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SPECIES COMPOSITION AND SEASONAL ABUNDANCE OF ZOOPLANKTON  
IN LAKE 114, EXPERIMENTAL LAKES AREA, NORTHWESTERN ONTARIO:  
BEFORE AND DURING ACIDIFICATION 1970-1971, 1978-1983

by

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## ABSTRACT

Lawrence, S.G., M. MacIver, and I.L. Delbaere. 1984. Species composition and seasonal abundance of zooplankton in Lake 114, Experimental Lakes Area, northwestern Ontario: before and during acidification 1970-1971, 1978-1983. Can. Data Rep. Fish. Aquat. Sci. 472: iv + 49 p.

A list of zooplankton species and the densities of all but the rare species collected from the deepest station of Lake 114 in the Experimental Lakes Area, Ontario are presented for three periods: 1970-1971, before the watershed was logged, the ice free season in 1978 after logging operations were terminated, and for the experimental period, 1979-1983, during which the lake was subject to monthly additions of sulfuric acid during the ice-free season. Water temperature data and range and mean pH concentration of the epilimnion water are included.

Key words: zooplankton; acidification; Precambrian Shield Lake; Cladocera; Copepoda; Rotifera.

## RESUME

Lawrence, S.G., M. MacIver, and I.L. Delbaere. 1984. Species composition and seasonal abundance of zooplankton in Lake 114, Experimental Lakes Area, northwestern Ontario: before and during acidification 1970-1971, 1978-1983. Can. Data Rep. Fish. Aquat. Sci. 472: iv + 49 p.

Ce rapport donne la liste des espèces de zooplancton et la densité de chacune sauf des espèces rares trouvées à la plus grande profondeur de relevé du lac 114 de la Région des Lacs Expérimentaux de l'Ontario. Cette liste couvre trois périodes: de 1970 à 1971, avant qu'on ne fasse de la drave; en 1978, durant la saison où les cours d'eau sont libres de glace, après la drave; et de 1979 à 1983, période d'étude durant laquelle le lac fut l'objet d'additions mensuelles d'acide sulphurique pendant qu'il était libre de glace. Ce rapport présente également des données sur la température de l'eau, les écarts de celle-ci, ainsi que l'acidité moyenne de l'épilimnion.

Mots-clés: zooplancton, acidification, lac du Bouclier canadien, cladocères, copépodes, rotifères.

## INTRODUCTION

Lake 114 is a shallow, oligotrophic lake located in the Experimental Lakes Area of north-western Ontario (Brunskill and Schindler 1971). It has been artificially acidified from mid-1979 to the present. Additions of known quantities of sulfuric acid were intended to mimic addition of acid through rain, and were equivalent to lowering the pH of precipitation reaching the lake by one unit (Schindler 1980). Schindler and Turner (1982) have described the sulfur budget of the lake.

The lake is 12.1 ha in area. The drainage area is 45 ha. The maximum and mean depths are 5.0 and 1.7 m respectively (Brunskill and Schindler 1971). The lake has contained large populations of fathead minnows and pearl dace throughout the period of investigation. Fathead minnows have been commercially fished from before the period of study to the present.

This report presents a species list and abundances of zooplankton as individuals per cubic meter from a single station in the deepest part of the lake for the years 1970-1971 and 1978-1983. Densities for rare forms (fewer than 500 individuals per  $m^{-3}$  and seen at irregular intervals) are not reported, but all species identified in the samples are listed in Tables 1 and 2, and the remaining data are on file in the Freshwater Institute.

## METHODS AND MATERIALS

In each addition of acid, 33.6 L of concentrated sulfuric acid were mixed into the surface waters of the lake (Cruikshank 1984a). Four additions were made in 1979, seven in 1980, and six in each year from 1981-1983. These additions were made during the ice free season, May-October (July-October in 1979), at approximately monthly intervals. Lake water samples for analyses of heavy metals, major ions, pH, C, N, and P in various forms, and conductivity were taken on a regular basis, usually on or about the zooplankton sampling date. Phytoplankton samples were taken and analyzed. These data are on file at the Freshwater Institute. Detailed temperature profile data for this lake are found in Cruikshank (1984b).

The depth of the water column varied subject to the amount of runoff in the spring and to subsequent rainfall. The maximum depth of the water column at the station sampled was 5 m, the minimum 3.5 m.

Zooplankton samples were taken in two ways. During 1970-1971, the water column was sampled in a discontinuous manner at one meter intervals using a 28.7 L capacity Schindler-Patalas trap equipped with a 73 $\mu$  mesh Nitex filter (Schindler 1969). The samples were taken at the midpoint of each interval. In the summer (June-August), a sample taken from the surface to 1 m interval was combined with that taken in the next interval. Likewise, the samples taken from the third and fourth intervals were combined. In other samples taken during this

period, zooplankton from all intervals were combined into one sample for the date. In 1978, a barrel net (mouth diameter 0.125 m) equipped with a 53 $\mu$  Nitex net (Chang et al. 1981) was pulled vertically three times through the water column so that for each meter of water column, the sampler filtered 37 L of lake water. From 1979-1983, a two barrel sampler (mouth diameter 0.129 m) equipped with 53 $\mu$  Nitex mesh nets were pulled two times vertically through the water column. For each meter of water, 52 L of lake water were filtered by both nets. Rarely, the lake was thermally stratified. On those occasions, the layers of the column were collected and counted separately. Here, all data is reported as a composite of the layers of the water column. All samples were preserved in formalin in the field. Final formalin concentration was 4%. In the laboratory, all samples were reduced to a known volume (40, rarely 90 mL) depending on the density of the zooplankton.

The zooplankton from two or more 1 mL subsamples were counted using a Sedgwick-Rafter counting chamber and a binocular microscope. Adult copepods, cladocerans, and where possible, rotifers were identified to species. Immature copepods were assigned as calanoid or cyclopoid and were identified to naupliar or copepodid stage. Eggs per female were recorded but are not reported here.

Identifications were made using Ward and Whipple (1959) and Brooks (1957) for crustaceans and Chengaleth et al. (1971), Ruttner-Kolisko (1974), Stemberger (1979) and Ward and Whipple (1959) for rotifers.

In order to determine whether counting less than 10% of the sample volume provides representative data on organisms present at low density, Chang et al. (1981) compared densities calculated from two or three 1 mL aliquots of a 40 mL sample with densities obtained from counting 10 1 mL aliquots of the sample. All 10 aliquots were removed before any counted aliquots were returned to the sample. For comparison with the densities (individuals per cubic meter of lake water) calculated from the original two or three counts, three densities were calculated from the 10 recounts: one based on all 10 counts, one on the lowest two counts and one on the highest two counts. The lowest two counts and highest two counts give an estimate of range of densities which could be obtained by counting only two or three aliquots from a sample. These data are reproduced here with permission.

## RESULTS

The crustacean species identified from Lake 114 and their average relative abundance during ice-free seasons in 1971, 1978-1983 are listed in Table 1. Rotifer species during the same periods appear in Table 2.

Table 3 presents the ice-free season mean and range of pH. Table 4 is a list of epilimnetic temperatures of the lake throughout the years of sampling. Densities of individual zooplankton species or life stages expressed as

individuals  $m^{-3}$  on each sampling date and the depth of the water column sampled are presented in Table 5. D. Malley (personal communication, Freshwater Institute) compared the two sampling methods described here but the data obtained were inconclusive. Comparisons of data obtained during 1970-1971 with that obtained later should be made with the differences in methods in mind.

Appendix 1 compares the densities calculated after recounting 10 1 mL aliquots of Lake 223 zooplankton samples with the densities based on the original two or three 1 mL aliquots. The densities based on the original two or three 1 mL aliquots with rare exceptions fall between the lowest and highest recounts. The densities based on the lowest pair of recounts and on the highest may vary by as much as three-fold when densities are low. The proportional disagreement between recounts for species more abundant than 5 000  $m^{-3}$  is considerably less. In the latter case, the densities based on the highest pair are within 50% of the lowest pair. Zeros based on two or three 1 mL aliquots do not necessarily indicate absence of the organism, rather they indicate densities lower than about 500  $m^{-3}$ .

#### ACKNOWLEDGMENTS

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#### REFERENCES

- BROOKS, J.L. 1957. The systematics of North American *Daphnia*. Mem. Conn. Acad. Arts Sci. 13: 1-180.
- BRUNSKILL, G.J., and D.W. SCHINDLER. 1971. Geography and bathymetry of selected lake basins, Experimental Lakes Area, north-western Ontario. J. Fish. Res. Board Can. 28: 139-155.
- CHANG, P.S.S., D.F. MALLEY, I.L. DELBAERE, and G. MUELLER. 1981. Species composition and seasonal abundance of zooplankton in Lake 223, Experimental Lakes Area, north-western Ontario, before and during acidification, 1974-1979. Can. Data Rep. Fish. Aquat. Sci. 290: iv + 42 p.
- CHENGALETH, R., C.H. FERNANDO, and M.G. GEORGE. 1971. The planktonic Rotifera of Ontario with keys to genera and species. Univ. Waterloo Biol. Ser. 2: 40 p.
- CRIKSHANK, D.R. 1984a. Whole lake chemical additions in the Experimental Lakes Area, 1969-1983. Can. Data Rep. Fish. Aquat. Sci. 449: iv + 23 p.
- CRIKSHANK, D.R. 1984b. The relationship of summer thermocline depth to several physi-  
cal characteristics of lakes. Can. Tech. Rep. Fish. Aquat. Sci. 1248: iv + 33 p.
- RUTTNER-KOLISKO, A. 1974. Plankton rotifers: biology and taxonomy (translated by G. Kolisko). Binnengewasser 26(1): 1-146.
- SCHINDLER, D.W. 1969. Two useful devices for vertical plankton and water sampling. J. Fish. Res. Board Can. 26: 1948-1955.
- SCHINDLER, D.W. 1980. Ecological effects of experimental whole-lake acidification, p. 453-464. In D. Shriner, C. Richmond and C. Lindberg (ed.) Atmospheric sulfur deposition. Ann Arbor Science Publishers, Ann Arbor, MI.
- SCHINDLER, D.W. and M.A. TURNER. 1982. Biological, chemical and physical responses of lakes to experimental acidification. Water Air Soil Pollut. 18: 259-271.
- STEMBERGER, R.S. 1979. A guide to rotifers of the Laurentian Great Lakes. U.S. Environ. Prot. Agency EPA-600/4-79-021: xii + 186 p.
- WARD, H.B., and G.C. WHIPPLE. 1959. Freshwater biology. 2nd ed. W.T. Edmondson (ed.) John Wiley and Sons, New York. 1248 p.

Table 1. Crustacean species identified from Lake 114 during the periods 1970-1971 and 1978-1983. A + indicates that a species was present on average during the time from ice-out to a fall water temperature of 10-12°C in numbers <1 000 m<sup>-3</sup>, ++ indicates 1 000-10 000 and +++ indicates >10 000. A - indicates that the organism was not found in the subsamples.

Species	1971	1978	1979	1980	1981	1982	1983
<b>CLADOCERA</b>							
<u>Alonella acutirostris</u> (Birge)	+	-	-	-	-	-	-
<u>Bosmina longirostris</u> (Muller)	+++	++	++	+++	+	++	++
<u>Chydorus sphaericus</u> (Muller)	+	-	+	-	-	+	-
<u>Daphnia catawba</u> *	-	-	-	-	-	+	+
<u>Drepanothrix dentata</u> (Euren)	-	+	-	-	-	-	-
<u>Diaphanosoma brachyurum</u> (Lieven)	++	++	++	++	+	+	++
<u>Holopedium gibberum</u> Zaddach	++	++	++	++	++	+	++
<b>COPEPODA</b>							
Calanoida							
<u>Diaptomus minutus</u> Lillj.	++	++	++	++	++	++	++
<u>Epischura lacustris</u> Forbes	+	+	+	+	+	+	+
<u>Epischura nevadensis</u> Lillj.	-	-	-	-	-	+	+
Calanoid nauplii	+++	+++	+++	+++	+++	+++	+++
Calanoid copepodids	++	+++	++	++	++	+++	+++
Cyclopoida							
<u>Cyclops bicuspidatus</u>							
<u>thomasi</u> (Forbes)	+	-	+	+	+	+	+
<u>Cyclops vernalis</u> Fischer	-	-	+	-	-	-	+
<u>Mesocyclops edax</u> (Forbes)	+	++	+	+	++	+	+
<u>Orthocyclops modestus</u> (Herrick)	+	+	-	+	-	+	-
<u>Tropocyclops prasinus</u>							
<u>mexicanus</u> Kiefer	++	++	++	++	++	+	++
Cyclopoid nauplii	+++	+++	+++	+++	+++	+++	+++
Cyclopoid copepodids	+++	+++	+++	++	++	++	++

\*This population deviates from the classical description in Brooks (1957). The final designation awaits taxonomic revision (W. Geiling, personal communication).

Table 2. Rotifer species identified from Lake 114 during the periods 1970-1971 and 1978-1983. A + indicates a species or genus was present on average during the time from ice-out to a fall water temperature of 10-12°C in numbers <10 000 individuals m<sup>-3</sup>, ++ indicates 10 000- 50 000, and +++ >50 000. A - indicates the organism was not seen.

Species	1971	1978	1979	1980	1981	1982	1983
<u>Ascomorpha</u> sp.	+	+	-	-	+	+	+
<u>Asplanchna</u> sp.	+	+	+	+	+	+	+
<u>Brachionus quadridentatus</u> (Hermann)	-	+	+	+	-	-	-
<u>Cephalodella</u> sp.	+	+	+	+	+	+	+
<u>Colletheca</u> sp.	++	+++	+++	++	++	++	+++
<u>Colurella</u> sp.	+	+	-	+	+	+	+
<u>Conochilis</u> sp.	+	+	+	+	+	+	+
<u>Conochiloides</u> sp.	+	+	++	-	++	++	++
<u>Euchlanus</u> sp.	-	+	-	-	+	+	-
<u>Filinia longispina</u> (Ehrbg.)	+	+	+	-	+	+	+
<u>Gastropodus stylifer</u> (Imhof)	+++	+	+	+	+	+	++
<u>Kellicottia bostoniensis</u> (Rousselet)	++	++	++	+	+	+	+
<u>Kel. longispina</u> (Kellicott)	++	++	+	+++	++	++	++
<u>Keratella cochlearis</u> (Gosse)	+++	++	++	++	++	+	+++
<u>K. cochlearis</u> f. <u>robusta</u> (Lauterborn)	+	+	+	-	-	+	-
<u>K. hiemalis</u> Carlin	++	+	+	+	+	+	+
<u>K. quadrata</u> (Muller)	-	-	-	-	-	+	-
<u>K. serrulata</u> (Ehrbg.)	-	-	-	-	+	-	-
<u>K. taurocephala</u> (Myers)	+++	+	+++	++	++	++	+++
<u>K. testudo</u> (Ehrbg.) Carlin	-	-	-	-	-	+	-
<u>Lecane</u> sp. (+ <u>Monostyla</u> )	+	+	+	+	+	+	+
<u>Lepadella</u> sp.	+	+	+	+	+	+	+
<u>Macrochaetus</u> sp.	-	-	-	-	+	-	-
<u>Monommata</u> sp.	+	-	-	+	-	+	+
<u>Notommata</u> sp.	-	+	+	+	+	+	-
<u>Ploesoma</u> sp.	-	-	-	+	+	-	-
<u>Polyarthra dolichoptera</u> (Idelson)	++	-	-	-	-	+	+
<u>P. euryptera</u> (Wierzejski)	-	-	-	+	-	-	-
<u>P. major</u> (Burckhardt)	-	-	+	+	+	+	-
<u>P. remata</u> (Skorikow)	+++	+++	+	++	++	+	+++
<u>P. vulgaris</u> Carlin	+++	++	++	+++	++	++	+++
<u>Rotaria</u> sp.	+	+	+	+	-	+	+
<u>Synchaeta</u> sp.	+	+	+	+	-	+	+
<u>Testudinella</u> sp.	+	+	-	+	+	+	+
<u>Trichocerca cylindrica</u> (Imhof)	++	+	++	+	+	++	+
<u>T. longisetata</u> (Schrantz)	-	-	-	+	+	-	-
<u>T. rouseletti</u> (Voigt)	+	-	-	-	-	-	-
<u>Trichocerca</u> sp.	+	+	+	+	+	+	+
<u>Trichotria</u> sp.	-	-	-	+	+	-	+
<u>Trochosphaera solstitialis</u> (Rousselet)	+	-	-	++	++	-	-
Other globular forms	+	++	+	+	+	-	+

Table 3. Mean and range of pH\* in Lake 114 in the ice-free seasons of 1971 and 1978-1983.

Year	Mean	Range
<b>Pre-acidification*</b>		
1971	6.05	5.79-6.93
1978	6.19	5.79-6.52
<b>During acidification**</b>		
1979	5.82	5.50-6.38
1980	6.11	5.80-6.39
1981	6.05	5.67-5.50
1982	5.90	5.54-6.16
1983	5.94	5.47-6.50

\* D.W. Schindler, Freshwater Institute, unpublished data.

\*\* D.R. Cruikshank (1984a).

Table 4. Epilimnetic temperatures in L114.

Date	Temp °C	Date	Temp °C	Date	Temp °C
1970		Aug 20	20.79	1982	
Feb 25	1.85	Sep 17	15.36	May 17	11.78
		Oct 15	4.05	May 31	19.52
1971				Jun 14	16.46
May 31	12.01	1980		Jun 28	20.41
Jun 10	19.12	May 13	10.39	Jul 12	21.53
Jul 8	20.13	Jun 10	16.77	Jul 26	23.18
Aug 5	19.4	Jul 8	20.71	Aug 9	19.6
Sep 2	20.34	Aug 5	21.59	Aug 23	19.74
Oct 1	12.2	Sep 2	19.0	Sep 6	15.16
Oct 28	7.3	Sep 9	19.6	Sep 20	11.91
		Sep 30	10.62	Oct 4	9.34
1978		Oct 28	1.3	1983	
May 15	13.22			May 9	9.9
May 29	21.43	1981		May 16	9.35
Jun 12	15.2	May 6	12.52	Jun 6	14.5
Jun 26	20.83	May 11	12.61	Jun 13	20.54
Jul 10	20.89	May 25	15.4	Jun 20	19.54
Jul 24	21.3	Jun 8	19.21	Jul 4	18.6
Aug 7	20.29	Jun 22	17.56	Jul 11	22.6
Aug 21	18.83	Jul 6	24.66	Aug 8	23.3
Sep 4	19.57	Jul 20	24.47	Aug 15	22.7
Sep 18	12.58	Aug 3	22.66	Aug 29	22.4
Oct 2	11.63	Aug 17	21.04	Sep 5	20.65
		Aug 31	21.98	Sep 12	15.0
1979		Sep 14	18.32	Sep 26	9.8
May 28	16.72	Sep 28	10.35	Oct 3	11.4
Jun 25	18.88	Oct 12	8.64	Oct 17	5.0
Jul 23	23.23	Oct 26	1.86		

Table 5. Densities of zooplankton species of life stages expressed as individuals  $m^{-3}$  on each sampling date for the years 1970-1971 and 1978-1983. The depth (m) of the samples column is included. Zeros indicate no animals were seen in the subsamples.

a. Cladocera



<u>Bosmina longirostris</u>		<u>Chydorus sphaericus</u>	
Date	Column depth	Date	Column depth
no. m <sup>-3</sup>	no. m <sup>-3</sup>	no. m <sup>-3</sup>	no. m <sup>-3</sup>
1970			
Aug 27	4	1970	
Sep 9	4	Sep 22	4
Sep 18	0	Sep 29	4
Sep 26	0	Oct 6	4
Oct 1	4	Oct 13	4
Oct 17	4	Oct 20	4
Oct 24	4	Oct 26	4
Nov 7	4	Dec 9	4
Dec 5	4		
1971			
Jan 9	4	1971	
Feb 24	4	Feb 10	4
Mar 30	4	Mar 17	4
Apr 27	4	May 11	4
May 11	4	May 25	4
May 25	4	Jun 8	4
Jun 8	4	Jun 22	4
Jun 25	4	Jul 6	4
Jul 8	4	Jul 20	4
Jul 22	4	Aug 3	4
Aug 5	4	Aug 18	4
Aug 26	4	Aug 31	4
Sep 2	4	Sep 14	4
Sep 25	4	Sep 25	4
1972			
May 22	3.7	1972	
Jun 12	4	Jun 10	4
Jul 10	4	Jul 17	4
Jul 31	4	Aug 3	4
Aug 31	4	Aug 23	4
Sep 11	4	Sep 6	4
1973			
May 28	4	215	4
Jun 25	5	172	4
Jul 9	4	9755	3
Aug 6	3.75	2008	3
Aug 20	4.75	4878	4
Sep 6	4.5	1812	4
Sep 17	4.75	4648	4
Oct 15	4	30795	4
1974			
May 16	4	38780	4
May 25	4	4973	4
Jun 9	4.5		
Jun 16	4.5		
Jul 7	4		
Jul 14	4.5		
Jul 21	4		
Jul 28	4.5		
Aug 4	4		
Aug 11	4		
Aug 18	4.5		
Aug 25	4.5		
Sep 1	4.5		
Sep 8	4		
1975			
May 15	4		
Jun 9	4		
Jun 16	4		
Jul 7	4		
Jul 14	4		
Jul 21	4		
Jul 28	4		
Aug 4	4		
Aug 11	4		
Aug 18	4.5		
Aug 25	4.5		
Sep 1	4.5		
Sep 8	4		
1976			
May 15	4		
Jun 9	4		
Jun 16	4		
Jul 7	4		
Jul 14	4		
Jul 21	4		
Jul 28	4		
Aug 4	4		
Aug 11	4		
Aug 18	4.5		
Aug 25	4.5		
Sep 1	4.5		
Sep 8	4		
1977			
May 15	4		
Jun 9	4		
Jun 16	4		
Jul 7	4		
Jul 14	4		
Jul 21	4		
Jul 28	4		
Aug 4	4		
Aug 11	4		
Aug 18	4.5		
Aug 25	4.5		
Sep 1	4.5		
Sep 8	4		
1978			
May 15	4		
Jun 12	4		
Jul 10	4		
Jul 31	4		
Aug 31	4		
Sep 11	4		
1979			
May 28	4		
Jun 25	5		
Jul 9	4		
Aug 6	3.75		
Aug 20	4.75		
Sep 6	4.5		
Sep 17	4.75		
Oct 15	4		
1980			
May 15	4		
Jun 9	4		
Jun 16	4		
Jul 7	4		
Jul 14	4		
Jul 21	4		
Jul 28	4		
Aug 4	4		
Aug 11	4		
Aug 18	4.5		
Aug 25	4.5		
Sep 1	4.5		
Sep 8	4		
1981			
May 15	4		
Jun 9	4		
Jun 16	4		
Jul 7	4		
Jul 14	4		
Jul 21	4		
Jul 28	4		
Aug 4	4		
Aug 11	4		
Aug 18	4.5		
Aug 25	4.5		
Sep 1	4.5		
Sep 8	4		
1982			
May 15	4		
Jun 8	4		
Jun 25	5		
Jul 17	4		
Aug 3	4		
Aug 23	4		
Sep 6	4		
Sep 20	4		
Oct 4	4		
Oct 18	4		
1983			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1984			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1985			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1986			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1987			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1988			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1989			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1990			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1991			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1992			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1993			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1994			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1995			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1996			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1997			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1998			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
1999			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
2000			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
2001			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
2002			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
2003			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
2004			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
2005			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
2006			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
2007			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
2008			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
2009			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
2010			
May 16	4		
May 23	4		
Jun 10	4		
Jun 27	5		
Jul 13	4		
Aug 9	4		
Aug 26	4		
Sep 12	4		
Sep 25	4		
2011			</

Diaphanopsis brachyurumHolopeodium gibberum

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			Sep 15	4	0	Sep 15	4	96
Aug 27	4	0	Sep 22	4	1045	Sep 22	4	1435
Sep 9	4	697	Sep 29	4	697	Sep 29	4	95
Sep 18	4	1742	Oct 6	4	3833	Oct 6	4	191
Sep 26	4	1045	Oct 13	4	3136	Oct 13	4	1148
Oct 1	4	0	Oct 20	4	1916	Oct 20	4	382
Oct 17	4	0	Oct 26	4	2090	Oct 26	4	0
Oct 24	4	0	Dec 9	4	1220	Dec 9	4	0
Nov 7	4	0	1981	4	697	1981	4	0
Dec 5	4	0	1971	4	0	Jan 13	4	0
1971			Jan 13	4	0	Feb 10	4	0
Jan 9	4	0	Feb 10	4	0	Mar 17	4	0
Feb 24	4	0	Mar 11	4	0	May 11	4	574
Mar 30	4	0	May 11	4	0	May 25	4	1817
Apr 27	4	0	May 25	4	0	Jun 8	4	4734
May 11	4	0	Jun 8	4	287	Jun 22	4	6695
May 25	4	0	Jun 22	4	1291	May 11	4	20984
Jun 8	4	0	Jul 6	4	4112	May 25	4	3228
Jun 25	4	0	Jul 20	4	3658	Jun 8	4	0
Jul 8	4	0	Aug 3	4	1076	Jun 25	4	0
Jul 22	4	0	Aug 18	4	0	Jul 8	4	0
Aug 5	4	0	Aug 31	4	0	Jul 22	4	0
Aug 26	4	0	Sep 14	4	0	Sep 14	4	0
Sep 2	4	0	Sep 28	4	0	Sep 28	4	0
Sep 25	4	0	Oct 12	4	0	Oct 12	4	0
1982			1978	4	0	1982	4	0
3.7	3.7	0	Jan 13	4	3.7	Jan 13	4	0
May 22	4	0	Mar 8	4	287	Mar 8	4	0
Jun 12	4	1435	May 17	5	861	May 17	5	96
Jul 10	4	2869	May 31	3	0	May 31	3	126
Jul 31	4	5164	Jun 14	4	3156	Jun 14	4	96
Aug 31	4	2295	Jun 14	4	1435	Jun 28	4	0
Sep 11	4	2008	Jul 29	4	958	Jul 12	4	96
1979			1979	4	0	1982	4	0
4	4	0	May 28	5	3658	Aug 23	4	382
May 28	4	0	Jun 25	5	861	Sep 6	3	382
Jun 12	4	1435	Jul 9	4	0	Aug 9	3	0
Jul 26	4	3156	Jul 23	3	1377	Sep 20	4	956
Aug 9	3	1918	Aug 6	4	1268	Oct 4	4	96
Sep 6	3	2200	Sep 20	4	516	Oct 18	4	765
Sep 23	3	255	Oct 4	4	3060	1983	4	0
Sep 25	3	0	Oct 18	4	4.5	2356	4	0
Sep 30	3	0	Sep 6	5	0	Mar 16	4	0
Sep 31	3	0	Sep 17	4	4.75	May 6	4	11477
Sep 25	3	0	Sep 17	4	4.75	May 16	4	204
Sep 25	3	0	Oct 15	4	2295	Jun 13	4	575
Sep 25	3	0	1980	4	0	Jun 20	4	2204
Sep 25	3	0	May 15	4	3015	Jul 4	4	9884
Sep 25	3	0	May 15	4	956	Jul 11	4	6982
Sep 25	3	0	Jun 9	4.5	0	Jul 18	3.5	656
Sep 25	3	0	Jun 16	4.5	382	Aug 1	3	204
Sep 25	3	0	Jun 16	4.5	191	Aug 8	3.5	2942
Sep 25	3	0	Jul 7	4	7316	Aug 15	4	382
Sep 25	3	0	Jul 14	4	574	Aug 29	4	1105
Sep 25	3	0	Jul 21	4	430	Aug 11	4	109
Sep 25	3	0	Jul 28	4	430	Aug 18	4	574
Sep 25	3	0	Aug 4	4	430	Aug 25	4	956
Sep 25	3	0	Aug 11	4	430	Sep 12	3.5	0
Sep 25	3	0	Aug 18	4	430	Sep 26	4	382
Sep 25	3	0	Aug 25	4	430	Oct 3	4	96
Sep 25	3	0	Sep 1	4	430	Oct 17	4	96
Sep 25	3	0	Sep 8	4	430	Dec 13	4	0

- b. Calanoid adults
- c. Calanoid nauplii
- d. Calanoid copepodids
- e. Cyclopoid adults
- f. Cyclopoid nauplii
- g. Cyclopoid copepodids



Diatomus minutus, female

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			Sep 15	4	1722	Sep 15	4	348
Aug 27	4	1045	Sep 22	4	4591	Sep 22	4	0
Sep 9	4	3484	Sep 29	4	2104	Sep 29	4	348
Sep 18	4	348	Oct 6	4	382	Oct 6	4	1394
Sep 26	4	1045	Oct 13	4	5547	Sep 26	4	348
Oct 1	4	697	Oct 20	4	3539	Oct 1	4	2090
Oct 17	4	1568	Oct 26	4	574	Oct 17	4	1220
Oct 24	4	174	Dec 9	4	1243	Oct 24	4	697
Nov 7	4	0	1981		Nov 7	4	348	669
Dec 5	4	1220	1981		Dec 5	4	348	669
1971			Jan 13	4	1148	Jan 13	4	765
Jan 9	4	9930	Feb 10	4	3443	Feb 10	4	2487
Feb 24	4	4530	Mar 17	4	478	Mar 17	4	191
Mar 30	4	14112	May 11	4	0	May 11	4	0
Apr 27	4	1742	May 25	4	322	May 25	4	2774
May 11	4	1742	Jun 8	4	1817	May 11	4	2295
May 25	4	2439	Jun 22	4	6025	May 25	4	6025
Jun 8	4	697	Jul 6	4	2391	Jun 22	4	1052
Jun 25	4	2439	Jul 20	4	1745	Jul 6	4	574
Jul 8	4	5226	Aug 3	4	1722	Jul 20	4	430
Jul 22	4	1394	Aug 18	4	1913	Aug 3	4	2104
Aug 5	4	7666	Aug 31	4	382	Aug 18	4	287
Aug 26	4	4335	Sep 14	4	295	Aug 31	4	956
Sep 2	4	5915	Sep 28	4	2367	Sep 14	4	1291
Sep 25	4	3484	Oct 12	4	0	Sep 28	4	287
1978			1982		1978			2265
May 22	3.7	0	Jan 13	4	20658	May 22	3.7	0
Jun 12	4	7173	Mar 8	4	574	Jun 12	4	5451
Jul 10	4	5738	May 17	5	1530	Jul 10	4	4591
Jul 31	4	5164	May 31	3	893	Jul 31	4	2008
Aug 31	4	2008	Jun 14	4	574	Aug 21	4	2008
Sep 11	4	861	Jun 28	4	1148	Sep 11	4	2295
1979			1982		1979			1982
May 28	4	861	Jan 13	4	20658	May 22	3.7	0
Jun 25	5	3960	Mar 8	4	574	Jun 12	4	5451
Jul 9	4	9253	Aug 9	3	1347	Jul 10	4	4591
Aug 6	4	7804	Sep 6	4	6882	Jul 31	4	2008
Sep 6	4	6524	Sep 20	4	4112	Aug 21	4	2008
Sep 17	4.5	1722	Oct 4	4	2933	Sep 11	4	2295
Oct 15	4	4208	Oct 18	4	1243	Jul 9	4	430
1983			1982		1979			2295
May 6	4	1268	Aug 23	4	6882	May 28	4	430
May 16	4	3156	Sep 6	4	4112	Jun 25	5	430
Jun 13	4	3.75	Sep 20	4	2933	Jun 9	4	1894
Jun 20	4	7804	Oct 4	4	1243	Jul 23	4	2582
Jun 27	4	3.75	Oct 18	4	1339	Aug 6	5	10100
Jul 14	4.5	4.75	1983		1979			10100
Jul 21	4	4.75	Aug 20	4	1339	Aug 6	5	5255
Aug 4	4	4.75	Sep 6	4	1913	Aug 20	5	1549
Sep 6	4.5	4.75	Sep 17	4	1268	Sep 6	4.5	3826
Sep 17	4.5	4.75	Oct 15	4	5164	Sep 17	4	905
Oct 15	4	4	May 6	4	0	Oct 15	4	6312
1980			May 16	4	612	May 16	4	3634
May 15	4	430	Jun 13	4	3.75	May 16	4	0
Jun 9	4.5	6312	Jun 20	4	0	May 16	4	1020
Jun 16	4.5	1339	Jul 1	4	669	Jun 13	4	95
Jul 7	4	1339	Jul 11	4	4.5	Jun 16	4	478
Jul 14	4.5	13772	Jul 11	4	14824	Jul 14	4	1982
Jul 21	4	4.75	Jul 18	3.5	8526	Jul 14	4	9086
Aug 1	4	4.75	Aug 1	4	23886	Jul 18	3.5	5684
Aug 4	4	4.75	Aug 8	3.5	5834	Aug 1	4	1817
Aug 11	4	4.75	Aug 15	4	12351	Aug 8	3.5	9728
Aug 18	4	4.75	Aug 22	4	3050	Aug 15	4	1913
Aug 25	4	4.75	Aug 29	4.5	2465	Aug 29	4.5	5441
Sep 1	4	4.75	Sep 12	3.5	656	Aug 18	4.5	2514
Sep 1	4	4.75	Sep 26	3.5	1202	Aug 25	4.5	3279
Sep 8	4	4	Oct 3	4	6599	Sep 1	4	9660
Sep 13	4	4	Oct 17	4	5738	Oct 17	4	8225
Dec 13	4	4	Dec 13	4	2774	Dec 13	4	2200

Diatomus minutus, male

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			1970	4	348	Sep 15	4	2582
Sep 9	4	1045	Sep 22	4	4591	Sep 22	4	3525
Sep 18	4	348	Sep 29	4	2104	Sep 29	4	669
Sep 26	4	1045	Oct 6	4	382	Oct 6	4	861
Oct 1	4	697	Oct 13	4	5547	Oct 13	4	5834
Oct 17	4	1568	Oct 20	4	3539	Oct 20	4	4591
Oct 24	4	174	Oct 26	4	574	Oct 26	4	1243
Nov 7	4	0	Dec 9	4	1243	Dec 9	4	669
Dec 5	4	1220	1981		1981			669
1971			1971	4	1148	Jan 13	4	765
Jan 9	4	9930	Feb 10	4	3443	Feb 10	4	2487
Feb 24	4	4530	Mar 17	4	478	Mar 17	4	191
Mar 30	4	14112	May 11	4	0	May 11	4	0
Apr 27	4	1742	May 25	4	322	May 25	4	2774
May 11	4	1742	Jun 8	4	1817	May 11	4	2295
May 25	4	2439	Jun 22	4	6025	May 25	4	6025
Jun 8	4	697	Jul 6	4	2391	Jun 22	4	1052
Jun 25	4	2439	Jul 20	4	1745	Jul 6	4	574
Jul 8	4	5226	Aug 3	4	1722	Jul 20	4	430
Jul 22	4	1394	Aug 18	4	1913	Aug 3	4	2104
Aug 5	4	7666	Aug 31	4	382	Aug 18	4	287
Aug 26	4	4335	Sep 14	4	295	Aug 31	4	956
Sep 2	4	5915	Sep 28	4	2367	Sep 14	4	1291
Sep 25	4	3484	Oct 12	4	0	Sep 28	4	287
1978			1982		1978			2265
May 22	3.7	0	Jan 13	4	20658	May 22	3.7	0
Jun 12	4	7173	Mar 8	4	574	Jun 12	4	5451
Jul 10	4	5738	May 17	5	1530	Jul 10	4	4591
Jul 31	4	5164	May 31	3	893	Jul 31	4	2008
Aug 31	4	2008	Jun 14	4	574	Aug 21	4	2008
Sep 11	4	861	Jun 28	4	1148	Sep 11	4	2295
1979			1982		1979			1982
May 28	4	861	Jan 13	4	20658	May 22	3.7	0
Jun 25	5	3960	Mar 8	4	574	Jun 12	4	5451
Jul 9	4	9253	Aug 9	3	1347	Jul 10	4	4591
Aug 6	4	7804	Sep 6	4	6882	Jul 31	4	2008
Sep 6	4	6524	Sep 20	4	4112	Aug 21	4	2008
Sep 17	4.5	1722	Oct 4	4	2933	Sep 11	4	2295
Oct 15	4	4208	Oct 18	4	1243	Jul 9	4	430
1983			1982		1979			2295
May 6	4	1268	Aug 23	4	6882	May 28	4	430
May 16	4	3156	Sep 6	4	4112	Jun 25	5	430
Jun 13	4	3.75	Sep 20	4	2933	Jun 9	4	1894
Jun 20	4	0	Oct 4	4	1243	Jul 23	4	2582
Jun 27	4	3.75	Oct 18	4	1339	Aug 6	5	10100
Jul 14	4.5	4.75	1983		1979			10100
Jul 21	4	4.75	Aug 20	4	1339	Aug 6	5	5255
Aug 4	4	4.75	Sep 6	4	1913	Aug 20	5	1549
Sep 17	4.5	4.75	Sep 17	4	1268	Sep 6	4.5	3826
Oct 15	4	4	Oct 15	4	5164	Sep 17	4	905
1980			May 6	4	0	Oct 15	4	6312
May 15	4	430	May 16	4	3.75	May 16	4	3.75
Jun 9	4.5	6312	Jun 13	4	0	May 16	4	1020
Jun 16	4.5	1339	Jun 20	4	669	Jun 13	4	95
Jul 7	4	1339	Jul 1	4	4.5	Jun 16	4	478
Jul 14	4.5	13772	Jul 11	4	14824	Jul 14	4	1982
Jul 21	4	4.75	Jul 18	3.5	8526	Jul 18	3.5	9086
Aug 1	4	4.75	Aug 1	4	23886	Aug 1	4	5684
Aug 4	4	4.75	Aug 8	3.5	5834	Aug 1	4	1817
Aug 11	4	4.75	Aug 15	4	12351	Aug 8	3.5	9728
Aug 18	4	4.75	Aug 22	4	3050	Aug 15	4	1913
Aug 25	4	4.75	Aug 29	4.5	2465	Aug 29	4.5	5441
Sep 1	4	4.75	Sep 12	3.5	656	Aug 18	4.5	2514
Sep 8	4	4	Sep 26	3.5	1202	Aug 25	4.5	3279
Sep 13	4	4	Oct 3	4	6599	Sep 1	4	9660
Sep 17	4	4	Oct 17	4	5738	Oct 17	4	8225
Dec 13	4	4	Dec 13	4	2774	Dec 13	4	2200

*Epischura lacustris*, male

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			Sep 15	4	0	Sep 15	4	0
Aug 27	4	0	Sep 22	4	96	Sep 22	4	0
Sep 9	4	0	Sep 29	4	96	Sep 29	4	0
Sep 18	4	0	Oct 6	4	0	Oct 6	4	0
Sep 26	4	0	Oct 13	4	96	Oct 13	4	0
Oct 1	4	0	Oct 20	4	0	Oct 20	4	0
Oct 17	4	0	Oct 26	4	0	Oct 26	4	0
Oct 24	4	0	Dec 9	4	0	Dec 9	4	0
Nov 7	4	0				1981		
Dec 5	4	0				Jan 13	4	0
			Jan 13	4	0	Feb 10	4	0
1971			Feb 10	4	0	Mar 17	4	0
Jan 9	4	0	Mar 17	4	0	May 11	4	0
Feb 24	4	0	May 11	4	0	May 25	4	0
Mar 30	4	0	May 25	4	0	Jun 8	4	0
Apr 27	4	0	Jun 11	4	0	Jun 22	4	0
May 11	4	0	Jun 22	4	0	Jul 6	4	0
May 25	4	0	Jul 6	4	0	Jul 20	4	0
Jun 8	4	0	Jul 20	4	0	Aug 3	4	0
Jun 25	4	0	Aug 18	4	0	Aug 18	4	0
Jul 8	4	0	Aug 18	4	0	Aug 31	4	0
Jul 22	4	0	Aug 31	4	0	Sep 14	4	0
Aug 5	4	0	Sep 14	4	0	Sep 28	4	0
Aug 26	4	0	Sep 28	4	0	Oct 12	4	0
Sep 2	4	0	Sep 2	4	0			
Sep 25	4	0	Sep 25	4	0	1982		
			0	0	0	Jan 13	4	0
1978			0	0	0	Mar 8	4	0
May 22	3.7	0	0	0	0	May 17	5	0
Jun 12	4	1148	Mar 8	4	0	May 31	3	0
Jul 10	4	0	May 17	5	0	Jun 14	4	0
Jul 31	4	287	May 31	3	0	Jun 28	4	0
Aug 31	4	0	Jun 14	4	0	Jul 12	4	0
Sep 11	4	0	Jun 28	4	0	Jul 26	4	0
1979			0	0	0	Aug 9	3	0
May 28	4	0	0	0	0	Sep 6	3	0
Jun 25	5	344	Aug 9	3	0	Sep 20	4	0
Jul 9	4	0	Aug 23	4	0	Oct 4	4	0
Jul 23	3.75	230	Sep 6	3	0	Oct 18	4	0
Aug 6	4.75	0	Sep 20	4	0			
Aug 20	5	0	Oct 4	4	0	1983		
Sep 6	4.5	191	Oct 18	4	0	0		
Sep 17	4.75	181	1983	4	0	0		
Oct 15	4	0	Mar 16	4	0	0		
			May 6	4	0	0		
1980			May 16	3.75	0	0		
May 15	4	0	May 16	3.75	0	0		
Jun 9	4.5	382	Jun 13	4	0	Jun 13	4	0
Jun 16	4.5	0	Jun 20	4	0	Jun 20	4	0
Jul 7	4	0	Jul 4	4	0	Jul 4	4	0
Jul 14	4.5	0	Jul 11	3.5	0	Jul 11	3.5	0
Jul 21	4	0	Jul 18	4	0	Jul 18	4	0
Jul 28	4.5	0	Aug 1	4	0	Aug 8	3.5	0
Aug 4	4	0	Aug 8	3.5	0	Aug 15	4	0
Aug 11	4	0	Aug 15	4	0	Aug 29	4.5	0
Aug 18	4.5	0	Aug 29	4.5	0	Sep 12	3.5	0
Aug 25	4.5	0	Sep 12	3.5	0	Sep 26	4	0
Sep 1	4	0	Sep 26	3.5	0	Oct 3	4	0
Sep 6	4	0	Oct 3	4	0	Oct 17	4	0
			Oct 17	4	0	1981		
			Dec 13	4	0	Dec 13	4	0

Calanoida N1			Calanoida N2		
Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			1970		
Aug 27	4	0	Sep 15	4	2391
Sep 9	4	2787	Sep 22	4	3443
Sep 18	4	1394	Sep 29	4	1435
Sep 26	4	697	Oct 6	4	0
Oct 1	4	174	Oct 13	4	0
Oct 17	4	0	Oct 20	4	0
Oct 24	4	0	Oct 26	4	0
Nov 7	4	0	Dec 9	4	96
Dec 5	4	0	1981		0
1971			Jan 13	4	0
Jan 9	4	0	Feb 10	4	0
Feb 24	4	348	Mar 17	4	287
Mar 30	4	1045	May 11	4	2200
Apr 27	4	1742	May 25	4	2774
May 11	4	11847	Jun 8	4	1817
May 25	4	12892	Jun 22	4	5547
Jun 8	4	2787	Jul 6	4	20228
Jun 25	4	1045	Jul 20	4	3443
Jul 8	4	10104	Aug 3	4	1578
Jul 22	4	3136	Aug 18	4	1076
Aug 5	4	0	Aug 31	4	1817
Aug 26	4	697	Sep 14	4	574
Sep 2	4	523	Sep 25	4	1435
Sep 25	4	1742	Sep 25	4	1506
1978			1978		0
May 22	3.7	4342	Jan 13	4	0
Jun 12	4	7747	Mar 8	4	765
Jul 10	4	5451	May 17	4	11381
Jul 31	4	5164	May 31	3	1278
Aug 31	4	3156	Jun 14	4	861
Sep 11	4	4591	1982		0
1979			1978		0
May 28	4	6456	Jan 13	4	5273
Jun 25	5	3099	Mar 8	4	6312
Jul 9	4	430	May 22	4	3.7
Aug 6	4.75	3.75	Jun 12	4	3156
Sep 11	4	4591	Jul 10	4	3156
1980			1979		0
May 22	3.7	4342	May 28	4	7962
Jun 12	4	7747	Jun 25	5	2066
Jul 10	4	5451	Jul 9	4	215
Jul 31	4	5164	Jul 31	4	3156
Aug 31	4	3156	Aug 21	4	1148
Sep 11	4	4591	Sep 11	4	3156
1981			1980		0
May 16	4	1052	Jun 28	4	5930
May 22	4	574	Jul 12	4	2582
Jun 12	4	191	Jul 26	4	1052
Jul 10	4	956	Aug 9	3	3181
Jul 31	5	7938	Aug 23	4	1435
Aug 6	4	5131	Sep 6	3	3443
Sep 6	4	1456	1982		0
Sep 17	4.75	1913	1982		0
Oct 15	4	181	1982		0
1983			1982		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1983		0
Sep 17	4.75	1913	1983		0
Oct 15	4	181	1983		0
1984			1983		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1984		0
Sep 17	4.75	1913	1984		0
Oct 15	4	181	1984		0
1985			1984		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1985		0
Sep 17	4.75	1913	1985		0
Oct 15	4	181	1985		0
1986			1985		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1986		0
Sep 17	4.75	1913	1986		0
Oct 15	4	181	1986		0
1987			1986		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1987		0
Sep 17	4.75	1913	1987		0
Oct 15	4	181	1987		0
1988			1987		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1988		0
Sep 17	4.75	1913	1988		0
Oct 15	4	181	1988		0
1989			1988		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1989		0
Sep 17	4.75	1913	1989		0
Oct 15	4	181	1989		0
1990			1989		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1990		0
Sep 17	4.75	1913	1990		0
Oct 15	4	181	1990		0
1991			1990		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1991		0
Sep 17	4.75	1913	1991		0
Oct 15	4	181	1991		0
1992			1991		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1992		0
Sep 17	4.75	1913	1992		0
Oct 15	4	181	1992		0
1993			1992		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1993		0
Sep 17	4.75	1913	1993		0
Oct 15	4	181	1993		0
1994			1993		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1994		0
Sep 17	4.75	1913	1994		0
Oct 15	4	181	1994		0
1995			1994		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1995		0
Sep 17	4.75	1913	1995		0
Oct 15	4	181	1995		0
1996			1995		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1996		0
Sep 17	4.75	1913	1996		0
Oct 15	4	181	1996		0
1997			1996		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1997		0
Sep 17	4.75	1913	1997		0
Oct 15	4	181	1997		0
1998			1997		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1998		0
Sep 17	4.75	1913	1998		0
Oct 15	4	181	1998		0
1999			1998		0
May 16	4	1052	May 22	4	5273
May 22	4	574	Jun 12	4	3156
Jun 12	4	191	Jul 10	4	3156
Jul 10	4	956	Jul 31	4	3156
Jul 31	5	7938	Aug 21	4	1148
Aug 6	4	5131	Sep 11	4	3156
Sep 6	4	1456	1999		0
Sep 17	4.75	1913	1999		0
Oct 15	4	181	1999		0
2000			1999		0
May 16	4				

## Calanoida N3

## Calanoida M4

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970	4	697	Sep 15	4	11094	1970	Aug 27	4	Sep 15	4	5451
Aug 27	4	1394	Sep 22	4	10903	Sep 22	4	Sep 22	4	7173	
Sep 9	4	697	Sep 29	4	5069	Sep 9	4	Sep 29	4	2774	
Sep 18	4	2090	Oct 6	4	2391	Sep 18	4	Sep 6	4	1617	
Sep 25	4	1394	Oct 13	4	1530	Sep 26	4	Oct 13	4	1530	
Oct 1	4	1045	Oct 20	4	287	Oct 1	4	Oct 20	4	96	
Oct 17	4	0	Oct 26	4	96	Oct 17	4	Oct 26	4	96	
Oct 24	4	0	Dec 9	4	0	Oct 24	4	Dec 9	4	0	
Nov 7	4	0	1981	4	0	Nov 7	4	0	1981	4	0
Dec 5	4	0			0	Dec 5	4	0	Jan 13	4	0
1971	4	0			0				Feb 10	4	0
Jan 9	4	523			0				Mar 17	4	0
Feb 24	4	1045			0				May 11	4	0
Mar 30	4	8885			0				May 25	4	0
Apr 27	4	28920			0				Jun 8	4	0
May 11	4	9408			0				Jun 22	4	0
May 25	4	2439			0				Jul 6	4	0
Jun 8	4	35192			0				Jul 20	4	0
Jun 25	4	15331			0				Aug 3	4	0
Jul 8	4	6969			0				Aug 18	4	0
Jul 22	4	3136			0				Aug 31	4	0
Aug 5	4	3484			0				Sep 14	4	0
Aug 26	4	2787			0				Sep 28	4	0
Sep 2	4	3658			0				Oct 12	4	0
Sep 25	4										
1978	3.7	9306	Jan 13	4	0	1978	May 22	3.7	1982	Jan 13	4
May 22	4	5164	Mar 8	4	191	May 22	May 12	4	Mar 8	4	96
Jun 12	4	6025	May 17	5	3283	Jun 12	4	May 17	5	0	
Jul 10	4	14346	May 31	3	7785	Jul 10	4	May 31	3	17502	
Jul 31	4	8321	Jun 14	4	17024	Jul 31	4	May 31	3	8644	
Aug 31	4	7460	Jun 28	4	17024	Aug 21	4	Jun 31	4	478	
Sep 11	4		Jul 12	4	5643	Sep 11	4	Jun 31	4	6504	
1979	4	17340	Jul 25	4	3443	1979	May 28	4	Jun 14	4	1435
May 28	4	3787	Aug 9	3	5604	May 28	4	Jun 28	4	574	
Jun 5	4	3658	Aug 23	4	1817	Jun 25	5	Jul 12	4	2167	
Jul 9	4	8258	Sep 6	3	2805	Jul 23	3.75	Aug 9	3	669	
Jul 23	3.75	6886	Sep 20	4	2391	Aug 6	4.75	Aug 23	4	1148	
Aug 6	4.75	1722	Oct 4	4	287	Aug 20	5	Sep 6	3	1530	
Aug 20	5	6121	Oct 18	4	96	Sep 6	4.5	Sep 20	4	287	
Sep 6	4.5	2174				Sep 17	4.75	Oct 4	4	0	
Sep 17	4.75	382				Oct 15	4	Oct 18	4		
Oct 15	4										
1980	4.5	23456	Mar 16	4	0	1980	May 15	4	May 6	4	5451
Jun 9	4.5	3634	May 6	4	9755	May 15	4	May 16	4	4897	
Jun 16	4.5	4399	Jun 13	4	8263	May 15	4	May 16	4	382	
Jul 7	4.5	14448	Jun 20	4	2965	Jun 9	4.5	Jun 13	4	574	
Jul 14	4.5	9554	Jul 11	4	4591	Jun 16	4.5	Jun 20	4	28190	
Jul 21	4	11190	Jul 18	3.5	5771	Jul 7	4	Jul 11	3.5		
Jul 28	4.5	7269	Aug 1	3	9373	Jul 14	4.5	Jul 18	4		
Aug 4	4	1594	Aug 8	3.5	15740	Jul 21	4	Aug 1	4		
Aug 11	4	10114	Aug 15	4	5643	Jul 28	4	Aug 8	3.5		
Aug 18	4	7651	Aug 29	4.5	5902	Aug 4	4	Aug 15	4		
Aug 25	4.5	2487	Sep 12	3.5	5164	Aug 11	4	Aug 29	4.5		
Sep 1	4.5	7077	Sep 25	3.5	7566	Sep 12	4.5	Sep 26	3.5		
Sep 8	4	3654	Oct 3	4	8307	Sep 18	4.5	Sep 26	3.5		
			Oct 17	4	2405	Sep 25	4.5	Oct 3	4		
			Dec 13	4	2391	Sep 1	4	Oct 17	4		
					287	Sep 8	4	Dec 13	4		
					0						

Calanoida N5				Calanoida N6			
Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth
1970			1970			1981	
Aug 27	4	348	Sep 15	4	2965	Sep 15	4
Sep 9	4	697	Sep 22	4	4112	Sep 22	4
Sep 18	4	697	Sep 29	4	3060	Sep 29	4
Sep 26	4	348	Oct 6	4	1817	Oct 6	4
Oct 1	4	1045	Oct 13	4	2487	Oct 13	4
Oct 17	4	1045	Oct 20	4	478	Oct 20	4
Oct 24	4	348	Oct 26	4	0	Oct 26	4
Nov 7	4	0	Dec 9	4	0	Dec 9	4
Dec 5	4	0	1981	4	0	1981	4
1971			1971			1981	
Jan 9	4	174	Jan 13	4	0	Jan 13	4
Feb 24	4	0	Feb 10	4	0	Feb 10	4
Mar 30	4	174	Mar 17	4	0	Mar 17	4
Apr 27	4	1916	May 11	4	4304	May 11	4
May 11	4	5375	May 25	4	1435	May 25	4
May 25	4	6369	Jun 8	4	1722	Jun 8	4
Jun 8	4	697	Jun 22	4	4949	Jun 22	4
Jun 25	4	3483	Jul 6	4	3539	Jul 6	4
Jul 8	4	1742	Jul 20	4	2726	Jul 20	4
Jul 22	4	1045	Aug 3	4	1291	Aug 3	4
Aug 5	4	348	Aug 18	4	956	Aug 18	4
Aug 26	4	1045	Aug 31	4	287	Aug 31	4
Sep 2	4	697	Sep 14	4	1722	Sep 14	4
Sep 25	4	4530	Sep 28	4	5164	Sep 28	4
1978			1978			1982	
May 22	3.7	10236	Jan 13	4	96	May 22	3.7
Jun 12	4	1148	Mar 8	4	0	14268	Jan 13
Jul 10	4	2008	May 17	5	12146	Mar 8	
Jul 31	4	1435	May 31	3	9174	May 17	
Aug 31	4	1722	Jun 14	4	96	May 31	
Sep 11	4	2008	Jun 28	4	4686	Jun 14	
1979			1979			1982	
May 28	4	6240	Jul 12	4	191	May 28	4
Jun 25	5	0	Jul 26	4	669	Jun 12	4
Jul 9	4	1076	Aug 9	3	889	1722	4
Jul 23	3.75	689	Aug 23	4	1243	1435	4
Aug 6	4	362	Sep 6	3	893	1435	4
Aug 20	5	344	Sep 20	4	1626	1076	3
Sep 6	4.5	765	Oct 4	4	96	1076	3
Sep 17	4.75	1087	Oct 18	4	0	Sep 20	4
Sep 15	4	478	Mar 16	4	0	Oct 4	4
1980			1980			1983	
May 15	4	5132	May 15	4	6312	May 15	4
Jun 9	4.5	18356	Jun 13	4	95	May 16	4
Jun 16	4.5	382	Jun 20	4	95	May 16	4
Jul 7	4	2295	Jul 1	4	18772	Jun 16	4.5
Jul 14	4.5	3658	Jul 11	4	3921	Jul 16	4.5
Jul 21	4	4591	Jul 18	3.5	4154	Jul 17	4
Jul 28	4.5	1505	Aug 1	4	2104	Jul 21	4
Aug 4	4	1630	Aug 8	3.5	1421	Jul 28	4.5
Aug 11	4	8392	Aug 15	4	574	Aug 4	4
Aug 18	4.5	4304	Aug 29	4.5	4081	Aug 11	4
Aug 25	4.5	1530	Sep 12	3.5	2514	Aug 18	4.5
Sep 1	4.5	1148	Sep 26	3.5	3716	Aug 25	4.5
Sep 8	4	3252	Oct 3	4	2200	Sep 21	0
Sep 13	4	955	Oct 17	4	2008	Sep 8	4

Calanoida C1		Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970					1970		
Aug 27	4	0	Sep 15	4	478	Aug 27	
Sep 9	4	0	Sep 22	4	669	Sep 9	
Sep 18	4	0	Sep 29	4	669	Sep 18	
Sep 26	4	0	Oct 6	4	956	Sep 26	
Oct 1	4	0	Oct 13	4	861	Oct 1	
Oct 17	4	0	Oct 20	4	574	Oct 17	
Oct 24	4	0	Oct 26	4	478	Oct 24	
Nov 7	4	697	Dec 9	4	0	Nov 7	
Dec 5	4	174	1981			Dec 5	
1971					1971		
Jan 9	4	0	Jan 13	4	0	Jan 9	
Feb 24	4	0	Feb 10	4	0	Feb 24	
Mar 30	4	0	Mar 17	4	4878	Mar 30	
Apr 27	4	0	May 11	4	574	Apr 27	
May 11	4	871	May 25	4	669	May 11	
May 25	4	11498	Jun 8	4	646	May 25	
Jun 8	4	2090	Jun 22	4	765	Jun 8	
Jun 25	4	0	Jul 6	4	382	Jun 25	
Jul 1	4	0	Jul 20	4	0	Jul 1	
Jul 8	4	348	Aug 3	4	0	Jul 8	
Jul 22	4	2040	Aug 18	4	96	Jul 22	
Aug 5	4	697	Aug 31	4	0	Aug 5	
Aug 26	4	174	Sep 14	4	765	Aug 26	
Sep 2	4	348	Sep 28	4	861	Sep 2	
Sep 25	4	174	Oct 12	4	191	Sep 25	
1972					1972		
Jan 13	4	96	May 22	2295	96	May 22	
Mar 8	4	0	Mar 17	5	0	Jun 12	
May 17	5	574	May 31	3	7942	Jul 10	
Jun 14	4	0	Jun 14	4	18034	Jul 31	
Jun 28	4	574	Jun 28	4	96	Aug 31	
Jul 12	4	0	Jul 12	4	478	Sep 11	
Jul 26	4	0	Jul 26	4	1913		
Aug 9	3	0	Aug 9	3	0		
Aug 23	4	1243	Aug 23	4	1243		
Sep 6	3	127	Sep 6	3	127		
Sep 20	4	287	Sep 20	4	287		
Oct 4	4	478	Oct 4	4	478		
Oct 18	4	0	Oct 18	4	478		
1973					1973		
Mar 16	4	0	May 6	4	0	May 26	
May 6	4	3.75	May 16	4	12674	Jun 25	
Jun 13	4	102	Jun 13	4	478	Jul 9	
Jun 20	4	0	Jun 20	4	0	Jul 10	
Jul 4	4	4	Jul 4	4	10760	Jul 17	
Jul 11	4	4	Jul 11	4	1817	Jul 23	
Jul 18	3.5	0	Jul 18	3.5	2514	Jul 14	
Aug 1	4	0	Aug 1	4	1666	Jul 21	
Aug 8	3.5	0	Aug 8	3.5	1262	Jul 23	
Aug 15	4	191	Aug 15	4	191	Aug 4	
Aug 29	4.5	935	Aug 29	4.5	935	Aug 11	
Sep 12	3.5	1312	Sep 12	3.5	1312	Aug 18	
Sep 26	3.5	328	Sep 26	3.5	328	Aug 25	
Oct 3	4	0	Oct 3	4	0	Sep 1	
Oct 17	4	1676	Oct 17	4	1676	Sep 8	
Dec 13	4	1817	Dec 13	4	1817		

Calanoida C3			Calanoida C4			Calanoida C5		
Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			1970			1970		
Aug 27	4	697	Sep 15	4	2104	Sep 15	4	1530
Sep 9	4	697	Sep 22	4	1913	Sep 22	4	2965
Sep 18	4	0	Sep 29	4	574	Sep 29	4	1052
Sep 26	4	0	Oct 6	4	96	Oct 6	4	96
Oct 1	4	348	Oct 13	4	861	Sep 26	4	669
Oct 17	4	697	Oct 20	4	1148	Oct 1	4	478
Oct 24	4	174	Oct 26	4	191	Oct 17	4	96
Nov 7	4	523	Dec 9	4	287	Oct 24	4	478
Dec 5	4	523	1981			Nov 7	4	0
1971			Jan 13	4	1045	Dec 5	4	1045
Jan 9	4	0	Feb 10	4	382	1981		
Feb 24	4	348	Mar 17	4	0	Jan 13	4	0
Mar 30	4	0	May 11	4	1530	Feb 10	4	191
Apr 27	4	174	May 25	4	3539	Mar 17	4	0
May 11	4	0	Jun 8	4	382	May 11	4	1052
May 25	4	5226	Jun 14	4	861	May 25	4	4017
Jun 8	4	2090	Jul 6	4	478	Jun 25	4	96
Jun 25	4	697	Jul 20	4	1626	Jun 25	4	430
Jul 8	4	0	Aug 3	4	1076	Jul 6	4	574
Jul 22	4	3484	Aug 18	4	287	Jul 20	4	382
Aug 5	4	3833	Aug 31	4	96	Aug 3	4	215
Aug 26	4	1394	Sep 14	4	191	Aug 18	4	861
Sep 2	4	523	Sep 28	4	2367	Sep 31	4	96
Sep 25	4	523	Oct 12	4	0	Sep 14	4	1052
1978			1982			Sep 25	4	1076
May 22	3.7	620	Jan 13	4	1339	1978		0
Jun 12	4	12524	Mar 8	4	0	May 22	3.7	2582
Jul 10	4	2295	May 17	5	96	Jun 12	4	191
Jul 31	4	861	May 31	3	9287	Jul 10	4	0
Aug 21	4	1148	Jun 14	4	1817	Jul 31	4	1788
Sep 11	4	861	Jun 28	4	96	Aug 31	4	3252
1979			1982			Sep 11	4	574
May 28	4	0	Jul 12	4	4399	1979		478
Jun 25	5	4132	Jul 26	4	3730	May 28	4	4878
Jul 9	4	215	Aug 9	3	635	Jun 25	5	7391
Jul 23	3.75	6425	Sep 6	3	1148	Jul 9	4	765
Aug 6	4.75	2899	Sep 20	4	1403	Aug 6	4.75	2678
Aug 20	5	689	Oct 4	4	669	Aug 23	4	287
Sep 6	4.5	574	Oct 18	4	96	Sep 6	4.5	382
Sep 17	4.75	725	1983			Sep 17	4.75	0
Oct 15	4	669	Mar 16	4	0	Sep 17	4.75	1983
1980			1980			Oct 15	4	1052
May 16	4	11190	May 16	4	11190	Oct 15	4	0
May 16	4	3.75	Jun 13	4	0	May 6	4	1626
Jun 15	4.5	2152	Jun 20	4	2965	May 16	4	3.75
Jun 16	4.5	2104	Jul 4	4	1148	Jun 13	4	0
Jul 7	4	0	1076	4	1937	Jun 20	4	659
Jul 14	4.5	1076	Jul 11	4	5356	Jul 4	4	2200
Jul 21	4	1722	Jul 18	3.5	3825	Jul 7	4	5810
Aug 1	4	661	Aug 1	4	2678	Jul 14	4	1817
Aug 4	4.5	382	Aug 8	3.5	2298	Jul 21	4	983
Aug 11	4	1076	Aug 15	4	382	Aug 1	4	382
Aug 18	4	1291	Aug 29	4.5	1275	Aug 8	3.5	10384
Aug 25	4.5	1913	Sep 12	3.5	2951	Aug 15	4	861
Sep 1	4.5	956	Sep 26	3.5	1202	Aug 29	4.5	2805
Sep 1	4.5	1722	Oct 3	4	669	Sep 12	3.5	1372
Sep 8	4	478	Oct 17	4	1626	Sep 26	3.5	2623
Sep 8	4	4	Dec 13	4	1626	Oct 3	4	4495
						Oct 17	4	287
						Dec 13	4	1148

## Calanoida CS

	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970	Aug 27	4	0	Sep 15	4	1913
	Sep 9	4	0	Sep 22	4	3156
	Sep 18	4	0	Sep 29	4	2200
	Sep 26	4	348	Oct 6	4	96
	Oct 1	4	174	Oct 13	4	1148
	Oct 17	4	0	Oct 20	4	765
	Oct 24	4	0	Oct 26	4	0
	Nov 7	4	348	Dec 9	4	287
	Dec 5	4	1568	1981	Jan 13	287
1971	Jan 9	4	6794	Feb 10	4	478
	Feb 24	4	348	Mar 17	4	0
	Mar 30	4	697	May 11	4	191
	Apr 27	4	174	May 25	4	8129
	May 11	4	174	Jun 8	4	1435
	May 25	4	0	Jun 22	4	1291
	Jun 8	4	2787	Jul 6	4	96
	Jun 25	4	3833	Jul 20	4	1243
	Jul 8	4	2439	Aug 3	4	861
	Jul 22	4	348	Aug 18	4	2391
	Aug 5	4	2990	Aug 31	4	0
	Aug 26	4	4355	Sep 14	4	1052
	Sep 2	4	9233	Sep 28	4	1722
	Sep 25	4	348	Oct 12	4	0
1978	May 22	3.7	0	1982	Jan 13	4
	Jun 12	4	6559	Mar 8	4	4208
	Jul 10	4	2295	May 17	5	0
	Jul 31	4	0	May 31	3	1522
	Aug 21	4	0	Jun 14	4	1530
	Sep 11	4	574	Jun 28	4	956
1979	May 28	4	0	Jul 12	4	1435
	Jun 25	5	2099	Jul 26	4	4112
	Jul 9	4	1937	Aug 9	3	6654
	Jul 23	3.75	3672	Aug 23	4	4112
	Aug 6	4.75	6342	Sep 6	3	4336
	Aug 20	5	516	Sep 20	4	1817
	Sep 6	4.5	955	Oct 4	4	191
	Sep 17	4.75	1993	Oct 18	4	0
	Oct 15	4	1339	1983	Mar 16	4
1980	May 15	4	0	May 6	4	191
	Jun 9	4.5	12242	May 16	4	3156
	Jun 16	4.5	955	Jun 13	4	3.75
	Jul 7	4	3443	Jun 20	4	96
	Jul 14	4.5	765	Jul 11	4	3730
	Jul 21	4	6240	Jul 18	3.5	9253
	Jul 28	4.5	955	Aug 1	4	3339
	Aug 4	4	1291	Aug 8	3.5	1312
	Aug 11	4	646	Aug 15	4	1052
	Aug 18	4.5	765	Aug 29	4	8088
	Aug 25	4.5	765	Sep 12	3.5	191
	Sep 1	4.5	382	Sep 26	3.5	3230
	Sep 8	4	96	Oct 3	4	3060
				Oct 17	4	2405
				Dec 13	4	7651
						1435
						1339

<u>Cyclops bicuspidatus thomasi, female</u>			<u>Cyclops bicuspidatus thomasi, male</u>		
Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			1970		
Aug 27	4	0	Sep 15	4	0
Sep 9	4	0	Sep 22	4	96
Sep 18	4	0	Sep 29	4	0
Sep 26	4	0	Oct 6	4	0
Oct 1	4	0	Oct 13	4	286
Oct 17	4	0	Oct 20	4	0
Oct 24	4	0	Oct 26	4	0
Nov 7	4	0	Dec 9	4	0
Dec 5	4	0	1981		0
1971			1971		
Jan 9	4	0	Jan 9	4	0
Feb 24	4	0	Feb 24	4	573
Mar 30	4	0	Mar 30	4	0
Apr 27	4	0	Apr 27	4	96
May 11	4	0	May 11	4	0
May 25	4	0	May 25	4	0
Jun 8	4	0	Jun 8	4	0
Jun 22	4	0	Jun 22	4	0
Jul 6	4	0	Jul 6	4	0
Jul 20	4	0	Jul 20	4	348
Aug 3	4	0	Aug 3	4	0
Aug 18	4	0	Aug 18	4	0
Aug 31	4	0	Aug 31	4	0
Sep 14	4	0	Aug 5	4	0
Sep 28	4	0	Aug 26	4	0
Oct 12	4	0	Sep 14	4	0
			Sep 28	4	0
1981			Sep 2	4	0
			Sep 25	4	0
					287
1978			1978		
May 22	3.7	0	May 22	3.7	0
Jun 12	4	0	Jun 12	4	0
Jul 10	4	0	Jul 10	4	0
Jul 31	4	0	Jul 31	4	0
Aug 31	4	0	Aug 21	4	0
Sep 11	4	0	Sep 11	4	0
1979			1979		
May 28	4	0	May 28	4	0
Jun 25	5	0	Jun 25	5	0
Jul 9	4	0	Jul 9	4	96
Jul 23	3.75	0	Jul 23	3.75	0
Aug 6	4.75	0	Aug 6	4.75	0
Aug 20	5	0	Aug 20	5	0
Sep 6	4.5	0	Sep 6	4.5	0
Sep 17	4.75	0	Sep 17	4.75	0
Oct 15	4	0	Oct 15	4	0
1980			1980		
May 15	4	0	May 15	4	0
Jun 9	4.5	0	Jun 9	4.5	0
Jun 16	4.5	0	Jun 16	4.5	1221
Jul 7	4	0	Jul 7	4	0
Jul 14	4.5	0	Jul 14	4.5	0
Jul 21	4	0	Jul 21	4	0
Jul 28	4.5	0	Jul 28	4.5	0
Aug 4	4	0	Aug 4	4	0
Aug 11	4	0	Aug 11	4	0
Aug 18	4	0	Aug 18	4	0
Aug 25	4.5	0	Aug 25	4.5	0
Sep 1	4.5	0	Sep 1	4.5	0
Sep 8	4	0	Sep 8	4	0
					287
1981			1981		
Jan 13	4	0	Jan 13	4	0
Feb 10	4	0	Feb 10	4	0
Mar 17	4	0	Mar 17	4	0
May 11	4	0	May 11	4	0
May 25	4	0	May 25	4	0
Jun 8	4	0	Jun 8	4	0
Jun 22	4	0	Jun 22	4	0
Jul 6	4	0	Jul 6	4	0
Jul 20	4	0	Jul 20	4	0
Aug 3	4	0	Aug 3	4	0
Aug 18	4	0	Aug 18	4	0
Aug 31	4	0	Aug 31	4	0
Sep 14	4	0	Sep 14	4	0
Sep 28	4	0	Sep 28	4	0
Oct 12	4	0	Oct 12	4	0
					287
1982			1982		
Jan 13	4	0	Jan 13	4	0
Mar 8	4	0	Mar 8	4	0
May 17	5	0	May 17	5	0
Jun 31	4	0	Jun 31	4	0
Jul 14	4	0	Jun 26	4	0
Jul 26	4	0	Jul 26	4	0
Aug 9	3	0	Jul 26	4	0
Aug 23	4	0	Aug 23	4	0
Sep 6	3	0	Sep 6	3	0
Sep 20	4	0	Sep 20	4	0
Sep 26	4	0	Sep 26	4	0
Oct 4	4	0	Oct 4	4	0
Oct 18	4	0	Oct 18	4	0
1983			1983		
Mar 16	4	95	Mar 16	4	0
May 6	4	0	May 6	4	0
May 16	3.75	0	May 16	3.75	0
Jun 13	4	0	Jun 13	4	0
Jun 20	4	0	Jun 20	4	0
Jul 7	4	0	Jul 7	4	0
Jul 11	4	0	Jul 11	4	0
Jul 18	4.5	0	Jul 18	4.5	0
Aug 1	4	0	Aug 1	4	0
Aug 8	3.5	0	Aug 8	3.5	0
Aug 15	4	0	Aug 15	4	0
Aug 22	4.5	0	Aug 22	4.5	0
Aug 29	4.5	0	Aug 29	4.5	0
Sep 12	3.5	0	Sep 12	3.5	0
Sep 26	3.5	0	Sep 26	3.5	0
Oct 3	4	0	Oct 3	4	0
Oct 17	4	0	Oct 17	4	0
Dec 13	4	0	Dec 13	4	0
					96

Mesocyclops edax, femaleMesocyclops edax, male

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			Sep 15	4	1970
Aug 27	4	0	Sep 22	4	Aug 27
Sep 9	4	0	Sep 29	4	Sep 27
Sep 18	4	0	Oct 6	4	Sep 22
Sep 26	4	0	Oct 13	4	Sep 29
Oct 1	4	0	Oct 20	4	Oct 6
Oct 17	4	0	Oct 26	4	Oct 13
Oct 24	4	0	Oct 24	4	Oct 20
Nov 7	4	0	Nov 7	4	Oct 26
Dec 5	4	0	Dec 9	4	Oct 24
					Dec 9
1981					1981
Jan 13	4	0	Jan 13	4	Sep 15
Feb 24	4	0	Feb 10	4	Sep 22
Mar 30	4	0	Mar 17	4	Sep 29
Apr 27	4	0	Apr 27	4	Oct 6
May 11	4	0	May 11	4	Oct 13
May 25	4	0	May 25	4	Oct 20
Jun 8	4	0	Jun 8	4	Oct 26
Jun 25	4	0	Jun 22	4	Oct 24
Jul 8	4	0	Jul 6	4	Oct 26
Jul 25	4	0	Jul 20	4	Oct 26
Aug 1	4	0	Aug 3	4	Oct 26
Aug 8	4	0	Aug 18	4	Oct 26
Aug 15	4	0	Aug 31	4	Oct 26
Aug 22	4	0	Sep 14	4	Oct 26
Aug 29	4	0	Sep 28	4	Oct 26
Aug 26	4	0	Sep 2	4	Oct 26
Sep 2	4	0	Sep 25	4	Oct 26
Sep 9	4	0			1982
Sep 25	4	0			1982

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1978			1978		
May 22	3.7	310	Jan 13	4	Jan 13
Jun 12	4	287	Mar 8	4	Mar 8
Jul 10	4	661	May 17	4	May 17
Jul 31	4	574	May 31	4	May 31
Aug 31	4	0	Jun 14	4	Jun 14
Sep 11	4	0	Jun 28	4	Jun 28
1979			1979		
May 28	4	1076	Aug 9	4	Aug 9
Jun 25	5	0	Aug 23	5	Aug 23
Jul 9	4	861	Sep 6	4	Sep 6
Jul 23	3.75	0	Sep 20	4	Sep 20
Aug 6	4.75	0	Oct 4	4	Oct 4
Aug 20	5	0	Oct 18	4	Oct 18
Sep 6	4.5	0	Sep 6	4.5	Sep 6
Sep 17	4.75	0	Sep 17	4.75	Sep 17
Oct 15	4	0	Oct 15	4	Oct 15
1983					1983
Mar 16	4	0			1983
May 6	4	0			1983
May 16	3.75	0			1983
Jun 13	4	0			1983
Jun 20	4	0			1983
Jun 27	4	0			1983
Jul 4	4	0			1983
Jul 11	4	0			1983
Jul 18	3.5	0			1983
Aug 1	4	0			1983
Aug 8	3.5	0			1983
Aug 15	4	0			1983
Aug 22	4	0			1983
Aug 29	4.5	0			1983
Sep 12	3.5	0			1983
Sep 26	3.5	0			1983
Oct 3	4	0			1983
Oct 17	4	0			1983
Dec 13	4	0			1983
1980			1980		
May 15	4	430	May 15	4	May 15
Jun 9	4.5	382	Jun 9	4.5	May 16
Jun 16	4	0	Jun 16	4.5	May 16
Jul 1	4	1076	Jul 7	4	Jun 13
Jul 14	4.5	191	Jul 18	3.5	Jun 20
Jul 21	4	430	Jul 21	4.5	Jul 4
Jul 28	4.5	956	Jul 28	4.5	Jul 11
Aug 4	4	0	Aug 4	4	Jul 18
Aug 11	4	430	Aug 11	4	Aug 1
Aug 18	4.5	573	Aug 18	4.5	Aug 8
Aug 25	4.5	382	Aug 25	4.5	Aug 15
Sep 1	4.5	191	Sep 1	4.5	Aug 29
Sep 8	4	0	Sep 8	4	Sep 12

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			Sep 15	4	4
Aug 27	4	0	Sep 22	4	0
Sep 9	4	0	Sep 29	4	0
Sep 18	4	0	Oct 6	4	96
Sep 26	4	0	Oct 13	4	0
Oct 1	4	0	Oct 20	4	0
Oct 17	4	0	Oct 26	4	0
Oct 24	4	0	Oct 24	4	0
Nov 7	4	0	Nov 7	4	0
Dec 5	4	0	Dec 9	4	0
					1981
1971			Jan 13	4	0
Jan 9	4	0	Feb 10	4	0
Feb 24	4	0	Mar 17	4	0
Mar 30	4	0	May 11	4	0
Apr 27	4	0	May 25	4	96
May 11	4	0	Jun 8	4	0
May 25	4	0	Jun 22	4	1506
Jun 8	4	0	Jun 26	4	1148
Jun 25	4	0	Jul 6	4	2439
Jul 8	4	0	Jul 20	4	215
Jul 22	4	0	Jul 25	4	574
Aug 5	4	0	Aug 18	4	0
Aug 12	4	0	Aug 31	4	0
Aug 25	4	0	Sep 14	4	0
Sep 1	4	0	Sep 28	4	0
Sep 8	4	0	Sep 12	4	0
Sep 25	4	0	Sep 25	4	0
					1982
1978			May 22	3.7	0
May 22	3.7	310	Jan 12	4	0
Jun 12	4	287	Jul 10	4	0
Jul 10	4	661	Jul 31	4	0
Jul 31	4	574	Aug 21	4	0
Aug 31	4	0	Sep 11	4	0
Sep 11	4	0	1979		
1979			May 28	4	0
May 28	4	1076	Aug 9	3	0
Jun 25	5	0	Aug 23	4	0
Jul 9	4	861	Sep 6	4	0
Jul 23	3.75	0	Sep 20	4	0
Aug 6	4.75	0	Oct 4	4	0
Aug 20	5	0	Oct 18	4	0
Sep 6	4.5	0	Sep 6	4.5	0
Sep 17	4.75	0	Sep 17	4.75	0
Oct 15	4	0	Oct 15	4	0
1983					1983
Mar 16	4	0			1983
May 6	4	0			1983
May 16	3.75	0			1983
Jun 13	4	0			1983
Jun 20	4	0			1983
Jun 27	4	0			1983
Jul 4	4	0			1983
Jul 11	4	0			1983
Jul 18	3.5	0			1983
Aug 1	4	0			1983
Aug 8	3.5	0			1983
Aug 15	4	0			1983
Aug 22	4	0			1983
Aug 29	4.5	0			1983
Sep 12	3.5	0			1983
Sep 26	3.5	0			1983
Oct 3	4	0			1983
Oct 17	4	0			1983
Dec 13	4	0			1983
1980			1980		
May 15	4	430	May 15	4	645
Jun 9	4.5	382	Jun 9	4.5	0
Jun 16	4	0	Jun 16	4.5	0
Jul 1	4	1076	Jul 7	4	215
Jul 14	4.5	191	Jul 18	4.5	573
Jul 21	4	430	Jul 21	4	645
Jul 28	4.5	956	Jul 28	4.5	191
Aug 4	4	0	Aug 4	4	215
Aug 11	4	430	Aug 11	4	215
Aug 18	4.5	573	Aug 18	4.5	765
Aug 25	4.5	382	Aug 25	4.5	0
Sep 1	4.5	191	Sep 1	4.5	191
Sep 8	4	0	Sep 8	4	0
					1981
1981					1981
Jan 13	4	0			1981
Feb 10	4	0			1981
Mar 17	4	0			1981
May 11	4	0			1981
May 25	4	0			1981
Jun 8	4	0			1981
Jun 22	4	0			1981
Jul 6	4	0			1981
Jul 20	4	0			1981
Aug 3	4	0			1981
Aug 18	4	0			1981
Sep 14	4	0			1981
Sep 28	4	0			1981
Oct 12	4	0			1981
Oct 17	4	0			1981
Dec 13	4	0			1981
1982					1982
Jan 13	4	0			1982
Feb 10	4	0			1982
Mar 8	4	0			1982
May 17	5	0			96
May 31	3	0			0
Jun 14	4	0			0
Jun 28	4	0			0
Jul 12	4	0			0
Jul 26	4	0			0
Aug 9	3	0			0
Sep 6	3	0			0
Sep 23	4	0			0
Sep 26	4	0			0
Oct 4	4	0			0
Oct 18	4	0			0
Oct 26	4	0			0
Dec 13	4	0			0
1983					1983
Jan 16	4	0			1983
May 6	4	0			1983
May 16	3.75	0			1983
Jun 13	4	0			1983
Jun 20	4	0			1983
Jun 27	4	0			1983
Jul 4	4	0			1983
Jul 11	4	0			1983
Jul 18	3.5	0			1983
Aug 1	4	0			1983
Aug 8	3.5	0			1983
Aug 15	4	0			1983
Aug 22	4	0			1983
Aug 29	4.5	0			1983
Sep 12	3.5	0			1983
Sep 26	3.5	0			1983
Oct 3	4	0			1983
Oct 17	4	0			1983
Dec 13	4	0			1983
1984					1984
Jan 13	4	0			1984
Feb 10	4	0			1984
Mar 8	4	0			1984
May 17	5	0			1984
May 31	3	0			1984
Jun 14	4	0			1984
Jun 28	4	0			1984
Jul 12	4	0			1984
Jul 26	4	0			1984
Aug 9	3	0			1984
Sep 6	3	0			1984
Sep 23	4	0			1984
Oct 10	4	0			1984
Oct 17	4	0			1984
Dec 13	4	0			1984
19					

<u>Tropocyclops prasinus mexicanus, female</u>				<u>Tropocyclops prasinus mexicanus, male</u>			
Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth
1970			Sep 15	4	6217	Sep 15	4
Aug 27	4	2090	Sep 22	4	3252	Sep 22	4
Sep 9	4	6969	Sep 29	4	1339	Sep 29	4
Sep 18	4	2439	Oct 6	4	1052	Oct 6	4
Sep 26	4	4181	Oct 13	4	2869	Oct 13	4
Oct 1	4	1742	Oct 20	4	1243	Oct 20	4
Oct 17	4	14634	Oct 26	4	1817	Oct 26	4
Oct 24	4	7840	Dec 9	4	765	Dec 9	4
Nov 7	4	2613	1981	4	1045	1981	4
Dec 5	4	1220	Jan 13	4	871	Jan 13	4
1971			Feb 10	4	0	Feb 10	4
Jan 9	4	1916	Mar 17	4	191	Mar 17	4
Feb 24	4	697	May 11	4	96	May 11	4
Mar 30	4	0	May 25	4	191	May 25	4
Apr 27	4	1045	Jun 8	0	0	Jun 8	0
May 11	4	697	Jun 22	4	430	Jun 22	4
May 25	4	0	Jul 6	4	861	May 25	4
Jun 8	4	348	Jul 20	4	1148	Jun 8	4
Jun 25	4	1712	Aug 3	4	4734	Jun 25	4
Jul 8	4	348	Aug 18	4	3156	Jul 8	4
Jul 22	4	697	Aug 31	4	1435	Jul 22	4
Aug 5	4	9756	Sep 14	4	2869	Aug 5	4
Aug 25	4	2962	Sep 28	4	3013	Aug 26	4
Sep 2	4	4007	Sep 28	4	1913	Sep 2	4
Sep 25	4	17596	Sep 25	4	8362	Sep 25	4
1972			1978			1982	
May 22	3.7	620	Jan 13	4	382	Jan 13	4
Jun 12	4	287	Mar 8	4	96	Mar 8	4
Jul 10	4	574	May 17	5	287	May 17	5
Jul 31	4	4304	May 31	3	513	May 31	3
Aug 31	4	4017	Jun 14	4	0	Jun 14	4
Sep 11	4	6025	Jun 28	4	0	Jun 28	4
1979			1979			1982	
May 28	4	215	Jul 26	4	96	Jul 26	4
Jun 25	5	516	Aug 9	3	128	Aug 9	3
Jul 9	4	1722	Aug 23	4	955	Aug 23	4
Jul 23	3.75	6427	Sep 6	3	127	Sep 6	3
Aug 6	4.75	4530	Sep 20	4	669	Sep 20	4
Aug 20	5	7575	Oct 4	4	1243	Oct 4	4
Sep 6	4.5	1913	Oct 18	4	478	Oct 18	4
Sep 17	4.75	3987	1983	4	0	1983	4
Oct 15	4	2391	Mar 16	4	765	Mar 16	4
1980			May 6	4	0	May 6	4
May 15	4	0	May 16	3.75	0	May 16	3.75
Jun 9	4.5	0	Jun 13	4	0	Jun 13	4
Jun 16	4.5	0	Jun 20	4	95	Jun 20	4
Jul 7	4	0	Jul 11	4	215	Jul 11	4
Jul 14	4.5	0	Jul 18	3.5	191	Jul 18	3.5
Jul 21	4	0	Aug 1	4	0	Aug 1	4
Jul 28	4.5	191	Aug 8	3.5	4591	Aug 8	3.5
Aug 4	4	215	Aug 15	4	6312	Aug 15	4
Aug 11	4	215	Aug 29	4.5	2040	Aug 29	4.5
Aug 18	4	765	Sep 12	3.5	5356	Aug 18	4.5
Aug 25	4.5	1339	Sep 26	3.5	6449	Aug 25	4.5
Sep 1	4.5	3634	Oct 3	4	6886	Sep 1	4.5
Sep 8	4	3443	Oct 17	4	3443	Sep 8	4
1981			1981			1981	
Oct 17	4	4017	Dec 13	4	2955	Dec 13	4

## Cyclopoida N1

## Cyclopoida N2

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			Sep 15	4	1243	1970			Sep 15	4	2104
Aug 27	4	14634	Sep 22	4	1722	Aug 27	4	13937	Sep 22	4	2487
Sep 9	4	4878	Sep 29	4	287	Sep 9	4	9059	Sep 29	4	1530
Sep 18	4	2439	Oct 6	4	287	Sep 18	4	8014	Oct 6	4	861
Sep 26	4	697	Oct 13	4	191	Sep 26	4	6530	Oct 13	4	382
Oct 1	4	174	Oct 20	4	382	Oct 1	4	1916	Oct 20	4	382
Oct 17	4	0	Oct 25	4	96	Oct 17	4	697	Oct 25	4	0
Oct 24	4	0	Dec 9	4	96	Oct 24	4	523	Dec 9	4	96
Nov 7	4	0				Nov 7	4	174			
Dec 5	4	0				1981		0			
1971						Jan 13	4	0			
Jan 9	4	0				Feb 10	4	0			
Feb 24	4	0				Mar 17	4	0			
Mar 30	4	174				May 11	4	1530			
Apr 27	4	6272				May 25	4	1435			
May 11	4	4181				Jun 8	4	1243			
May 25	4	2787				Jun 22	4	1722			
Jun 8	4	11498				Jul 6	4	3921			
Jun 25	4	12195				Jul 20	4	8345			
Jul 1	4	12544				Aug 3	4	5595			
Aug 5	4	9059				Aug 18	4	6217			
Aug 26	4	3658				Aug 31	4	2200			
Sep 2	4	6620				Sep 14	4	1339			
Sep 25	4	1742				Sep 28	4	1076			
1982						Sep 25	4	1148			
Jan 13	4	0									
Mar 8	4	95									
May 17	4	2008									
Jul 10	4	2039									
Jul 31	4	669									
Aug 31	4	4017									
Sep 11	4	955									
1978											
May 22	4	0									
Jun 12	4	95									
Jul 10	4	2008									
Jul 31	4	6312									
Aug 31	4	669									
Sep 11	4	861									
1979											
May 28	4	0									
Jun 25	4	382									
Jul 12	4	478									
Jun 14	4	478									
Jul 28	4	478									
Aug 9	4	478									
Sep 6	3	0									
Sep 20	4	191									
Oct 4	4	0									
Oct 18	4	0									
1983											
May 28	4	9684									
Jun 25	5	7402									
Jul 9	4	2532									
Jul 23	3.75	6886									
Aug 6	4.75	4520									
Aug 20	5	3615									
Sep 6	4.5	936									
Sep 17	4.75	564									
Oct 15	4	574									
Mar 16	4	0									
May 6	4	1243									
May 16	4	3.75									
Jun 13	4	3036									
Jun 20	4	956									
Jun 27	4	3060									
Jul 11	4	1076									
Jul 14	4	546									
Jul 21	4	4304									
Jul 28	4	3170									
Aug 15	4	2295									
Aug 29	4	1243									
Aug 31	4	1093									
Sep 12	3.5	765									
Sep 26	4	574									
Sep 3	4	382									
Sep 8	4	956									
1980											
May 15	4	0									
Jun 9	4	4.5									
Jun 13	4	4.5									
Jun 20	4	3552									
Jul 4	4	861									
Jul 11	4	2487									
Jul 18	4	1312									
Aug 1	4	3921									
Aug 8	4	1506									
Aug 15	4	1339									
Aug 22	4	2582									
Aug 29	4	2367									
Aug 29	4	2582									
Aug 31	4	4399									
Sep 1	4	4399									
Sep 8	4	8799									
Sep 13	4	6982									
Dec 13	4	1913									

Cyclopoida N3				Cyclopoida N4			
Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth
1970			1970			1970	
Aug 27	4	11498	Sep 15	4	6217	Sep 15	4
Sep 9	4	9756	Sep 22	4	3730	Sep 22	4
Sep 18	4	6969	Sep 29	4	2965	Sep 29	4
Sep 26	4	3484	Oct 6	4	1243	Oct 6	4
Oct 1	4	2439	Oct 13	4	382	Oct 13	4
Oct 17	4	1045	Oct 20	4	765	Oct 20	4
Oct 24	4	0	Oct 26	4	191	Oct 26	4
Nov 7	4	0	Dec 9	4	191	Oct 26	4
Dec 5	4	0	1981		0	Dec 9	4
1971			1971			1981	
Jan 9	4	0	Jan 13	4	574	Jan 13	4
Feb 24	4	0	Feb 10	4	191	Feb 10	4
Mar 30	4	523	Mar 17	4	96	Mar 17	4
Apr 27	4	174	May 11	4	1817	May 11	4
May 1	4	15679	May 25	4	5547	May 25	4
May 25	4	19512	Jun 8	4	1817	May 25	4
Jun 8	4	11498	Jun 22	4	4304	May 25	4
Jun 25	4	39721	Jul 6	4	4973	May 25	4
Jul 18	4	25436	Aug 3	4	23480	Jun 8	4
Jul 22	4	29617	Aug 18	4	20228	Jun 25	4
Aug 5	4	16376	Aug 31	4	19798	Jul 25	4
Aug 26	4	11847	Sep 14	4	3221	Jul 22	4
Sep 2	4	11324	Sep 23	4	1913	Aug 5	4
Sep 25	4	3493	Oct 12	4	2152	Aug 26	4
1978			1978			1982	
May 22	3.7	59866	Jan 13	4	0	May 22	3.7
Jun 12	4	11477	Mar 8	4	191	Jun 12	4
Jul 10	4	9468	May 17	5	3539	Jul 10	4
Jul 31	4	11477	May 31	3	12855	Jul 31	4
Aug 21	4	21806	Jun 14	4	1722	Aug 31	4
Sep 11	4	8608	Jun 26	4	12624	Sep 11	4
1979			1979			1982	
May 28	4	46266	Jul 12	4	6886	May 22	3.7
Jun 25	5	40456	Jul 25	4	2869	Jun 12	4
Jul 9	4	39165	Aug 9	3	3430	May 22	3.7
Jul 23	3.75	16986	Aug 23	4	1817	Jun 25	5
Aug 6	4.75	1725	Sep 6	3	2805	Jul 9	4
Aug 20	5	23385	Sep 20	4	765	Jul 23	3.75
Sep 6	4.5	14537	Oct 4	4	1052	Aug 6	4.75
Sep 17	4.75	9061	Oct 18	4	191	Aug 20	5
Oct 15	4	574	1983			Sep 6	4.5
1980			1980			Sep 17	4.75
May 15	4	20443	Mar 16	4	382	Oct 15	4
Jun 9	4.5	16533	May 6	4	5930	Oct 15	4
Jun 16	4.5	13007	May 16	3.75	918	May 16	3.75
Jul 7	4	4987	Jun 13	4	5930	May 16	3.75
Jul 14	4.5	890	Jun 20	4	7651	Jun 9	4.5
Jul 21	4	4949	Jul 4	4	9899	Jun 16	4.5
Jul 28	4.5	4208	Jul 11	4	4304	Jul 7	4
Aug 4	4	5595	Aug 1	4	5246	Jul 14	4.5
Aug 11	4	7101	Aug 8	4	11859	Jul 21	4
Aug 18	4.5	9181	Aug 15	4	32463	Jul 28	4.5
Aug 25	4.5	8416	Aug 29	4.5	7651	Aug 4	4
Sep 1	4.5	11286	Sep 12	3.5	3656	Aug 11	4
Sep 8	4	11955	Sep 25	3.5	5028	Aug 18	4.5
Oct 17	4	0	Oct 3	4	6025	Aug 25	4.5
Dec 13	4	0	Oct 17	4	861	Oct 3	4
					3388	Sep 1	4
					6025	Sep 8	4
					11286	Oct 13	4
					11955	Dec 13	4

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## Cyclopoida NS

## Cyclopoida NG

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			Sep 15	4	3156	Sep 15	4	1243
Aug 27	4	9408	Sep 22	4	2391	Sep 22	4	478
Sep 9	4	18118	Sep 29	4	574	Sep 29	4	382
Sep 18	4	14634	Oct 6	4	861	Oct 6	4	191
Sep 26	4	8711	Oct 13	4	956	Oct 13	4	287
Oct 1	4	3135	Oct 20	4	765	Oct 20	4	382
Oct 17	4	2265	Oct 26	4	96	Oct 26	4	191
Oct 24	4	1916	Dec 9	4	574	Dec 9	4	1435
Nov 7	4	348						
Dec 5	4	174						
1971			Jan 13	4	1052	1971	4	1530
Jan 9	4	0	Feb 10	4	96	Jan 13	4	0
Feb 24	4	0	Mar 17	4	0	Feb 10	4	0
Mar 30	4	174	May 11	4	287	Mar 17	4	191
Apr 27	4	0	May 25	4	1913	May 11	4	956
May 11	4	2265	Jun 8	4	2295	May 25	4	1626
May 25	4	13240	Jun 22	4	430	Jun 8	4	646
Jun 8	4	15226	Jul 6	4	2200	Jun 22	4	1148
Jun 25	4	13589	Jul 20	4	7173	Jul 6	4	1722
Jul 16	4	9756	Aug 3	4	7532	Jul 20	4	5595
Jul 22	4	9059	Aug 18	4	6217	Aug 3	4	1722
Aug 5	4	4878	Aug 31	4	1243	Aug 18	4	0
Aug 26	4	4878	Sep 14	4	0	Aug 31	4	0
Sep 2	4	7491	Sep 28	4	0	Sep 14	4	0
Sep 25	4	4181	Oct 12	4	96	Sep 28	4	0
					96	Sep 25	4	0
1972			Jan 13	4	96	1978	3.7	27917
May 22	4	3.7	Mar 8	0	0	May 22	4	0
Jun 12	4	53972	May 17	4	1339	Jun 12	4	0
Jul 10	4	9181	May 31	4	4935	Jul 10	4	574
Jul 31	4	16641	Jun 14	4	765	Jul 31	4	3544
Aug 21	4	4071	Jun 28	4	5738	Aug 31	4	287
Sep 11	4	13772	Jul 12	4	6503	Sep 11	4	1913
		5451	Jul 26	4	861			1913
1973			Aug 9	3	1783	1979	4	2152
May 28	4	7747	Aug 23	4	1625	May 28	4	767
Jun 25	4	17215	Sep 6	3	1275	Jun 25	5	478
Jul 9	4	32278	Sep 20	4	191	Jul 9	4	382
Jul 23	3.75	4361	Oct 4	4	478	Jul 23	4	96
Aug 6	4.75	2899	Oct 18	4	191	Aug 6	4	0
Aug 20	5	7747				Aug 20	5	96
Sep 6	4.5	3826				Sep 6	4.5	0
Sep 17	4.75	1993	Mar 16	4	96	Sep 17	4.75	191
Oct 15	4	861	May 6	4	2965	Oct 15	4	1817
			May 16	4	0			191
1980			Jun 13	4	7364	1980	4	1291
May 15	4	861	Jun 20	4	3060	May 15	4	3.75
Jun 9	4.5	5930	Jul 4	4	7962	Jun 9	4.5	0
Jun 16	4.5	6695	Jul 11	4	3252	Jun 16	4.5	2582
Jul 7	4	1722	Jul 18	3.5	2295	Jul 7	4	1435
Jul 14	4.5	2487	Aug 1	4	11381	Jul 14	4.5	1312
Jul 21	4	861	Aug 8	3.5	16833	Jul 21	4	4686
Jul 28	4.5	1148	Aug 15	4	8799	Aug 4	4.5	6558
Aug 4	4	1722	Aug 29	4.5	2295	Aug 11	4	4973
Aug 11	4	2582	Sep 12	3.5	874	Aug 18	4.5	2380
Aug 18	4.5	5930	Sep 26	3.5	2295	Sep 12	3.5	656
Aug 25	4.5	6695	Oct 3	4	2774	Sep 17	4	656
Sep 1	4.5	2487	Oct 17	4	1530	Oct 17	4	1626
Sep 8	4	3060	Dec 13	4	1530	Dec 13	4	287
								478

Cyclopoida C1			Cyclopoida C2					
Date	Column depth	No. m <sup>-3</sup>	Date	Column depth	No. m <sup>-3</sup>	Date	Column depth	No. m <sup>-3</sup>
1970			Sep 15	4	861	Sep 15	4	1435
Aug 27	4	4530	Sep 22	4	1032	Sep 22	4	574
Sep 9	4	11847	Sep 29	4	287	Sep 29	4	287
Sep 18	4	7656	Oct 6	4	95	Oct 6	4	96
Sep 26	4	6959	Oct 13	4	382	Sep 26	4	96
Oct 1	4	81088	Oct 20	4	0	Oct 1	4	96
Oct 17	4	3484	Oct 26	4	0	Oct 17	4	96
Oct 24	4	3136	Dec 9	4	191	Oct 24	4	0
Nov 7	4	523	1974			Nov 7	4	96
Dec 5	4		1981			1974	174	
1971			Jan 13	4	382	Jan 13	4	287
Jan 9	4	0	Feb 10	4	96	Feb 10	4	191
Feb 24	4	174	Mar 17	4	0	Mar 17	4	0
Mar 30	4	0	May 11	4	0	May 11	4	765
Apr 27	4	0	May 25	4	0	May 25	4	0
May 11	4	174	Jun 8	4	287	Jun 8	4	669
May 25	4	6272	Jun 22	4	1076	May 11	4	1506
Jun 8	4	4181	Jul 6	4	1243	May 25	4	956
Jun 25	4	3484	Jul 20	4	1267	Jun 8	4	2750
Jul 8	4	2787	Aug 3	4	6240	Jun 25	4	13342
Jul 22	4	1742	Aug 18	4	4112	Jul 8	4	6408
Aug 5	4	1394	Aug 31	4	382	Aug 18	4	1626
Aug 26	4	4355	Sep 14	4	574	Aug 31	4	478
Sep 2	4	10104	Sep 28	4	0	Sep 14	4	430
Sep 25	4	31010	Oct 12	4	96	Sep 28	4	191
1978			1982			1982		
May 22	3.7	8685	Jan 13	4	191	Jan 13	4	0
Jun 12	4	2582	Mar 8	0	0	Mar 8	4	0
Jul 10	4	3443	May 17	4	0	May 17	5	0
Jul 31	4	3156	May 31	3	637	May 31	3	511
Aug 31	4	8894	Jun 14	4	191	Jun 14	4	96
Sep 11	4	8608	Jun 28	4	1626	Jun 28	4	669
1979			1982			1982		
May 28	4	4734	Aug 9	3	508	May 22	3.7	7444
Jun 25	5	1377	Aug 23	4	1817	Jun 12	4	861
Jul 9	4	3658	Sep 6	3	1913	Jul 10	4	5738
Jul 23	3.75	4132	Sep 20	4	574	Jul 31	4	2582
Aug 6	4.75	4893	Oct 4	4	861	Aug 21	4	6312
Aug 20	5	1549	Oct 18	4	191	Sep 11	4	4878
Sep 6	4.5	2869	1983			1979		
Sep 17	4.75	1268	Mar 16	4	0	May 28	4	3443
Oct 15	4	669	May 6	4	573	Jun 25	5	1549
1980			May 16	4	102	Jul 9	4	4204
May 15	4	0	Jun 13	4	765	Jul 23	4	2984
Jun 9	4.5	191	Jun 20	4	574	Jul 31	4	893
Jun 16	4.5	0	Jun 27	4	2152	Aug 6	5	1052
Jun 7	4	215	Jul 14	4	1052	Aug 20	5	95
Jul 14	4.5	574	Jul 18	4	1312	Aug 20	5	2582
Jul 21	4	215	Aug 1	4	3921	Aug 28	4	4487
Jul 28	4.5	574	Aug 8	4	7870	Aug 4	4	1722
Aug 4	4	2367	Aug 15	4	8034	Aug 11	4	1506
Aug 11	4	1291	Aug 29	4	3316	Aug 18	4	5547
Aug 18	4.5	2678	Sep 12	4	5246	Aug 25	4	4298
Aug 25	4.5	2104	Sep 26	4	1033	Sep 1	4.5	3060
Sep 1	4.5	1148	Oct 3	4	1339	Sep 8	4	3060
Sep 8	4	382	Oct 17	4	0	Oct 17	4	96
Sep 13	4	0	Dec 13	4	0	Dec 13	4	191

## Cyclopoida C3

## Cyclopoida C4

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970	4	3136	Sep 15	4	574	1970	Aug 27	4	Sep 15	4	96
Aug 27	4	4878	Sep 22	4	669	Sep 27	4	Sep 22	4	48	
Sep 9	4	5226	Sep 29	4	287	Sep 9	4	Sep 29	4	191	
Sep 18	4	2090	Oct 6	4	191	Sep 18	4	Oct 6	4	191	
Sep 25	4	1916	Oct 13	4	191	Sep 26	4	Oct 13	4	0	
Oct 1	4	2962	Oct 20	4	0	Oct 1	4	Oct 20	4	0	
Oct 17	4	1220	Oct 26	4	0	Oct 17	4	Oct 26	4	0	
Oct 24	4	0	Dec 9	4	0	Oct 24	4	Dec 9	4	96	
Nov 7	4	0	1981	Jan 13	4	Nov 7	4	1981	Jan 13	0	
Dec 5	4	0	Feb 10	4	0	Dec 5	4	Feb 10	4	96	
1971	4	0	Mar 17	4	0	Jan 9	4	Mar 17	4	0	
Jan 9	4	0	May 11	4	573	Feb 24	4	May 11	4	0	
Feb 24	4	174	May 25	4	0	Mar 30	4	May 25	4	0	
Mar 30	4	0	Jun 8	4	382	Apr 27	4	Jun 8	4	0	
Apr 27	4	0	Jun 22	4	1722	May 11	4	Jun 22	4	0	
May 11	4	348	Jul 6	4	765	May 25	4	Jul 6	4	0	
May 25	4	0	Jul 20	4	4878	Jun 8	4	Jul 20	4	191	
Jun 8	4	12892	Aug 3	4	478	Jun 25	4	Aug 3	4	215	
Jun 25	4	4530	Aug 9	4	6456	Jul 8	4	Aug 18	4	478	
Jul 8	4	2439	Aug 18	4	2774	Jul 22	4	Aug 31	4	287	
Jul 22	4	3426	Aug 31	4	765	Aug 5	4	Sep 14	4	96	
Aug 5	4	5224	Sep 14	4	478	Aug 26	4	Sep 28	4	0	
Aug 26	4	4530	Sep 28	4	215	Sep 2	4	Oct 12	4	96	
Sep 2	4	10976	Oct 12	4	0	Sep 25	4	5923		0	
Sep 25	4	18293									
1978	3.7	930	Jan 13	4	0	1978	May 22	3.7	0	0	
Jun 12	4	287	Mar 8	4	0	Jun 12	4	0	0	0	
Jul 10	4	2008	May 17	5	0	Jul 10	4	1148	Mar 8	0	
Jul 31	4	1435	May 31	3	254	Jul 31	4	574	May 17	0	
Aug 31	4	4017	Jun 14	4	0	Aug 21	4	1722	May 31	0	
Sep 11	4	3730	Jun 28	4	96	Sep 11	4	287	Jun 14	0	
1979	4	0	Jul 12	4	0	1979	May 28	4	0	0	
May 22	4	861	Jul 26	4	254	May 28	4	0	0	0	
Jun 25	5	344	Aug 9	3	574	Jun 25	5	0	0	0	
Jul 9	4	1291	Aug 23	4	765	Jul 9	4	1506	Aug 23	0	
Jul 23	3.75	1836	Sep 6	3	478	Jul 23	3.75	689	Sep 6	382	
Aug 6	4.75	12683	Sep 20	4	287	Aug 6	4.75	906	Sep 20	382	
Aug 20	5	7058	Oct 4	4	287	Aug 20	5	5509	Oct 4	287	
Sep 6	4.5	1722	Oct 18	4	0	Sep 6	4.5	2104	Oct 18	96	
Sep 17	4.75	1812				Sep 17	4.75	544			
Oct 15	4	96				Oct 15	4	96			
1980	4	0				1980	May 15	4	0	0	
May 15	4.5	1339	Jun 13	4	3.75	May 15	Jun 9	4.5	May 6	102	
Jun 9	4.5	573	Jun 20	4	191	Jun 9	4.5	0	May 6	0	
Jun 16	4	215	Jul 11	4	3013	Jun 16	4.5	Jun 16	4	102	
Jul 7	4	191	Jul 18	3.5	478	Jul 7	4	0	Jun 13	3.75	
Jul 14	4.5	1076	Aug 1	4	219	Jul 14	4.5	191	Jul 18	437	
Jul 21	4	574	Aug 8	3.5	1148	Jul 21	4	215	Aug 1	956	
Jul 28	4.5	861	Aug 15	4	2732	Jul 28	4.5	765	Aug 8	4591	
Aug 4	4	430	Aug 29	4.5	2582	Aug 4	4	430	Aug 15	861	
Aug 11	4	3634	Sep 12	3.5	1700	Aug 11	4	646	Aug 29	4.5	
Aug 18	4.5	1913	Sep 26	3.5	3495	Aug 18	4.5	191	Sep 12	2842	
Aug 25	4.5	1530	Oct 3	4	1202	Aug 25	4.5	1148	Sep 26	874	
Sep 1	4.5	765	Oct 17	4	287	Sep 1	4.5	765	Oct 3	478	
Sep 8	4	0	Dec 13	4	0	Sep 8	4	0	Oct 17	0	
									Dec 13	0	

Cyclopoida CS	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970	Aug 27	4	5923	Sep 15	4	0
	Sep 9	4	3484	Sep 22	4	96
	Sep 18	4	4878	Sep 29	4	96
	Sep 26	4	5226	Oct 6	4	96
	Oct 1	4	871	Oct 13	4	96
	Oct 17	4	2090	Oct 20	4	0
	Oct 24	4	697	Oct 26	4	0
	Nov 7	4	348	Dec 9	4	96
	Dec 5	4	174	1981	Jan 13	4
1971	Jan 9	4	0	Feb 10	4	0
	Feb 24	4	0	Mar 17	4	0
	Mar 30	4	0	May 11	4	0
	Apr 27	4	0	May 25	4	0
	May 11	4	697	Jun 8	4	0
	May 25	4	0	Jun 22	4	0
	Jun 8	4	2090	Jul 6	4	191
	Jun 25	4	2090	Jul 20	4	0
	Jul 8	4	697	Aug 3	4	215
	Jul 22	4	0	Aug 16	4	191
	Aug 5	4	1394	Aug 31	4	96
	Aug 26	4	871	Sep 14	4	0
	Sep 2	4	2265	Sep 28	4	0
	Sep 25	4	4007	Oct 12	4	0
1978	May 22	3.7	0	1982	Jan 13	4
	Jun 12	4	0	Mar 8	4	0
	Jul 10	4	287	May 17	5	0
	Jul 31	4	574	May 31	3	0
	Aug 31	4	1435	Jun 14	4	0
	Sep 11	4	1721	Jun 28	4	0
1979	May 28	4	0	Jul 12	4	191
	Jun 25	5	172	Jul 26	4	382
	Jul 9	4	1076	Aug 9	3	128
	Jul 23	3.75	459	Aug 23	4	478
	Aug 6	4.75	1631	Sep 6	3	0
	Aug 20	5	6025	Sep 20	4	287
	Sep 6	4.5	1913	Oct 4	4	191
	Sep 17	4.75	1993	Oct 18	4	191
	Oct 15	4	0	Mar 16	4	95
1980	May 15	4	0	May 6	4	0
	Jun 9	4.5	0	May 16	3.75	204
	Jun 16	4.5	1339	Jun 13	4	0
	Jul 7	4	215	Jun 20	4	0
	Jul 14	4.5	191	Jul 4	4	861
	Jul 21	4	215	Jul 11	4	669
	Jul 28	4.5	382	Jul 18	3.5	765
	Aug 4	4	0	Aug 1	4	1817
	Aug 11	4	0	Aug 8	3.5	1967
	Aug 18	4.5	191	Aug 15	4	1435
	Aug 25	4.5	0	Aug 29	4.5	850
	Sep 1	4.5	191	Sep 12	3.5	4044
	Sep 8	4	96	Sep 26	3.5	2077
	Sep 15	4	0	Oct 3	4	669
	Sep 22	4	0	Oct 17	4	13
	Sep 29	4	0	Dec 13	4	96



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h. Rotifera



<u><i>Ascomorpha</i> sp.</u>								<u><i>Asplanchna</i> sp.</u>							
Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth
1970			Sep 15	4	0	1970		Aug 27	4	0	Sep 15	4	0	Sep 15	4
Aug 27	4	0	Sep 22	4	0	Aug 27		Sep 9	4	0	Sep 22	4	0	Sep 22	4
Sep 9	4	0	Sep 29	4	96	Sep 9		Sep 18	4	0	Sep 29	4	0	Sep 29	4
Sep 18	4	0	Oct 6	4	0	Sep 18		Sep 26	4	0	Oct 6	4	0	Oct 6	4
Sep 26	4	0	Oct 13	4	0	Sep 26		Sep 26	4	0	Oct 13	4	0	Oct 13	4
Oct 1	4	0	Oct 20	4	0	Sep 26		Sep 26	4	0	Oct 20	4	0	Oct 20	4
Oct 17	4	0	Oct 26	4	0	Oct 1		Oct 17	4	0	Oct 26	4	0	Oct 26	4
Oct 24	4	0	Dec 9	4	0	Oct 24		Oct 24	4	0	Dec 9	4	0	Dec 9	4
Nov 7	4	0	2090	4	0	Nov 7		Nov 7	4	0	1981	4	0	1981	4
Dec 5	4	0	174	4	0	Dec 5		Dec 5	4	0	Jan 13	4	0	Jan 13	4
1971			Jan 13	4	0	1971		Jan 9	4	0	Feb 10	4	0	Feb 10	4
Jan 9	4	0	Feb 10	4	0	Mar 17	4	0	Feb 24	4	0	Mar 17	4	0	
Feb 24	4	0	Mar 11	4	0	May 11	4	0	Mar 30	4	0	May 11	4	0	
Mar 30	4	0	May 25	4	0	May 25	4	0	Apr 27	4	0	May 25	4	0	
Apr 27	4	0	348	4	0	215	4	0	May 11	4	0	Jun 8	4	0	
May 11	4	0	392	4	0	May 11		May 11	4	0	May 11		0	Jun 22	4
May 25	4	0	1568	4	96	May 25		May 25	4	0	Jun 21	4	0	Jun 21	4
Jun 8	4	0	1568	4	287	Jun 8		Jun 8	4	0	Jun 22	4	0	Jun 22	4
Jun 25	4	0	Jul 20	4	0	Jul 20		Jul 20	4	0	Jul 22	4	0	Jul 22	4
Jul 8	4	0	Aug 3	4	0	Aug 3		Aug 3	4	0	Aug 22	4	0	Aug 22	4
Jul 22	4	0	Aug 18	4	0	Aug 18		Aug 18	4	0	Aug 31	4	0	Aug 31	4
Aug 5	4	0	Aug 31	4	0	Aug 31		Aug 31	4	0	Aug 15	4	0	Aug 15	4
Aug 26	4	0	Sep 14	4	0	Sep 14		Aug 5	4	0	Aug 26	4	0	Aug 26	4
Sep 2	4	0	Sep 28	4	0	Sep 28		Aug 26	4	0	Sep 2	4	0	Sep 2	4
Sep 25	4	0	391	4	0	Oct 12		Sep 25	4	0	Sep 25	4	0	Sep 25	4
1978			1982	4	0	1978		1978	4	0	1982	4	0	1982	4
May 22	3.7	1241	Jan 13	4	0	May 22		May 22	4	3.7	4953	4	0	Jan 13	4
Jun 12	4	0	Mar 8	4	5	Jun 12		Jun 12	4	4	1148	4	0	Mar 8	4
Jul 10	4	0	May 17	4	5	Jul 10		Jul 10	4	4	3873	5	0	May 17	5
Jul 31	4	0	May 31	3	3	Jul 31		Jul 31	4	4	71706	3	0	May 31	3
Aug 31	4	0	Jun 14	4	4	Aug 31		Aug 31	4	4	Jun 14	4	0	Jun 14	4
Sep 11	4	0	Jun 28	4	4	Jun 28		Jun 28	4	4	Jun 28	4	0	Jun 28	4
1979			1983	4	0	1979		1979	4	0	1982		0	1982	
May 28	4	0	Aug 9	3	3	May 28		May 28	4	4	1076	3	0	Aug 9	3
Jun 25	5	0	Aug 23	4	4	Jun 25		Jun 25	5	5	Aug 23	4	0	Aug 23	4
Jul 9	4	0	Sep 6	3	3	Jul 9		Jul 9	4	4	Sep 6	3	0	Sep 6	3
Jul 23	3.75	0	Sep 20	4	4	Jul 23		Jul 23	4	3.75	230	4	230	4	
Aug 6	4.75	0	Oct 4	4	4	Aug 6		Aug 6	4	4.75	230	4	230	4	
Aug 20	5	0	Oct 18	4	4	Aug 20		Aug 20	5	5	Oct 4	4	0	Oct 4	4
Sep 6	4.5	0	1983	4	0	Sep 6		Sep 6	4.5	0	Oct 18	4	0	Oct 18	4
Sep 17	4.75	0	Oct 15	4	4	Sep 17		Sep 17	4.75	0	1983	4	0	1983	4
Oct 15	4	0	1983	4	0	Oct 15		Oct 15	4	4	Mar 16	4	0	Mar 16	4
1980			1980	4	0	1980		May 15	4	4	1076	4	0	May 16	4
May 15	4.5	0	May 16	4	7.5	May 15		Jun 9	4	4.5	6504	4	0	May 16	4
Jun 9	4.5	0	Jun 13	4	7.5	Jun 9		Jun 16	4	4.5	2754	4	0	Jun 16	4
Jun 16	4.5	0	Jul 4	4	0	Jul 4		Jul 7	4	4.5	6586	4	0	Jul 7	4
Jul 7	4	0	Jul 11	4	0	Jul 11		Jul 14	4	4.5	287	4	0	Jul 11	4
Jul 14	4.5	0	Jul 18	3.5	0	Jul 18		Jul 14	4	4.5	0	0	0	Jul 14	4
Jul 21	4	0	Aug 1	4	0	Aug 1		Jul 21	4	4	0	0	0	Jul 18	3.5
Jul 23	4.5	0	Aug 8	4	5	Aug 8		Jul 23	4	4.5	0	0	0	Aug 1	3.5
Aug 4	4	0	Aug 15	4	5	Aug 15		Aug 4	4	4	0	0	0	Aug 15	4
Aug 11	4	0	Aug 29	4.5	5	Aug 29		Aug 11	4	4	0	0	0	Aug 29	4.5
Aug 18	4.5	0	Sep 12	4	5	Sep 12		Aug 18	4	4.5	0	0	0	Sep 12	3.5
Aug 25	4.5	0	Sep 26	3.5	0	Sep 26		Aug 25	4	4.5	0	0	0	Sep 26	3.5
Sep 1	4.5	0	Oct 3	4	4	Oct 3		Sep 1	4	4.5	0	0	0	Oct 3	4
Sep 8	4	0	287	4	4	287		Sep 8	4	4	0	0	0	Oct 17	4
Dec 13	4	0	7562	4	4	7562		Dec 13	4	4	0	0	0	Dec 13	4

Cephalodella sp.

<u>Ceratodella</u> sp.	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970						
	Aug 27	4	0	Sep 15	4	1076
	Sep 9	4	0	Sep 22	4	0
	Sep 18	4	0	Sep 29	4	0
	Sep 26	4	0	Oct 6	4	0
	Oct 1	4	0	Oct 13	4	0
	Oct 17	4	0	Oct 20	4	0
	Oct 24	4	0	Oct 26	4	0
	Nov 7	4	0	Dec 9	4	0
	Dec 5	4	0			
1971						
	Jan 9	4	0	Jan 13	4	0
	Feb 24	4	0	Feb 10	4	0
	Mar 30	4	0	Mar 17	4	0
	Apr 27	4	0	May 11	4	0
	May 11	4	0	May 25	4	0
	May 25	4	0	Jun 8	4	0
	Jun 8	4	0	Jun 22	4	0
	Jun 25	4	0	Jul 6	4	0
	Jul 13	4	0	Jul 20	4	0
	Jul 25	4	0	Aug 3	4	0
	Jul 25	4	0	Aug 18	4	0
	Jul 22	4	0	Aug 31	4	96
	Aug 5	4	0	Sep 14	4	191
	Aug 26	4	0	Sep 28	4	430
	Sept 2	4	0	Oct 12	4	174
	Sept 25	4	0	392		

Colletheca sp.

Date	Column depth	no. m <sup>-3</sup>	Colletheca sp.		Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
			Date	no. m <sup>-3</sup>						
Sep 15	4	1076	1970	4	Sep 15	4	26468	1983	4	26468
Sep 22	4	0	Aug 27	4	Sep 22	4	28836	Feb 10	4	13676
Sep 29	4	0	Sep 9	4	Sep 29	4	0	Mar 17	4	0
Oct 6	4	0	Sep 18	4	Oct 6	4	4	May 11	4	4
Oct 13	4	0	Sep 26	4	Oct 13	4	4	May 25	4	4
Oct 20	4	0	Oct 1	4	Oct 13	4	4	Jun 8	4	4
Oct 26	4	0	Oct 17	4	Oct 20	4	4	May 11	4	4
Dec 9	4	0	Oct 24	4	Oct 26	4	4	Jun 22	4	4
1981	4	0	Nov 7	4	Dec 9	4	4	Jul 6	4	4
1971	4	0	Dec 5	4	1981	4	4	Jul 20	4	4
Jan 13	4	0	Jan 9	4	Jan 13	4	4	Aug 3	4	4
Feb 10	4	0	Feb 24	4	Feb 10	4	4	Aug 18	4	4
Mar 17	4	0	Mar 30	4	Mar 17	4	4	Aug 18	4	4
May 11	4	0	Apr 27	4	May 25	4	4	Aug 31	4	4
May 25	4	0	May 11	4	Jun 8	4	4	Aug 31	4	4
Jun 8	4	0	May 25	4	May 11	4	4	Sep 14	4	4
Jun 22	4	0	Jun 8	4	May 25	4	4	Sep 14	4	4
Jul 6	4	0	Jun 25	4	Jun 25	4	4	Sep 28	4	4
Jul 20	4	0	Jul 8	4	Jul 20	4	4	Sep 28	4	4
Aug 3	4	0	Aug 18	4	Aug 31	4	4	Sep 28	4	4
Aug 18	4	0	Aug 31	4	Aug 31	4	4	Sep 28	4	4
Aug 31	4	96	Aug 31	4	Aug 31	4	4	Sep 28	4	4
1981	4	191	Sep 14	4	Sep 14	4	4	Sep 28	4	4
430	0	0	Sep 28	4	Sep 14	4	4	Sep 28	4	4
Sep 12	4	0	Sep 25	4	Sep 14	4	4	Sep 28	4	4
Oct 12	4	0	Sep 25	4	Sep 14	4	4	Sep 28	4	4
1978	4	0	May 22	3.7	42185	4	4	1982	4	287
Jan 13	4	0	Jun 12	4	76034	4	4	Jan 13	4	96
Mar 8	4	0	Jul 10	4	89928	4	4	Mar 8	4	0
May 17	5	215	Jul 31	4	470837	5	5	May 17	4	2592
May 31	3	856	Aug 21	4	0	3	3	May 31	4	6014
Jun 14	4	0	Sep 11	4	2295	4	4	Jun 14	4	3443
Jun 28	4	0	1979	4	1979	4	4	Jun 28	4	38949
Jul 12	4	0	May 22	4	May 22	4	4	Jul 12	4	10329
Jul 26	4	0	Jun 12	4	Jun 12	4	4	Jul 26	4	2797
Aug 9	3	254	Jul 10	4	76034	4	4	Aug 9	3	14882
Aug 23	4	0	Jul 31	4	89928	4	4	Aug 23	4	73380
Sep 6	3	0	Aug 21	4	32278	3	3	Sep 6	3	15650
Sep 20	4	0	Sep 11	4	89928	4	4	Sep 20	4	136431
Oct 4	4	0	Aug 6	4.75	362789	4	4	Oct 4	4	118570
Oct 18	4	0	Aug 20	5	302128	4	4	Oct 18	4	36543
1982	4	0	Sep 6	4.5	35578	4	4	1983	4	0
Jan 13	4	0	Sep 17	4.75	16490	4	4	Mar 16	4	1339
Mar 8	4	0	Oct 15	4	2487	4	4	May 6	4	1224
May 17	5	215	May 15	4	3443	4	4	May 16	4	1560
May 31	3	856	Jun 9	4.5	3634	4	4	Jun 13	4	765
Jun 14	4	0	Jun 16	4.5	46099	4	4	Jul 4	4	8392
Jun 28	4	0	Jul 7	4	48099	4	4	Jul 11	4	11190
Jul 18	3.5	1230	Jul 14	4.5	493333	4	4	Jul 18	4	14264
Aug 1	4	0	Jul 21	4	430	4	4	Aug 1	4	58110
Aug 8	3.5	246	Aug 4	4	0	4	4	Aug 8	3.5	6640
Aug 15	4	56	Aug 11	4	2357	4	4	Aug 15	4	1052
Aug 29	4.5	0	Aug 18	4	12481	4	4	Aug 29	4	17406
Sep 12	3.5	0	Sep 18	4	57384	4	4	Sep 12	3.5	277411
Sep 26	3.5	0	Sep 25	4.5	28118	4	4	Sep 26	3.5	368160
Oct 3	4	0	Sep 1	4	259851	4	4	Oct 17	4	84785
Oct 17	4	0	Sep 8	4	18722	4	4	Oct 17	4	7173
Dec 13	4	0	Dec 13	4	0	4	4	Dec 13	4	0

<u><i>Conchoecetes unicornis</i></u>		<u><i>Conchoecetes sp.</i></u>	
Date	Column depth	Date	Column depth
1970		Sep 15	2797
Aug 27	4	Sep 22	4
Sep 9	4	Sep 29	4
Sep 18	4	Sep 9	4
Sep 26	4	Sep 18	4
Oct 1	4	Sep 26	4
Oct 17	4	Oct 1	4
Oct 24	4	Oct 17	4
Nov 7	4	Oct 24	4
Dec 5	4	Nov 7	4
		Dec 5	4
1971		1971	18267
Jan 9	4	Jan 9	4
Feb 24	4	Feb 24	4
Mar 30	4	Mar 30	4
Apr 27	4	Apr 27	4
May 11	4	May 11	4
May 25	4	May 25	4
Jun 8	4	Jun 8	4
Jun 25	4	Jul 20	4
Jul 1	4	Aug 3	4
Jul 22	4	Aug 18	4
Aug 5	4	Aug 31	4
Aug 26	4	Sep 14	4
Sep 2	4	Sep 28	4
Sep 25	4	Oct 12	4
		Sep 2	4
1978		1978	39083
May 22	3.7	May 22	3.7
Jun 12	4	Jun 12	4
Jul 10	4	Jul 10	4
Jul 31	4	Jul 31	4
Aug 31	4	Aug 21	4
Sep 11	4	Sep 11	4
		1979	39083
1982		1982	39083
Jan 13	4	May 28	4
Mar 8	4	Jun 25	5
May 17	5	Jul 9	4
May 31	3	Jul 23	3.75
Jun 14	4	Aug 6	4.75
Jun 28	4	Aug 20	5
Jul 12	4	Sep 6	4.5
Jul 26	4	Sep 17	4.75
Aug 9	3	Sep 15	4
Aug 23	4	1980	47151
Sep 6	3	16220	18839
Sep 20	4	16220	18839
Sep 4	4	478	478
Oct 4	4	0	0
Oct 18	4	0	0
1983		1980	1980
Mar 16	4	May 15	4
May 6	4	Jun 9	4.5
May 16	3.75	Jun 16	4.5
Jun 13	4	Jul 1	4
Jun 20	4	Jul 11	4
Jul 4	4	Jul 18	3.5
Jul 7	4	Aug 1	4.5
Jul 14	4.5	Aug 1	4.5
Jul 21	4	Jul 21	4
Jul 28	4.5	Jul 28	4.5
Aug 4	4	Aug 4	4
Aug 11	4	Aug 11	4
Aug 18	4.5	Aug 18	4.5
Aug 25	4.5	Aug 25	4.5
Sep 1	4.5	Sep 1	4.5
Sep 8	4	Sep 8	4
		1980	16139
May 15	4	May 15	4
Jun 9	4.5	Jun 13	4
Jun 16	4.5	Jun 20	4
Jul 7	4	Jul 4	4
Jul 14	4.5	Jul 11	4
Jul 21	4	Jul 18	3.5
Jul 28	4.5	Jul 21	4
Aug 4	4	Aug 8	3.5
Aug 11	4	Aug 15	4
Aug 18	4.5	Aug 29	4.5
Aug 25	4.5	Sep 12	3.5
Sep 1	4.5	Sep 26	3.5
Sep 8	4	Sep 25	4.5
		Sep 1	4
1980		Oct 3	4
Oct 17	4	Oct 17	4
Dec 13	4	Dec 13	4
		1722	0

Filinia longispinaGastropus stylifer

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970	4	0	Sep 15	4	0	1970	4	4
Aug 27	4	0	Sep 22	4	0	Aug 27	4	0
Sep 9	4	0	Sep 29	4	0	Sep 9	4	1506
Sep 18	4	0	Oct 6	4	0	Sep 29	4	382
Sep 25	4	0	Oct 13	4	0	Sep 18	4	1291
Oct 1	4	0	Oct 20	4	0	Sep 26	4	5164
Oct 17	4	0	Oct 26	4	0	Oct 1	4	4519
Oct 24	4	0	Dec 9	4	0	Oct 20	4	1722
Nov 7	4	0	3443	4	0	Oct 26	4	1722
Dec 5	4	0	174	4	0	Dec 9	4	1722
1981			Jan 13	4	0	1981		
1971			Feb 10	4	0	4208		
Jan 9	4	0	Mar 17	4	0	2008		
Feb 24	4	0	May 11	4	0	1971		
Mar 30	4	0	May 25	4	0	1291		
Apr 27	4	0	Jun 8	4	0	96		
May 11	4	0	Jun 22	4	0	2295		
May 25	4	0	Jul 6	4	0	784		
Jun 8	4	0	Jul 20	4	0	0		
Jun 25	4	0	Aug 3	4	0	0		
Jul 8	4	0	Aug 18	4	0	0		
Jul 22	4	0	Aug 31	4	0	0		
Aug 5	4	0	Sep 14	4	0	0		
Aug 26	4	0	Sep 28	4	0	0		
Sep 2	4	0	Oct 12	4	0	0		
Sep 25	4	0	174	4	0	174		
1982			Jan 13	4	0	1982		
May 22	3.7	0	Mar 8	4	0	0		
Jun 12	4	0	May 17	5	0	669		
Jul 10	4	0	May 31	3	0	1291		
Jul 31	4	0	Jun 14	4	0	298		
Aug 31	4	0	Jun 14	4	0	0		
Sep 11	4	0	Jun 28	4	0	0		
1979			Jul 12	4	0	0		
May 28	4	0	Jul 26	4	0	0		
Jun 25	5	0	Aug 9	3	0	0		
Jul 9	4	0	Aug 23	4	0	2797		
Jul 23	3.75	0	Sep 6	3	0	215		
Aug 6	4.75	0	Sep 20	4	0	362		
Aug 20	5	0	Oct 4	4	0	0		
Sep 6	4.5	0	Oct 18	4	0	0		
Sep 17	4.75	0	1983	4	0	0		
Oct 15	4	0	Mar 16	4	0	0		
1980			May 6	4	0	430		
May 15	4	0	May 16	3.75	0	4307		
Jun 9	4.5	0	Jun 13	4	0	0		
Jun 16	4.5	0	Jun 20	4	0	0		
Jul 7	4	0	Jul 4	4	0	1291		
Jul 14	4.5	0	Jul 11	4	0	0		
Jul 21	4	0	Aug 1	4	0	0		
Jul 28	4.5	0	Aug 8	3.5	0	0		
Aug 4	4	0	Aug 15	4	0	0		
Aug 11	4	0	Aug 29	4.5	0	0		
Aug 18	4.5	0	Sep 12	3.5	0	0		
Aug 25	4.5	0	Sep 26	3.5	0	0		
Sep 1	4.5	0	Oct 3	4	0	0		
Sep 8	4	0	Oct 17	4	0	0		
Dec 13	4	0	Dec 13	4	0	0		

<u><i>Kellicottia bostoniensis</i></u>			
Date	Column depth	no. m <sup>-3</sup>	Date
1970	4	109756	Sep 15
Aug 27	4	536568	Sep 22
Sep 9	4	39721	Sep 29
Sep 18	4	39024	Oct 6
Sep 26	4	153331	Oct 13
Oct 1	4	39373	Oct 20
Oct 17	4	21426	Oct 26
Oct 24	4	14286	Dec 9
Nov 7	4	30662	
Dec 5	4		
1971			
Jan 9	4	1040007	Jan 13
Feb 24	4	9756	Feb 10
Mar 30	4	27003	Mar 17
Apr 27	4	32578	Feb 24
May 11	4	14112	Mar 30
May 25	4	56798	Apr 27
Jun 8	4	50958	May 11
Jul 22	4	15668	May 18
Aug 5	4	22735	May 25
Aug 26	4	8275	Jun 11
Sep 2	4	13328	Jun 18
Sep 25	4	80139	Jul 2
1978			
May 22	3.7	1982	1978
Jun 12	4	83750	Jan 13
Jul 10	4	287	Mar 9
Jul 31	4	861	May 17
Aug 31	4	0	May 31
Sep 11	4	0	Jun 14
1979			
May 28	4	369913	Jun 13
Jun 25	5	3271	Aug 23
Jul 9	4	0	Sep 6
Jul 23	3.75	689	Sep 20
Aug 6	4.75	181	Oct 4
Aug 20	5	1205	Oct 18
Sep 6	4.5	574	96
Sep 17	4.75	0	
Oct 15	4	191	
1980			
May 15	4	5164	Mar 16
Jun 9	4.5	0	May 6
Jun 16	4.5	0	May 16
Jul 7	4	0	May 15
Jul 14	4.5	215	Jun 13
Jul 21	4	0	Jun 20
Jul 28	4.5	0	Jun 4
Aug 4	4	0	Jun 16
Aug 11	4	430	Jul 11
Aug 18	4.5	0	Jul 14
Aug 25	4.5	0	Jul 21
Sep 1	4.5	0	Jul 28
Sep 8	4	0	Aug 4
Sep 15	4	5810	Aug 15
Oct 17	4	0	Aug 29
Dec 13	4	0	Aug 11

<u><i>Kellicottia longispina</i></u>			
Date	Column depth	no. m <sup>-3</sup>	Date
1970	4	109756	1970
Sep 15	4	215	Aug 27
Sep 22	4	1291	Sep 9
Sep 29	4	0	Sep 18
Oct 6	4	28836	Sep 26
Oct 13	4	12051	Sep 26
Oct 20	4	8608	Oct 1
Oct 26	4	215	Oct 17
Dec 9	4	215	Oct 24
1981			
Jan 13	4	95	Nov 7
Feb 10	4	0	Dec 5
Mar 17	4	4	Dec 5
May 11	4	6272	
May 18	4	9233	
May 25	4	348	
May 30	4	4007	
Jun 8	4	68206	
Jun 22	4	119946	
Jul 6	4	110213	
Jun 20	4	35279	
Jul 25	4	18031	
Jul 8	4	4704	
Jul 22	4	3136	
Aug 5	4	15668	
Aug 26	4	1491	
Sep 2	4	1176	
Sep 25	4	915	
1982			
Jan 13	4	3.7	
Mar 8	4	1052	
May 17	5	499	
May 25	4	24101	
May 31	3	106093	
Jun 14	4	10903	
Jun 28	4	34661	
Jul 12	4	20873	
Jul 25	4	32709	
Aug 9	3	42250	
Aug 23	4	44329	
Sep 6	3	69148	
Sep 20	4	32996	
Sep 28	4	41316	
Sep 31	4	73737	
1983			
Mar 16	4	14202	
May 6	4	3443	
May 15	4	1450	
May 25	4	3013	
Jun 9	4	689	
Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1984			
Mar 16	4	14202	
May 6	4	3443	
May 15	4	1450	
May 25	4	3013	
Jun 9	4	689	
Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1985			
Mar 16	4	14202	
May 6	4	3443	
May 15	4	1450	
May 25	4	3013	
Jun 9	4	689	
Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1986			
Mar 16	4	14202	
May 6	4	3443	
May 15	4	1450	
May 25	4	3013	
Jun 9	4	689	
Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1987			
Mar 16	4	14202	
May 6	4	3443	
May 15	4	1450	
May 25	4	3013	
Jun 9	4	689	
Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1988			
Mar 16	4	14202	
May 6	4	3443	
May 15	4	1450	
May 25	4	3013	
Jun 9	4	689	
Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1989			
Mar 16	4	14202	
May 6	4	3443	
May 15	4	1450	
May 25	4	3013	
Jun 9	4	689	
Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1990			
Mar 16	4	14202	
May 6	4	3443	
May 15	4	1450	
May 25	4	3013	
Jun 9	4	689	
Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1991			
Mar 16	4	14202	
May 6	4	3443	
May 15	4	1450	
May 25	4	3013	
Jun 9	4	689	
Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1992			
Mar 16	4	14202	
May 6	4	3443	
May 15	4	1450	
May 25	4	3013	
Jun 9	4	689	
Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1993			
Mar 16	4	14202	
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May 15	4	1450	
May 25	4	3013	
Jun 9	4	689	
Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1994			
Mar 16	4	14202	
May 6	4	3443	
May 15	4	1450	
May 25	4	3013	
Jun 9	4	689	
Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1995			
Mar 16	4	14202	
May 6	4	3443	
May 15	4	1450	
May 25	4	3013	
Jun 9	4	689	
Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1996			
Mar 16	4	14202	
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May 25	4	3013	
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Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1997			
Mar 16	4	14202	
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May 15	4	1450	
May 25	4	3013	
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Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
1998			
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May 6	4	3443	
May 15	4	1450	
May 25	4	3013	
Jun 9	4	689	
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Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
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Mar 16	4	14202	
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Aug 6	4.75	352	
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Sep 6	4.5	956	
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Oct 15	4	2774	
2000			
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May 15	4	1450	
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Aug 20	5	172	
Sep 6	4.5	956	
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Oct 15	4	2774	
2001			
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May 25	4	3013	
Jun 9	4	689	
Jul 23	3.75	352	
Aug 6	4.75	352	
Aug 20	5	172	
Sep 6	4.5	956	
Sep 17	4.75	1450	
Oct 15	4	2774	
2002			
Mar 16	4	14202	
May 6	4	3443	

Keratella cochlearis

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			1970			1970			1970		
Aug 27	4	2277700	Sep 15	4	3228	Aug 27	4	0	Sep 15	4	0
Sep 9	4	2343554	Sep 22	4	2797	Sep 9	4	0	Sep 22	4	0
Sep 18	4	1517122	Sep 29	4	574	Sep 18	4	0	Sep 29	4	0
Sep 26	4	1176655	Oct 6	4	6886	Sep 26	4	0	Oct 6	4	0
Oct 1	4	673519	Oct 13	4	4734	Oct 1	4	0	Oct 13	4	0
Oct 17	4	750188	Oct 20	4	7107	Oct 1	4	0	Oct 20	4	0
Oct 24	4	279094	Oct 26	4	1291	Oct 17	4	0	Oct 26	4	0
Nov 7	4	953984	Dec 9	4	5380	Oct 24	4	0	Dec 9	4	0
Dec 5	4	560501	1981			Nov 7	4	0	1981		
1971			Jan 13	4	2869	Dec 5	4	0	Jan 13	4	0
Jan 9	4	406098	Feb 10	4	1243	1971			Feb 10	4	0
Feb 24	4	120558	Mar 17	4	1052	Jan 9	4	0	Mar 17	4	0
Mar 30	4	98606	May 11	4	5164	Feb 24	4	0	May 11	4	0
Apr 27	4	61498	May 25	4	1817	Mar 30	4	0	May 25	4	0
May 11	4	175750	Jun 8	4	18554	Apr 27	4	0	Jun 8	4	0
May 25	4	757317	Jun 22	4	63696	May 11	4	0	Jun 22	4	0
Jun 8	4	447648	Jul 6	4	16394	May 25	4	0	Jul 6	4	0
Jun 25	4	125336	Jul 12	4	4160	Jun 8	4	0	Jul 12	4	0
Jul 8	4	348868	Aug 3	4	6886	Jun 25	4	0	Aug 3	4	0
Jul 22	4	2017160	Aug 18	4	956	Jul 8	4	0	Aug 18	4	0
Aug 5	4	1835279	Aug 31	4	478	Jul 22	4	0	Aug 31	4	0
Aug 26	4	927788	Sep 14	4	1913	Aug 5	4	0	Sep 14	4	0
Sep 2	4	1030531	Sep 28	4	1937	Aug 26	4	0	Sep 28	4	0
Sep 25	4	518206	Oct 12	4	11668	Sep 2	4	0	Oct 12	4	0
1978			1982			1978			1982		
May 22	3.7	189212	Jan 13	4	7173	May 22	3.7	0	Jan 13	4	0
Jun 12	4	15781	Mar 8	4	3252	Jun 12	4	0	Mar 8	4	0
Jul 10	4	10903	May 17	5	14418	Jul 10	4	0	May 17	5	0
Jul 31	4	3156	May 31	3	31564	Jul 31	4	0	May 31	3	0
Aug 31	4	186950	Jun 14	4	3443	Aug 31	4	0	Jun 14	4	0
Sep 11	4	146333	Jun 28	4	9468	Sep 11	4	0	Jun 28	4	0
1979			1982			1979			1982		
May 28	4	329596	Aug 9	3	5188	May 28	4	0	Aug 9	3	0
Jun 25	5	149600	Aug 23	4	6096	Jun 25	5	0	Aug 23	4	0
Jul 9	4	84440	Sep 6	3	4304	Jul 9	4	0	Sep 6	3	0
Sep 11	4	22995	Sep 20	4	1506	Jul 23	3.75	0	Sep 20	4	0
Jul 23	3.75	2899	Oct 4	4	430	Aug 6	4.75	0	Oct 4	4	0
Aug 6	4.75	861	Oct 18	4	12816	Aug 20	5	0	Oct 18	4	0
Sep 6	4.5	2487	1983			Sep 6	4.5	0	1983		
Sep 17	4.75	2174	Mar 16	4	7962	Sep 17	4.75	0	Mar 16	4	0
Oct 15	4	5643	May 6	4	56914	Oct 15	4	0	May 6	4	0
1980			1980			1980			1980		
May 15	4	434470	May 15	4	3162	May 15	4	0	May 16	3.75	0
Jun 9	4.5	10329	Jun 13	4	1086558	Jun 9	4.5	0	Jun 13	4	0
Jun 16	4.5	5547	Jun 20	4	69817	Jun 16	4.5	0	Jun 20	4	0
Jul 7	4	7722	Jul 4	4	30646	Jul 7	4	0	Jul 4	4	0
Jul 14	4.5	765	Jul 11	4	50355	Jul 14	4.5	0	Jul 14	4.5	0
Jul 21	4	3013	Aug 1	4	5656	Jul 21	4	0	Aug 1	4	0
Jul 29	4.5	2295	Aug 8	3.5	4949	Jul 28	4.5	0	Aug 8	3.5	0
Aug 4	4	2367	Aug 15	4	3689	Aug 4	4	0	Aug 15	4	0
Aug 11	4	2152	Aug 29	4.5	3252	Aug 11	4	0	Aug 29	4.5	0
Aug 18	4.5	2295	Sep 12	3.5	3443	Sep 12	4.5	0	Sep 12	3.5	0
Aug 25	4.5	1913	Sep 26	3.5	56492	Aug 25	4.5	0	Sep 26	3.5	0
Sep 1	4.5	574	Oct 3	4	182973	Oct 3	4	0	Oct 3	4	0
Sep 8	4	4304	Oct 17	4	477723	Sep 1	4.5	0	Oct 17	4	0
			Dec 13	4	353964	Sep 8	4	0	Dec 13	4	0
					656445						

<u>Keratella himalensis</u>			<u>Keratella taurcephala</u>																																																																																																																																																																																																																																																																																			
Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>																																																																																																																																																																																																																																																																																	
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Aug 27	4	0	Sep 15	4	31633																																																																																																																																																																																																																																																																																	
Sep 9	4	0	Sep 22	4	29911																																																																																																																																																																																																																																																																																	
Sep 18	4	0	Sep 29	4	10042																																																																																																																																																																																																																																																																																	
Sep 26	4	0	Sep 18	4	17000																																																																																																																																																																																																																																																																																	
Oct 1	4	0	Sep 26	4	11620																																																																																																																																																																																																																																																																																	
Oct 17	4	0	Oct 1	4	11190																																																																																																																																																																																																																																																																																	
Oct 24	4	0	Oct 17	4	4591																																																																																																																																																																																																																																																																																	
Nov 7	4	0	Oct 24	4	4949																																																																																																																																																																																																																																																																																	
Dec 5	4	0	Nov 7	4																																																																																																																																																																																																																																																																																		
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Jan 9	4	0	1981																																																																																																																																																																																																																																																																																			
Feb 24	4	10976	Jan 13	4	765																																																																																																																																																																																																																																																																																	
Mar 30	4	23868	Feb 10	4	382																																																																																																																																																																																																																																																																																	
Apr 27	4	13065	Mar 17	4	191																																																																																																																																																																																																																																																																																	
May 11	4	80662	Mar 24	4	10975																																																																																																																																																																																																																																																																																	
May 25	4	59190	Mar 30	4	4878																																																																																																																																																																																																																																																																																	
Jun 8	4	3135	Apr 27	4	1220																																																																																																																																																																																																																																																																																	
Jun 25	4	3135	May 11	4	31559																																																																																																																																																																																																																																																																																	
Jul 1	4	3135	May 11	4	120732																																																																																																																																																																																																																																																																																	
Jul 8	4	0	May 25	4	6025																																																																																																																																																																																																																																																																																	
Jun 25	4	784	Jun 8	4	5810																																																																																																																																																																																																																																																																																	
Jul 8	4	0	Jun 25	4	22332																																																																																																																																																																																																																																																																																	
Jul 22	4	0	Jul 8	4	9684																																																																																																																																																																																																																																																																																	
Aug 5	4	0	Jul 22	4	11094																																																																																																																																																																																																																																																																																	
Aug 26	4	0	Aug 31	4	14442																																																																																																																																																																																																																																																																																	
Sep 2	4	0	Sep 14	4	19606																																																																																																																																																																																																																																																																																	
Sep 25	4	0	Aug 26	4	23240																																																																																																																																																																																																																																																																																	
1981			Sep 2	4	15207																																																																																																																																																																																																																																																																																	
Jan 13	4	21136	Sep 25	4																																																																																																																																																																																																																																																																																		
Feb 10	4	30700	1971																																																																																																																																																																																																																																																																																			
Mar 17	4	9086	Jan 9	4																																																																																																																																																																																																																																																																																		
May 11	4	5505	Feb 24	4																																																																																																																																																																																																																																																																																		
May 25	4	0	Mar 30	4																																																																																																																																																																																																																																																																																		
Jun 8	4	96	Apr 27	4																																																																																																																																																																																																																																																																																		
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Aug 14	4	96	Aug 31	4																																																																																																																																																																																																																																																																																		
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May 22	3.7	53042	1978																																																																																																																																																																																																																																																																																			
Jun 12	4	4661	May 22	3.7																																																																																																																																																																																																																																																																																		
Jul 10	4	287	May 22	4	1241																																																																																																																																																																																																																																																																																	
Jul 31	4	0	Jun 12	4	1435																																																																																																																																																																																																																																																																																	
Aug 21	4	0	Jul 10	4	2582																																																																																																																																																																																																																																																																																	
Sep 11	4	0	Jul 31	4	1435																																																																																																																																																																																																																																																																																	
1979			Aug 21	4	0	Aug 21	4	2582	Jul 12	4	0	Aug 21	4	16067	Jul 15	4	0	Aug 21	4		Aug 9	3	126	1979			Aug 23	4	0	May 28	4		Sep 6	3	0	Jun 25	5		Sep 20	4	0	Jul 9	4		Oct 4	4	0	Jul 23	3.75		Oct 18	4	0	Aug 6	4.75		Sep 6	4.5	0	Aug 20	5		Sep 17	4.75	0	Sep 6	4.5		Oct 15	4	0	Sep 17	4.75		1980			Mar 16	4	157950	Oct 15	4		May 6	4	9590	1980			May 16	4	3.75	May 15	4		May 16	4	191	Jun 9	4.5		Jun 13	4	0	Jun 16	4.5		Jun 20	4	0	Jul 7	4		Jul 4	4	0	Jul 11	4		Jul 11	4	0	Jul 14	4.5		Jul 18	3.5	0	Jul 21	4		Aug 1	4	0	Jul 21	4		Aug 1	3.5	0	Jul 28	4.5		Aug 8	3.5	0	Aug 4	4		Aug 15	4	0	Aug 11	4		Aug 29	4.5	0	Aug 18	4.5		Sep 12	3.5	0	Aug 25	4.5		Sep 26	3.5	0	Sep 1	4.5		Oct 3	4	0	Sep 8	4		Oct 17	4	0	Sep 8	4		Oct 13	4	0	1979			1980			Jul 1	4.5	0	May 15	4		Jun 9	4.5	0	Jun 9	4.5		Jun 16	4.5	0	Jun 16	4.5		Jul 7	4	0	Jul 7	4		Jul 14	4.5	0	Jul 14	4.5		Jul 21	4	0	Jul 21	4		Jul 28	4.5	0	Aug 4	4		Aug 11	4	0	Aug 11	4		Aug 18	4.5	0	Aug 18	4.5		Sep 12	3.5	0	Aug 25	4.5		Sep 26	3.5	0	Sep 1	4.5		Oct 3	4	0	Sep 8	4		Oct 17	4	0	Sep 8	4		Oct 13	4	0	1980		
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Oct 18	4	0	Aug 6	4.75																																																																																																																																																																																																																																																																																		
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Jun 13	4	0	Jun 16	4.5																																																																																																																																																																																																																																																																																		
Jun 20	4	0	Jul 7	4																																																																																																																																																																																																																																																																																		
Jul 4	4	0	Jul 11	4																																																																																																																																																																																																																																																																																		
Jul 11	4	0	Jul 14	4.5																																																																																																																																																																																																																																																																																		
Jul 18	3.5	0	Jul 21	4																																																																																																																																																																																																																																																																																		
Aug 1	4	0	Jul 21	4																																																																																																																																																																																																																																																																																		
Aug 1	3.5	0	Jul 28	4.5																																																																																																																																																																																																																																																																																		
Aug 8	3.5	0	Aug 4	4																																																																																																																																																																																																																																																																																		
Aug 15	4	0	Aug 11	4																																																																																																																																																																																																																																																																																		
Aug 29	4.5	0	Aug 18	4.5																																																																																																																																																																																																																																																																																		
Sep 12	3.5	0	Aug 25	4.5																																																																																																																																																																																																																																																																																		
Sep 26	3.5	0	Sep 1	4.5																																																																																																																																																																																																																																																																																		
Oct 3	4	0	Sep 8	4																																																																																																																																																																																																																																																																																		
Oct 17	4	0	Sep 8	4																																																																																																																																																																																																																																																																																		
Oct 13	4	0	1979																																																																																																																																																																																																																																																																																			
1980			Jul 1	4.5	0	May 15	4		Jun 9	4.5	0	Jun 9	4.5		Jun 16	4.5	0	Jun 16	4.5		Jul 7	4	0	Jul 7	4		Jul 14	4.5	0	Jul 14	4.5		Jul 21	4	0	Jul 21	4		Jul 28	4.5	0	Aug 4	4		Aug 11	4	0	Aug 11	4		Aug 18	4.5	0	Aug 18	4.5		Sep 12	3.5	0	Aug 25	4.5		Sep 26	3.5	0	Sep 1	4.5		Oct 3	4	0	Sep 8	4		Oct 17	4	0	Sep 8	4		Oct 13	4	0	1980																																																																																																																																																																																																		
Jul 1	4.5	0	May 15	4																																																																																																																																																																																																																																																																																		
Jun 9	4.5	0	Jun 9	4.5																																																																																																																																																																																																																																																																																		
Jun 16	4.5	0	Jun 16	4.5																																																																																																																																																																																																																																																																																		
Jul 7	4	0	Jul 7	4																																																																																																																																																																																																																																																																																		
Jul 14	4.5	0	Jul 14	4.5																																																																																																																																																																																																																																																																																		
Jul 21	4	0	Jul 21	4																																																																																																																																																																																																																																																																																		
Jul 28	4.5	0	Aug 4	4																																																																																																																																																																																																																																																																																		
Aug 11	4	0	Aug 11	4																																																																																																																																																																																																																																																																																		
Aug 18	4.5	0	Aug 18	4.5																																																																																																																																																																																																																																																																																		
Sep 12	3.5	0	Aug 25	4.5																																																																																																																																																																																																																																																																																		
Sep 26	3.5	0	Sep 1	4.5																																																																																																																																																																																																																																																																																		
Oct 3	4	0	Sep 8	4																																																																																																																																																																																																																																																																																		
Oct 17	4	0	Sep 8	4																																																																																																																																																																																																																																																																																		
Oct 13	4	0	1980																																																																																																																																																																																																																																																																																			

<u>Lecane</u> sp. (+ Monostyla)	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970	Aug 27	4	1045	Sep 15	4	861
	Sep 9	4	6271	Sep 22	4	215
	Sep 18	4	1394	Sep 29	4	0
	Sep 26	4	2091	Oct 6	4	215
	Oct 1	4	522	Oct 13	4	215
	Oct 17	4	0	Oct 20	4	215
	Oct 24	4	174	Oct 26	4	0
	Nov 7	4	0	Dec 9	4	0
	Dec 5	4	0	1981	4	2439
1971	Jan 9	4	0	Jan 13	4	96
	Feb 24	4	0	Feb 10	0	0
	Mar 30	4	0	Mar 17	4	0
	Apr 27	4	174	May 11	4	0
	May 11	4	784	May 18	4	0
	May 25	4	0	May 25	4	0
	Jun 8	4	1568	Jun 6	4	0
	Jun 25	4	4704	Jun 13	4	0
	Jul 8	4	3136	Aug 3	4	0
	Jul 22	4	2382	Aug 18	4	0
	Aug 5	4	1568	Aug 31	4	0
	Aug 26	4	914	Sep 14	4	0
	Sep 2	4	1960	Sep 28	4	0
	Sep 25	4	348	Oct 12	4	0
1978	May 22	3.7	930	Jan 13	4	0
	Jun 12	4	287	Mar 8	0	0
	Jul 10	4	574	May 17	5	0
	Jul 31	4	574	May 31	3	0
	Aug 31	4	861	Jun 14	4	0
	Sep 11	4	287	1982	3.7	0
1979	May 28	4	430	May 22	4	0
	Jun 25	5	1721	Jun 12	4	0
	Jul 9	4	660	Jul 26	4	0
	Jul 23	3.75	0	Aug 9	3	0
	Aug 6	4.75	191	Aug 23	4	0
	Aug 20	5	344	Sep 6	3	0
	Sep 6	4.5	191	Sep 11	4	0
	Sep 17	4.75	181	Sep 17	4	0
	Oct 15	4	0	Oct 15	4	0
1980	May 6	4	0	1983	4	0
	May 16	3.75	191	Mar 16	4	0
	Jun 13	4	0	May 6	4	0
	Jun 16	4.5	191	May 16	4	0
	Jul 7	4.5	1148	Jun 9	4.5	0
	Jul 14	4.5	1122	Jun 16	4.5	0
	Jul 21	4	191	Jul 7	4	0
	Jul 28	4.5	1506	Jul 14	4.5	0
	Aug 4	4	1530	Jul 21	4	0
	Aug 11	4	1507	Jul 28	4.5	0
	Aug 18	4.5	1721	Aug 4	4	0
	Aug 25	4.5	1530	Aug 11	4	0
	Sep 1	4.5	573	Aug 18	4.5	0
	Sep 8	4.	574	Aug 25	4.5	0
	Oct 17	4	0	Sep 1	4.5	0
	Dec 13	4	0	Sep 8	4	0

<u>Lepadella</u> sp.	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970	1971	1970	1970	1971	1970	1970
	Jan 9	4	0	Jan 9	4	0
	Feb 17	4	0	Feb 24	4	0
	Mar 11	4	215	Mar 30	4	0
	May 11	4	861	Apr 27	4	0
	May 18	4	215	May 11	4	0
	Jun 8	4	478	May 25	4	0
	Jun 15	4	574	Jun 25	4	0
	Jul 6	4	574	Jun 8	4	0
	Jul 20	4	2510	Jun 25	4	0
	Aug 3	4	2152	Jul 8	4	0
	Aug 18	4	1243	Jul 22	4	0
	Aug 31	4	192	Aug 5	4	0
	Sep 14	4	0	Aug 26	4	0
	Sep 28	4	215	Sep 2	4	0
	Oct 12	4	0	Sep 25	4	0
1971	1972	1971	1971	1972	1971	1971
	Jan 13	4	96	Jan 13	4	0
	Feb 10	0	697	Feb 17	4	0
	Mar 17	4	0	Mar 11	4	0
	May 11	4	0	May 18	4	0
	May 25	4	0	May 25	4	0
	Jun 8	4	0	Jun 22	4	0
	Jun 15	4	0	Jul 6	4	0
	Jul 10	4	0	Jul 20	4	0
	Jul 31	4	0	Aug 9	3	0
	Aug 21	4	0	Aug 23	4	0
	Sep 11	4	0	Sep 6	3	0
	1973	1972	1972	1973	1972	1972
	Jun 28	4	861	May 28	4	0
	Jul 12	4	430	Jun 25	5	0
	Jul 26	4	287	Jul 9	4	0
	Aug 9	3	1722	Jul 23	3.75	0
	Aug 23	3	1409	Aug 6	4.75	0
	Sep 6	4	0	Aug 20	5	0
	Sep 20	4	0	Sep 6	4.5	0
	Oct 4	4	0	Sep 17	4.75	0
	Oct 18	4	0	Oct 15	4	0
1978	1979	1978	1978	1979	1978	1978
	May 22	4	0	May 28	4	0
	Jun 12	4	0	Jun 25	5	0
	Jul 10	4	0	Jul 9	4	0
	Jul 31	4	0	Jul 23	3.75	0
	Aug 21	4	0	Aug 6	4.75	0
	Sep 11	4	0	Aug 20	5	0
	1979	1980	1979	1980	1979	1980
	May 17	4	0	May 15	4	0
	Jun 10	4	318	Jun 9	4.5	0
	Jun 20	4	382	Jun 16	4.5	0
	Jul 4	4	861	Jul 7	4	0
	Jul 11	4	1506	Jul 14	4.5	0
	Jul 18	3.5	491	Jul 21	4	0
	Aug 1	4	215	Jul 28	4.5	0
	Aug 8	3.5	747	Aug 4	4	0
	Aug 15	4	287	Aug 11	4	0
	Aug 22	4.5	0	Aug 18	4.5	0
	Sep 12	3.5	246	Aug 25	4.5	0
	Sep 25	3.5	982	Sep 26	3.5	0
	Oct 3	4	1076	Oct 3	4	0
	Oct 17	4	0	Oct 17	4	0
	Dec 13	4	0	Dec 13	4	0

Notonemata sp.		<u>Polyarthra dolichoptera</u>			
Date	Column depth	No. m <sup>-3</sup>	Date	Column depth	No. m <sup>-3</sup>
1970			1970		
Aug 27	4	0	Sep 15	4	0
Sep 9	4	0	Sep 22	4	2797
Sep 18	4	0	Sep 29	4	1052
Sep 26	4	0	Oct 6	4	430
Oct 1	4	0	Oct 13	4	0
Oct 17	4	0	Oct 20	4	0
Oct 24	4	0	Oct 26	4	0
Nov 7	4	0	Dec 9	4	0
Dec 5	4	0	1981		
1971			Jan 13	4	0
Jan 9	4	0	Feb 10	4	0
Feb 24	4	0	Mar 17	4	0
Mar 30	4	0	May 11	4	0
Apr 27	4	0	May 25	4	0
May 11	4	0	Jun 8	4	24293
May 25	4	0	Jun 22	4	646
Jun 8	4	0	Jul 6	4	0
Jun 25	4	0	Jul 20	4	215
Jul 1	4	0	Aug 3	4	646
Jul 22	4	0	Aug 18	4	96
Aug 5	4	0	Aug 31	4	0
Aug 26	4	0	Sep 14	4	0
Sep 2	4	0	Sep 28	4	669
Sep 25	4	0	Oct 12	4	0
1978			1978		
May 22	3.7	310	Jan 13	4	0
Jun 12	4	574	Mar 8	4	0
Jul 10	4	0	May 17	5	0
Jul 31	4	0	Jun 31	3	21304
Aug 31	4	0	Jun 14	4	128179
Sep 11	4	0	Aug 21	4	1136
1979			Sep 11	4	287
May 28	4	430	1979		0
Jun 25	5	344	May 22	4	0
Jul 9	4	0	Jun 12	4	0
Jul 23	4	0	Jul 10	4	0
Aug 6	4.75	0	Jul 31	4	0
Aug 20	5.75	0	Aug 21	4	0
Sep 6	4.5	0	Sep 11	4	0
Sep 17	4.75	191	1980		0
Sep 15	4	0	Mar 16	4	0
1980			May 6	3.75	0
May 15	4	0	May 16	4	1052
Jun 9	4.5	8799	Jun 9	4.5	8355
Jun 16	4.5	0	Jun 16	4.5	382
Jul 7	4	0	Jul 7	4	0
Jul 14	4.5	0	Jul 14	4.5	0
Jul 21	4.5	0	Jul 14	4.5	0
Jul 28	4.5	0	Jul 21	4.5	0
Aug 4	4	0	Jul 28	4.5	0
Aug 11	4	0	Aug 4	4	0
Aug 18	4.5	0	Aug 11	4	0
Aug 25	4.5	956	Aug 29	4.5	0
Sep 1	4.5	382	Sep 12	3.5	0
Sep 8	4	382	Sep 26	3.5	0
Sep 15	4	215	Oct 3	4	0
Oct 17	4	0	Oct 17	4	0
Dec 13	4	0	Dec 13	4	0

Polyarthra remata

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			Sep 15	4	53367
Aug 27	4	427178	Sep 22	4	95975
Sep 9	4	590244	Sep 29	4	38447
Sep 18	4	2056202	Oct 6	4	90380
Sep 26	4	100697	Oct 13	4	63696
Oct 1	4	46690	Oct 20	4	100064
Oct 17	4	71254	Oct 26	4	11405
Oct 24	4	65888	Dec 9	4	192596
Nov 7	4	161324			
Dec 5	4	361324	1981	4	22125
			Jan 13	4	127584
1971			Feb 10	4	71539
Jan 9	4	613415	Mar 17	4	52937
Feb 24	4	60279	May 11	4	1817
Mar 30	4	7666	May 25	4	1243
Apr 27	4	82230	Jun 8	4	2152
May 11	4	165810	Jun 22	4	14824
May 25	4	43118	Jul 6	4	3084
Jun 8	4	23519	Jul 20	4	13342
Jun 25	4	2352	Aug 3	4	19224
Jul 8	4	784	Aug 18	4	15589
Jul 22	4	35279	Aug 31	4	21951
Aug 5	4	21951	Sep 14	4	34646
Aug 26	4	24434	Sep 28	4	10616
Sep 2	4	174434	Sep 12	4	111368
Sep 25	4				
1978			1982	4	2295
May 22	3.7	1185215	Jan 13	4	9468
Jun 12	4	0	May 17	4	8853
Jul 10	4	287	May 31	3	3252
Jul 31	4	287	Jun 14	4	6046
Aug 31	4	2869	Jun 28	4	430
Sep 11	4	34920	Jul 12	4	215
1979			1979	4	3013
May 28	4	36798	Aug 9	3	509
Jun 25	5	1033	Aug 23	4	2295
Jul 9	4	0	Sep 6	3	1076
Jul 23	3.75	0	Sep 20	4	2582
Aug 6	4.75	181	Oct 4	4	6408
Aug 20	5.75	861	Oct 18	4	
Sep 6	4.5	1148			
Sep 17	4.75	362	1983	4	61329
Oct 15	4	573	Mar 16	4	112186
			May 6	4	47642
1980			May 16	3.75	55944
May 15	4	50139	May 15	4	5504
Jun 9	4.5	382	Jun 9	4	3013
Jun 16	4.5	1722	Jun 16	4	3073
Jul 7	4	1722	Jul 11	4	3873
Jul 14	4.5	4591	Jul 18	3.5	7132
Jul 21	4	5164	Aug 1	4	4304
Jul 28	4.5	11477	Aug 8	3.5	3689
Aug 4	4	16785	Aug 15	4	2673
Aug 11	4	93823	Aug 29	4.5	3060
Aug 18	4.5	49924	Sep 12	3.5	109194
Aug 25	4.5	82268	Sep 26	3.5	252080
Sep 1	4.5	171196	Oct 3	4	625128
Sep 8	4	75532	Oct 17	4	416800
			154076	4	138798

Polyarthra vulgaris

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			Sep 15	4	53367
Sep 22	4	95975	Aug 27	4	163415
Sep 29	4	38447	Sep 9	4	222300
Oct 6	4	90380	Sep 18	4	249129
Oct 13	4	63696	Sep 26	4	182230
Oct 20	4	100064	Oct 1	4	140418
Oct 26	4	11405	Oct 17	4	67944
Dec 9	4	192596	Oct 24	4	57840
Nov 7	4		Nov 7	4	29094
Dec 5	4		Dec 5	4	22125
			1981	4	2200
1971			Jan 13	4	2200
Jan 9	4	127584	Feb 10	4	3921
Feb 24	4	71539	Mar 17	4	6695
Mar 30	4	52937	May 11	4	81988
Apr 27	4	1817	Mar 30	4	6312
May 11	4	1243	Apr 27	4	1530
May 25	4	2152	May 11	4	3443
Jun 8	4	14824	May 25	4	16928
Jun 22	4	3084	Jun 8	4	5595
Jul 6	4	13342	Jun 25	4	14448
Jul 20	4	19224	Jul 8	4	5451
Aug 3	4	15589	Jul 22	4	62449
Aug 18	4	21924	Aug 5	4	92084
Aug 31	4	34646	Aug 26	4	27114
Sep 14	4	10616	Sep 2	4	8703
Sep 28	4	111368	Sep 25	4	
Sep 25	4		1978	3.7	14266
			May 22	3.7	14266
1972			Jun 12	4	4304
May 22	3.7	1185215	Jun 10	4	8321
Jun 12	4	0	Jul 31	4	14633
Jul 10	4	287	Aug 21	4	70296
Jul 31	4	287	Sep 11	4	48776
Aug 31	4	2869	Jun 25	5	37874
Sep 11	4	34920	Jul 9	4	11362
			1979	4	9468
1978			May 28	4	13974
May 28	4	36798	Jun 25	5	159456
Jun 25	3	1033	Jul 23	3.75	55663
Jul 9	4	509	Aug 6	4.75	13357
Jul 23	3.75	0	Sep 20	4	2525
Aug 6	4.75	181	Oct 4	4	7057
Aug 20	5.75	861	Oct 18	4	72476
Sep 6	4.5	1148	Sep 6	4.5	88180
Sep 17	4.75	362	Sep 17	4.75	88976
Oct 15	4	573	Sep 15	4	17789
			1982	4	12696
1979			Mar 16	4	24484
May 22	3.7	1185215	May 6	4	7141
Jun 12	4	0	Jun 13	4	71779
Jul 10	4	287	Jun 20	4	5260
Jul 31	4	287	Jul 4	4	4519
Aug 31	4	2869	Jul 7	4	1076
Sep 11	4	34920	Jul 14	4.5	1230
			1979	4	81998
1980			May 15	4	26899
May 15	4	50139	Jun 9	4	3443
Jun 9	4.5	382	Jun 16	4.5	3252
Jun 16	4.5	1722	Jul 1	4	5955
Jul 7	4	1722	Jul 7	4	16259
Jul 14	4.5	4591	Jul 21	4	27544
Jul 21	4	5164	Aug 4	4.5	43421
Jul 28	4.5	11477	Aug 15	4	84355
Aug 4	4	16785	Aug 11	4	168279
Aug 11	4	93823	Aug 18	4.5	141548
Aug 18	4.5	49924	Sep 1	4	38949
Aug 25	4.5	82268	Sep 26	4.5	153216
Sep 1	4.5	171196	Oct 3	4	101140
Sep 8	4	75532	Oct 17	4	56554
			154076	4	3013

<u>Rotaria</u> sp.	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	
1970	Aug 27	4	0	Sep 15	4	0	1970	Aug 27	4	
	Sep 9	4	0	Sep 22	4	430		Sep 9	4	
	Sep 18	4	0	Sep 29	4	0		Sep 18	4	
	Sep 26	4	0	Oct 6	4	0		Sep 26	4	
	Oct 1	4	0	Oct 13	4	0		Oct 6	4	
	Oct 17	4	0	Oct 20	4	0		Oct 13	4	
	Oct 24	4	0	Oct 26	4	0		Oct 20	4	
	Nov 7	4	0	Oct 27	4	1045		Oct 26	4	
	Dec 5	4	0	Nov 7	4	1466		Dec 9	4	
1971	Jan 13	4	0	1981	Jan 13	0	1981	Jan 13	4	
	Feb 10	4	96		Feb 10	4		Feb 10	4	
	Mar 17	4	191		Mar 17	4		Mar 17	4	
	May 11	4	4704		May 11	4		May 11	4	
	May 25	4	4678		May 25	4		May 25	4	
	Jun 8	4	3136		Jun 8	4		Jun 8	4	
	Jun 22	4	64460		Jun 22	4		Jun 22	4	
	Jul 6	4	3520		May 25	4		Jul 6	4	
	Jul 11	4	0		Jun 9	4		Jul 20	4	
	Jul 16	4	0		Jun 25	4		Aug 3	4	
	Jul 20	4	0		Jul 8	4		Aug 18	4	
	Aug 3	4	3136		Jul 22	4		Aug 31	4	
	Aug 18	4	0		Aug 5	4		Sep 14	4	
	Aug 31	4	0		Aug 26	4		Sep 28	4	
	Sep 14	4	0		Sep 2	4		Oct 12	4	
	Sep 28	4	0		Sep 25	4		1176	0	
1972	Jan 13	4	0	1978	May 22	3.7	1982	Jan 13	4	
	Mar 8	4	96		Jun 12	4		Mar 8	4	
	May 17	5	0		Jul 10	4		May 17	5	
	May 31	3	0		Jul 31	4		May 31	3	
	Jun 14	4	0		Aug 21	4		Jun 14	4	
	Jun 28	4	0		Sep 11	4		Jun 28	4	
	Jul 12	4	0		Sep 25	4		Jul 12	4	
	Jul 25	4	0		1979	May 28	4	1982	Jan 13	4
	Aug 9	3	126		Jun 25	5		Mar 8	4	
	Aug 23	4	1506		Jul 9	4		May 17	5	
	Sep 6	3	287		Jul 23	3.75		May 31	3	
	Sep 20	4	0		Aug 6	4.75		Jun 14	4	
	Oct 4	4	215		Sep 6	5		Jun 28	4	
	Oct 18	4	191		Sep 17	4.75		Jul 12	4	
	Oct 25	4	0		Sep 15	4		215	0	
1979	Jan 13	4	0		1978	May 28	4	1982	Jan 13	4
	Mar 8	4	96		Jun 25	5		Mar 8	4	
	May 17	5	0		Jul 10	4		May 17	5	
	May 31	3	0		Jul 31	4		May 31	3	
	Jun 14	4	0		Aug 21	4		Jun 14	4	
	Jun 28	4	0		Sep 11	4		Jun 28	4	
	Jul 12	4	0		Sep 25	4		Jul 12	4	
	Jul 25	4	0		1979	May 28	4	1982	Jan 13	4
	Aug 9	3	126		Jun 25	5		Mar 8	4	
	Aug 23	4	1506		Jul 9	4		May 17	5	
	Sep 6	3	287		Jul 23	3.75		May 31	3	
	Sep 20	4	0		Aug 6	4.75		Jun 14	4	
	Oct 4	4	215		Sep 6	5		Jun 28	4	
	Oct 18	4	191		Sep 17	4.75		Jul 12	4	
	Oct 25	4	0		Sep 15	4		215	0	
1980	Jan 16	4	0		1980	May 15	4	1983	Mar 16	4
	Mar 16	4	0		Jun 9	4.5		May 6	4	
	May 6	4	3.75		Jun 16	4.5		May 16	4	
	May 15	4	0		Jul 7	4		Jun 13	4	
	Jun 9	4.5	0		Jul 11	4		Jun 20	4	
	Jun 16	4.5	0		Jul 14	4.5		Jul 4	4	
	Jul 7	4	0		Jul 17	4		Jul 11	4	
	Jul 14	4.5	0		Jul 21	4.5		Jul 18	4	
	Jul 21	4	0		Jul 21	4		Aug 1	4	
	Jul 25	4	0		Jul 28	4.5		Aug 8	3.5	
	Aug 4	4	0		Aug 9	4		Aug 15	4	
	Aug 11	4	96		Aug 15	4		Aug 15	4	
	Aug 18	4.5	0		Aug 11	4		Aug 29	4.5	
	Aug 25	4.5	0		Aug 18	4.5		Sep 12	3.5	
	Sep 1	4.5	0		Aug 25	4.5		Sep 26	4.5	
	Sep 8	4	0		Sep 1	4.5		Oct 3	4	
	Sep 15	4	0		Sep 8	4		Oct 17	4	
	Oct 17	4	96		Oct 17	4		Oct 13	4	
	Dec 13	0	0		96	0		669	0	
									646	

Testudinella sp.

Trichocerca cylindrica

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970	4	0	Sep 15	4	215	1970	Aug 27	4
Aug 27	4	0	Sep 22	4	0	Sep 15	1045	4
Sep 9	4	0	Sep 29	4	0	Sep 22	2787	4
Sep 18	4	0	Oct 6	4	0	Sep 29	1742	4
Sep 26	4	0	Oct 13	4	0	Oct 6	2080	4
Oct 1	4	0	Oct 20	4	0	Oct 13	1394	4
Oct 17	4	0	Oct 26	4	0	Oct 20	1045	4
Oct 24	4	0	Oct 17	4	0	Oct 26	871	4
Nov 7	4	0	Nov 7	4	0	Dec 9	523	4
Dec 5	4	0	Dec 5	4	0	1981	0	0
1971	4	0	Jan 13	4	0	Jan 13	4	0
Jan 9	4	0	Feb 10	4	0	Feb 10	4	0
Feb 24	4	0	Mar 17	4	0	Mar 17	4	0
Mar 30	4	0	May 11	4	0	May 11	4	0
Apr 27	4	0	May 25	4	0	May 25	4	0
May 11	4	0	Jun 8	4	0	Jun 8	4	0
May 25	4	0	Jun 22	4	0	Apr 27	4	0
Jun 8	4	0	Jul 6	4	0	May 11	4	0
Jun 25	4	0	Jul 20	4	0	May 25	4	0
Jul 8	4	0	Aug 3	4	0	Jun 8	4	0
Jul 22	4	0	Aug 18	4	0	Jun 25	4	0
Aug 5	4	0	Aug 31	4	0	Jul 8	4	0
Aug 26	4	0	Sep 14	4	0	Jul 22	4	0
Sep 2	4	0	Sep 28	4	0	Aug 5	4	0
Sep 25	4	0	Sep 12	4	0	Aug 26	4	0
1978	3.7	0	1982	4	0	1982	4	0
May 22	4	0	Jan 13	4	0	Jan 13	4	0
Jun 12	4	0	Mar 8	4	0	Mar 8	4	0
Jul 10	4	0	May 17	4	0	May 17	5	0
Jul 31	4	0	May 31	4	0	May 31	3	0
Aug 31	4	0	Jun 14	4	0	Jun 14	4	0
Sep 11	4	0	287	4	0	287	4	0
1979	4	0	1978	4	0	1982	4	0
May 28	5	0	May 22	4	0	May 22	4	0
Jun 25	4	0	Jun 12	4	0	Jun 12	4	0
Jul 9	4	0	Jul 10	4	0	Jul 10	4	0
Jul 23	3.75	0	Jul 31	4	0	Jul 31	4	0
Aug 6	4.75	0	Aug 21	4	0	Aug 21	4	0
Aug 20	5	0	Sep 11	4	0	Sep 11	4	0
Sep 6	4.5	0	1979	4	0	1979	4	0
Sep 17	4.75	0	May 28	4	0	May 28	4	0
Oct 15	4	0	Jun 25	4	0	Jun 25	4	0
1980	4	0	Jul 9	4	0	Jul 9	4	0
May 15	4	0	Aug 23	4	0	Aug 23	4	0
Jun 9	4.5	0	Sep 6	4	0	Sep 6	4	0
Jun 16	4.5	0	Sep 20	4	0	Sep 20	4	0
Jul 7	4	0	Oct 4	4	0	Oct 4	4	0
Jul 14	4.5	0	Oct 18	4	0	Oct 18	4	0
Jul 21	4	0	1983	4	0	1983	4	0
Jul 28	4	0	May 6	4	0	May 6	4	0
Aug 4	4	0	May 16	4	0	May 16	4	0
Aug 11	4	0	May 16	4	0	May 16	3.75	0
Aug 18	4.5	0	Jun 13	4	0	Jun 13	4	0
Aug 25	4.5	0	Jun 20	4	0	Jun 20	4	0
Sep 1	4.5	0	Jul 4	4	0	Jul 4	4	0
Sep 8	4	0	215	0	0	215	0	0
1980	4	0	Jul 7	4	0	Jul 7	4	0
May 15	4	0	Jul 14	4	0	Jul 14	4	0
Jun 13	4	0	Jul 21	4	0	Jul 21	4	0
Jun 20	4	0	Jul 28	4	0	Jul 28	4	0
Jul 4	4	0	Aug 4	4	0	Aug 4	4	0
Jul 11	4	0	Aug 11	4	0	Aug 11	4	0
Jul 18	3.5	0	Aug 18	4	0	Aug 18	4	0
Aug 1	4	0	Sep 12	3.5	0	Sep 12	3.5	0
Aug 8	3.5	0	Sep 26	3.5	0	Sep 26	3.5	0
Aug 15	4	0	Oct 3	4	0	Oct 3	4	0
Aug 29	4.5	0	Oct 17	4	0	Oct 17	4	0
Aug 30	4	0	Dec 13	4	0	Dec 13	4	0

Trichocerca sp.

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
1970			1970			1970		
Aug 27	4	17770	Sep 15	4	1506	Sep 15	4	134709
Sep 9	4	74564	Sep 22	4	1506	Sep 22	4	213039
Sep 18	4	28223	Sep 29	4	1435	Sep 29	4	79286
Sep 26	4	42957	Oct 6	4	11190	Oct 6	4	47557
Oct 1	4	5923	Oct 13	4	11345	Oct 13	4	40241
Oct 17	4	20209	Oct 20	4	3443	Oct 20	4	30557
Oct 24	4	22303	Oct 26	4	0	Oct 26	4	7962
Nov 7	4	23693	Dec 9	4	861	Dec 9	4	0
Dec 5	4	39373	1981			1981		
1971			Jan 13	4	0	Jan 13	4	0
Jan 9	4	162195	Feb 10	4	0	Feb 10	4	0
Feb 24	4	697	Mar 17	4	0	Mar 17	4	0
Mar 30	4	348	May 11	4	430	May 11	4	180760
Apr 27	4	2352	May 25	4	96	May 25	4	6599
May 11	4	7839	Jun 8	4	574	Jun 8	4	5164
May 25	4	0	Jun 22	4	646	Jun 22	4	0
Jun 8	4	3920	Jul 6	4	2678	Jul 6	4	3539
Jun 25	4	4704	Jul 20	4	2893	Jul 20	4	0
Jul 10	4	10192	Aug 3	4	4089	Aug 3	4	0
Jul 22	4	10192	Aug 18	4	0	Aug 18	4	0
Aug 5	4	15668	Aug 31	4	0	Aug 31	4	0
Aug 26	4	33319	Sep 14	4	0	Sep 14	4	0
Sep 12	4	93816	Sep 28	4	430	Sep 28	4	0
Sep 25	4	0	Oct 12	4	0	Oct 12	4	0
1978			1971			1982		
May 22	3.7	0	Jan 13	4	0	Jan 13	4	0
Jun 12	4	0	Mar 8	4	0	Mar 8	4	0
Jul 10	4	0	May 17	5	0	May 17	5	0
Jul 31	4	287	May 31	3	0	May 31	3	0
Aug 31	4	0	Jun 14	4	0	Jun 14	4	0
Sep 11	4	2582	Jul 10	4	0	Jun 28	4	0
1979			Jun 31	4	0	Jul 12	4	0
May 28	4	0	Aug 21	4	0	Jul 26	4	0
Jun 9	4	215	Sep 11	4	0	Aug 9	3	0
Jul 26	4	254	May 28	4	0	Aug 23	4	0
Aug 9	4	646	Jun 25	4	0	Sep 6	3	0
Aug 23	4	646	Jul 9	4	0	Sep 20	4	0
Aug 6	4.75	230	Sep 6	3	0	Oct 4	4	0
Aug 20	5	725	Sep 20	4	0	Oct 18	4	0
Sep 6	4.5	344	Oct 4	4	0	1983		
Sep 17	4.75	1913	Oct 18	4	96	1983		
Sep 17	4	2356	1983			1983		
Oct 15	4	1148	Mar 16	4	0	Mar 16	4	0
May 6	6	0	May 16	6	0	May 6	4	0
May 16	6	3.75	Jun 13	4	0	May 16	4	3.75
Jun 13	4	102	Jun 20	4	0	Jun 13	4	0
Jun 20	4	0	Jul 4	4	0	Jun 20	4	0
Jul 4	4	215	Jul 11	4	0	Jul 11	4	0
Jul 7	4	0	Jul 18	4	0	Jul 18	4	0
Jul 14	4.5	382	Aug 1	3.5	0	Aug 1	4	0
Jul 21	4	430	Aug 8	3.5	0	Aug 8	4	0
Jul 21	4	1339	Aug 19	4	0	Aug 15	4	0
Jul 28	4.5	1076	Aug 4	4	0	Aug 15	4	0
Aug 4	4	191	Aug 15	4	0	Aug 15	4	0
Aug 11	4	645	Aug 29	4.5	191	Aug 29	4.5	0
Aug 18	4.5	861	Sep 12	3.5	0	Sep 12	3.5	0
Aug 25	4.5	382	Sep 26	3.5	1476	Sep 26	4.5	0
Sep 1	4.5	1148	Oct 3	4	0	Oct 3	4	0
Sep 8	4	3060	Oct 17	4	0	Oct 17	4	0
Dec 13	4	1291	Dec 13	4	0	Dec 13	4	0

### *Trochosphaera solstitialis*

Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>	Date	Column depth	no. m <sup>-3</sup>
Sep 15	4	1506	1970	Aug 27	4	Sep 15	4	134709
Sep 22	4	1506	Sep 9	4	Sep 22	4	213039	
Sep 29	4	1435	Sep 18	4	Sep 29	4	79286	
Oct 6	4	11190	Sep 26	4	Oct 6	4	47557	
Oct 13	4	11835	Oct 1	4	Oct 13	4	40241	
Oct 20	4	3443	Oct 17	4	Oct 20	4	30557	
Oct 26	4	0	Oct 24	4	Oct 26	4	7962	
Dec 9	4	861	Nov 7	4	Dec 9	4	0	
1981			1981		1981			
Jan 13	4	0	1971	Jan 9	4	Jan 13	4	0
Feb 10	4	0	Feb 24	4	Feb 10	4	0	
Mar 17	4	0	Mar 30	4	Mar 17	4	0	
May 11	4	430	Apr 27	4	May 11	4	180760	
May 25	4	95	May 11	4	May 25	4	6599	
Jun 8	4	574	May 11	4	Jun 8	4	5164	
Jun 22	4	646	May 25	4	Jun 22	4	0	
Jul 6	4	2678	Jun 8	4	Jul 6	4	3539	
Jul 20	4	2893	Jun 25	4	Jul 20	4	0	
Aug 3	4	4089	Jul 8	4	Aug 3	4	0	
Aug 18	4	0	Jul 22	4	Aug 18	4	0	
Aug 31	4	0	Aug 5	4	Aug 31	4	0	
Sep 14	4	0	Aug 26	4	Sep 14	4	0	
Sep 28	4	430	Sep 2	4	Sep 28	4	0	
Oct 12	4	0	Sep 25	4	Oct 12	4	0	
1982			1978	May 22	3.7	1982		
Jan 13	4	0	Jun 12	4	Jan 13	4	0	
Mar 8	4	0	Jul 10	4	Mar 8	4	0	
May 17	5	0	Jul 31	4	May 17	5	0	
May 31	3	0	Aug 21	4	May 31	3	0	
Jun 14	4	0	Sep 11	4	Jun 14	4	0	
Jun 28	4	0	Aug 21	4	Jun 28	4	0	
Jul 12	4	0	Aug 21	4	Jul 12	4	0	
Jul 26	4	0	Aug 21	4	Jul 26	4	0	
Aug 9	3	0	Aug 28	4	Aug 9	3	0	
Aug 23	4	0	Aug 28	4	Aug 23	4	0	
Sep 6	3	0	Jul 9	4	Sep 6	3	0	
Sep 20	4	0	Jul 23	3.75	Sep 20	4	0	
Oct 4	4	430	Aug 5	4.75	Oct 4	4	0	
Oct 18	4	96	Aug 20	5	Oct 18	4	0	
1983			Sep 6	4.5	1983			
Mar 16	4	0	Sep 17	4.75	Mar 16	4	0	
May 6	4	0	Oct 15	4	May 6	4	0	
May 16	3.75	102	May 15	4	May 16	3.75	0	
Jun 13	4	0	Jun 9	4.5	Jun 13	4	0	
Jun 20	4	0	Jun 16	4.5	Jun 20	4	0	
Jul 4	4	215	Jul 7	4	Jul 4	4	0	
Jul 11	4	646	Jul 14	4.5	Jul 11	4	0	
Jul 18	3.5	1230	Jul 21	4	Jul 18	3.5	0	
Aug 1	4	215	Jul 28	4.5	Aug 1	4	0	
Aug 8	3.5	0	Aug 4	4	Aug 8	3.5	0	
Aug 15	4	0	Aug 11	4	Aug 15	4	0	
Aug 23	4.5	191	Aug 18	4.5	Aug 23	4.5	0	
Sep 12	3.5	0	Aug 25	4.5	Sep 12	3.5	0	
Sep 26	3.5	1476	Sep 1	4.5	Sep 26	3.5	0	
Oct 3	4	0	Sep 8	4	Oct 3	4	0	
Oct 17	4	0			Oct 17	4	0	
Dec 13	4	861			Dec 13	4	0	

Trichopteria sp.

Date	Column depth	no. $\text{m}^{-3}$	Date	Column depth	no. $\text{m}^{-3}$	Date	Column depth	no. $\text{m}^{-3}$
1970			Sep 15	4	0	1970		
Aug 27	4	0	Sep 22	4	0	Aug 27	4	0
Sep 9	4	0	Sep 29	4	0	Sep 9	4	0
Sep 18	4	0	Oct 6	4	0	Sep 18	4	0
Sep 26	4	0	Oct 13	4	0	Sep 26	4	0
Oct 1	4	0	Oct 20	4	0	Oct 1	4	0
Oct 17	4	0	Oct 26	4	0	Oct 17	4	0
Oct 24	4	0	Dec 9	4	0	Oct 24	4	0
Nov 7	4	0				Nov 7	4	0
Dec 5	4	0				Dec 5	4	0
1971			Jan 13	4	0	1971		
Jan 9	4	0	Feb 10	4	0	Jan 9	4	0
Feb 24	4	0	Mar 17	4	0	Feb 24	4	0
Mar 30	4	0	May 11	4	0	Mar 30	4	0
Apr 27	4	0	May 25	4	0	Apr 27	4	0
May 11	4	0	Jun 8	4	0	May 11	4	0
May 25	4	0	Jun 22	4	0	May 25	4	0
Jun 8	4	0	Jul 6	4	0	Jun 22	4	0
Jun 25	4	0	Jul 20	4	0	Jul 6	4	0
Jul 8	4	0	Aug 3	4	0	Jul 20	4	0
Jul 22	4	0	Aug 18	4	0	Aug 3	4	0
Aug 5	4	0	Aug 31	4	0	Aug 18	4	0
Aug 26	4	0	Sep 14	4	0	Aug 31	4	0
Sep 2	4	0	Sep 28	4	0	Sep 14	4	0
Sep 25	4	0	Sep 25	4	0	Sep 28	4	0
1978			1978			1978		
May 22	3.7	0	Jan 13	4	0	May 22	3.7	0
Jun 12	4	0	Mar 8	4	0	Jun 12	4	0
Jul 10	4	0	May 17	5	0	Jul 10	4	0
Jul 31	4	0	May 31	3	0	Jul 31	4	0
Aug 31	4	0	Jun 14	4	0	Aug 31	4	0
Sep 11	4	0	Jun 28	4	0	Aug 21	4	0
1979			1979			1979		
May 28	4	0	Aug 9	3	0	May 28	4	0
Jun 25	5	0	Aug 23	4	0	Jun 25	5	0
Jul 9	4	0	Sep 6	3	0	Jul 9	4	0
Jul 23	3.75	0	Sep 20	4	0	Jul 23	3.75	0
Aug 6	4.75	0	Oct 4	4	0	Aug 6	4.75	0
Aug 20	5	0	Oct 18	4	0	Aug 20	5	0
Sep 6	4.5	0				Sep 6	4.5	0
Sep 17	4.75	0				Sep 17	4.75	0
Sep 25	4	0				Oct 15	4	0
Oct 15	4	0				Oct 15	4	0
1980			1980			1980		
May 15	4	0	May 6	4	0	May 15	4	0
Jun 9	4.5	0	May 16	3.75	0	Jun 13	4	0
Jun 16	4.5	0	Jun 13	4	0	Jun 16	4.5	0
Jul 7	4	0	Jun 20	4	0	Jul 7	4	0
Jul 14	4.5	0	Jul 4	4	0	Jul 14	4.5	0
Jul 21	4	0	Jul 11	3.5	0	Jul 21	4	0
Jul 28	4.5	0	Aug 1	4	0	Aug 8	3.5	0
Aug 4	4	0	Aug 8	3.5	0	Aug 15	4	0
Aug 11	4	0	Aug 15	4	0	Aug 4	4	0
Aug 18	4.5	0	Aug 29	4.5	0	Aug 11	4	0
Aug 25	4.5	0	Sep 12	3.5	0	Aug 18	4.5	0
Sep 1	4.5	0	Sep 26	3.5	0	Aug 25	4.5	0
Sep 8	4	0	Oct 3	4	0	Sep 1	4.5	0
1981			1981			1981		
Jan 13	4	0	Jan 13	4	0	Jan 13	4	0
Feb 10	4	0	Feb 10	4	0	Feb 10	4	0
Mar 17	4	0	Mar 17	4	0	Mar 17	4	0
May 11	4	0	May 11	4	0	May 11	4	0
May 25	4	0	May 25	4	0	May 25	4	0
Jun 8	4	0	Jun 8	4	0	Jun 8	4	0
Jun 22	4	0	Jun 22	4	0	Jun 22	4	0
Jul 6	4	0	Jul 6	4	0	Jul 6	4	0
Jul 20	4	0	Jul 20	4	0	Jul 20	4	0
Aug 3	4	0	Aug 3	4	0	Aug 3	4	0
Aug 18	4	0	Aug 18	4	0	Aug 18	4	0
Aug 31	4	0	Aug 31	4	0	Aug 31	4	0
Sep 14	4	0	Sep 14	4	0	Sep 14	4	0
Sep 28	4	0	Sep 28	4	0	Sep 28	4	0
Sep 25	4	0	Sep 25	4	0	Sep 25	4	0
Oct 12	4	0	Oct 12	4	0	Oct 12	4	0
1982			1982			1982		
Jan 13	4	0	Jan 13	4	0	Jan 13	4	0
Mar 8	4	0	Mar 8	4	0	Mar 8	4	0
May 17	5	0	May 17	5	0	May 17	5	0
May 31	3	0	May 31	3	0	May 31	3	0
Jun 14	4	0	Jun 14	4	0	Jun 14	4	0
Jun 28	4	0	Jun 28	4	0	Jun 28	4	0
Jul 12	4	0	Jul 12	4	0	Jul 12	4	0
Jul 26	4	0	Jul 26	4	0	Jul 26	4	0
Aug 9	3	0	Aug 9	3	0	Aug 9	3	0
Aug 23	4	0	Aug 23	4	0	Aug 23	4	0
Sep 6	3	0	Sep 6	3	0	Sep 6	3	0
Sep 20	4	0	Sep 20	4	0	Sep 20	4	0
Oct 4	4	0	Oct 4	4	0	Oct 4	4	0
Oct 18	4	0	Oct 18	4	0	Oct 18	4	0
1983			1983			1983		
Mar 16	4	0	Mar 16	4	0	Mar 16	4	0
May 6	4	0	May 6	4	0	May 6	4	0
May 16	3.75	0	May 16	3.75	0	May 16	3.75	0
Jun 13	4	0	Jun 13	4	0	Jun 13	4	0
Jun 20	4	0	Jun 20	4	0	Jun 20	4	0
Jul 4	4	0	Jul 4	4	0	Jul 4	4	0
Jul 11	3.5	0	Jul 11	3.5	0	Jul 11	3.5	0
Jul 18	4	0	Jul 18	4	0	Jul 18	4	0
Aug 1	4	0	Aug 1	4	0	Aug 1	4	0
Aug 8	3.5	0	Aug 8	3.5	0	Aug 8	3.5	0
Aug 15	4	0	Aug 15	4	0	Aug 15	4	0
Aug 29	4.5	0	Aug 29	4.5	0	Aug 29	4.5	0
Aug 4	4	0	Aug 4	4	0	Aug 4	4	0
Aug 11	4	0	Aug 11	4	0	Aug 11	4	0
Aug 18	4.5	0	Aug 18	4.5	0	Aug 18	4.5	0
Aug 25	4.5	0	Aug 25	4.5	0	Aug 25	4.5	0
Sep 1	4	0	Sep 1	4	0	Sep 1	4	0
Sep 8	4	0	Sep 8	4	0	Sep 8	4	0
1981			1981			1981		
Jan 13	4	0	Jan 13	4	0	Jan 13	4	0
Feb 10	4	0	Feb 10	4	0	Feb 10	4	0
Mar 17	4	0	Mar 17	4	0	Mar 17	4	0
May 11	4	0	May 11	4	0	May 11	4	0
May 25	4	0	May 25	4	0	May 25	4	0
Jun 8	4	0	Jun 8	4	0	Jun 8	4	0
Jun 22	4	0	Jun 22	4	0	Jun 22	4	0
Jul 6	4	0	Jul 6	4	0	Jul 6	4	0
Jul 20	4	0	Jul 20	4	0	Jul 20	4	0
Aug 3	4	0	Aug 3	4	0	Aug 3	4	0
Aug 18	4	0	Aug 18	4	0	Aug 18	4	0
Aug 31	4	0	Aug 31	4	0	Aug 31	4	0
Sep 14	4	0	Sep 14	4	0	Sep 14	4	0
Sep 28	4	0	Sep 28	4	0	Sep 28	4	0
Sep 25	4	0	Sep 25	4	0	Sep 25	4	0
Oct 17	4	0	Oct 17	4	0	Oct 17	4	0
Oct 24	4	0	Oct 24	4	0	Oct 24	4	0
Dec 13	4	0	Dec 13	4	0	Dec 13	4	0

Appendix 1. Variation in calculated density due to variability in raw count for adult copepods and cladocerans in L223 in 1974.

Species	Sampling date	Sampling layer m	Original Count			Recount				
			Percent of total sample volume counted	Calculated density (no. m <sup>-3</sup> )	Raw Counts (no. ml <sup>-1</sup> aliquot)	Percent of total sample volume	Calculated density 10 counts	density lowest pair	density highest pair	
<u>Daphnia</u> <u>galeatae</u> <u>mendotae</u>	May 22	0-11	8.8	0	0,0,0,0,1,0,0,0, 0,0	25	12	0	58	
	Jun 19	0- 4	6.7	732	2,1,2,1,1,2,1,2, 2,5	25	530	279	976	
	Jun 19	4-13	7.1	1084	6,13,9,7,6,9, 15,9,9,13	25	1672	929	2168	
	Jul 17	0- 4	8.3	0	0,0,0,0,0,0,0,0, 0,0	25	0	0	0	
	Jul 17	4-13	7.3	3228	16,14,30,18,19, 22,21,17,29,16	25	3097	2323	4568	
	Aug 14	0- 5	7.5	310	1,0,1,0,1,1,0,1, 1,1	25	163	0	232	
	Aug 14	5-12	7.1	3066	16,14,16,16,16, 12,11,22,17,12	25	3026	2290	3883	
	Sep 13	0- 7	7.5	232	3,3,4,2,1,2,1,4, 3,3	25	453	174	610	
	Sep 11	7-12	7.0	499	1,1,0,1,4,2,1,0, 4,2	25	446	0	1115	
	Oct 9	0-12	7.0	192	1,1,4,4,1,3,0,3, 1,6	25	257	54	536	
	Nov 6	0-13	7.5	66	1,1,0,1,0,0,0,1, 0,0	25	40	0	99	
<u>Bosmina</u> <u>longirostris</u>	May 22	0-11	8.8	66	0,0,0,1,0,0,0,0, 0,0	25	12	0	58	
	Jun 19	0- 4	6.7	1777	6,7,10,13,10,6,7, 5,10,7	25	2258	1533	3205	
	Jun 19	4-13	7.1	3794	14,24,15,13,15,10, 20,18,20,19	25	2602	1781	3407	
	Jul 17	0- 4	8.3	1087	6,7,3,8,3,6,4,2, 5,8	25	1449	697	2230	
	Jul 17	4-13	7.3	423	1,1,2,2,3,2,4,2, 2,3	25	341	155	542	
	Aug 14	0- 5	7.5	5033	33,27,24,18,24,24, 28,30,23,25	25	5947	4762	7317	
	Aug 14	5-12	7.1	906	5,7,6,6,6,8,10,1, 2,7	25	1155	299	1792	
	Sep 11	0- 7	7.5	348	2,5,2,3,2,3,2,2, 0,3	25	418	174	697	
	Sep 11	7-12	7.0	599	1,1,2,1,2,3,1,0, 2,1	25	390	139	697	
	Oct 9	0-12	7.0	0	3,1,0,0,0,0,0,1, 0,1	25	64	0	214	
	Nov 6	0-13	7.5	0	0,0,0,0,0,0,0,0, 0,1	25	10	0	50	
<u>Diaphanosoma</u> <u>brachyurum</u>	May 22	0-11	8.8	0	0,0,0,0,0,0,0,0, 0,0	25	0	0	0	
	Jun 19	0- 4	6.7	0	0,0,0,0,0,0,0,0, 0,0	25	0	0	0	
	Jun 19	4-13	7.1	0	0,0,0,0,0,0,0,0, 0,0	25	0	0	0	
	Jul 17	0- 4	8.3	1672	7,6,7,9,5,11,8,8, 12,13	25	2397	1533	3484	
	Jul 17	4-13	7.3	688	5,4,4,6,8,7,5,1, 6,6	25	805	387	1161	
	Aug 14	0- 7	7.5	1471	4,9,5,9,13,5,9,8, 8,9	25	1835	1045	2555	
	Aug 14	5-12	7.1	209	10,6,4,2,3,4,5,6, 5,4	25	976	498	1593	
	Sep 11	0- 7	7.5	290	2,5,5,4,4,2,6,4, 3,6	25	714	348	1045	
	Sep 11	7-12	7.0	1099	1,1,1,1,1,1,3,2, 1,2	25	390	279	697	
	Oct 9	0-12	7.0	115	2,0,0,3,1,2,2,2, 2,1	25	161	0	268	
	Nov 6	0-13	7.5	0	0,0,0,0,0,1,0,0, 0,0	25	10	0	50	

## Appendix 1. Cont'd.

Species	Sampling date	Sampling layer m	Original Count		Raw Counts (no. ml <sup>-1</sup> (aliquot))	Percent of total sample volume	Recount		
			Percent of total sample volume counted	Calculated density (no. m <sup>-3</sup> )			10 counts	Calculated density lowest pair (no. m <sup>-3</sup> )	highest pair
<i>Cyclops bicuspidatus thomasi</i>	May 22	0-11	8.8	494	3,2,4,9,3,3,3,4, 2,5	25	441	232	1045
	Jun 19	0- 4	6.7	0	0,0,0,0,0,0,0, 0,0	25	0	0	0
	Jun 19	4-13	7.1	0	0,0,3,0,0,0,0,0, 0,0	25	52	0	232
	Jul 17	0- 4	8.3	84	0,0,0,0,0,0,0,0, 0,0	25	0	0	0
	Jul 17	4-13	7.3	952	4,4,7,4,3,8,6,10, 4,4	25	836	542	1394
	Aug 14	0- 5	7.5	0	0,2,0,0,0,0,0,0, 0,0	25	46	0	232
	Aug 14	5-12	7.1	4530	24,19,17,26,21,23, 20,32,26,21	25	4559	3584	5774
	Sep 11	0- 7	7.5	0	0,0,0,0,1,0,0, 0,0	25	17	0	87
	Sep 11	7-12	7.0	999	3,5,5,4,2,4,2,2, 1,5	25	920	418	1394
	Oct 9	0-12	7.0	1345	9,7,14,16,12,15, 16,17,10,13	25	1383	911	1769
<i>Mesocyclops edax</i>	Nov 6	0-13	7.5	0	0,1,0,0,1,0,1,3, 1,2	25	90	0	249
	May 22	0-11	8.8		1,2,0,0,0,0,0,0, 0,1	25	46	0	174
	Jun 19	0- 4	6.7	209	3,0,0,0,1,0,2,0 2,1	25	251	0	697
	Jun 19	4-13	7.1	271	0,0,0,1,0,1,0,1, 1,2	25	105	0	232
	Jul 17	0- 4	8.3	251	0,2,2,2,3,4,3,0 1,0	25	474	0	976
	Jul 17	4-13	7.3	265	0,0,0,0,0,0,0,0, 0,0	25	0	0	0
	Aug 14	0- 5	7.5	77	1,0,1,0,2,0,0,0, 0,0	25	93	0	348
	Aug 14	5-12	7.1	70	1,0,1,1,1,0,0,0 1,0	25	100	0	199
	Sep 11	0- 7	7.5	58	0,0,0,0,0,0,0,1, 0,1	25	35	0	174
	Sep 11	7-12	7.0	200	0,0,0,1,1,1,0,0 0,0	25	84	0	279
<i>Tropocyclops prostans mex.</i>	Oct 9	0-12	7.0	77	0,0,1,0,0,1,0,0 1,1	25	43	0	107
	Nov 6	0-13	7.5	0	0,0,0,0,0,0,0,0 0,0	25	0	0	0
	May 22	0-11	8.8	99	1,0,3,1,0,1,2,2, 0,0	25	116	0	290
	Jun 19	0- 4	6.7	0	2,2,2,1,0,0,1,0, 1,0	25	251	0	557
	Jun 19	4-13	7.1	0	0,0,0,0,0,0,0,0, 0,0	25	0	0	0
	Jul 17	0- 4	8.3	84	0,0,0,3,0,0,2,0, 2,0	25	195	0	697
	Jul 17	4-13	7.3	0	0,0,0,0,0,0,0,0, 0,0	25	0	0	0
	Aug 14	0- 5	7.5	929	1,4,5,2,3,4,0,4, 0,2	25	604	0	1045
	Aug 14	5-12	7.1	70	1,0,0,0,0,0,1,0, 2,1	25	100	0	299
	Sep 11	0- 7	7.5	174	1,1,1,1,0,0,1,0, 1,1	25	122	0	174
<i>Tropocyclops prostans mex.</i>	Sep 11	7-12	7.0	0	0,0,1,2,0,0,1,0, 0,0	25	111	0	418
	Oct 9	0-12	7.0	154	1,1,3,2,3,4,1,0, 3,2	25	214	54	375
	Nov 6	0-13	7.5	133	0,0,1,1,2,1,0,0, 0,3	25	80	0	249

## Appendix I. Cont'd.

Species	Sampling date	Sampling Layer m	Original Count			Recount			
			Percent of total sample volume counted	Calculated density (no. m <sup>-3</sup> )	Raw Counts (no. ml <sup>-1</sup> aliquot)	Percent of total sample volume	Calculated density (no. m <sup>-3</sup> )	10 counts	lowest pair
<u><i>Holopedium gibberum</i></u>	May 22	0-11	8.8	33	0,0,0,1,0,1,0, 0,0	25	23	0	116
	Jun 19	0- 4	6.7	0	0,1,0,0,0,1,0,0, 0,0	25	56	0	279
	Jun 19	4-13	7.1	108	0,0,2,0,1,2,1,3, 4,1	25	244	0	542
	Jul 17	0- 4	8.3	0	0,0,0,0,0,0,0,0, 0,0	25	0	0	0
	Jul 17	4-13	7.3	0	0,1,0,0,0,0,0,0, 0,0	25	15	0	77
	Aug 14	0- 5	7.5	0	0,0,0,0,0,0,0,0, 0,0	25	0	0	0
	Aug 14	5-12	7.1	0	0,0,0,0,0,0,0,0, 0,0	25	0	0	0
	Sep 11	0- 7	7.5	0	0,0,0,0,0,0,0,0, 0,0	25	0	0	0
	Sep 11	7-12	7.0	0	0,0,0,0,0,0,0,0, 1,0	25	28	0	139
	Oct 9	0-12	7.0	0	0,0,0,0,0,0,0,0, 0,0	25	0	0	0
	Nov 6	0-13	7.5	0	0,0,0,0,0,0,0,0, 0,0	25	0	0	0
<u><i>Diaptomus minutus</i></u>	May 22	0-11	8.8	1678	20,37,27,36,22, 20,33,33,23,14	25	3078	1974	4239
	Jun 19	0- 4	6.7	627	3,4,6,9,5,5,5,6, 7,2	25	1449	697	2230
	Jun 19	4-13	7.1	596	5,5,6,5,3,2,5,4 2,10	25	819	348	1394
	Jul 17	0- 4	8.3	451	0,1,1,0,4,2,0,0, 1,0	25	251	0	836
	Jul 17	4-13	7.3	53	0,0,0,0,0,0,0,0, 0,2	25	31	0	115
	Aug 14	0- 5	7.5	697	1,1,3,2,2,1,4,0, 2,3	25	441	116	813
	Aug 14	5-12	7.1	70	1,0,0,0,0,0,0,2, 0,0	25	59	0	299
	Sep 11	0- 7	7.5	58	0,0,0,0,0,0,1,2, 0,0	25	52	0	261
	Sep 11	7-12	7.0	200	0,1,0,0,1,1,0,0, 2,1	25	167	0	418
	Oct 9	0-12	7.0	3496	45,44,48,45,36,39 27,48,45,41	25	4481	3377	5146
	Nov 6	0-13	7.5	7699	75,73,76,61,73,77 81,77,68,67	25	7247	6371	7865
<u><i>Epischura lacustris</i></u>	May 22	0-11	8.8	0	0,0,0,0,0,0,0,0, 0,0	25	0	0	0
	Jun 19	0- 4	6.7	314	1,0,1,1,0,0,1,0, 2,2	25	223	0	557
	Jun 19	4-13	7.1	163	0,0,1,1,2,0,0,0, 0,0	25	62	0	232
	Jul 17	0- 4	8.3	0	0,0,0,0,0,0,0,0, 0,0	25	0	0	0
	Jul 17	4-13	7.3	53	1,0,1,0,1,0,1,0, 2,1	25	108	0	232
	Aug 14	0- 5	7.5	0	0,0,1,0,0,0,0,0, 0,0	25	23	0	116
	Aug 14	5-12	7.1	70	0,0,0,0,0,0,2,0, 0,0	25	40	0	199
	Sep 11	0- 7	7.5	0	0,0,1,0,0,0,1,0, 0,1	25	52	0	174
	Sep 11	7-12	7.0	0	0,1,0,0,0,0,0,0, 0,0	25	28	0	139
	Oct 9	0-12	7.0	154	0,1,0,0,0,0,0,0, 0,0	25	11	0	54
	Nov 6	0-13	7.5	0	0,0,0,0,0,2,0,1, 0,0	25	30	0	149