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# **Limnological Results from the 1984 British Columbia Lake Enrichment Program**

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**LIMNOLOGICAL RESULTS FROM THE 1984  
BRITISH COLUMBIA LAKE ENRICHMENT PROGRAM**

**by**

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## ABSTRACT

Nidle, B. H., and K. S. Shortreed. 1985. Limnological results from the 1984 British Columbia Lake Enrichment Program. Can. MS Rep. Fish. Aquat. Sci. 1834: 202 p.

Results of the 1984 Limnology subprogram of the British Columbia Lake Enrichment Program (LEP) are presented. Nineteen stations in 14 lakes were sampled for a variety of physical, chemical, and biological variables. The number of times each lake was sampled ranged from one to 22. Summarized data for each station and date are presented, and raw data are contained in the Appendix Tables.

**Key words:** lake fertilization, humic-stained, glacially-turbid, warm monomictic, oligotrophic, nutrients, bacteria, picoplankton, phytoplankton, zooplankton

## RÉSUMÉ

Nidle, B. H., and K. S. Shortreed. 1985. Limnological results from the 1984 British Columbia Lake Enrichment Program. Can. MS Rep. Fish. Aquat. Sci. 1834: 202 p.

Le présent rapport porte sur les résultats du sous-programme limnologique réalisé en 1984 dans le cadre du Programme d'enrichissement de lacs (LEP) de la Colombie-Britannique. On a recueilli des données physiques, chimiques et biologiques à 19 stations réparties dans 14 lacs, dont chacun a été échantillonné de une à 22 fois. On présente un résumé des données recueillies à chaque station selon le jour et les données brutes sont incluses dans des tableaux annexés.

**Mots-clés:** fertilisation lacustre, coloré d'acide humide, glaciaire-turbide, chaud monomictique, oligotrophe, bioéléments, bactéries, picoplancton, phytoplancton, zooplancton

## INTRODUCTION

The Lake Enrichment Program, under the auspices of the Federal-Provincial Salmonid Enhancement Program (SEP), commenced in 1977 with the fertilization and study of six lakes. In 1984, 10 lakes were fertilized and limnological surveys were conducted on a total of 14 coastal British Columbia lakes. Data obtained from earlier work on many of these lakes and the rationale and objectives of these continuing studies have been previously reported by Stockner (1979); Stockner and Shortreed (1978, 1979, 1985); Stockner et al. (1980); Shortreed and Stockner (1981); MacIsaac et al. (1981); Costella et al. (1982, 1983a, 1983b); and Nidle et al. (1984). After further analysis, data presented in this report will be used to determine the effect of fertilizer additions on treated lakes, and to calculate appropriate fertilizer loads in untreated lakes which are candidates for fertilization.

## DESCRIPTION OF STUDY LAKES

The 14 study lakes exhibit a wide variety of morphometric and hydrologic characteristics (Table 1, Fig. 1). Lake areas ranged from 2.3-51 km<sup>2</sup>, mean depths from 34-212 m, and theoretical water residence times from 0.4-8.0 yr. The lakes are oligotrophic and most are warm monomictic, however Kitlope Lake is dimictic and Henderson Lake is meromictic. Of the 14 lakes studied, 7 were humic-stained, 6 were clear, and 1 was glacially-turbid. As a result, average Secchi depths ranged from 3.5-17.0 m. The lakes have relatively small littoral zones, low inorganic nutrient levels, low phytoplankton biomass (Shortreed and Stockner 1981), low bacterioplankton biomass (MacIsaac et al. 1981) and low zooplankton biomass (Rankin and Ashton 1980; Rankin et al. 1979). Maps showing station locations for all lakes are presented in Nidle et al. (1984).

## METHODS

Fertilizer was applied to 8 of the lakes once weekly for 18 weeks (May-September) and to Great Central and Henderson lakes twice weekly for the same period. Fertilizer (ammonium nitrate and ammonium phosphate) was applied in aqueous solution using a DC-6B water bomber (Stephens and Stockner 1983). N:P ratios (atomic) in applied fertilizer were 1:1 for Nimpkish Lake, 35:1 for Henderson and Kennedy lakes, and 15:1 for the remainder. Fertilizer loads (as phosphates) to the lakes ranged from 2-5 mg/m<sup>2</sup>/wk. Float-equipped de Havilland Beaver aircraft were used to sample all lakes except Great Central and Sproat, which were sampled by boat. The number of sampling dates for each lake, the depths sampled, and the types of analyses carried out at each station varied considerably, and are listed in Table 3.

Temperature profiles to a maximum depth of 50 m were obtained at each station using a Montedoro-Whitney temperature probe (Model TC-5C). In

addition, an Applied Microsystems conductivity, temperature and depth measuring system (Model CTD-12) was used to obtain profiles to a depth of 100 m at Great Central and Sproat lakes in November and December. Buoyancy frequencies (/s) were calculated (Turner 1973) and the depth of maximum buoyancy frequency was used to determine epilimnion depth. Water temperature and an equation of state (Chen and Millero 1977) were used to quantify convective stability to a depth of 50 m (Johnson and Merritt 1979).

A Li-Cor light meter (Model 185A) equipped with a Li-Cor underwater quantum sensor (Model Li-192S) was used to measure photosynthetically active radiation (PAR: 400-700 nm) from the surface to the compensation depth (1% of surface intensity) and vertical light extinction coefficients were calculated. A standard 22-cm white Secchi disk was used to measure water transparency.

An opaque 6-L Van Dorn bottle, rinsed with 95% ethanol, was used to collect all water samples, which were usually collected between 0800 and 1200 h. An acid washed, deionized distilled water (DDW) rinsed, screw-capped test tube was rinsed and then filled with sample water from each sampling depth, covered with clean aluminum foil, capped, stored at 4°C, and later analyzed for total phosphorus. All chemical analyses were carried out according to those methods given in Stephens and Brandstaetter (1983). Water samples for the remaining nutrient analyses and for chlorophyll determinations were collected in 1-L or 2-L polyethylene bottles, kept cool and dark, and filtered within 2-4 h. Water for dissolved nutrient analyses was filtered through 47-mm Whatman GF/F filters, which had been previously ashed (460°C for 4 h) and washed (500 mL DDW). Each filter was placed in a 47-mm Swinnex (Millipore Corp.) filtering unit, rinsed with an additional 500 mL of DDW, and then rinsed with approximately 50 mL of sample. An acid washed, DDW rinsed glass bottle was rinsed and filled with 100 mL of filtered water, covered with clean aluminum foil, capped, stored at 4°C in the dark, and later analyzed for nitrate, ammonia and total dissolved nitrogen. An additional 100 mL of sample was filtered into a precleaned and rinsed polyethylene bottle, stored at 4°C in the dark, and later analyzed for soluble reactive silicon and total dissolved solids.

One liter of water from each sampling depth was filtered through an ashed and washed 47-mm diameter Whatman GF/F filter, which was then folded in half, placed in an ashed aluminum dish, stored in a dessicator overnight, and then frozen prior to being analyzed for particulate carbon and nitrogen. A 2-L sample was filtered through an ashed and washed 47-mm diameter Whatman GF/F filter which was then placed into a clean scintillation vial, and later analyzed for particulate phosphorus. A 500-mL sample was filtered under subdued light through a 47-mm diameter 0.8-μm Millipore AA filter and a few drops of MgCO<sub>3</sub> suspension were added. The filter was folded in half, placed in an aluminum dish, stored overnight in a dessicator, and then frozen until it was analyzed for total chlorophyll using a Turner fluorometer (Model 112).

At stations where primary productivity was measured, glass jars were filled completely with water (generally from 1, 3, and 7.5 m), and sealed. A Cole-Parmer Digi-Sense pH meter (Model 5986-10) was used to determine the pH and total alkalinity of these samples according to the

standard potentiometric method of APHA (1980). Dissolved inorganic carbon (DIC) was established indirectly from pH, temperature, total dissolved solids and bicarbonate alkalinity.

Test tubes containing 2-3 mL of 95% ethanol were rinsed thoroughly with water, and then filled. From each test tube 5 mL were filtered through a 25-mm diameter, 0.2- $\mu\text{m}$  Nuclepore membrane filter counter-stained with Irgalan black. Filters were removed when just dry, placed in petri dishes lined with absorbent filter paper, and air-dried at room temperature. Bacterioplankton numbers were later determined from these samples using the acridine orange direct count method as described by MacIsaac et al. (1981). Random fields were counted on each filter until 300 bacteria or 10 fields were enumerated, and the counts converted to numbers/mL. Occasional blanks were used to check for significant bacteria background counts in the Irgalan black solution and rinse water.

Opaque 125-mL polyethylene bottles were rinsed and filled with sample water in the field for phytoplankton enumeration and identification. Phototrophic picoplankton (cyanobacteria and eukaryotic algae  $<3\ \mu\text{m}$  in diameter) were counted with epifluorescence microscopy by filtering 15 mL of sample water through stained Nuclepore filters as described for the bacteria samples. Care was taken to minimize exposure of the sample to light during sampling and laboratory processing. Filters were placed in opaque petri dishes, air-dried, and stored in the dark at room temperature for 1 to 4 weeks. During analysis, each filter was placed on a wetted 40- $\mu\text{m}$  mesh nylon screen in a filter holder, 1-2 mL of filtered DDW were added to the filter column, and the cells on the filter were rehydrated for 3 to 5 min. The water was drawn through at a vacuum pressure of 20 cm Hg, and the moist filter was placed on a glass slide with a drop of immersion oil and a coverslip. The Zeiss epifluorescence microscope was equipped with a 397 nm longwave-pass exciter filter and a 560 nm shortwave-pass exciter filter, a 580 nm beam-splitter mirror and a 590 nm longwave-pass barrier filter. Filters were examined at 1250 X magnification under oil immersion, and random fields were counted to a minimum of 200 cells or 30 fields per sample. Phototrophic picoplankton were identified as cyanobacteria or eukaryotic algae, assigned to general categories based on morphological characteristics and fluorescence colour, and scored into size categories.

The remaining sample water in the opaque polyethylene bottles was fixed with 1 mL of Lugol's solution and phytoplankton  $>3\ \mu\text{m}$  in diameter were later enumerated and identified from this sample. For analysis, each sample was gently mixed and a subsample settled overnight in a settling chamber of 7-, 12- or 27-mL volume. One transect at 187.5 X and one at 750 X magnification were counted using a Wild M40 inverted microscope equipped with phase contrast optics. Cells were identified to genus or species and assigned to one or more size classes. Counts were converted to numbers and cell volumes and carbon biomass was calculated using formulas modified from Strathmann (1967).

Primary production was measured at one station on Great Central Lake and 2 stations on Sproat Lake at 7 to 10 depths in the water column (usually between 0 and 30 m). One 125-mL light bottle was filled with water

from each depth and dark bottles were filled with water from 1, 3, 5 and 30 m. Each bottle was inoculated with approximately 93 kBq of a  $^{14}\text{C}$ -bicarbonate stock solution. At each station activity of the stock solution was determined by inoculating three scintillation vials containing 0.5 mL of Scintigest (Fisher Scientific). Bottles were incubated at their respective depths for 1-2 h, generally between 0900 and 1200 h. After incubation, bottles were placed in dark boxes and transported to the field laboratory where filtration started within 2 h after incubation stopped. Two 50-mL aliquots were removed from each bottle and filtered through 47-mm diameter Nuclepore filters (0.2 and 8.0  $\mu\text{m}$  pore size) at a vacuum not exceeding 20 cm Hg. Filters were placed into scintillation vials containing 0.5 mL of Scintigest. All vials were stored cold in the dark. At the West Vancouver Laboratory, 10 mL of Scintiverse II (Fisher Scientific) were added to each scintillation vial. Samples were counted in a Packard Tri-Carb 460C Liquid scintillation counter. Quench series composed of the same scintillation cocktail and filters as used for samples were used to determine counting efficiency and Strickland's (1960) equation was used to calculate primary production rates. Production was converted from hourly to daily rates using light data collected with Li-Cor printing integrators (Model 550) equipped with Model 190S quantum sensors.

At each station, zooplankton were sampled by vertical hauls with a 100- $\mu\text{m}$  mesh size SCOR (Scientific Committee on Ocean Research) net ( $0.25\text{ m}^2$  mouth area) towed at approximately 0.5 m/s from 50 m to the surface. Zooplankton were preserved in a 4% formalin-sucrose solution buffered with borax (Haney and Hall 1973). Filtration efficiency of the net was assumed to be 100%. At the West Vancouver Laboratory, each sample was halved using a Folsom plankton splitter. One half was filtered onto an ashed and weighed Whatman GF/C filter, dried to a constant weight at  $90^\circ\text{C}$  for 24 h and weighed. This portion of the sample was then ashed ( $460^\circ\text{C}$  for 4 h) and weighed again. Zooplankton biomass is expressed as mg dry weight/ $\text{m}^{-3}$  and mg ash-free dry weight/ $\text{m}^{-3}$ . The other portion of the sample was used for zooplankton identification and enumeration, which will be reported elsewhere.

## RESULTS

Results are presented as monthly means and time-weighted growing season averages in Tables 4 to 37. Raw data tables for each lake, station, and date are presented in Appendix tables 1-152. Additional data not reported here but collected during the study include phytoplankton community structure, in-vivo fluorescence profiles from Great Central and Sproat lakes, and detailed temperature and conductivity profiles.

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Table 1. Geographic and hydrologic data from, and fertilizer additions to, the 1984 study lakes.

Lake	Latitude (N)	Longitude (W)	Elevation (m)	Lake Area (km <sup>2</sup> )	Mean depth (m)	Water residence time (y)	Fertilizer load (mg P·m <sup>-2</sup> ·wk <sup>-1</sup> )
Awun	53°36'	132°35'	16	4.9	47	0.9	3.82
Bonilla	53°31'	130°15'	10	2.3	34	1.0	5.00
Curtis	53°30'	129°50'	10	3.0	34	0.6	4.31
Eden	53°51'	132°43'	52	5.9	43	0.9	3.42
Great Central	49°22'	125°15'	82	51.0	212	7.3	2.75
Henderson	49°05'	125°02'	15	15.0	109 (32) <sup>a</sup>	3.2 (0.9) <sup>a</sup>	4.42
Hobiton	48°45'	124°49'	15	3.6	36	1.0	0
Ian	53°45'	132°35'	35	20.0	50	1.1	0
Kennedy-1	49°08'	125°35'	4	17.0	51	1.7	2.99
Kennedy-2	49°04'	125°30'	4	47.0	27	0.9	0
Kitlope	53°07'	127°13'	15	12.0	86	0.4	0
Long	51°14'	127°10'	15	21.0	73	1.1	2.99
Nimpkish	50°25'	126°57'	20	37.0	162	1.4	2.00
Sproat	49°14'	125°06'	29	41.0	59	8.0	0
Yakoun	53°19'	132°17'	107	8.1	39	2.5	3.67

<sup>a</sup>Numbers in brackets are the result of calculating the lake volume using only the mixolimnion.

Table 2. Legend for Table 3.

Symbol	Variables measured
A.....	physical variables (Secchi depth, 0-50 m temperature profile, light profile to compensation depth)
B.....	CTD profile
C.....	ammonia, total dissolved nitrogen, nitrate, total phosphorus, soluble reactive silicon, total dissolved solids
D.....	C (above) plus particulate carbon, nitrogen, and phosphorus
E.....	total chlorophyll
F.....	picoplankton and phytoplankton identification and enumeration
G.....	bacteria biomass
H.....	zooplankton biomass (vertical haul 0-50 m)
I.....	primary production, pH, total alkalinity, and dissolved inorganic carbon
J.....	fluorometer profile

**Table 3.** Physical, chemical and biological variables measured at each lake and station during 1984.

Lake and station	Variables measured	Depths sampled (m)	Number of sampling dates
Awun	C,E	1,3,5	1
Bonilla	C,E	1,3,5	1
Curtis	C,E	1,3,5,	1
Eden	C,E	1,3,5,	1
Great Central-1	A,B,C,D,E,F,G,H,J	variable	22
Great Central-2	A,B,C,D,E,F,G,H,I,J	variable	21
Henderson	A,C,D,E,F,G,H	1,3,5,30	9
Hobiton	A,C,D,E,F,G,H	1,3,5,30	9
Ian	C,E	1,3,5,	1
Kennedy-1	A,C,D,E,F,G,H	1,3,5,30	9
Kennedy-2	A,C,D,E,F,G,H	1,3,5,30	9
Kitlope	C,E	1,3,5,	1
Long-1	C,E	1,3,5,30	2
Long-2	C,E	1,3,5,30	2
Nimpkish-1	A,C,D,E,F,G,H	1,3,5,30	9
Nimpkish-2	A,C,D,E,F,G,H	1,3,5,30	9
Sproat-1	A,B,C,D,E,F,G,H,I,J	variable	22
Sproat-2	A,B,C,D,E,F,G,H,I,J	variable	22
Yakoun	C,E	1,3,5	1

Table 4. Monthly sampling dates for the 1984 study lakes.

Lake	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy	Nimpkish 1	Nimpkish 2
Jan	12		11	11					
Feb	8	8	7	7					
Mar	8	8	7	7	19	20	20	13	13
Mar	21	21	22	22					
Apr	6	6	4	5	24	24	24	3	3
Apr	27	27	25	26					
May	11	11	9	10	22	22	22	8	8
May	23	23	24	25					
Jun	8	8	6	7	18	18	18	5	5
Jun	21	21	20	19				26	26
Jul	4	4	5	6	16	16	16	25	25
Jul	17	17	18	19					
Jul	31	31							
Aug	15	15	1	2					
Aug	31	31	30	30					
Sep	12	12	13	14	11	11	11	18	18
Sep	25	25	26	27					
Oct	9	9	11	12	10	10	10	22	22
Oct	24	24	25	26					
Nov	7	7	8	9	6	6	6	6	6
Nov	20	20	21	22					
Dec	18	18	19	20					

Table 5. Variation in surface temperature ( $^{\circ}\text{C}$ ) during 1984.

Lake	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan	4.5		5.2	5.6						
Feb	4.4	4.1	5.2	5.5						
Mar	5.3	4.5	5.5	6.3	8.3	6.8	6.9	6.5	5.9	6.1
Mar	5.6	4.8	6.5	7.5						
Apr	7.0	6.5	7.3	8.8	9.2	9.5	8.5	8.5	6.2	6.4
Apr	9.8	8.4	8.6	9.6						
May	10.0	9.9	9.5	11.6	10.2	11.3	9.8	10.1	7.4	8.0
May	11.4	10.7	10.6	12.0						
Jun	14.2	13.7	13.9	14.5	15.0	17.1	16.4	16.5	10.2	10.9
Jun	17.2	16.5	17.0	17.2					12.6	13.4
Jul	17.2	16.8	16.5	17.8	18.4	21.0	20.2	20.6	16.4	15.4
Jul	22.0	20.4								
Jul	22.5	21.7	20.7	20.9						
Aug	20.1	19.7	20.8	21.3						
Aug	18.9	18.5	18.8	19.2	18.9	20.1	19.3	19.3	16.6	16.8
Sep	17.1	16.9	17.0	17.5	16.8	17.0	17.3	16.9	17.0	14.8
Sep	16.4	16.4	16.5							
Oct	12.4	13.1	12.7	12.7	11.7	11.2	10.4	10.7	10.7	10.9
Oct	11.2	11.3	11.7	11.6						
Nov	9.4	9.0	9.3	9.4	9.8	9.0	8.9	8.9	9.0	
Nov	8.0	7.6	8.1	8.3						
Dec	5.3	5.5	5.8	6.0						
$\bar{x}$	15.9	15.6	15.4	15.4	13.9	15.5	15.0	15.3	13.7	13.7

Table 6. Variation in mean epilimnetic temperature ( $^{\circ}\text{C}$ ) during 1984.

LAKE	GCL	GCL	Sproat	Sproat	Henderson	Hobiton	Kennedy	Nimpkish	Nimpkish
	1	2	1	2	1	2	1	2	1
Jan	4.1		4.9		5.1				
Feb	4.0	4.0	4.6		4.9				
Mar	4.4	3.8	4.9		5.1				
Mar	5.0	4.3	5.7		6.4				
Apr	5.6	5.4	6.1		6.8				
Apr	7.4	6.0	6.6		8.6				
May	9.7	9.5	8.8		10.1				
May	9.9	9.4	10.2		11.6				
Jun	12.7	11.4	12.0		12.9				
Jun	14.9	15.4	15.8		15.4				
Jul	15.4	15.9	15.1		15.1				
Jul	21.0	17.8							
Jul	21.8	20.2	20.1		18.7				
Aug	18.2	17.9	19.9		21.0				
Aug	18.3	17.0	18.6		18.8				
Sep	16.7	16.7	16.6		17.0				
sep	16.3	14.9	15.5		16.6				
Oct	9.3	11.8	11.2		12.6				
Oct	10.7	10.3	11.6		11.4				
Nov	9.1	9.0	9.3		9.4				
Nov	7.6	7.9	8.0		8.3				
Dec	5.3	5.3	5.7		5.9				
$\bar{x}$	14.5	14.3	14.2		14.2				
					12.7				
						14.0			
						13.8			
							14.1		
							12.6		
								12.4	

Table 7. Variation in depth of maximum stability (m) during 1984. (u denotes an unstable water column.)

Lake	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2	
Jan	u	u	u	u			u	u	u	u	
Feb	u	u	u	u			u	u	u	u	
Mar	u	u	u	u	u		u	u	u	u	
Mar	u	u	u	u			u	u	u	u	
Apr	u	u	u	u	u		u	u	u	u	
Apr	u	u	u	u			u	u	u	u	
May	u	u	11.5	10.2	16.0	13.0	15.0	7.0	u	u	
May	14.0	16.8	6.8	9.3							
Jun	7.4	4.5	10.0	7.9	11.6	5.8	5.0	10.9	u	24.0	
Jun	9.0	6.6	8.2	10.0					17.2	20.1	
Jul	9.9	7.9	10.2	12.0	13.9	8.0	6.2	7.4	19.8	26.5	
Jul	3.2	8.6									
Jul	5.9	8.0	5.0	9.3							
Aug	10.8	10.8	9.0	8.0	16.1	6.6	6.8	8.8	20.9	27.4	
Aug	10.2	11.0	12.0	9.4							
Aug				10.8							
Sep	10.8	11.0	11.6	11.0	17.2	7.9	8.0	10.2	35.0	25.7	
Sep	9.7	12.2	12.1	10.6							
Oct	18.5	15.1	15.6	9.7	21.0	15.9	18.3	16.5	u	u	
Oct	15.0	16.4	14.6	12.8							
Nov	18.4	21.8	20.8	18.9	35.4	20.7	u	u			
Nov	18.3	19.1	19.4	23.0							
Dec	u	u	u	u	u	u					
	$\bar{X}$	9.7	10.7	10.2	10.0	13.7	8.0	8.1	9.6	22.2	24.8

Table 8. Variation in modified Schmidt stability index ( $\text{kg} \cdot \text{s}^{-5}$ ) during 1984.

LAKE	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan										
Feb										
Mar	29	21		197	903	221	286	107		138
Mar	103	11	207	703						
Apr	261	174	386	947	848	927	517	349	5	30
Apr	822	579	570	1275						
May	925	818	773	1952	836	1630	643	1019	140	156
May	1721	135	1348	2140						
Jun	1939	1322	2235	2404	4052	7516	6128	4265	386	491
Jun	5003	4476	4886	5847					1653	1495
Jul	3867	4487	3617	5359	5244	9152	8022	7518	2720	1948
Jul	7496	6308								
Jul	9058	7263	7714	7991						
Aug			6724	7553						
Aug	6375	5943	6365	6009	5188	8079	7654	6282	2228	2303
Aug	5013	4297	5831	5145						
Sep	3730	3700	3866	4152						
Sep	3609	3664	3604	3806	3220	5927	5559	4563	1578	1680
Oct	1455	1796	1353	1535	1087	1133	900	855	130	263
Oct	905	998	1351	1194						
Nov	522	503	1812	2346	530	412	292	208		
Nov	1404	1049	1079	1479						
Dec	156	203	247	276						
X	3854	3492	3651	3852	2852	5106	4641	3943	2128	1398

Table 9. Variation in Secchi depth (m) during 1984.

LAKE	GCL		Sproat		Henderson		Hobiton		Kennedy		Nimpkish	
	1	2	1	2	1	2	1	2	1	2	1	2
Jan	10.0		12.0		13.0							
Feb	14.0	11.0	11.5	11.5								
Mar	13.0	12.0	12.0	11.0								
Mar	8.0	9.0	8.5	8.2								
Apr	9.0	10.0	10.0	10.5								
Apr	11.5	13.0	11.0	9.5								
May	9.5	8.0	9.5	10.0								
May	7.5	7.0	11.5	9.5								
Jun	10.0	8.5	11.5	11.5								
Jun	7.0	8.0	12.0	12.5								
Jul	7.5	7.3	13.5	14.0								
Jul	11.5	10.0	13.5	14.0								
Jul	11.0	7.5	13.5	14.5								
Aug	13.0	11.0	14.0	14.0								
Aug	9.5	9.0	9.5	12.5								
Sep	11.0	8.5	10.0	14.0								
Sep	11.0	7.0	12.0	14.0								
Oct	6.0	7.5	7.0	5.5								
Oct	7.0	6.5	5.5	6.5								
Nov	8.0	6.5	8.0	8.0								
Nov	8.0	9.5	7.5	9.5								
Dec	12.5	11.5	9.5	9.5								
$\bar{x}$	9.8	8.5	11.6	11.9								

Table 10. Variation in compensation depth (m) during 1984.

LAKL	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan			26.7	28.0						
Feb	13.4	14.9	20.4	21.0						
Mar	22.0	22.6	24.6	26.2	19.8	13.0	11.0	10.0	11.2	11.1
Mar	26.7	20.9	19.9	23.9						
Apr	18.7	19.2		22.6	13.9	14.4	10.3	9.1	9.3	9.2
Apr	13.5	16.7	28.7	25.2						
May	25.5	14.1	21.9	27.1					12.7	14.2
May	21.6	14.2	22.1	25.1						
Jun	17.8	14.4	22.3	23.1	15.3	12.0	10.8	10.7	12.6	10.1
Jun	15.2	13.1	19.2	21.6					9.9	10.0
Jul	18.0	14.9	18.0	20.9						
Jul	14.7	12.7								
Jul	25.5	24.1	17.7	18.5	9.3	10.8	9.8	10.4	10.2	13.2
Aug	37.7	20.9								
Aug			27.6		10.9					
Aug	22.4	18.9	23.2							
Sep										
Sep	18.2	19.1	29.9	21.7						
Oct										
Oct	14.5	14.2	9.5	10.5						
Nov	13.3	11.1	10.0	10.0						
Nov	12.1	12.1	17.8	18.5	8.1					
Dec	11.8	13.6	13.9							
X	20.6	16.8	22.8	21.5	12.8	12.7	10.9	11.0	12.2	12.2

Table 11. Variation in mean extinction coefficient ( $k_e$ ) during 1984.

LAKE	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan			0.19	0.18						
Feb	0.33	0.28	0.20	0.21						
Mar	0.22	0.22	0.20	0.18	0.24	0.37	0.40	0.44	0.42	0.42
Mar	0.18	0.23	0.24	0.20						
Apr	0.23	0.24	0.21	0.35	0.34	0.40	0.50	0.44	0.46	
Apr	0.31	0.27	0.17	0.20						
May	0.18	0.31	0.22	0.17						
May	0.22	0.32	0.22	0.18						
Jun	0.25	0.32	0.21	0.19	0.28	0.34	0.39	0.38	0.34	0.42
Jun	0.29	0.32	0.21	0.20					0.41	0.42
Jul	0.21	0.27	0.23	0.20	0.46	0.39	0.45	0.35	0.50	0.37
Jul	0.28	0.33	0.23	0.25						
Jul	0.19	0.20	0.25	0.21						
Aug	0.12	0.23			0.44	0.36	0.25	0.33	0.37	0.28
Aug	0.23	0.24	0.17	0.20						
Sep	0.23	0.22	0.14	0.20						
Oct	0.27	0.29	0.46	0.42						
Oct										
Nov	0.31	0.38	0.45	0.45	0.56					0.55
Nov	0.36	0.35	0.25	0.23						
Dec	0.38	0.31	0.32							
Dec										
A	0.23	0.27	0.21	0.21	0.38	0.35	0.39	0.40	0.39	0.38

Table 12. Variation in mean epilimnetic pH during 1984.

LAKE	Great Central-2	Sproat-1	Sproat-2
Feb	6.4	6.4	6.5
Mar	6.3	6.4	6.5
Mar	6.6	6.5	6.7
Apr	6.3	6.8	6.5
Apr	6.4	6.8	6.7
May	6.6	6.9	6.9
May	6.4	6.9	6.6
Jun	6.5	6.7	7.1
Jun	6.4	6.9	6.9
Jul	6.3	7.0	6.7
Jul	6.4		
Jul	6.1	6.9	6.9
Aug	6.3	6.7	7.0
Aug		7.2	7.2
Aug	6.5	6.7	6.7
Sep	6.4	6.9	6.8
Sep	7.4	7.2	7.6
Oct	7.5	7.3	7.3
Oct	7.1	7.3	7.3
Nov	7.1	7.2	7.2
Nov	7.0	7.3	7.2
Dec	7.0	7.1	7.2
X	6.6	6.9	6.9

Table 13. Variation in mean epilimnetic total alkalinity  
 $(\text{mg}\cdot\text{L}^{-1} \text{CaCO}_3)$  during 1984.

LAKE	Gréat Central-2	Sproat-1	Sproat-2
Feb	11.16	21.26	24.20
Mar	11.94	21.28	23.24
Mar	11.06	21.15	22.85
Apr	10.94	21.50	22.91
Apr	12.63	21.13	21.80
May	10.98	21.99	23.07
May	10.40	21.25	21.28
Jun	11.00	21.75	23.00
Jun	11.95	21.02	22.82
Jul	12.13	22.63	24.33
Jul	11.21		
Jul	10.49	22.44	22.36
Aug	11.00	21.56	26.58
Aug		23.07	23.43
Aug	10.82	21.40	22.66
Sep	11.62	22.49	23.06
Sep	13.39	23.40	24.26
Oct	12.72	22.28	21.94
Oct	11.09	20.25	21.10
Nov	11.47	20.56	21.46
Nov	11.36	20.44	22.23
Dec	11.55	20.32	22.50
X	11.52	22.01	23.06

Table 14. Variation in mean epilimnetic DIC ( $\text{mg}\cdot\text{L}^{-1}$ ) during 1984.

LAKE	Great Central-2	Sproat-1	Sproat-2
Feb	6.36	11.10	11.74
Mar	7.64	10.97	11.44
Mar	4.59	9.85	8.89
Apr	5.73	11.02	10.92
Apr	6.45	7.78	8.61
May	4.78	7.30	7.72
May	5.32	7.01	8.86
Jun	5.19	7.70	6.62
Jun	4.64	6.54	7.14
Jul	6.73	6.95	8.14
Jul	5.13		
Jul	7.16	7.06	6.81
Aug	5.53	7.92	7.89
Aug		6.45	6.58
Aug	4.54	7.86	8.14
Sep	5.72	7.26	7.65
Sep	3.51	6.59	6.20
Oct	3.34	6.14	5.98
Oct	3.20	5.61	5.79
Nov	3.46	5.81	6.06
Nov	3.53	5.72	6.37
Dec	3.73	6.00	6.46
$\bar{x}$	5.18	7.14	7.68

Table 15. Variation in mean epilimnetic total dissolved nitrogen ( $\mu\text{g} \cdot \text{L}^{-1}$ ) during 1984.

LAKE	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan	283		246	270						
Feb	199	189	262	453						
Mar	306	328	269	282	232	251	248	251	296	287
Mar	234	216	188	191						
Apr	194	138	196	189	224	229	231	209	178	157
Apr	220	252	148	219						
May	140	159	144	154	252	203	217	181	192	183
May	230	189	149	176						
Jun	260	200	198	329	126	195	329	163	270	225
Jun	306	233	241	203					179	170
Jul	173	138	144	144						
Jul	162	276								
Jul	248	180	173	228	279	251	170	237	273	220
Aug	172	133	172	130						
Aug	172	191	179	216						
Aug			102	114						
Sep	350	176	217	255						
Sep	183	228	135	124	113	129	130	112	155	167
Oct	122	138	258	232	215	205	230	248	193	176
Oct	166	172	176	172						
Nov	257	179	347	265						
Nov	388	240	414	370	210	188	222	225		
Dec	536	536	527	357						
$\bar{x}$	210	190	174	193	205	198	202	174	199	182

Table 16. Variation in mean epilimnetic nitrate ( $\mu\text{g N} \cdot \text{L}^{-1}$ ) during 1984.

Table 17. Variation in mean epilimnetic ammonia ( $\mu\text{g N.L}^{-1}$ ) during 1984.

Lake	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy	Nimpkish	Nimpkish 2
Jan	<4		<4		5				
Feb	5	<4	<4	6					
Mar	<4	<4	<4	<4	<4				
Apr	<4	<4	<4	<4	<4				
May	<4	<4	<4	<4	<4				
Jun	<4	<4	<4	<4	<4				
Jul	5	5	8	<4					
Aug	<4	<4	<4	<4	<4				
Sep	<4	<4	5	<4	<4				
Oct	<4	<4	<4	<4	<4				
Nov	<4	<4	8	<4	5				
Dec	5	<4	5	5	<4				

Table 18. Variation in mean epilimnetic total phosphorus ( $\mu\text{g P.L}^{-1}$ ) during 1984.

Table 19. Variation in mean epilimnetic particulate phosphorus ( $\mu\text{g P.L}^{-1}$ ) during 1984.

Lake	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan	0.9		1.2	1.4						
Feb	1.0	0.9	0.9	1.1						
Mar	3.3	0.6	0.9	1.2	1.4	1.9	1.4	1.0	0.5	<0.5
Mar	1.0	0.9	1.0	1.3						
Apr	0.7	<0.5	0.6	0.8	1.1	1.0	0.8	0.6	0.6	0.6
Apr	0.2	0.3	0.8							
May	0.6	0.7	0.6	0.8	2.8	3.1	2.6	1.5	0.4	0.4
May	1.1	1.7	1.1	2.0						
Jun	0.4	0.7	0.4	0.4	<0.2	3.1	1.8	1.7	0.3	0.6
Jun	1.0	1.5	<0.2						0.7	0.9
Jul	1.2	1.5	0.6	0.5						
Jul	0.4	0.8	0.4	0.4						
Jul	0.4	1.2	0.2	0.4						
Aug	1.4	2.2	0.2	<0.2						
Aug	1.8	1.9	0.4	0.5						
Aug	1.8	1.9	0.6	0.6						
Sep	1.4	1.7	0.5	0.6						
Sep	1.4	1.9	0.5	0.8						
Oct	1.1	1.3	0.7	1.0						
Oct	2.0	2.4	1.4	1.8						
Nov	1.4	1.2	1.0	1.1						
Nov	1.2	1.1	0.9	1.0						
Dec	1.5	1.1	1.4	1.5						
X	0.9	1.4	0.5	0.7	2.4	1.8	2.1	1.0	0.8	0.9

Table 20. Variation in mean epilimnetic particulate carbon ( $\mu\text{g C L}^{-1}$ ) during 1984.

LAKE	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan	121		144		127					
Feb	104	106	85	142					84	80
Mar	72	112	78	101	104		155	96		
Mar	101	104	119	150						
Apr	116	108	143	141	123	162	141	157	82	90
Apr	136	96	149	152						
May	116	125	116	167	127	177	132	102	91	
May	122	128	121	100						
Jun	202	236	146	195	224	223	265	207	100	99
Jun	218	209	247	161					171	184
Jul	237	250	280	265						
Jul	189	210								
Jul	158	181	162	170						
Aug	199	198	156	147						
Aug			155	151	369	172	282	229	172	202
Aug	180	162	158	164						
Sep	206	248	141	199	321	210	378	207	182	185
Sep	277	424	196	230						
Oct	328	232	227	208	352	372	311	288	198	227
Oct	252	248	326	235						
Nov	241	253	226	230	246	258	235	236		
Nov	309	242	270	222						
Dec	129	116	124	132						
A	193	210	176	178	243	206	254	190	159	170

Table 21. Variation in mean epilimnetic particulate nitrogen ( $\mu\text{g N}\cdot\text{L}^{-1}$ ) during 1984.

Lake	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan	12	16	17							
Feb	11	9	17							
Mar	9	12	21	15	21	36	29	30	16	18
Mar	19	20	33	31						
Apr	26	27	27	34	19	22	24	22	9	13
Apr	14	10	24	21						
May	14	15	10	15	12	20	17	11	6	7
May	18	18	18	13						
Jun	20	25	18	39	33	22	38	23	14	12
Jun	43	40	18	24						20
Jul	28	27	22	41						
Jul	23	24								
Jul	20	23	21	17						
Aug	23	27	12	26						
Aug			18	15						
Aug	29	30	17	15						
Sep	35	34	17	24						
Sep	26	41	19	26						
Oct	29	30	32	21						
Oct	32	31	34	28						
Nov	28	27	27	27						
Nov	29	29	26	26						
Dec	19	15	16	15						
$\bar{x}$	24	27	19	24	32	25	36	23	19	21

Table 22. Variation in mean epilimnetic soluble reactive silicon ( $\text{mg Si} \cdot \text{L}^{-1}$ )

LAKE	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan	0.88		1.09		1.18					
Feb	0.94	0.90	1.17	1.25						
Mar	0.98	0.98	1.13	1.25	0.45	0.98	0.64	0.58	1.65	1.66
Mar	0.86	0.87	0.98	1.04						
Apr	0.98	0.98	1.18	1.24	0.44	1.08	0.71	0.61	1.74	1.75
Apr	0.95	0.94	1.15	1.18						
May	0.95	0.94	1.16	1.15	0.51	1.10	0.75	0.69	1.75	1.71
May	0.95	0.98	1.05	1.05						
Jun	0.88	0.88	1.02	1.01	0.43	1.05	0.66	0.71	1.72	1.64
Jun	0.82	0.78	1.11	1.14					1.69	1.68
Jul	0.56	0.51	1.07	1.12	0.23	1.01	0.36	0.40	1.58	1.62
Jul	0.37	0.44								
Jul	0.48	0.41	0.99	0.97						
Aug	0.57	0.49	0.95	1.06						
Aug	0.60	0.58	1.07	1.12	0.28	0.97	0.56	0.62	1.83	1.78
Aug			0.98	1.07						
Sep	0.50	0.46	0.98	1.00	0.16	0.86	0.49	0.60	1.55	1.58
Sep	0.53	0.48	1.02	1.07						
Oct	0.59	0.58	1.00	1.03	0.30	0.96	0.63	0.66	1.51	1.54
Oct	0.64	0.62	0.94	1.00						
Nov	0.79	0.78	0.99	1.06						
Nov	0.83	0.83	1.10	1.16	0.35	1.06	0.81	0.77		
Dec	1.02	1.03	1.05	1.08						
X	0.68	0.64	1.04	1.09	0.35	1.01	0.59	0.61	1.66	1.66

Table 23. Variation in mean epilimnetic total dissolved solids ( $\text{mg}\cdot\text{L}^{-1}$ ) during 1984.

LAKE	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan	20.7		30.4		28.0					
Feb	19.6	22.5	31.7	36.7						
Mar	24.0	22.0	33.5	39.2	80.3	19.5	20.8	19.7	26.1	27.6
Mar	21.7	20.0	33.6	34.3						
APR	23.5	24.7	32.0	33.6	76.3	28.7	26.5	26.4	18.5	19.9
APR	26.3	25.3	40.7	43.3						
MAY					60.4	21.5	24.8	25.3	28.0	22.7
MAY										
JUN	22.4	26.1	32.0	35.6	57.0	21.2	24.0	22.4	29.7	26.9
JUN										
JUL										
JUL	24.0	22.4								
JUL										
AUG	22.5	18.0	34.5	36.4						
AUG										
AUG	22.0	21.5	33.9	32.1	51.2	19.1	24.0	20.1	23.6	14.8
AUG				34.5						
SEP	23.5	21.2	32.9	36.7	53.6	20.7	22.5	17.5	26.3	25.1
SEP										
OCT										
OCT										
NOV	20.5	28.6	16.6	31.3	37.9	26.6	20.4	19.2		
NOV										
DEC	23.0	19.2	33.8	33.3						
DEC										
X	23.2	23.6	33.0	36.3	60.1	22.0	24.1	21.8		

Table 24. Variation in mean epilimnetic bacterial numbers ( $\times 10^6 \cdot \text{mL}^{-1}$ ) during 1984.

LAKI	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan	0.70		0.77	0.91						
Feb	0.65	0.67	0.50	0.62						
Mar	0.63	0.58	0.61	0.73	0.70	0.82	0.73	0.56	0.77	0.74
Mar	0.61	0.56	0.57	0.71						
Apr	0.47	0.50	0.51	0.62	0.86	0.74	0.92	0.92	0.64	0.67
Apr	0.66	0.67	0.54	0.68						
May	0.43	0.40	0.52	0.62	0.63	0.74	0.58	0.54	0.88	0.86
May	0.50	0.45	0.55	0.66						
Jun	0.44	0.52	0.49	0.64	1.48	0.83	0.75	0.63	0.72	0.62
Jun	0.50	0.64	0.52	0.70					0.75	0.77
Jul	0.92	0.83	0.76	0.93	2.03	0.82	1.20	0.51	0.79	0.65
Jul	0.78	1.14								
Jul	0.70	1.07	0.65	0.44						
Aug	1.11	0.84	0.41	0.46						
Aug	1.13	1.16	0.51	0.51	1.70	0.84	1.42	0.67	0.78	0.75
Aug	0.90	1.16	0.52	0.67						
Sep	1.01	1.31	0.48	0.64	1.78	0.99	1.88	0.60	0.87	0.99
Sep										
Oct	1.21	1.27	0.92	0.94	1.29	1.06	1.40	0.72	1.10	1.36
Oct	1.67	1.34	1.16	1.19						
Nov	1.46	1.49	1.03	1.35	1.40	1.34	1.48	1.20		
Nov	1.23	1.28	0.94	1.13						
Dec	1.00	1.21	0.85	1.01						
$\bar{X}$	0.78	0.89	0.57	0.66	1.34	0.84	1.14	0.64	0.81	0.81

Table 25. Variation in mean epilimnetic total chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ ) during 1984.

Lake	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan	0.70		0.75		1.31					
Feb	0.71	0.50	0.56		1.44					
Mar	0.38	0.37	0.50		1.12					
Mar	0.85	0.53	1.21		1.37					
Apr	1.19	1.08	1.09		1.13					
Apr	1.15	0.77	1.29		1.00					
May	1.49	1.08	0.84		0.66					
May	0.96	1.13	0.68		0.63					
Jun	1.38	1.67	0.64		0.31					
Jun	1.00	1.11	0.35		0.39					
Jul	0.96	0.85	0.26		0.37					
Jul	0.23	0.22								
Jul	0.50	0.54	0.16		0.12					
Aug	0.60	1.01	0.25		0.33					
Aug			0.29		0.50					
Aug	0.36	0.50	0.25		0.27					
Sep	0.99	1.04	0.34		0.36					
Sep	0.67	0.91	0.36		0.48					
Oct	1.61	1.77	1.12		1.40					
Oct	2.16	2.82	1.34		1.87					
Nov	1.46	1.59	1.16		1.44					
Nov	1.58	1.38	1.15		1.33					
Dec	1.00	0.96	0.79		1.07					
$\bar{x}$	0.92	1.00	0.55		0.61					
					2.96					
						1.30				
							2.11			
								1.13		
									1.01	
										1.24

Table 26. Variation in mean (1, 3 and 5 m) total algal volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ ) during 1984.

Table 27. Variation in mean (1, 3 and 5 m) total algal carbon ( $\text{mg} \cdot \text{m}^{-3}$ ) during 1984.

LAKE	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan	60		36	61						
Feb	87	69	49	79						
Mar	69	86	39	94						
Mar	134	80	103	140						
Apr	164	160	189	155						
Apr	165	150	285	333						
May	192	198	277	250						
May	406	367	367	225						
Jun										
Jun	313	270	574							
Jun	275	253								
Jul										
Jul	243	137	522							
Jul	352	87								
Aug										
Aug	93	110	81	64						
Aug		109	92	268						
Aug		205	94							
Sep										
Sep	110	106	315							
Sep	91	66								
Oct										
Oct	215	100	194							
Oct	173	123								
Nov										
Nov	118	91	207	88						
Nov	80	74	115	73						
Dec										
Dec	71	74	187	114						
$\bar{x}$	134	196	223	161	334	188	367	152	138	179

Table 28. Variation in mean euphotic zone primary production ( $>0.2 \mu\text{m}$ ) ( $\text{mg C}\cdot\text{m}^{-3}\cdot\text{h}^{-1}$ ) during 1984.

LAKE	Great Central-2	Sproat-1	Sproat-2
Feb	0.54	0.26	0.64
Mar	0.18	0.28	0.38
Mar	0.10	0.24	0.17
Apr	0.31	0.80	0.38
Apr	0.45	0.05	0.25
May	0.38	0.51	0.37
May	0.89	0.42	0.17
Jun	1.80	0.46	0.26
Jun	2.06	0.55	0.45
Jul	1.18	0.34	0.45
Jul	1.66		
Jul	1.27	0.74	0.86
Aug	0.95	0.54	0.57
Aug		0.20	0.27
Aug	0.82	0.45	1.07
Sep	1.72	0.72	0.78
Sep	0.64	0.11	0.68
Oct	0.21	0.49	0.60
Oct	0.55	2.14	0.67
Nov	0.97	0.63	0.76
Nov	0.72	0.15	0.28
Dec	0.57	0.38	0.21
$\bar{x}$	1.06	0.46	0.50

Table 29. Variation in mean euphotic zone primary production (0.2-8.0  $\mu\text{m}$ ) ( $\text{mg C}\cdot\text{m}^{-3}\cdot\text{h}^{-1}$ ) during 1984.

LAKE	Great Central-2	Sproat-1	Sproat-2
Feb	0.34	0.18	0.51
Mar	0.10	0.15	0.25
Mar	0.01	0.00	0.01
Apr	0.21	0.44	0.11
Apr	0.35	0.00	0.08
May	0.22	0.19	0.25
May	0.66	0.25	0.08
Jun	0.82	0.40	0.12
Jun	0.90	0.28	0.20
Jul	0.08	0.13	0.24
Jul	0.87		
Jul	0.57	0.54	0.52
Aug	0.63	0.38	0.29
Aug		0.08	0.10
Aug	0.56	0.28	0.85
Sep	1.18	0.49	0.69
Sep	0.44	0.01	0.46
Oct	0.14	0.37	0.35
Oct	0.36	1.80	0.38
Nov	0.70	0.35	0.40
Nov	0.32	0.08	0.17
Dec	0.41	0.31	0.07
X	0.57	0.28	0.31

Table 30. Variation in mean euphotic zone primary production ( $>8.0 \mu\text{m}$ ) ( $\text{mg C}\cdot\text{m}^{-3}\cdot\text{h}^{-1}$ ) during 1984.

LAKE	Great Central-2	Sproat-1	Sproat-2
Feb	0.20	0.09	0.13
Mar	0.07	0.14	0.13
Mar	0.09	0.24	0.16
Apr	0.10	0.36	0.27
Apr	0.10	0.05	0.17
May	0.16	0.32	0.12
May	0.24	0.17	0.09
Jun	0.98	0.06	0.14
Jun	1.16	0.27	0.25
Jul	1.10	0.21	0.21
Jul	0.79		
Jul	0.70	0.20	0.34
Aug	0.32	0.16	0.28
Aug		0.11	0.16
Aug	0.26	0.17	0.22
Sep	0.54	0.23	0.09
Sep	0.19	0.10	0.22
Oct	0.07	0.13	0.25
Oct	0.19	0.34	0.29
Nov	0.27	0.28	0.36
Nov	0.40	0.06	0.10
Dec	0.16	0.09	0.14
X	0.50	0.17	0.20

Table 31. Variation in mean euphotic zone integrated hourly primary production ( $\text{mg C}\cdot\text{m}^{-2}\cdot\text{h}^{-1}$ ) during 1984.

LAKE	Great Central-2	Sproat-1	Sproat-2
Feb	7.99	5.41	13.51
Mar	3.96	6.98	10.04
Mar	2.09	4.70	3.96
Apr	5.91	14.91	8.58
Apr	7.48	1.50	6.32
May	5.39	11.17	10.00
May	12.71	9.22	4.30
Jun	25.90	10.27	5.96
Jun	27.04	10.59	9.66
Jul	17.64	6.14	9.44
Jul	21.04		
Jul	30.56	13.78	15.14
Aug	19.91	13.22	13.90
Aug		5.38	7.71
Aug	15.42	10.37	19.48
Sep	28.43	13.50	15.29
Sep	12.17	3.28	14.76
Oct	3.23	7.12	7.37
Oct	7.80	20.33	7.06
Nov	10.74	6.31	7.64
Nov	8.74	2.63	5.16
Dec	7.81	5.22	2.88
X	17.47	9.10	10.31

Table 32. Variation in mean euphotic zone daily primary production ( $\text{mg C} \cdot \text{m}^{-2} \cdot \text{d}^{-1}$ ) during 1984.

LAKE	Great Central-2	Sproat-1	Sproat-2
Feb	66.17	32.63	82.82
Mar	25.64	64.89	80.85
Mar	13.82	26.05	22.88
Apr	30.30	101.54	59.09
Apr	63.49	12.65	36.02
May	64.13	108.65	129.30
May	81.32	93.46	47.98
Jun	340.43	68.20	147.45
Jun	274.82	193.97	31.36
Jul	195.39	47.79	77.80
Jul	192.87		
Jul	103.09	143.76	141.46
Aug	167.86	147.13	168.40
Aug		42.25	93.39
Aug	143.18	145.68	185.41
Sep	247.90	140.17	145.54
Sep	104.51	76.64	139.18
Oct	32.73	113.73	76.18
Oct	62.00	169.24	75.62
Nov	60.85	27.36	67.16
Nov	48.21	16.16	36.00
Dec	33.34	27.16	14.97
$\bar{x}$	154.73	103.12	101.96

Table 33. Variation in mean euphotic zone primary production per unit of light ( $\text{mg C}\cdot\text{Einstein}^{-1}$ ) during 1984.

LAKE	Great Central-2	Sproat-1	Sproat-2
Feb	11.93	8.72	22.14
Mar	1.04	3.58	4.46
Mar	0.76	2.87	2.52
Apr	1.72	3.02	2.62
Apr	1.60	0.34	1.38
May	3.59	3.86	4.93
May	2.74	2.19	6.82
Jun	11.56	2.77	7.95
Jun	5.27	4.27	2.56
Jul	8.86	1.36	2.22
Jul	3.66		
Jul	5.76	2.76	3.05
Aug	5.18	2.90	3.38
Aug		2.14	2.05
Aug	4.67	5.60	7.13
Sep	14.21	4.59	5.13
Sep	8.63	3.95	5.47
Oct	20.20	12.94	16.74
Oct	19.50	23.64	7.28
Nov	10.04	10.52	13.65
Nov	16.80	8.78	24.58
Dec	10.55	7.57	4.17
X	7.61	4.18	5.00

Table 34. Variation in volumetric zooplankton biomass (mg dry weight·m<sup>-3</sup>) during 1984.

LAKE	GCL 1	GCL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan	7.4		6.1		5.5					
Feb	5.1	4.2	2.7		4.4					
Mar	3.3	2.2	3.0		6.7					
Mar	3.8	2.2	6.1		12.5					
Apr	5.5	3.4	4.4		8.1					
Apr	4.8	0.9	8.2		19.0					
May	2.8	1.5	3.6		5.5					
May	3.6	3.0	10.9		13.4					
Jun	2.0	4.0	5.7		14.1					
Jun	7.1	3.3	11.0		11.3					
Jul	19.6	49.1	13.8		6.2					
Jul	28.7	16.5								
Jul	24.8	10.9	13.0		6.6					
Aug	25.2	18.2	20.6		15.0					
Aug			8.4		9.6					
Aug	21.2	4.4	4.5		4.3					
Sep	9.4	5.4	1.2		1.5					
Sep	5.8	10.0	2.3		2.0					
Oct	5.4	4.5	3.4		2.5					
Oct	6.0	2.8	2.0		3.7					
Nov	2.9	2.4	4.3		3.5					
Nov	3.8	2.4	2.9		3.3					
Dec	3.2	1.9	3.7		3.7					
	$\bar{X}$	12.3	10.2	8.1	8.7	12.8	7.9	9.2	5.2	3.5

Table 35. Variation in zooplankton ash-free dry weight ( $\text{mg} \cdot \text{m}^{-3}$ ) during 1984.

LAKE	JUL 1	JUL 2	Sproat 1	Sproat 2	Henderson	Hobiton	Kennedy 1	Kennedy 2	Nimpkish 1	Nimpkish 2
Jan	5.0		5.3	4.9						
Feb	3.6	3.4	2.3	4.2						
Mar	2.6	2.0	2.8	6.0						
Mar	3.1	1.9	5.4	11.7	4.2	4.9	3.1	2.2	2.0	3.0
Apr	4.6	2.3	4.0	7.3	1.7	5.1	2.4	9.2	1.9	0.8
Apr	4.4	0.7	7.7	17.9						
May	2.7	1.3	3.2	5.1						
May	3.0	2.6	9.9	12.2	3.1	5.4	3.8	4.3	0.7	1.9
Jun	2.2	3.8	5.2	14.1						
Jun	4.1	2.5	10.1	11.3	16.8	11.6	7.7	4.2	1.6	1.7
Jul	10.8	26.2	12.9	5.6						
Jul	23.9	9.9								
Jul	18.5	8.0	11.9	6.2	24.0		13.0	6.7	4.8	9.0
Aug	18.4	7.6	17.4	13.7						
Aug	19.6	3.5	7.6	8.7	25.0	7.2	25.6	4.9	4.1	4.6
Sep	8.3	4.7	1.1	1.3						
Sep	5.2	7.0	2.3	2.0	2.5	2.4	4.1	2.7	N/A	3.1
Oct	3.2	2.0	3.1	2.4						
Oct	3.7	1.6	2.0	3.5	3.7	2.3	8.2	2.2	1.9	1.5
Nov	1.9	1.6	4.1	3.4						
Nov	2.5	1.7	2.8	3.3	3.2	5.8	0.1	2.7		
Dec	2.5	1.5	3.3	2.7						
X	9.6	6.2	7.3	8.1	10.8	7.0	8.5	4.7	3.1	

Table 36. Summary of data from the north coastal lakes (sampled on Sept. 13, 1984).

LAKE	Awun	Bonilla	Curtis	Eden	Ian	Kitlope	Yakoun
Total dissolved solids ( $\text{mg} \cdot \text{L}^{-1}$ )	31.5	20.9	14.7	34.1	35.9	8.9	23.3
Total dissolved nitrogen ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	259	229	199	289	343	144	187
Nitrate ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	16	2	1	19	31	8	1
Ammonia ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	<4	<4	<4	<4	<4	<4	<4
Total phosphorus ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	6.0	4.0	3.5	4.0	4.0	2.0	4.0
Soluble reactive silicon ( $\text{mg Si} \cdot \text{L}^{-1}$ )	1.91	0.19	0.33	2.08	1.68	0.44	0.87
Total chlorophyll ( $\mu\text{g} \cdot \text{L}^{-1}$ )	1.10	2.01	2.37	0.96	0.78	0.47	2.67

Table 37. Long Lake summary.

	Long-1			Long-2		
	March 13	September 18	March 13	September 18	March 13	September 18
Total dissolved solids ( $\text{mg} \cdot \text{L}^{-1}$ )	14.4	13.6		15.3		11.7
Total dissolved nitrogen ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	310	126		256		123
Nitrate ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	70	5		63		1
Ammonia ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	<4	5		<4		<4
Total phosphorus ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	3.0	2.3		1.8		1.7
Soluble reactive silica ( $\text{mg Si} \cdot \text{L}^{-1}$ )	0.99	0.74		0.94		0.60
Total chlorophyll ( $\mu\text{g} \cdot \text{L}^{-1}$ )	0.81	1.86		0.57		1.99



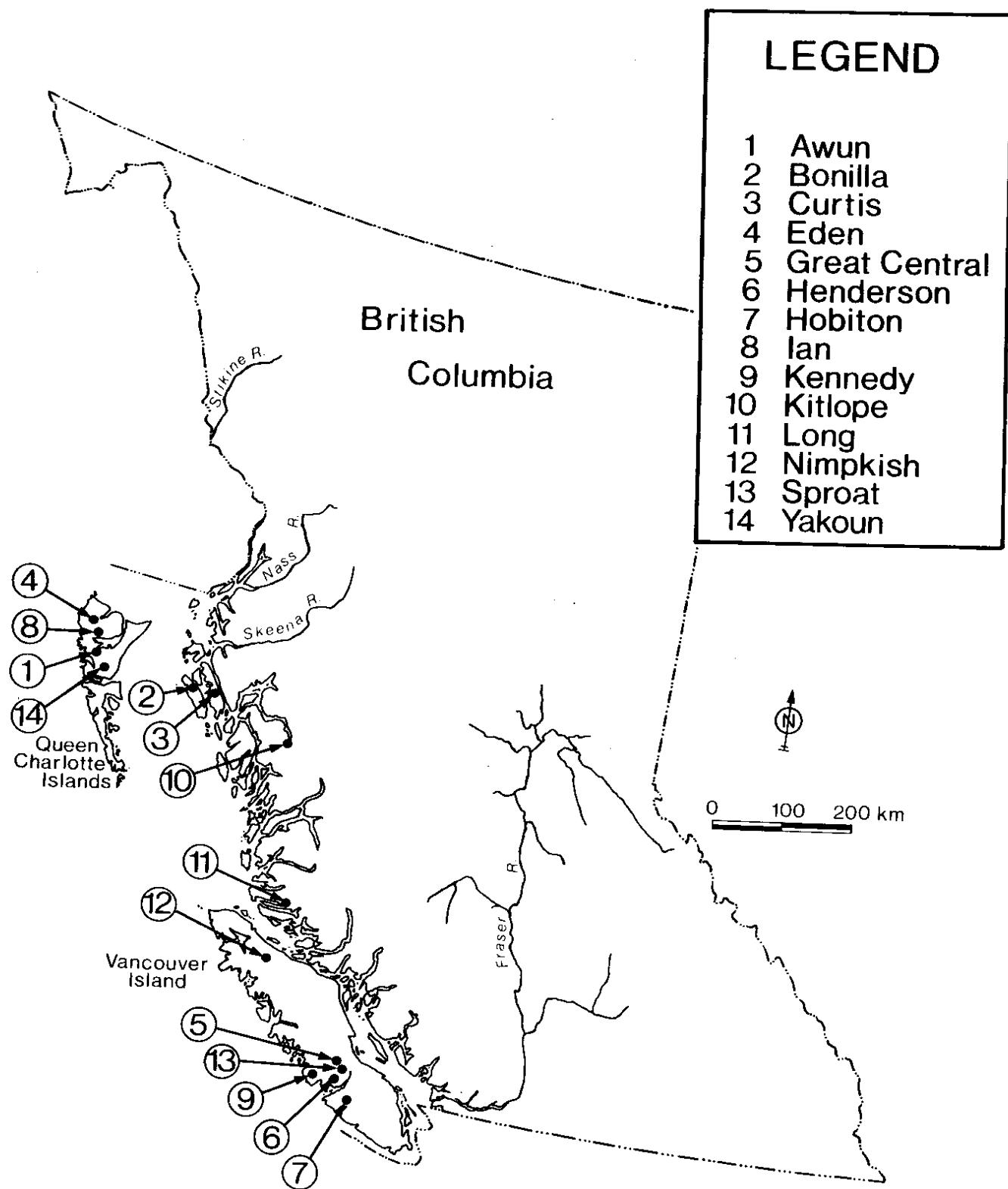


Fig. 1. Location of the 14 study lakes in British Columbia.



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Appendix Table 1. Chemical and biological data from Awun Lake, September 13, 1984.

Depth (m)	1	3	5
TDS ( $\text{mg} \cdot \text{L}^{-1}$ )			31.5
TDN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	261	231	284
Nitrate ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	17	16	16
Ammonia ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	<4	<4	<4
TP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	8		4
SRS ( $\text{mg Si} \cdot \text{L}^{-1}$ )	1.72	1.97	2.04
Chlorophyll ( $\mu\text{g} \cdot \text{L}^{-1}$ )	1.35	1.13	0.83

Appendix Table 2. Chemical and biological data from Bonilla Lake, September 13, 1984.

Depth (m)	1	3	5
TDS ( $\text{mg} \cdot \text{L}^{-1}$ )			20.9
TDN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	224	237	226
Nitrate ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	<1	2	2
Ammonia ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	<4	<4	<4
TP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	4	4	4
SRS ( $\text{mg Si} \cdot \text{L}^{-1}$ )	0.28	0.15	0.13
Chlorophyll ( $\mu\text{g} \cdot \text{L}^{-1}$ )	2.31	2.04	1.68

Appendix Table 3. Chemical and biological data from Curtis Lake, September 13, 1984.

Depth (m)	1	3	5
TDS			14.7
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	235	154	209
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	1	1	1
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	4	3	
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.36	0.31	0.30
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	2.50	2.15	2.45

Appendix Table 4. Chemical and biological data from Eden Lake, September 13, 1984.

Depth (m)	1	3	5
TDS ( $\text{mg}\cdot\text{L}^{-1}$ )			34.1
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	305	283	279
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	20	19	19
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	2.22	2.00	2.02
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	1.18	1.20	0.50

Appendix Table 5. Physical, chemical and biological data from Great Central Lake, Stn. 1, January 12, 1984.

Depth (m)	1	3	5	23	40
Temperature (°C)	4.1	4.1	4.1	4.1	4.0
TDS (mg·L⁻¹)			20.7		
TDN (µg N·L⁻¹)	172	349	390	239	264
Nitrate (µg N·L⁻¹)	33	32	33	36	38
Ammonia (µg N·L⁻¹)	<4	4	4	<4	<4
PN (µg N·L⁻¹)	10	15	14	9	12
PC (µg C·L⁻¹)	105	149	132	104	116
TP (µg P·L⁻¹)	2	2	2	2	2
PP (µg P·L⁻¹)	0.8	1.0	0.9	0.8	0.8
SiS (mg Si·L⁻¹)	0.87	0.86	0.86	0.90	0.91
Bacteria (X10⁶·mL⁻¹)	0.90	0.94	0.76	0.47	0.43
Chlorophyll (µg·L⁻¹)	0.81	0.95	1.00	0.45	0.31
Alg. Volume (mm³·m⁻³)	521	508	428	384	276
Alg. Carbon (mg C·m⁻³)	63	63	53	48	31

Appendix Table 6. Physical, chemical and biological data from Great Central Lake, Str. 1, February 8, 1984.

Depth (m)	0	1	3	5	7.5	10	15	23	40
Temperature (°C)	4.1	4.0	4.0	4.0	4.0	4.0	4.0	3.9	3.8
TDS (mg·L⁻¹)				19.6					
pH					6.4	6.6			
T. Alk. (mg·L⁻¹ CaCO₃)				12.19	12.28				
BIC (mg·L⁻¹)				6.47	5.32				
TDN (µg N·L⁻¹)				258	213	139			
Nitrate (µg N·L⁻¹)				36	37	37	206	181	
Ammonia (µg N·L⁻¹)				<4	7	8	39	40	
PN (µg N·L⁻¹)				13	14	14	<4	<4	
PC (µg C·L⁻¹)				124	115	126	6	6	
TP (µg P·L⁻¹)				3	1	1	1	1	
PP (µg P·L⁻¹)				1.0	1.1	1.1	0.8	0.8	
SKS (mg Si·L⁻¹)				0.99	0.91	0.93	0.93	0.94	
Bacteria (X10⁶·mL⁻¹)				0.56	0.66	0.86			
Chlorophyll (µg·L⁻¹)				0.83	1.00	0.99			
Alg. Volume (mm³·m⁻³)				666	741	632			
Alg. Carbon (mg C·m⁻³)				81	101	80			
Pr. Prod. (mg C·m⁻³·h⁻¹)a	0.80	0.79	1.19	0.67	0.34	0.17	0.00	0.00	
Pr. Prod. (mg C·m⁻³·h⁻¹)b	0.37	0.24	0.66	0.38	0.14	0.06	0.12	0.03	
Pr. Prod. (mg C·m⁻³·h⁻¹)c	0.15	0.18	0.26	0.32					

aTotal Primary Production (&gt;0.2 µm).

bFractionated Primary Production (&gt;3.0 µm).

cFractionated Primary Production (&gt;8.0 µm).

Appendix Table 7. Physical, chemical and biological data from Great Central Lake, Stn. 1, March 8, 1984.

Depth (m)	0	1	3	5	7.5	10	15	23	40
Temperature (°C)	5.0	4.9	4.7	4.5	4.3	4.1	4.0	3.9	3.6
TDS (mg·L⁻¹)				24.0					
pH					6.4				
T. Alk. (mg·L⁻¹ CaCO₃)					12.68				
DIC (mg·L⁻¹)					6.59				
TWN (µg N·L⁻¹)				289					
Nitrate (µg N·L⁻¹)				362					
Ammonia (µg N·L⁻¹)				39					
PN (µg N·L⁻¹)				<4					
PC (µg C·L⁻¹)				9					
TP (µg P·L⁻¹)				82					
PP (µg P·L⁻¹)				73					
SRS (mg Si·L⁻¹)					<1				
Bacteria (X10⁶·mL⁻¹)					0.7				
Chlorophyll (µg·L⁻¹)					0.8				
Alg. Volume (mm³·m⁻³)					<0.5				
Alg. Carbon (mg C·m⁻³)									
Pr. Prod. (mg C·m⁻³·h⁻¹)a	0.00	0.00							
Pr. Prod. (mg C·m⁻³·h⁻¹)b	0.00	0.00							
Pr. Prod. (mg C·m⁻³·h⁻¹)c	0.00	0.00							

aTotal Primary Production (>0.2 µm).

bFractionated Primary Production (>3.0 µm).

cFractionated Primary Production (>8.0 µm).

Appendix Table 8. Physical, chemical and biological data from Great Central Lake, Stn. 1, March 21, 1984.

Depth (m)	0	1	3	5	7.5	10	15	23	40
Temperature (°C)	5.6	5.6	5.5	5.4	5.2	5.0	4.9	4.8	4.4
TDS (mg·L <sup>-1</sup> )				21.7					
pH					6.2	6.5			
T·Alk. (mg·L <sup>-1</sup> )				10.81		11.06			
DIC (mg·L <sup>-1</sup> )				8.05		5.79			
TDN (μg N·L <sup>-1</sup> )					249	185			
Nitrate (μg N·L <sup>-1</sup> )					35	34	184	258	
Ammonia (μg N·L <sup>-1</sup> )					<4	<4	38	41	
PN (μg N·L <sup>-1</sup> )					30	22	7	9	
PC (μg C·L <sup>-1</sup> )					103	128	119	84	70
TP (μg P·L <sup>-1</sup> )					<1	1	<1	<1	
PP (μg P·L <sup>-1</sup> )					1.0	1.1	1.0	1.0	0.8
SRS (mg Si·L <sup>-1</sup> )					0.88	0.84	0.85	0.85	0.87
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )					0.68	0.53	0.65	0.67	0.53
Chlorophyll (μg·L <sup>-1</sup> )					1.15	1.15	1.02	0.61	0.31
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )					948	1535	689	557	427
Alg. Carbon (mg C·m <sup>-3</sup> )					116	202	85	64	52
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	0.30	0.49	0.49	0.54	0.33	0.30	0.13	0.12	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>b</sup>	0.02	0.16	0.49	0.42	0.27	0.12	0.05	0.00	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>		0.46	0.20	0.42	0.31	0.20	0.20	0.00	

<sup>a</sup>Total Primary Production (>0.2 μm).

<sup>b</sup>Fractionated Primary Production (>3.0 μm).

<sup>c</sup>Fractionated Primary Production (>8.0 μm).

Appendix Table 9. Physical, chemical and biological data from Great Central Lake, Stn. 1, April 6, 1984.

Depth (m)	Temperature (°C)	1	3	5	13	19	40
TDS (mg·L⁻¹)		7.0	6.9	6.8	5.6	5.1	4.4
TDN (µg N·L⁻¹)	136	217	229	191	268		
Nitrate (µg N·L⁻¹)	24	24	24	27	31	35	
Ammonia (µg N·L⁻¹)	<4	<4	<4	<4	<4	<4	
PN (µg N·L⁻¹)	25	45	24	31	28	4	
PC (µg C·L⁻¹)	137	131	121	141	97	67	
TP (µg P·L⁻¹)	2	1	<1	1	<1	1	
PP (µg P·L⁻¹)	0.6	0.6	0.8	0.9	<0.5	<0.5	
SiS (mg Si·L⁻¹)	1.02	0.98	0.97	0.97	0.95	0.95	0.96
Bacteria ( $\times 10^6 \cdot mL^{-1}$ )	0.34	0.39	0.36	0.49	0.66	0.66	0.60
Chlorophyll (µg·L⁻¹)	1.14	1.12	1.30	2.09	0.65	0.21	
Alg. Volume ( $mm^3 \cdot m^{-3}$ )	1466	1494	1134	1159	648	1365	
Alg. Carbon (mg C·m⁻³)	169	177	146	136	77	164	

Appendix Table 10. Physical, chemical and biological data from Great Central Lake, Stn. 1, April 27, 1984.

Depth (m)	1	3	5	7.4	11	40
Temperature (°C)	9.4	8.5	8.0	7.4	5.7	
TDS (mg·L <sup>-1</sup> )			26.3			
TDN (μg N·L <sup>-1</sup> )	340	323	131	160	144	
Nitrate (μg N·L <sup>-1</sup> )	27	29	30	26	36	
Ammonia (μg N·L <sup>-1</sup> )	<4	<4	<4	<4	<4	
P <sub>N</sub> (μg N·L <sup>-1</sup> )	13	15	15	18	8	
PC (μg C·L <sup>-1</sup> )	120	203	135	142	82	
TP (μg P·L <sup>-1</sup> )	1	2	<1	2	<1	
PP (μg P·L <sup>-1</sup> )	<0.2	0.3	0.3	0.2	<0.2	
SRS (mg Si·L <sup>-1</sup> )	0.96	0.96	0.94	0.95	0.94	
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	0.61	0.62	0.58	0.71	0.79	
Chlorophyll (μg·L <sup>-1</sup> )	1.08	1.18	1.35	1.88	0.27	
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	1535	1929	1450	1444	545	
Alg. Carbon (mg C·m <sup>-3</sup> )	143	193	158	155	58	

Appendix Table 11. Physical, chemical and biological data from Great Central Lake, Stn. 1, May 11, 1984.

Depth (m)	1	5	10	14	40
Temperature (°C)	10.0	9.8	7.8	6.9	4.6
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	110	171	138	160	186
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	22	21	21	23	38
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	12	16	18	18	7
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	111	120	132	152	95
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )		1	2	<1	2
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	0.5	0.6	0.9	0.9	0.6
SRK (mg Si·L <sup>-1</sup> )	0.96	0.94	0.96	0.94	0.94
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.48	0.34	0.48	0.60	0.52
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.98	1.00	2.00	1.99	0.23
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	2485	1726	2811	2111	231
Alg. Carbon (mg C·m <sup>-3</sup> )	233	152	270	190	23

Appendix Table 12. Physical, chemical and biological data from Great Central Lake, Stn. 1, May 23, 1984.

Depth (m)	1	3	5	20	40
Temperature (°C)	11.4	11.3	11.2	5.8	4.4
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	165	284	240	183	222
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	15	14	14	27	33
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	20	20	15	17	11
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	121	121	123	98	79
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	<1	<1	<1	<1	<1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	0.9	1.1	1.2	1.3	1.0
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.94	0.95	0.96	0.98	0.98
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.44	0.53	0.53	0.81	0.72
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.87	0.95	1.06	1.21	0.30
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )					
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )					

Appendix Table 13. Physical, chemical and biological data from Great Central Lake, Stn. 1, June 8, 1984.

Depth (m)	1	5	10	17	40
Temperature ( $^{\circ}\text{C}$ )	13.3	12.0	8.6	5.9	4.6
TDS ( $\text{mg} \cdot \text{L}^{-1}$ )		22.4			
TDN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	259	262	303	223	262
Nitrate ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	3	8	18	30	41
Ammonia ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	<4	<4	4	<4	<4
PN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	20	19	20	19	8
PC ( $\mu\text{g C} \cdot \text{L}^{-1}$ )	201	202	172	153	100
TP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	1	1	2	<1	1
PP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	0.5	0.4	0.6	0.3	0.3
SRS ( $\text{mg Si} \cdot \text{L}^{-1}$ )	0.89	0.88	0.90	0.92	0.91
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.53	0.36	0.66	0.70	0.58
Chlorophyll ( $\mu\text{g} \cdot \text{L}^{-1}$ )	1.55	1.21	2.16	1.35	0.19
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )					
Alg. Carbon ( $\text{mg C} \cdot \text{m}^{-3}$ )					

Appendix Table 14. Physical, chemical and biological data from Great Central Lake, Stn. 1, June 21, 1984.

Depth (m)	1	3	5	13	40
Temperature (°C)	17.0	16.3	15.3	9.0	4.8
TuN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	329	391	198	185	208
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	3	3	6	16	47
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	50	40	40	45	32
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	218	230	207	202	153
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	<1	2	2	2	<1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	0.6	1.2	1.3	1.1	0.7
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.81	0.81	0.83	0.88	0.97
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.53	0.32	0.66	0.64	0.51
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	1.16	0.94	0.89	2.00	0.24
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )					
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )					

Appendix Table 15. Physical, chemical and biological data from Great Central Lake, Stn. 1; July 4, 1984.

Depth (m)	1	3	5	14	40
Temperature (°C)	17.0	16.4	15.9	9.3	4.5
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	144	143	233	192	127
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	3	2	2	9	40
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	6	<4	7	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	29	27	28	33	13
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	246	221	243	256	165
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	<1	<1	1	1	<1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1.0	1.5	1.2	1.5	1.1
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.58	0.56	0.54	0.81	0.98
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.87	0.96	0.93	1.05	0.77
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.93	0.98	0.98	2.65	1.33
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )					
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )					

Appendix Table 16. Physical, chemical and biological data from Great Central Lake, Stn. 1, July 17, 1984.

Depth (m)	1	5	12	22	40
Temperature (°C)	21.3	17.2	11.1	5.7	3.7
TBN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	140	136	183	370	198
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	2	1	1	30	40
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	11	<4	5	<4	5
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	23	26	31	18	17
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	189	220	272	184	148
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	2	2	2	2
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	0.5	0.7	0.4	0.5	0.5
SrS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.41	0.55	0.33	0.86	0.92
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.78	0.78	0.81	0.88	0.75
Chlorophyll <i>a</i> ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.18	0.80	0.28	1.23	0.62
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )					
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )					

Appendix Table 17. Physical, chemical and biological data from Great Central Lake, Stn. 1, July 31, 1984.

Depth (m)	1	5	15	21	40
Temperature (°C)	22.2	21.2	9.6	7.1	4.7
TDS (mg·L <sup>-1</sup> )	24.0				
TDN (μg N·L <sup>-1</sup> )	305	190	270	125	200
Nitrate (μg N·L <sup>-1</sup> )	4	1	<1	17	39
Ammonia (μg N·L <sup>-1</sup> )	<4	<4	<4	<4	<4
PN (μg N·L <sup>-1</sup> )	19	20	31	33	15
PC (μg C·L <sup>-1</sup> )	165	150	225	276	138
TP (μg P·L <sup>-1</sup> )	<1	<1	4	<1	<1
PP (μg P·L <sup>-1</sup> )	<0.2	0.6	1.1	0.3	<0.2
SrS (mg Si·L <sup>-1</sup> )	0.57	0.39	0.49	0.77	0.85
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	0.63	0.78	0.75	1.04	0.62
Chlorophyll (μg·L <sup>-1</sup> )	0.41	0.60	1.74	4.02	0.41
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )					
Alg. Carbon (mg C·m <sup>-3</sup> )					

Appendix Table 18. Physical, chemical and biological data from Great Central Lake, Stn. 1, August 15, 1984.

Depth (m)	1	3	5	20	40
Temperature ( $^{\circ}\text{C}$ )	19.7	19.3	19.0	6.8	4.4
TDS ( $\text{mg}\cdot\text{L}^{-1}$ )			22.5		
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	109	132	276	148	177
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	2	<1	2	13	41
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	5	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	20	20	28	23	14
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	186	204	208	226	77
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1	2	1	2	<1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1.2	1.5	1.4	1.0	0.9
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.57	0.56	0.60	0.80	0.51
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	1.00	1.41	0.92	1.22	0.61
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.53	0.75	0.53	2.25	0.29
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	690	598	706	11248	1580
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	83	89	107	727	108

Appendix Table 19. Physical, chemical and biological data from Great Central Lake, Stn. 1, August 31, 1984.

Depth (m)	1	3	5	23	40
Temperature (°C)	18.9	18.8	18.7	6.7	4.4
TDS (mg·L <sup>-1</sup> )			22.0		
TDN (μg N·L <sup>-1</sup> )	147	182	187	147	158
Nitrate (μg N·L <sup>-1</sup> )	<1	<1	<1	20	44
Ammonia (μg N·L <sup>-1</sup> )	<4	<4	<4	<4	<4
PN (μg N·L <sup>-1</sup> )	23	31	34	18	24
PC (μg C·L <sup>-1</sup> )	172	214	155	173	156
TP (μg P·L <sup>-1</sup> )	1	2	1	2	2
PP (μg P·L <sup>-1</sup> )	1.7	2.1	1.6	1.4	1.0
SRS (mg Si·L <sup>-1</sup> )	0.64	0.58	0.57	0.75	0.87
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	0.83	1.12	1.44	1.07	0.67
Chlorophyll (μg·L <sup>-1</sup> )	0.36	0.32	0.39	2.66	0.36
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )					
Alg. Carbon (mg C·m <sup>-3</sup> )					

Appendix Table 20. Physical, chemical and biological data from Great Central Lake, Stn. 1, September 12, 1984.

Depth (m)	1	3	5	20	40
Temperature (°C)	17.0	16.9	16.7	6.6	4.2
TDS (mg·L <sup>-1</sup> )			23.5		
TIN (μg N·L <sup>-1</sup> )	505	130	411	144	135
Nitrate (μg N·L <sup>-1</sup> )	2	1	1	8	41
Ammonia (μg N·L <sup>-1</sup> )	<4	<4	<4	<4	<4
PN (μg N·L <sup>-1</sup> )	35	36	35	36	21
PC (μg C·L <sup>-1</sup> )	210	188	221	169	225
TP (μg P·L <sup>-1</sup> )	2	1	2	1	<1
PP (μg P·L <sup>-1</sup> )	1.2	1.6	1.3	0.9	0.7
SRS (mg Si·L <sup>-1</sup> )	0.58	0.48	0.44	0.77	0.89
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	0.94	0.78	1.31	1.19	0.43
Chlorophyll (μg·L <sup>-1</sup> )	1.02	0.97	0.98	1.47	0.35
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )					
Alg. Carbon (mg C·m <sup>-3</sup> )					

Appendix Table 21. Physical, chemical and biological data from Great Central Lake, Stn. 1, September 25, 1984.

Depth (m)	1	3	5	21	40
Temperature (°C)	16.4	16.3	16.3	6.2	4.2
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	154	208	186	172	200
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	2	1	2	27	48
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	22	29	28	32	26
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	219	299	314	364	331
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1	<1	1	<1	<1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1.4	1.4	1.4	1.2	0.8
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.57	0.52	0.51	0.83	0.94
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.86	0.81	1.04	0.83	0.59
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.59	0.75	0.67	1.93	0.36
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )					
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )					

Appendix Table 22. Physical, chemical and biological data from Great Central Lake, Stn. 1, October 9, 1984.

Depth (m)	1	3	5	24	40
Temperature (°C)	12.3	12.2	12.1	3.9	3.0
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	120	150	95	130	135
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	2	2	1	32	44
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	30	33	24	21	17
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	313	404	268	197	120
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	1	2	<1	<1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1.1	1.2	1.1	0.7	0.5
SrS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.57	0.58	0.63	0.75	0.90
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	1.16	0.76	1.71	1.13	0.98
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	1.44	1.77	1.61	1.72	0.61
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )					
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )					

Appendix Table 23. Physical, chemical and biological data from Great Central Lake, Stn. 1, October 24, 1984.

Depth (m)	1	3	5	12	40
Temperature (°C)	11.1	11.0	10.9	10.4	4.2
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	245	118	181	119	195
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	1	1	1	1	47
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	29	32	30	35	12
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	231	241	244	292	283
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	2	2	2	1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1.8	1.9	2.2	1.9	0.8
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.69	0.66	0.60	0.61	0.85
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	1.84	1.54	1.89	1.42	0.75
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	2.05	2.68	1.94	1.99	0.48
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )					
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )					

Appendix Table 24. Physical, chemical and biological data from Great Central Lake, Stn. 1, November 7, 1984.

Depth (m)	1	3	5	15	40
Temperature (°C)	9.2	9.2	9.1	9.1	4.6
TDS ( $\text{mg L}^{-1}$ )			20.5		
TDN ( $\mu\text{g N L}^{-1}$ )	218	233	224	353	226
Nitrate ( $\mu\text{g N L}^{-1}$ )	<1	<1	<1	<1	47
Ammonia ( $\mu\text{g N L}^{-1}$ )	<4	<4	<4	6	18
PN ( $\mu\text{g N L}^{-1}$ )	25	33	31	24	16
PC ( $\mu\text{g C L}^{-1}$ )	228	281	266	188	119
TP ( $\mu\text{g P L}^{-1}$ )	1	2	1	2	<1
PP ( $\mu\text{g P L}^{-1}$ )	1.1	1.8	1.5	1.1	0.5
SRS (mg Si $\cdot \text{L}^{-1}$ )	0.82	0.79	0.78	0.78	0.91
bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	1.31	1.57	1.48	1.47	0.74
Chlorophyll ( $\mu\text{g L}^{-1}$ )	1.30	2.06	1.09	1.40	0.34
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	1101	1112	1065	1187	928
Alg. Carbon ( $\text{mg C m}^{-3}$ )	121	122	113	128	72

Appendix Table 25. Physical, chemical and biological data from Great Central Lake, Stn. 1, November 20, 1984.

Depth (m)	1	3	5	15	40
Temperature (°C)	8.0	8.0	8.0	8.0	8.0
TUN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	285	439	439	387	203
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	2	<1	1	2	36
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	30	31	33	22	22
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	348	300	364	223	185
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	2	2	<1	<1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1.3	1.2	0.7	1.4	0.6
S&S ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.86	0.83	0.82	0.83	0.99
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	1.34	1.20	1.25	1.12	0.16
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	1.61	1.67	1.62	1.41	0.44
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	733	727	709	703	994
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	78	82	78	75	75

Appendix Table 26. Physical, chemical and biological data from Great Central Lake, Stn. 1, December 18, 1984.

Dept'n (m)	1	3	5	10	40
Temperature (°C)	5.3	5.3	5.3	5.3	5.1
TDS (mg·L <sup>-1</sup> )			23.0		
TDN (μg N·L <sup>-1</sup> )	619	547	646	328	540
Nitrate (μg N·L <sup>-1</sup> )	21		20	20	21
Ammonia (μg N·L <sup>-1</sup> )	<4	4	6	5	4
PN (μg N·L <sup>-1</sup> )	16	23	19	22	12
PC (μg C·L <sup>-1</sup> )	107	172	135	149	82
TP (μg P·L <sup>-1</sup> )	2	1	2	2	<1
PP (μg P·L <sup>-1</sup> )	1.5	1.5	1.7	1.8	0.9
SrS (mg Si·L <sup>-1</sup> )	1.00	1.03	1.03	1.03	1.03
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	1.08	0.99	0.96	1.31	0.65
Chlorophyll (μg·L <sup>-1</sup> )	1.10	1.21	1.30	1.16	0.22
Alg. Volume (m <sup>3</sup> ·m <sup>-3</sup> )	593	561	599	680	355
Alg. Carbon (mg C·m <sup>-3</sup> )	73	70	77	77	32

Appendix Table 27. Physical, chemical and biological data from Great Central Lake, Stn. 2, February 8, 1984.

Depth (m)	0	1	3	5	7.5	10	15	23	40
Temperature (°C)	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.0
TDS ( $\text{mg}\cdot\text{L}^{-1}$ )					22.5				
pH						6.4	6.4		
T • Alk. ( $\text{mg}\cdot\text{L}^{-1}$ $\text{CaCO}_3$ )						11.30	11.01		
DIC ( $\text{mg}\cdot\text{L}^{-1}$ )						6.67	6.05		
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )						147	256		
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )						34	33		
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )						<4	<4		
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )						14	15		
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )									
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )						<1	<1		
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )						0.8	0.9		
SKS ( $\text{mg Si}\cdot\text{L}^{-1}$ )						0.90	0.91	0.88	
Bacteria ( $\times 10^6 \cdot \text{ml}^{-1}$ )						0.62	0.75	0.62	
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )						0.59	0.60	0.66	
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )						504	689	437	
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )						71	80	57	
Pr. Prod. ( $\text{mg C}\cdot\text{m}^{-3}\cdot\text{h}^{-1}$ ) <sup>a</sup>						0.42	0.81	1.04	
Pr. Prod. ( $\text{mg C}\cdot\text{m}^{-3}\cdot\text{h}^{-1}$ ) <sup>b</sup>						0.66	0.72	0.60	
Pr. Prod. ( $\text{mg C}\cdot\text{m}^{-3}\cdot\text{h}^{-1}$ ) <sup>c</sup>						0.13	0.28	0.31	
							0.17	0.13	
								0.13	
								0.04	
								0.04	
								0.14	
								0.10	
								0.08	
								0.04	
								0.04	
								0.16	
								0.16	
								0.16	
								0.14	

<sup>a</sup>Total Primary Production ( $>0.2 \mu\text{m}$ ).

<sup>b</sup>Fractionated Primary Production ( $>3.0 \mu\text{m}$ ).

<sup>c</sup>Fractionated Primary Production ( $>8.0 \mu\text{m}$ ).

Appendix Table 28. Physical, chemical and biological data from Great Central Lake, Stn. 2, March 8, 1984.

Depth (m)	0	1	3	5	7.5	10	15	23	40
Temperature (°C)	4.1	4.1	4.0	3.9	3.8	3.8	3.6	3.5	3.5
TDS (mg•L <sup>-1</sup> )				22.0					
pH		6.4			6.2				
T. Alk. (mg•L <sup>-1</sup> CaCO <sub>3</sub> )		12.03			11.84				
DIC (mg•L <sup>-1</sup> )		6.70			8.57				
TDN (μg N•L <sup>-1</sup> )	357		268		203				
Nitrate (μg N•L <sup>-1</sup> )	36		36		37				
Ammonia (μg N•L <sup>-1</sup> )	<4		<4		<4				
PN (μg N•L <sup>-1</sup> )	11		16		13				
PC (μg C•L <sup>-1</sup> )	89		132		86				
Tp (μg P•L <sup>-1</sup> )	<1		1		<1				
Pp (μg P•L <sup>-1</sup> )	0.7		0.7		0.6				
Sks (mg Si•L <sup>-1</sup> )	0.96		0.98		0.95				
Bacteria (X10 <sup>6</sup> •mL <sup>-1</sup> )	0.46		0.52		0.55				
Chlorophyll (μg•L <sup>-1</sup> )	0.36		0.53		0.49				
Alg. Volume (mm <sup>3</sup> •m <sup>-3</sup> )	775		723		617				
Alg. Carbon (mg C•m <sup>-3</sup> )	99		89		70				
Pr. Prod. (mg C•m <sup>-3</sup> •h <sup>-1</sup> ) <sup>a</sup>	0.05		0.00		0.34		0.35	0.28	0.05
Pr. Prod. (mg C•m <sup>-3</sup> •h <sup>-1</sup> ) <sup>b</sup>	0.00		0.00		0.24		0.27	0.22	0.24
Pr. Prod. (mg C•m <sup>-3</sup> •h <sup>-1</sup> ) <sup>c</sup>	0.00		0.00		0.00		0.00	0.10	0.19

aTotal Primary Production (>0.2 μm).

bFractionated Primary Production (>3.0 μm).

cFractionated Primary Production (>8.0 μm).

Appendix Table 29. Physical, chemical and biological data from Great Central Lake, Stn. 2, March 21, 1984.

depth (m)	0	1	3	5	7.5	10	15	23	40
Temperature (°C)	4.8	4.8	4.7	4.7	4.6	4.5	4.3	4.1	3.8
TDS (mg·L⁻¹)					20.0				
pH									
T. Alk. (mg·L⁻¹ CaCO₃)									
DIC (mg·L⁻¹)									
TDN (µg N·L⁻¹)									
Nitrate (µg N·L⁻¹)									
Ammonia (µg N·L⁻¹)									
PN (µg N·L⁻¹)									
PC (µg C·L⁻¹)									
TP (µg P·L⁻¹)									
PP (µg P·L⁻¹)									
SRS (mg Si·L⁻¹)									
Bacteria (X10⁶·mL⁻¹)									
Chlorophyll (µg·L⁻¹)									
Alg. Volume (mm³·m⁻³)									
Alg. Carbon (mg C·m⁻³)									
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>a</sup>	0.15	0.57	0.15	0.09	0.08	0.09	0.02	0.00	0.00
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>b</sup>	0.02	0.00	0.06	0.15	0.05	0.00	0.00	0.00	0.00
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>c</sup>	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>b</sup>Fractionated Primary Production (>3.0 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 30. Physical, chemical and biological data from Great Central Lake, Stn. 2, April 6, 1984.

Depth (m)	0	1	3	5	7.5	12	14	23	40
Temperature (°C)	6.5	6.5	6.4	6.3					
TDS (mg·L⁻¹)					24.7				
pH									
T. Alk. (mg·L⁻¹ CaCO₃)									
DIC (mg·L⁻¹)									
TDN (µg N·L⁻¹)									
Nitrate (µg N·L⁻¹)									
Ammonia (µg N·L⁻¹)									
PN (µg N·L⁻¹)									
PC (µg C·L⁻¹)									
TP (µg P·L⁻¹)									
PP (µg P·L⁻¹)									
Sks (mg Si·L⁻¹)									
Bacteria (X10⁶·mL⁻¹)									
Chlorophyll (µg·L⁻¹)									
Alg. Volume (mm³·m⁻³)									
Alg. Carbon (mg C·m⁻³)									
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>a</sup>	0.15	0.13	0.40	0.23	0.35	0.26	0.34	0.08	
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>b</sup>	0.15	0.09	0.25	0.10	0.10	0.10	0.13		
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>c</sup>	0.00	0.00	0.17	0.18	0.00	0.00	0.00	0.00	

aTotal Primary Production (>0.2 µm).

bFractionated Primary Production (>3.0 µm).

cFractionated Primary Production (>8.0 µm).

Appendix Table 31. Physical, chemical and biological data from Great Central Lake, Stn. 2, April 27, 1984.

Depth (m)	0	1	3	5	7	19	21	25	40
Temperature (°C)	8.4	7.6	6.8	6.5	5.4	5.1	4.8	4.6	3.7
TDS (mg·L⁻¹)									
pH	6.4								
T. Alk. (mg·L⁻¹ CaCO₃)	13.68								
DIC (mg·L⁻¹)	7.28								
TDN (µg N·L⁻¹)	281	155	323	312	231	210			
Nitrate (µg N·L⁻¹)	26	29	29	31	33	38			
Ammonia (µg N·L⁻¹)	<4	<4	<4	5	<4	<4			
PW (µg N·L⁻¹)	9	13	13	10	8	5			
PC (µg C·L⁻¹)	91	122	116	97	79	73			
TP (µg P·L⁻¹)	1	<1	1	1	1	1			
PP (µg P·L⁻¹)	0.3	0.3	<0.2	0.3	0.2	0.2			
SRS (mg Si·L⁻¹)	0.96	0.94	0.93	0.93	0.95	0.93			
Bacteria (X10⁶·mL⁻¹)	0.65	0.53	0.63	0.66	0.81	0.73			
Chlorophyll (µg·L⁻¹)	0.73	1.13	1.11	0.91	0.53	0.20			
Alg. Volume (mm³·m⁻³)	1632	1206	1723	972	832	459			
Alg. Carbon (mg C·m⁻³)	157	125	166	103	82	46			
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>a</sup>	0.04	0.15	0.30	0.25	0.26	0.48			
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>b</sup>	0.14	0.24	0.19	0.20	0.13	0.13			
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>c</sup>	0.00	0.01	0.09	0.07	0.08	0.04			

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>b</sup>Fractionated Primary Production (>3.0 µm).

<sup>c</sup>Fractionated Primary Production (>6.0 µm).

Appendix Table 32. Physical, chemical and biological data from Great Central Lake, Stn. 2, May 11, 1984.

Depth (m)	0	1	3	5	7.5	10	15	40
Temperature (°C)	9.9	9.8	9.7	9.5		7.7	7.2	4.6
pH								
T. Alk. (mg·L⁻¹ CaCO₃)	6.6 10.91 4.31							
DIC (mg·L⁻¹)								
TDN (µg N·L⁻¹)	94	151						
Nitrate (µg N·L⁻¹)	23	22						
Ammonia (µg N·L⁻¹)	<4	<4						
PN (µg N·L⁻¹)	14	15						
PC (µg C·L⁻¹)	135	109	130					
TP (µg P·L⁻¹)	<1	<1						
PP (µg P·L⁻¹)	0.7	0.7	0.9					
SRS (mg Si·L⁻¹)	0.95	0.95	0.91					
Bacteria (x10⁶·mL⁻¹)	0.38	0.31	0.50					
Chlorophyll (µg·L⁻¹)	1.04	1.03	1.07					
Alg. Volume (mm³·m⁻³)	2319	2212	2236					
Alg. Carbon (mg C·m⁻³)	201	200	195					
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>a</sup>	0.00	0.34	0.38					
Pr. prod. (mg C·m⁻³·h⁻¹) <sup>b</sup>	0.00	0.21	0.37					
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>c</sup>	0.00	0.09	0.26					
				0.38	0.54	0.06		
				0.35	0.30			
				0.35	0.00	0.00		

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>b</sup>Fractionated Primary Production (>3.0 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 33. Physical, chemical and biological data from Great Central Lake, Stn. 2, May 23, 1984.

Depth (m)	0	1	3	5	6	9	12	15	19	23	40
pH											
T. Alk. ( $\text{mg L}^{-1}$ CaCO <sub>3</sub> )	10.7	10.6	10.5	10.4	10.3	10.1	9.4	8.3	6.0	5.2	
DIC ( $\text{mg L}^{-1}$ )			6.4								
TDN ( $\mu\text{g N L}^{-1}$ )	155	174	179	247							
Nitrate ( $\mu\text{g N L}^{-1}$ )	16	16	19	17							
Ammonia ( $\mu\text{g N L}^{-1}$ )	<4	4	<4	<4							
PN ( $\mu\text{g N L}^{-1}$ )	18	17	18	17							
PC ( $\mu\text{g C L}^{-1}$ )	111	146	119	112							
TP ( $\mu\text{g P L}^{-1}$ )		<1	2	<1							
PP ( $\mu\text{g P L}^{-1}$ )	1.5	1.9	1.6	1.7							
SKS ( $\text{mg Si L}^{-1}$ )	0.97	0.98	0.98	0.99							
Bacteria ( $\times 10^6 \text{ mL}^{-1}$ )	0.49	0.48	0.41	0.32							
Chlorophyll ( $\mu\text{g L}^{-1}$ )	1.08	1.08	1.11	1.16							
Alg. Volume ( $\text{mm}^3 \text{ m}^{-3}$ )	4202	5507	5337	4586							
Alg. Carbon ( $\text{mg C m}^{-3}$ )	327	433	428	358							
Pr. Prod. ( $\text{mg C m}^{-3} \text{ h}^{-1}$ ) <sup>a</sup>	0.86		1.16	0.84	0.63	0.37	0.19	0.30	0.09		
Pr. Prod. ( $\text{mg C m}^{-3} \text{ h}^{-1}$ ) <sup>b</sup>		0.56	0.56	0.78	0.39	0.27	0.06	0.20	0.06		
Pr. Prod. ( $\text{mg C m}^{-3} \text{ h}^{-1}$ ) <sup>c</sup>	0.33		0.00	0.22	0.13	0.00	0.00	0.00	0.00		

<sup>a</sup>Total Primary Production ( $>0.2 \mu\text{m}$ )

<sup>b</sup>Fractionated Primary Production ( $>3.0 \mu\text{m}$ )

<sup>c</sup>Fractionated Primary Production ( $>8.0 \mu\text{m}$ )

Appendix Table 34. Physical, chemical and biological data from Great Central Lake, Stn. 2, June 8, 1984.

Depth (m)	0	1	3	5	7.5	9	15	30	40
Temperature (°C)	11.7	11.5		10.0		9.2	7.8		4.6
TDS (mg·L <sup>-1</sup> )				26.1					
pH					6.3				
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )					6.4				
DIC (mg·L <sup>-1</sup> )					11.00				
					5.61				
						11.00			
TDN (µg N·L <sup>-1</sup> )						6.87			
Nitrate (µg N·L <sup>-1</sup> )	241								
Ammonia (µg N·L <sup>-1</sup> )	10								
PN (µg N·L <sup>-1</sup> )	<4								
	22								
PC (µg C·L <sup>-1</sup> )									
TP (µg P·L <sup>-1</sup> )									
PP (µg P·L <sup>-1</sup> )									
SiS (mg Si·L <sup>-1</sup> )	0.90								
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	0.47								
Chlorophyll (µg·L <sup>-1</sup> )	1.47								
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )									
Alg. Carbon (mg C·m <sup>-3</sup> )									
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	0.40								
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.17								
	0.72								
	0.56								
	1.25								
	2.29								
	1.71								
	1.03								
	0.95								
	1.89								
	0.51								
	0.26								

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 35. Physical, chemical and biological data from Great Central Lake, Stn. 2, June 21, 1984.

Depth (m)	0	1	3	5	10	12	14	16	40
Temperature (°C)	16.5	16.3	16.0	15.0				8.7	4.7
pH					6.6		6.2		
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )					11.95		11.47		
DIC (mg·L <sup>-1</sup> )					4.64		6.98		
TDN (µg N·L <sup>-1</sup> )					192	238	270		
Nitrate (µg N·L <sup>-1</sup> )					12	6	11		
Ammonia (µg N·L <sup>-1</sup> )					<4	4	<4		
PN (µg N·L <sup>-1</sup> )					40	40	40		
PC (µg C·L <sup>-1</sup> )					209	220	198		
TP (µg P·L <sup>-1</sup> )					1	2	2		
PP (µg P·L <sup>-1</sup> )					1.6	1.5	1.4		
SRS. (mg Si·L <sup>-1</sup> )					0.76	0.75	0.83		
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )					0.75	0.50	0.66		
Chlorophyll (µg·L <sup>-1</sup> )					1.02	1.07	1.24		
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )									
Alg. Carbon (mg C·m <sup>-3</sup> )									
Pr. Prod. (mg G·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	1.29	1.52	1.78		2.19	1.68	1.24		
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.68	0.67	0.80		1.22	0.65	0.39		
								0.36	

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 36. Physical, chemical and biological data from Great Central Lake, Stn. 2, July 4, 1984.

Depth (m)	0	1	3	5	7.5	9	11.2	12	40
Temperature (°C)	16.8	16.8	16.7	16.6					
pH									
T. Alk. ( $\text{mg L}^{-1}$ CaCO <sub>3</sub> )	6.2	6.3	6.4						
DIC ( $\text{mg L}^{-1}$ )	12.81	12.00	11.57						
	7.98	6.42	5.78						
TDN ( $\mu\text{g N L}^{-1}$ )	174	128	111						
Nitrate ( $\mu\text{g N L}^{-1}$ )	2	3	3						
Ammonia ( $\mu\text{g N L}^{-1}$ )	6	<4	<4						
PN ( $\mu\text{g N L}^{-1}$ )	28	23	30						
PC ( $\mu\text{g C L}^{-1}$ )	235	209	307						
TP ( $\mu\text{g P L}^{-1}$ )	2	1	1						
PP ( $\mu\text{g P L}^{-1}$ )	1.4	1.7	1.5						
SRS ( $\text{mg Si L}^{-1}$ )	0.52	0.50	0.51						
Bacteria ( $\times 10^6 \text{ mL}^{-1}$ )	0.70	0.84	0.95						
Chlorophyll ( $\mu\text{g L}^{-1}$ )	0.24	1.27	1.04						
Alg. Volume ( $\text{mm}^3 \text{ m}^{-3}$ )									
Alg. Carbon ( $\text{mg C m}^{-3}$ )									
Pr. prod. ( $\text{mg C m}^{-3} \text{ h}^{-1}$ ) <sup>a</sup>	3.48	2.09	1.24						
Pr. prod. ( $\text{mg C m}^{-3} \text{ h}^{-1}$ ) <sup>c</sup>	2.83	1.66	0.86						
Total Primary Production ( $>0.2 \mu\text{m}$ )									
Fractionated Primary Production ( $>8.0 \mu\text{m}$ )									

<sup>a</sup>Total Primary Production ( $>0.2 \mu\text{m}$ ).

<sup>c</sup>Fractionated Primary Production ( $>8.0 \mu\text{m}$ ).

Appendix Table 37. Physical, chemical and biological data from Great Central Lake, Stn. 2, July 17, 1984.

Depth (m)	0	1	5	10	14	20	28	30	40
Temperature (°C)	20.4	20.3	19.3			12.2	8.4		
pH									
T. Alk. (mg•L <sup>-1</sup> CaCO <sub>3</sub> )	6.5	6.3				6.2			
DIC (mg•L <sup>-1</sup> )	10.95	11.47				10.85			
TDN (µg N•L <sup>-1</sup> )	4.51	5.75				7.38			
Nitrate (µg N•L <sup>-1</sup> )	234	317				242	310		
Ammonia (µg N•L <sup>-1</sup> )	<4	<4				<4	33		
PN (µg N•L <sup>-1</sup> )	22	27				35	22		
PC (µg C•L <sup>-1</sup> )	174	246				267	148		
TP (µg P•L <sup>-1</sup> )	2	2				2	2		
PP (µg P•L <sup>-1</sup> )	0.9	0.8				1.1	0.9		
SRS (mg Si•L <sup>-1</sup> )	0.48	0.40				0.41	0.88		
Bacteria (x10 <sup>6</sup> •mL <sup>-1</sup> )	1.16	1.13				0.80	0.71		
Chlorophyll (µg•L <sup>-1</sup> )	0.38	0.07				3.17	1.48		
Alg. Volume (mm <sup>3</sup> •m <sup>-3</sup> )									
Alg. Carbon (mg C•m <sup>-3</sup> )									
Pr. Prod. (mg C•m <sup>-3</sup> •h <sup>-1</sup> ) <sup>a</sup>	1.79	0.67				1.30	0.41	0.07	0.03
Pr. Prod. (mg C•m <sup>-3</sup> •h <sup>-1</sup> ) <sup>c</sup>	0.60	0.20	0.01	0.38	1.28	0.16	0.00	0.00	

<sup>a</sup>Total Primary Production (>0.2 µm).  
<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 38. Physical, chemical and biological data from Great Central Lake, Stn. 2, July 31, 1984.

Depth (m)	0	1	3	5	7.5	10	18	40
Temperature (°C)	21.7	21.6	21.3	21.0			8.5	4.5
TDS (mg·L⁻¹)				22.4				
pH	6.1				6.1			
T. Alk. (mg·L⁻¹ CaCO₃)	10.95				10.04			
DIC (mg·L⁻¹)	7.54				6.77			
TDN (µg N·L⁻¹)								
Nitrate (µg N·L⁻¹)	135	220	185					
Ammonia (µg N·L⁻¹)	2	2	1					
PN (µg N·L⁻¹)	<4	<4	<4					
PC (µg C·L⁻¹)	23	23	23					
TP (µg P·L⁻¹)	199	172	173					
PP (µg P·L⁻¹)	2	1	1					
SiS (µg Si·L⁻¹)	0.9	1.8	0.9					
Bacteria (x10⁶·mL⁻¹)	0.46	0.38	0.40					
Chlorophyll (µg·L⁻¹)	1.18	1.06	0.96					
Alg. Volume (mm³·m⁻³)	0.55	0.55	0.52					
Alg. Carbon (mg C·m⁻³)								
Pr. Prod. (mg C·m⁻³·h⁻¹)a								
Pr. prod. (mg C·m⁻³·h⁻¹)c	3.18	3.10	2.03	1.67	1.00	0.55	1.44	
			0.60	0.38	0.19	0.16	0.67	

aTotal Primary Production (>0.2 µm).  
cFractionated Primary Production (>8.0 µm).

Appendix Table 39. Physical, chemical and biological data from Great Central Lake, Stn. 2, August 15, 1984.

Depth (m)	0	1	3	5	7.5	10	15	19	40
Temperature (°C)	19.7	19.7	19.6	19.6					
TDS (mg·L <sup>-1</sup> )					16.5	9.5	7.3	4.6	
pH					6.3	6.4			6.2
T. Alk. (μg·L <sup>-1</sup> CaCO <sub>3</sub> )				11.00	11.00				9.75
DIC (mg·L <sup>-1</sup> )				5.84	5.23				6.98
TDN (μg N·L <sup>-1</sup> )					132	135			
Nitrate (μg N·L <sup>-1</sup> )					<1	<1			16 <sup>4</sup>
Ammonia (μg N·L <sup>-1</sup> )					<4	<4			4 <sup>1</sup>
PN (μg N·L <sup>-1</sup> )					23	30			<4 <sup>2</sup>
PC (μg C·L <sup>-1</sup> )									11 <sup>3</sup>
T P (μg P·L <sup>-1</sup> )									18 <sup>4</sup>
F P (μg P·L <sup>-1</sup> )									90 <sup>5</sup>
SRS (μg Si·L <sup>-1</sup> )									
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )									
Chlorophyll (μg·L <sup>-1</sup> )									
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )									
Alg. Carbon (mg C·m <sup>-3</sup> )									
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	2.05	1.19	1.87	1.56	1.01	0.69	0.55	0.35	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.50	0.29	0.32	0.43	0.17	0.11	0.22	0.22	

<sup>a</sup>Total Primary Production (>0.2 μm).

<sup>c</sup>Fractionated Primary Production (>8.0 μm).

Appendix Table 40. Physical, chemical and biological data from Great Central Lake, Stn. 2, August 31, 1984.

Depth (m)	0	1	3	5	7	15	20	23	40
Temperature (°C)	18.5	18.4	18.2	18.0				7.5	4.6
TDS (mg·L⁻¹)					21.5				
pH	6.4					6.6			
T. Alk. (mg·L⁻¹)	9.99					11.66			
DIC (mg·L⁻¹)	4.85					4.24			
TN (µg N·L⁻¹)	158	263	153				225		
Nitrate (µg N·L⁻¹)	<1	<1	<1				14		
Ammonia (µg N·L⁻¹)	<4	<4	<4				<4		
PN (µg N·L⁻¹)	31	26	34				31		
PC (µg C·L⁻¹)	156	156	173			167			
TP (µg P·L⁻¹)	2	3	2				2		
PP (µg P·L⁻¹)	2.2	1.6	1.9				1.2		
SKS (mg Si·L⁻¹)	0.58	0.58	0.56				0.69		
Bacteria (x10⁶·mL⁻¹)	1.08	1.01	1.40				0.99		
Chlorophyll (µg·L⁻¹)	0.52	0.49	0.49				2.45		
Alg. Volume (mm³·m⁻³)									
Alg. Carbon (mg C·m⁻³)									
Pr. Prod. (mg C·m⁻³·h⁻¹) a	1.21	1.38	1.15	0.93					
Pr. Prod. (mg C·m⁻³·h⁻¹)c	0.28	0.28	0.24	0.23					
								0.18	0.12
								0.13	0.11

Appendix Table 41. Physical, chemical and biological data from Great Central Lake, Stn. 2, September 12, 1984.

Depth (m)	0	1	3	5	7.5	10	13	30	40
Temperature (°C)	16.9	16.9	16.8	16.7					
TuS (mg·L <sup>-1</sup> )					21.2				
pH						6.5			
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )						11.43			
DIC (mg·L <sup>-1</sup> )						6.15			
TDN (µg N·L <sup>-1</sup> )						319			
Nitrate (µg N·L <sup>-1</sup> )						95			
Ammonia (µg N·L <sup>-1</sup> )						2			
PN (µg N·L <sup>-1</sup> )						<4			
PC (µg C·L <sup>-1</sup> )						32			
TP (µg P·L <sup>-1</sup> )						40			
PP (µg P·L <sup>-1</sup> )						240			
SRS (mg Si·L <sup>-1</sup> )						267			
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )						236			
Chlorophyll (µg·L <sup>-1</sup> )						240			
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )						267			
Alg. Carbon (mg C·m <sup>-3</sup> )						236			
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>						2.53			
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>						0.86			
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>b</sup>						0.70			
Total Primary Production (>0.2 µm)						2.27			
Fractionated Primary Production (>8.0 µm)						0.72			

<sup>a</sup>Total Primary Production (>0.2 µm).  
<sup>b</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 42. Physical, chemical and biological data from Great Central Lake, Stn. 2, September 25, 1984.

Depth (m)	0	1	3	5	7.5	12	21	40
Temperature (°C)	16.4	16.4	16.3	16.2			7.0	4.9
pH			7.5		7.4			
T. Alk. (mg•L <sup>-1</sup> CaCO <sub>3</sub> )		13.39		13.39				
DIC (mg•L <sup>-1</sup> )	3.46		3.55		3.55			
TUN (µg N•L <sup>-1</sup> )	149	208	327		189	166		
Nitrate (µg N•L <sup>-1</sup> )	2	25	15		38	51		
Ammonia (µg N•L <sup>-1</sup> )	<4	5	5		<4	<4		
PN (µg N•L <sup>-1</sup> )	46	44	34		28	10		
PC (µg C•L <sup>-1</sup> )	525	457	289		293	111		
TP (µg P•L <sup>-1</sup> )	1	1	1		1	<1		
PP (µg P•L <sup>-1</sup> )	1.8	2.1	1.8		1.0	0.8		
SKS (mg Si•L <sup>-1</sup> )	0.48	0.48	0.46		0.48	0.92		
Bacteria (x10 <sup>6</sup> •mL <sup>-1</sup> )	1.26	1.06	1.15		0.75	0.62		
Chlorophyll (µg•L <sup>-1</sup> )	0.90	0.98	0.84		2.13	0.26		
Alg. Volume (mm <sup>3</sup> •m <sup>-3</sup> )								
Alg. Carbon (mg C•m <sup>-3</sup> )								
Pr. Prod. (mg C•m <sup>-3</sup> •h <sup>-1</sup> ) <sup>a</sup>	0.85	0.50	1.26	0.88	0.69	0.54	0.04	
Pr. Prod. (mg C•m <sup>-3</sup> •h <sup>-1</sup> ) <sup>c</sup>	0.50	0.26	0.63	0.30	0.14	0.09	0.00	

<sup>a</sup>Total Primary Production (>0.2 µm).  
<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 43. Physical, chemical and biological data from Great Central Lake, Stn. 2, October 9, 1984.

Depth (m)	0	1	3	5	10	18	28	30	40	3.1
Temperature (°C)	13.1	13.1	13.0	13.0						
pH		7.5			7.1					
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )		12.72			12.76					
DIC (mg·L <sup>-1</sup> )		3.34			3.72					
TDN (µg N·L <sup>-1</sup> )		125			110					
Nitrate (µg N·L <sup>-1</sup> )		1			1					
Ammonia (µg N·L <sup>-1</sup> )		<4			<4					
PN (µg N·L <sup>-1</sup> )		29			26					
PC (µg C·L <sup>-1</sup> )		215			203					
TP (µg P·L <sup>-1</sup> )		2			2					
PP (µg P·L <sup>-1</sup> )		1.3			1.3					
SRS (mg Si·L <sup>-1</sup> )		0.62			0.57					
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )		1.37			1.02					
Chlorophyll (µg·L <sup>-1</sup> )		1.83			1.77					
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )										
Alg. Carbon (mg C·m <sup>-3</sup> )										
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	1.02	0.67	0.35	0.16	0.03	0.02	0.01	0.01	0.01	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.27	0.15	0.07	0.05	0.02	0.01	0.01	0.00	0.00	

<sup>a</sup>Total Primary Production (>0.2 µm).  
<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 44. Physical, chemical and biological data from Great Central Lake, Stn. 2, October 24, 1984.

Depth (m)	0	1	3	5	8	10	15	40
Temperature (°C)	11.3	11.2	11.1	10.9	10.6			
pH		7.1				7.2		
T. Alk. (mg·L⁻¹ CaCO₃)	11.43					10.76		
DIC (mg·L⁻¹)	3.40					3.00		
TDN (µg N·L⁻¹)	92	233	219	145				
Nitrate (µg N·L⁻¹)	1	1	1	1				
Ammonia (µg N·L⁻¹)	<4	<4	<4	<4				
PN (µg N·L⁻¹)	28	33	30	31				
PC (µg C·L⁻¹)	244	270	219	259				
TP (µg P·L⁻¹)	2	2	3	3				
PP (µg P·L⁻¹)	2.6	2.3	2.3	2.2				
SRS (µg Si·L⁻¹)	0.63	0.63	0.61	0.61				
Bacteria (X10⁶·mL⁻¹)	1.67	1.15	1.20	1.33				
Chlorophyll (µg·L⁻¹)	3.06	3.00	2.68	2.52				
Alg. Volume (mm³·m⁻³)								
Alg. Carbon (mg C·m⁻³)								
Pr. prod. (mg C·m⁻³·h⁻¹)a	2.24	0.96	0.48	0.12	0.10	0.03		
Pr. prod. (mg C·m⁻³·h⁻¹)c	0.39	0.15	0.04	0.00	0.05			

aTotal Primary Production (>0.2 µm).

cFractionated Primary Production (>8.0 µm).

Appendix Table 45. Physical, chemical and biological data from Great Central Lake, Stn. 2, November 7, 1984.

Depth (m)	0	1	3	5	7.5	10	13	40
Temperature (°C)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	4.7
TDS (mg·L⁻¹)								
pH								
T. Alk. (mg·L⁻¹ CaCO₃)								
DIC (mg·L⁻¹)								
TDN (µg N·L⁻¹)								
Nitrate (µg N·L⁻¹)								
Ammonia (µg N·L⁻¹)								
PN (µg N·L⁻¹)								
PC (µg C·L⁻¹)								
TP (µg P·L⁻¹)								
PP (µg P·L⁻¹)								
SRS (mg Si·L⁻¹)								
Bacteria (X10⁶·mL⁻¹)								
Chlorophyll (µg·L⁻¹)								
Alg. Volume (mm³·m⁻³)								
Alg. Carbon (mg C·m⁻³)								
Pr. Prod. (mg C·m⁻³·h⁻¹)⁹	1.21	1.32	1.69	0.89	0.50	0.28	0.12	0.08
Pr. Prod. (mg C·m⁻³·h⁻¹)₁₀	0.26	0.42	0.45	0.21	0.21	0.21	0.00	0.00

Total Primary Production ( $>0.2 \mu\text{m}$ )

Appendix Table 46. Physical, chemical and biological data from Great Central Lake, Stn. 2, November 20, 1984.

Depth (m)	0	1	3	5	8	10	14	40
Temperature (°C)	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.0
pH								4.7
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )	7.0							
DIC (mg·L <sup>-1</sup> )	11.71							
	3.66							
TDN (µg N·L <sup>-1</sup> )	214	263	219					237
Nitrate (µg N·L <sup>-1</sup> )	3	3	2					37
Ammonia (µg N·L <sup>-1</sup> )	<4	<4	<4					<4
FN (µg N·L <sup>-1</sup> )	29	29	31					21
PC (µg C·L <sup>-1</sup> )	282	267	220					
TP (µg P·L <sup>-1</sup> )	2	1	<1					<1
PP (µg P·L <sup>-1</sup> )	1.0	1.4	1.1					0.5
SXS (mg Si·L <sup>-1</sup> )	0.79	0.84	0.84					0.83
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	1.25	1.39	1.09					1.40
Chlorophyll (µg·L <sup>-1</sup> )	1.50	1.43	1.35					1.23
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	604	665	745					807
Alg. Carbon (mg C·m <sup>-3</sup> )	64	75	83					62
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	1.19	1.13	1.26	0.95	0.39	0.19	0.00	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.34	0.23	0.32	0.29	0.20	0.06		

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 47. Physical, chemical and biological data from Great Central Lake, Stn. 2, December 18, 1984.

Depth (m)	0	1	3	5	5.5	5.6	5.4	5.4	12	10	7.5	7.5	5.5	5.5	5.5	5.5	5.5	5.5	40	
Temperature (°C)	5.5	5.5	5.5	5.5	5.5	5.5	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	4.6	
TDS (mg·L <sup>-1</sup> )																				
pH	6.9																			
T· Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )	11.55																			
DIC (mg·L <sup>-1</sup> )	3.75																			
TDN (µg N·L <sup>-1</sup> )	363																			
Nitrate (µg N·L <sup>-1</sup> )	22																			
Ammonia (µg N·L <sup>-1</sup> )	<4																			
PN (µg N·L <sup>-1</sup> )	18																			
PC (µg C·L <sup>-1</sup> )	133																			
TP (µg P·L <sup>-1</sup> )	<1																			
PP (µg P·L <sup>-1</sup> )	1.1																			
SRS (mg Si·L <sup>-1</sup> )	1.05																			
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	1.82																			
Chlorophyll (µg·L <sup>-1</sup> )	1.10																			
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	735																			
Alg. Carbon (mg C·m <sup>-3</sup> )	79																			
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	0.46																			
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.40																			

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 48. Physical, chemical and biological data from Henderson Lake, March 19, 1984.

Depth (m)	0	3	5	30
Temperature (°C)	6.4	5.9	5.9	5.5
TDS (mg·L⁻¹)			80.3	
TDN (µg N·L⁻¹)	228	185	226	287
Nitrate (µg N·L⁻¹)	34	34	34	36
Ammonia (µg N·L⁻¹)	<4	<4	<4	<4
PN (µg N·L⁻¹)	14	30	13	26
PC (µg C·L⁻¹)	111	98	128	79
TP (µg P·L⁻¹)	1	1	<1	<1
PP (µg P·L⁻¹)	1.3	1.5	1.3	1.5
SRS (mg Si·L⁻¹)	0.46	0.47	0.43	0.43
Bacteria (x10⁶·mL⁻¹)	0.63	0.76	0.65	0.76
Chlorophyll (µg·L⁻¹)	0.15	0.43	0.45	0.23
Alg. Volume (mm³·m⁻³)	548	633	530	383
Alg. Carbon (mg C·m⁻³)	62	65	60	49

Appendix Table 49. Physical, chemical and biological data from Henderson Lake, April 24, 1984.

Depth (m)	1	3	5	7.4	7.7	30
Temperature (°C)	8.2					5.3
TDS (mg·L <sup>-1</sup> )						
TDN (μg N·L <sup>-1</sup> )	205	261	199	233		
Nitrate (μg N·L <sup>-1</sup> )	24	24	22	30		
Ammonia (μg N·L <sup>-1</sup> )	<4	<4	<4	<4		
PN (μg N·L <sup>-1</sup> )	14	36	17	8		
PC (μg C·L <sup>-1</sup> )	117	145	126	105		
TP (μg P·L <sup>-1</sup> )	1	2	<1	<1		
PP (μg P·L <sup>-1</sup> )	0.9	1.0	1.1	0.9		
SRS (mg Si·L <sup>-1</sup> )	0.48	0.42	0.42	0.43		
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	0.86	0.83	0.78	0.97		
Chlorophyll (μg·L <sup>-1</sup> )	0.84	1.09	1.06	0.34		
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	2137	2097	1559	593		
Alg. Carbon (mg C·m <sup>-3</sup> )	184	174	128	61		

Appendix Table 50. Physical, chemical and biological data from Henderson Lake, May 22, 1984.

Depth (m)	1	3	5	10.0	5	30
Temperature (°C)	10.2	10.1	10.1	10.0	5.8	
TDS (mg·L <sup>-1</sup> )				60.4		
TDN (µg N·L <sup>-1</sup> )	222	304	230	429		
Nitrate (µg N·L <sup>-1</sup> )	21	20	20	32		
Ammonia (µg N·L <sup>-1</sup> )	<4	<4	<4	<4		
P <sub>N</sub> (µg N·L <sup>-1</sup> )	16	15	6	5		
PC (µg C·L <sup>-1</sup> )	125	120	136	65		
TP (µg P·L <sup>-1</sup> )	5	5	5			
PP (µg P·L <sup>-1</sup> )	2.6	2.7	3.0	2		
SWS (mg Si·L <sup>-1</sup> )	0.55	0.51	0.48	0.50		
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	0.60	0.62	0.67	0.59		
Chlorophyll (µg·L <sup>-1</sup> )	1.85	1.79	1.77	0.20		
alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	5596	5345	6171	602		
alg. Carbon (mg C·m <sup>-3</sup> )	415	404	464	56		

Appendix Table 51. Physical, chemical and biological data from Henderson Lake, June 18, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	14.9	14.7	14.5	6.7
TDS (mg·L⁻¹)				57.0
TDN (µg N·L⁻¹)	143	129	106	327
Nitrate (µg N·L⁻¹)	16	15	14	41
Ammonia (µg N·L⁻¹)	4	4	<4	<4
PN (µg N·L⁻¹)	32	36	31	12
PC (µg C·L⁻¹)	232	229	212	134
TP (µg P·L⁻¹)	3	4	3	<1
PP (µg P·L⁻¹)	2.5	3.8	2.9	<0.2
SRS (ng Si·L⁻¹)	0.44	0.42	0.41	0.51
Bacteria (x10⁶·mL⁻¹)	0.99	1.75	1.69	0.76
Chlorophyll (µg·L⁻¹)	2.54	3.63	3.53	0.21
Alg. Volume (mm³·m⁻³)	5720	7258	9968	501
Alg. Carbon (mg C·m⁻³)	450	556	717	56

Appendix Table 52. Physical, chemical and biological data from Henderson Lake, July 16, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	18.3	18.1	17.9	6.7
TUN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	232	311	293	312
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	5	5	6	39
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	44	54	49	17
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	294	373	369	142
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	5	5	5	2
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2.2	3.7	3.1	0.3
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.30	0.19	0.19	0.30
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	2.02	1.75	2.31	0.81
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	3.20	3.16	3.23	0.17
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	7554	5518	5488	514
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	599	464	502	48

Appendix Table 53. Physical, chemical and biological data from Henderson Lake, August 14, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	18.9	18.8	18.7	6.9
TDS (mg·L <sup>-1</sup> )				
TDN (µg N·L <sup>-1</sup> )	211	218	211	179
Nitrate (µg N·L <sup>-1</sup> )	4	3	3	36
Ammonia (µg N·L <sup>-1</sup> )	5	7	5	6
PN (µg N·L <sup>-1</sup> )	36	37	56	11
PC (µg C·L <sup>-1</sup> )	378	366	362	134
TP (µg P·L <sup>-1</sup> )	4	3	4	1
PP (µg P·L <sup>-1</sup> )	3.9	4.5	3.6	1.3
SRS (mg Si·L <sup>-1</sup> )	0.27	0.25	0.31	0.43
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	1.62	1.82	1.67	0.87
Chlorophyll (µg·L <sup>-1</sup> )	6.37	7.27	6.37	0.31
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	1754	2218	2416	754
Alg. Carbon (mg C·m <sup>-3</sup> )	245	275	284	60

Appendix Table 54. Physical, chemical and biological data from Henderson Lake, September 11, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	17.0	16.9	16.8	6.7
TDS (mg·L <sup>-1</sup> )			53.6	
T <sub>DN</sub> ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	130	105	103	133
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	3	2	1	39
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	35	44	39	18
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	282	379	301	210
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	3	3	3	1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	0.8	1.2	1.4	1.1
SRS (mg Si·L <sup>-1</sup> )	0.24	0.13	0.10	0.27
bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	2.13	1.43	1.77	0.81
Chlorophyll (μg·L <sup>-1</sup> )	4.36	4.05	3.40	0.30
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	2203	3911	2203	360
Alg. Carbon (mg C·m <sup>-3</sup> )	251	449	246	36

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Appendix Table 55. Physical, chemical and biological data from Henderson Lake, October 10, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	11.7	11.6	11.6	5.3
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	265	155	225	225
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	7	7	7	49
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	5	4	<4	6
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	47	41	48	33
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	325	368	363	197
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	2	2	<1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2.2	2.2	2.1	1.3
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.37	0.27	0.25	0.42
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	1.37	1.28	1.22	0.64
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	2.85	3.07	3.24	0.73
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	2339	1478	1766	350
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	226	170	186	33

Appendix Table 56. Physical, chemical and biological data from Henderson Lake, November 6, 1984.

Depth (m)	1	3	5	9.8	9.8	30
Temperature (°C)						
TDS (mg•L <sup>-1</sup> )						
TDN (μg N•L <sup>-1</sup> )	193	231			205	287
Nitrate (μg N•L <sup>-1</sup> )	16	16			15	34
Ammonia (μg N•L <sup>-1</sup> )	4	9			<4	6
PN (μg N•L <sup>-1</sup> )	36	21			26	23
PC (μg C•L <sup>-1</sup> )	260	178			250	295
TP (μg P•L <sup>-1</sup> )	2	1			1	<1
pP (μg P•L <sup>-1</sup> )	1.3	1.2			1.4	1.4
SiS (mg Si•L <sup>-1</sup> )	0.40	0.36			0.30	0.30
Bacteria (X10 <sup>6</sup> •mL <sup>-1</sup> )	1.60	1.24			1.68	1.08
Chlorophyll (μg•L <sup>-1</sup> )	1.42	1.66			1.42	0.88
Alg. Volume (mm <sup>3</sup> •m <sup>-3</sup> )	1389	1162			1036	535
Alg. Carbon (mg C•m <sup>-3</sup> )	146	119			106	58

Appendix Table 57. Physical, chemical and biological data from Hobiton Lake, March 19, 1984.

Depth (m)	Temperature (°C)	1	3	5	30	5.6
TDS (mg·L⁻¹)		6.6	6.5	6.4		
TUN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	290	263	186	266		
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	30	30	31	34		
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	4	<4		
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	36	36	36	35		
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	191	133	155	141		
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1	1	<1	<1		
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1.9	2.0	2.0	1.8		
SKS (mg Si·L⁻¹)	0.97	0.98	0.99	0.98		
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	1.00	0.91	0.87	0.48		
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.51	0.53	0.55	0.28		
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	385	315	418	380		
Alg. Carbon (mg C·m⁻³)	49	42	55	53		

Appendix Table 58. Physical, chemical and biological data from Hobiton Lake, April 24, 1984.

Depth (m)		1	3	5	8.2	5	30
Temperature (°C)		9.1		8.5			
TDS (mg·L <sup>-1</sup> )					28.7		
TUN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )		169		276	290		180
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )		19		20	21		36
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )		<4		4	<4		<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )		15		43	23		10
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )		145		181	204		117
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )		<1		2	1		2
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )		0.8		1.1	1.1		1.0
SRS (mg Si·L <sup>-1</sup> )		1.06		1.07	1.09		1.09
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )		0.72		0.68	0.67		0.90
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )		1.30		1.51	2.07		0.22
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )		1811		1534	1403		435
Alg. Carbon (mg C·m <sup>-3</sup> )		199		175	166		57

Appendix Table 59. Physical, chemical and biological data from Hobiton Lake, May 22, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	11.3	11.2	11.1	5.9
TDS (mg·L <sup>-1</sup> )				
TDN (µg N·L <sup>-1</sup> )	251	165	193	201
Nitrate (µg N·L <sup>-1</sup> )	2	2	2	35
Ammonia (µg N·L <sup>-1</sup> )	<4	<4	<4	<4
PN (µg N·L <sup>-1</sup> )	18	21	21	9
PC (µg C·L <sup>-1</sup> )	172	182	176	111
TP (µg P·L <sup>-1</sup> )	5	5	6	4
PP (µg P·L <sup>-1</sup> )	2.7	3.3	3.2	2.4
SRS (mg Si·L <sup>-1</sup> )	1.12	1.10	1.09	1.14
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	0.65	0.80	0.77	0.71
Chlorophyll (µg·L <sup>-1</sup> )	2.20	2.30	2.40	0.17
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	6087	7068	6445	282
Alg. Carbon (mg C·m <sup>-3</sup> )	451	524	432	34

Appendix Table 60. Physical, chemical and biological data from Hobiton Lake, June 18, 1984.

Depth (m)	1	3	5	30
Temperature ( $^{\circ}\text{C}$ )	17.0	16.2	15.0	6.6
TDS ( $\text{mg} \cdot \text{L}^{-1}$ )				
TDN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	213	245	127	216
Nitrate ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	2	1	1	45
Ammonia ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	18	21	25	11
PC ( $\mu\text{g C} \cdot \text{L}^{-1}$ )	208	232	230	144
TP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	1	1	2	2
PP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	1.6	1.8	1.9	1.4
SiS ( $\text{mg Si} \cdot \text{L}^{-1}$ )	1.04	1.04	1.06	1.15
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.72	0.95	0.83	0.77
Chlorophyll ( $\mu\text{g} \cdot \text{L}^{-1}$ )	0.91	0.95	1.17	0.23
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	1494	1340	1306	502
Alg. Carbon ( $\text{mg C} \cdot \text{m}^{-3}$ )	158	160	135	48

Appendix Table 61. Physical, chemical and biological data from Hobiton Lake, July 16, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	20.7	20.2	17.6	5.9
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	249	251	253	320
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	1	1	<1	45
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	21	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	21	32	27	14
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	180	271	254	156
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	2	2	2
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1.0	1.6	1.4	1.08
SKS ( $\text{mg Si}\cdot\text{mL}^{-1}$ )	1.01	1.00	1.02	0.87
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.94	0.82	0.70	0.19
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.56	0.48	1.01	0.19
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	513	716	819	354
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	72	92	111	31

Appendix Table 62. Physical, chemical and biological data from Hobiton Lake, August 14, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	20.0	19.9	19.8	6.6
TDS (mg•L <sup>-1</sup> )				
TDN (µg N•L <sup>-1</sup> )	146			
Nitrate (µg N•L <sup>-1</sup> )	<1			
Ammonia (µg N•L <sup>-1</sup> )	<4			
PN (µg N•L <sup>-1</sup> )	19	<4	<4	
PC (µg C•L <sup>-1</sup> )	160	13	9	
TP (µg P•L <sup>-1</sup> )				174
PP (µg P•L <sup>-1</sup> )	1	1	2	2
SRS (mg Si•L <sup>-1</sup> )	0.96	0.96	1.3	1.3
Bacteria (X10 <sup>6</sup> •mL <sup>-1</sup> )	0.85	0.80	0.88	0.81
Chlorophyll (µg•L <sup>-1</sup> )	0.95	1.21	1.43	0.26
Alg. Volume (mm <sup>3</sup> •m <sup>-3</sup> )	700	755	664	
Alg. Carbon (mg C•m <sup>-3</sup> )	92	91	273	27

**Appendix Table 63.** Physical, chemical and biological data from Hobiton Lake, September 11, 1984.

Depth (m)	1	3	5	16.7	20.7	30
Temperature (°C)	17.3	17.1				
TDS ( $\mu\text{g}\cdot\text{L}^{-1}$ )						
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	112	123	153	169		
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	1	1	2	39		
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4		
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	41	38	36	34		
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	199	219	212	139		
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1	2	2	2		
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2.4	2.4	2.6	0.7		
SiS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.84	0.88	0.87	1.09		
Bacteria ( $\times 10^6\cdot\text{mL}^{-1}$ )	1.20	0.65	1.12	0.76		
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	1.33	1.51	1.71	0.22		
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	1458	1462	1176	325		
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	195	186	159	31		

Appendix Table 64. Physical, chemical and biological data from Hobiton Lake, October 10, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	11.1	11.0	10.8	4.2
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	160	230	225	200
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	5	6	4	42
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	44	36	47	27
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	391	344	381	179
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	2	2	<1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1.7	1.6	1.8	0.9
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.97	0.94	0.96	1.08
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	1.08	1.06	1.03	0.62
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	1.54	1.28	1.17	0.21
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	1773	1165	1575	239
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	211	157	184	26

Appendix Table 65. Physical, chemical and biological data from Hobiton Lake, November 6, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	9.0	9.0	9.0	6.2
TDS (mg L <sup>-1</sup> )				26.6
TDN (μg N L <sup>-1</sup> )	181	204	178	254
Nitrate (μg N L <sup>-1</sup> )	14	14	14	40
Ammonia (μg N L <sup>-1</sup> )	4	4	<4	<4
PN (μg N L <sup>-1</sup> )	29	26	38	19
PC (μg C L <sup>-1</sup> )	269	221	283	183
TP (μg P L <sup>-1</sup> )	3	2	1	<1
PP (μg P L <sup>-1</sup> )	1.4	1.5	1.4	1.1
SRS (mg Si L <sup>-1</sup> )	1.04	1.07	1.07	1.16
Bacteria (X10 <sup>6</sup> mL <sup>-1</sup> )	1.62	1.55	1.57	0.63
Chlorophyll (μg L <sup>-1</sup> )	1.08	0.86	0.91	0.25
Alg. Volume (mm <sup>3</sup> m <sup>-3</sup> )	1070	959	747	331
Alg. Carbon (mg C m <sup>-3</sup> )	131	109	96	41

Appendix Table 66. Chemical and biological data from Ian Lake, Stn. 2, September 13, 1984.

Depth (m)	1	3	5
TDS ( $\text{mg} \cdot \text{L}^{-1}$ )			35.9
TDN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	310	366	353
Nitrate ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	31	32	31
Ammonia ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	<4	<4	5
TP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	4		4
SRS ( $\text{mg Si} \cdot \text{L}^{-1}$ )	1.67	1.69	1.66
Chlorophyll ( $\mu\text{g} \cdot \text{L}^{-1}$ )	0.68	0.69	0.96

Appendix Table 67. Physical, chemical and biological data from Kennedy Lake, Stn. 1, March 20, 1984.

Depth (m)	0	1	2	3	5	7.5	10	15	30
Temperature (°C)	6.9	6.9	6.8	6.8	6.7	6.5	6.4	6.2	6.0
TDS (mg·L <sup>-1</sup> )					20.8				
pH					6.6				
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )					13.51				
DIC (mg·L <sup>-1</sup> )					6.11				
TDN (µg N·L <sup>-1</sup> )					241				
Nitrate (µg N·L <sup>-1</sup> )					53				
Ammonia (µg N·L <sup>-1</sup> )					<4				
PN (µg N·L <sup>-1</sup> )					31				
PC (µg C·L <sup>-1</sup> )					100				
TP (µg P·L <sup>-1</sup> )					1				
PP (µg P·L <sup>-1</sup> )					1.1				
SRK (mg Si·L <sup>-1</sup> )					0.63				
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )					0.75				
Chlorophyll (µg·L <sup>-1</sup> )					0.56				
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )					1010				
Alg. Carbon (mg C·m <sup>-3</sup> )					111				
Pr. Prod. (mg C·m <sup>-3</sup> ·n <sup>-1</sup> ) <sup>a</sup>					0.54				
Pr. Prod. (mg C·m <sup>-3</sup> ·n <sup>-1</sup> ) <sup>b</sup>					0.22				
Pr. Prod. (mg C·m <sup>-3</sup> ·n <sup>-1</sup> ) <sup>c</sup>					0.04				
					0.11				
					0.35				
					0.17				
					0.02				
					0.30				
					0.00				
					0.00				
					0.06				
					0.06				
					0.00				

aTotal Primary Production (>0.2 µm).

bFractionated Primary Production (>3.0 µm).

cFractionated Primary Production (>8.0 µm).

Appendix Table 68. Physical, chemical and biological data from Kennedy Lake, Stn. 1, April 24, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	8.5	8.4	8.3	6.0
TDS ( $\mu\text{g L}^{-1}$ )				
TWN ( $\mu\text{g N L}^{-1}$ )	178	260	284	202
Nitrate ( $\mu\text{g N L}^{-1}$ )	41	40	36	44
Ammonia ( $\mu\text{g N L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N L}^{-1}$ )	32	16	39	9
PC ( $\mu\text{g C L}^{-1}$ )	144	173	136	110
TP ( $\mu\text{g P L}^{-1}$ )	5	2	1	2
PP ( $\mu\text{g P L}^{-1}$ )	1.0	1.0	0.8	0.4
SrS ( $\text{mg Si L}^{-1}$ )	0.72	0.71	0.71	0.71
Bacteria ( $\times 10^6 \text{ mL}^{-1}$ )	0.85	0.93	0.91	1.01
Chlorophyll ( $\mu\text{g L}^{-1}$ )	1.30	1.31	1.21	0.31
Alg. Volume ( $\text{mm}^3 \text{ m}^{-3}$ )	2066	1897	1556	518
Alg. Carbon ( $\text{mg C m}^{-3}$ )	208	186	160	54

Appendix Table 69. Physical, chemical and biological data from Kennedy Lake, Stn. 1, May 22, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	9.7	9.6	9.5	6.5
TDS (mg·L <sup>-1</sup> )				24.8
TDN (μg N·L <sup>-1</sup> )	253	216	182	205
Nitrate (μg N·L <sup>-1</sup> )	30	29	30	49
Ammonia (μg N·L <sup>-1</sup> )	<4	4	<4	<4
PN (μg N·L <sup>-1</sup> )	16	18	16	5
PC (μg C·L <sup>-1</sup> )	126	138	132	62
TP (μg P·L <sup>-1</sup> )	6	5	3	4
PP (μg P·L <sup>-1</sup> )	2.4	2.7	2.6	1.5
SRS (mg Si·L <sup>-1</sup> )	0.75	0.76	0.75	0.76
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	0.59	0.49	0.65	0.87
Chlorophyll (μg·L <sup>-1</sup> )	1.99	2.14	2.12	0.29
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	3170	3002	2760	223
Alg. Carbon (mg C·m <sup>-3</sup> )	255	241	218	22

Appendix Table 70. Physical, chemical and biological data from Kennedy Lake, Stn. 1, June 18, 1984.

Depth (m)	1	3	5	30
Temperature ( $^{\circ}\text{C}$ )	16.3	16.1	12.0	6.8
TDS ( $\text{mg L}^{-1}$ )				24.0
TUN ( $\mu\text{g N L}^{-1}$ )	323	309	355	479
Nitrate ( $\mu\text{g N L}^{-1}$ )	14	13	13	56
Ammonia ( $\mu\text{g N L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N L}^{-1}$ )	37	39	9	42
PC ( $\mu\text{g C L}^{-1}$ )	265	265	136	312
TP ( $\mu\text{g P L}^{-1}$ )	3	3	4	1
PP ( $\mu\text{g P L}^{-1}$ )	1.4	1.7	2.0	0.6
SRS ( $\text{mg Si L}^{-1}$ )	0.66	0.66	0.67	0.77
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.53	0.63	1.10	0.92
Chlorophyll ( $\mu\text{g L}^{-1}$ )	1.73	1.79	1.69	0.26
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	12508	8310	7308	461
Alg. Carbon ( $\text{mg C m}^{-3}$ )	881	618	580	74

Appendix Table 71. Physical, chemical and biological data from Kennedy Lake, Stn. 1, July 16, 1984.

Depth (m)	1	3	5	30
Temperature ( $^{\circ}\text{C}$ )	19.7	19.0	17.0	6.4
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	127	206	178	260
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	7	6	1	61
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	6	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	43	41	42	14
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	321	293	287	118
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	4	4	4	2
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2.6	2.6	2.1	1.1
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.36	0.35	0.38	0.68
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	1.22	1.16	1.23	0.76
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	1.46	1.62	2.16	0.22
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	5519	2973	4194	325
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	538	313	395	33

Appendix Table 72. Physical, chemical and biological data from Kennedy Lake, Stn. 1, August 14, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	19.1	18.8	18.5	7.1
TDS (mg·L <sup>-1</sup> )				24.0
TDN (μg N·L <sup>-1</sup> )	138	145	107	171
Nitrate (μg N·L <sup>-1</sup> )	5	2	3	60
Ammonia (μg N·L <sup>-1</sup> )	<4	<4	<4	<4
PN (μg N·L <sup>-1</sup> )	43	37	40	14
PC (μg C·L <sup>-1</sup> )	293	287	265	134
TP (μg P·L <sup>-1</sup> )	4	4	4	2
PP (μg P·L <sup>-1</sup> )	2.2	2.7	2.7	1.3
SRS (mg Si·L <sup>-1</sup> )	0.49	0.61	0.57	1.01
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	1.48	1.39	1.39	0.87
Chlorophyll (μg·L <sup>-1</sup> )	2.96	3.27	3.27	0.36
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	2807	1872	1907	268
Alg. Carbon (mg C·m <sup>-3</sup> )	320	217	223	28

Appendix Table 73. Physical, chemical and biological data from Kennedy Lake, Stn. 1, September 11, 1984.

Depth (m)	1	3	5	16.5	22.5	30
Temperature ( $^{\circ}\text{C}$ )	16.8	16.7		16.5		7.1
TDS ( $\text{mg L}^{-1}$ )						
TUN ( $\mu\text{g N L}^{-1}$ )	123		119	148	379	
Nitrate ( $\mu\text{g N L}^{-1}$ )	2		2	2	51	
Ammonia ( $\mu\text{g N L}^{-1}$ )	6	<4	<4	<4	<4	
PN ( $\mu\text{g N L}^{-1}$ )	57	43	56	56	31	
PC ( $\mu\text{g C L}^{-1}$ )	376	362	397	161		
TP ( $\mu\text{g P L}^{-1}$ )	3	3	4	4	5	
PP ( $\mu\text{g P L}^{-1}$ )	2.6	2.6	2.9	2.9	1.0	
SRS ( $\text{mg Si L}^{-1}$ )	0.45	0.54	0.48	0.48	0.72	
Bacteria ( $\times 10^6 \text{ mL}^{-1}$ )	1.75	1.56	2.34	2.34	0.94	
Chlorophyll ( $\mu\text{g L}^{-1}$ )	2.98	2.01	3.61	3.61	0.28	
Alg. Volume ( $\text{mm}^3 \text{ m}^{-3}$ )	6085	4713	4135	270		
Alg. Carbon ( $\text{mg C m}^{-3}$ )	538	403	365	25		

Appendix Table 74. Physical, chemical and biological data from Kennedy Lake, Stn. 1, October 10, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	10.4	10.3	10.2	5.7
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	210	260	220	185
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	17	15	15	58
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	5	6	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	38	33	32	23
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	328	283	323	181
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	3	2	4	1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1.8	2.0	2.3	0.9
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.65	0.60	0.64	0.75
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	1.54	1.26	1.40	0.83
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	2.11	2.06	2.06	0.44
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	2372	2386	2857	449
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	264	275	328	46

Appendix Table 75. Physical, chemical and biological data from Kennedy Lake, Stn. 1, November 6, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	9.0	9.0	9.0	7.4
TDS (mg·L <sup>-1</sup> )				20.4
TDN (μg N·L <sup>-1</sup> )	203	228	234	197
Nitrate (μg N·L <sup>-1</sup> )	31	32	36	51
Ammonia (μg N·L <sup>-1</sup> )	9	6	7	6
PN (μg N·L <sup>-1</sup> )	18	25	25	16
PC (μg C·L <sup>-1</sup> )	190	281	270	198
TP (μg P·L <sup>-1</sup> )	2	2	1	1
PP (μg P·L <sup>-1</sup> )	1.5	1.3	1.4	1.3
SRS (mg Si·L <sup>-1</sup> )	0.89	0.80	0.74	0.81
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	1.76	1.31	1.64	1.19
Chlorophyll (μg·L <sup>-1</sup> )	1.00	1.10	1.02	0.40
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	1216	1361	1063	1214
Alg. Carbon (mg C·m <sup>-3</sup> )	146	166	125	146

Appendix Table 76. Physical, chemical and biological data from Kennedy Lake, Stn. 2, March 20, 1984.

Depth (m)	0	1	2	3	5	7.5	10	30
Temperature (°C)	6.5	6.4	6.4	6.3	6.2	6.1	6.1	5.2
TDS (mg·L <sup>-1</sup> )					19.7			
pH						6.7	6.5	
T · Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )						8.60	8.60	
DIC (mg·L <sup>-1</sup> )						3.37	3.59	
TDN (μg N·L <sup>-1</sup> )						313	279	164
Nitrate (μg N·L <sup>-1</sup> )						31	31	31
Ammonia (μg N·L <sup>-1</sup> )						<4	<4	<4
PN (μg N·L <sup>-1</sup> )						30	30	29
PC (μg C·L <sup>-1</sup> )						119	121	121
TP (μg P·L <sup>-1</sup> )						1	<1	1
PP (μg P·L <sup>-1</sup> )						1.0	1.1	1.0
SRS (mg Si·L <sup>-1</sup> )						0.58	0.60	0.57
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )						0.46	0.66	0.57
Chlorophyll (μg·L <sup>-1</sup> )						0.25	0.24	0.23
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )						440	587	715
Alg. Carbon (mg C·m <sup>-3</sup> )						60	75	106
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>						0.17	0.17	0.01
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>b</sup>						0.09	0.05	0.02
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>						0.00	0.00	0.00

<sup>a</sup>Total Primary Production (>0.2 μm).

<sup>b</sup>Fractionated Primary Production (>3.0 μm).

<sup>c</sup>Fractionated Primary Production (>8.0 μm).

Appendix Table 77. Physical, chemical and biological data from Kennedy Lake, Stn. 2, April 24, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	8.5	8.4	8.2	6.1
TDS ( $\text{mg L}^{-1}$ )			26.4	
TDN ( $\mu\text{g N L}^{-1}$ )	150	259	181	246
Nitrate ( $\mu\text{g N L}^{-1}$ )	23	24	24	25
Ammonia ( $\mu\text{g N L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N L}^{-1}$ )	16	17	42	12
PC ( $\mu\text{g C L}^{-1}$ )	163	154	164	146
TP ( $\mu\text{g P L}^{-1}$ )	<1	1	2	2
PP ( $\mu\text{g P L}^{-1}$ )	0.6	0.7	0.9	0.3
SRS ( $\text{mg Si L}^{-1}$ )	0.62	0.61	0.60	0.62
Bacteria ( $\times 10^6 \cdot \text{ml}^{-1}$ )	0.64	0.98	1.01	1.03
Chlorophyll (µg L⁻¹)	1.44	1.50	1.63	0.40
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	792	663	724	404
Alg. Carbon ( $\text{mg C m}^{-3}$ )	109	87	87	57

Appendix Table 78. Physical, chemical and biological data from Kennedy Lake, Stn. 2, May 22, 1984.

Depth (m)	1	3	5	30
Temperature ( $^{\circ}\text{C}$ )	10.0	9.7	9.5	6.6
TDS ( $\text{mg}\cdot\text{L}^{-1}$ )			25.3	
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	163	173	207	260
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	18	17	19	24
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	11	12	8	6
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	108	108	89	85
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	4	3	3	4
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1.7	1.5	1.4	1.3
SKS ( $\mu\text{g Si}\cdot\text{L}^{-1}$ )	0.70	0.68	0.69	0.69
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.49	0.46	0.68	0.82
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	1.16	0.96	0.73	0.14
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	926	1093	447	221
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	102	125	50	27

Appendix Table 79. Physical, chemical and biological data from Kennedy Lake, Stn. 2, June 18, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	16.4	16.2	15.9	7.5
TDS (mg·L <sup>-1</sup> )				
TN (µg N·L <sup>-1</sup> )	209	121	159	165
Nitrate (µg N·L <sup>-1</sup> )	14	14	14	27
Ammonia (µg N·L <sup>-1</sup> )	<4	<4	<4	<4
PN (µg N·L <sup>-1</sup> )	21	25	22	11
PC (µg C·L <sup>-1</sup> )	189	244	189	143
TP (µg P·L <sup>-1</sup> )	1	1	1	2
PP (µg P·L <sup>-1</sup> )	0.3	0.4	0.3	0.6
SRS (mg Si·L <sup>-1</sup> )	0.73	0.70	0.70	0.70
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	0.64	0.64	0.60	0.83
Chlorophyll (µg·L <sup>-1</sup> )	1.21	1.30	1.33	0.49
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	1243	900	1219	121
Alg. Carbon (mg C·m <sup>-3</sup> )	156	121	168	148

Appendix Table 80. Physical, chemical and biological data from Kennedy Lake, Stn. 2, July 16, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	20.1	19.3	18.5	7.6
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	230	237	243	314
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	3	3	2	26
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	25	28	24	18
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	186	212	208	191
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	2	2	1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	0.6	0.9	1.0	1.8
SiS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.41	0.40	0.40	0.38
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.61	0.42	0.50	0.80
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.54	0.93	1.00	0.12
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	1811	1768	1777	209
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	173	179	180	27

Appendix Table 81. Physical, chemical and biological data from Kennedy Lake, Stn. 2, August 14, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	19.2	18.9	18.7	7.9
TDS ( $\text{mg L}^{-1}$ )				
TDN ( $\mu\text{g N L}^{-1}$ )	97	122	140	167
Nitrate ( $\mu\text{g N L}^{-1}$ )	<1	<1	4	29
Ammonia ( $\mu\text{g N L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N L}^{-1}$ )	25	29	26	11
PC ( $\mu\text{g C L}^{-1}$ )	237	244	205	162
TP ( $\mu\text{g P L}^{-1}$ )	1	1	1	2
PP ( $\mu\text{g P L}^{-1}$ )	0.9	1.1	1.0	0.9
SRS ( $\text{mg Si L}^{-1}$ )	0.62	0.62	0.61	0.64
Bacteria ( $\times 10^6 \text{ mL}^{-1}$ )	0.69	0.70	0.62	0.79
Chlorophyll (µg L⁻¹)	1.34	1.40	1.38	0.19
Alg. Volume ( $\text{mm}^3 \text{ m}^{-3}$ )	2441	1902	2239	2194
Alg. Carbon ( $\text{mg C m}^{-3}$ )	224	167	198	196

Appendix Table 82. Physical, chemical and biological data from Kennedy Lake, Stn. 2, September 11, 1984.

Depth (m)	1	3	5	16.6	16.8	3	17.5	30
Temperature (°C)	16.9							7.3
TDS (mg·L⁻¹)								
TDN (µg N·L⁻¹)	114	123	100	132				
Nitrate (µg N·L⁻¹)	1	2	2	29				
Ammonia (µg N·L⁻¹)	<4	<4	<4	<4				
PN (µg N·L⁻¹)	35	17	17	27				
PC (µg C·L⁻¹)	213	197	210	91				
TP (µg P·L⁻¹)	1	1	1	2				
PP (µg P·L⁻¹)	3.0	0.9	0.8	0.7				
SRS (mg Si·L⁻¹)	0.59	0.62	0.59	0.66				
Bacteria (X10⁶·mL⁻¹)	0.44	0.49	0.86	0.79				
Chlorophyll (µg·L⁻¹)	1.30	1.45	1.09	0.16				
Alg. Volume (mm³·m⁻³)	1649	1443	1174	283				
Alg. Carbon (mg C·m⁻³)	197	183	153	33				

Appendix Table 83. Physical, chemical and biological data from Kennedy Lake, Stn. 2, October 10, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	10.7	10.6	10.5	6.2
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	155	245	345	270
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	13	13	13	32
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	5	<4	5	5
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	34	31	31	19
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	281	276	307	310
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1	2	2	1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1.1	1.3	1.2	1.2
SrS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.71	0.63	0.64	0.64
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.58	0.73	0.85	1.04
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.99	0.90	0.81	0.17
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	1604	1203	1645	430
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	224	163	202	62

Appendix Table 84. Physical, chemical and biological data from Kennedy Lake, Stn. 2, November 6, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	9.1	9.1	9.1	8.8
TDS ( $\text{mg} \cdot \text{L}^{-1}$ )			19.2	
TUN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	225	229	203	244
Nitrate ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	24	23	23	22
Ammonia ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	5	9	<4	4
PN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	28	25	25	20
PC ( $\mu\text{g C} \cdot \text{L}^{-1}$ )	277	255	213	199
TP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	1	1	2	1
PP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	1.2	1.1	1.2	1.1
SRS ( $\text{mg Si} \cdot \text{L}^{-1}$ )	0.77	0.78	0.78	0.77
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	1.32	1.04	1.32	1.12
Chlorophyll ( $\mu\text{g} \cdot \text{L}^{-1}$ )	0.40	0.46	0.50	<0.10
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	930	711	735	546
Alg. Carbon ( $\text{mg C} \cdot \text{m}^{-3}$ )	114	101	95	68

Appendix Table 85. Chemical and biological data from Kitlope Lake,  
September 13, 1984.

Depth (m)	1	3	5
TDS ( $\text{mg}\cdot\text{L}^{-1}$ )			8.9
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	157	124	152
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	8	8	9
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	2	2
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.38	0.48	0.44
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.59	0.50	0.33

Appendix Table 86. Physical, chemical and biological data from Long Lake, Stn. 1, March 13, 1984.

Depth (m)	1	3	5	5	30
Temperature (°C)	6.1	5.4	5.1	4.6	
TDS (mg·L <sup>-1</sup> )					
TDN (μg N·L <sup>-1</sup> )	355	340	285	259	
Nitrate (μg N·L <sup>-1</sup> )	66	69	69	78	
Ammonia (μg N·L <sup>-1</sup> )	<4	<4	<4	<4	
PN (μg N·L <sup>-1</sup> )	31	30	29	26	
PC (μg C·L <sup>-1</sup> )	199	121	128	116	
TP (μg P·L <sup>-1</sup> )	3	3	3	3	
PP (μg P·L <sup>-1</sup> )	2.1	1.2	1.0	1.2	
SRS (mg Si·L <sup>-1</sup> )	0.95	1.02	1.01	1.00	
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	0.89	0.80	0.96	0.93	
Chlorophyll (μg·L <sup>-1</sup> )	2.17	0.62	0.36	0.08	
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	808	484	534	396	
Alg. Carbon (mg C·m <sup>-3</sup> )	113	72	80	62	

Appendix Table 87. Chemical and biological data from Long Lake, Stn. 1, September 18, 1984.

Depth (m)	1	3	5
TDS ( $\text{mg} \cdot \text{L}^{-1}$ )			13.6
TDN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	131	110	136
Nitrate ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	2	4	9
Ammonia ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	<4	<4	6
TP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	2	3	2
SRS ( $\text{mg Si} \cdot \text{L}^{-1}$ )	0.80	0.71	0.71
Chlorophyll ( $\mu\text{g} \cdot \text{L}^{-1}$ )	2.34	2.39	0.86

Appendix Table 88. Physical, chemical and biological data from Long Lake, Stn. 2, March 13, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	5.6	5.3	5.2	4.9
TDS (mg·L⁻¹)				
TDN (µg N·L⁻¹)	223	263	290	248
Nitrate (µg N·L⁻¹)	63	63	63	63
Ammonia (µg N·L⁻¹)	<4	<4	<4	<4
PN (µg N·L⁻¹)	32	34	28	28
PC (µg C·L⁻¹)	130	163	133	103
TP (µg P·L⁻¹)	2	2	2	1
PP (µg P·L⁻¹)	1.0	0.9	0.8	0.7
SRS (mg Si·L⁻¹)	0.96	0.95	0.95	0.91
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.82	0.82	1.01	0.85
Chlorophyll (µg·L⁻¹)	0.64	0.97	0.54	0.13
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	279	326	297	282
Alg. Carbon (mg C·m⁻³)	43	53	47	44

Appendix Table 89. Chemical and biological data from Long Lake, Stn. 2, September 18, 1984.

Depth (m)	1	3	5
TDS ( $\text{mg} \cdot \text{L}^{-1}$ )			11.7
TDN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	115	118	135
Nitrate ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	1	1	1
Ammonia ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	<4	<4	<4
TP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	2	2	1
SRS ( $\text{mg Si} \cdot \text{L}^{-1}$ )	0.61	0.59	0.59
Chlorophyll ( $\mu\text{g} \cdot \text{L}^{-1}$ )	1.77	2.51	1.69

Appendix Table 90. Physical, chemical and biological data from Nimpkish Lake, Stn. 1, March 13, 1984.

Depth (m)	1	3	5	5	30
Temperature (°C)	5.9	5.9	5.9	5.9	5.6
TDS (mg·L⁻¹)					
TDN (µg N·L⁻¹)	340	278	246	320	
Nitrate (µg N·L⁻¹)	54	54	55	56	
Ammonia (µg N·L⁻¹)	<4	<4	<4	6	
PN (µg N·L⁻¹)	13	15	10	26	
PC (µg C·L⁻¹)	108	81	77	72	
TP (µg P·L⁻¹)	1	2	1	2	
PP (µg P·L⁻¹)	0.6	<0.5	0.5	<0.5	
SRS (mg Si·L⁻¹)	1.45	1.44	1.52	1.47	
Bacteria (x10⁶·mL⁻¹)	0.80	0.81	0.77	0.71	
Chlorophyll (µg·L⁻¹)	0.07	0.08	0.09	0.07	
Alg. Volume (mm³·m⁻³)	190	246	369	280	
Alg. Carbon (mg C·m⁻³)	24	33	52	38	

Appendix Table 91. Physical, chemical and biological data from Nimpkish Lake, Stn. 1, April 3, 1984.

Depth (m)	1	3	5	30
Temperature ( $^{\circ}\text{C}$ )	6.2	6.2	6.2	5.9
TDS ( $\text{mg}\cdot\text{L}^{-1}$ )			18.5	
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	222	150	163	158
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	47	50	50	50
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	9	10	8	10
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	74	99	79	74
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1	<1	<1	<1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	0.5	0.7	0.5	0.8
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	1.74	1.73	1.71	1.77
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.74	0.78	0.69	0.36
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.12	0.11	0.10	0.08
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	571	437	350	263
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	75	56	42	35

Appendix Table 92. Physical, chemical and biological data from Nimpkish Lake, Stn. 1, May 8, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	7.4	7.3	7.2	6.6
TDS ( $\text{mg} \cdot \text{L}^{-1}$ )			28.0	
TDN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	178	189	207	195
Nitrate ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	50	50	51	54
Ammonia ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	4	8	5	6
PC ( $\mu\text{g C} \cdot \text{L}^{-1}$ )	61	115	93	94
TP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	<1	<1	<1	<1
PP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	<0.2	0.4	0.3	0.5
SRS ( $\text{mg Si} \cdot \text{L}^{-1}$ )	1.77	1.75	1.74	1.72
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.84	0.89	0.91	0.86
Chlorophyll ( $\mu\text{g} \cdot \text{L}^{-1}$ )	0.09	0.11	0.12	0.08
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	273	466	311	289
Alg. Carbon ( $\text{mg C} \cdot \text{m}^{-3}$ )	32	52	41	33

Appendix Table 93. Physical, chemical and biological data from Nimpkish Lake, Stn. 1, June 5, 1984.

Depth (m)	1	3	5	30
Temperature ( $^{\circ}\text{C}$ )	10.0	9.7	9.5	7.9
TDS ( $\text{mg L}^{-1}$ )				29.7
TDN ( $\mu\text{g N L}^{-1}$ )	280	306	225	434
Nitrate ( $\mu\text{g N L}^{-1}$ )	36	37	38	43
Ammonia ( $\mu\text{g N L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N L}^{-1}$ )	9	10	24	11
PO ( $\mu\text{g C L}^{-1}$ )	119	80	112	89
TP ( $\mu\text{g P L}^{-1}$ )	1	1	1	<1
PP ( $\mu\text{g P L}^{-1}$ )	0.5	0.8	0.5	0.5
SrS ( $\text{mg Si L}^{-1}$ )	1.73	1.71	1.71	1.70
bacteria ( $\times 10^6 \text{ mL}^{-1}$ )	0.74	0.77	0.60	0.76
Chlorophyll ( $\mu\text{g L}^{-1}$ )	0.46	0.56	0.29	0.12
Alg. Volume ( $\text{mm}^3 \text{ m}^{-3}$ )	820	761	382	353
Alg. Carbon ( $\text{mg C m}^{-3}$ )	78	83	44	41

Appendix Table 94. Physical, chemical and biological data from Nimpkish Lake, Stn. 1, June 26, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	12.6	12.5	12.4	7.7
T <sub>DN</sub> ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	177	197	162	173
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	35	34	35	45
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	5
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	20	19	19	15
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	162	166	184	162
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	2	1	1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	0.6	0.5	0.9	0.2
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	1.70	1.68	1.70	1.69
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.67	0.74	0.83	0.74
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.80	0.79	0.64	0.15
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	2157	1846	2088	388
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	166	144	169	38

Appendix Table 95. Physical, chemical and biological data from Nimpkish Lake, Stn. 1, July 25, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	16.3	16.1	16.0	8.4
TIN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	245	237	336	366
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	23	22	20	45
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	4	16
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	21	19	18	14
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	163	166	188	138
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	<1	1	<1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	0.7	0.8	0.7	0.2
SKS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	1.64	1.64	1.46	1.67
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.61	0.81	0.96	0.73
Chlorophyll ( $\mu\text{g L}^{-1}$ )	1.53	1.81	1.76	0.19
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	2614	2211	1864	602
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	225	193	151	60

Appendix Table 96. Physical, chemical and biological data from Nimpkish Lake, Stn. 1, August 21, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	16.5	16.4	16.3	9.0
TDS (mg·L <sup>-1</sup> )			23.6	
TDN (µg N·L <sup>-1</sup> )	148	130	117	167
Nitrate (µg N·L <sup>-1</sup> )	32	48	26	43
Ammonia (µg N·L <sup>-1</sup> )	<4	<4	<4	<4
PN (µg N·L <sup>-1</sup> )	16	19	15	10
PC (µg C·L <sup>-1</sup> )	197	184	136	118
TP (µg P·L <sup>-1</sup> )	<1	<1	<1	<1
PP (µg P·L <sup>-1</sup> )	0.6	0.9	0.5	0.4
SKS (mg Si·L <sup>-1</sup> )	1.84	1.82	1.84	1.84
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	0.71	0.78	0.85	0.76
Chlorophyll (µg·L <sup>-1</sup> )	0.98	1.05	1.01	0.19
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	1735	1878	2081	511
Alg. Carbon (mg C·m <sup>-3</sup> )	172	175	180	43

Appendix Table 97. Physical, chemical and biological data from Nimpkish Lake, Stn. 1, September 18, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	14.8	14.7	14.6	12.4
TDS (mg•L <sup>-1</sup> )				26.3
TUN (μg N•L <sup>-1</sup> )	142	161	162	159
Nitrate (μg N•L <sup>-1</sup> )	23	23	25	33
Ammonia (μg N•L <sup>-1</sup> )	<4	<4	<4	<4
PN (μg N•L <sup>-1</sup> )	22	25	23	34
PC (μg C•L <sup>-1</sup> )	165	167	169	228
TP (μg P•L <sup>-1</sup> )	<1	<1	<1	1
PP (μg P•L <sup>-1</sup> )	1.4	1.2	1.2	2.0
SRS (mg Si•L <sup>-1</sup> )	1.49	1.56	1.59	1.65
Bacteria (x10 <sup>6</sup> •mL <sup>-1</sup> )	1.02	0.68	0.91	1.07
Chlorophyll (μg•L <sup>-1</sup> )	1.42	1.39	1.42	0.41
Alg. Volume (mm <sup>3</sup> •m <sup>-3</sup> )	1156	1460	954	562
Alg. Carbon (mg C•m <sup>-3</sup> )	126	138	98	61

Appendix Table 98. Physical, chemical and biological data from Nimpkish Lake, Stn. 1, October 22, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	10.6	10.4	10.2	9.5
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	202	244	154	172
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	35	34	34	37
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	20	22	22	31
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	175	164	182	266
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	2	2	2
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2.1	1.8	2.0	1.8
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	1.48	1.56	1.39	1.62
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.99	1.02	1.25	1.16
Chlorophyll (μg·L⁻¹)	0.33	0.90	0.68	0.42
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	781	828	1160	673
Alg. Carbon (mg C·m⁻³)	113	117	162	96

Appendix Table 99. Physical, chemical and biological data from Nimpkish Lake, Stn. 2, March 13, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	6.1	6.0	6.0	5.6
TDS ( $\text{mg L}^{-1}$ )				
TDN ( $\mu\text{g N L}^{-1}$ )	328	299	252	268
Nitrate ( $\mu\text{g N L}^{-1}$ )	55	55	55	56
Ammonia ( $\mu\text{g N L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N L}^{-1}$ )	15	13	22	22
PC ( $\mu\text{g C L}^{-1}$ )	78	91	78	74
TP ( $\mu\text{g P L}^{-1}$ )	1	1	1	1
PP ( $\mu\text{g P L}^{-1}$ )	<0.5	<0.5	<0.5	0.5
SRS ( $\text{mg Si L}^{-1}$ )	1.51	1.45	1.48	1.49
Bacteria ( $\times 10^6 \text{ mL}^{-1}$ )	0.72	0.86	0.70	0.70
Chlorophyll ( $\mu\text{g L}^{-1}$ )	0.12	0.13	0.14	0.09
Alg. Volume ( $\text{nm}^3 \cdot \text{m}^{-3}$ )	257	371	302	284
Alg. Carbon ( $\text{mg C m}^{-3}$ )	34	43	35	36

Appendix Table 100. Physical, chemical and biological data from Nimpkish Lake, Stn. 2, April 3, 1984.

Depth (m)	1	3	5	6.4	6.0
Temperature (°C)					
TDS (mg·L <sup>-1</sup> )					
TDN (µg N·L <sup>-1</sup> )	150	183	139	153	
Nitrate (µg N·L <sup>-1</sup> )	50	50	51	51	
Ammonia (µg N·L <sup>-1</sup> )	<4	<4	<4	<4	
P <sub>N</sub> (µg N·L <sup>-1</sup> )	10	8	15	18	
PC (µg C·L <sup>-1</sup> )	93	78	87	101	
TP (µg P·L <sup>-1</sup> )	1	2	<1	<1	
PP (µg P·L <sup>-1</sup> )	0.7	0.6	0.6	0.9	
SRS (mg Si·L <sup>-1</sup> )	1.73	1.75	1.76	1.78	
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	0.51	0.49	0.90	0.77	
Chlorophyll (µg·L <sup>-1</sup> )	0.14	0.14	0.14	0.14	
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	392	343	337	364	
Alg. Carbon (mg C·m <sup>-3</sup> )	50	38	42	44	

Appendix Table 101. Physical, chemical and biological data from Nimpkish Lake, Stn. 2, May 8, 1984.

depth (m)	1	3	5	30
Temperature (°C)	8.0	7.9	7.9	7.2
TDS (mg L <sup>-1</sup> )				
TDN (μg N L <sup>-1</sup> )	162	186	165	219
Nitrate (μg N L <sup>-1</sup> )	50	52	46	52
Ammonia (μg N L <sup>-1</sup> )	<4	<4	<4	<4
PN (μg N L <sup>-1</sup> )	6	8	8	7
PC (μg C L <sup>-1</sup> )	83	83	77	86
TP (μg P L <sup>-1</sup> )	<1	<1	1	<1
PP (μg P L <sup>-1</sup> )	0.4	0.3	0.4	0.6
SiS (mg Si L <sup>-1</sup> )	1.72	1.72	1.70	1.72
Bacteria (x10 <sup>6</sup> mL <sup>-1</sup> )	0.85	0.85	0.89	0.89
Chlorophyll (μg L <sup>-1</sup> )	0.57	0.56	0.52	0.18
Alg. Volume (mm <sup>3</sup> m <sup>-3</sup> )	676	531	421	435
Alg. Carbon (mg C m <sup>-3</sup> )	77	60	50	50

Appendix Table 102. Physical, chemical and biological data from Nimpkish Lake, Stn. 2, June 5, 1984.

Depth (m)	1	3	5	10.3	5	30	7.7
Temperature (°C)	10.8		10.6				
TDS (mg·L <sup>-1</sup> )					26.9		
TDN (μg N·L <sup>-1</sup> )	210		258		207		239
Nitrate (μg N·L <sup>-1</sup> )	40		39		39		44
Ammonia (μg N·L <sup>-1</sup> )	<4		<4		<4		<4
PN (μg N·L <sup>-1</sup> )	11		14		12		10
PC (μg C·L <sup>-1</sup> )	88		105		103		102
TP (μg P·L <sup>-1</sup> )	1		1		2		1
PP (μg P·L <sup>-1</sup> )	0.7		0.9		0.9		0.6
SRS (mg Si·L <sup>-1</sup> )	1.66		1.63		1.64		1.64
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	0.54		0.49		0.83		0.65
Chlorophyll (μg·L <sup>-1</sup> )	0.97		0.58		1.16		0.55
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	1001		1204		723		299
Alg. Carbon (mg C·m <sup>-3</sup> )	106		130		76		35

Appendix Table 103. Physical, chemical and biological data from Nimpkish Lake, Stn. 2, June 26, 1984.

Dept (m)	1	3	5	30
Temperature (°C)	13.4	13.3	13.2	8.7
TUN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	164	139	202	183
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	32	31	32	42
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	16	25	18	14
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	177	197	178	148
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	2	2	1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	0.5	1.3	1.0	0.5
Sks ( $\text{mg Si}\cdot\text{L}^{-1}$ )	1.69	1.67	1.69	1.69
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.67	0.91	0.73	0.74
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	1.16	1.20	1.23	0.39
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	2733	2398	2714	911
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	227	20	214	74

Appendix Table 104. Physical, chemical and biological data from Nimpkish Lake, Stn. 2, July 25, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	15.3	15.2	15.0	9.8
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	235	205	221	371
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	24	25	25	54
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	6	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	16	40	19	14
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	200	231	161	130
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1	<1	<1	<1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	0.4	0.4	0.4	<0.2
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	1.63	1.65	1.58	1.70
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.71	0.62	0.63	1.05
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	1.13	1.38	1.48	0.22
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	2801	3271	2484	708
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	232	276	223	62

Appendix Table 105. Physical, chemical and biological data from Nimpkish Lake, Stn. 2, August 21, 1984.

Depth (m)	1	3	5	30
Temperature ( $^{\circ}\text{C}$ )	16.7	16.6	16.5	10.7
TDS ( $\mu\text{g L}^{-1}$ )			14.8	
TDN ( $\mu\text{g N L}^{-1}$ )	123	149	130	200
Nitrate ( $\mu\text{g N L}^{-1}$ )	23	26	24	41
Ammonia ( $\mu\text{g N L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N L}^{-1}$ )	25	21	16	12
PC ( $\mu\text{g C L}^{-1}$ )	219	214	174	181
TP ( $\mu\text{g P L}^{-1}$ )	<1	<1	<1	1
PP ( $\mu\text{g P L}^{-1}$ )	0.9	0.9	0.9	0.6
SKS ( $\mu\text{g Si L}^{-1}$ )	1.78	1.78	1.78	1.83
Bacteria ( $\times 10^6 \text{ mL}^{-1}$ )	0.68	0.74	0.83	0.75
Chlorophyll ( $\mu\text{g L}^{-1}$ )	1.62	1.56	1.51	0.26
Alg. Volume ( $\text{mm}^3 \text{ m}^{-3}$ )	2476	2614	2264	567
Alg. Carbon ( $\text{mg C m}^{-3}$ )	223	213	182	48

Appendix Table 106. Physical, chemical and biological data from Nimpkish Lake, Stn. 2, September 18, 1984.

Depth (m)	1	3	5	15.2	9.2
Temperature (°C)	15.4	15.3	15.2	15.2	9.2
TDS (mg·L <sup>-1</sup> )					
TDN (µg N·L <sup>-1</sup> )	158	196	146	243	
Nitrate (µg N·L <sup>-1</sup> )	23	21	21	46	
Ammonia (µg N·L <sup>-1</sup> )	<4	<4	<4	<4	
PN (µg N·L <sup>-1</sup> )	29	32	32	15	
PC (µg C·L <sup>-1</sup> )	177	193	185	134	
TP (µg P·L <sup>-1</sup> )	<1	<1	<1	<1	
PP (µg P·L <sup>-1</sup> )	1.5	1.4	1.4	1.2	
SKS (µg Si·L <sup>-1</sup> )	1.57	1.59	1.57	1.68	
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	0.94	1.07	0.97	0.85	
Chlorophyll (µg·L <sup>-1</sup> )	1.92	1.58	1.71	0.08	
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )					
Alg. Carbon (mg C·m <sup>-3</sup> )					

Appendix Table 107. Physical, chemical and biological data from Nimpkish Lake, Stn. 2, October 22, 1984.

Depth (m)	1	3	5	30
Temperature (°C)	10.9	10.8	10.8	10.3
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	192	188	157	167
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	32	32	32	38
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	15	20	19	21
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	126	175	191	189
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	2	2	1
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	1.6	1.6	2.1	1.9
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	1.48	1.56	1.54	1.56
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	1.27	1.55	1.29	1.31
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.71	0.59	0.69	0.31
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	882	1183	1385	450
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	124	160	194	81

Appendix Table 108. Physical, chemical and biological data from Sproat Lake, Stn. 1, January 11, 1984.

Depth (m)	1	3	5	23	40
Temperature (°C)	5.0	5.0	5.0	5.0	4.8
TDS (mg·L <sup>-1</sup> )		30.4			
TDN (µg N·L <sup>-1</sup> )	252	264	261	206	245
Nitrate (µg N·L <sup>-1</sup> )	27	27	27	27	28
Ammonia (µg N·L <sup>-1</sup> )	<4	<4	<4	<4	<4
PN (µg N·L <sup>-1</sup> )	13	18	14	12	22
PC (µg C·L <sup>-1</sup> )	125	142	146	128	177
TP (µg P·L <sup>-1</sup> )	1	1	1	2	1
PP (µg P·L <sup>-1</sup> )			1.2	1.1	1.1
SRS (mg Si·L <sup>-1</sup> )	1.06	1.12	1.09	1.14	1.07
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	0.65	0.85	0.87	0.73	0.76
Chlorophyll (µg·L <sup>-1</sup> )	0.77	0.97	0.84	0.63	0.53
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	324	291	324	382	285
Alg. Carbon (ng C·m <sup>-3</sup> )	37	33	38	45	33

Appendix Table 109. Physical, chemical and biological data from Sproat Lake, Stn. 1, February 7, 1984.

Depth (m)	0	1	3	5	7.5	10	23	40
Temperature (°C)	4.8	4.8	4.8	4.8	4.8	4.8	4.6	4.5
TDS (mg·L <sup>-1</sup> )				31.7				
pH	6.4				6.5			
Total Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )	21.13				21.38			
DIC (mg·L <sup>-1</sup> )	11.62				10.59			
TDN (µg N·L <sup>-1</sup> )	162	295	276					
Nitrate (µg N·L <sup>-1</sup> )	32	32	32					
Ammonia (µg N·L <sup>-1</sup> )	<4	<4	<4					
PN (µg N·L <sup>-1</sup> )	11	11	8					
PC (µg C·L <sup>-1</sup> )	96	93	78					
TP (µg P·L <sup>-1</sup> )	1	1	1					
PP (µg P·L <sup>-1</sup> )	1.3	0.8	0.8					
SRS (mg Si·L <sup>-1</sup> )	1.19	1.17	1.16					
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	0.37	0.35	0.62					
Chlorophyll (µg·L <sup>-1</sup> )	0.66	0.66	0.71					
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	395	364	469					
Alg. Carbon (mg C·m <sup>-3</sup> )	46	42	58					
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	0.68	0.64	0.66	0.74	0.38	0.05	0.00	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>b</sup>	0.20	0.58	0.40	0.68	0.00	0.00	0.00	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.13	0.08	0.20	0.13	0.20	0.00	0.00	

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>b</sup>Fractionated Primary Production (>3.0 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 110. Physical, chemical and biological data from Sproat Lake, Stn. 1, March 7, 1984.

Depth (m)	0	1	3	5	7.5	10	15	23	40
Temperature (°C)	5.1	5.0	5.0	4.9	4.9	4.9	4.8	4.7	4.3
TDS (mg·L⁻¹)									
pH	6.5	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
T. Alk. (mg·L⁻¹ CaCO₃)	20.93	21.62	21.62	21.62	21.62	21.62	21.62	21.62	21.62
DIC (mg·L⁻¹)	10.20	11.73	11.73	11.73	11.73	11.73	11.73	11.73	11.73
TDN (µg N·L⁻¹)	270	328	337	337	337	337	337	337	337
Nitrate (µg N·L⁻¹)	31	31	32	32	32	32	32	32	32
Ammonia (µg N·L⁻¹)	<4	<4	<4	<4	<4	<4	<4	<4	<4
PN (µg N·L⁻¹)	18	17	23	23	23	23	23	23	23
PC (µg C·L⁻¹)	85	70	91	91	91	91	91	91	91
TP (µg P·L⁻¹)	<1	1	<1	<1	<1	<1	<1	<1	<1
PP (µg P·L⁻¹)	0.9	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
SiS (mg Si·L⁻¹)	1.08	1.14	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Bacteria (X10⁶·mL⁻¹)	0.62	0.56	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Chlorophyll (µg·L⁻¹)	0.42	0.42	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Alg. Volume (mm³·m⁻³)	422	385	399	399	399	399	399	399	399
Alg. Carbon (mg C·m⁻³)	38	36	41	41	41	41	41	41	41
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>a</sup>	0.34	0.41	0.61	0.61	0.61	0.61	0.61	0.61	0.61
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>b</sup>	0.13	0.02	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>c</sup>	0.03	0.01	0.18	0.18	0.18	0.18	0.18	0.18	0.18

aTotal Primary Production (>0.2 µm).

bFractionated Primary Production (>3.0 µm).

cFractionated Primary Production (>8.0 µm).

Appendix Table III. Physical, chemical and biological data from Sproat Lake, Stn. 1, March 22, 1984.

depth (m)	0	1	3	5	7.5	8	10	15	40
Temperature (°C)	6.5	6.5	6.4	6.2		6.1	5.6	5.4	5.0
TDS (mg·L⁻¹)				33.6					
pH			6.4			6.6			
T. Alk. (mg·L⁻¹ CaCO₃)		20.88			21.42				
DIC (mg·L⁻¹)		10.47			9.23				
TDN (µg N·L⁻¹)			179	165	140	190	266		
Nitrate (µg N·L⁻¹)		24	24	24	24	24	38		
Ammonia (µg N·L⁻¹)		<4	<4	<4	<4	<4	<4		
PN (µg N·L⁻¹)		30	30	37				23	
PC (µg C·L⁻¹)			126	127	129	128	86		
TP (µg P·L⁻¹)		<1	<1	1	1	1	<1		
PP (µg P·L⁻¹)		1.0	1.0	1.0	1.0	1.4	0.8		
SRS (µg Si·L⁻¹)		0.90	1.03	1.01		0.96	1.03		
Bacteria (x10⁶·mL⁻¹)		0.36	0.42	0.72		0.68	0.65		
Chlorophyll (µg·L⁻¹)		1.21	1.51	1.47		1.64	0.21		
Alg. Volume (mm³·m⁻³)		858	965	946		1498	411		
Alg. Carbon (mg C·m⁻³)		92	105	112		170	45		
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>a</sup>		0.21	0.49	0.45	0.29		0.30	0.16	
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>b</sup>		0.07	0.36	0.09	0.26		0.00		
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>c</sup>		0.77		0.08	0.12	0.13	0.15	0.13	

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>b</sup>Fractionated Primary Production (>3.0 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 112. Physical, chemical and biological data from Sproat Lake, Stn. 1, April 4, 1984.

Depth (m)	0	1	3	5	10.5	12	15	21.5	40
Temperature (°C)	7.3	7.3	7.2	7.1					5.0
TDS (mg·L <sup>-1</sup> )				32.0					5.5
pH					6.8				6.8
T·Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )					21.37				21.62
DIC (mg·L <sup>-1</sup> )					10.86				11.19
TDN (µg N·L <sup>-1</sup> )									
Nitrate (µg N·L <sup>-1</sup> )	178	183	228						229
Ammonia (µg N·L <sup>-1</sup> )	15	15	15						33
PN (µg N·L <sup>-1</sup> )	<4	<4	<4						<4
PC (µg C·L <sup>-1</sup> )	31	24	32						20
TP (µg P·L <sup>-1</sup> )									
PP (µg P·L <sup>-1</sup> )	<1	<1	<1						<1
SiS (mg Si·L <sup>-1</sup> )	0.5	<0.5	0.7						<0.5
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	1.20	1.18	1.18						1.20
Chlorophyll (µg·L <sup>-1</sup> )	0.33	0.34	0.55						0.73
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	0.80	1.08	1.38						0.25
Alg. Carbon (mg C·m <sup>-3</sup> )	2086	2240	1530	2184	2409	2353	1085	323	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	197	216	154	203	220	225	97	30	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>b</sup>	0.12	0.16	0.41	0.53	0.89	0.55	0.57	0.32	0.07
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.04	0.14	0.22	0.20	0.17	0.29	0.37	0.10	

aTotal Primary Production (>0.2 µm).

bFractionated Primary Production (>3.0 µm).

cFractionated Primary Production (>8.0 µm).

Appendix Table 113. Physical, chemical and biological data from Sproat Lake, Stn. 1, April 25, 1984.

Depth (m)	0	1	3	5	17	23	40
Temperature (°C)	8.6	8.4	7.8	7.6	6.1	5.2	4.7
TDS (mg·L <sup>-1</sup> )					40.7		
pH							
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )	6.7						
DIC (mg·L <sup>-1</sup> )	20.84						
TDN (µg N·L <sup>-1</sup> )	104	199	106	193			
Nitrate (µg N·L <sup>-1</sup> )	14	15	31	17			
Amonia (µg N·L <sup>-1</sup> )	<4	<4	<4	<4			
PN (µg N·L <sup>-1</sup> )	14	47	18	28			
PC (µg C·L <sup>-1</sup> )	145	165	176	183	137		
TP (µg P·L <sup>-1</sup> )	1	<1	2	2			
PP (µg P·L <sup>-1</sup> )	0.3	0.6	1.0	1.3	0.7		
SRS (µg Si·L <sup>-1</sup> )	1.14	1.13	1.14	1.15	1.16	1.20	
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	0.52	0.21	0.54	0.50	0.72	0.75	
Chlorophyll (µg·L <sup>-1</sup> )	0.67	0.99	1.42	1.82	1.54	0.20	
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	3788	3318	2605	3954	2984	375	
Alg. Carbon (mg C·m <sup>-3</sup> )	323	300	231	358	284	42	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	0.08						0.00
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>b</sup>	0.00	0.14	0.00	0.14	0.07	0.00	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>		0.15	0.00	0.15	0.00	0.00	

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>b</sup>Fractionated Primary Production (>3.0 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 114. Physical, chemical and biological data from Sproat Lake, Stn. 1, May 9, 1984.

Depth (m)	0	1	3	5	10	12	15	18	23	28	40
Temperature (°C)	9.5	9.5	9.4	9.3	8.5	7.6	6.6	6.1	5.6	5.3	5.1
pH											
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )	6.9				6.9			6.8	6.8		
DIC (mg·L <sup>-1</sup> )	22.11				21.87			21.82	21.87		
	7.35				7.24			7.69	7.84		
TDN (μg N·L <sup>-1</sup> )	113	146	152	166	149	112	177	148	268	155	
Nitrate (μg N·L <sup>-1</sup> )	12	12	12	11	13	16	17	30	35	38	
Ammonia (μg N·L <sup>-1</sup> )	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	
PN (μg N·L <sup>-1</sup> )	12	2	11	16	15	18	16	8	8	6	
PC (μg C·L <sup>-1</sup> )	122	61	125	158	161	165	155	97	81	108	164
TP (μg P·L <sup>-1</sup> )	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PP (μg P·L <sup>-1</sup> )	0.5	0.5	0.6	0.9	0.8	1.0	1.1	0.5	0.5	0.5	0.6
SrS (mg Si·L <sup>-1</sup> )	1.22	1.16	1.16	1.16	1.13	1.16	1.16	1.16	1.22	1.20	1.18
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	0.34	0.42	0.66	0.67	0.60	0.52	0.67	0.82	0.82	0.82	0.66
Chlorophyll (μg·L <sup>-1</sup> )	0.61	0.72	0.70	1.33	1.71	2.63	3.22	1.22	0.68	0.68	0.39
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	4580	2698	3241	3287	4733	3202	3812	2538	1517	1088	
Alg. Carbon (mg C·m <sup>-3</sup> )	353	227	252	275	374	279	308	216	128	98	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	0.70				0.48			0.56	0.51	0.07	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>b</sup>		0.17	0.01		0.23			0.25	0.00	0.00	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>		0.34			0.25			0.38	0.48	0.00	

<sup>a</sup>Total Primary Production (>0.2 μm).

<sup>b</sup>Fractionated Primary Production (>3.0 μm).

<sup>c</sup>Fractionated Primary Production (>8.0 μm).

Appendix Table 115. Physical, chemical and biological data from Sproat Lake, Stn. 1, May 24, 1984.

Depth (m)	0	1	3	5	9	13	17	19	21	25	40
pH											
Temperature (°C)	10.6	10.5	10.2	10.0	8.3	7.2	6.3	6.0	5.6	4.9	
T. Alk. (mg·L⁻¹ CaCO₃)											
DIC (mg·L⁻¹)											
TDN (µg N·L⁻¹)											
Nitrate (µg N·L⁻¹)	143	126	179	149	149	140	197	162	182	185	
Ammonia (µg N·L⁻¹)	5	6	6	7	8	12	15	19	28	37	
PN (µg N·L⁻¹)	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	
PC (µg C·L⁻¹)	22	15	15	20	21	20	22	22	13	9	
TP (µg P·L⁻¹)	107	110	145	132	147	156	155	155	78	58	165
PP (µg P·L⁻¹)	<1	<1	<1	1	1	2	2	1	1	1	
SRS (mg Si·L⁻¹)	0.9	1.0	1.5	1.6	2.8	2.6	2.9	2.9	1.2	1.1	
Bacteria (x10⁶·mL⁻¹)	1.06	1.04	1.04	1.05	1.05	1.07	1.08	1.08	1.12	1.12	
Chlorophyll (µg·L⁻¹)	0.58	0.52	0.54	0.70	0.76	0.70	0.63	0.80	0.75	0.57	
Alg. Volume (mm³·m⁻³)	0.66	0.64	0.74	1.20	1.95	3.46	3.73	3.64	0.75	0.24	
Alg. Carbon (mg C·m⁻³)	4111	5321	5338	5167	6536	7710	6929	4662	1446	675	
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>a</sup>	1.85	1.04	0.45	0.42	0.52	0.28	0.23	0.17	0.00		
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>b</sup>	0.28	0.29	0.29	0.34	0.24	0.22					
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>c</sup>	0.13	0.27	0.14	0.14	0.11	0.20	0.14				

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>b</sup>Fractionated Primary Production (>3.0 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 116. Physical, chemical and biological data from Sproat Lake, Stn. 1, June 6, 1984.

Depth (m)	0	1	3	5	10	13	15	16	20	23	27	40
Temperature (°C)	13.9	13.6	13.0	12.0	9.5	8.2			7.5	6.3	5.8	4.9
TDS (mg·L <sup>-1</sup> )					32.0							
pH												
T·Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )					6.7	6.8						
DIC (mg·L <sup>-1</sup> )					21.99	21.51						
					7.87	7.54						
TUN (μg N·L <sup>-1</sup> )												
Nitrate (μg N·L <sup>-1</sup> )	188	286	178	139	265	8						
Ammonia (μg N·L <sup>-1</sup> )	3	2	3	4	<4	<4						
PN (μg N·L <sup>-1</sup> )	<4	<4	<4	<4	14	21	21	22				
PC (μg C·L <sup>-1</sup> )	114	188	127	155	141							
TP (μg P·L <sup>-1</sup> )			<1	<1								
PP (μg P·L <sup>-1</sup> )	0.4	0.4	0.4	0.4	0.4	0.5						
SKS (mg Si·L <sup>-1</sup> )	1.02	1.03	1.03	1.02	1.03							
Bacteria (X10 <sup>6</sup> ·ml <sup>-1</sup> )	0.34	0.39	0.62	0.61	0.85							
Chlorophyll (μg·L <sup>-1</sup> )	0.40	0.33	0.75	1.07	1.66							
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	3502	5427	3977	4839	6142							
Alg. Carbon (mg C·m <sup>-3</sup> )	253	395	292	358	448							
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	0.46	0.37	0.41	0.54	0.75							
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.13	0.10	0.06	0.05	0.14	0.02						
Total Primary Production (>0.2 μm)												
Fractionated Primary Production (>8.0 μm),												

<sup>a</sup>Total Primary Production (>0.2 μm).

<sup>c</sup>Fractionated Primary Production (>8.0 μm).

Appendix Table 117. Physical, chemical and biological data from Sproat Lake, Stn. 1, June 20, 1984.

Depth (m)	0	1	3	5	10	15	17	20	23	28	30	33	40
Temperature (°C)	17.0	17.0	16.3	15.6	11.6	8.5		6.8	6.0	5.6		5.2	4.9
pH		6.9			7.0					6.7			
T. Alk. (mg·L⁻¹ CaCO₃)	20.56			21.47					20.80				
DIC (mg·L⁻¹)	6.50			6.57					7.86				
TDN (µg N·L⁻¹)		241	228	254	215	274		245	379	298		357	460
Nitrate (µg N·L⁻¹)	9	17	9	22	6			15	27	32		39	43
Ammonia (µg N·L⁻¹)	<4	<4	<4	<4	<4			<4	<4	<4		<4	<4
PN (µg N·L⁻¹)	20	12	21	24	18			32	25	16		12	12
PC (µg C·L⁻¹)	163	168	411	233	168			240	205	125		101	119
TP (µg P·L⁻¹)	<1	<1	<1	<1	<1			1	1	<1		<1	<1
PP (µg P·L⁻¹)	<0.2	<0.2	<0.2	0.2	0.2			0.3	0.3	<0.2		<0.2	<0.2
SRS (mg Si·L⁻¹)	1.13	1.11	1.09	1.11	1.10			1.18	1.17	1.19		1.21	1.23
Bacteria (x10⁶·mL⁻¹)	0.48	0.45	0.62	0.80	0.83			0.82	0.73	0.85		0.80	0.61
Chlorophyll (µg·L⁻¹)	0.58	0.22	0.26	1.24	2.00			2.46	2.47	0.75		0.42	0.32
Alg. Volume (mm³·m⁻³)	4635	3809	3494	8102	9392			6680	4337	2490		1054	1050
Alg. Carbon (mg C·m⁻³)	316	264	244	558	648			500	354	182		88	84
Pr. prod. (mg C·m⁻³·h⁻¹)a	0.17	0.12	0.38	0.42	0.70			0.42	0.16			0.05	
Pr. prod. (mg C·m⁻³·h⁻¹)c	0.03	0.00	0.16	0.16	0.17			0.35	0.12			0.04	

aTotal Primary Production (>0.2 µm).

cFractionated Primary Production (>8.0 µm).

Appendix Table 118. Physical, chemical and biological data from Sproat Lake, Stn. 1, July 5, 1984.

Depth (m)	0	1	3	5	8	10	12	16	21	25	28	40
Temperature (°C)	16.5	16.4	16.1	15.9	14.6			10.2	8.0	6.5	5.9	5.4
pH		6.9		7.0				147	168	157	185	228
T. Alk. (mg·L⁻¹) CaCO₃	23.90		21.32					1	2	2	17	20
DIC (mg·L⁻¹)	7.64		6.48					12	8	5	11	6
								40	24	34	34	17
TDN (µg N·L⁻¹)	123	163	157									
Nitrate (µg N·L⁻¹)	1	1	<1									
Ammonia (µg N·L⁻¹)	11	11	6									
PN (µg N·L⁻¹)	25	19	24									
PC (µg C·L⁻¹)	261	192	478	191				328	219	260	126	309
TP (µg P·L⁻¹)	1	<1	1	<1				1	2	2	1	2
PP (µg P·L⁻¹)	0.5	0.6	0.6	0.8				1.2	0.9	1.1	1.1	0.8
SRS (mg Si·L⁻¹)	1.07	1.08	1.07	1.08				1.06	1.06	1.08	1.16	1.18
Bacteria (X10⁶·mL⁻¹)	0.79	0.71	0.81	0.71				0.84	0.95	0.88	0.99	1.20
Chlorophyll (µg·L⁻¹)	0.25	0.25	0.25	0.28				1.77	0.52	1.96	2.65	2.69
Alg. Volume (mm³·m⁻³)	2962	3208	4042	3162				9604	7965	11917	7434	1195
Alg. Carbon (mg C·m⁻³)	207	229	293	231				634	523	787	656	553
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>a</sup>	0.13	0.20	0.25	0.08				0.30				
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>c</sup>	0.00	0.20	0.23	0.00				0.16				
												0.10

<sup>a</sup>Total Primary Production (>0.2 µm),  
<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 119. Physical, chemical and biological data from Sproat Lake, Stn. 1, July 18, 1984.

Depth (m)	0	1	5	10	15	20	24	28	30	34	40
Temperature (°C)	20.7	20.6	18.8	14.0	9.1	6.7	6.0	5.5	5.3	5.1	4.9
pH											
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )	6.8	6.9	6.8	6.8	6.8						
DIC (mg·L <sup>-1</sup> )	22.57	22.32	21.42	21.23							
	7.33	6.80	7.46	7.44							
TDN (µg N·L <sup>-1</sup> )	181	165	231	230	202	184	183	250	229	213	
Nitrate (µg N·L <sup>-1</sup> )	1	<1	4	<1	5	14	24	27	30	39	
Ammonia (µg N·L <sup>-1</sup> )	5	<4	6	<4	5	<4	<4	<4	<4	<4	
PN (µg N·L <sup>-1</sup> )	18	24	32	25	33	28	21	24	19	17	
PC (µg C·L <sup>-1</sup> )	161	162	246	211	250	213	187	199	132	111	169
TP (µg P·L <sup>-1</sup> )	<1	<1	<1	<1	1	2	1	2	2	1	
PP (µg P·L <sup>-1</sup> )	0.3	0.2	0.8	0.8	0.8	1.0	0.9	0.9	0.6	0.5	
SRS (mg Si·L <sup>-1</sup> )	0.99	0.99	1.03	0.98	1.02	1.06	1.09	1.12	1.12	1.14	
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	0.65	0.65	1.02	0.90	0.66	0.65	1.29	1.22	1.16	0.92	
Chlorophyll (µg·L <sup>-1</sup> )	0.14	0.17	2.27	0.73	1.53	2.65	1.69	1.80	0.93	0.37	
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	888	1057	12575	8093	13754	9852	7616	4760	3049	1629	
Alg. Carbon (mg C·m <sup>-3</sup> )	90	100	865	552	956	708	554	348	215	119	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	0.22	0.19	0.62	1.14	0.33	0.27	0.34	0.04			
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.00	0.01	0.02	0.37	0.18	0.11	0.06	0.00			

<sup>a</sup>Total Primary Production (>0.2 µm),  
<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 120. Physical, chemical and biological data from Sproat Lake, Stn. 1, August 1, 1984.

Depth (m)	0	1	3	5	10	15	20	23	25	30	40
Temperature (°C)	20.8	20.5	20.0	19.6	14.4	8.6	7.3	6.8	6.5	5.9	5.0
TDS (mg·L <sup>-1</sup> )				34.5							
pH					6.8	6.6					
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )					22.23	20.89					
DIC (mg·L <sup>-1</sup> )					7.30	8.56					
TN (μg N·L <sup>-1</sup> )					230	170	115	145	215	150	110
Nitrate (μg N·L <sup>-1</sup> )					3	2	3	1	1	4	6
Ammonia (μg N·L <sup>-1</sup> )					<4	<4	<4	<4	<4	<4	<4
PN (μg N·L <sup>-1</sup> )					10	14	14	14	22	37	43
PO (μg C·L <sup>-1</sup> )					110	191	167	175	275	250	255
TP (μg P·L <sup>-1</sup> )					<1	1	<1	<1	<1	<1	<1
PP (μg P·L <sup>-1</sup> )					<0.2	0.3	0.2	0.3	0.4	0.7	0.7
SRS (mg Si·L <sup>-1</sup> )					0.90	1.02	0.95	0.98	1.05	1.06	1.10
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )					0.42	0.46	0.34	0.58	0.52	0.60	0.92
Chlorophyll (μg·L <sup>-1</sup> )					0.24	0.27	0.25	0.56	0.78	2.43	3.08
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )					567	629	993	1284	3678	7663	13372
Alg. Carbon (mg C·m <sup>-3</sup> )					72	69	101	117	278	533	914
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>					0.19	0.15	0.37	0.46	0.50	0.43	0.74
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>					0.04	0.03	0.14	0.00	0.07	0.10	0.46

<sup>a</sup>Total Primary Production (>0.2 μm).

<sup>c</sup>Fractionated Primary Production (>8.0 μm).

Appendix Table 121. Physical, chemical and biological data from Sproat Lake, Stn. 1, August 16, 1984.

Depth (m)	0	1	3	5	10	15	20	23	25	30	40
Temperature (°C)	19.9	19.8	19.6	19.4	15.7	8.9	6.7	5.9	5.7	5.1	4.7
TDS (mg·L⁻¹)				31.6							
pH					7.1				6.9		
T. Alk. (μg·L⁻¹ CaCO₃)	22.95				23.19				22.95		
DIC (mg·L⁻¹)	6.24				6.66				7.42		
TDN (μg N·L⁻¹)											
Nitrate (μg N·L⁻¹)	257	145	135	138	245	146	390	185	524	221	
Ammonia (μg N·L⁻¹)	<1	<1	<1	<1	<1	<1	7	13	30	34	
PN (μg N·L⁻¹)	9	5	<4	<4	<4	<4	4	<4	<4	<4	
24	14	17	16	17	17	39	31	31	20	11	
PC (μg C·L⁻¹)											
TP (μg P·L⁻¹)	187	140	137	177	197	276	263	240	195	124	
PP (μg P·L⁻¹)	<1	1	<1	<1	<1	<1	1	1	2	1	
SRS (mg Si·L⁻¹)	0.3	0.3	0.5	0.5	0.5	0.8	1.3	1.1	1.0	0.7	
Bacteria (X10⁶·mL⁻¹)	1.06	1.06	1.08	1.07	1.01	1.06	1.09	1.03	1.12	1.21	
Chlorophyll (μg·L⁻¹)	0.36	0.39	0.62	0.69	0.92	0.73	0.76	0.62	0.93	0.72	
Alg. Volume (mm³·m⁻³)	0.31	0.26	0.31	0.56	1.09	2.57	3.69	3.69	2.98	0.77	
Alg. Carbon (mg C·m⁻³)	1008	1070	1166	1080	4488	10430	11072	8805	5600	1660	
Pr. Prod. (mg C·m⁻³·h⁻¹)a	0.34	0.18	0.14	0.19					0.13	0.06	
Pr. Prod. (mg C·m⁻³·h⁻¹)c	0.00	0.00	0.00	0.00					0.00	0.00	

aTotal Primary Production (>0.2 μm).

cFractionated Primary Production (>8.0 μm).

Appendix Table 122. Physical, chemical and biological data from Sproat Lake, Stn. 1, August 30, 1984.

Depth (m)	0	1	3	5	10	15	28	30	40
Temperature (°C)	18.8	18.8		18.6		9.2	6.3		5.2
TDS (mg·L <sup>-1</sup> )			33.9						
pH					6.6				
T· Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )		6.7			20.99				
DIC (mg·L <sup>-1</sup> )		21.80			8.31				
TDN (μg N·L <sup>-1</sup> )		7.41							
Nitrate (μg N·L <sup>-1</sup> )	94			110		144		126	183
Ammonia (μg N·L <sup>-1</sup> )	<1		<1		<1		<1		37
PN (μg N·L <sup>-1</sup> )	<4		<4		<4		<4		<4
	17		18		25		34		17
PC (μg C·L <sup>-1</sup> )			166			218			
TP (μg P·L <sup>-1</sup> )		149			271				140
PP (μg P·L <sup>-1</sup> )		2		2		1		1	
SRS (mg Si·L <sup>-1</sup> )		0.6		0.6		1.1		1.0	0.9
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	0.97		0.99		0.94		1.05		1.21
Chlorophyll (μg·L <sup>-1</sup> )	0.57		0.45		0.84		1.01		1.00
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	0.27		0.23		0.75		2.66		0.72
Alg. Carbon (mg C·m <sup>-3</sup> )		829		785		6326		9542	3896
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>		81		76		456		659	269
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	2.44	0.25	0.19	0.27	0.48	0.41	0.13	0.07	
	0.11	0.05	0.01	0.04	0.12	0.16	0.14	0.04	

<sup>a</sup>Total Primary Production (>0.2 μm),  
<sup>c</sup>Fractionated Primary Production (>8.0 μm).

Appendix Table 123. Physical, chemical and biological data from Sproat Lake, Stn. 1, September 13, 1984.

Depth (m)	0	1	3	5	10	15	18	22	25	30	40
Temperature (°C)	17.0	16.9	16.8	16.6	16.2	9.4	7.6	6.7	6.2	5.2	4.8
TDS (mg·L⁻¹)					32.9						
pH						7.0					
T. Alk. (mg·L⁻¹ CaCO <sub>3</sub> )	22.80				22.18						
UIC (mg·L⁻¹)	7.79				6.74						
TDN (µg N·L⁻¹)											
Nitrate (µg N·L⁻¹)	159	273	216	219		300	174	208	207	238	
Nitrite (µg N·L⁻¹)	<1	4	1	1		5	1	7	22	36	
Ammonia (µg N·L⁻¹)	<4	<4	<4	<4		<4	<4	<4	<4	<4	
PN (µg N·L⁻¹)	19	15	16	19		25	29	30	32	23	14
PC (µg C·L⁻¹)											
TP (µg P·L⁻¹)	1	<1	2	1		<1	3	3	1	2	
PP (µg P·L⁻¹)	0.5	0.5	0.4	0.5		0.8	1.1	0.8	1.0	0.9	0.6
SRS (mg Si·L⁻¹)	0.97	0.98	0.97	0.99		0.94	0.96	0.97	1.01	1.07	1.12
Bacteria (x10 <sup>6</sup> ·mL⁻¹)	0.55	0.61	0.36	0.40		0.93	0.67	1.06	0.66	0.64	0.85
Chlorophyll (µg·L⁻¹)	0.34	0.34	0.36	0.34		0.96	1.68	3.98	3.57	2.67	1.27
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> ) <sup>a</sup>	1144	1037	929	1451		3649	7901	8451	9125	10427	3492
Alg. Carbon (mg C·m <sup>-3</sup> )	136	97	97	145		296	563	607	629	692	237
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	1.13	0.28	0.37	0.92		0.30	0.52	0.55	0.04		
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.10	0.28	0.10	0.19		0.09	0.19	0.22	0.00		

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 124. Physical, chemical and biological data for Sproat Lake, Stn. 1, September 26, 1984.

Depth (m)	0	1	3	5	10	16	20	23	25	30	40
Temperature (°C)	16.5	16.4	16.2	16.1	15.7	9.5	7.8	6.5	6.2	5.5	5.0
pH											
T. Alk. (mg•L <sup>-1</sup> CaCO <sub>3</sub> )	7.2										
DIC (mg•L <sup>-1</sup> )	23.24										
	6.44										
TDN (μg N•L <sup>-1</sup> )	112	137	148	144	128	142	102	153	140	222	
Nitrate (μg N•L <sup>-1</sup> )	4	2	1	1	2	2	1	1	22	42	
Ammonia (μg N•L <sup>-1</sup> )	<4	<4	<4	<4	9	<4	<4	<4	<4	<4	
PN (μg N•L <sup>-1</sup> )	20	24	19	15	22	25	26	29	28	16	
PC (μg C•L <sup>-1</sup> )	216	243	161	163	214	219	240	254	213	105	
TP (μg P•L <sup>-1</sup> )	1	<1	<1	<1	1	1	1	1	<1	<1	
PP (μg P•L <sup>-1</sup> )	0.5	0.4	0.4	0.4	0.7	1.1	1.1	1.0	1.2	0.9	0.8
SrS (μg Si•L <sup>-1</sup> )	1.01	1.02	1.04	1.02	1.04	1.04	1.01	1.01	1.10	1.22	
Bacteria (X10 <sup>6</sup> •mL <sup>-1</sup> )	0.61	0.59	0.51	0.38	0.54	0.58	0.86	0.88	0.95	0.64	
Chlorophyll (μg•L <sup>-1</sup> )	0.36	0.36	0.36	0.36	1.00	2.01	2.79	2.91	2.97	0.82	
Alg. Volume (mm <sup>3</sup> •m <sup>-3</sup> )	837	715	861	1286	3543	10133	10549	13310	11778	3342	
Alg. Carbon (mg C•m <sup>-3</sup> )	102	81	91	132	313	707	738	910	779	223	
Pr. Prod. (mg C•m <sup>-3</sup> •h <sup>-1</sup> ) <sup>a</sup>	0.43	0.22	0.22	0.16							
Pr. Prod. (mg C•m <sup>-3</sup> •h <sup>-1</sup> ) <sup>c</sup>	0.16	0.15	0.08	0.08							
									0.00	0.00	

<sup>a</sup>Total Primary Production (>0.2 μm).

<sup>c</sup>Fractionated Primary Production (>8.0 μm).

Appendix Table 125. Physical, chemical and biological data from Sproat Lake, Stn. 1, October 11, 1984.

Depth (m)	0	1	3	5	10	15	23	27	30	35	3.5	40
Temperature (°C)	12.7	12.6	12.4	12.3	11.8	10.0	6.2	5.6	5.1	3.9	3.5	
pH			7.3			7.0						
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )	22.28				18.36							
DIC (mg·L <sup>-1</sup> )	6.14				5.55							
TDN (µg N·L <sup>-1</sup> )	420	170	185	160	260	160	330	360	265	365	33	
Nitrate (µg N·L <sup>-1</sup> )	1	1	1	5	12	<1	<1	<1	18	18		
Ammonia (µg N·L <sup>-1</sup> )	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	
PN (µg N·L <sup>-1</sup> )	38	38	32	31	22	36	40	45	27	27	26	
PC (µg C·L <sup>-1</sup> )	309	228	201	197	201	215	300	280	199	192	175	
TP (µg P·L <sup>-1</sup> )	1	<1	<1	2	2	<1	<1	<1	<1	<1	<1	
PP (µg P·L <sup>-1</sup> )	0.7	0.7	0.7	1.3	1.8	0.9	0.8	0.9	0.6	0.6	0.7	
SRS (mg Si·L <sup>-1</sup> )	1.04	0.96	1.01	1.06	1.02	0.94	1.05	1.00	1.11	1.11	1.18	
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	1.07	0.89	1.00	0.82	0.84	0.95	0.91	1.12	0.86	0.98		
Chlorophyll (µg·L <sup>-1</sup> )	1.10	1.15	1.10	0.73	0.66	1.57	3.18	3.80	2.85	2.85	2.11	
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	1927	1713	1447	1113	10356	9203	5901	7998	4752	4752	905	
Alg. Carbon (mg C·m <sup>-3</sup> )	226	247	174	146	709	665	388	543	367	367	107	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	1.00	1.06	0.84	0.46	0.06	0.02	0.00	0.00	0.00	0.00	0.00	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.21	0.35	0.24	0.11	0.01	0.00	0.00	0.00	0.00	0.00	0.00	

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 126. Physical, chemical and biological data from Sproat Lake, Stn. 1, October 25, 1984.

Depth (m)	0	1	3	5	10	15	20	25	29	30	40
Temperature (°C)	11.7	11.7	11.6	11.6	11.5	10.7	8.5	6.9	5.9	5.2	5.0
pH											
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )	7.3										
DIC (mg·L <sup>-1</sup> )	20.51										
TDN (µg N·L <sup>-1</sup> )	139	267	151	146	159	197	157	121	142	133	
Nitrate (µg N·L <sup>-1</sup> )	1	1	1	1	6	15	3	3	28	38	
Ammonia (µg N·L <sup>-1</sup> )	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	
PN (µg N·L <sup>-1</sup> )	27	32	46	30	35	46	33	24	28	25	
PC (µg C·L <sup>-1</sup> )	219	470	394	220	198	359	199	217	154	148	
TP (µg P·L <sup>-1</sup> )	2	2	2	2	2	3	2	1	1	1	
PP (µg P·L <sup>-1</sup> )	1.3	1.4	1.4	1.3	2.1	1.8	1.3	1.1	1.0	1.3	
SWS (mg Si·L <sup>-1</sup> )	0.93	0.94	0.93	0.95	0.93	0.94	0.94	0.97	1.28	1.00	
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	1.43	1.02	1.02	1.18	1.05	1.25	1.72	0.93	0.78	0.70	
Chlorophyll (µg·L <sup>-1</sup> )	1.32	1.36	1.32	1.38	0.88	0.73	1.23	1.89	1.78	0.82	
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	1459	1750	1358	1363	1541	2002	4871	7476	5466	4450	
Alg. Carbon (mg C·m <sup>-3</sup> )	171	183	163	177	166	211	407	544	380	308	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	2.37	2.34	2.37	1.03	0.94	0.27					
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.25	0.17	0.69	0.12	0.20	0.00					

<sup>a</sup>Total Primary Production (>0.2 µm).  
<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 127. Physical, chemical and biological data from Sproat Lake, Stn. 1, November 8, 1984.

Depth (m)	0	1	3	5	7.5	10	15	23	30	35	40
Temperature (°C)	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.2	7.4	6.1	5.4
TDS (mg·L⁻¹)					16.6						
pH					7.2						
T. Alk. (mg·L⁻¹ CaCO₃)				20.56							
DIC (mg·L⁻¹)	5.81				5.81						
TDN (µg N·L⁻¹)											
Nitrate (µg N·L⁻¹)	672	334	338	228	256	256	355	188	188	307	375
Ammonia (µg N·L⁻¹)	14	14	14	14	14	14	15	18	20	30	47
PN (µg N·L⁻¹)	<4	<4	5	5	<4	33	12	5	5	8	5
PC (µg C·L⁻¹)											
TP (µg P·L⁻¹)	236	223	214	248	208	170	166	199	199	258	191
PP (µg P·L⁻¹)	0.9	0.9	2	2	1	1	2	<1	1	1	<1
SKS (µg Si·L⁻¹)											
Bacteria (X10⁶·mL⁻¹)	0.97	1.01	0.96	1.02	0.99	1.02	1.00	1.04	1.08	1.17	
Chlorophyll (µg·L⁻¹)											
Alg. Volume (mm³·m⁻³) <sup>a</sup>	0.90	0.93	1.31	1.03	1.09	0.92	0.98	0.92	0.86	0.61	
Alg. Carbon (mg C·m⁻³)	1.28	1.21	1.28	1.22	1.15	0.79	0.46	0.84	1.26	0.89	
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>a</sup>	1.996	1690	2040	1628	1737	1768	2311	3294	6422	3845	
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>c</sup>	202	197	222	179	181	186	228	299	445	262	

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 128. Physical, chemical and biological data from Sproat Lake, Stn. 1, November 21, 1984.

Depth (m)	0	1	3	5	8	10	15	20	24	35	40
Temperature (°C)	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.0	7.0	5.5	5.3
pH											
T. Alk. (mg·L⁻¹ CaCO₃)		7.3									
DIC (mg·L⁻¹)	20.32										
	5.67										
TDN (µg N·L⁻¹)	337	686	335	410	237	476	546	460	297	470	
Nitrate (µg N·L⁻¹)	2	<1	1	<1	<1	<1	<1	<1	12	34	
Ammonia (µg N·L⁻¹)	<4	<4	<4	<4	<4	<4	4	<4	<4	<4	
PN (µg N·L⁻¹)	30	27	20	26	26	28	25	22	19	12	
PC (µg C·L⁻¹)	203	237	274	300	311	292	260	257	209	146	178
TP (µg P·L⁻¹)	2	1	1	<1	2	<1	2	2	<1	<1	
PP (µg P·L⁻¹)	0.8	0.8	1.0	0.8	0.9	1.0	0.8	0.7	0.6	0.5	
SKS (mg Si·L⁻¹)	1.17	1.11	1.07	1.05	1.08	1.12	1.04	1.14	1.19	1.27	
Bacteria (X10⁶·mL⁻¹)	0.62	0.78	0.91	1.21	1.18	0.95	0.94	0.82	1.04	0.83	
Chlorophyll (µg·L⁻¹)	1.14	1.12	1.18	1.08	1.16	1.21	1.06	0.62	1.16	0.97	
Alg. Volume (mm³·m⁻³)	988	879	1592	1906	1545	1025	1486	1217	4508	3541	
Alg. Carbon (mg C·m⁻³)	94	98	153	182	156	102	152	122	345	251	
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>a</sup>	0.61	0.55	0.15	0.16	0.01	0.00					
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>c</sup>	0.20	0.26	0.10	0.10	0.05	0.00					

aTotal Primary Production (>0.2 µm).

cFractionated Primary Production (>8.0 µm).

Appendix Table 129. Physical, chemical and biological data from Sproat Lake, Stn. 1, December 19, 1984.

Depth (m)	0	1	3	5	7.5	10	15	25	30	35	40
Temperature (°C)	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.7	5.3
TDS (mg·L <sup>-1</sup> )					33.8						
pH	7.1					7.2					
T· Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )	18.92					21.72					
DIC (mg·L <sup>-1</sup> )	5.70					6.30					
TDN (μg N·L <sup>-1</sup> )	698	559									
Nitrate (μg N·L <sup>-1</sup> )	16	16	513	488	474	396	557	649	496	443	
Ammonia (μg N·L <sup>-1</sup> )	5	5	16	15	16	16	16	16	16	16	36
PN (μg N·L <sup>-1</sup> )	15	15	13	16	22	15	17	16	5	6	5
PC (μg C·L <sup>-1</sup> )	118	111	99	108	207	96	155	111	117	117	115
TP (μg P·L <sup>-1</sup> )	1	1	1	<1	1	1	1	1	1	1	<1
PP (μg P·L <sup>-1</sup> )	0.9	1.3	1.4	1.4	1.2	1.5	2.0	1.3	1.4	1.4	2.0
SRS (mg Si·L <sup>-1</sup> )	1.02	1.06	1.06	1.04	1.06	1.04	1.03	1.05	1.13	1.17	
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	1.03	0.88	0.90	0.90	1.04	1.00	0.87	0.74	1.09	0.80	
Chlorophyll (μg·L <sup>-1</sup> )	0.79	0.81	0.81	0.73	0.77	0.90	0.72	0.86	0.72	0.64	
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	2003	1712	1985	1844	1560	1968	2100	1836	1742	2288	
Alg. Carbon (mg C·m <sup>-3</sup> )	187	180	193	183	154	201	199	168	154	178	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	0.48	0.44	0.43	0.32	0.46	0.00	0.00	0.00	0.00	0.00	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>		0.43	0.20	0.21	0.00	0.00	0.00	0.00	0.00	0.00	

aTotal Primary Production (>0.2 μm).

cFractionated Primary Production (>8.0 μm).

Appendix Table 130. Physical, chemical and biological data from Sproat Lake, Stn. 2, January 11, 1984.

Depth (m)	1	3	5	23	40
Temperature (°C)	5.2	5.2	5.0	5.0	5.0
TDS (mg·L <sup>-1</sup> )			28.0		
TDN (μg N·L <sup>-1</sup> )	262	273	277	192	348
Nitrate (μg N·L <sup>-1</sup> )	22	22	22	24	26
Ammonia (μg N·L <sup>-1</sup> )	<4	<4	<4	9	4
PN (μg N·L <sup>-1</sup> )	18	22	20	13	11
PC (μg C·L <sup>-1</sup> )	131	154	143	93	115
TP (μg P·L <sup>-1</sup> )	2	2	2	1	2
PP (μg P·L <sup>-1</sup> )	1.4	1.7	1.6	1.2	1.1
SKS (mg Si·L <sup>-1</sup> )	1.13	1.14	1.19	1.18	1.24
Bacteria (X10 <sup>6</sup> ·ml <sup>-1</sup> )	0.40	0.84	1.36	0.96	0.97
Chlorophyll (μg·L <sup>-1</sup> )	1.39	1.98	1.95	0.70	0.53
Alg. Volume (m <sup>3</sup> ·m <sup>-3</sup> )	464	456	690	411	426
Alg. Carbon (mg C·m <sup>-3</sup> )	53	54	75	42	47

Appendix Table 131. Physical, chemical and biological data from Sproat Lake, Stn. 2, February 7, 1984.

Depth (m)	0	1	3	5	7.5	10	23	40
Temperature (°C)	5.0	5.0	5.0	5.0	5.0	5.0	4.9	4.8
TDS (mg·L <sup>-1</sup> )				36.7				
pH					6.5	6.5		
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )					24.32	24.08		
DIC (mg·L <sup>-1</sup> )					11.84	11.64		
TDN (µg N·L <sup>-1</sup> )					352	473	416	478
Nitrate (µg N·L <sup>-1</sup> )					27	27	27	33
Ammonia (µg N·L <sup>-1</sup> )					<4	<4	6	4
PN (µg N·L <sup>-1</sup> )					16	24	22	8
PC (µg C·L <sup>-1</sup> )					144	149	225	85
TP (µg P·L <sup>-1</sup> )					2	2	2	2
PP (µg P·L <sup>-1</sup> )					0.9	1.3	1.3	0.9
SRS (mg Si·L <sup>-1</sup> )					1.23	1.28	1.21	1.27
bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )					0.41	0.58	0.86	0.71
Chlorophyll (µg·L <sup>-1</sup> )					1.51	1.94	2.04	1.29
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )					604	640	945	643
Alg. Carbon (mg C·m <sup>-3</sup> )					66	72	98	73
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>					1.58	1.14	1.71	0.83
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>b</sup>					0.49	0.68	0.83	0.14
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>					0.16	0.40	0.39	0.00

aTotal Primary Production (>0.2 µm).

bFractionated Primary Production (>3.0 µm).

cFractionated Primary Production (>8.0 µm).

Appendix Table 132. Physical, chemical and biological data from Sproat Lake, Stn. 2, March 7, 1984.

Depth (m)	0	1	3	5	7.5	10	15	23	40
Temperature (°C)	5.7	5.5	5.0	5.0	5.0	5.0	4.9	4.9	4.7
TDS (mg·L <sup>-1</sup> )				39.2					
pH					6.5	6.5			
T·Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )					23.29	23.19			
DIC (mg·L <sup>-1</sup> )					11.32	11.57			
TDN (μg N·L <sup>-1</sup> )					135	270			
Nitrate (μg N·L <sup>-1</sup> )					23	23			
Ammonia (μg N·L <sup>-1</sup> )					<4	<4			
PN (μg N·L <sup>-1</sup> )					15	19			
PC (μg C·L <sup>-1</sup> )					98	116	134	93	65
TP (μg P·L <sup>-1</sup> )					1	2	1	1	<1
PP (μg P·L <sup>-1</sup> )					0.9	1.3	1.6	1.1	1.0
SRS (mg Si·L <sup>-1</sup> )					1.26	1.22	1.23	1.25	1.28
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )					0.52	0.86	0.81	0.72	0.75
Chlorophyll (μg·L <sup>-1</sup> )					0.83	1.35	1.71	1.20	0.49
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )					629	915	960	679	462
Alg. Carbon (mg C·m <sup>-3</sup> )					67	108	107	72	48
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>					0.26	0.66	0.72	0.98	0.12
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>b</sup>					0.06	0.11	0.48	0.65	0.21
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>					0.00	0.00	0.26	0.38	0.21

<sup>a</sup>Total Primary Production (>0.2 μm).

<sup>b</sup>Fractionated Primary Production (>3.0 μm).

<sup>c</sup>Fractionated Primary Production (>8.0 μm).

Appendix Table 133. Physical, chemical and biological data from Sproat Lake, Stn. 2, March 22, 1984.

Depth (m)	0	1	3	5	7.5	10	13.5	23	40
Temperature (°C)	7.5	7.4	7.1	6.6	5.9	5.6	5.5	5.3	5.1
TDS (mg·L <sup>-1</sup> )				34.3					
pH	6.7				6.7				
T·Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )	22.60				23.10				
DIC (mg·L <sup>-1</sup> )	8.70				9.09				
TDN (µg N·L <sup>-1</sup> )	142	197	157						
Nitrate (µg N·L <sup>-1</sup> )	14	12	14						
Ammonia (µg N·L <sup>-1</sup> )	<4	<4	<4						
PN (µg N·L <sup>-1</sup> )	27	34	28						
PC (µg C·L <sup>-1</sup> )	145	173	151						
TP (µg P·L <sup>-1</sup> )	<1	1	2						
PP (µg P·L <sup>-1</sup> )	0.9	1.7	1.5						
SRS (mg Si·L <sup>-1</sup> )	1.05	1.03	1.02						
bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	0.43	0.47	0.65						
Chlorophyll (µg·L <sup>-1</sup> )	1.48	1.70	1.79						
Alg. Volume (m <sup>3</sup> ·m <sup>-3</sup> )	1070	1143	1432						
Alg. Carbon (mg C·m <sup>-3</sup> )	122	130	169						
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	0.19	0.20	0.38	0.37	0.49				0.05
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>b</sup>			0.00	0.33	0.42	0.28			0.01
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.15	0.21	0.00	0.24	0.24	0.06			

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>b</sup>Fractionated Primary Production (>3.0 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 134. Physical, chemical and biological data from Sproat Lake, Stn. 2, April 5, 1984.

Depth (m)	0	1	3	5	10	15	20	23	40
Temperature (°C)	8.8	8.6	8.3	7.8					
TDS (mg·L⁻¹)				33.6					
pH					6.5	6.5	6.6		
T· Alk. (mg·L⁻¹ CaCO₃)					21.87	22.85	23.34		
DIC (mg·L⁻¹)					10.70	10.94	10.65		
TDN (µg N·L⁻¹)					194	184	204		
Nitrate (µg N·L⁻¹)					6	6	12		
Ammonia (µg N·L⁻¹)					<4	<4	<4		
PN (µg N·L⁻¹)					29	18	53		
PC (µg C·L⁻¹)					150	145	184		
TP (µg P·L⁻¹)					<1	1	1		
PP (µg P·L⁻¹)					0.7	0.7	0.9		
SRS (mg Si·L⁻¹)					1.22	1.21	1.22		
Bacteria (X10⁶·mL⁻¹)					0.65	0.53	0.46		
Chlorophyll (µg·L⁻¹)					0.94	1.16	1.30		
Alg. Volume (mm³·m⁻³)					1261	1633	1778		
Alg. Carbon (mg C·m⁻³)					126	166	173		
Pr. Prod. (mg C·m⁻³·h⁻¹)²					0.12	0.18	0.34		
Pr. Prod. (mg C·m⁻³·h⁻¹)³					0.05				
Pr. Prod. (mg C·m⁻³·h⁻¹)⁴					0.06	0.18	0.32		

Total Primary Production ( $>0.2 \mu\text{m}$ )

BFR fractionated Primary Production ( $>3.0 \mu\text{m}$ )

Fractionated Primary Production ( $>8.0 \mu\text{m}$ ).

Appendix Table 135. Physical, chemical and biological data from Sproat Lake, Stn. 2, April 26, 1984.

Depth (m)	0	1	3	5	18	21	40
Temperature (°C)	9.6	9.5	9.3	9.1	5.6	5.4	5.1
TDS ( $\text{mg} \cdot \text{L}^{-1}$ )				43.3			
pH					6.8		
T. Alk. ( $\text{mg} \cdot \text{L}^{-1}$ $\text{CaCO}_3$ )					21.90		
DIC ( $\text{mg} \cdot \text{L}^{-1}$ )	7.95				8.06		
TDN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )							
Nitrate ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	225	270	180	240			
<4	3	3	2	19			
Ammonia ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	<4	<4		<4			
PN ( $\mu\text{g N} \cdot \text{L}^{-1}$ )	25	17	19	20			
PC ( $\mu\text{g C} \cdot \text{L}^{-1}$ )							
TP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	145	146	170	196	170	88	
PP ( $\mu\text{g P} \cdot \text{L}^{-1}$ )	<1	1	<1	1	1	1	
0.6	0.7	1.0	1.8	1.8	1.4	1.0	
SiS ( $\text{mg Si} \cdot \text{L}^{-1}$ )							
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	1.16	1.14	1.16	1.27			
Chlorophyll ( $\mu\text{g} \cdot \text{L}^{-1}$ )	0.61	0.51	0.64	0.82	0.70	0.79	
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )							
Alg. Carbon ( $\text{mg C} \cdot \text{m}^{-3}$ )	0.36	0.58	0.58	2.50			
Pr. Prod. ( $\text{mg C} \cdot \text{m}^{-3} \cdot \text{h}^{-1}$ ) <sup>a</sup>	3825	4673	2879	4905	4247	743	
Pr. Prod. ( $\text{mg C} \cdot \text{m}^{-3} \cdot \text{h}^{-1}$ ) <sup>b</sup>	338	405	255	440	388	75	
Pr. Prod. ( $\text{mg C} \cdot \text{m}^{-3} \cdot \text{h}^{-1}$ ) <sup>c</sup>	0.12	0.35			0.34	0.14	
	0.00	0.12			0.36	0.06	
	0.11	0.08	0.13	0.22	0.21	0.04	

<sup>a</sup>Total Primary Production ( $>0.2 \mu\text{m}$ ).

<sup>b</sup>Fractionated Primary Production ( $>3.0 \mu\text{m}$ ).

<sup>c</sup>Fractionated Primary Production ( $>8.0 \mu\text{m}$ ).

Appendix Table 136. Physical, chemical and biological data from Sproat Lake, Stn. 2, May 10, 1984.

Depth (m)	0	1	3	5	7.5	10	13	15	20	23	28	40
Temperature (°C)	11.6	11.5	11.3	11.1	10.6	8.6	7.3	6.6	5.8	5.6	5.5	5.4
pH												
T. Alk. (mg·L⁻¹ CaCO₃)	6.7	7.1				7.0						
DIC (mg·L⁻¹)	22.85 8.62	23.29 6.82				22.75 7.10						
TDN (µg N·L⁻¹)	155	130	222			109	125	172	225	218	177	150
Nitrate (µg N·L⁻¹)	3	3	3			3	3	6	20	33	30	39
Ammonia (µg N·L⁻¹)	<4	<4	<4			<4	<4	<4	<4	<4	<4	<4
PN (µg N·L⁻¹)	12	13	15			21	26	28	26	15	12	8
PC (µg C·L⁻¹)	174	142	150			203	212	223	237	227	89	116
TP (µg P·L⁻¹)	1	<1	1			2	1	1	<1	<1	<1	<1
PP (µg P·L⁻¹)	0.7	0.9	0.8			1.0	1.2	1.4	1.5	1.0	1.0	1.2
SRS (mg Si·L⁻¹)	1.15	1.14	1.16			1.16	1.19	1.22	1.25	1.29	1.28	1.31
bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.40	0.66	0.66			0.78	0.74	0.70	0.78	0.97	0.97	0.94
Chlorophyll (µg·L⁻¹)	0.60	0.58	0.50			0.98	1.80	2.89	3.37	1.77	1.00	0.45
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	3797	3042	3109			4240	5257	5606	4665	2210	1300	997
Alg. Carbon (mg C·m⁻³)	287	223	239			320	406	436	368	182	112	87
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>a</sup>		0.49	0.32			0.43	0.53					
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>b</sup>	0.68	0.45				0.32	0.37	0.21				
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>c</sup>	0.62	0.22	0.00			0.11	0.14	0.07				

<sup>a</sup>Total Primary Production (>0.2 µm).<sup>b</sup>Fractionated Primary Production (>3.0 µm).<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 137. Physical, chemical and biological data from Sproat Lake, Stn. 2, May 25, 1984.

Depth (m)	0	1	3	5	9	13	17	19	21	25	28	40
Temperature (°C)	12.0	12.0	12.0	11.0	7.9	6.7	6.0	5.8	5.4	5.3		
pH				6.6		6.5						
T. Alk. (mg L <sup>-1</sup> CaCO <sub>3</sub> )			21.28		21.28							
DIC (mg L <sup>-1</sup> )		8.24		9.47								
TDN (µg N L <sup>-1</sup> )	185	209	159	149	207	178	125	202	179	215		
Nitrate (µg N L <sup>-1</sup> )	2	3	3	2	3	3	10	16	20	36		
Ammonia (µg N L <sup>-1</sup> )	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4		
PN (µg N L <sup>-1</sup> )	10	14	16	21	24	22	18	19	19	5		
PC (µg C L <sup>-1</sup> )	90	105	104	166	190	176	145	140	140	60		
TP (µg P L <sup>-1</sup> )	<1	<1	3	1	2	1	2	2	2	2		
PP (µg P L <sup>-1</sup> )	1.3	2.2	1.8	2.7	3.0	4.3	3.9	1.7	3.1	1.8		
SRS (µg Si L <sup>-1</sup> )	1.03	1.03	1.05	1.08	1.12	1.10	1.12	1.14	1.12	1.17		
Bacteria (x10 <sup>6</sup> mL <sup>-1</sup> )	0.77	0.60	0.64	0.65	0.89	0.82	0.73	0.85	0.92	0.69		
Chlorophyll (µg L <sup>-1</sup> )	0.46	0.59	0.58	0.90	1.63	3.33	3.26	3.29	3.36	0.42		
Alg. Volume (mm <sup>3</sup> m <sup>-3</sup> )	2655	3502	2946	3964	4580	8796	6348	5017	4316	722		
Alg. Carbon (mg C m <sup>-3</sup> )	200	250	227	290	348	654	479	389	346	61		
Pr. Prod. (mg C m <sup>-3</sup> h <sup>-1</sup> ) <sup>a</sup>	0.82	0.54									0.00	
Pr. Prod. (mg C m <sup>-3</sup> h <sup>-1</sup> ) <sup>b</sup>	0.48	0.53	0.27	0.06	0.22	0.11	0.04				0.00	
Pr. Prod. (mg C m <sup>-3</sup> h <sup>-1</sup> ) <sup>c</sup>	0.41	0.22	0.28	0.18	0.04	0.24	0.12				0.00	

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>b</sup>Fractionated Primary Production (>3.0 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 138. Physical, chemical and biological data from Sproat Lake, Stn. 2, June 7, 1984.

Depth (m)	0	1	3	5	10	15	19	21	24	26	40
Temperature (°C)	14.5	14.3	14.0	13.0	9.2	6.9	6.0	5.9	5.8	5.7	5.0
TDS (mg·L⁻¹)				35.6							
pH											
T. Alk. (mg·L⁻¹ CaCO₃)	7.1				7.1						
DIC (mg·L⁻¹)	22.95				23.04						
	6.54				6.69						
TDN (µg N·L⁻¹)	171				349						
Nitrate (µg N·L⁻¹)	2				2						
Ammonia (µg N·L⁻¹)	<4				<4						
PN (µg N·L⁻¹)	41				54						
PC (µg C·L⁻¹)	185				178						
TP (µg P·L⁻¹)	1				1						
PP (µg P·L⁻¹)	0.4				0.5						
SRS (mg Si·L⁻¹)	1.01				1.00						
Bacteria (x10⁶·mL⁻¹)	0.48				0.86						
Chlorophyll (µg L⁻¹)	0.32				0.31						
Alg. Volume (mm³·m⁻³)	3632				3622						
Alg. Carbon (mg C·m⁻³)	274				285						
Pr. Prod. (mg C·m⁻³·h⁻¹)a	0.44				0.34						
Pr. Prod. (mg C·m⁻³·h⁻¹)c	0.13				0.12						

aTotal Primary Production (>0.2 µm).

cFractionated Primary Production (>8.0 µm).

Appendix Table 139. Physical, chemical and biological data from Sproat Lake, Stn. 2, June 19, 1984.

Depth (m)	0	1	3	5	8	10	15	18	20	24	28	40
Temperature (°C)	17.2	17.2	17.1	16.6		12.6	7.7	6.9	6.6	6.0	5.9	5.6
pH					6.8		7.0					
T. Alk. (mg·L⁻¹ CaCO₃)		23.90				21.75						
DIC (mg·L⁻¹)		7.70				6.58						
TDN (µg N·L⁻¹)	222	138	254				197	162	170	152	241	203
Nitrate (µg N·L⁻¹)	7	<1	1				1	1	6	13	23	29
Ammonia (µg N·L⁻¹)	<4	<4	<4				<4	<4	<4	<4	<4	<4
PN (µg N·L⁻¹)	25	24	22				24	33	36	68	33	24
PC (µg C·L⁻¹)	161	151	151		181	229	233	302	226	143	138	
TP (µg P·L⁻¹)	<1	<1	<1			<1	2	3	1	1	1	1
PP (µg P·L⁻¹)	<0.2	<0.2	<0.2			0.2	0.5	0.4	0.7	0.8	0.7	0.3
SKS (mg Si·L⁻¹)	1.18	1.11	1.12			1.18	1.18	1.20	1.23	1.27	1.30	1.34
Bacteria (X10⁶·mL⁻¹)	0.66	0.54	0.81			0.77	0.50	0.69	0.80	0.88	0.94	1.00
Chlorophyll (µg·L⁻¹)	0.26	0.58	0.30			0.41	1.62	2.48	2.66	2.29	1.62	0.54
Alg. Volume (mm³·m⁻³)	3408	3050	3952			7352	8011	10164	9208	5608	4056	1805
Alg. Carbon (mg C·m⁻³)	253	220	286			488	553	713	669	425	328	133
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>a</sup>	0.31	0.36	0.44			0.41				0.43	0.26	
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>c</sup>	0.00	0.00	0.16			0.33				0.23	0.12	

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 140. Physical, chemical and biological data from Sproat Lake, Stn. 2, July 6, 1984.

Depth (m)	0	1	3	5	10	15	18	23	28	30	40
Temperature (°C)	17.8	17.8	17.7	17.7	14.2	9.1	7.7	6.5	6.1	5.9	5.5
TUN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	197	130	104	1	174	158	141	144	157	178	
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	3	1	1	1	1	10	19	28	20	42	
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	6	12	5	5	5	8	5	5	<4	6	
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	36	44	43	62	53	55	36	48	48	39	
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	213	447	184	217	234	244	232	175	290	218	
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	2	<1	<1	<1	<1	2	1	<1	2	<1	
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	0.4	0.6	0.5	0.6	0.6	1.0	1.2	1.0	0.9	1.1	0.9
SiS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	1.12	1.11	1.11	1.16	1.11	1.20	1.23	1.29	1.23	1.36	
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.64	1.06	1.01	1.01	0.62	0.84	1.47	1.42	1.21	0.90	
Chlorophyll (µg·L⁻¹)	0.22	0.27	0.28	0.70	1.19	2.68	2.41	1.65	2.68	0.54	
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	1857	1434	1790	2103	10356	11121	6777	3997	7478	1508	
Alg. Carbon (mg C·m⁻³)	151	117	142	163	680	755	481	291	533	112	
Pr. Prod. (ng C·m⁻³·h⁻¹)a	0.16	0.04	0.31	0.19	0.53	0.58					
Pr. Prod. (mg C·m⁻³·h⁻¹)c	0.00	0.00	0.00	0.00	0.19	0.34					
Total Primary Production (>0.2 µm)											
Fractionated Primary Production (>8.0 µm)											

aTotal Primary Production (>0.2  $\mu\text{m}$ ).  
cFractionated Primary Production (>8.0  $\mu\text{m}$ ).

Appendix Table 141. Physical, chemical and biological data from Sproat Lake, Stn. 2, July 19, 1984.

Depth (m)	0	1	5	10	14	18	24	28	30	35	39	40
Temperature (°C)	20.9	20.9	18.8	14.2	10.3	7.3	6.6	6.3	6.2	5.9	5.7	
pH												
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )	6.9	6.9	6.7	6.7	6.6	6.6						
DIC (mg·L <sup>-1</sup> )	22.57	22.14	23.24	22.14								
	6.86	6.76	8.58	9.40								
TDN (μg N·L <sup>-1</sup> )	246	209	284	295	209	269	248	255	237	232		
Nitrate (μg N·L <sup>-1</sup> )	2	1	1	1	2	21	29	26	29	36		
Ammonia (μg N·L <sup>-1</sup> )	5	<4	<4	<4	9	5	<4	<4	<4	<4		
PN (μg N·L <sup>-1</sup> )	17	17	18	25	28	26	22	23	23	21		
PC (μg C·L <sup>-1</sup> )	183	157	209	283	262	193	191	174	160	153		
TP (μg P·L <sup>-1</sup> )	1	1	2	1	2	2	2	2	2	2		
PP (μg P·L <sup>-1</sup> )	0.6	0.3	0.6	0.7	1.0	1.1	0.9	1.1	1.0	1.0		
SRS (mg Si·L <sup>-1</sup> )	0.91	1.03	1.04	1.05	1.05	1.14	1.17	1.18	1.20	1.30		
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	0.43	0.45	0.84	1.03	0.73	0.86	1.11	1.27	1.14	1.06		
Chlorophyll (μg·L <sup>-1</sup> )	0.11	0.14	0.36	0.53	1.38	2.25	2.39	2.03	1.55	0.74		
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	716	1052	1226	3594	8651	7077	5765	7678	5926	2417		
Alg. Carbon (mg C·m <sup>-3</sup> )	76	99	111	278	600	509	413	546	416	169		
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	0.01	0.18	0.58	0.54	0.40	0.69	0.45	0.57				
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.00	0.18	0.04	0.41	0.08	0.25	0.21	0.20				

<sup>a</sup>Total Primary Production (>0.2 μm).  
<sup>c</sup>Fractionated Primary Production (>8.0 μm).

Appendix Table 142. Physical, chemical and biological data from Sproat Lake, Stn. 2, August 2, 1984.

Depth (m)	0	1	3	5	12	13	17	22	24	26	30	40
Temperature (°C)	21.3	21.2	21.1	20.9	13.4	13.0	7.7	6.6	6.5	6.3	6.1	5.4
TDS (mg·L <sup>-1</sup> )				36.4								
pH					7.1							
T·Aik. (mg·L <sup>-1</sup> )					26.15							
DIC (mg·L <sup>-1</sup> )					7.78							
TuN (μg N·L <sup>-1</sup> )						130						
Nitrate (μg N·L <sup>-1</sup> )						5						
Ammonia (μg N·L <sup>-1</sup> )						<4						
PN (μg N·L <sup>-1</sup> )						31						
PC (μg C·L <sup>-1</sup> )	129	155	156	188			286	311	229	233	202	177
T <sub>P</sub> (μg P·L <sup>-1</sup> )	<1	<1	<1	<1				<1	<1	<1	1	2
PP (μg P·L <sup>-1</sup> )	<0.2	<0.2	<0.2	0.4			0.3	0.2	0.2	0.4	0.2	<0.2
Sks (mg Si·L <sup>-1</sup> )	1.10	1.04	1.06	0.96			1.05	0.99	1.07	1.11	1.12	1.27
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	0.56	0.50	0.32	0.58			0.68	0.96	0.77	0.91	1.12	0.65
Chlorophyll (μg·L <sup>-1</sup> )	0.31	0.33	0.34	0.77			1.92	3.76	2.60	2.89	2.59	0.66
Alg. Volume (m <sup>3</sup> ·m <sup>-3</sup> ) Alg. Carbon (mg C·m <sup>-3</sup> )	616	489	397	1088			8440	10827	7327	6933	7772	2303
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup> Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.59 0.20	0.28 0.07	0.27 0.22	0.30 0.22			0.55 0.27			0.36 0.14	0.01 0.00	

<sup>a</sup>Total Primary Production (>0.2 μm).  
<sup>c</sup>Fractionated Primary Production (>8.0 μm).

Appendix Table 143. Physical, chemical and biological data from Sproat Lake, Stn. 2, August 17, 1984.

Depth (m)	0	1	3	5	10	15	19	21	25	30	40
Temperature (°C)	19.9	19.8	19.7	19.6	17.4	9.4	7.8	7.3	6.6	5.9	5.3
TDS ( $\mu\text{g}\cdot\text{L}^{-1}$ )					32.1						
pH					7.2						
T. Alk. ( $\text{mg}\cdot\text{L}^{-1}$ CaCO <sub>3</sub> )					23.43						
DIC ( $\text{mg}\cdot\text{L}^{-1}$ )					6.58						
TEN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	187	162	299	279	117	171	203	132	248	130	
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	2	2	3	2	<1	6	12	12	23	41	
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	
PN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	17	14	15	17	22	29	27	26	22	16	
PC ( $\mu\text{g C}\cdot\text{L}^{-1}$ )	184	133	136	159	180	236	211	200	178	114	
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	<1	1	1	<1	2	2	2	2	4	1	
PP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	0.6	0.5	0.5	0.8	1.0	1.1	1.1	1.0	0.9	0.9	
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	1.01	1.12	1.12	1.15	1.12	1.18	1.15	1.20	1.24	1.34	
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.55	0.49	0.48	0.55	0.87	0.68	0.76	0.94	0.98	0.73	
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	0.51	0.62	0.36	0.74	1.19	3.91	3.62	4.82	4.11	1.33	
Alg. Volume ( $\text{mm}^3\cdot\text{m}^{-3}$ )	714	752	835	871	3146	5774	6165	8119	7522	2925	
Alg. Carbon ( $\text{mg C}\cdot\text{m}^{-3}$ )	81	87	96	103	270	449	453	590	524	200	
Pr. Prod. ( $\text{mg C}\cdot\text{m}^{-3}\cdot\text{h}^{-1}$ ) <sup>a</sup>	0.11	0.18	0.32	0.23	0.37				0.20	0.01	
Pr. Prod. ( $\text{mg C}\cdot\text{m}^{-3}\cdot\text{h}^{-1}$ ) <sup>c</sup>	0.00	0.08	0.08	0.12	0.29				0.12		

<sup>a</sup>Total Primary Production ( $>0.2 \mu\text{m}$ ).  
<sup>c</sup>Fractionated Primary Production ( $>8.0 \mu\text{m}$ ).

Appendix Table 144. Physical, chemical and biological data from Sproat Lake, Stn. 2, August 30, 1984.

Depth (m)	0	1	3	5	10	15	20	30	40
Temperature (°C)	19.2	19.1	19.0	18.8	18.4	18.0	17.7	17.3	16.9
TDS (mg·L⁻¹)				34.5					
pH	6.8				6.6				
T. Alk. (mg·L⁻¹ CaCO₃)	22.61				22.71				
DIC (mg·L⁻¹)	7.55				8.72				
TDN (µg N·L⁻¹)	129			99					
Nitrate (µg N·L⁻¹)	<1			<1					
Ammonia (µg N·L⁻¹)	<4			<4					
PN (µg N·L⁻¹)	13			18					
PC (µg C·L⁻¹)	146			183					
Tr (µg P·L⁻¹)	1			1					
PP (µg P·L⁻¹)	0.6			0.7					
SRS (mg Si·L⁻¹)	1.05			1.09					
Bacteria ( $\times 10^6 \cdot \text{mL}^{-1}$ )	0.60			0.56					
Chlorophyll (µg·L⁻¹)	0.26			0.28					
Alg. Volume ( $\text{mm}^3 \cdot \text{m}^{-3}$ )	831			1035					
Alg. Carbon (mg C·m⁻³)	88			99					
Pr. Prod. (mg C·m⁻³·h⁻¹) a	2.33			0.38					
Pr. Prod. (mg C·m⁻³·h⁻¹) c	0.12			0.05					

<sup>a</sup>Total Primary Production (>0.2  $\mu\text{m}$ )

Fractionated Primary Production ( $>8.0 \mu\text{m}$ ).

Appendix Table 145. Physical, chemical and biological data from Sproat Lake, Stn. 2, September 14, 1984.

Depth (m)	0	1	3	5	10	14	18	23	27	30	40
Temperature (°C)	17.5	17.4	17.2	17.0	16.6	10.2	7.8	7.0	6.6	6.1	5.2
TDS (mg·L <sup>-1</sup> )				36.7							
pH					6.7		6.8				
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )		22.85				23.28					
DIC (mg·L <sup>-1</sup> )	7.80				7.50						
TDN (µg N·L <sup>-1</sup> )	485	158			190	187	106	154	108	175	111
Nitrate (µg N·L <sup>-1</sup> )	3	13	4			3	3	3	11	18	16
Ammonia (µg N·L <sup>-1</sup> )	<4	<4	<4			<4	<4	<4	<4	<4	<4
PN (µg N·L <sup>-1</sup> )	25	22	23			24	45	30	45	26	35
PC (µg C·L <sup>-1</sup> )		232	211	155	359	258	300	224	301	317	
TP (µg P·L <sup>-1</sup> )	2	1	<1			2	2	2	1	1	2
PP (µg P·L <sup>-1</sup> )	0.5	0.6	0.7			0.6	1.3	1.0	1.1	0.9	0.9
SRS (mg Si·L <sup>-1</sup> )	1.00	1.00	1.00	1.02	0.97	1.00	1.04	1.09	1.12	1.24	
Bacteria (x10 <sup>6</sup> mL <sup>-1</sup> )	0.43	0.62	0.92	0.58	0.96	0.78	1.06	1.11	0.98	0.90	
Chlorophyll (µg·L <sup>-1</sup> )	0.36	0.36	0.42	0.31	0.81	2.31	4.94	4.40	2.73	1.23	
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	1069	1098	956	1108	2608	7621	8784	7009	6690	5586	
Alg. Carbon (mg C·m <sup>-3</sup> )	106	107	106	108	240	562	642	499	454	370	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	0.94	1.30	0.34	0.34	0.22	0.98	0.48	0.23	0.11		
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.07	0.14	0.08	0.07	0.08	0.04	0.08	0.00	0.00		

<sup>a</sup>Total Primary Production (>0.2 µm).<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 146. Physical, chemical and biological data from Sproat Lake, Stn. 2, September 27, 1984.

Depth (m)	0	1	3	5	7.5	10	16	20	23	25	30	40
Temperature (°C)	16.8	16.8	16.7	16.6	16.4	16.4	16.7	17.4	17.1	16.9	16.4	5.2
pH												
T. Alk. (mg·L⁻¹ CaCO₃)	24.14											
DIC (mg·L⁻¹)	6.15											
TDN (µg N·L⁻¹)	143	101	112									
Nitrate (µg N·L⁻¹)	3	3	3									
Ammonia (µg N·L⁻¹)	<4	<4	<4									
PN (µg N·L⁻¹)	34	24	26									
PC (µg C·L⁻¹)	256	233	210									
TP (µg P·L⁻¹)	<1	<1	<1									
PP (µg P·L⁻¹)	0.6	0.6	0.9									
SRS (mg Si·L⁻¹)	1.12	1.10	1.18									
Bacteria (x10⁶·mL⁻¹)	0.56	0.56	0.88									
Chlorophyll (µg·L⁻¹)	0.40	0.56	0.38									
Alg. Volume (mm³·m⁻³)	754	431	574									
Alg. Carbon (mg C·m⁻³)	76	54	69									
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>a</sup>	0.38	0.44	0.61	0.67	0.77							
Pr. Prod. (mg C·m⁻³·h⁻¹) <sup>c</sup>	0.10	0.14	0.16	0.33	0.15							
											0.06	
											0.04	

<sup>a</sup>Total Primary Production (>0.2 µm),  
<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 147. Physical, chemical and biological data from Sproat Lake, Stn. 2, October 12, 1984.

Depth (m)	0	1	3	5	10	15	20	25	30	35	40
Temperature (°C)	12.7	12.7	12.7	12.6	12.0	10.0	7.3	5.9	5.1	4.5	3.7
pH											
T. Alk. (mg·L⁻¹ CaCO₃)	21.94	7.3									
DIC (mg·L⁻¹)	5.98										
TBN (µg N·L⁻¹)	295	210	190	535	190	715	305	185	285	315	
Nitrate (µg N·L⁻¹)	2	1	1	4	3	1	1	10	19	38	
Ammonia (µg N·L⁻¹)	<4	<4	<4	<4	6	<4	<4	<4	<4	<4	
PN (µg N·L⁻¹)	22	20	21	18	23	27	25	23	20	14	
PC (µg C·L⁻¹)	206	187	231	245	275	232	214	251	158	135	197
TP (µg P·L⁻¹)	1	1	2	2	1	1	<1	<1	2	1	
PP (µg P·L⁻¹)	0.9	1.1	1.0	1.5	1.4	1.0	0.7	0.6	0.6	0.8	
SKS (mg Si·L⁻¹)	1.01	1.01	1.06	1.06	1.09	1.01	1.03	1.13	1.23	1.35	
Bacteria (x10⁶·mL⁻¹)	0.92	0.97	0.93	1.16	1.16	1.14	0.97	1.07	0.97	0.83	
Chlorophyll (µg·L⁻¹)	1.38	1.44	1.38	1.72	1.49	1.61	3.64	2.73	1.83	1.27	
Alg. Volume (mm³·m⁻³)	782	727	647	1178	1520	2376	9940	7550	7836	4721	
Alg. Carbon (mg C·m⁻³)	101	109	89	141	150	240	713	515	533	322	
Pr. Prod. (mg C·m⁻³·h⁻¹)a	1.02	1.15	0.78	0.49	0.06	0.02	0.00	0.04			
Pr. Prod. (mg C·m⁻³·h⁻¹)c	0.23	0.69	0.22	0.11	0.00	0.00	0.00	0.00			

aTotal Primary Production (>0.2 µm).

cFractionated Primary Production (>8.0 µm).

Appendix Table 148. Physical, chemical and biological data from Sproat Lake, Stn. 2, October 26, 1984.

Depth (m)	0	1	3	5	10	15	20	25	28	35	40
Temperature (°C)	11.6	11.6	11.5	11.5	11.4	10.0	8.5	7.1	6.7	5.5	5.1
pH			7.3			7.2					
T. Alk. (mg·L⁻¹ CaCO₃)	22.14					20.08					
DIC (mg·L⁻¹)	5.97					5.61					
TDN (µg N·L⁻¹)	165	205	143	175	142	161	112	118	114	139	
Nitrate (µg N·L⁻¹)	1	1	<1	<1	9	3	1	3	16	40	
Ammonia (µg N·L⁻¹)	4	<4	<4	<4	4	<4	<4	<4	<4	<4	
FN (µg N·L⁻¹)	29	26	29	28	28	28	26	27	25	17	
PC (µg C·L⁻¹)	235	210	267	227	314	270	221	264	224	161	
TP (µg P·L⁻¹)	2	2	2	4	4	1	1	2	1	1	
PP (µg P·L⁻¹)	2.0	1.6	1.8	1.8	2.0	1.5	1.2	1.3	1.0	1.0	
SRS (mg Si·L⁻¹)	0.99	1.01	1.00	1.00	0.93	0.97	0.98	1.01	1.08	1.17	
Bacteria (x10⁶·mL⁻¹)	1.73	1.00	0.94	1.08	1.13	1.14	0.87	1.02	1.24	0.80	
Chlorophyll (µg·L⁻¹)	1.67	1.78	1.67	2.36	1.09	1.19	1.51	1.99	1.99	1.09	
Alg. Volume (mm³·m⁻³)	839	848	998	1299	893	1479	3576	6605	4435	2691	
Alg. Carbon (mg C·m⁻³)	113	121	136	162	91	141	285	496	319	190	
Pr. Prod. (mg C·m⁻³·h⁻¹)a	1.52	1.21	1.60	0.36	0.00	0.10					
Pr. Prod. (mg C·m⁻³·h⁻¹)c									0.11		

aTotal Primary Production (>0.2 µm).  
cFractionated Primary Production (>8.0 µm).

Appendix Table 149. Physical, chemical and biological data from Sproat Lake, Stn. 2, November 9, 1984.

Depth (m)	0	1	3	5	7.5	10	12	20	29	35	40
Temperature (°C)	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
TDS (mg·L <sup>-1</sup> )					31.3						
pH					7.2						
T. Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )		21.51			7.2						
DIC (mg·L <sup>-1</sup> )	6.06				21.42						
					6.07						
TDN (μg N·L <sup>-1</sup> )	273	207	305	172	193	440	154	226	271	271	
Nitrate (μg N·L <sup>-1</sup> )	13	13	13	13	13	13	10	12	24	47	
Amonia (μg N·L <sup>-1</sup> )	6	5	5	5	5	5	<4	6	<4	<4	
PN (μg N·L <sup>-1</sup> )	29	30	29	27	24	22	24	24	19	28	
PC (μg C·L <sup>-1</sup> )	223	251	206	228	224	248	231	210	161	289	
TP (μg P·L <sup>-1</sup> )	2	2	2	2	1	1	1	1	2	<1	
PP (μg P·L <sup>-1</sup> )	1.1	1.2	1.2	1.1	1.0	1.0	0.9	0.6	0.9	1.0	
SKS (mg Si·L <sup>-1</sup> )	1.10	1.06	1.07	1.05	1.02	1.07	1.11	1.12	1.15	1.32	
Bacteria (x10 <sup>6</sup> ·mL <sup>-1</sup> )	1.43	1.39	1.27	1.02	1.26	1.73	1.55	1.06	0.99	0.80	
Chlorophyll (μg·L <sup>-1</sup> )	1.03	1.50	1.58	1.60	1.42	1.48	0.64	1.06	1.08	0.70	
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	838	661	767	795	656	944	889	3385	3077	2051	
Alg. Carbon (mg C·m <sup>-3</sup> )	104	72	89	92	79	101	83	252	217	150	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	0.90	1.21	1.25	0.72	0.36						
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.22	0.49	0.25	0.25	0.27						
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>b</sup>						0.05	0.02	0.02			

<sup>a</sup>Total Primary Production (>0.2 μm).

<sup>b</sup>Fractionated Primary Production (>8.0 μm).

Appendix Table 150. Physical, chemical and biological data from Sproat Lake, Stn. 2, November 22, 1984.

Depth (m)	0	1	3	5	8	10	15	19	28	33	40
Temperature (°C)	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.0	6.7	5.4
pH											
T·Alk. (mg·L⁻¹ CaCO₃)											
DIC (mg·L⁻¹)	7.2 22.23 6.37										
TWN (µg N·L⁻¹)	285	439	439	439	361	281	349	274	375	212	
Nitrate (µg N·L⁻¹)	<1	<1	<1	<1	<1	6	<1	3	31	11	
Ammonia (µg N·L⁻¹)	<4	<4	<4	<4	4	<4	<4	<4	<4	<4	
PN (µg N·L⁻¹)	25	27	30	26	27	22	23	23	15	13	
PC (µg C·L⁻¹)	254	181	215	268	227	251	157	171	279	184	200
TP (µg P·L⁻¹)	1	3	2	2	1	2	3	2	3	<1	
PP (µg P·L⁻¹)	1.0	1.0	1.0	1.0	1.1	1.0	1.1	0.7	0.8	0.7	
SKS (mg Si·L⁻¹)	1.16	1.16	1.16	1.15	1.16	1.17	1.16	1.19	1.24	1.40	
Bacteria (X10⁶·mL⁻¹)	0.86	0.93	1.37	1.41	1.03	1.08	1.08	0.99	0.78	0.68	
Chlorophyll (µg·L⁻¹)	1.39	1.45	1.43	1.50	1.43	1.48	0.62	0.75	1.03	0.73	
Alg. Volume (mm³·m⁻³)	874	470	673	994	798	891	1030	2091	3284	1617	
Alg. Carbon (mg C·m⁻³)	95	56	67	101	78	89	96	163	228	113	
Pr. Prod. (mg C·m⁻³·h⁻¹)a	1.55	1.10	0.62	0.36	0.15				0.00		
Pr. Prod. (mg C·m⁻³·h⁻¹)c	0.32	0.29	0.19	0.09	0.08				0.00		

aTotal Primary Production (>0.2 µm).  
cFractionated Primary Production (>8.0 µm).

Appendix Table 151. Physical, chemical and biological data from Sproat Lake, Stn. 2, December 20, 1984.

Depth (m)	0	1	3	5	7.5	15	20	25	32	37	40
Temperature (°C)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.7	5.4
TDS (mg·L <sup>-1</sup> )											
pH											
T·Alk. (mg·L <sup>-1</sup> CaCO <sub>3</sub> )											
DIC (mg·L <sup>-1</sup> )											
TDN (µg N·L <sup>-1</sup> )											
Nitrate (µg N·L <sup>-1</sup> )	520	320	519	335	271	199	184	391	471	267	
Ammonia (µg N·L <sup>-1</sup> )	4	4	4	12	14	12	13	14	27	39	
PN (µg N·L <sup>-1</sup> )	6	5	5	5	6	5	6	5	5	5	
PC (µg C·L <sup>-1</sup> )											
TP (µg P·L <sup>-1</sup> )	2	2	1	2	1	1	1	2	2	1	
PP (µg P·L <sup>-1</sup> )	1.1	1.5	2.0	1.4	1.2	1.7	1.4	1.3	1.7	2.0	
SKS (mg Si·L <sup>-1</sup> )	1.08	1.03	1.08	1.09	1.08	1.08	1.10	1.10	1.09	1.09	
Bacteria (X10 <sup>6</sup> ·mL <sup>-1</sup> )	1.04	1.16	1.29	1.16	1.08	0.86	0.89	1.14	0.78	0.74	
Chlorophyll (µg·L <sup>-1</sup> )	1.21	1.16	1.17	1.16	1.06	1.10	1.16	1.05	0.59	0.57	
Alg. Volume (mm <sup>3</sup> ·m <sup>-3</sup> )	1216	1024	1320	842	1215	1229	1059	1061	986	1362	
Alg. Carbon (mg C·m <sup>-3</sup> )	120	97	126	96	122	120	90	95	84	108	
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>a</sup>	0.52	0.86	0.42	0.21	0.00	0.00	0.00	0.00			
Pr. Prod. (mg C·m <sup>-3</sup> ·h <sup>-1</sup> ) <sup>c</sup>	0.41	0.30	0.16	0.17							

<sup>a</sup>Total Primary Production (>0.2 µm).

<sup>c</sup>Fractionated Primary Production (>8.0 µm).

Appendix Table 152. Chemical and biological data from Yakoun Lake,  
September 13, 1984.

Depth (m)	1	3	5
TDS ( $\text{mg}\cdot\text{L}^{-1}$ )			23.3
TDN ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	168	183	210
Nitrate ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	1	1	2
Ammonia ( $\mu\text{g N}\cdot\text{L}^{-1}$ )	<4	<4	<4
TP ( $\mu\text{g P}\cdot\text{L}^{-1}$ )	4		4
SRS ( $\text{mg Si}\cdot\text{L}^{-1}$ )	0.90	0.86	0.85
Chlorophyll ( $\mu\text{g}\cdot\text{L}^{-1}$ )	2.66	2.81	2.55