.0002	.0351	.5662
		298	.0891	0	.0018	.1585	.0582	.0002	.0472	.3549
		305	.0086	0	.0018	.0637	.0088	0	.0394	.1942
		313	.0470	0	.0027	.2780	.0818	.0009	.1802	.5985
		322	.0440	0	.0066	.2563	.0476	0	.0876	.4421
		326	.0394	0	.0012	.1693	.0451	0	.0644	.3193

TABLE 4. Continuing

Year	Station	Julian Date	CHLORO $G \cdot M^{-3}$	EUGLENO $G \cdot M^{-3}$	CYANO $G \cdot M^{-3}$	CRYPTO $G \cdot M^{-3}$	DINO $G \cdot M^{-3}$	CHRYSO $G \cdot M^{-3}$	BACILL $G \cdot M^{-3}$	TOTAL $G \cdot M^{-3}$
1982	41	69	.0106	0	.0050	.0715	.0086	0	.1133	.2090
		77	.0121	0	.0027	.0558	.0408	.0001	.1324	.2438
		84	.0255	0	.0023	.0652	.0664	0	.1015	.2809
		91	.0201	0	.0041	.0586	.0443	0	.2136	.3407
		104	.0165	0	.0018	.0759	.0202	0	.2190	.3333
		119	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		124	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		131	.0531	0	.0042	.0764	.0763	.0001	.6004	.8106
		138	.0329	0	.0029	.0693	.0386	.0001	.3309	.4748
		148	.0509	0	.0022	.0688	.0537	0	.5425	.7181
		152	.0395	0	.0027	.0547	.0475	0	.5556	.6999
		158	.0623	0	.0062	.0731	.0890	0	.5005	.7310
		166	.0793	0	.0269	.2501	.3905	.2434	.1828	1.1730
		173	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		180	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		187	.1081	0	.0429	.1957	.1314	.0964	.3140	.8885
		194	.2113	0	.0788	.3510	.1837	.1501	.2487	1.2236
		202	.1661	0	.0453	.3508	.1839	.0577	.1526	.9643
		207	.0434	0	.0078	.1537	.0326	.0360	.0057	.2793
		216	.0750	0	.0076	.0688	.0422	.0011	.0015	.1962
		229	.0744	0	.0203	.1442	.0644	.0017	.0051	.3101
		236	.0495	0	.0295	.2353	.1255	.0104	.0024	.4525
		242	.3793	0	.0429	.2468	.2036	.0035	.0170	.8932
		251	.3095	0	.0215	.1770	.0928	0	.0261	.6269
		257	.2706	0	.0246	.2902	.1439	.0073	.0360	.7805
		266	.3911	0	.0424	.6597	.4364	.0019	.0413	1.5727
		271	.2136	0	.0249	.4934	.1300	0	.0276	.8904
		278	.4378	0	.0290	.5437	.1233	0	.0916	1.2254
		286	.2904	0	.0112	.2905	.1003	.0016	.0646	.7585
		292	.1554	0	.0369	.1706	.0994	0	.0766	.5389
		298	.0605	0	.0051	.1663	.0349	.0025	.0287	.2981
		306	.0545	0	.0087	.1963	.0434	.0027	.0355	.3410
		313	.0630	0	.0036	.2034	.0782	.0014	.0362	.3857
		320	.0371	0	.0012	.0855	.0210	.0010	.0345	.1803
		326	.0722	0	.0012	.2061	.0607	.0005	.0548	.3955

TABLE 4. Continuing

Year	Station	Julian Date	CHLORO G·M^{-3}	EUGLENO G·M^{-3}	CYANO G·M^{-3}	CRYPTO G·M^{-3}	DINO G·M^{-3}	CHRYSO G·M^{-3}	BACILL G·M^{-3}	TOTAL G·M^{-3}
1982	81	90	.0151	0	.0091	.1473	.1682	.0038	1.4647	1.8081
		110	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		125	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		131	.0697	0	.0127	.2819	.8995	.0240	.7542	2.0420
		140	.1128	0	.0190	.1752	.5256	.1159	.3451	1.2936
		147	.0615	0	.0140	.1550	.3006	.6607	.2506	1.4431
		152	.0593	0	.0195	.1294	.2873	.1540	.2642	.9139
		159	.0534	0	.0306	.1577	.1272	.0474	.2225	.6387
		167	.0399	0	.0437	.1794	.2074	.0430	.4655	.9789
		173	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		180	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		187	.0451	0	.0656	.1703	.1428	.6058	.2748	1.3243
		196	.0626	0	.0427	.3150	.2698	.4812	.2237	1.3948
		202	.0553	0	.0451	.2657	.0918	.3243	.0358	.8179
		208	.1293	0	.0218	.3289	.1249	.0143	.0351	.6542
		216	.1003	0	.0046	.4006	.1032	.0001	.0059	.6946
		222	.1808	0	.0328	.2119	.0400	0	.0041	.4696
		230	.3179	0	.0384	.7478	.4315	0	.0144	1.5500
		236	.5852	0	.0196	.3017	.1107	.0018	.0092	1.0283
		243	.2619	0	.0106	.5151	.1232	.0004	.0307	.9500
		251	.2935	0	.0097	.3624	.1594	.0017	.0481	.8747
		259	.3811	0	.0089	.3367	.1588	.0030	.0648	.9533
		266	.2858	0	.0259	.2794	.1232	.0056	.0619	.8019
		272	.4495	0	.0337	.2663	.1856	.0124	.1239	1.0714
		278	.2375	0	.0241	.4841	.1786	.0039	.2326	1.1608
		287	.3101	0	.0677	.4736	.2404	.0055	.0775	1.1748
		292	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		299	.0643	0	.0044	.3757	.0556	.0008	.0735	.5943
		306	.1192	0	.0157	.9275	.1621	.0021	.1038	1.3303
		313	.0872	0	.0030	.3367	.1038	.0003	.1172	.6482
		320	.0449	0	.0003	.3360	.0674	.0007	.0563	.5075
		327	.0790	0	.0002	.1998	.0289	0	.0980	.4058

TABLE 4. Continuing

Year	Station	Julian Date	CHLORO G·M^{-3}	EUGLENO G·M^{-3}	CYANO G·M^{-3}	CRYPTO G·M^{-3}	DINO G·M^{-3}	CHRYSO G·M^{-3}	BACILL G·M^{-3}	TOTAL G·M^{-3}
1982	93	70	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		77	.0089	.0164	.0015	.0949	.0644	0	.4655	.6517
		83	.0360	.0135	.0053	.0861	.0617	0	.4070	.6096
		89	.0070	0	.0023	.0718	.0647	.0005	1.0341	1.1804
		95	.0274	0	.0253	.0635	.1049	0	1.0275	1.2485
		104	.0103	0	.0009	.0544	.1241	0	.2443	.4339
		120	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		125	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		131	.0214	0	.0005	.0230	.2028	.0017	.4705	.7198
		138	.0359	0	.0058	.1350	.1846	.0061	.5372	.9046
		140	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		141	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		147	.0661	0	.0017	.1118	.5828	.0349	.8243	1.6216
		152	.1691	0	.0087	.2958	.4057	.0257	.2730	1.1780
		159	.0635	0	.0068	.2212	.1228	.0237	.5414	.9793
		166	.1610	0	.0423	.4881	.3601	.1130	.1287	1.2932
		173	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		180	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000	-99.9000
		188	.1976	0	.0155	.2920	.0752	.2254	.0606	.8663
		194	.1827	0	.0048	.2020	.0832	.1469	.0321	.6517
		202	.1368	0	.0172	.1467	.1151	.0172	.1915	.6245
		208	.1506	0	.0315	.1206	.1056	.0070	.0093	.4246
		216	.1676	0	.0331	.1681	.1858	.0146	.0165	.5857
		221	.2184	0	.0226	.1666	.1404	.0052	.0140	.5672
		229	.1851	0	.0167	.2404	.1463	.0004	.0086	.5975
		235	.2594	0	.0101	.1651	.1363	.0033	.0184	.5925
		243	.1988	0	.0420	.3912	.0963	.0398	.0467	.8148
		252	.0562	0	.0181	.0745	.0757	.0039	.0539	.2823
		257	.1446	0	.0309	.3045	.1069	.0033	.0761	.6662
		265	.0690	0	.0288	.1373	.0417	.0051	.0457	.3276
		272	.1639	0	.1968	.5643	.1683	.0111	.0523	1.1566
		277	.2465	0	.0225	.2667	.1267	.0030	.0173	.6828
		285	.1620	0	.0246	.3220	.0573	.0018	.1319	.6996
		291	.1712	0	.0210	.2740	.0926	.0044	.1312	.6952
		299	.1586	0	.0048	.2772	.0265	.0011	.1359	.6041
		305	.0821	0	.0103	.6053	.0854	.0015	.3408	1.1253
		312	.2740	0	.0319	.2747	.0823	.0082	.4802	1.1514
		320	.1412	0	.0163	.1630	.0516	.0001	.8027	1.2548
		327	.0438	0	.0063	.0528	.0192	.0002	.2766	.3989

TABLE 5a. MEAN DAILY BIOMASS AND PERCENTAGE OF SEASONAL BIOMASS PER SAMPLE FOR ALGAL SPECIES CONTRIBUTING GREATER THAN 5% TO A SAMPLE IN THE YEAR. THE SPECIES ARE SUBDIVIDED INTO CHLOROPHYCEAE, CYANOPHYCEAE, CRYPTOPHYCEAE, DINOPHYCEAE, CHRYSOPHYCEAE, AND BACILLARIOPHYCEAE.

STATION 12 1981

	BIOMASS (G*M-3)	DATE																											
		MAR 18	MAR 24	MAR 30	APR 06	APR 15	APR 21	APR 29	MAY 05	MAY 12	MAY 21	MAY 28	JUN 03	JUN 10	JUN 16	JUN 23	JUN 30	JUL 14	AUG 05	AUG 10	AUG 24	SEP 26	OCT 14	OCT 19	OCT 27	NOV 03	NOV 11	NOV 18	NOV 24	NOV 30	DEC 07
PANDORINA MORUM	0.000323																							100					
PEDIASTRUM SIMPLEX VAR DUODENARIUM	0.001124																			23	76								
PEDIASTRUM DUPLEX VAR CLATHRATUM	0.001409																		34	58	7								
SCENEDESMUS ECORNIS	0.000171																			85									14
STAURASTRUM PARADOXUM VAR PARVUM	0.007880																		15	10	15	6		3			10	35		2	
ULOTHRIX VARIABILIS	0.001303																			15				3	45		4	12	8		10
MOUGEOTIA SPP	0.002492																7	2		26	11	20	5			17	7				
SPHAEROCYSTIS SCHROETERI	0.002905																		15	3		34		46						
COELASTRUM MICROPORUM	0.002322															5			8		3	67	2	4		5				1
OOCYSTIS BORGEI	0.002850		2												2	2			11	7	14	20	4	6	15		4	4	3		
OSCILLATORIA MINIMA	0.001109	3								8		3	5		4	1	54	1				4	3	3				1		4
OSCILLATORIA LIMNETICA	0.009182				1					1	1		1	9	2	18	37	4				1		1	2	2	2	2	1	1
ANABAENA SPP	0.000360																		22	32	33	11								
CRYPTOMONAS EROSA	0.183131				1		1	1				2	6	4	2	1	3		16	5	3	11	6	4	3	6	6	2	2	
RHODOMONAS MINUTA	0.133712		1		1		1			1		2	5	10	5	10	13		1	7	2	3	6	3	2	4	3	3	2	1
KATABLEPHARIS OVALIS	0.002822		1									1	8	12	4		3	6			9	9	5	4	2	8	9	10		
GYMNODINIUM HELVETICUM	0.070800	2	4	2	3	2	3	3	4	3	2	10	15	8	1	6	4					3	1	2	2	3	2	2		1	
GYMNODINIMUM UBERRIMUM	0.018317		1		2		10	19	8	6	3	11		24			8		2											
PERIDINIUM CINCTUM	0.004583																				35						44			19
PERIDINIUM ACICULIFERUM	0.060696					3	1	1			1	3	20	6	1	4			31	4	3	5	5	4						
GLENODINIUM SPP	0.046671		1			1	2	1	2	1	2	2	9	9	3	15	17	3		4		1			4	2	1	2	1	2
CERATIUM HIRUNDINELLA	0.019167																		11		9	73		5						
DINOBRYON SERTULARIA	0.005431													19	49	16	6	7												
ASTERIONELLA FORMOSA	0.007731		1	1	5		2	2	1	2		2	9	10	3	3	1					6	2	6	10	3	7	2	4	5	1
DIATOMA ELONGATA	0.010362				1							1	8	17	5	4	28	3				1		2	6	3		3	2	1	4
CYCLOTELLA SPP	0.008236	51	26	21																											
MELOSIRA BINDERANA	0.014215	3	20	3	49		5	5		1				5															1	1	
MELOSIRA ISLANDICA	0.048609	3	3	7	7	4	8	15	7	13	15	9		1																	
FRAGILARIA CAPUCINA	0.001696																							9	10	2	48		24		3
FRAGILARIA CROTONENSIS	0.006236															11					3	9	5	13	24	7	6	5	4	8	
NITZSCHIA ACICULARIS	0.006196		8	2	5	1	1		1	1	1	2	7	16	6	3	21				2	1		2	2		3		2	1	
STEPHANODISCUS ASTRAEA VAR MINUTULA	0.037394		3	3	30	9	6	3														3	3	6	7	5	5	3	2	3	2
STEPHANODISCUS HANTZSCHII	0.002705		1	2	13	15	5	2		1									40			3			5		2				1
STEPHANODISCUS NIAGARAE	0.005453					18	54	27																							
CYMATOPLEURA SOLEA	0.000000																														
TABELLARIA FENESTRATA	0.022684				2		2	2						2		1	8					4		5	16	12	25		5	2	8
SYNEDRA ULNA	0.026086	4	4	6	15	5	11	19	4	4	5	4	2									2				1				2	
SYNEDRA ACUS	0.007733				3			1	1	4		21	42	16	4											1					

TABLE 5b. MEAN DAILY BIOMASS AND PERCENTAGE OF SEASONAL BIOMASS PER SAMPLE FOR ALGAL SPECIES CONTRIBUTING GREATER THAN 5% TO A SAMPLE IN THE YEAR. THE SPECIES ARE SUBDIVIDED INTO CHLOROPHYCEAE, CYANOPHYCEAE, CRYPTOPHYCEAE, DINOPHYCEAE, CHRYSOPHYCEAE, AND BACILLARIOPHYCEAE.

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	BIOMASS (G*M-3)	DATE																														
		MAR 19	MAR 24	MAR 30	APR 9	APR 15	APR 28	MAY 5	MAY 12	MAY 21	MAY 28	JUN 3	JUN 10	JUN 16	JUN 23	JUN 3	JUL 14	JUL 27	AUG 5	AUG 10	AUG 25	SEP 25	OCT 6	OCT 14	OCT 19	OCT 27	NOV 3	NOV 11	NOV 18	NOV 24	NOV 30	DEC 11
PANDORINA MORUM	0.000000																															
PEDIASTRUM SIMPLEX VAR DUODENARIUM	0.002340																				33	42				2			20		
PEDIASTRUM DUPLEX VAR CLATHRATUM	0.001127																		52	38									8		
SCENEDESMUS ECORNIS	0.000584															10				78						6			5		
STAURASTRUM PARADOXUM VAR PARVUM	0.006922																			3	13	13	14		11		3	7	28	3		
ULOTHRIX VARIABILIS	0.005441											5									1	15	5	11	8	11	15	4	18	2		
MOUGEOTIA SPP	0.002921															2	80				8	3					4					
SPHAEROCYSTIS SCHROETERI	0.001669																		21	21	11		12	5		2	25					
COELASTRUM MICROPORUM	0.001167																		9		20	26	7	3	8	5	7	2		1	5	
OOCYSTIS BORGEI	0.005154												1						5	4	28	11	6	6	8	16	1	2	1	1		1
OSCILLATORIA MINIMA	0.004037								1	2		7	10	13	23	35						2										
OSCILLATORIA LIMNETICA	0.009633											1	4	22	24	22	4						2	1	2	1		2	2	1		1
ANABAENA SPP	0.007452																		88	4										6		
CRYPTOMONAS EROSA	0.149134											1	2	2	3	4	2	3	2	2	4	6	6	6	7	5	9	6	7	4	2	
RHODOMONAS MINUTA	0.092277		1							1	1	1	2	2	5	9	5		2	1	4	2	6	6	5	2	6	8	6	4	2	3
KATABLEPHARIS OVALIS	0.004530											1	18	2	7	9	7			3	6	7	7	1	7	5	2	4	5			
GYMNODINIUM HELVETICUM	0.065477	2	2	4	2	1	7	2	3	2	3	9	11	10	1	15							2	2	1		1	3	2	4		1
GYMNODINIMUM UBERRIMUM	0.018293			6	1		24	27		9	1	8			14	2		1														
PERIDINIUM CINCTUM	0.004990																	15		11	22	31		17								
PERIDINIUM ACICULIFERUM	0.031258		1		1	2	2		6	9	3	23	6	3	1				15	9	4				4						
GLENODINIUM SPP	0.033910			1			1	1	3	2	2	6	7	6	6	28	4			4						3	2	2	3	2	1	4
CERATIUM HIRUNDINELLA	0.011552																			12	22		16	27	12		9					
DINOBRYON SERTULARIA	0.004874												21	23	1	42	10															
ASTERIONELLA FORMOSA	0.007517	1	1	4	3	2	1	2	3	4	3		12	8	4	1						1	2	1	3	2	4	4	10	10	3	
DIATOMA ELONGATA	0.006460	1		1	1			1				2	28	25	12	10	4						1	2		3		1				
CYCLOTELLA SPP	0.010132	21	54	24																												
MELOSIRA BINDERANA	0.046107	12	18	29	31	3	2																									
MELOSIRA ISLANDICA	0.040917	2	9	13	10	17	11	7	6	6	4	9																				
FRAGILARIA CAPUCINA	0.001822		5							17						17						44				5	8				
FRAGILARIA CROTONENSIS	0.007870		1		3								8		5	3					1	3	19	10	1	19	7	8	1		2	
NITZSCHIA ACICULARIS	0.007566	1			1		1					2	12	18	26	24						2										
STEPHANODISCUS ASTRAEA VAR MINUTULA	0.027397	8		6	20	7	13	5															8	3	5	2	2	6		1	2	2
STEPHANODISCUS HANTZSCHII	0.001967	2	3	4		1	3		1										53	7		7	1						3		5	
STEPHANODISCUS NIAGARAE	0.004524				9	8	63																				19					
CYMATOPLEURA SOLEA	0.000807		33				66																									
TABELLARIA FENESTRATA	0.036235	2	2	3	1	1	3	1			2	1	3	7	4	5							7	3		12	5		4	12	10	
SYNEDRA ULNA	0.033970	7	16	10	12	1	12	6	8	12	3	4																			2	
SYNEDRA ACUS	0.002291					1		1	7	11	8	14		37	7												4			3		

TABLE 5c. MEAN DAILY BIOMASS AND PERCENTAGE OF SEASONAL BIOMASS PER SAMPLE FOR ALGAL SPECIES CONTRIBUTING GREATER THAN 5% TO A SAMPLE IN THE YEAR. THE SPECIES ARE SUBDIVIDED INTO CHLOROPHYCEAE, CYANOPHYCEAE, CRYPTOPHYCEAE, DINOPHYCEAE, CHRYSOPHYCEAE, AND BACILLARIOPHYCEAE.

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	BIOMASS (G*M-3)	DATE																												
		MAR 21	MAR 24	MAR 31	APR 8	APR 15	APR 21	APR 28	MAY 5	MAY 12	MAY 21	JUN 3	JUN 10	JUN 16	JUN 23	JUN 3	JUL 14	JUL 28	AUG 5	AUG 10	AUG 25	SEP 25	OCT 6	OCT 14	OCT 19	OCT 27	NOV 3	NOV 11	NOV 18	NOV 24	NOV 30	DEC 8
PANDORINA MORUM	0.002458																					100								
PEDIASTRUM SIMPLEX VAR DUODENARIUM	0.003178																		70			26	2							
PEDIASTRUM DUPLEX VAR CLATHRATUM	0.006973																14	29	14	14	9			4	8	5				
SCENEDESMUS ECORNIS	0.000231																					58					20	5		15	
STAURASTRUM PARADOXUM VAR PARVUM	0.008197											5					5		19	12	7		9	4	6	6	9	6	3	2	
ULOTHRIX VARIABILIS	0.005489							1	3		2			2				4		17		18	16	13	3	4	6		1	4	
MOUGEOTIA SPP	0.018579	6	1												9	13	40	2	5	2	7	2	5								
SPHAEROCYSTIS SCHROETERI	0.004060																1	9	6	49	26			3		1			2		
COELASTRUM MICROPORUM	0.006780																3	10	5		9	14	17	2	3	4	7	5	4	7	1
OOCYSTIS BORGEI	0.008918	1			1			1					2					1	4	19	32	5	5	3	3	3	5	4	1		
OSCILLATORIA MINIMA	0.011835								1	21	11	12	37	5	1	1			2											1
OSCILLATORIA LIMNETICA	0.006867				3			4			1	8	11	15	12	16	7						2		1		1	3	1	2	1
ANABAENA SPP	0.006133												28	1			27	3	19				11	4							
CRYPTOMONAS EROSA	0.189057						1					1	1	3	2	2	3	7	12		3	3	5	9	3	5	3	6	4	3	3	2
RHODOMONAS MINUTA	0.118721	1	1	2	2	2	2	2	1		1	6	8	6	5	5	2		1	1	3	1	6	3	2	2	1	5	3	4	3	4
KATABLEPHARIS OVALIS	0.010058	1				2	2	4	2	2	4	5	4	1	1		25	5	2	1	4	4	1	3	4		1	1	5			
GYMNODINIUM HELVETICUM	0.060635	5	3	3	6	2	4	4	2	5	5	18	10	10	2										4	3	1				
GYMNODINIMUM UBERRIMUM	0.049150	5	1	9	9	3	10	24	22				6	5	1				1												
PERIDINIUM CINCTUM	0.015148																		33	23	19			23							
PERIDINIUM ACICULIFERUM	0.085649	5	6	2	9	9	3	7	9	21	1	2		1	5				4	2	2		3								
GLENODINIUM SPP	0.042665	2					3	6	4	1		3	6	13	7	23	3	2			1				1			3	2	3	2
CERATIUM HIRUNDINELLA	0.012910																		16		4	10	44	16		8					
DINOBRYON SERTULARIA	0.005714				1			12		7	3	27	4	12	2	10	18														
ASTERIONELLA FORMOSA	0.009455	2	3	4	3	3	3	2	1			1		3										1	1	5	6	16	17	10	5	1
DIATOMA ELONGATA	0.007184	3	6	10	4	2	9	5	3	3	1	5	12	11	4	8	5														
CYCLOTELLA SPP	0.007996	21	48	28		1																									
MELOSIRA BINDERANA	0.188355	21	21	19	16	5	5	4	2																						
MELOSIRA ISLANDICA	0.018519	21	14	18	20	3	5	6	3	3													2			1					
FRAGILARIA CAPUCINA	0.005137		8	6		8	25		15												4		1	16	1		9				
FRAGILARIA CROTONENSIS	0.012676	3	11	2	2	2		6	5	12	2	2	6	5		1			3		1	1	2	9	1	1		2	6	3	
NITZSCHIA ACICULARIS	0.003805	3	3	2	4	2	5	5	13	13	3	6	5	4	10	2						1	6								
STEPHANODISCUS ASTRAEA VAR MINUTULA	0.019374	2			15	2	5	4										1	2			1	9	5	5	3	5	5	5	3	9	4
STEPHANODISCUS HANTZSCHII	0.005562	3	5	4	16	12	16	4	13									2	5		2		1		2	4		2			1	
STEPHANODISCUS NIAGARAE	0.025756	17	26		7	7																3		5	9	3	6	6	3		3
CYMATOPLEURA SOLEA	0.000000																														
TABELLARIA FENESTRATA	0.053457	11	2		7	9	6	6	6	5	2	5	3	1	2	2						3	2		3		2	3	3	1	3
SYNEDRA ULNA	0.014153	36	34	6	8	3	7		1																						
SYNEDRA ACUS	0.001007		9	9			11	34					17		17																

TABLE 5d. MEAN DAILY BIOMASS AND PERCENTAGE OF SEASONAL BIOMASS PER SAMPLE FOR ALGAL SPECIES CONTRIBUTING GREATER THAN 5% TO A SAMPLE IN THE YEAR. THE SPECIES ARE SUBDIVIDED INTO CHLOROPHYCEAE, CYANOPHYCEAE, CRYPTOPHYCEAE, DINOPHYCEAE, CHRYSOPHYCEAE, AND BACILLARIOPHYCEAE.

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	BIOMASS (G*M-3)	DATE																														
		MAR 19	MAR 24	MAR 31	APR 9	APR 15	APR 21	APR 28	MAY 5	MAY 12	MAY 21	MAY 28	JUN 3	JUN 10	JUN 16	JUN 23	JUN 30	JUL 28	AUG 5	AUG 10	AUG 25	SEP 25	OCT 6	OCT 13	OCT 19	OCT 27	NOV 3	NOV 11	NOV 18	NOV 25	NOV 30	DEC 12
PANDORINA MORUM	0.000000																															
PEDIASTRUM SIMPLEX VAR DUODENARIUM	0.007999															9			8	36	25	4		3	11							
PEDIASTRUM DUPLEX VAR CLATHRATUM	0.004032													9		4	3		10	60	8						3					
SCENEDESMUS ECORNIS	0.001848																	88	11													
STAURASTRUM PARADOXUM VAR PARVUM	0.002401															16				25	19			11			11		16			
ULOTHRIX VARIABILIS	0.008553								2	17	3	2		2	5	10	36					1	5		1	4			2		4	
MOUGEOTIA SPP	0.005555									8		13			4	25	26						19				1					
SPHAEROCYSTIS SCHROETERI	0.004391										2	9	1			1	6	6	6	13	4	25	2	10	5			2				
COELASTRUM MICROPORUM	0.004331								1	1			3	1			10		5		6	13	20	2	3		3	18	2		3	
OOCYSTIS BORGEI	0.006176														2	2	12	1	3	16	25	3	3	4	2	16	4		1			
OSCILLATORIA MINIMA	0.001417			6							14	7	5	5	1		8					8	2						32	1	4
OSCILLATORIA LIMNETICA	0.003412					1		2		1	8	1	3	4	11	2	16			7		1	1	1		5	1	2		6	6	9
ANABAENA SPP	0.019692																		72	1		20		1	1		1					
CRYPTOMONAS EROSA	0.129961	2		1	1	1		1	1	3	6	3	5	2	2	1	4	1	5	10		5	2	1	2	9	10	4	1	2	1	1
RHODOMONAS MINUTA	0.109188	2		1	3	1		1	1	5	6	4	6	3	7	3	6	1	3	6		2	1	2	1	5	2	4	2	3	2	2
KATABLEPHARIS OVALIS	0.006091							1	6	8	7	16	20	3	4	1	5		2	5	8		2		1							
GYMNODINIUM HELVETICUM	0.072015	2	1	3	6	2			5	7	28	10	3	3	10		2									1		1	2	2		
GYMNODINIMUM UBERRIMUM	0.038347	2	4	8	9	5	9	9	3	19	7	2	2	8	1					2		1										
PERIDINIUM CINCTUM	0.002497																				60				39							
PERIDINIUM ACICULIFERUM	0.098500		5	8	1	3	5	10	28	4	9	1	2						3	6	2	3										
GLENODINIUM SPP	0.033642	3	1							9	7	6	4	7	9		6	4		9					4		2	4	2	4	3	2
CERATIUM HIRUNDINELLA	0.012790																8			65	18							8				
DINOBRYON SERTULARIA	0.006335								3		21	48	22				1															
ASTERIONELLA FORMOSA	0.007087	4	1	6	8	6	3	2			5						1					1	3		3	3		2	9	8	11	12
DIATOMA ELONGATA	0.010129	6		1	5	2	7	9	1	2	16		1	1	2	2	4									1				6	4	18
CYCLOTELLA SPP	0.004690	55	4	40																												
MELOSIRA BINDERANA	0.071595	33		32	16	3	3	1	2																					1		
MELOSIRA ISLANDICA	0.017166	29		29	16	10	6	3		1	1																		1			
FRAGILARIA CAPUCINA	0.008718						5			5															7	9	1	12	9	11		36
FRAGILARIA CROTONENSIS	0.005667								3			4				3	3		6		34	8	3	8	3	7				8	2	
NITZSCHIA ACICULARIS	0.007855	6		2	10	4		2	1	23	8	4	6	1	1	1	8					6	1	1								1
STEPHANODISCUS ASTRAEA VAR MINUTULA	0.039062	9		4	22	8	4	4		2							1			1		4	7	2		4	1	2	2	4	4	2
STEPHANODISCUS HANTZSCHII	0.008136	9	30	3		4	10	9		5						3	13						2		1	2						
STEPHANODISCUS NIAGARAE	0.113237	2	1				5	5	5	3	1	2										1			5	6	13	6	17	9	4	4
CYMATOPLEURA SOLEA	0.002465						21												29												48	
TABELLARIA FENESTRATA	0.032580		1			1	8	10	7	7	4	7	5				1					1	3	2		1		5		7	3	15
SYNEDRA ULNA	0.017292	19	1	7	42	12		3		6																				1	3	1
SYNEDRA ACUS	0.001510	6		6		5		11		23	16					11												6				11

TABLE 5e. MEAN DAILY BIOMASS AND PERCENTAGE OF SEASONAL BIOMASS PER SAMPLE FOR ALGAL SPECIES CONTRIBUTING GREATER THAN 5% TO A SAMPLE IN THE YEAR. THE SPECIES ARE SUBDIVIDED INTO CHLOROPHYCEAE, EUGLENOPHYCEAE, CYANOPHYCEAE, CRYPTOPHYCEAE, DINOPHYCEAE, CHRYSOPHYCEAE AND BACILLARIOPHYCEAE.

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	BIOMASS (G*M-3)	DATE																														
		MAR 8	MAR 17	MAR 24	APR 2	APR 5	APR 15	MAY 1	MAY 21	MAY 28	MAY 31	JUN 7	JUN 17	JUL 5	JUL 14	JUL 22	JUL 26	AUG 3	AUG 9	AUG 19	AUG 23	AUG	SEP 7	SEP 17	SEP 23	SEP 28	OCT 4	OCT 14	OCT 18	OCT 25	NOV 1	NOV 9	NOV 17
OOCYSTIS SPP	0.016476																	6	19	5	2			1	20	1	8	8	13	4		1	
STAURASTRUM PARADOXUM	0.004258																		8					6	16	4	10	13	10	11		4	4
PEDIASTRUM SIMPLEX VAR DUODENARIUM	0.000861																								74	16			8				
COSMARIUM SPP	0.005728													2		9		2	3		6	8	2	6	11	6	1	5	19	8			4
SCENEDESMUS BIJUGA	0.002285	2		2	3	1	1	2	2	2	6	3	4	1	7	5	3			2		3	4	6	1					14	3	3	2	
ULOTHRIX SPP	0.000555	6																										21		13		37		2
SPHAEROCYSTIS SCHROETERI	0.003315																	13	12	18			4	5	6	3	6	14	11				
PHACUS SPP	0.000243		100																														
OSCILLATORIA LIMNETICA	0.016529											3	6	16	12	21				4	25	1		1									
MERISMOPEDIA SPP	0.001883											2	4	3		17		9	10	23		11		2	4	2	6						
ANABAENA SPP	0.005347																	31	21	2		2		11	8	6	4	5	2				
KATABLEPHARIS OVALIS	0.014217											4	9	7	8	4		1	1	1	3	5	5	6	8	8	5	8			1		
CRYPTOMONAS EROSA	0.111072	1		1	1							4	4	5	4	4		2	1	2	4	6	5	5	6	6	5	4	6	3		1	3
RHODOMONAS MINUTA	0.112622				1		1	1	1	1	1	1	4	4	3	3	5	1		1	3	5	7	8	5	5	12	3			1	5	3
CRYPTOMONAS CURVATA	0.007119						2	1	2		2			1	7	10	6				5		1	2		5	9	14	1	7	3	1	3	4
GLENODINIUM SPP	0.024040				1		1	2	2	1	1	1	9	7	3	16	11				1	3	2	1	4	1	2	1		1	1	5	3	3
CERATIUM HIRUNDINELLA	0.006006																						16		6	26	25	6		5	12			
PERIDINIUM ACICULIFERUM	0.018904			1					1		3	7	4	5	2	6	3	35	16	1	4	1					2						
PERIDINIUM CINCTUM	0.001347	32																										67						
GYMNODINIMUM UBERRIMUM	0.003991											8	11			23	56																
GYMNODINIUM HELVETICUM	0.048201	3			2	2	2		1				16	9	3	7	19	1			1	4		1	1	2		1	1	1	2	3	1
DINOBRYON SERTULARIA	0.003718												40	45	8	2	2																
FRAGILARIA CAPUCINA	0.002615														15	32						34									15		
FRAGILARIA CROTONENSIS	0.006404		1											1				8		15	9	6	2	3	8	9	2	1	2	1	15	4	
TABELLARIA FENESTRATA	0.017601														6	6	3				11	1	10	18	8	7	3	6	4	3		4		
NITZSCHIA LINEARIS	0.009021	4	1	3	5	2	4	6	15	15	17	12	3																			1	1
MELOSIRA ISLANDICA	0.075321					1	1	7	8	10	15	16			4	16	9			1												1	1
MELOSIRA BINDERANA	0.001063	10			35						25				26															1			
DIATOMA ELONGATA	0.020079												18	6	20	20	23				7												
STEPHANODISCUS ASTRAEA VAR MINUTULA	0.005839	10		2	2		1	2		1	3	2					17						1		1	2			1	2		22	14
STEPHANODISCUS NIAGARAE	0.000741																									100							
STEPHANODISCUS HANTZSCHII	0.003445	11	2	2	3	1	3		1	3		10				6	9			3	2		1	1		2				7	2	15	1
SYNEDRA ULNA	0.005176	11		16		10	3		4	11	20	20																					

TABLE 5f. MEAN DAILY BIOMASS AND PERCENTAGE OF SEASONAL BIOMASS PER SAMPLE FOR ALGAL SPECIES CONTRIBUTING GREATER THAN 5% TO A SAMPLE IN THE YEAR. THE SPECIES ARE SUBDIVIDED INTO CHLOROPHYCEAE, EUGLENOPHYCEAE, CYANOPHYCEAE, CRYPTOPHYCEAE, DINOPHYCEAE, CHRYSOPHYCEAE AND BACILLARIOPHYCEAE.

STATION 41 1982

	BIOMASS (G*M-3)	DATE																												
		MAR 1	MAR 18	MAR 25	APR 1	APR 14	MAY 1	MAY 18	MAY 28	JUN 1	JUN 7	JUN 15	JUL 6	JUL 14	JUL 21	JUL 26	AUG 4	AUG 17	AUG 24	AUG 31	SEP 8	SEP 14	SEP 23	SEP 28	OCT 5	OCT 14	OCT 19	OCT 25	NOV 2	NOV 9	NOV 17	NOV 22
OOCYSTIS SPP	0.022893																1	1	10	4	10	22	7	11	16	3	1	1	1		1
STAURASTRUM PARADOXUM	0.007864																		4	7	7	11	7	28	15	3		1	6	3	2
PEDIASTRUM SIMPLEX VAR DUODENARIUM	0.000347																				54				4				9	7	24
COSMARIUM SPP	0.010587												2	4			1			2	5	5	5		37	9	15	1	1		
SCENEDESMUS BIJUGA	0.002263	1	3	25	1	2	3	3	5	3		3	2	9	8			3	3	1	2		1					2	1	2	3
ULOTHRIX SPP	0.003583																				1			4	30	9	13	6	11	4	18
SPHAEROCYSTIS SCHROETERI	0.022991																1		22	23	12	15	11	7		3	1				
PHACUS SPP	0.000000																														
OSCILLATORIA LIMNETICA	0.008008	1	1		1		1				2	9	16	30	10	2			4	3					1		2		1		
MERISMOPEDIA SPP	0.003108																7	20	18	31		17	3								
ANABAENA SPP	0.003894																					4	30	18	15	6	20	2	2		
KATABLEPHARIS OVALIS	0.011049											3	11	10	21	2		2	3	3	2	4	3	3	9	2	2		1	2	2
CRYPTOMONAS EROSA	0.105497	1		1		1						2	2	4	5	3	1	2	3	5	2	5	14	11	9	5	3	1	2	1	1
RHODOMONAS MINUTA	0.081160			1	1	1	1	1	1	1	1	5	3	6	6	1		2	4	2	3	3	6	4	7	3	1	2	3	5	2	5
CRYPTOMONAS CURVATA	0.007544		1	2					7	2	2	19	10	7							3	4	3		4	4	4	4	3	2	2	6
GLENODINIUM SPP	0.018286	1	1	1			3	2	2	4	2	19	4	12		3			7	1	4	2	1	1	3		1	1	2	2	1	5
CERATIUM HIRUNDINELLA	0.015627																			5	10	5	31	9	17	11	10				
PERIDINIUM ACICULIFERUM	0.021769			2		1	1	1			2	21	2	3	4	1	5	7	7	16	1	6	12								
PERIDINIUM CINCTUM	0.008088																		8	20		3	52	10		4					
GYMNODINIMUM UBERRIMUM	0.003942						27	7	20	6	6	10	6										10					4			
GYMNODINIUM HELVETICUM	0.033293		2	4	3		1		1	1	4	11	8	9	7			1				5	4	4	1	2	3	1	2	6	1	2
DINOBRYON SERTULARIA	0.002385											44	19	22	11	3															
FRAGILARIA CAPUCINA	0.000718																									6		75	10		7	
FRAGILARIA CROTONENSIS	0.003559		1	8	1								4			1		1		8	10	12	3	3	7	8	18		1			5
TABELLARIA FENESTRATA	0.016861	9		2		3	4			4			6	21	1							1	5	1	15	8	5		3	1		2
NITZSCHIA LINEARIS	0.010692	2	5	1	4	3	17	7	6	13	13		9	1	4															1	
MELOSIRA ISLANDICA	0.084887		1	1	3	6	16	9	17	16	15	2	5		2																
MELOSIRA BINDERANA	0.005055		4		20	4	22	16	7	19	5																				
DIATOMA ELONGATA	0.007239											51	28	7	8																
STEPHANODISCUS ASTRAEA VAR MINUTULA	0.003798	7	13	5	4			1		2													3			20		4	8	9	18
STEPHANODISCUS NIAGARAE	0.000589		61																						38						
STEPHANODISCUS HANTZSCHII	0.002098	8		2	4	1	10	5	4		4		14		6						6	6	2						4	6	10
SYNEDRA ULNA	0.010165	10	10	7	15	1	10	7	10	3	3			19																	

TABLE 5g. MEAN DAILY BIOMASS AND PERCENTAGE OF SEASONAL BIOMASS PER SAMPLE FOR ALGAL SPECIES CONTRIBUTING GREATER THAN 5% TO A SAMPLE IN THE YEAR. THE SPECIES ARE SUBDIVIDED INTO CHLOROPHYCEAE, EUGLENOPHYCEAE, CYANOPHYCEAE, CRYPTOPHYCEAE, DINOPHYCEAE, CHRYSOPHYCEAE AND BACILLARIOPHYCEAE.

STATION 81 1982

	BIOMASS (G*M-3)	DATE																									
		MAR 31	MAY 1 1	MAY 2	MAY 27	JUN 1	JUN 8	JUN 16	JUL 6	JUL 15	JUL 21	JUL 27	AUG 4	AUG 10	AUG 18	AUG 24	AUG 31	SEP 8	SEP 15	SEP 23	SEP 29	OCT 5	OCT 14	OCT 26	NOV 2	NOV 9	NOV 17	NOV 23
OOCYSTIS SPP	0.043471										2	3	3	6	3	9	5	5	11	6	10	6	15	1	2	2		1
STAURASTRUM PARADOXUM	0.011292												6	1	4	13		6	10	8	6	8	6	3	8	7		5
PEDIASTRUM SIMPLEX VAR DUODENARIUM	0.001882													10		33		5	5		19	11	8			4		
COSMARIUM SPP	0.005932	2				1	1			1	3	7	3		22	9	1	8	2	1	7	17		2				4
SCENEDESMUS BIJUGA	0.001615	3	9	11	8	5	2	4	3	8	1		2		5	4	2	2	5	3		5	1			4		1
ULOTHRIX SPP	0.003659																4	7	8		5		22	2	20	7	9	10
SPHAEROCYSTIS SCHROETERI	0.033391												6		15	31	11	7	3	6	13							
PHACUS SPP	0.000000																											
OSCILLATORIA LIMNETICA	0.006881	4	3	10	7	9	15	14	12	17	1																	
MERISMOPEDIA SPP	0.000994		1				2	2	2	1	6	7		39	16	4	2				1			6			
ANABAENA SPP	0.008347							2	7	3	5	6	1	6	2	1	3			10	12	1	28	1	4			
KATABLEPHARIS OVALIS	0.010883		5	3	3	3	3	2	3	5		4	3	1	1	3	5	5	4	2	5	8	6	2	7	2	2	2
CRYPTOMONAS EROSA	0.182907	1	1		1	1	1	2	1	2	3	4	6	3	13	4	7	5	5	4	3	6	5	4	4	1	1	1
RHODOMONAS MINUTA	0.121633	2	6	4	1	2	1	1	2	5	2	3	1		1	1	3	1	1	1	2	3	6	4	20	7	7	3
CRYPTOMONAS CURVATA	0.013609	5	4	1	8	1	13	8		1	1		1	1	4	6		6	3	9		4	2	1	6	2		1
GLENODINIUM SPP	0.040350	5	26	1	4	4	5	10	6	13	3							1	1			2		1	2	1	1	1
CERATIUM HIRUNDINELLA	0.047787								1			4	4		27	5	3	6	2	5	4	10	16	1	2	3		
PERIDINIUM ACICULIFERUM	0.045797	2	26	16	2	9	1	4	4	3	3	3		2	3	1	1		6		2	1		1				
PERIDINIUM CINCTUM	0.015504					4		4			4	4	9		6	6	13	11	7	11	9				6			
GYMNODINIMUM UBERRIMUM	0.018150	7	28	34	14	12	1																					
GYMNODINIUM HELVETICUM	0.033048	3	15	15	16	3	4	2		8											5		2		8	5	5	
DINOBRYON SERTULARIA	0.006764		1	2	7	10	1	1	33	27	13																	
FRAGILARIA CAPUCINA	0.006224		6					31	2	3								2	10	19		18	1					2
FRAGILARIA CROTONENSIS	0.014632	7	7	3	11	4	3	18	9	6	1				1	1	1	1	1	2	3	5			2	3		
TABELLARIA FENESTRATA	0.042871	25	12	8	4	3	1	8	5	6	1	2						1	2		4	3	3	1	1			
NITZSCHIA LINEARIS	0.003839	18	6	26	18	8	11	2																4		1	1	
MELOSIRA ISLANDICA	0.022657	32	29	4	6	8	5	12																				
MELOSIRA BINDERANA	0.043630	63	25	3			3	2																				
DIATOMA ELONGATA	0.025046		2	9	7	15	14	14	17	16																		
STEPHANODISCUS ASTRAEA VAR MINUTULA	0.014869	18	1														3	3		1	3	6	6	1	12	12	9	16
STEPHANODISCUS NIAGARAE	0.008691	8						8											3		12	45		10		11		
STEPHANODISCUS HANTZSCHII	0.001392	1	6		6			2									10	2		4	19			12	8	4	8	10
SYNEDRA ULNA	0.004660	44	4	11		6	3																		12	10	4	2

TABLE 5h. MEAN DAILY BIOMASS AND PERCENTAGE OF SEASONAL BIOMASS PER SAMPLE FOR ALGAL SPECIES CONTRIBUTING GREATER THAN 5% TO A SAMPLE IN THE YEAR. THE SPECIES ARE SUBDIVIDED INTO CHLOROPHYCEAE, EUGLENOPHYCEAE, CYANOPHYCEAE, CRYPTOPHYCEAE, DINOPHYCEAE, CHRYSOPHYCEAE AND BACILLARIOPHYCEAE.

STATION 93 1982

	BIOMASS (G*M-3)	DATE																														
		MAR 18	MAR 24	MAR 3	APR 5	APR 14	MAY 11	MAY 18	MAY 27	JUN 1	JUN 8	JUN 15	JUL 7	JUL 13	JUL 21	JUL 27	AUG 4	AUG 9	AUG 18	AUG 23	AUG 31	SEP 9	SEP 17	SEP 22	SEP 29	OCT 4	OCT 14	OCT 18	OCT 26	NOV	NOV 8	NOV 17	NOV 23
OOCYSTIS SPP	0.024680				1								1	8	2	10	3	2	4	7	9	1	2	1	5	10	3	5	2	2	5	1
STAURASTRUM PARADOXUM	0.013821														6			8	9	17	7		5	4	2	6	6	4	5	4	6	1	3
PEDIASTRUM SIMPLEX VAR DUODENARIUM	0.003429																			5			5		3		6	32			17	28	
COSMARIUM SPP	0.010405									4				12		2		7	3	10		3	8		3	6	2		9	1	17	3	1
SCENEDESMUS BIJUGA	0.001025	4	5		1		1	1	3		9	3	4	3	3		3			1	6	9	3	3	8	5		1		4	1		5
ULOTHRIX SPP	0.002067												81	12			2																3
SPHAEROCYSTIS SCHROETERI	0.012397												1	5	1	2	25		11	8	2		1	1	1	6	7	3	2		3	8	
PHACUS SPP	0.000000																																
OSCILLATORIA LIMNETICA	0.003350	1	4	1	1					6		28	11	1	10		9				2	8	8	1								1
MERISMOPEDIA SPP	0.001399							12		1	5	16		4	6	2	12	1		1	8	1	7	3	4	6						
ANABAENA SPP	0.010002															9	5	6	3	1	3	1	2	3	53	2	1	1	1		1		
KATABLEPHARIS OVALIS	0.010167								2	8	7	18	9	4		2	1		1	1	2	1	7	3	7	6	3	2	1	2			
CRYPTOMONAS EROSA	0.116822	1						1		1	2	6	4	2	2	2	3	3	5	1	6	1	5	1	1	2	5	5	5	11	6	3	
RHODOMONAS MINUTA	0.082039	1	1	1	1	1		2	2	7	4	7	4	4	2			1	1	2	5		3	2	18	5	2	1	1	4	1	1	1
CRYPTOMONAS CURVATA	0.006881	1		1	1			4	3	10	3	18			3				3	1		1	1		3		6	9	10	11	1		1
GLENODINIUM SPP	0.018915						2		3	4	14	19	8	2	3	2				1	1	6	3	1	5	2	2	2		3	1	2	1
CERATIUM HIRUNDINELLA	0.011517													8				9	13	27					8	9	2	17			3		
PERIDINIUM ACICULIFERUM	0.056284	1	2	1	5	5	7	7	27	10		1	1	2	1	2	2	2	2	1	4	1	1		3								
PERIDINIUM CINCTUM	0.013689															8	30	13	12						7	15				6	6		
GYMNODINIMUM UBERRIMUM	0.006305			6		10	13	14	16	2	12												12	11									
GYMNODINIUM HELVETICUM	0.027565	4	1	3			3	1	3	21		23			7							2	4		1		3	1	3	7	3		1
DINOBRYON SERTULARIA	0.001470							1	5	1	4	23	55	3	4																		
FRAGILARIA CAPUCINA	0.000495				27			4		4													50									12
FRAGILARIA CROTONENSIS	0.007294	1					2			5	3	1	2					3		5	14	6	9		3		3	2	3	16	4	7	
TABELLARIA FENESTRATA	0.015386								7	2	7			2	2							2	5		5	2	9	3	10	4	12	10	10
NITZSCHIA LINEARIS	0.005611	12	4	6	3			15	12	14	20		5				1																2
MELOSIRA ISLANDICA	0.022937	5	9	8	11		1	2	2		29				12		1							3						3	1	2	2
MELOSIRA BINDERANA	0.015614	5	4	23	42	11	1	1	4		2	2																	1				
DIATOMA ELONGATA	0.007151	1		2				3	2	5	7	41	11	3	11					1	5	1										
STEPHANODISCUS ASTRAEA VAR MINUTULA	0.024760	10	1	5		2	10	13	8	3	2	1	1		1									1				1	2	8	5	8	7
STEPHANODISCUS NIAGARAE	0.102034			1	13		8	5	15	3	5				1											1	1	1	5	9	21	3
STEPHANODISCUS HANTZSCHII	0.044518	15	17	26	11	7	4	4	7	1																							
SYNEDRA ULNA	0.014669	8	3	72		2		8		3																							

Table 6. Average benthic populations, dry biomass (mg) per m^2, and diversity indexes at the sampled stations in Lake Ontario, during early spring, July and November, 1981 - 1983.
Listed for each station are the site number, depth (m), date as month and year, number of replicate Ponars collected, average of the total number of organisms per m^2, average dry biomass ($mg \cdot m^{-2}$) calculated as shell free weight for the molluscs, the H diversity for the numbers, biomass (wt) and species diversity (D). For each of the taxa present, the average number, Standard Error (in brackets) and dry weight as milligrams per m^2 are listed.

SITE= 41 -125.M	D= 381	REPS= 5	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D			no. S.E.	mg. dry
	TAXA		2511	827.87	.4582	.4084	.7664				
STYLODRILUS HERINGIANUS			221 (57.0)	65.77	IMM TUBIFICIDS + HAIRS		10 (2.5)	2.83	PISIDIUM SPP	23 (9.3)	1.58
CALANOID			15 (10.9)	.07	MYSIS		15 (7.1)	15.27	PONTOPOREIA	2223 (58.0)	742.01
HETERO. OLIVERI			4 (4.0)	.34							
SITE= 41 -126.M	D= 781	REPS= 5	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D				
	TAXA		2926	1174.60	.7865	.6456	1.0023				
STYLODRILUS HERINGIANUS			355 (23.0)	106.41	TUBIFEX TUBIFEX		26 (1.9)	6.99	LIMNODRILUS HOFFMEISTER	12 (0.8)	3.40
PISIDIUM SPP			39 (10.6)	2.91	CALANOID		30 (10.4)	.14	MYSIS	76 (19.7)	76.36
PONTOPOREIA			2334 (345)	972.35	HETEROTRISSOCLADIUS SP		27 (27.0)	3.65	HETERO. OLIVERI	27 (14.1)	2.39
SITE= 41 -125.M	D=1181	REPS= 5	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D				
	TAXA		2220	848.77	.7343	.6023	.7787				
STYLODRILUS HERINGIANUS			497 (131)	149.32	IMM TUBIFICIDS + HAIRS		12 (3.1)	2.64	PISIDIUM SPP	53 (18.3)	3.70
CALANOID			4 (4.0)	.15	CANDONA		4 (4.0)	.12	MYSIS	15 (7.0)	15.27
PONTOPOREIA			1635 (221)	677.57							
SITE= 81 - 35.M	D= 381	REPS= 5	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D				
	TAXA		10457	2664.64	.3169	.4195	1.1885				
NEMATODA			8 (8.0)	.08	TURBELLARIA		54 (30.2)	53.17	IMM TUBIFICIDS + HAIRS	131 (25.0)	36.72
IMM TUBIFICIDS NO HAIRS			99 (18.6)	30.06	TUBIFEX TUBIFEX		66 (12.4)	36.81	LIMNODRILUS HOFFMEISTER	55 (10.3)	28.43
L. MAUMEENSIS			11 (2.0)	5.74	PISIDIUM SPP		117 (62.2)	11.01	CALANOID	11 (7.5)	.05
ASELLUS			8 (8)	5.07	PONTOPOREIA		9893 (674)	2457.19	HETERO. OLIVERI	4 (4.0)	.31

Table 6. (continued)

SITE= 81 - 35.M	D= 781	REPS= 5	TOT.NO/M	TOT.WT	MG	H NO.	H WT.	D		
	TAXA		4944	3496.46		.4887	.3849	1.4108		
TURBELLARIA			8 (8.0)	7.43	IMM TUBIFICIDS + HAIRS		142 (65.2)	39.64	IMM TUBIFICIDS NO HAIRS	33 (15.2)	9.98
TUBIFEX TUBIFEX			120 (54.8)	67.22	LIMNODRILUS HOFFMEISTER		98 (45.5)	50.97	SPHAERIUM SPP	4 (4.0)	63.05
PISIDIUM SPP			15 (10.9)	1.42	MYSIS		4 (4.0)	3.82	PONTOPOREIA	4470 (999)	3245.70
TRICHOPTERA (CADDIS FLY)			4 (4.0)	3.88	HETEROTRISSO. CHANGI		4 (4.0)	.34	CHIRONOMUS SPP	38 (10.9)	3.00
SITE= 81 - 35.M	D=1181	REPS= 5	TOT.NO/M	TOT.WT	MG	H NO.	H WT.	D		
	TAXA		7592	3729.97		.7694	.4667	1.0073		
NEMATODA			4 (4.0)	.30	IMM TUBIFICIDS + HAIRS		255 (120)	71.06	IMM TUBIFICIDS NO HAIRS	542 (111)	164.88
TUBIFEX TUBIFEX			64 (15.3)	19.69	P. MOLDAVIENSIS		64 (13.1)	.56	LIMNODRILUS HOFFMEISTER	159 (31.7)	82.48
PISIDIUM SPP			284 (75.9)	26.65	CALANOID		7 (7.0)	.10	PONTOPOREIA	6205 (999)	3358.90
GAMMARUS SPP			8 (4.6)	5.35							
SITE= 93(22)- 35.M	D=381	REPS=4	TOT.NO/M	TOT.WT	MG	H NO.	H WT.	D		
	TAXA		7958	6321.11		.	.	2.004		
IMM TUBIFICIDS + HAIRS			4287 (225)	1185.47	IMM TUBIFICIDS NO HAIRS		2339 (123)	710.23	PELOSCOLEX MULTISETOSUS	422 (22.1)	138.50
HELOBDELLA STAGNALIS			25 (8.3)	32.81	GLOSSOPHONIA SPP		5 (5.0)	6.31	PHYSA SPP	5 (5.0)	0.60
SPHAERIUM SPP			301 (36.0)	4017.10	PISIDIUM CASERTANUM		25 (11.6)	2.33	PISIDIUM HENSLOWI	50 (23.2)	4.51
PISIDIUM LILLIJEBORGI			69 (31.9)	7.48	PISIDIUM NITIDUM		5 (5.0)	0.48	PISIDIUM IDAHOENSE	5 (5.0)	1.60
CANDONA			44 (34.9)	1.01	HARPACTICOID		5 (5.0)	0.13	ASELLUS	220 (45.3)	148.10
GAMMARUS FASCIATUS			63 (5.0)	44.20	PONTOPOREIA		13 (5.0)	2.99	PROCLADIUS SPP	50 (16.6)	8.29
CHIRONOMUS SPP			25 (16.6)	8.97							
SITE= 93 - 18.M	D= 581	REPS= 3	TOT.NO/M	TOT.WT	MG	H NO.	H WT.	D		
	TAXA		2192	1838.72		2.1295	1.5463	1.6899		
IMM TUBIFICIDS + HAIRS			283 (49.2)	78.81	IMM TUBIFICIDS NO HAIRS		425 (75.2)	129.06	TUBIFEX TUBIFEX	212 (36.9)	118.60
ILYODRILUS TEMPLETONI			71 (12.1)	19.72	PELOSCOLEX MULTISETOSUS		495 (86.4)	163.36	LIMNODRILUS HOFFMEISTER	353 (61.0)	182.86
VALVATA TRICARINATA			13 (13.0)	13.04	SPHAERIUM SPP		69 (58.0)	1057.80	PISIDIUM SPP	101 (22.6)	10.08
MYSIS			13 (13.0)	12.67	ASELLUS		25 (12.4)	16.88	PONTOPOREIA	82 (22.6)	19.69
PROCLADIUS SPP			44 (6.2)	10.88	HETEROTRISSO. CHANGI		6 (6.0)	5.27			
SITE= 93 - 70.M	D= 781	REPS= 5	TOT.NO/M	TOT.WT	MG	H NO.	H WT.	D		
	TAXA		5093	2449.72		1.1100	1.0416	1.2887		
STYLODRILUS HERINGIANUS			610 (290)	133.17	IMM TUBIFICIDS + HAIRS		244 (116)	67.93	TUBIFEX TUBIFEX	203 (96.5)	178.31
HELOBDELLA STAGNALIS			27 (21.0)	22.00	GYRAULUS SPP		4 (4.0)	.40	PISIDIUM SPP	242 (147)	22.74
MYSIS			38 (12.5)	38.17	ASELLUS		53 (47.2)	35.30	PONTOPOREIA	3595 (999)	1837.40
GAMMARUS SPP			15 (12.6)	10.69	TRICHOPTERA (CADDIS FLY		4 (4.0)	3.88	HETEROTRISSO. CHANGI	58 (28.5)	99.73

Table 6. (continued)

SITE= 93 - 70.M D=1181 REPS= 5	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D				no.	S.E.	mg. dry
TAXA	7152	3672.45	.9163	.5816	2.1408						
NEMATODA	4 (4.0)	.01	STYLODRILUS HERINGIANUS		291 (78.7)	60.99	IMM TUBIFICIDS + HAIRS		194 (52.4)		54.11
IMM TUBIFICIDS NO HAIRS	65 (17.5)	19.90	TUBIFEX TUBIFEX		97 (26.2)	54.25	PELOSCOLEX MULTISETOSUS		32 (8.8)		10.64
POTOMOTHRIX VEJDOVSKYI	129 (34.3)	1.14	P. MOLDAVIENSIS		32 (8.8)	2.30	LIMNODRILUS HOFFMEISTER		32 (9.4)		16.54
HELOBDELLA STAGNALIS	4 (4.0)	4.01	PHYSA SPP		8 (5.6)	29.94	GYRAULUS SPP		11 (11.0)		.01
AMNICOLA SPP	8 (8.0)	7.82	SPHAERIUM SPP		8 (4.7)	126.10	PISIDIUM SPP		498 (143)		4.58
MYSIS	4 (4.0)	3.82	ASELLUS		8 (8.0)	5.07	PONTOPOREIA		5701 (959)		3266.97
GAMMARUS SPP	11 (11.0)	.52	PROCLADIUS SPP		15 (6.9)	3.73					
SITE= 41 -125.M D= 382 REPS= 5	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D						
TAXA	2363	931.47	.5937	.5064	.7724						
TURBELLARIA	4 (4.0)	3.71	STYLODRILUS HERINGIANUS		370 (62.3)	101.01	TUBIFEX TUBIFEX		8 (2.6)		2.14
PISIDIUM SPP	27 (7.5)	1.13	CALANOID		4 (4.0)	.01	MYSIS		23 (13.9)		22.90
PONTOPOREIA	1927 (323)	800.57									
SITE= 41 -125.M D= 782 REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D						
TAXA	2174	899.68	.4739	.4503	.5205						
STYLODRILUS HERINGIANUS	202 (27.1)	54.81	PISIDIUM SPP		14 (7.0)	.94	CALANOID		5 (4.7)		.01
MYSIS	52 (14.2)	50.50	PONTOPOREIA		1901 (62.3)	793.42					
SITE= 41 -125.M D=1182 REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D						
TAXA	3788	994.09	.5532	.6210	.6068						
STYLODRILUS HERINGIANUS	506 (42.1)	136.72	IMM TUBIFICIDS + HAIRS		15 (0.2)	3.22	PISIDIUM SPP		63 (4.4)		4.41
CALANOID	6 (6.0)	.16	MYSIS		27 (12.6)	42.55	PONTOPOREIA		3171 (187)		807.03
SITE= 81 - 35.M D= 482 REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D						
TAXA	11268	2748.41	.4069	.5146	.8575						
STYLODRILUS HERINGIANUS	35 (6.1)	7.33	IMM TUBIFICIDS + HAIRS		35 (6.0)	9.78	IMM TUBIFICIDS NO HAIRS		386 (67.5)		117.47
TUBIFEX TUBIFEX	34 (6.00	18.55	LIMNODRILUS SPP		34 (6.2)	18.18	LIMNODRILUS HOFFMEISTER		175 (30.6)		90.86
L. CLAPAREDEIANIS	34 (6.0)	18.28	PISIDIUM SPP		165 (70.8)	15.55	PONTOPOREIA		10370 (497)		2452.41

SITE= 81 - 35.M	D= 782	REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D			no.	S.E.	mg. dry
	TAXA		21851	5516.22	.9030	.9094	1.2010					
NEMATODA		6 (6.0)	.04	IMM TUBIFICIDS + HAIRS	61 (8.3)	17.12	IMM TUBIFICIDS NO HAIRS	61 (8.2)	18.57			
TUBIFEX TUBIFEX		184 (24.8)	77.51	LIMNODRILUS HOFFMEISTER	92 (12.3)	47.52	L. ANGUSTIPENIS	13 (4.1)	6.97			
L. CLAPAREDEIANIS		15 (2.0)	7.92	PISIDIUM SPP	326 (53.5)	30.53	CANDONA	54 (18.9)	.18			
MYSIS		18 (14.1)	18.86	PONTOPOREIA	10502 (569)	2645.56						

SITE= 81 - 35.M	D=1182	REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA		7461	2729.35	.9635	.7117	.7850					
NEMATODA		6 (6.0)	.03	IMM TUBIFICIDS + HAIRS	797 (125)	207.41	IMM TUBIFICIDS NO HAIRS	332 (48.7)	101.14			
TUBIFEX TUBIFEX		84 (12.6)	45.41	P. MOLDAVIENSIS	83 (13.5)	.65	L. CLAPAREDEIANIS	83 (12.5)	43.04			
PISIDIUM SPP		580 (70.9)	57.42	MYSIS	13 (5.5)	10.72	PONTOPOREIA	5489 (326)	2263.56			
CANDONA		30 (23.2)	.90									

SITE= 93A - 70.M	D= 382	REPS= 5	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA		7138	3544.47	.7152	.4189	1.0143					
STYLODRILUS HERINGIANUS		257 (34.7)	64.42	IMM TUBIFICIDS + HAIRS	66 (9.2)	18.41	IMM TUBIFICIDS NO HAIRS	130 (18.5)	40.18			
TUBIFEX TUBIFEX		142 (16.2)	78.67	P. MOLDAVIENSIS	62 (6.9)	5.30	LIMNODRILUS HOFFMEISTER	124 (13.9)	36.03			
PISIDIUM SPP		300 (72.7)	26.78	MYSIS	8 (4.7)	7.64	PONTOPOREIA	6041 (440)	3266.35			
HETEROTRISSOCLADIUS CHANGI		8 (4.7)	.69									

SITE= 93A - 70.M	D= 782	REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA		8476	2964.45	.5231	.3991	.9950					
STYLODRILUS HERINGIANUS		102 (15.9)	21.99	TUBIFEX TUBIFEX	127 (20.4)	71.02	LIMNODRILUS HOFFMEISTER	47 (7.5)	24.41			
PISIDIUM SPP		538 (163)	52.74	CALANOID	5 (5.0)	.02	MYSIS	38 (7.0)	38.18			
ASELLUS		5 (5.0)	3.18	PONTOPOREIA	7497 (343)	2739.98	TRICHOPTERA (CADDIS FLY)	5 (5.0)	2.63			
HETEROTRISSOCLADIUS CHANGI		112 (32.2)	10.30									

SITE= 93A - 70.M	D=1182	REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA		5541.0	2445.51	.8711	.5724	1.0441					
STYLODRILUS HERINGIANUS		336 (23.9)	72.30	IMM TUBIFICIDS + HAIRS	144 (10.2)	39.77	IMM TUBIFICIDS NO HAIRS	24 (1.7)	7.27			
TUBIFEX TUBIFEX		72 (5.2)	40.09	PELOSCOLEX MULTISETOSUS	23 (1.8)	8.17	LIMNODRILUS HOFFMEISTER	48 (3.4)	25.33			
L. ANGUSTIPENIS		23 (1.6)	12.40	PISIDIUM SPP	535 (163)	50.24	MYSIS	19 (0)	19.09			
PONTOPOREIA		4317 (579)	2170.85									

Table 6. (continued)

SITE= 12 -104.M	D= 483 REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D				no. S.E.	mg. dry
	TAXA	2703	758.11	.8464	.8020	.7593					
STYLODRILUS HERINGIANUS		510 (93.5)	161.90	LIMNODRILUS HOFFMEISTER		151 (21.6)	35.90	PISIDIUM LILLIJEBORGI		14 (9.0)	6.91
P. CONVENTUS		14 (9.0)	3.30	PONTOPOREIA		1961 (473)	546.70	HETERO. OLIVERI		48 (19.0)	3.10
MICROPSECTRA		5 (5.0)	.30								
SITE= 12 -104.M	D= 783 REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA	527	109.65	.8978	.8246	.4787					
STYLODRILUS HERINGIANUS		113 (33.4)	10.30	MYSIS		18 (13.3)	15.00	PONTOPOREIA		358 (80.1)	81.00
HETERO. OLIVERI		38 (16.1)	3.35								
SITE= 12 -104.M	D=1183 REPS= 3	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA	2302	749.90	.8414	.7545	1.0334					
STYLODRILUS HERINGIANUS		397 (36.9)	105.60	IMM TUBIFICIDS + HAIRS		24 (12.2)	12.20	LIMNODRILUS HOFFMEISTER		38 (14.6)	18.60
PISIDIUM LILLIJEBORGI		56 (14.7)	6.20	P. NITIDUM		12 (4.7)	1.10	CANDONA		18 (18.0)	.50
MYSIS		18 (0)	13.80	PONTOPOREIA		1733 (104)	591.40	HETERO. OLIVERI		6 (6.0)	.50
SITE= 41 -125.M	D= 483 REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA	1907	504.90	.6289	.4559	.3972					
STYLODRILUS HERINGIANUS		474 (55.2)	68.00	P. CONVENTUS		18 (9.0)	1.30	MYSIS		5 (5.0)	3.80
PONTOPOREIA		1410 (179)	431.80								
SITE= 41 -125.M	D=1183 REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA	1366	633.20	.5578	.3998	.6926					
STYLODRILUS HERINGIANUS		177 (17.9)	43.90	LIMNODRILUS SPP		6 (6.0)	2.70	P. CONVENTUS		6 (6.0)	.35
CANDONA		12 (6.2)	.40	MYSIS		18 (5.1)	15.00	PONTOPOREIA		1147 (52.5)	570.80
SITE= 81 - 35.M	D= 483 REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA	4326	1835.90	1.2228	.6456	1.1944					
STYLODRILUS HERINGIANUS		44 (12.4)	13.20	TUBIFICIDS + HAIRS		306 (85.4)	17.00	TUBIFICIDS NO HAIRS		576 (161)	196.00
PISIDIUM LILLIJEBORGI		48 (7.2)	5.20	P. CASERTANUM		78 (11.7)	7.00	P. NITIDUM		96 (14.5)	8.60
P. VENTRICOSUM		120 (18.9)	10.80	CYTHERISSA		5 (5.0)	.10	CANDONA		33 (14.1)	1.00
ASELLUS		122 (70.2)	39.00	PONTOPOREIA		2898 (476)	1538.00	GAMMARUS FASCIATUS		5 (5.0)	1.42

Table 6. (continued)

SITE= 81 - 35.M	D= 783	REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D			no.	S.E.	mg. dry
	TAXA		5985	1747.10	.5615	.4424	1.3798					
NEMATODA			18 (13.3)	.10	STYLODRILUS HERINGIANUS		24 (5.9)	10.30	TUBIFICIDS + HAIRS	92	(22.8)	38.00
TUBIFICIDS NO HAIRS			190 (47.3)	79.00	P. NITIDUM		23 (9.0)	2.20	CALANOID	89	(53.1)	2.60
CYTHERISSA			18 (10.9)	.40	CANDONA		108 (46.5)	3.20	MYSIS	5	(5.0)	3.70
ASELLUS			33 (20.9)	16.00	PONTOPOREIA		5343 (977)	1588.00	PROCLADIUS BELLUS	9	(9.0)	.90
HETEROTRISSO. CHANGI			33 (20.9)	2.70								
SITE= 81 - 35.M	D=1183	REPS= 3	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA		4196	1718.44	.6576	.4681	1.3186					
NEMATODA			6 (6.0)	.04	PHAGOCATES GRACILIS		6 (6.0)	4.00	STYLODRILUS HERINGIANUS	50	(13.4)	22.00
TUBIFIDS + HAIRS			201 (59.8)	86.00	LIMNODRILUS HOFFMEISTER		75 (10.9)	34.00	PISIDIUM LILLIJEBORGI	94	(37.8)	8.90
P. CONVENTUS			12 (12.0)	.90	P. VENTRICOSUM		100 (25.1)	9.40	CYTHERISSA	6	(6.0)	.10
CANDONA			25 (6.6)	.80	ASELLUS		6 (6.0)	3.60	PONTOPOREIA	3615	(451)	1548.70
SITE= 93A 70.M	D= 483	REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA		4059	1502.80	.7260	.6574	.7221					
STYLODRILUS HERINGIANUS			259 (28.1)	68.90	IMM TUBIFICIDS + HAIRS		96 (10.4)	40.00	IMM TUBIFICIDS NO HAIRS	208	(22.6)	87.00
PISIDIUM LILLIJEBORGI			14 (11.4)	1.50	P. NITIDUM		108 (49.4)	9.70	MYSIS	28	(9.4)	27.00
PONTOPOREIA			3346 (404)	1268.70	HETEROTRISSOC CHANGI		5 (5.0)	0.40				
SITE= 93A - 70.M	D= 783	REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA		4108	2314.10	.3479	.2031	.6009					
STYLODRILUS HERINGIANUS			103 (9.8)	26.00	IMM TUBIFICIDS + HAIRS		39 (3.5)	17.00	IMM TUBIFICIDS NO HAIRS	85	(7.0)	37.00
P. NITIDUM			47 (12.2)	4.40	PONTOPOREIA		3825 (1893)	2229.00	HETEROTRISSO. CHANGI	9	(9.0)	.70
SITE= 93A - 70.M	D=1183	REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA		2475	1544.90	.6107	.5869	.8958					
STYLODRILUS HERINGIANUS			132 (21.7)	292.00	IMM TUBIFICIDS NO HAIRS		94 (39.2)	3.20	LIMNODRILUS HOFFMEISTER	25	(16.4)	13.80
PISIDIUM LILLIJEBORGI			69 (8.3)	6.90	P. CONVENTUS		5 (5.0)	.40	P. NITIDUM	5	(5.0)	.60
PONTOPOREIA			2131 (96.2)	1227.00	HETEROTRISSO. CHANGI		12 (5.1)	1.00				

Table 6. (continued)

SITE= 93 - 15.M	D= 483 REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D			no.	S.E.	mg. dry
	TAXA	6701	5082.80	1.6542	1.5502	2.043					
IMM TUBIFICIDS + HAIRS		289 (75.7)	85.00	IMM TUBIFICIDS NO HAIRS		3245 (850)	1646.00	PELOSCOLEX MULTISETOSUS		263 (68.9)	80.60
BULIMUS TENTACULATA		5 (5.0)	78.00	SPHAERIUM NITIDUM		603 (130)	1858.00	S. CORNEUM		259 (146)	710.00
PISIDIUM LILLIJEBORGI		19 (11.2)	18.00	P. CASERTANUM		23 (11.8)	2.10	P. IDAHOENSE		5 (4.0)	.70
P. HENSLOWI		18 (13.3)	1.80	ASELLUS		80 (9.0)	22.30	PONTOPOREIA		1458 (207)	533.00
GAMMARUS FASCIATUS		42 (15.5)	11.80	PROCLADIUS SPP		9 (5.4)	.90	MONODIAMESIA		19 (7.7)	3.30
HETEROTRISSO. CHANGI		287 (82.3)	23.00	MICROPSECTRA		5 (5.0)	.20	PARACLADOPELMA		61 (9.0)	5.30
CHIR. ANTHRACINUS GRP.		14 (9.2)	2.80								
SITE= 93 - 20.M	D= 783 REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA	9131	9554.30	1.4955	1.0542	2.193					
IMM TUBIFICIDS + HAIRS		204 (36.3)	85.00	IMM TUBIFICIDS NO HAIRS		2439 (435)	586.70	VALVATA TRICARINATA		9 (5.4)	5.60
SPHAERIUM SPP		70 (39.6)	253.00	S. NITIDUM		1949 (237)	6890.00	S. CORNEUM		184 (27.2)	684.00
PISIDIUM SPP		37 (13.3)	3.70	PISIDIUM LILLIJEBORGI		52 (29.2)	5.70	P. IDAHOENSE		5 (5.0)	.90
P. VENTRICOSUM		103 (38.2)	8.30	P. HENSLOWI		42 (19.4)	3.40	CALANOID		18 (13.3)	.50
CANDONA		9 (5.4)	.30	ASELLUS		85 (36.5)	58.30	PONTOPOREIA		3854 (631)	883.00
GAMMARUS FASCIATUS		5 (5.0)	1.20	HEXAGENIA LIMBATA		5 (5.0)	77.00	PROCLADIUS BELLUS		42 (7.7)	5.30
HETEROTRISSO. CHANGI		5 (5.0)	.30	PARACLADOPELMA		14 (9.0)	1.20	PHAENOPSECTRA (TRIBELOS)		5 (5.0)	.90
SITE= 93 - 15.M	D=1183 REPS= 4	TOT.NO/M	TOT.WT MG	H NO.	H WT.	D					
	TAXA	4309	3602.70	1.4399	1.5239	2.031					
NEMATODA		12 (6.2)	.10	IMM TUBIFICIDS + HAIRS		125 (20.5)	34.60	IMM TUBIFICIDS NO HAIRS		1605 (262)	498.00
HELOBDELLA STAGNALIS		12 (6.0)	10.50	VALVATA SINCERA		5 (5.0)	.60	S. RHOMBOIDEUM		12 (11.7)	45.00
S. NITIDUM		207 (32.7)	639.00	S. CORNEUM		320 (28.8)	1261.00	P. CASERTANUM		37 (13.3)	3.50
P. CONVENTUS		5 (5.0)	.30	P. VARIABLE		5 (5.0)	.40	CANDONA		5 (5.0)	.10
ASELLUS		56 (10.9)	33.70	PONTOPOREIA		1831 (106)	1046.30	GAMMARUS FASCIATUS		31 (12.5)	21.70
PROCLADIUS SPP		5 (5.0)	1.20	HETEROTRISSO. CHANGI		25 (6.2)	2.30	CHIR. ANTHRACINUS GRP.		5 (5.0)	4.30

Table 7. List of the benthic species collected in Lake Ontario, and their number of occurences. The maximum number of date X site combinations is 33.

	SAMPLE OCCURRENCE		SAMPLE OCCURRENCE
NEMATODA	8		
TURBELLARIA (PHAGOCATES)	4	CALANOID	11
STYLODRILUS HERINGIANUS	23	CYTHERISSA	3
IMM TUBIFICIDS + HAIRS	22	CANDONA	12
IMM TUBIFICIDS NO HAIRS	17	MYSIS	21
TUBIFEX TUBIFEX	15	ASELLUS	11
ILYODRILUS TEMPLETONI	1	PONTOPOREIA	33
PELOSCOLEX MULTISETOSUS	5	GAMMARUS FASCIATUS	6
POTOMOTHRIX VEJDOVSKYI	1	HEXAGENIA LIMBATA	1
P. MOLDAVIENSIS	4	TRICHOPTERA (CADDIS FLY)	3
LIMNODRILUS SPP	2	PROCLADIUS SPP	4
LIMNODRILUS HOFFMEISTER	15	PROCLADIUS BELLUS	2
L. ANGUSTIPENIS	2	MONODIAMESIA	1
L. CLAPAREDEIANIS	3	HETEROTRISSOCLADIUS SP	2
L. MAUMEENSIS	1	HETERO. OLIVERI	6
HELOBDELLA STAGNALIS	3	HETEROTRISSO. CHANGI	11
GLOSSOPHONIA SP	1	MICROPSECTRA	2
PHYSA SPP	2	PARACLADOPELMA	2
GYRAULUS SPP	2	CHIRONOMUS SPP	1
BULIMUS TENTACULATA	1	CHIR. ANTHRACINUS GRP.	2
VALVATA TRICARINATA	2	PHAENOPSECTRA (TRIBELOS)	1
VALVATA SINCERA	1		
AMNICOLA SPP	1		
SPHAERIUM SPP	5	NUMBER OF SPECIES = 56	
S. RHOMBOIDEUM	1		
S. NITIDUM	3		
S. CORNEUM	3		
PISIDIUM SPP	19		
PISIDIUM LILLIJEBORGI	8		
P. CASERTANUM	3		
P. CONVENTUS	6		
P. IDAHOENSE	2		
P. NITIDUM	6		
P. VARIABLE	2		
P. VENTRICOSUM	4		
P. HENSLOWI	2		

Table 8. Pontoporeia populations in Lake Ontario, 1981 - 1983 reported as 1 mm size classes. Listed as number, S.E., and wet biomass (mg) per Ponar (0.053 m-2), corrected for the number of eggs hatched.

Table 8A: Kingston Basin, Stn 81 (35m).

Date	Size	Number per Ponar	S.E.	Biomass mg. wet
Mar 81				
	J= 1	168.0	8.9	3.15
	J= 2	.4	.1	.02
	J= 3	7.8	2.4	.91
	J= 4	73.8	11.9	16.40
	J= 5	167.4	26.0	71.73
	J= 6	97.6	18.3	71.29
	J= 7	9.2	2.5	9.65
	J= 8	.4	.2	.59
	SUM=	524.6		173.74
May 81				
	J= 1	150.0	3.6	2.19
	J= 2	3.9	.7	.09
	J= 3	1.2	.5	.16
	J= 4	8.4	1.9	1.85
	J= 5	43.6	11.5	18.47
	J= 6	72.2	12.3	52.73
	J= 7	46.2	10.1	52.87
	J= 8	14.8	2.6	23.91
	SUM=	340.3		152.27
June 81				
	J= 1	24.0	.8	0.00
	J= 2	150.0	.2	7.11
	J= 3	1.0	.4	.12
	J= 4	6.0	5.0	1.52
	J= 5	29.0	3.8	12.71
	J= 6	61.2	7.7	45.13
	J= 7	37.2	10.3	41.88
	J= 8	11.0	3.6	17.13
	SUM=	319.4		125.62
July 81				
	J= 1	0.0	0.0	0.00
	J= 2	79.2	2.6	3.31
	J= 3	19.3	4.3	1.40
	J= 4	1.6	.6	.40
	J= 5	18.6	2.5	8.20
	J= 6	138.0	41.4	98.41
	J= 7	30.8	4.9	35.82
	J= 8	16.0	4.9	27.07
	SUM=	303.5		174.62
Aug 81				
	J= 1	0.0	0.0	0.00
	J= 2	14.5	5.1	.56
	J= 3	110.5	40.2	9.94
	J= 4	8.5	1.5	2.06
	J= 5	25.8	8.3	11.12
	J= 6	70.3	29.1	51.10
	J= 7	48.5	11.4	54.60
	J= 8	21.8	6.0	35.98
	SUM=	299.9		165.35
Sept 81				
	J= 1	.6	.1	.01
	J= 2	18.0	5.2	.72
	J= 3	34.4	4.9	3.38
	J= 4	14.4	3.5	3.29
	J= 5	41.6	6.1	17.02
	J= 6	91.2	8.3	64.72
	J= 7	35.0	3.9	38.60
	J= 8	33.8	1.8	50.94
	SUM=	269.0		178.68
Oct 81				
	J= 1	0.0	0.0	0.00
	J= 2	25.7	4.0	1.08
	J= 3	138.0	11.6	16.63
	J= 4	29.0	5.4	6.54
	J= 5	16.0	1.9	7.59
	J= 6	46.3	4.9	35.79
	J= 7	28.2	5.2	31.23
	J= 8	49.2	11.0	78.61
	SUM=	332.4		177.46
Nov 81				
	J= 1	0.0	0.0	0.00
	J= 2	12.7	2.9	.60
	J= 3	42.0	11.5	4.09
	J= 4	106.7	13.0	24.58
	J= 5	42.7	7.5	19.26
	J= 6	77.0	8.5	57.05
	J= 7	17.7	2.4	21.34
	J= 8	29.5	3.1	51.17
	SUM=	328.3		178.08
Apr 82				
	J= 1	480.2	4.7	4.79
	J= 2	.4	.2	.01
	J= 3	5.9	2.3	.85
	J= 4	23.4	4.2	5.20
	J= 5	154.0	17.0	65.61
	J= 6	17.0	4.4	13.26
	J= 7	11.2	2.5	13.13
	J= 8	15.6	3.5	27.15
	SUM=	707.7		130.01

Table 8A. Stn 81 continued.

Date	Size	Number per Ponar	S.E.	Biomass mg. wet
May 82				
	J= 1	240.0	4.5	5.26
	J= 2	.4	.2	.02
	J= 3	4.4	.9	.59
	J= 4	71.0	6.4	14.99
	J= 5	179.2	12.7	79.47
	J= 6	26.4	2.1	20.41
	J= 7	20.0	1.6	23.54
	J= 8	8.2	1.2	13.15
	SUM=	549.6		157.42
June 82				
	J= 1	300.0	4.5	7.93
	J= 2	132.8	3.2	5.56
	J= 3	2.6	.4	.33
	J= 4	38.0	7.9	9.86
	J= 5	120.0	11.5	48.80
	J= 6	63.2	7.6	48.17
	J= 7	17.0	1.3	18.21
	J= 8	9.2	1.7	14.54
	SUM=	682.8		153.41
July 82				
	J= 1	92.3	.9	2.24
	J= 2	63.3	5.6	2.05
	J= 3	2.0	.6	.25
	J= 4	29.3	5.2	6.65
	J= 5	79.3	13.1	35.77
	J= 6	61.5	7.8	47.31
	J= 7	15.8	3.9	18.15
	J= 8	12.8	3.9	21.20
	SUM=	356.3		133.63
Aug 82				
	J= 1	79.0	.4	1.35
	J= 2	13.5	5.8	.53
	J= 3	8.3	1.2	.69
	J= 4	17.0	2.4	3.75
	J= 5	117.5	18.6	50.35
	J= 6	44.3	2.0	35.05
	J= 7	14.3	3.7	15.51
	J= 8	12.0	1.6	20.38
	SUM=	305.9		127.55
Sept 82				
	J= 1	6.8	3.0	.20
	J= 2	39.8	9.0	2.15
	J= 3	77.0	9.9	10.40
	J= 4	34.0	6.3	7.28
	J= 5	86.8	11.1	36.77
	J= 6	77.3	21.8	57.82
	J= 7	15.5	4.0	17.09
	J= 8	5.0	3.5	7.82
	SUM=	342.2		139.53

Date	Size	Number per Ponar	S.E.	Biomass mg. wet
Nov 82				
	J= 1	1.3	.5	0.02
	J= 2	31.0	2.8	1.45
	J= 3	37.7	5.5	4.00
	J= 4	29.7	1.6	7.44
	J= 5	100.7	8.2	43.40
	J= 6	53.7	.7	40.16
	J= 7	9.3	1.6	9.92
	J= 8	7.0	.5	12.44
	SUM=	270.4		118.82
Apr 83				
	J= 1	59.0	0.0	1.11
	J= 2	0.0	0.0	0.00
	J= 3	19.9	0.0	3.18
	J= 4	30.5	0.0	10.61
	J= 5	52.1	0.0	31.72
	J= 6	35.6	0.0	34.60
	J= 7	25.0	0.0	34.96
	J= 8	21.3	0.0	38.39
	SUM=	243.4		154.56

Table 8B. Niagara area, Stn 93A (70m).

Date Size	Number per Ponar	S.E.	Biomass mg. wet
Apr 81			
J= 1	131.0	4.9	2.54
J= 2	4.6	2.0	.19
J= 3	35.5	1.2	5.20
J= 4	108.5	10.2	28.90
J= 5	55.9	6.9	25.56
J= 6	18.3	5.3	16.25
J= 7	10.4	1.7	13.21
J= 8	5.4	.4	9.66
SUM=	369.6		101.50
May 81			
J= 1	116.0	38.3	2.43
J= 2	6.5	.9	.20
J= 3	26.3	6.5	3.82
J= 4	96.2	16.0	24.88
J= 5	54.7	13.4	27.86
J= 6	15.0	1.5	12.68
J= 7	2.3	.6	3.04
J= 8	1.7	.5	3.40
SUM=	318.7		78.31
June 81			
J= 1	6.0	.9	.13
J= 2	72.0	.9	2.39
J= 3	.7	.3	.08
J= 4	46.0	9.0	11.90
J= 5	37.3	4.3	18.55
J= 6	21.7	2.3	18.53
J= 7	4.7	1.1	6.07
J= 8	1.3	.6	2.47
SUM=	189.7		60.12
July 81			
J= 1	0.0	0.0	0.00
J= 2	13.0	2.8	.48
J= 3	11.4	2.7	1.44
J= 4	15.8	4.3	4.18
J= 5	42.6	9.3	22.86
J= 6	88.2	30.8	77.18
J= 7	14.0	2.1	16.36
J= 8	5.0	1.8	9.01
SUM=	190.0		131.52
Aug 81			
J= 1	.7	.0	.02
J= 2	15.6	1.8	.64
J= 3	33.0	5.8	2.45
J= 4	31.2	7.0	8.07
J= 5	65.4	7.9	33.11
J= 6	78.4	11.9	72.37
J= 7	12.2	2.2	15.36
J= 8	1.2	.4	2.10
SUM=	237.7		134.12
Sept 81			
J= 1	0.0	0.0	0.00
J= 2	13.8	1.8	.62
J= 3	42.6	7.7	4.44
J= 4	44.6	2.4	12.50
J= 5	78.8	6.7	38.05
J= 6	39.2	5.8	35.67
J= 7	9.0	1.7	12.45
J= 8	1.4	.4	2.80
SUM=	229.4		106.52
Oct 81			
J= 1	0.0	0.0	0.00
J= 2	19.2	2.7	1.13
J= 3	65.8	4.5	7.86
J= 4	21.4	5.2	4.02
J= 5	118.8	14.7	56.00
J= 6	46.4	2.9	38.46
J= 7	12.2	1.7	16.10
J= 8	.6	.4	.99
SUM=	284.4		124.56
Nov 81			
J= 1	0.0	0.0	0.00
J= 2	3.2	1.1	.19
J= 3	18.2	5.4	2.01
J= 4	152.6	30.0	39.18
J= 5	29.8	7.2	14.82
J= 6	88.0	12.1	76.26
J= 7	26.2	4.4	35.47
J= 8	2.6	.9	5.21
SUM=	320.6		173.14
Mar 82			
J= 1	0.0	0.0	0.00
J= 2	.8	.4	.04
J= 3	6.6	1.4	.66
J= 4	116.8	18.8	33.21
J= 5	44.4	9.9	23.28
J= 6	28.8	6.5	24.11
J= 7	19.8	4.4	25.25
J= 8	4.0	.9	8.74
SUM=	221.2		115.30

Table 8B. Stn 93 continued.

Date Size	Number per Ponar	S.E.	Biomass mg. wet
May 82			
J= 1	270.2	4.9	6.37
J= 2	92.2	1.0	3.90
J= 3	2.6	.8	.35
J= 4	66.8	8.1	16.65
J= 5	82.8	11.9	37.17
J= 6	37.6	4.3	33.39
J= 7	6.8	1.8	8.23
J= 8	3.8	1.0	7.33
SUM=	562.8		113.40
June 82			
J= 1	60.3	0.0	1.44
J= 2	232.0	.9	8.51
J= 3	0.0	0.0	0.00
J= 4	20.3	.4	5.14
J= 5	97.5	6.8	47.07
J= 6	55.3	3.9	49.11
J= 7	28.8	3.5	35.94
J= 7	28.8	3.5	35.94
J= 8	8.3	1.5	16.81
SUM=	502.5		164.02
July 82			
J= 1	.8	.4	0.00
J= 2	116.3	11.0	5.64
J= 3	3.0	.7	.33
J= 4	42.5	3.8	10.83
J= 5	121.0	2.3	63.82
J= 6	51.3	5.4	48.50
J= 7	8.5	1.8	10.75
J= 8	1.8	.4	3.22
SUM=	345.2		143.10
Aug 82			
J= 1	12.8	.7	.31
J= 2	62.6	4.1	2.35
J= 3	9.7	1.6	1.06
J= 4	4.3	.3	1.32
J= 5	163.0	6.6	74.99
J= 6	51.0	11.2	48.91
J= 7	11.5	5.5	13.56
J= 8	1.3	.7	2.24
SUM=	316.2		144.74
Sept 82			
J= 1	.3	.2	.01
J= 2	8.8	3.4	.43
J= 3	18.5	2.5	2.23
J= 4	22.8	4.8	7.76
J= 5	66.3	7.3	32.01
J= 6	47.3	7.4	42.62
J= 7	19.3	3.3	23.06
J= 8	2.0	1.1	3.58
SUM=	185.3		111.69

Date Size	Number per Ponar	S.E.	Biomass mg. wet
Nov 82			
J= 1	0.0	0.0	0.00
J= 2	4.3	1.3	.19
J= 3	53.0	6.8	6.03
J= 4	28.7	4.1	13.45
J= 5	88.0	9.9	44.03
J= 6	44.7	3.7	38.73
J= 7	8.7	.6	10.49
J= 8	1.0	.4	1.93
SUM=	228.4		114.86
Apr 83			
J= 1	2.3	0.0	.04
J= 2	0.0	0.0	0.00
J= 3	27.9	0.0	5.69
J= 4	51.3	0.0	14.17
J= 5	53.7	0.0	30.00
J= 6	24.7	0.0	22.15
J= 7	9.2	0.0	11.89
J= 8	3.1	0.0	6.21
SUM=	172.2		90.14

Table 8C. Open lake, Stn 41 (125m).

Date Size	Number per Ponar	S.E.	Biomass mg. wet
Mar 81			
J= 1	30.0	.9	.52
J= 2	6.8	.9	.17
J= 3	10.4	1.6	.69
J= 4	12.8	.9	3.30
J= 5	18.4	1.5	6.14
J= 6	33.6	1.9	21.11
J= 7	5.4	.5	5.27
J= 8	.2	.0	.26
SUM=	117.6		37.47
May 81			
J= 1	89.2	1.9	1.15
J= 2	10.4	1.4	.44
J= 3	11.4	1.5	.82
J= 4	12.0	1.5	2.08
J= 5	16.8	1.9	6.34
J= 6	30.4	1.2	19.62
J= 7	13.2	1.8	13.25
J= 8	.6	.5	.91
SUM=	184.0		44.59
June 81			
J= 1	12.0	1.3	.23
J= 2	78.0	1.3	3.66
J= 3	4.6	.3	.38
J= 4	13.0	2.1	2.29
J= 5	13.0	2.5	5.00
J= 6	36.8	5.1	25.43
J= 7	14.6	1.2	14.58
J= 8	0.0	0.0	0.00
SUM=	172.0		51.56
July 81			
J= 1	0.0	0.0	0.00
J= 2	9.7	2.8	.41
J= 3	5.6	1.4	.39
J= 4	10.6	1.4	1.88
J= 5	23.8	6.4	8.42
J= 6	49.6	2.7	33.57
J= 7	17.0	2.6	18.11
J= 8	7.2	.6	10.87
SUM=	123.5		73.65
Aug 81			
J= 1	15.0	.2	.35
J= 2	1.2	.2	.05
J= 3	1.6	.4	.11
J= 4	10.4	1.9	1.74
J= 5	30.4	6.2	11.32
J= 6	38.4	2.4	25.85
J= 7	22.2	2.5	23.33
J= 8	9.4	1.8	12.74
SUM=	128.6		75.50
Sept 81			
J= 1	228.0	4.0	5.38
J= 2	10.3	1.7	.40
J= 3	11.8	1.0	.89
J= 4	16.0	1.7	2.97
J= 5	12.0	1.7	4.17
J= 6	27.0	3.2	18.27
J= 7	12.2	.2	12.24
J= 8	9.0	2.0	13.53
SUM=	326.3		57.86
Oct 81			
J= 1	0.0	0.0	0.00
J= 2	140.0	1.6	5.93
J= 3	2.4	.5	.16
J= 4	16.5	4.4	3.21
J= 5	17.0	2.7	6.10
J= 6	26.5	3.3	18.03
J= 7	10.0	1.0	10.85
J= 8	6.0	.4	8.77
SUM=	218.4		53.03
Nov 81			
J= 1	0.0	0.0	0.00
J= 2	16.8	2.3	.69
J= 3	10.6	3.2	.71
J= 4	9.9	1.9	1.57
J= 5	21.0	3.2	7.82
J= 6	17.4	3.3	11.41
J= 7	6.0	.8	6.39
J= 8	4.6	.7	7.00
SUM=	86.3		35.59
Mar 82			
J= 1	10.0	.5	.25
J= 2	17.5	2.7	.77
J= 3	25.3	4.6	1.91
J= 4	16.7	3.2	2.45
J= 5	17.0	3.3	6.53
J= 6	22.5	2.0	14.60
J= 7	16.5	2.7	16.79
J= 8	7.3	2.0	10.84
SUM=	132.8		54.15

Table 8C. Stn 41 continued.

Date	Size	Number per Ponar	S.E.	Biomass mg. wet
May 82				
	J= 1	10.0	.4	0.06
	J= 2	8.6	3.4	.39
	J= 3	18.0	2.0	1.25
	J= 4	19.2	2.1	3.89
	J= 5	14.8	1.9	5.07
	J= 6	16.0	1.0	10.77
	J= 7	10.6	.8	10.54
	J= 8	5.2	1.3	7.72
	SUM=	102.4		39.63
June 82				
	J= 1	15.0	.5	0.11
	J= 2	8.0	.6	.38
	J= 3	26.3	2.7	1.79
	J= 4	7.3	1.4	1.15
	J= 5	12.3	2.6	4.97
	J= 6	20.0	3.8	12.50
	J= 7	3.8	1.0	3.67
	J= 8	1.3	.5	1.84
	SUM=	94.0		26.30
July 82				
	J= 1	6.0	.4	.15
	J= 2	10.2	.9	.41
	J= 3	6.8	1.3	.53
	J= 4	35.8	3.2	6.97
	J= 5	9.8	2.1	3.81
	J= 6	15.8	1.7	10.36
	J= 7	11.2	1.2	11.03
	J= 8	5.0	1.2	8.71
	SUM=	100.6		41.98
Aug 82				
	J= 1	20.0	.5	0.12
	J= 2	9.5	.4	.50
	J= 3	13.0	2.2	1.14
	J= 4	31.8	1.8	5.37
	J= 5	13.3	1.0	4.30
	J= 6	12.3	1.3	8.50
	J= 7	8.3	1.7	8.02
	J= 8	4.5	1.3	6.63
	SUM=	112.7		34.47
Sept 82				
	J= 1	35.0	.6	1.02
	J= 2	16.8	.7	.56
	J= 3	4.8	.8	.42
	J= 4	17.8	1.7	2.73
	J= 5	45.5	3.6	16.00
	J= 6	19.3	1.3	12.66
	J= 7	11.5	2.7	11.22
	J= 8	8.6	.8	14.47
	SUM=	159.3		59.07

Date	Size	Number per Ponar	S.E.	Biomass mg. wet
Nov 82				
	J= 1	50.0	5.8	0.26
	J= 2	25.0	1.0	1.19
	J= 3	9.0	.3	.78
	J= 4	19.3	1.4	3.11
	J= 5	38.0	3.9	12.20
	J= 6	13.3	2.6	8.91
	J= 7	9.0	2.1	9.24
	J= 8	4.7	.7	7.27
	SUM=	168.3		42.70
Apr 83				
	J= 1	2.9	1.3	.07
	J= 2	8.7	2.8	.44
	J= 3	7.3	1.5	.75
	J= 4	54.0	13.0	8.78
	J= 5	21.8	5.0	6.99
	J= 6	7.4	1.5	4.89
	J= 7	4.4	.5	5.29
	J= 8	7.9	1.9	12.21
	SUM=	114.4		39.42

TABLE 9. List of the zooplankton species found at the four Bioindex stations in Lake Ontario in 1981 and 1982.

CLADOCERA

- Alona guttata
- Alona quadrangularis
- Bosmina longirostris
- Ceriodaphnia lacustris
- Ceriodaphnia quadrangula
- Chydorus sphaericus
- Daphnia ambigua
- Daphnia galeata mendotae
- Daphnia longiremis
- Daphnia pulex
- Daphnia retrocurva
- Diaphanosoma birgei
- Eubosmina coregoni
- Holopedium gibberum
- Ilyocryptus spinifer
- Leptodora kindtii
- Leydigia quadrangularis
- Polyphemus pediculus
- Simocephalus vetulus

COPEPODA

CYCLPOIDA
- Cyclops bicuspidatus thomasi
- Cyclops vernalis
- Eucyclops agilis
- Mesocyclops edax
- Tropocyclops prasinus mexicanus

CALANOIDA
- Diaptomus ashlandii
- Diaptomus minutus
- Diaptomus oregonensis
- Diaptomus sicilis
- Diaptomus siciloides
- Limnocalanus macrurus

HARPACTICOIDA
- Eurytemora affinis

TABLE 10a. SEASONAL TRENDS IN ZOOPLANKTON POPULATIONS IN LAKE ONTARIO. MISSING CRUISES ARE FLAGGED AS -1.

STATION 12 1981

		DENSITY (NO. M-3)								
		MAR 16	MAR 23	MAR 30	APR 6	APR 13	APR 21	APR 27	MAY 4	MAY 11
CLADOCERA										
BOSMINA LONGIROSTRIS				1	5		4	1	1	
BOSMINA LONGIROSTRIS	EGG			1	1			11		
EUBOSMINA COREGONI				2	4					
EUBOSMINA COREGONI	EGG			1	6					
DAPHNIA RETROCURVA										
DAPHNIA RETROCURVA	EGG									
DAPHNIA LONGIREMIS										
DAPHNIA LONGIREMIS	EGG									
DAPHNIA GALEATA MENDOTAE										
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA PULEX										
CERIODAPHNIA LACUSTRIS										
CERIODAPHNIA LACUSTRIS	EGG									
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS										
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
DIAPHANOSOMA BIRGEI	EGG									
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
SIMOCEPHALUS VETULUS										
ILYOCRYPTUS SPINIFER										
LEYDIGIA QUADRANGULARIS										
LEYDIGIA QUADRANGULARIS	EGG									
POLYPHEMUS PEDICULUS										
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		257	197	175	305	161	319	292	184	209
CYCLOPS BICUSPIDATUS THOMASI	EGG	144	265	387	1558	1028	1886	3848	1840	1541
CYCLOPS VERNALIS										
TROPOCYCLOPS PRASINUS MEXICANUS		30	17	15	36	13	26	19	16	16
TROPOCYCLOPS PRASINUS MEXICANUS	EGG	13							10	16
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		575	326	202	342	106	230	138	60	65
CYCLOPOID NAUPLII		80	57	16	43	42	151	130	77	876
LIMNOCALANUS MACRURUS			1	1		1				3
LIMNOCALANUS MACRURUS	COPEPODITE	21	15	20	31	124	77	57	34	59
LIMNOCALANUS MACRURUS	NAUPLI	537	347	228	223		134	58	52	31
DIAPTOMUS SICILIS		8	2	3	12	10	13	6	8	12
DIAPTOMUS SICILIS	EGG	20		5	67	84	52	63	62	70
DIAPTOMUS OREGONENSIS		2	2	1	4	2			2	2
DIAPTOMUS OREGONENSIS	EGG								4	
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS			1				1			2
DIAPTOMUS MINUTUS	EGG									
DIAPTOMUS ASHLANDII										
DIAPTOMUS ASHLANDII	EGG									
EURYTEMORA AFFINIS										
EURYTEMORA AFFINIS	EGG									
CALANOID COPEPODITES		84	38	69	102	71	210	141	180	194
CALANOID NAUPLII		495	566	153	356	546	409	406	429	426
HARPACTICOID COPEPODITES										

TABLE 10a. Continued

STATION 12 1981

		DENSITY (NO. M-3)								
		MAY 20	MAY 26	JUN 2	JUN 9	JUN 15	JUN 22	JUN 29	JUL 6	JUL 13
CLADOCERA										
BOSMINA LONGIROSTRIS		1	1		212	70	242	354	1241	5941
BOSMINA LONGIROSTRIS	EGG	5			30	47	436	401	1941	4102
EUBOSMINA COREGONI										47
EUBOSMINA COREGONI	EGG									
DAPHNIA RETROCURVA						23				
DAPHNIA RETROCURVA	EGG									
DAPHNIA LONGIREMIS										
DAPHNIA LONGIREMIS	EGG									
DAPHNIA GALEATA MENDOTAE										
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA PULEX										
CERIODAPHNIA LACUSTRIS										
CERIODAPHNIA LACUSTRIS	EGG									
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS										
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
DIAPHANOSOMA BIRGEI	EGG									
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
SIMOCEPHALUS VETULUS										
ILYOCRYPTUS SPINIFER										
LEYDIGIA QUADRANGULARIS										
LEYDIGIA QUADRANGULARIS	EGG									
POLYPHEMUS PEDICULUS										
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		261	167		30	94		494	15	11
CYCLOPS BICUSPIDATUS THOMASI	EGG	2144	274					766		
CYCLOPS VERNALIS									5	
TROPOCYCLOPS PRASINUS MEXICANUS		12	49	165	392	566	67		137	
TROPOCYCLOPS PRASINUS MEXICANUS	EGG				363	1320	181		1283	
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		27	409	20655	45592	54890	5273	4692	795	2970
CYCLOPOID NAUPLII		3723	5839	131285	33710	24709	2354	2334	4328	7685
LIMNOCALANUS MACRURUS										
LIMNOCALANUS MACRURUS	COPEPODITE	83	3							
LIMNOCALANUS MACRURUS	NAUPLI	34		11						
DIAPTOMUS SICILIS		16	1							
DIAPTOMUS SICILIS	EGG	144								
DIAPTOMUS OREGONENSIS		9								
DIAPTOMUS OREGONENSIS	EGG	26								
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS										
DIAPTOMUS MINUTUS	EGG									
DIAPTOMUS ASHLANDII										
DIAPTOMUS ASHLANDII	EGG									
EURYTEMORA AFFINIS										
EURYTEMORA AFFINIS	EGG									
CALANOID COPEPODITES		412	341	977	2698	141	51	81	31	81
CALANOID NAUPLII		626	432	978	4274	117	101	23	31	58
HARPACTICOID COPEPODITES										

TABLE 10 a. Continued

STATION 12 1981

		DENSITY (NO. M-3)								
		JUL 21	JUL 27	AUG 4	AUG 10	AUG 17	AUG 24	AUG 31	SEP 8	SEP 14
CLADOCERA										
BOSMINA LONGIROSTRIS		7412	154826	121381	62105	96199	12072	18956	3889	910
BOSMINA LONGIROSTRIS	EGG	8006	25351	12731	13863	18787	4998	2545	459	326
EUBOSMINA COREGONI								70	849	273
EUBOSMINA COREGONI	EGG								388	344
DAPHNIA RETROCURVA				1308	396	650	5140	11034	22209	601
DAPHNIA RETROCURVA	EGG					56	613	3960	1555	69
DAPHNIA LONGIREMIS										
DAPHNIA LONGIREMIS	EGG									
DAPHNIA GALEATA MENDOTAE										
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA PULEX										
CERIODAPHNIA LACUSTRIS				176	362	1018	2734	9620	1344	522
CERIODAPHNIA LACUSTRIS	EGG			34	222	2376	2216	6507	425	327
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS										
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
DIAPHANOSOMA BIRGEI	EGG									
HOLOPEDIUM GIBBERUM									69	18
HOLOPEDIUM GIBBERUM	EGG								70	
ALONA QUADRANGULARIS										
ALONA GUTTATA										
SIMOCEPHALUS VETULUS										
ILYOCRYPTUS SPINIFER										
LEYDIGIA QUADRANGULARIS										
LEYDIGIA QUADRANGULARIS	EGG									
POLYPHEMUS PEDICULUS				18	26					
POLYPHEMUS PEDICULUS	EGG			212	105					
LEPTODORA KINDTII				18	8			34		
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		13	27	212	388	1118	236	10752	8559	726
CYCLOPS BICUSPIDATUS THOMASI	EGG				184	608	684	15985	3749	1237
CYCLOPS VERNALIS			27							
TROPOCYCLOPS PRASINUS MEXICANUS			198	18	34	98	897	601	12308	406
TROPOCYCLOPS PRASINUS MEXICANUS	EGG		1442			198	942	1131	3535	
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		4130	10865	5728	3165	15645	14995	36216	92805	4402
CYCLOPOID NAUPLII		2659	12562	8063	1113	3734	15655	13863	39612	3217
LIMNOCALANUS MACRURUS										
LIMNOCALANUS MACRURUS	COPEPODITE									
LIMNOCALANUS MACRURUS	NAUPLI									
DIAPTOMUS SICILIS										
DIAPTOMUS SICILIS	EGG									
DIAPTOMUS OREGONENSIS								34		
DIAPTOMUS OREGONENSIS	EGG									
DIAPTOMUS SICILOIDES									34	
DIAPTOMUS MINUTUS										
DIAPTOMUS MINUTUS	EGG									
DIAPTOMUS ASHLANDII										
DIAPTOMUS ASHLANDII	EGG									
EURYTEMORA AFFINIS										52
EURYTEMORA AFFINIS	EGG									654
CALANOID COPEPODITES		20		18	8		23	140	34	194
CALANOID NAUPLII		13		34	26	27		70	141	247
HARPACTICOID COPEPODITES										

TABLE 10a. Continued

STATION 12 1981

		DENSITY (NO. M-3)								
		SEP 24	SEP 29	OCT 5	OCT 13	OCT 19	OCT 26	NOV 2	NOV 10	NOV 17
CLADOCERA										
BOSMINA LONGIROSTRIS		3077	5035	-1	905	919	1824	2730	1767	329
BOSMINA LONGIROSTRIS	EGG	1909	2913	-1	445	551	622	340	183	74
EUBOSMINA COREGONI		955	1583	-1	98	395	91	692	1230	399
EUBOSMINA COREGONI	EGG	477	1358	-1	41	296	56	495	734	466
DAPHNIA RETROCURVA		7569	5206	-1	445	679	784	791	91	95
DAPHNIA RETROCURVA	EGG	2050	1244	-1	232	374	317	290	41	
DAPHNIA LONGIREMIS				-1						
DAPHNIA LONGIREMIS	EGG			-1						
DAPHNIA GALEATA MENDOTAE				-1						
DAPHNIA GALEATA MENDOTAE	EGG			-1						
DAPHNIA PULEX				-1						
CERIODAPHNIA LACUSTRIS		1026	622	-1	48	31	41	20	4	
CERIODAPHNIA LACUSTRIS	EGG	601	354	-1	6	6				
CERIODAPHNIA QUADRANGULA				-1						
CHYDORUS SPHAERICUS				-1						4
CHYDORUS SPHAERICUS	EGG			-1						
DIAPHANOSOMA BIRGEI				-1						
DIAPHANOSOMA BIRGEI	EGG			-1						
HOLOPEDIUM GIBBERUM				-1						
HOLOPEDIUM GIBBERUM	EGG			-1						
ALONA QUADRANGULARIS				-1						
ALONA GUTTATA				-1						
SIMOCEPHALUS VETULUS				-1						
ILYOCRYPTUS SPINIFER				-1						
LEYDIGIA QUADRANGULARIS				-1						
LEYDIGIA QUADRANGULARIS	EGG			-1						
POLYPHEMUS PEDICULUS				-1						
POLYPHEMUS PEDICULUS	EGG			-1						
LEPTODORA KINDTII				-1						
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		10115	4074	-1	1336	919	1061	1740	608	374
CYCLOPS BICUSPIDATUS THOMASI	EGG	20866	6224	-1	1081	3535	2631	5899	204	459
CYCLOPS VERNALIS				-1						
TROPOCYCLOPS PRASINUS MEXICANUS		3077	4045	-1	580	834	573	1328	1300	368
TROPOCYCLOPS PRASINUS MEXICANUS	EGG	1980	820	-1						
MESOCYCLOPS EDAX				-1						
EUCYCLOPS AGILIS				-1						
CYCLOPOID COPEPODITES		43855	24220	-1	4612	3820	1895	5319	7610	1909
CYCLOPOID NAUPLII		7807	7185	-1	3649	2490	2630	4469	4100	2009
LIMNOCALANUS MACRURUS				-1						
LIMNOCALANUS MACRURUS	COPEPODITE			-1						
LIMNOCALANUS MACRURUS	NAUPLI			-1		4				
DIAPTOMUS SICILIS				-1				13		
DIAPTOMUS SICILIS	EGG			-1						
DIAPTOMUS OREGONENSIS		34		-1			6		15	4
DIAPTOMUS OREGONENSIS	EGG	459		-1						
DIAPTOMUS SICILOIDES				-1						
DIAPTOMUS MINUTUS				-1						
DIAPTOMUS MINUTUS	EGG			-1						
DIAPTOMUS ASHLANDII				-1						
DIAPTOMUS ASHLANDII	EGG			-1						
EURYTEMORA AFFINIS			13	-1					11	
EURYTEMORA AFFINIS	EGG			-1						
CALANOID COPEPODITES		176	183	-1	34	38	49	34	36	24
CALANOID NAUPLII		141	70	-1	13	22	20	48	6	66
HARPACTICOID COPEPODITES				-1						

TABLE 10b. SEASONAL TRENDS IN ZOOPLANKTON POPULATIONS IN LAKE ONTARIO. MISSING CRUISES ARE FLAGGED AS -1.

STATION 41 1981

DENSITY (NO. M-3)

		MAR 16	MAR 23	MAR 30	APR 6	APR 13	APR 21	APR 27	MAY 4	MAY 11
CLADOCERA										
BOSMINA LONGIROSTRIS		6		5	6		1		1	2
BOSMINA LONGIROSTRIS	EGG						11		2	4
EUBOSMINA COREGONI		7		2					1	
EUBOSMINA COREGONI	EGG								4	
DAPHNIA RETROCURVA										
DAPHNIA RETROCURVA	EGG									
DAPHNIA LONGIREMIS										
DAPHNIA LONGIREMIS	EGG									
DAPHNIA GALEATA MENDOTAE										
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA PULEX										
CERIODAPHNIA LACUSTRIS										
CERIODAPHNIA LACUSTRIS	EGG									
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS										
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
DIAPHANOSOMA BIRGEI	EGG									
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
SIMOCEPHALUS VETULUS										
ILYOCRYPTUS SPINIFER										
LEYDIGIA QUADRANGULARIS										
LEYDIGIA QUADRANGULARIS	EGG									
POLYPHEMUS PEDICULUS										
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		94	420	601	1838	515	865	612	703	531
CYCLOPS BICUSPIDATUS THOMASI	EGG	67	749	2153	17456	1641	10859	7812	6428	4991
CYCLOPS VERNALIS										
TROPOCYCLOPS PRASINUS MEXICANUS		31	50	6	22	30	21	34	16	21
TROPOCYCLOPS PRASINUS MEXICANUS	EGG									
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		314	547	463	890	406	294	286	34	169
CYCLOPOID NAUPLII		189	264	20	134	126	90	274	1884	4141
LIMNOCALANUS MACRURUS			1	4		5		13	8	
LIMNOCALANUS MACRURUS	COPEPODITE	10	8	5	27	48	13	45	13	27
LIMNOCALANUS MACRURUS	NAUPLI	34	44	19	52		26	37	9	35
DIAPTOMUS SICILIS		2	5	6	63	27	13	20	13	12
DIAPTOMUS SICILIS	EGG		30	58	326		18	96	48	30
DIAPTOMUS OREGONENSIS			5	5	20	12	5	6	2	3
DIAPTOMUS OREGONENSIS	EGG			31	31	15	5		19	
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS		1								
DIAPTOMUS MINUTUS	EGG									
DIAPTOMUS ASHLANDII								2	1	
DIAPTOMUS ASHLANDII	EGG									
EURYTEMORA AFFINIS										
EURYTEMORA AFFINIS	EGG									
CALANOID COPEPODITES		31	59	22	101	56	35	100	63	188
CALANOID NAUPLII		559	459	14	176	91	78	342	44	284
HARPACTICOID COPEPODITES										

TABLE 10b. Continued

STATION 41 1981

DENSITY (NO. M-3)

		MAY 20	MAY 26	JUN 2	JUN 9	JUN 15	JUN 22	JUN 29	JUL 6	JUL 13
CLADOCERA										
BOSMINA LONGIROSTRIS		1	1	6	70	70	56	495	763	5752
BOSMINA LONGIROSTRIS	EGG	1		11	70	105	70	523	1141	4102
EUBOSMINA COREGONI		1								
EUBOSMINA COREGONI	EGG	1								
DAPHNIA RETROCURVA									4	
DAPHNIA RETROCURVA	EGG									
DAPHNIA LONGIREMIS										
DAPHNIA LONGIREMIS	EGG									
DAPHNIA GALEATA MENDOTAE										
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA PULEX										
CERIODAPHNIA LACUSTRIS										
CERIODAPHNIA LACUSTRIS	EGG									
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS										
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
DIAPHANOSOMA BIRGEI	EGG									
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
SIMOCEPHALUS VETULUS										
ILYOCRYPTUS SPINIFER										
LEYDIGIA QUADRANGULARIS										
LEYDIGIA QUADRANGULARIS	EGG									
POLYPHEMUS PEDICULUS										
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		1167	1045	594	2895	5269	530	1563	1173	9666
CYCLOPS BICUSPIDATUS THOMASI	EGG	11981	6980	3995	32127	25005		134		6601
CYCLOPS VERNALIS										
TROPOCYCLOPS PRASINUS MEXICANUS		8	21	20		70	13		23	
TROPOCYCLOPS PRASINUS MEXICANUS	EGG					176	77		135	
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		324	381	3960	43519	41593	7497	2856	4696	15090
CYCLOPOID NAUPLII		10581	10341	18220	37051	18885	4980	4131	19389	16221
LIMNOCALANUS MACRURUS										
LIMNOCALANUS MACRURUS	COPEPODITE	27	17	4						
LIMNOCALANUS MACRURUS	NAUPLI	27	12	10						
DIAPTOMUS SICILIS		6	2							
DIAPTOMUS SICILIS	EGG	19	26							
DIAPTOMUS OREGONENSIS		6	6		20	34	6			
DIAPTOMUS OREGONENSIS	EGG	66	33		444					
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS										
DIAPTOMUS MINUTUS	EGG									
DIAPTOMUS ASHLANDII										
DIAPTOMUS ASHLANDII	EGG									
EURYTEMORA AFFINIS										
EURYTEMORA AFFINIS	EGG									
CALANOID COPEPODITES		250	134	247	862		70	41		11
CALANOID NAUPLII		90	31	134	249	70	63	41	27	
HARPACTICOID COPEPODITES										

TABLE 10 b. Continued

STATION 41 1981

		DENSITY (NO. M-3) JUL 21	JUL 27	AUG 4	AUG 10	AUG 17	AUG 24	AUG 31	SEP 8	SEP 14
CLADOCERA										
BOSMINA LONGIROSTRIS		15373	74130	125059	247573	59756	23484	62719	-1	117
BOSMINA LONGIROSTRIS	EGG	7073	37536	46969	90009	2716	3395	17448	-1	116
EUBOSMINA COREGONI					1415	452		58	-1	601
EUBOSMINA COREGONI	EGG							58	-1	624
DAPHNIA RETROCURVA			94	637	1238	17881	5728	8487	-1	6601
DAPHNIA RETROCURVA	EGG			1342	3005	9393	1662	2711	-1	1886
DAPHNIA LONGIREMIS					88				-1	
DAPHNIA LONGIREMIS	EGG								-1	
DAPHNIA GALEATA MENDOTAE									-1	
DAPHNIA GALEATA MENDOTAE	EGG								-1	
DAPHNIA PULEX									-1	
CERIODAPHNIA LACUSTRIS				283	2828	5941	760	5894	-1	341
CERIODAPHNIA LACUSTRIS	EGG			495	4598	2206	406	5717	-1	294
CERIODAPHNIA QUADRANGULA									-1	
CHYDORUS SPHAERICUS									-1	11
CHYDORUS SPHAERICUS	EGG								-1	
DIAPHANOSOMA BIRGEI									-1	
DIAPHANOSOMA BIRGEI	EGG								-1	
HOLOPEDIUM GIBBERUM									-1	
HOLOPEDIUM GIBBERUM	EGG								-1	
ALONA QUADRANGULARIS									-1	
ALONA GUTTATA									-1	
SIMOCEPHALUS VETULUS									-1	
ILYOCRYPTUS SPINIFER									-1	
LEYDIGIA QUADRANGULARIS									-1	
LEYDIGIA QUADRANGULARIS	EGG								-1	
POLYPHEMUS PEDICULUS									-1	
POLYPHEMUS PEDICULUS	EGG								-1	
LEPTODORA KINDTII							18		-1	11
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		7215	16598	25463	17595	19919	9195	2828	-1	7733
CYCLOPS BICUSPIDATUS THOMASI	EGG	1885	3017	38620	42883	33726	1697	1473	-1	6744
CYCLOPS VERNALIS									-1	
TROPOCYCLOPS PRASINUS MEXICANUS			23	425	88	509	530	1649	-1	4669
TROPOCYCLOPS PRASINUS MEXICANUS	EGG		472	1131		1697	1255	1591	-1	472
MESOCYCLOPS EDAX									-1	23
EUCYCLOPS AGILIS									-1	
CYCLOPOID COPEPODITES		23390	18013	90541	74273	64510	26597	14619	-1	25559
CYCLOPOID NAUPLII		98274	7356	13296	1945	6394	18956	16505	-1	9337
LIMNOCALANUS MACRURUS									-1	
LIMNOCALANUS MACRURUS	COPEPODITE								-1	
LIMNOCALANUS MACRURUS	NAUPLI								-1	
DIAPTOMUS SICILIS									-1	
DIAPTOMUS SICILIS	EGG								-1	
DIAPTOMUS OREGONENSIS					88	56	36		-1	139
DIAPTOMUS OREGONENSIS	EGG								-1	223
DIAPTOMUS SICILOIDES									-1	
DIAPTOMUS MINUTUS									-1	
DIAPTOMUS MINUTUS	EGG								-1	
DIAPTOMUS ASHLANDII									-1	
DIAPTOMUS ASHLANDII	EGG								-1	
EURYTEMORA AFFINIS									-1	
EURYTEMORA AFFINIS	EGG								-1	
CALANOID COPEPODITES		70	70		177	282	52	116	-1	94
CALANOID NAUPLII		141	117			226	36	412	-1	23
HARPACTICOID COPEPODITES									-1	

TABLE 10b. Continued

STATION 41 1981

		DENSITY (NO. M-3)								
		SEP 24	SEP 29	OCT 5	OCT 13	OCT 19	OCT 26	NOV 2	NOV 10	NOV 17
CLADOCERA										
BOSMINA LONGIROSTRIS		2594	2319	2263	3295	919	1740	694	2122	792
BOSMINA LONGIROSTRIS	EGG	1492	1527	678	1131	283	354	141	226	98
EUBOSMINA COREGONI		491	1895	813	1570	1033	919	1180	3140	1867
EUBOSMINA COREGONI	EGG	58	1273	424	749	763	353	756	3480	1485
DAPHNIA RETROCURVA		4008	2999	1342	1838	2546	749	685	890	159
DAPHNIA RETROCURVA	EGG	1336	819	637	1017	850	91	63	113	10
DAPHNIA LONGIREMIS										
DAPHNIA LONGIREMIS	EGG									
DAPHNIA GALEATA MENDOTAE				6		20				4
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA PULEX							6			
CERIODAPHNIA LACUSTRIS		2515	183	162	269	84	70	6	27	11
CERIODAPHNIA LACUSTRIS	EGG	1258	56	77	27					
CERIODAPHNIA QUADRANGULA							13			6
CHYDORUS SPHAERICUS										
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
DIAPHANOSOMA BIRGEI	EGG									
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
SIMOCEPHALUS VETULUS										
ILYOCRYPTUS SPINIFER										
LEYDIGIA QUADRANGULARIS										
LEYDIGIA QUADRANGULARIS	EGG									
POLYPHEMUS PEDICULUS										
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		2573	2009	2885	3905	2122	2630	1584	2545	1145
CYCLOPS BICUSPIDATUS THOMASI	EGG	4970	3565	3197	7498	3338	6649	2165	7921	1768
CYCLOPS VERNALIS										
TROPOCYCLOPS PRASINUS MEXICANUS		2435	1838	1244	1584	2376	2942	2065	2490	1273
TROPOCYCLOPS PRASINUS MEXICANUS	EGG	706		141		84				
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		16898	16070	7244	10920	12052	9959	13751	14883	12901
CYCLOPOID NAUPLII		5855	4923	3027	6734	5035	5828	8941	5149	5998
LIMNOCALANUS MACRURUS				34			6	6		22
LIMNOCALANUS MACRURUS	COPEPODITE									
LIMNOCALANUS MACRURUS	NAUPLI								13	
DIAPTOMUS SICILIS						6				
DIAPTOMUS SICILIS	EGG									
DIAPTOMUS OREGONENSIS			13	20		20	20		56	17
DIAPTOMUS OREGONENSIS	EGG									
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS										
DIAPTOMUS MINUTUS	EGG									
DIAPTOMUS ASHLANDII										
DIAPTOMUS ASHLANDII	EGG									
EURYTEMORA AFFINIS		38								
EURYTEMORA AFFINIS	EGG									
CALANOID COPEPODITES		137	113	100	438	62	91	84	112	52
CALANOID NAUPLII		77	183	48	70	13	6	41	55	8
HARPACTICOID COPEPODITES										

TABLE 10 C.SEASONAL TRENDS IN ZOOPLANKTON POPULATIONS IN LAKE ONTARIO. MISSING CRUISES ARE FLAGGED AS -1.

STATION 81 1981

DENSITY (NO. M-3)

		MAR 16	MAR 23	MAR 30	APR 6	APR 13	APR 21	APR 27	MAY 4	MAY 11
CLADOCERA										
BOSMINA LONGIROSTRIS		8	2	2		4	6	20	11	13
BOSMINA LONGIROSTRIS	EGG		2				4	8		38
EUBOSMINA COREGONI		14	8	5	6	4	1		6	6
EUBOSMINA COREGONI	EGG	2		1			6		11	13
DAPHNIA RETROCURVA										
DAPHNIA RETROCURVA	EGG									
DAPHNIA LONGIREMIS									6	4
DAPHNIA LONGIREMIS	EGG									
DAPHNIA GALEATA MENDOTAE		1						4		
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA PULEX										
CERIODAPHNIA LACUSTRIS										
CERIODAPHNIA LACUSTRIS	EGG									
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS										8
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
DIAPHANOSOMA BIRGEI	EGG									
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
SIMOCEPHALUS VETULUS										
ILYOCRYPTUS SPINIFER										
LEYDIGIA QUADRANGULARIS										
LEYDIGIA QUADRANGULARIS	EGG									
POLYPHEMUS PEDICULUS										
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		219	276	329	621	855	470	488	601	237
CYCLOPS BICUSPIDATUS THOMASI	EGG	1327	1276	2263	5273	7271	5396	7264	2949	377
CYCLOPS VERNALIS										
TROPOCYCLOPS PRASINUS MEXICANUS		38	38	34	38	73	27	12	88	36
TROPOCYCLOPS PRASINUS MEXICANUS	EGG		13							
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		520	369	269	509	343	306	134	151	1584
CYCLOPOID NAUPLII		87	48	20	73	68	61	1083	5263	13722
LIMNOCALANUS MACRURUS		10	1	7	6			5	4	
LIMNOCALANUS MACRURUS	COPEPODITE	7	4	5	67	171	74	97	49	77
LIMNOCALANUS MACRURUS	NAUPLI	46	26	24	226		72	84	10	66
DIAPTOMUS SICILIS		18	16	25	56		27	14	63	
DIAPTOMUS SICILIS	EGG	79	73	144	642		358	144	301	
DIAPTOMUS OREGONENSIS		2		8	27	42	27	5	22	10
DIAPTOMUS OREGONENSIS	EGG			34	27	95	201		66	
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS				1	4					
DIAPTOMUS MINUTUS	EGG									
DIAPTOMUS ASHLANDII										
DIAPTOMUS ASHLANDII	EGG									
EURYTEMORA AFFINIS										
EURYTEMORA AFFINIS	EGG									
CALANOID COPEPODITES		20	6	7	63	48	55	85	191	141
CALANOID NAUPLII		42	12	29	201	93	77	293	208	155
HARPACTICOID COPEPODITES										

TABLE 10c. Continued

STATION 81 1981

		DENSITY (NO. M-3)								
		MAY 20	MAY 26	JUN 2	JUN 9	JUN 15	JUN 22	JUN 29	JUL 6	JUL 13
CLADOCERA										
BOSMINA LONGIROSTRIS		33	417	292	455	1034	1464	22230	59576	55315
BOSMINA LONGIROSTRIS	EGG	55	416	561	542	1113	2960	14551	35310	20230
EUBOSMINA COREGONI		24	34	23	8	8		486		
EUBOSMINA COREGONI	EGG	19	13	23	15	18		161		
DAPHNIA RETROCURVA							9	9	56	141
DAPHNIA RETROCURVA	EGG								146	
DAPHNIA LONGIREMIS										
DAPHNIA LONGIREMIS	EGG									
DAPHNIA GALEATA MENDOTAE										
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA PULEX										
CERIODAPHNIA LACUSTRIS									22	105
CERIODAPHNIA LACUSTRIS	EGG								136	212
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS		26	98	42	55	70	15	273	147	141
CHYDORUS SPHAERICUS	EGG	15	27	19	62	79		181	68	141
DIAPHANOSOMA BIRGEI										
DIAPHANOSOMA BIRGEI	EGG									
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
SIMOCEPHALUS VETULUS										
ILYOCRYPTUS SPINIFER										
LEYDIGIA QUADRANGULARIS										
LEYDIGIA QUADRANGULARIS	EGG									
POLYPHEMUS PEDICULUS										70
POLYPHEMUS PEDICULUS	EGG									141
LEPTODORA KINDTII									22	
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		59	20	13	16	167	181	120	3893	4562
CYCLOPS BICUSPIDATUS THOMASI	EGG	124	77	175	227	159	90		3439	6577
CYCLOPS VERNALIS			6				5			69
TROPOCYCLOPS PRASINUS MEXICANUS		56	183	62	23	18	5	40	55	388
TROPOCYCLOPS PRASINUS MEXICANUS	EGG		572	155	79		70	222		283
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		6469	10637	3469	1619	1024	3618	4204	7152	28152
CYCLOPOID NAUPLII		11758	15617	4640	1462	1467	2566	9418	6202	16552
LIMNOCALANUS MACRURUS										
LIMNOCALANUS MACRURUS	COPEPODITE	49	6	4						
LIMNOCALANUS MACRURUS	NAUPLI	26								
DIAPTOMUS SICILIS										
DIAPTOMUS SICILIS	EGG									
DIAPTOMUS OREGONENSIS									33	
DIAPTOMUS OREGONENSIS	EGG									
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS							5			
DIAPTOMUS MINUTUS	EGG									
DIAPTOMUS ASHLANDII										
DIAPTOMUS ASHLANDII	EGG									
EURYTEMORA AFFINIS								9	89	
EURYTEMORA AFFINIS	EGG							413		
CALANOID COPEPODITES		221	48	75	172	96	121	423	134	283
CALANOID NAUPLII		137	126	46	85	62	15	40	33	
HARPACTICOID COPEPODITES										

TABLE 10c. Continued

STATION 81 1981

		DENSITY (NO. M-3)								
		JUL 21	JUL 27	AUG 4	AUG 10	AUG 17	AUG 24	AUG 31	SEP 8	SEP 14
CLADOCERA										
BOSMINA LONGIROSTRIS		54576	21149	13109	70106	91484	6281	902	388	282
BOSMINA LONGIROSTRIS	EGG	17605	7213	6317	15405	5187	4413	549	281	300
EUBOSMINA COREGONI		754	70	1319	1570	2358	1866	216	706	3055
EUBOSMINA COREGONI	EGG		141	942	629	943	2885	176	706	1923
DAPHNIA RETROCURVA		532	856	6319	16191	80638	15166	6523	9195	5017
DAPHNIA RETROCURVA	EGG	94	467	1319	5186	7544	7356	11317	1838	1395
DAPHNIA LONGIREMIS		125								
DAPHNIA LONGIREMIS	EGG	31								
DAPHNIA GALEATA MENDOTAE							27			
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA PULEX										
CERIODAPHNIA LACUSTRIS		1069	937	4858	15718	16976	2659	313	494	94
CERIODAPHNIA LACUSTRIS	EGG	1445	1008	3583	11002	3890	2348		212	94
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS		375	26	283		236	27			19
CHYDORUS SPHAERICUS	EGG	62		117						
DIAPHANOSOMA BIRGEI				23				38		9
DIAPHANOSOMA BIRGEI	EGG			47						
HOLOPEDIUM GIBBERUM								38		
HOLOPEDIUM GIBBERUM	EGG							38		
ALONA QUADRANGULARIS										
ALONA GUTTATA										
SIMOCEPHALUS VETULUS										
ILYOCRYPTUS SPINIFER										
LEYDIGIA QUADRANGULARIS										
LEYDIGIA QUADRANGULARIS	EGG									
POLYPHEMUS PEDICULUS				23						
POLYPHEMUS PEDICULUS	EGG			1013						
LEPTODORA KINDTII			8		79		27		70	9
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		753	734	1933	9509	20748	15393	9117	8630	1868
CYCLOPS BICUSPIDATUS THOMASI	EGG	1477	662	1367	6287	19805	28181	25622	5234	2830
CYCLOPS VERNALIS			8						34	
TROPOCYCLOPS PRASINUS MEXICANUS		534	309	1130	2278	8488	2687	1218	3961	1206
TROPOCYCLOPS PRASINUS MEXICANUS	EGG	4841	1123	5799	3615	32184	3027	550	1166	999
MESOCYCLOPS EDAX							27	77	34	
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		15592	34872	39990	42440	119778	29424	25779	34235	21956
CYCLOPOID NAUPLII		7544	14288	14241	22320	65076	59530	30808	22634	13204
LIMNOCALANUS MACRURUS										
LIMNOCALANUS MACRURUS	COPEPODITE									
LIMNOCALANUS MACRURUS	NAUPLI									
DIAPTOMUS SICILIS								38		
DIAPTOMUS SICILIS	EGG									
DIAPTOMUS OREGONENSIS									212	9
DIAPTOMUS OREGONENSIS	EGG								565	
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS										
DIAPTOMUS MINUTUS	EGG									
DIAPTOMUS ASHLANDII										
DIAPTOMUS ASHLANDII	EGG									
EURYTEMORA AFFINIS		31	26	23	79		27		34	
EURYTEMORA AFFINIS	EGG		18	612			425			
CALANOID COPEPODITES		125	388	495	313	118	339	393	141	75
CALANOID NAUPLII		63	60	188	79	472	169	431	211	66
HARPACTICOID COPEPODITES										

TABLE 10c. Continued

STATION 81 1981

DENSITY (NO. M-3)

		SEP 24	SEP 29	OCT 5	OCT 13	OCT 19	OCT 26	NOV 2	NOV 10	NOV 17
CLADOCERA										
BOSMINA LONGIROSTRIS		848	2602	7017	19012	6790	4859	3537	4299	651
BOSMINA LONGIROSTRIS	EGG	334	1161	3394	7921	3508	2992	537	678	212
EUBOSMINA COREGONI		4420	2235	5374	7469	7073	5559	4921	6620	2108
EUBOSMINA COREGONI	EGG	1060	537	3451	3226	6224	2206	3395	2602	1102
DAPHNIA RETROCURVA		4669	1655	2462	3507	2659	456	974	1315	226
DAPHNIA RETROCURVA	EGG	1308	352	169	56	2829	73	155	13	27
DAPHNIA LONGIREMIS										6
DAPHNIA LONGIREMIS	EGG									13
DAPHNIA GALEATA MENDOTAE								13		27
DAPHNIA GALEATA MENDOTAE	EGG									20
DAPHNIA PULEX										
CERIODAPHNIA LACUSTRIS		513	409	1047	1330	212	31	56	27	
CERIODAPHNIA LACUSTRIS	EGG	158	105	198	84				43	
CERIODAPHNIA QUADRANGULA							11	27	13	
CHYDORUS SPHAERICUS						13				
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
DIAPHANOSOMA BIRGEI	EGG									
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
SIMOCEPHALUS VETULUS						13				
ILYOCRYPTUS SPINIFER										
LEYDIGIA QUADRANGULARIS										
LEYDIGIA QUADRANGULARIS	EGG									
POLYPHEMUS PEDICULUS										
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		4632	3283	1783	3960	3253	2249	1938	3507	729
CYCLOPS BICUSPIDATUS THOMASI	EGG	5587	3535	1796	3112	5518	1632	3720	7045	2092
CYCLOPS VERNALIS										
TROPOCYCLOPS PRASINUS MEXICANUS		2440	1655	11769	19919	6903	2758	3366	5545	1357
TROPOCYCLOPS PRASINUS MEXICANUS	EGG	708		905	1811				338	
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		18178	16862	13015	33274	17259	12562	10977	14260	5545
CYCLOPOID NAUPLII		7709	4469	3564	10185	7242	6451	3904	7356	3791
LIMNOCALANUS MACRURUS										
LIMNOCALANUS MACRURUS	COPEPODITE									
LIMNOCALANUS MACRURUS	NAUPLI									
DIAPTOMUS SICILIS					27	13		13		43
DIAPTOMUS SICILIS	EGG									
DIAPTOMUS OREGONENSIS			6			13		27	27	34
DIAPTOMUS OREGONENSIS	EGG									
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS										
DIAPTOMUS MINUTUS	EGG									
DIAPTOMUS ASHLANDII										
DIAPTOMUS ASHLANDII	EGG									
EURYTEMORA AFFINIS				13		13	11	27	56	13
EURYTEMORA AFFINIS	EGG							27		
CALANOID COPEPODITES		212	148	113	877	225	63	98	283	34
CALANOID NAUPLII		141	56	112	84	56	43	43		6
HARPACTICOID COPEPODITES										

TABLE 10 d. SEASONAL TRENDS IN ZOOPLANKTON POPULATIONS IN LAKE ONTARIO. MISSING CRUISES ARE FLAGGED AS -1.

STATION 93 1981

DENSITY (NO. M-3)

		MAR 16	MAR 23	MAR 30	APR 6	APR 13	APR 21	APR 27	MAY 4	MAY 11
CLADOCERA										
BOSMINA LONGIROSTRIS		1509	117	248	20	19	44	94	1237	282
BOSMINA LONGIROSTRIS	EGG	75	4	9			36	179	2369	530
EUBOSMINA COREGONI		320	43	63		10	20	60	477	105
EUBOSMINA COREGONI	EGG	28	6	4			11	62	955	167
DAPHNIA RETROCURVA										
DAPHNIA RETROCURVA	EGG									
DAPHNIA LONGIREMIS		27	1			2	2		34	
DAPHNIA LONGIREMIS	EGG	28				2			230	
DAPHNIA GALEATA MENDOTAE								4	18	8
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA PULEX										
CERIODAPHNIA LACUSTRIS										
CERIODAPHNIA LACUSTRIS	EGG									
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS							2			62
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
DIAPHANOSOMA BIRGEI	EGG									
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
SIMOCEPHALUS VETULUS										
ILYOCRYPTUS SPINIFER										
LEYDIGIA QUADRANGULARIS										
LEYDIGIA QUADRANGULARIS	EGG									
POLYPHEMUS PEDICULUS										
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		805	459	254	476	177	363	933	4811	1176
CYCLOPS BICUSPIDATUS THOMASI	EGG	390	1066	302	3466	1201	1856	6685	64652	4588
CYCLOPS VERNALIS										
TROPOCYCLOPS PRASINUS MEXICANUS		141	36	44	17	22	12	8	34	8
TROPOCYCLOPS PRASINUS MEXICANUS	EGG									
MESOCYCLOPS EDAX										8
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		6337	1888	1476	183	358	1340	2905	19098	8523
CYCLOPOID NAUPLII		4754	1006	354	10	259	3095	5506	32680	13227
LIMNOCALANUS MACRURUS										
LIMNOCALANUS MACRURUS	COPEPODITE		15	30	27	93	6			8
LIMNOCALANUS MACRURUS	NAUPLI		41	44	49		12		18	
DIAPTOMUS SICILIS			2	10	15		9	41		8
DIAPTOMUS SICILIS	EGG				50		33			
DIAPTOMUS OREGONENSIS		141	44	9	8	4	4	13		34
DIAPTOMUS OREGONENSIS	EGG	61				29	33	43		283
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS		4	2	2			2	17		26
DIAPTOMUS MINUTUS	EGG							37		
DIAPTOMUS ASHLANDII		9	9				21	86	87	
DIAPTOMUS ASHLANDII	EGG						22	98	283	
EURYTEMORA AFFINIS										
EURYTEMORA AFFINIS	EGG									
CALANOID COPEPODITES		13	30	26	127	65	19	41	530	230
CALANOID NAUPLII		9	244	80	105	208	51	212	671	202
HARPACTICOID COPEPODITES										

TABLE 10d. Continued

STATION 93 1981

		DENSITY (NO. M-3)								
		MAY 20	MAY 26	JUN 2	JUN 9	JUN 15	JUN 22	JUN 29	JUL 6	JUL 13
CLADOCERA										
BOSMINA LONGIROSTRIS		513	1172	537	7037	2405	874	1100	2153	6564
BOSMINA LONGIROSTRIS	EGG	99	263	406	1325	1131	1087	715	2372	4374
EUBOSMINA COREGONI		98	252	48	531	56	50	30	76	75
EUBOSMINA COREGONI	EGG	37	51	27	35		25			150
DAPHNIA RETROCURVA		4			26	20	97	8	27	
DAPHNIA RETROCURVA	EGG				17		14			
DAPHNIA LONGIREMIS					71	84	13			
DAPHNIA LONGIREMIS	EGG					13				
DAPHNIA GALEATA MENDOTAE		4	20	5	26	55	9	15	49	
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA PULEX										
CERIODAPHNIA LACUSTRIS									5	9
CERIODAPHNIA LACUSTRIS	EGG									
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS		17	9	5	69	6	9			
CHYDORUS SPHAERICUS	EGG						6			
DIAPHANOSOMA BIRGEI						6				
DIAPHANOSOMA BIRGEI	EGG									
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
SIMOCEPHALUS VETULUS										
ILYOCRYPTUS SPINIFER										
LEYDIGIA QUADRANGULARIS										
LEYDIGIA QUADRANGULARIS	EGG									
POLYPHEMUS PEDICULUS										
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		13	9	9	327	13	308	8	22	37
CYCLOPS BICUSPIDATUS THOMASI	EGG				1219	91	1930			
CYCLOPS VERNALIS					9		2			
TROPOCYCLOPS PRASINUS MEXICANUS		117	70	51		41		62	27	141
TROPOCYCLOPS PRASINUS MEXICANUS	EGG	118	101	48		86		487	70	216
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		6074	18835	1237	14748	8912	780	5124	1458	3413
CYCLOPOID NAUPLII		16673	168148	1824	5976	4017	527	3584	1577	1208
LIMNOCALANUS MACRURUS										
LIMNOCALANUS MACRURUS	COPEPODITE									
LIMNOCALANUS MACRURUS	NAUPLI									
DIAPTOMUS SICILIS										
DIAPTOMUS SICILIS	EGG									
DIAPTOMUS OREGONENSIS					52		9			
DIAPTOMUS OREGONENSIS	EGG				114		44			
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS										
DIAPTOMUS MINUTUS	EGG									
DIAPTOMUS ASHLANDII										
DIAPTOMUS ASHLANDII	EGG									
EURYTEMORA AFFINIS						6	2			
EURYTEMORA AFFINIS	EGG						112			
CALANOID COPEPODITES		212	283	49	61	70	330	31	49	178
CALANOID NAUPLII		188	444	105	79	69	281	70	113	74
HARPACTICOID COPEPODITES										

TABLE 10d. Continued

STATION 93 1981

		DENSITY (NO. M-3) JUL 21	JUL 27	AUG 4	AUG 10	AUG 17	AUG 24	AUG 31	SEP 8	SEP 14
CLADOCERA										
BOSMINA LONGIROSTRIS		19927	26256	250498	77606	26142	27970	15731	-1	2757
BOSMINA LONGIROSTRIS	EGG	9820	1470	65641	30112	2885	25222	1697	-1	1500
EUBOSMINA COREGONI								13	-1	34
EUBOSMINA COREGONI	EGG								-1	13
DAPHNIA RETROCURVA				1980	2778	8743	10670	13353	-1	1088
DAPHNIA RETROCURVA	EGG			2734	2323	678	7517	1131	-1	140
DAPHNIA LONGIREMIS		5							-1	
DAPHNIA LONGIREMIS	EGG								-1	
DAPHNIA GALEATA MENDOTAE		15							-1	
DAPHNIA GALEATA MENDOTAE	EGG								-1	
DAPHNIA PULEX									-1	
CERIODAPHNIA LACUSTRIS			20	660	555	4541	11963	5658	-1	786
CERIODAPHNIA LACUSTRIS	EGG			1415	555	4669	11236	2490	-1	672
CERIODAPHNIA QUADRANGULA									-1	
CHYDORUS SPHAERICUS									-1	
CHYDORUS SPHAERICUS	EGG								-1	
DIAPHANOSOMA BIRGEI							40		-1	13
DIAPHANOSOMA BIRGEI	EGG								-1	
HOLOPEDIUM GIBBERUM									-1	6
HOLOPEDIUM GIBBERUM	EGG								-1	50
ALONA QUADRANGULARIS									-1	
ALONA GUTTATA									-1	
SIMOCEPHALUS VETULUS									-1	
ILYOCRYPTUS SPINIFER									-1	
LEYDIGIA QUADRANGULARIS									-1	
LEYDIGIA QUADRANGULARIS	EGG								-1	
POLYPHEMUS PEDICULUS									-1	
POLYPHEMUS PEDICULUS	EGG								-1	
LEPTODORA KINDTII							40	13	-1	20
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		30	608	2735	7276	699	1658	919	-1	134
CYCLOPS BICUSPIDATUS THOMASI	EGG			19806	11166	2291	2223	1202	-1	466
CYCLOPS VERNALIS									-1	
TROPOCYCLOPS PRASINUS MEXICANUS		181	27	659	555	1337	1252	578	-1	1159
TROPOCYCLOPS PRASINUS MEXICANUS	EGG	1878		3488	1111	3713	8810	2928	-1	1627
MESOCYCLOPS EDAX		5					40		-1	
EUCYCLOPS AGILIS									-1	
CYCLOPOID COPEPODITES		4022	22635	29237	28901	17655	24898	10977	-1	4130
CYCLOPOID NAUPLII		2445	91	5752	12429	5305	12448	3592	-1	2744
LIMNOCALANUS MACRURUS									-1	
LIMNOCALANUS MACRURUS	COPEPODITE								-1	
LIMNOCALANUS MACRURUS	NAUPLI								-1	
DIAPTOMUS SICILIS									-1	
DIAPTOMUS SICILIS	EGG								-1	
DIAPTOMUS OREGONENSIS					50				-1	
DIAPTOMUS OREGONENSIS	EGG				808				-1	
DIAPTOMUS SICILOIDES									-1	
DIAPTOMUS MINUTUS									-1	
DIAPTOMUS MINUTUS	EGG								-1	
DIAPTOMUS ASHLANDII									-1	
DIAPTOMUS ASHLANDII	EGG								-1	
EURYTEMORA AFFINIS			6		151	20	687		-1	
EURYTEMORA AFFINIS	EGG						11034		-1	
CALANOID COPEPODITES		65	41	1415	405	233	1898	56	-1	587
CALANOID NAUPLII		35	6	849	50	148	565	127	-1	1562
HARPACTICOID COPEPODITES									-1	

TABLE 10d. Continued

STATION 93 1981

DENSITY (NO. M-3)

		SEP 24	SEP 29	OCT 5	OCT 13	OCT 19	OCT 26	NOV 2	NOV 10	NOV 17
CLADOCERA										
BOSMINA LONGIROSTRIS		5549	-1	1508	274	487	3262	734	1386	1562
BOSMINA LONGIROSTRIS	EGG	3427	-1	785	113	328	1149	409	960	1026
EUBOSMINA COREGONI		1033	-1	1005	28	348	348	167	452	381
EUBOSMINA COREGONI	EGG	434	-1	605	23	324	169	141	269	310
DAPHNIA RETROCURVA		5767	-1	1980	2659	49	3791	197	70	24
DAPHNIA RETROCURVA	EGG	2067	-1	2027	1513	34	1923	56	9	31
DAPHNIA LONGIREMIS			-1							13
DAPHNIA LONGIREMIS	EGG		-1							
DAPHNIA GALEATA MENDOTAE			-1				9		4	4
DAPHNIA GALEATA MENDOTAE	EGG		-1							11
DAPHNIA PULEX			-1							
CERIODAPHNIA LACUSTRIS		1469	-1	205	11	34	113	9	23	10
CERIODAPHNIA LACUSTRIS	EGG	979	-1	31			9			6
CERIODAPHNIA QUADRANGULA			-1						4	
CHYDORUS SPHAERICUS			-1			34	19	11	38	10
CHYDORUS SPHAERICUS	EGG		-1			15	19	4	13	4
DIAPHANOSOMA BIRGEI			-1							4
DIAPHANOSOMA BIRGEI	EGG		-1							
HOLOPEDIUM GIBBERUM			-1							
HOLOPEDIUM GIBBERUM	EGG		-1							
ALONA QUADRANGULARIS			-1							4
ALONA GUTTATA			-1						4	
SIMOCEPHALUS VETULUS			-1			4				
ILYOCRYPTUS SPINIFER			-1							4
LEYDIGIA QUADRANGULARIS			-1							
LEYDIGIA QUADRANGULARIS	EGG		-1							
POLYPHEMUS PEDICULUS			-1							
POLYPHEMUS PEDICULUS	EGG		-1							
LEPTODORA KINDTII			-1							
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		3047	-1	229	510	81	763	222	76	59
CYCLOPS BICUSPIDATUS THOMASI	EGG	4544	-1	298	312	51	1669	1330	273	73
CYCLOPS VERNALIS			-1							4
TROPOCYCLOPS PRASINUS MEXICANUS		4462	-1	3300	923	148	1395	140	292	91
TROPOCYCLOPS PRASINUS MEXICANUS	EGG	1469	-1	313						
MESOCYCLOPS EDAX			-1							
EUCYCLOPS AGILIS			-1							
CYCLOPOID COPEPODITES		21002	-1	5941	703	397	5319	791	569	264
CYCLOPOID NAUPLII		2448	-1	3269	62	92	4602	438	160	24
LIMNOCALANUS MACRURUS			-1		4					
LIMNOCALANUS MACRURUS	COPEPODITE		-1							
LIMNOCALANUS MACRURUS	NAUPLI		-1							
DIAPTOMUS SICILIS			-1		6			6		
DIAPTOMUS SICILIS	EGG		-1					16		
DIAPTOMUS OREGONENSIS		27	-1	16	6		9	23	38	201
DIAPTOMUS OREGONENSIS	EGG		-1					50		27
DIAPTOMUS SICILOIDES			-1							
DIAPTOMUS MINUTUS			-1							
DIAPTOMUS MINUTUS	EGG		-1							
DIAPTOMUS ASHLANDII			-1							
DIAPTOMUS ASHLANDII	EGG		-1							
EURYTEMORA AFFINIS		27	-1	15		51	37	37		13
EURYTEMORA AFFINIS	EGG		-1							
CALANOID COPEPODITES		462	-1	156	45	494	310	106	113	144
CALANOID NAUPLII		190	-1	86	1	98	55	20	13	8
HARPACTICOID COPEPODITES			-1						4	

TABLE 10 e. SEASONAL TRENDS IN ZOOPLANKTON POPULATIONS IN LAKE ONTARIO. MISSING CRUISES ARE FLAGGED AS -1.

STATION 12 1982

		DENSITY (NO. M-3)								
		MAR 8	MAR 17	MAR 24	MAR 31	APR 5	APR 14	MAY 4	MAY 10	MAY 18
CLADOCERA										
BOSMINA LONGIROSTRIS		14	3		1	1				
BOSMINA LONGIROSTRIS	EGG	10				1				
EUBOSMINA COREGONI		3			1					2
EUBOSMINA COREGONI	EGG									
DAPHNIA RETROCURVA										
DAPHNIA RETROCURVA	EGG									
DAPHNIA LONGIREMIS										
DAPHNIA LONGIREMIS	EGG									
DAPHNIA GALEATA MENDOTAE										
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA AMBIGUA										
DAPHNIA SP.										
CERIODAPHNIA LACUSTRIS										
CERIODAPHNIA LACUSTRIS	EGG									
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS										
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
ILYOCRYPTUS SPINIFER										
POLYPHEMUS PEDICULUS										
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		208	121	134	147	279	231	317	724	820
CYCLOPS BICUSPIDATUS THOMASI	EGG	85	41	46		46	42	1245	3288	10009
CYCLOPS VERNALIS										
TROPOCYCLOPS PRASINUS MEXICANUS		67	35	20	20	35	24	8	17	23
TROPOCYCLOPS PRASINUS MEXICANUS	EGG									
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		5489	1449	877	325	549	387	340	402	382
CYCLOPOID NAUPLII		442	271	257	31	89	71	74	142	693
LIMNOCALANUS MACRURUS					2	1	3			
LIMNOCALANUS MACRURUS	COPEPODITE		1		1	3	6	3	14	4
LIMNOCALANUS MACRURUS	NAUPLI	85	37	15	10	49	27	4	5	5
DIAPTOMUS SICILIS		10	4	8	3	12	25	6	3	2
DIAPTOMUS SICILIS	EGG	170		85	19	157	66	27	25	
DIAPTOMUS OREGONENSIS			1	1		1		1	5	9
DIAPTOMUS OREGONENSIS	EGG								12	
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS										
DIAPTOMUS ASHLANDII										
EURYTEMORA AFFINIS										
EURYTEMORA AFFINIS	EGG									
CALANOID COPEPODITES		42	22	27	11	25	20	35	20	49
CALANOID NAUPLII		198	98	110	17	135	142	86	71	145
HARPACTICOID COPEPODITES										

TABLE 10 e. Continued

STATION 12 1982

		DENSITY (NO. M-3)								
		MAY 27	MAY 31	JUN 7	JUN 28	JUL 13	JUL 21	JUL 26	AUG 3	AUG 9
CLADOCERA										
BOSMINA LONGIROSTRIS			4	5	70	1040	498	556	3916	325
BOSMINA LONGIROSTRIS	EGG		11	14	113	1672	159	350	769	31
EUBOSMINA COREGONI		3				3			3	14
EUBOSMINA COREGONI	EGG	42				21				3
DAPHNIA RETROCURVA						14		34		
DAPHNIA RETROCURVA	EGG					10		42		
DAPHNIA LONGIREMIS			1			28	4			
DAPHNIA LONGIREMIS	EGG					39				
DAPHNIA GALEATA MENDOTAE								3	1	3
DAPHNIA GALEATA MENDOTAE	EGG							5		10
DAPHNIA AMBIGUA										
DAPHNIA SP.										
CERIODAPHNIA LACUSTRIS								3	3	60
CERIODAPHNIA LACUSTRIS	EGG									21
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS								3		
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
ILYOCRYPTUS SPINIFER										
POLYPHEMUS PEDICULUS									3	28
POLYPHEMUS PEDICULUS	EGG									14
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		2221	554	1471		1584	231	63		17
CYCLOPS BICUSPIDATUS THOMASI	EGG	34009	6802	17755		18434	5873	373		145
CYCLOPS VERNALIS										7
TROPOCYCLOPS PRASINUS MEXICANUS		28	15	18					4	17
TROPOCYCLOPS PRASINUS MEXICANUS	EGG								52	53
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		382	171	244	146	3664	714	787	331	2079
CYCLOPOID NAUPLII		2207	764	2674	2424	1556	813	1896	628	1882
LIMNOCALANUS MACRURUS		10								
LIMNOCALANUS MACRURUS	COPEPODITE	7	3	5						
LIMNOCALANUS MACRURUS	NAUPLI	14	6							
DIAPTOMUS SICILIS		42	1							3
DIAPTOMUS SICILIS	EGG									
DIAPTOMUS OREGONENSIS		7	8	3		7				
DIAPTOMUS OREGONENSIS	EGG		29							
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS										
DIAPTOMUS ASHLANDII										
EURYTEMORA AFFINIS									3	7
EURYTEMORA AFFINIS	EGG								22	113
CALANOID COPEPODITES		141	82	56		102	51	33	5	74
CALANOID NAUPLII		184	119	49	4	24	16	50	15	60
HARPACTICOID COPEPODITES										

TABLE 10 e. Continued

STATION 12 1982

		DENSITY (NO. M-3)								
		AUG 17	AUG 23	AUG 30	SEP 7	SEP 14	SEP 22	SEP 28	OCT 4	OCT 12
CLADOCERA										
BOSMINA LONGIROSTRIS		537590	48553	267776	154971	201455	314883	89183	354177	13722
BOSMINA LONGIROSTRIS	EGG	105631	20032	101859	30477	47534	108649	14939	95867	849
EUBOSMINA COREGONI				56			616		333	1839
EUBOSMINA COREGONI	EGG						716		999	424
DAPHNIA RETROCURVA		236	14		101	1132	1823	566	12982	8276
DAPHNIA RETROCURVA	EGG		28		151	1132	1383	283	21637	990
DAPHNIA LONGIREMIS										
DAPHNIA LONGIREMIS	EGG									
DAPHNIA GALEATA MENDOTAE						283	100	169	666	
DAPHNIA GALEATA MENDOTAE	EGG							226	1331	
DAPHNIA AMBIGUA										
DAPHNIA SP.										
CERIODAPHNIA LACUSTRIS		943	21		101	566	465	509	333	955
CERIODAPHNIA LACUSTRIS	EGG	471					2615	735	333	35
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS										
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
HOLOPEDIUM GIBBERUM										212
HOLOPEDIUM GIBBERUM	EGG									672
ALONA QUADRANGULARIS										
ALONA GUTTATA										
ILYOCRYPTUS SPINIFER										
POLYPHEMUS PEDICULUS		236	14					113		
POLYPHEMUS PEDICULUS	EGG		49							
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		2475	381	4725	9700	8205	9607	1584	11983	4315
CYCLOPS BICUSPIDATUS THOMASI	EGG	4008	834	3508	33751	50647	5268	1528	36949	7144
CYCLOPS VERNALIS										
TROPOCYCLOPS PRASINUS MEXICANUS		236		56				56		1981
TROPOCYCLOPS PRASINUS MEXICANUS	EGG	1768								424
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		30416	1711	65642	54163	46968	95571	71527	98530	49798
CYCLOPOID NAUPLII		28530	2858	44591	12025	19806	3081	5489	17309	8276
LIMNOCALANUS MACRURUS										
LIMNOCALANUS MACRURUS	COPEPODITE									
LIMNOCALANUS MACRURUS	NAUPLI									
DIAPTOMUS SICILIS										35
DIAPTOMUS SICILIS	EGG									424
DIAPTOMUS OREGONENSIS					202			113		106
DIAPTOMUS OREGONENSIS	EGG				859					
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS										
DIAPTOMUS ASHLANDII										
EURYTEMORA AFFINIS			14					113	666	
EURYTEMORA AFFINIS	EGG									
CALANOID COPEPODITES		707	14				377	226	666	672
CALANOID NAUPLII		236			101		126	56	666	424
HARPACTICOID COPEPODITES										

TABLE 10 e. Continued

STATION 12 1982

		DENSITY (NO. M-3)					
		OCT 18	OCT 25	NOV 1	NOV 8	NOV 16	NOV 22
BOSMINA LONGIROSTRIS		12166	2245	27	343	309	60
BOSMINA LONGIROSTRIS	EGG	283	169		57	26	14
EUBOSMINA COREGONI		1273	292	15	488	937	124
EUBOSMINA COREGONI	EGG	672	75	2	367	424	117
DAPHNIA RETROCURVA		2582	613	20	134	212	10
DAPHNIA RETROCURVA	EGG	141	47		24	9	
DAPHNIA LONGIREMIS							
DAPHNIA LONGIREMIS	EGG						
DAPHNIA GALEATA MENDOTAE		176	47	2	14	26	32
DAPHNIA GALEATA MENDOTAE	EGG					71	
DAPHNIA AMBIGUA							
DAPHNIA SP.							
CERIODAPHNIA LACUSTRIS		354	9		3		
CERIODAPHNIA LACUSTRIS	EGG						
CERIODAPHNIA QUADRANGULA							
CHYDORUS SPHAERICUS					3		
CHYDORUS SPHAERICUS	EGG						
DIAPHANOSOMA BIRGEI							
HOLOPEDIUM GIBBERUM		35	19	3			
HOLOPEDIUM GIBBERUM	EGG						
ALONA QUADRANGULARIS							
ALONA GUTTATA							
ILYOCRYPTUS SPINIFER							
POLYPHEMUS PEDICULUS							
POLYPHEMUS PEDICULUS	EGG						
LEPTODORA KINDTII							
COPEPODA							
CYCLOPS BICUSPIDATUS THOMASI		5340	877	69	544	495	240
CYCLOPS BICUSPIDATUS THOMASI	EGG	2511	1160	91	728	1282	162
CYCLOPS VERNALIS							
TROPOCYCLOPS PRASINUS MEXICANUS		495	179	15	152	53	113
TROPOCYCLOPS PRASINUS MEXICANUS	EGG						
MESOCYCLOPS EDAX							
EUCYCLOPS AGILIS							
CYCLOPOID COPEPODITES		62813	7847	686	6875	10787	5291
CYCLOPOID NAUPLII		1450	2358	346	4074	2387	1867
LIMNOCALANUS MACRURUS				1			7
LIMNOCALANUS MACRURUS	COPEPODITE						
LIMNOCALANUS MACRURUS	NAUPLI						
DIAPTOMUS SICILIS			28	70	10	79	110
DIAPTOMUS SICILIS	EGG		113	118	113	185	155
DIAPTOMUS OREGONENSIS		35			3	26	35
DIAPTOMUS OREGONENSIS	EGG						
DIAPTOMUS SICILOIDES							
DIAPTOMUS MINUTUS							
DIAPTOMUS ASHLANDII							
EURYTEMORA AFFINIS		71	9	7	17	9	
EURYTEMORA AFFINIS	EGG			14			
CALANOID COPEPODITES		247	198	52	102	115	74
CALANOID NAUPLII		35	75	212	233	318	99
HARPACTICOID COPEPODITES							

TABLE 10f. SEASONAL TRENDS IN ZOOPLANKTON POPULATIONS IN LAKE ONTARIO. MISSING CRUISES ARE FLAGGED AS -1.

STATION 41 1982

		DENSITY (NO. M-3)								
		MAR 8	MAR 17	MAR 24	MAR 31	APR 5	APR 14	MAY 4	MAY 10	MAY 18
CLADOCERA										
BOSMINA LONGIROSTRIS		5	1	5	1	-1	7			
BOSMINA LONGIROSTRIS	EGG					-1				
EUBOSMINA COREGONI		5	1	6	7	-1	4			
EUBOSMINA COREGONI	EGG					-1				
DAPHNIA RETROCURVA						-1				
DAPHNIA RETROCURVA	EGG					-1				
DAPHNIA LONGIREMIS						-1				
DAPHNIA LONGIREMIS	EGG					-1				
DAPHNIA GALEATA MENDOTAE						-1				
DAPHNIA GALEATA MENDOTAE	EGG					-1				
DAPHNIA AMBIGUA						-1				
DAPHNIA SP.						-1				
CERIODAPHNIA LACUSTRIS						-1				
CERIODAPHNIA LACUSTRIS	EGG					-1				
CERIODAPHNIA QUADRANGULA						-1				
CHYDORUS SPHAERICUS					1	-1				
CHYDORUS SPHAERICUS	EGG					-1				
DIAPHANOSOMA BIRGEI						-1				
HOLOPEDIUM GIBBERUM						-1				
HOLOPEDIUM GIBBERUM	EGG					-1				
ALONA QUADRANGULARIS						-1				
ALONA GUTTATA						-1				
ILYOCRYPTUS SPINIFER						-1				
POLYPHEMUS PEDICULUS						-1				
POLYPHEMUS PEDICULUS	EGG					-1				
LEPTODORA KINDTII						-1				
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		95	76	140	318	-1	718	747	622	1358
CYCLOPS BICUSPIDATUS THOMASI	EGG	30	56	55	71	-1	1821	2965	4199	11725
CYCLOPS VERNALIS						-1				
TROPOCYCLOPS PRASINUS MEXICANUS		26	15	52	18	-1	37	20	27	31
TROPOCYCLOPS PRASINUS MEXICANUS	EGG					-1				
MESOCYCLOPS EDAX						-1				
EUCYCLOPS AGILIS						-1				
CYCLOPOID COPEPODITES		1421	628	1335	1312	-1	1393	243	229	379
CYCLOPOID NAUPLII		414	145	334	143	-1	283	141	215	201
LIMNOCALANUS MACRURUS		2	4	17	3	-1	3			
LIMNOCALANUS MACRURUS	COPEPODITE	3				-1	16	8	5	
LIMNOCALANUS MACRURUS	NAUPLI	62	41	44	18	-1	77	11	9	
DIAPTOMUS SICILIS		5	5	28	1	-1	4	8	16	3
DIAPTOMUS SICILIS	EGG		83	39		-1	51	93	120	99
DIAPTOMUS OREGONENSIS		2		1		-1	2		9	23
DIAPTOMUS OREGONENSIS	EGG					-1			44	263
DIAPTOMUS SICILOIDES						-1				
DIAPTOMUS MINUTUS						-1				
DIAPTOMUS ASHLANDII						-1				
EURYTEMORA AFFINIS						-1				
EURYTEMORA AFFINIS	EGG					-1				
CALANOID COPEPODITES		34	15	45	21	-1	56	28	44	23
CALANOID NAUPLII		281	165	184	50	-1	187	113	215	150
HARPACTICOID COPEPODITES						-1				

TABLE 10 f. Continued

STATION 41 1982

		DENSITY (NO. M-3)								
		MAY 27	MAY 31	JUN 7	JUN 28	JUL 13	JUL 21	JUL 26	AUG 3	AUG 9
CLADOCERA										
BOSMINA LONGIROSTRIS					79	1494	396	3174	126758	115615
BOSMINA LONGIROSTRIS	EGG				362	2626	264	938	16599	39002
EUBOSMINA COREGONI									47	348
EUBOSMINA COREGONI	EGG								70	
DAPHNIA RETROCURVA						9			47	2612
DAPHNIA RETROCURVA	EGG								47	1567
DAPHNIA LONGIREMIS										
DAPHNIA LONGIREMIS	EGG									
DAPHNIA GALEATA MENDOTAE										
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA AMBIGUA										
DAPHNIA SP.										
CERIODAPHNIA LACUSTRIS										10447
CERIODAPHNIA LACUSTRIS	EGG									12537
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS					9	4				
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
ILYOCRYPTUS SPINIFER										
POLYPHEMUS PEDICULUS										
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		502	297	1513	35	915	173	72	4763	4179
CYCLOPS BICUSPIDATUS THOMASI	EGG	3961	2758	17287		106	795		7639	1219
CYCLOPS VERNALIS								2		
TROPOCYCLOPS PRASINUS MEXICANUS		19	18	28	17	13				1654
TROPOCYCLOPS PRASINUS MEXICANUS	EGG									7922
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		184	85	300	12378	7391	956	2843	13015	27162
CYCLOPOID NAUPLII		707	634	2504	15137	2971	1081	8497	2027	16367
LIMNOCALANUS MACRURUS			1							
LIMNOCALANUS MACRURUS	COPEPODITE	7	1	2						
LIMNOCALANUS MACRURUS	NAUPLI	5	1							
DIAPTOMUS SICILIS		9	21	2			3			
DIAPTOMUS SICILIS	EGG	9	133	32						
DIAPTOMUS OREGONENSIS		4		4						
DIAPTOMUS OREGONENSIS	EGG	42								
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS										
DIAPTOMUS ASHLANDII										
EURYTEMORA AFFINIS										174
EURYTEMORA AFFINIS	EGG									
CALANOID COPEPODITES		58	38	46	44	106	69	2		871
CALANOID NAUPLII		177	106	83	141	79	19	10	47	1219
HARPACTICOID COPEPODITES										

TABLE 10f. Continued

STATION 41 1982

DENSITY (NO. M-3)

		AUG 17	AUG 23	AUG 30	SEP 7	SEP 14	SEP 22	SEP 28	OCT 4	OCT 12
CLADOCERA										
BOSMINA LONGIROSTRIS		23107	129021	166483	43483	28577	91056	26722	18705	9408
BOSMINA LONGIROSTRIS	EGG	6696	29830	76055	10424	1556	16205	3929	4244	1697
EUBOSMINA COREGONI		23		35		71	1222	314	707	6719
EUBOSMINA COREGONI	EGG						772	79	629	2192
DAPHNIA RETROCURVA		23	586	4626	5547	2546	43213	9510	6366	14571
DAPHNIA RETROCURVA	EGG		50	4194	5286	1945	9002	3536	2593	5093
DAPHNIA LONGIREMIS				106					79	
DAPHNIA LONGIREMIS	EGG									
DAPHNIA GALEATA MENDOTAE								78	39	70
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA AMBIGUA										
DAPHNIA SP.										
CERIODAPHNIA LACUSTRIS		59	404	2581	1340	1061	28294	4244	2004	1344
CERIODAPHNIA LACUSTRIS	EGG	47	151	2914	1712	1450	10803	1729	786	495
CERIODAPHNIA QUADRANGULA					37					
CHYDORUS SPHAERICUS										
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
HOLOPEDIUM GIBBERUM							257	118	79	282
HOLOPEDIUM GIBBERUM	EGG						257			212
ALONA QUADRANGULARIS										
ALONA GUTTATA										
ILYOCRYPTUS SPINIFER										
POLYPHEMUS PEDICULUS		12								
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII						3				
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		554	3941	3933	6180	3324	7781	6052	2908	7993
CYCLOPS BICUSPIDATUS THOMASI	EGG	837	3921	3063	13142	6826	7716	7741	6051	15137
CYCLOPS VERNALIS				56						
TROPOCYCLOPS PRASINUS MEXICANUS		35	50	495	856	212	1929	1218	943	2829
TROPOCYCLOPS PRASINUS MEXICANUS	EGG			990			3472		236	70
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		12732	24373	30784	36336	17966	92599	38511	38040	59418
CYCLOPOID NAUPLII		17259	13055	13666	15860	9337	8552	6012	16819	13157
LIMNOCALANUS MACRURUS										
LIMNOCALANUS MACRURUS	COPEPODITE		151							
LIMNOCALANUS MACRURUS	NAUPLI									
DIAPTOMUS SICILIS										
DIAPTOMUS SICILIS	EGG									
DIAPTOMUS OREGONENSIS										
DIAPTOMUS OREGONENSIS	EGG									
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS										
DIAPTOMUS ASHLANDII										
EURYTEMORA AFFINIS		23					707	39	39	70
EURYTEMORA AFFINIS	EGG									
CALANOID COPEPODITES		295	91	92	111	180	1222	314	314	990
CALANOID NAUPLII		129		183	186	3	386	118	471	495
HARPACTICOID COPEPODITES										

TABLE 10f. Continued

STATION 41 1982

		DENSITY (NO. M-3)					
		OCT 18	OCT 25	NOV 1	NOV 8	NOV 16	NOV 22
BOSMINA LONGIROSTRIS		748	1743	735	202	106	552
BOSMINA LONGIROSTRIS	EGG	65	88	49	3	7	14
EUBOSMINA COREGONI		363	916	311	389	329	1994
EUBOSMINA COREGONI	EGG	81	123	205	318	180	1429
DAPHNIA RETROCURVA		1263	820	778	152	131	255
DAPHNIA RETROCURVA	EGG	46	534	212	21	3	70
DAPHNIA LONGIREMIS						3	
DAPHNIA LONGIREMIS	EGG						
DAPHNIA GALEATA MENDOTAE		24	141	7	3	3	28
DAPHNIA GALEATA MENDOTAE	EGG	16					28
DAPHNIA AMBIGUA							
DAPHNIA SP.							
CERIODAPHNIA LACUSTRIS		100	177			3	14
CERIODAPHNIA LACUSTRIS	EGG						
CERIODAPHNIA QUADRANGULA							
CHYDORUS SPHAERICUS		16					
CHYDORUS SPHAERICUS	EGG						
DIAPHANOSOMA BIRGEI							
HOLOPEDIUM GIBBERUM		26	46	14		3	
HOLOPEDIUM GIBBERUM	EGG	48					
ALONA QUADRANGULARIS							
ALONA GUTTATA							
ILYOCRYPTUS SPINIFER							
POLYPHEMUS PEDICULUS							
POLYPHEMUS PEDICULUS	EGG						
LEPTODORA KINDTII							
COPEPODA							
CYCLOPS BICUSPIDATUS THOMASI		1206	6373	658	597	170	1471
CYCLOPS BICUSPIDATUS THOMASI	EGG	547	15158	1421	714	647	3353
CYCLOPS VERNALIS							
TROPOCYCLOPS PRASINUS MEXICANUS		206	1135	198	378	78	976
TROPOCYCLOPS PRASINUS MEXICANUS	EGG			49	21		
MESOCYCLOPS EDAX							
EUCYCLOPS AGILIS							
CYCLOPOID COPEPODITES		4769	22833	5885	9648	2560	28294
CYCLOPOID NAUPLII		477	6281	2942	3508	884	9620
LIMNOCALANUS MACRURUS							
LIMNOCALANUS MACRURUS	COPEPODITE						
LIMNOCALANUS MACRURUS	NAUPLI						
DIAPTOMUS SICILIS		5	145		3	24	14
DIAPTOMUS SICILIS	EGG					56	
DIAPTOMUS OREGONENSIS		31	77		10	24	99
DIAPTOMUS OREGONENSIS	EGG	86				53	113
DIAPTOMUS SICILOIDES						3	
DIAPTOMUS MINUTUS							
DIAPTOMUS ASHLANDII							
EURYTEMORA AFFINIS			77	7	3	7	
EURYTEMORA AFFINIS	EGG						
CALANOID COPEPODITES		52	315	127	64	57	297
CALANOID NAUPLII		21	109	332	145	230	664
HARPACTICOID COPEPODITES							

TABLE 10 g. SEASONAL TRENDS IN ZOOPLANKTON POPULATIONS IN LAKE ONTARIO. MISSING CRUISES ARE FLAGGED AS -1.

STATION 81 1982

		DENSITY (NO. M-3)								
		MAR 8	MAR 17	MAR 24	MAR 31	APR 5	APR 14	MAY 4	MAY 10	MAY 18
CLADOCERA										
BOSMINA LONGIROSTRIS		-1	-1	-1	22	-1	-1	6	28	70
BOSMINA LONGIROSTRIS	EGG	-1	-1	-1		-1	-1		2	192
EUBOSMINA COREGONI		-1	-1	-1	65	-1	-1	3	5	8
EUBOSMINA COREGONI	EGG	-1	-1	-1	5	-1	-1		2	4
DAPHNIA RETROCURVA		-1	-1	-1		-1	-1			27
DAPHNIA RETROCURVA	EGG	-1	-1	-1		-1	-1			
DAPHNIA LONGIREMIS		-1	-1	-1		-1	-1			
DAPHNIA LONGIREMIS	EGG	-1	-1	-1		-1	-1			
DAPHNIA GALEATA MENDOTAE		-1	-1	-1		-1	-1			
DAPHNIA GALEATA MENDOTAE	EGG	-1	-1	-1		-1	-1			
DAPHNIA AMBIGUA		-1	-1	-1		-1	-1			
DAPHNIA SP.		-1	-1	-1		-1	-1			
CERIODAPHNIA LACUSTRIS		-1	-1	-1		-1	-1			
CERIODAPHNIA LACUSTRIS	EGG	-1	-1	-1		-1	-1			
CERIODAPHNIA QUADRANGULA		-1	-1	-1		-1	-1			
CHYDORUS SPHAERICUS		-1	-1	-1		-1	-1			
CHYDORUS SPHAERICUS	EGG	-1	-1	-1		-1	-1			
DIAPHANOSOMA BIRGEI		-1	-1	-1		-1	-1			
HOLOPEDIUM GIBBERUM		-1	-1	-1		-1	-1			
HOLOPEDIUM GIBBERUM	EGG	-1	-1	-1		-1	-1			
ALONA QUADRANGULARIS		-1	-1	-1		-1	-1			
ALONA GUTTATA		-1	-1	-1		-1	-1			
ILYOCRYPTUS SPINIFER		-1	-1	-1		-1	-1			
POLYPHEMUS PEDICULUS		-1	-1	-1		-1	-1			
POLYPHEMUS PEDICULUS	EGG	-1	-1	-1		-1	-1			
LEPTODORA KINDTII		-1	-1	-1		-1	-1			
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		-1	-1	-1	922	-1	-1	470	403	534
CYCLOPS BICUSPIDATUS THOMASI	EGG	-1	-1	-1	2569	-1	-1	4459	6083	4169
CYCLOPS VERNALIS		-1	-1	-1		-1	-1			
TROPOCYCLOPS PRASINUS MEXICANUS		-1	-1	-1	82	-1	-1	3	9	19
TROPOCYCLOPS PRASINUS MEXICANUS	EGG	-1	-1	-1		-1	-1			
MESOCYCLOPS EDAX		-1	-1	-1		-1	-1			
EUCYCLOPS AGILIS		-1	-1	-1		-1	-1			
CYCLOPOID COPEPODITES		-1	-1	-1	1618	-1	-1	150	364	943
CYCLOPOID NAUPLII		-1	-1	-1	110	-1	-1	76	339	7074
LIMNOCALANUS MACRURUS		-1	-1	-1	3	-1	-1			
LIMNOCALANUS MACRURUS	COPEPODITE	-1	-1	-1		-1	-1	11	9	4
LIMNOCALANUS MACRURUS	NAUPLI	-1	-1	-1	14	-1	-1	25	23	4
DIAPTOMUS SICILIS		-1	-1	-1	8	-1	-1	8	5	
DIAPTOMUS SICILIS	EGG	-1	-1	-1	127	-1	-1		37	
DIAPTOMUS OREGONENSIS		-1	-1	-1	6	-1	-1	6		
DIAPTOMUS OREGONENSIS	EGG	-1	-1	-1		-1	-1			
DIAPTOMUS SICILOIDES		-1	-1	-1		-1	-1			
DIAPTOMUS MINUTUS		-1	-1	-1		-1	-1			
DIAPTOMUS ASHLANDII		-1	-1	-1		-1	-1			
EURYTEMORA AFFINIS		-1	-1	-1		-1	-1			
EURYTEMORA AFFINIS	EGG	-1	-1	-1		-1	-1			
CALANOID COPEPODITES		-1	-1	-1		-1	-1	8	11	63
CALANOID NAUPLII		-1	-1	-1	8	-1	-1	40	28	106
HARPACTICOID COPEPODITES		-1	-1	-1		-1	-1			

TABLE 10g. Continued

STATION 81 1982

		DENSITY (NO. M-3)								
		MAY 27	MAY 31	JUN 7	JUN 28	JUL 13	JUL 21	JUL 26	AUG 3	AUG 9
CLADOCERA										
BOSMINA LONGIROSTRIS		13	12	88	329	12166	13536	16835	21590	131851
BOSMINA LONGIROSTRIS	EGG	21	40	230	636	15052	5432	1238	3613	24899
EUBOSMINA COREGONI			2	2	51	29		57		
EUBOSMINA COREGONI	EGG			8	67	51		9		
DAPHNIA RETROCURVA			2	2	12	65		172	234	3254
DAPHNIA RETROCURVA	EGG	3	12	6	3	157		155	60	1768
DAPHNIA LONGIREMIS										71
DAPHNIA LONGIREMIS	EGG									
DAPHNIA GALEATA MENDOTAE										
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA AMBIGUA										
DAPHNIA SP.			2							
CERIODAPHNIA LACUSTRIS					2		11	93	179	11318
CERIODAPHNIA LACUSTRIS	EGG							274	212	6508
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS				2	46	24	11	159	5	
CHYDORUS SPHAERICUS	EGG	1			26	16	11			
DIAPHANOSOMA BIRGEI										
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
ILYOCRYPTUS SPINIFER										
POLYPHEMUS PEDICULUS									5	
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII					2					
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		9	148	132	293	1301	5	919	1110	2900
CYCLOPS BICUSPIDATUS THOMASI	EGG	26	123	204	1471	14798		2087	446	3749
CYCLOPS VERNALIS						7				
TROPOCYCLOPS PRASINUS MEXICANUS		5	5	6				66	114	283
TROPOCYCLOPS PRASINUS MEXICANUS	EGG			49				866	380	3466
MESOCYCLOPS EDAX										
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		1253	711	1689	477	6394	418	4925	2459	23484
CYCLOPOID NAUPLII		865	329	100	76	1740	368	2966	1088	18957
LIMNOCALANUS MACRURUS										
LIMNOCALANUS MACRURUS	COPEPODITE	2		2						
LIMNOCALANUS MACRURUS	NAUPLI	2	5	4						
DIAPTOMUS SICILIS										
DIAPTOMUS SICILIS	EGG									
DIAPTOMUS OREGONENSIS			2	2						
DIAPTOMUS OREGONENSIS	EGG									
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS				2						
DIAPTOMUS ASHLANDII										
EURYTEMORA AFFINIS								17	11	
EURYTEMORA AFFINIS	EGG									
CALANOID COPEPODITES		21	51	51	19	35	5	17	27	990
CALANOID NAUPLII		45	40	27	2	7	11	53	11	707
HARPACTICOID COPEPODITES										

TABLE 10g. Continued

STATION 81 1982

DENSITY (NO. M-3)

		AUG 17	AUG 23	AUG 30	SEP 7	SEP 14	SEP 22	SEP 28	OCT 4	OCT 12
CLADOCERA										
BOSMINA LONGIROSTRIS		90541	-1	262	1556	1556	5658	6720	11813	9973
BOSMINA LONGIROSTRIS	EGG	32695	-1	56	389	1167	3234	2210	4102	2900
EUBOSMINA COREGONI		314	-1	311	1238	1061	7477	2255	4951	7639
EUBOSMINA COREGONI	EGG	157	-1	141	318	672	3637	1414	3749	1839
DAPHNIA RETROCURVA		10767	-1	17174	16198	9124	108326	14235	9691	8347
DAPHNIA RETROCURVA	EGG	3615	-1	10751	6649	7498	50121	3183	3607	3041
DAPHNIA LONGIREMIS			-1							
DAPHNIA LONGIREMIS	EGG		-1							
DAPHNIA GALEATA MENDOTAE			-1				202	44		
DAPHNIA GALEATA MENDOTAE	EGG		-1							
DAPHNIA AMBIGUA			-1							
DAPHNIA SP.			-1							
CERIODAPHNIA LACUSTRIS		16505	-1	2850	2299	2228	11520	2696	2334	1521
CERIODAPHNIA LACUSTRIS	EGG	19805	-1	1117	1768	2228	5052	1812	778	70
CERIODAPHNIA QUADRANGULA			-1							
CHYDORUS SPHAERICUS			-1	35	212	3		44	39	
CHYDORUS SPHAERICUS	EGG		-1		35			44		
DIAPHANOSOMA BIRGEI			-1		106					
HOLOPEDIUM GIBBERUM			-1		35	70	202	132	71	141
HOLOPEDIUM GIBBERUM	EGG		-1							212
ALONA QUADRANGULARIS			-1							
ALONA GUTTATA			-1							
ILYOCRYPTUS SPINIFER			-1							
POLYPHEMUS PEDICULUS			-1							
POLYPHEMUS PEDICULUS	EGG		-1							
LEPTODORA KINDTII			-1	17	70					
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		11396	-1	9959	15632	10256	100242	9637	6154	9478
CYCLOPS BICUSPIDATUS THOMASI	EGG	6209	-1	6960	30487	29426	286984	19275	17648	22918
CYCLOPS VERNALIS			-1							
TROPOCYCLOPS PRASINUS MEXICANUS		1257	-1	502	1874	1344	5457	1857	2617	5234
TROPOCYCLOPS PRASINUS MEXICANUS	EGG	2515	-1	2228	1909	742	1414		813	
MESOCYCLOPS EDAX			-1						35	
EUCYCLOPS AGILIS			-1							
CYCLOPOID COPEPODITES		33953	-1	43148	37065	15844	202101	21751	30275	47251
CYCLOPOID NAUPLII		16504	-1	18419	14147	4208	29709	7162	11459	9832
LIMNOCALANUS MACRURUS			-1							
LIMNOCALANUS MACRURUS	COPEPODITE		-1							
LIMNOCALANUS MACRURUS	NAUPLI		-1							
DIAPTOMUS SICILIS			-1							35
DIAPTOMUS SICILIS	EGG		-1							
DIAPTOMUS OREGONENSIS			-1	74		70	606	44		
DIAPTOMUS OREGONENSIS	EGG		-1	735		460				
DIAPTOMUS SICILOIDES			-1							
DIAPTOMUS MINUTUS			-1							
DIAPTOMUS ASHLANDII			-1							
EURYTEMORA AFFINIS			-1	130	70	176	202		176	35
EURYTEMORA AFFINIS	EGG		-1	2723	70	1414				
CALANOID COPEPODITES		786	-1	92	318	247	3637	309	849	565
CALANOID NAUPLII		550	-1	279	247	354	1617	575	424	212
HARPACTICOID COPEPODITES			-1							

TABLE 10g. Continued

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		DENSITY (NO. M-3)					
		OCT 18	OCT 25	NOV 1	NOV 8	NOV 16	NOV 22
BOSMINA LONGIROSTRIS		7967	10751	10327	5729	1096	750
BOSMINA LONGIROSTRIS	EGG	596	1924	1273	1485	449	254
EUBOSMINA COREGONI		6701	4216	17825	11813	10214	16184
EUBOSMINA COREGONI	EGG	1935	2009	12025	8559	7682	6903
DAPHNIA RETROCURVA		1973	1231	3926	1591	534	877
DAPHNIA RETROCURVA	EGG	409	608	707	336		127
DAPHNIA LONGIREMIS				70			42
DAPHNIA LONGIREMIS	EGG						42
DAPHNIA GALEATA MENDOTAE			56	35	71		141
DAPHNIA GALEATA MENDOTAE	EGG		28		88		141
DAPHNIA AMBIGUA							
DAPHNIA SP.							
CERIODAPHNIA LACUSTRIS		37	113	177	53		28
CERIODAPHNIA LACUSTRIS	EGG			70			
CERIODAPHNIA QUADRANGULA							
CHYDORUS SPHAERICUS		335	42				
CHYDORUS SPHAERICUS	EGG						
DIAPHANOSOMA BIRGEI							
HOLOPEDIUM GIBBERUM		74	42			17	
HOLOPEDIUM GIBBERUM	EGG		28			70	
ALONA QUADRANGULARIS							
ALONA GUTTATA							
ILYOCRYPTUS SPINIFER							
POLYPHEMUS PEDICULUS							
POLYPHEMUS PEDICULUS	EGG						
LEPTODORA KINDTII							
COPEPODA							
CYCLOPS BICUSPIDATUS THOMASI		4356	1132	6436	2476	615	1641
CYCLOPS BICUSPIDATUS THOMASI	EGG	6701	1768	11105	3236	1220	3791
CYCLOPS VERNALIS							
TROPOCYCLOPS PRASINUS MEXICANUS		1154	1118	1627	1485	569	1174
TROPOCYCLOPS PRASINUS MEXICANUS	EGG					35	
MESOCYCLOPS EDAX							
EUCYCLOPS AGILIS					17		
CYCLOPOID COPEPODITES		31421	19919	61115	44846	11021	33839
CYCLOPOID NAUPLII		4914	7809	27587	5800	2150	3225
LIMNOCALANUS MACRURUS				35			
LIMNOCALANUS MACRURUS	COPEPODITE						
LIMNOCALANUS MACRURUS	NAUPLI						
DIAPTOMUS SICILIS					53	7	14
DIAPTOMUS SICILIS	EGG						
DIAPTOMUS OREGONENSIS		37			35	31	127
DIAPTOMUS OREGONENSIS	EGG	521					127
DIAPTOMUS SICILOIDES							14
DIAPTOMUS MINUTUS							
DIAPTOMUS ASHLANDII							
EURYTEMORA AFFINIS			56	70	17	14	70
EURYTEMORA AFFINIS	EGG		594				
CALANOID COPEPODITES		596	212	636	371	205	269
CALANOID NAUPLII		260	99	212	35	113	42
HARPACTICOID COPEPODITES							

TABLE 10h. SEASONAL TRENDS IN ZOOPLANKTON POPULATIONS IN LAKE ONTARIO. MISSING CRUISES ARE FLAGGED AS -1.

STATION 93 1982

		DENSITY (NO. M-3)								
		MAR 8	MAR 17	MAR 24	MAR 31	APR 5	APR 14	MAY 4	MAY 10	MAY 18
CLADOCERA										
BOSMINA LONGIROSTRIS		35	19	22	-1	22	21	57	51	44
BOSMINA LONGIROSTRIS	EGG		1		-1					86
EUBOSMINA COREGONI		1	3		-1		5	4	4	3
EUBOSMINA COREGONI	EGG				-1					2
DAPHNIA RETROCURVA					-1					3
DAPHNIA RETROCURVA	EGG				-1					14
DAPHNIA LONGIREMIS		6	1	2	-1	4	5	4		
DAPHNIA LONGIREMIS	EGG	1		1	-1	1	3			
DAPHNIA GALEATA MENDOTAE		1			-1	1				
DAPHNIA GALEATA MENDOTAE	EGG				-1					
DAPHNIA AMBIGUA					-1					
DAPHNIA SP.					-1					
CERIODAPHNIA LACUSTRIS					-1					
CERIODAPHNIA LACUSTRIS	EGG				-1					
CERIODAPHNIA QUADRANGULA					-1					
CHYDORUS SPHAERICUS		1			-1	1				
CHYDORUS SPHAERICUS	EGG				-1					
DIAPHANOSOMA BIRGEI					-1					
HOLOPEDIUM GIBBERUM					-1					
HOLOPEDIUM GIBBERUM	EGG				-1					
ALONA QUADRANGULARIS					-1					
ALONA GUTTATA					-1					
ILYOCRYPTUS SPINIFER					-1					
POLYPHEMUS PEDICULUS					-1					
POLYPHEMUS PEDICULUS	EGG				-1					
LEPTODORA KINDTII					-1					
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		59	84	25	-1	55	47	816	943	732
CYCLOPS BICUSPIDATUS THOMASI	EGG		4	5	-1	26	21	6015	6896	13369
CYCLOPS VERNALIS					-1					
TROPOCYCLOPS PRASINUS MEXICANUS		109	68	33	-1	67	90	44	4	7
TROPOCYCLOPS PRASINUS MEXICANUS	EGG				-1					
MESOCYCLOPS EDAX					-1					
EUCYCLOPS AGILIS					-1					
CYCLOPOID COPEPODITES		628	462	262	-1	299	414	525	898	997
CYCLOPOID NAUPLII		223	110	181	-1	96	201	1051	1275	1549
LIMNOCALANUS MACRURUS		1	6	5	-1					
LIMNOCALANUS MACRURUS	COPEPODITE		3	3	-1			16		
LIMNOCALANUS MACRURUS	NAUPLI	32	63	36	-1	2	7			
DIAPTOMUS SICILIS		3	45	4	-1	3		12		5
DIAPTOMUS SICILIS	EGG	27	369	34	-1	8		57		
DIAPTOMUS OREGONENSIS		11	3	4	-1	45	23		6	9
DIAPTOMUS OREGONENSIS	EGG		3		-1				34	5
DIAPTOMUS SICILOIDES					-1					
DIAPTOMUS MINUTUS		1	1		-1				2	2
DIAPTOMUS ASHLANDII					-1			4	4	4
EURYTEMORA AFFINIS					-1					
EURYTEMORA AFFINIS	EGG				-1					
CALANOID COPEPODITES		11	25	10	-1	5	2	20	9	32
CALANOID NAUPLII		42	64	49	-1	3	4	44	18	19
HARPACTICOID COPEPODITES					-1					

TABLE 10h. Continued

STATION 93 1982

DENSITY (NO. M-3)

		MAY 27	MAY 31	JUN 7	JUN 28	JUL 13	JUL 21	JUL 26	AUG 3	AUG 9
CLADOCERA										
BOSMINA LONGIROSTRIS		62	229	1406	1473	285	360	27162	7922	413472
BOSMINA LONGIROSTRIS	EGG	95	437	598	957	303	832	4131	2086	80355
EUBOSMINA COREGONI		29	58	194	37	14		21	4	401
EUBOSMINA COREGONI	EGG	8	39	56		2		21	22	1155
DAPHNIA RETROCURVA		12	4	48		6		7	35	589
DAPHNIA RETROCURVA	EGG	75		32						212
DAPHNIA LONGIREMIS		8	16	57	12	2				
DAPHNIA LONGIREMIS	EGG		8							
DAPHNIA GALEATA MENDOTAE		4	8	40		4				23
DAPHNIA GALEATA MENDOTAE	EGG									
DAPHNIA AMBIGUA			2							
DAPHNIA SP.										
CERIODAPHNIA LACUSTRIS								14	9	3207
CERIODAPHNIA LACUSTRIS	EGG							7		10115
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS										
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
HOLOPEDIUM GIBBERUM										
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
ILYOCRYPTUS SPINIFER										
POLYPHEMUS PEDICULUS										
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		586	95	178	21	52	73	28	106	1957
CYCLOPS BICUSPIDATUS THOMASI	EGG	4177	289			686	260			943
CYCLOPS VERNALIS										
TROPOCYCLOPS PRASINUS MEXICANUS		37	91	40	12	2	3	21	4	1202
TROPOCYCLOPS PRASINUS MEXICANUS	EGG	66	33		37	23				14996
MESOCYCLOPS EDAX				16						
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		3661	3195	18108	2413	865	216	389	331	19740
CYCLOPOID NAUPLII		3129	5625	19466	1598	135	772	877	526	11223
LIMNOCALANUS MACRURUS										
LIMNOCALANUS MACRURUS	COPEPODITE	4	2							
LIMNOCALANUS MACRURUS	NAUPLI	8	4							
DIAPTOMUS SICILIS				8						
DIAPTOMUS SICILIS	EGG									
DIAPTOMUS OREGONENSIS		8		8						
DIAPTOMUS OREGONENSIS	EGG	75								
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS		4								
DIAPTOMUS ASHLANDII			4							
EURYTEMORA AFFINIS										
EURYTEMORA AFFINIS	EGG									
CALANOID COPEPODITES		87	98	105	21	60		14	31	235
CALANOID NAUPLII		54	87	137	25	73	7		13	118
HARPACTICOID COPEPODITES		4								

TABLE 10h. Continued

STATION 93 1982

		DENSITY (NO. M-3)								
		AUG 17	AUG 23	AUG 30	SEP 7	SEP 14	SEP 22	SEP 28	OCT 4	OCT 12
CLADOCERA										
BOSMINA LONGIROSTRIS		108032	620856	61762	4776	19806	3310	445916	28973	11986
BOSMINA LONGIROSTRIS	EGG	11832	42037	28456	1811	5658	1876	291996	11770	3215
EUBOSMINA COREGONI		193	404	283	28	118	295	1344	127	78
EUBOSMINA COREGONI	EGG	128	1010		28		101	1556	56	53
DAPHNIA RETROCURVA		675	2223	646	334	1250	23	4527	1457	2075
DAPHNIA RETROCURVA	EGG	997	707	646	283	1886		2546	919	849
DAPHNIA LONGIREMIS										
DAPHNIA LONGIREMIS	EGG									
DAPHNIA GALEATA MENDOTAE		64				70		70	14	13
DAPHNIA GALEATA MENDOTAE	EGG								28	
DAPHNIA AMBIGUA										
DAPHNIA SP.										
CERIODAPHNIA LACUSTRIS		2604	21625	323	51	117	330	6224	311	230
CERIODAPHNIA LACUSTRIS	EGG	1801	14551	242	17	94	403	13298	481	39
CERIODAPHNIA QUADRANGULA										
CHYDORUS SPHAERICUS					11					13
CHYDORUS SPHAERICUS	EGG									
DIAPHANOSOMA BIRGEI										
HOLOPEDIUM GIBBERUM			202							13
HOLOPEDIUM GIBBERUM	EGG									
ALONA QUADRANGULARIS										
ALONA GUTTATA										
ILYOCRYPTUS SPINIFER										
POLYPHEMUS PEDICULUS		32								
POLYPHEMUS PEDICULUS	EGG									
LEPTODORA KINDTII										
COPEPODA										
CYCLOPS BICUSPIDATUS THOMASI		14147	1010	3678	13038	2735	141	4739	1174	168
CYCLOPS BICUSPIDATUS THOMASI	EGG	38454	5254	2263	48802	9384	75	8417	1910	271
CYCLOPS VERNALIS										
TROPOCYCLOPS PRASINUS MEXICANUS		128	808	81	22	70	73	495	141	91
TROPOCYCLOPS PRASINUS MEXICANUS	EGG	482	11317				42	636		
MESOCYCLOPS EDAX		32			5					
EUCYCLOPS AGILIS										
CYCLOPOID COPEPODITES		43213	26879	11075	10185	29426	407	16552	12223	4032
CYCLOPOID NAUPLII		5465	5658	1778	135	9054	186	3112	4555	1251
LIMNOCALANUS MACRURUS										
LIMNOCALANUS MACRURUS	COPEPODITE		4042							
LIMNOCALANUS MACRURUS	NAUPLI									
DIAPTOMUS SICILIS					34					
DIAPTOMUS SICILIS	EGG									
DIAPTOMUS OREGONENSIS		32		40	322	94				
DIAPTOMUS OREGONENSIS	EGG				1522	165				
DIAPTOMUS SICILOIDES										
DIAPTOMUS MINUTUS										
DIAPTOMUS ASHLANDII					22					
EURYTEMORA AFFINIS					62	23	127	141		13
EURYTEMORA AFFINIS	EGG				707					
CALANOID COPEPODITES		610	637	202	645	448	281	5376	255	69
CALANOID NAUPLII		418	252	647	68	188	315	1485	297	47
HARPACTICOID COPEPODITES										

TABLE 10h. Continued

STATION 93 1982

		DENSITY (NO. M-3)					
		OCT 18	OCT 25	NOV 1	NOV 8	NOV 16	NOV 22
BOSMINA LONGIROSTRIS		6215	2101	3996	1331	353	107
BOSMINA LONGIROSTRIS	EGG	632	104	778	449	102	20
EUBOSMINA COREGONI		924	332	831	740	184	147
EUBOSMINA COREGONI	EGG	391	145	247	283	25	28
DAPHNIA RETROCURVA		1674	1352	8205	308	173	6
DAPHNIA RETROCURVA	EGG	632	249	990	108	17	
DAPHNIA LONGIREMIS				88			
DAPHNIA LONGIREMIS	EGG			17			
DAPHNIA GALEATA MENDOTAE		221	62	601	507	14	12
DAPHNIA GALEATA MENDOTAE	EGG	70	41	371	216		
DAPHNIA AMBIGUA							
DAPHNIA SP.							
CERIODAPHNIA LACUSTRIS		170	42	141	25		
CERIODAPHNIA LACUSTRIS	EGG	47			16		
CERIODAPHNIA QUADRANGULA							
CHYDORUS SPHAERICUS					50	7	2
CHYDORUS SPHAERICUS	EGG						
DIAPHANOSOMA BIRGEI					17		
HOLOPEDIUM GIBBERUM		61	21	35			
HOLOPEDIUM GIBBERUM	EGG						
ALONA QUADRANGULARIS							2
ALONA GUTTATA					8		
ILYOCRYPTUS SPINIFER					8		
POLYPHEMUS PEDICULUS							
POLYPHEMUS PEDICULUS	EGG						
LEPTODORA KINDTII							
COPEPODA							
CYCLOPS BICUSPIDATUS THOMASI		1296	1227	1697	174	102	77
CYCLOPS BICUSPIDATUS THOMASI	EGG	1169	4598	6543	607	240	150
CYCLOPS VERNALIS					8		
TROPOCYCLOPS PRASINUS MEXICANUS		339	145	283	183	14	24
TROPOCYCLOPS PRASINUS MEXICANUS	EGG			141			
MESOCYCLOPS EDAX							
EUCYCLOPS AGILIS							
CYCLOPOID COPEPODITES		28898	8322	16693	424	459	651
CYCLOPOID NAUPLII		1391	2372	10964	108	17	65
LIMNOCALANUS MACRURUS							
LIMNOCALANUS MACRURUS	COPEPODITE						
LIMNOCALANUS MACRURUS	NAUPLI						2
DIAPTOMUS SICILIS		23		17	8	46	186
DIAPTOMUS SICILIS	EGG				141	99	501
DIAPTOMUS OREGONENSIS		23		141	158	71	103
DIAPTOMUS OREGONENSIS	EGG			389			143
DIAPTOMUS SICILOIDES							
DIAPTOMUS MINUTUS							
DIAPTOMUS ASHLANDII							
EURYTEMORA AFFINIS		23			8	14	
EURYTEMORA AFFINIS	EGG						
CALANOID COPEPODITES		165	166	318	150	14	67
CALANOID NAUPLII		66	187	247	25		59
HARPACTICOID COPEPODITES							