

Appendix I

Results of phytoplankton identification and enumeration for the Aurora Trout Lakes, 1987-2006, presented as phytoplankton biovolume ($\mu^3 \cdot \text{mL}^{-1} \times 10^3$). p= present but in small quantities ($< 0.5 \mu^3 \cdot \text{mL}^{-1} \times 10^3$). In some cases nomenclature has changed but in the interest of continuity, old taxonomic names are being used.

Table I-1: Phytoplankton biovolume data for Aurora Whitepine Lake 1987-2006 ($\mu^3 \cdot \text{mL}^{-1} \times 10^3$).

Aurora Whitepine	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
BACILLARIOPHYCEAE																				
<i>Actinella</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-
<i>Asterionella</i>	-	5	-	p	-	p	p	1	1	1	p	p	p	p	-	2	3	1	p	-
<i>Cyclotella</i>	-	-	-	-	p	-	-	-	-	-	-	p	-	-	p	-	-	p	-	-
<i>Cymatopleura</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Eunotia</i>	-	-	-	-	-	p	-	-	p	-	2	p	p	2	1	p	-	p	-	p
<i>Frustulia</i>	-	-	-	-	-	-	-	-	-	-	-	-	p	-	p	p	-	p	p	-
<i>Melosira</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	-	-	1	-
<i>Meridion</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
<i>Navicula</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	p	-	-
<i>Nitzschia</i>	-	-	-	-	-	-	-	-	-	-	-	1	-	-	p	-	-	-	-	-
<i>Pinnularia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-
<i>Surirella</i>	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-	-
<i>Synedra</i>	-	-	-	-	1	-	p	-	-	-	-	p	-	2	-	-	-	p	p	p
<i>Tabellaria</i>	-	-	-	-	-	2	p	-	p	-	-	p	1	2	2	2	p	p	-	1
CHLOROPHYCEAE																				
<i>Bambusina</i>	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-	-	-
<i>Botryococcus</i>	4	-	-	p	-	1	2	-	3	3	2	2	7	6	6	11	4	11	-	1
<i>Chlamydomonas</i>	5	16	-	6	3	2	1	10	1	4	3	4	1	2	1	p	p	1	2	p
<i>Coccomyxa</i>	-	-	-	-	-	-	-	-	-	-	p	p	p	-	-	-	-	-	p	-
<i>Coelastrum</i>	-	-	-	p	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-
<i>Dictyosphaerium</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	p	-	-
<i>Gemmellicystis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-
<i>Gloeocystis</i>	-	1	-	-	-	-	-	-	-	p	10	2	2	-	-	1	1	-	-	-
<i>Gloeotila</i>	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-	-	-
<i>Golenkinia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-
Chlorophyceae, unid.	-	-	-	5	-	1	1	-	3	2	-	1	p	2	p	-	p	-	-	1
<i>Kirchneriella</i>	-	p	-	p	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p
<i>Koliella</i>	-	-	-	p	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Monomastix</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	p	p
<i>Monoraphidium</i>	-	-	-	-	-	p	p	p	p	p	p	p	p	-	p	p	-	-	-	-
<i>Mougeotia</i>	-	-	-	-	-	-	-	-	p	2	-	-	-	-	-	-	p	-	-	-
<i>Nephrochlamys</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-
<i>Oocystis</i>	p	p	-	2	p	1	1	1	2	6	2	4	1	2	3	2	4	2	1	2
<i>Paramastix</i>	-	-	-	-	-	-	-	-	-	-	p	p	-	-	-	-	-	-	-	-
<i>Pediastrum</i>	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	1	-	-	-	-
<i>Pedinomonas</i>	-	-	-	-	-	-	p	p	-	-	-	-	-	-	-	-	p	p	p	1
<i>Pleurotaenium</i>	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
<i>Polytoma</i>	-	-	-	-	-	-	-	-	-	-	-	p	-	-	p	-	-	p	-	-
<i>Quadrigula</i>	p	-	-	p	-	-	-	p	p	p	-	p	-	-	-	-	-	p	-	-
<i>Scenedesmus</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Scourfieldia</i>	-	-	-	-	-	-	1	p	p	p	-	-	p	-	-	-	-	-	-	p
<i>Sphaerocystis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	4
<i>Staurastrum</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-
<i>Xanthidium</i>	-	6	-	-	-	1	p	-	4	p	1	p	2	3	4	2	1	1	-	-
CHRYSOPHYCEAE																				
<i>Bicosoeca</i>	-	-	-	-	-	-	p	-	-	-	-	-	-	-	p	-	-	-	-	-
<i>Bitrichia</i>	p	-	-	p	-	1	p	1	1	p	2	2	1	1	1	p	p	p	p	p
<i>Chromulina</i>	-	-	-	12	p	7	10	13	9	10	3	2	14	9	11	6	9	9	7	14
<i>Chrysidiastrum</i>	-	-	-	-	-	-	-	3	p	-	3	-	6	-	1	-	2	2	p	-
<i>Chrysochromulina</i>	p	p	-	p	-	-	72	357	63	13	65	93	4	-	29	p	11	10	6	12

Table I-1 continued

Aurora Whitepine	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CHRYSTOPHYCEAE CONT'D																				
<i>Chrysolykos</i>	-	-	-	-	-	-	-	-	-	-	-	-	p	p	-	-	p	-	-	-
Chrysophyte, unid.	15	4	-	27	p	13	17	24	13	11	7	8	27	22	5	12	25	11	6	10
<i>Chrysosphaerella</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
<i>Chyrsidiastrum</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Codonocladium</i>	-	-	-	1	-	1	-	-	p	-	1	1	-	p	-	-	p	-	-	-
<i>Desmarella</i>	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-	-	p	p	-	-
<i>Dinobryon</i>	46	17	-	12	4	43	16	34	20	5	15	11	4	13	7	9	4	2	3	12
<i>Epipyxis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
<i>Kephyrion</i>	-	-	-	1	1	p	p	p	p	p	1	p	p	p	p	p	2	p	p	p
<i>Mallomonas</i>	1	p	-	1	1	2	6	-	3	4	2	3	4	7	4	2	10	11	3	19
<i>Ochromonas</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	p
<i>Pseudokephyrion</i>	p	-	-	1	-	-	1	p	1	p	p	p	p	p	p	-	p	-	p	p
<i>Rhizochrysis</i>	-	-	-	-	-	-	-	-	1	-	2	1	-	1	4	p	3	1	p	1
<i>Spiniferomonas</i>	-	-	-	-	-	-	-	-	p	-	-	-	-	1	-	-	p	1	p	p
<i>Synura</i>	p	1	-	1	-	6	1	-	-	-	10	13	11	6	8	1	17	-	3	3
<i>Uroglena</i>	-	-	-	-	-	-	-	-	-	-	-	p	4	5	1	-	1	1	2	3
CRYPTOPHYCEAE																				
<i>Cryptaulax</i>	-	-	-	-	-	-	-	-	p	-	1	p	p	-	p	p	-	p	-	1
<i>Cryptomonas</i>	100	127	-	73	40	42	61	72	107	81	90	47	29	42	36	10	25	26	43	41
<i>Cyathomonas</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-
<i>Katablepharis</i>	p	p	-	-	-	-	-	p	-	-	-	1	-	p	p	1	-	-	-	-
<i>Pleuromastix</i>	-	-	-	-	-	-	-	1	1	p	p	p	p	p	1	p	p	-	-	-
<i>Rhodomonas</i>	-	p	-	-	-	-	-	-	-	-	p	p	-	-	-	-	-	-	-	-
CYANOPHYCEAE																				
<i>Aphanothece</i>	-	p	-	-	p	-	-	p	-	p	p	p	-	p	-	p	-	-	p	-
Cyanophyceae, unid.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-
<i>Chroococcus</i>	-	1	-	-	-	-	p	-	p	1	-	12	2	p	11	25	5	11	16	5
<i>Gomphosphaeria</i>	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-	-
<i>Lyngbya</i>	p	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Merismopedia</i>	-	-	-	-	p	-	2	2	-	p	p	2	2	2	2	2	3	2	1	3
<i>Oscillatoria</i>	-	-	-	-	-	-	-	-	-	p	1	p	-	-	-	-	-	1	-	-
<i>Rhabdoderma</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	p	p	-	-	-	-	-
<i>Romeria</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-
DINOPHYCEAE																				
<i>Ceratium</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-
Dinophyceae, unid.	18	115	-	-	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Gymnodinium</i>	-	-	-	78	-	85	95	27	53	12	69	78	62	65	70	28	57	21	119	57
<i>Peridinium</i>	98	46	-	44	20	75	58	25	47	42	43	24	22	19	2	5	1	3	5	p
XANTHOPHYCEAE																				
<i>Goniochloris</i>	p	p	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Isthmochloron</i>	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1

Table I-2: Phytoplankton biovolume data for Little Whitepine Lake 1987-2006 ($\mu^3 \cdot \text{mL}^{-1} \times 10^3$).

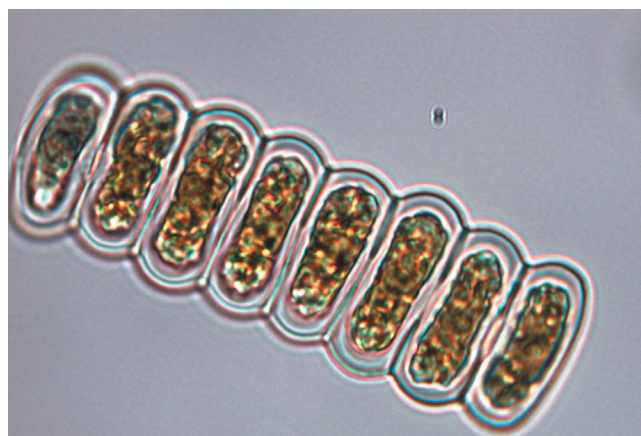
Little Whitepine L.	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
BACILLARIOPHYCEAE																				
<i>Achnanthes</i>	-	-	-	-	-	-	-	-	-	-	-	p	p	p	-	-	-	-	-	-
<i>Anomoeoneis</i>	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
<i>Asterionella</i>	1	-	-	-	-	-	-	-	-	-	-	-	53	3	-	p	p	-	p	-
<i>Cocconeis</i>	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-
<i>Cyclotella</i>	-	-	-	-	-	-	-	9	12	2	3	7	9	1	-	1	-	1	2	1
<i>Cymbella</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	2	-
<i>Eunotia</i>	-	-	-	-	-	-	-	-	-	-	-	-	p	p	-	-	-	-	-	1
<i>Frustulia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
<i>Melosira</i>	-	-	-	p	-	7	6	3	22	1	1	-	2	1	-	6	1	2	2	-
<i>Navicula</i>	-	-	-	-	-	-	2	-	-	-	-	2	-	1	-	-	-	-	-	-
<i>Neidium</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
<i>Nitzschia</i>	-	-	-	p	-	-	p	-	-	-	-	-	2	p	-	p	-	p	p	-
<i>Pinnularia</i>	-	-	-	-	-	-	-	-	2	-	-	-	12	-	-	13	-	-	-	-
<i>Rhizosolenia</i>	-	-	-	-	-	-	75	22	9	-	p	-	5	1	11	23	17	27	17	23
<i>Stauroneis</i>	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-
<i>Surirella</i>	-	-	-	p	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Synedra</i>	p	-	-	-	1	2	7	2	7	p	5	2	21	6	11	12	52	16	12	50
<i>Tabellaria</i>	p	-	-	4	-	-	1	1	p	7	6	8	1	p	141	28	7	1	2	36
CHLOROPHYCEAE																				
<i>Ankistrodesmus</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	p	p	-	-
<i>Arthrodesmus</i>	-	-	-	p	-	-	p	p	2	1	6	1	2	5	6	8	4	3	-	-
<i>Bambusina</i>	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
<i>Botryococcus</i>	252	17	-	5	-	-	3	-	-	-	1	p	p	4	p	1	1	3	1	-
<i>Carteria</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-
<i>Chlamydomonas</i>	10	29	-	1	6	-	3	7	4	5	p	p	1	2	-	3	p	15	p	21
<i>Closterium</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p
<i>Coccomyxa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
<i>Coelastrum</i>	-	-	-	-	p	-	-	-	p	-	2	-	-	p	4	-	-	1	-	-
<i>Cosmarium</i>	-	-	-	-	-	-	-	-	-	7	2	1	-	3	-	4	-	1	2	7
<i>Crucigenia</i>	p	2	-	2	1	-	1	-	p	p	-	-	-	p	p	-	-	-	-	-
Desmid, unident.	-	-	-	-	-	-	-	3	-	-	7	-	-	-	-	7	17	-	-	-
<i>Dictyosphaerium</i>	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	p	p	p
<i>Elakatothrix</i>	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-	-	-
<i>Gemmelicystis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
<i>Gloeocystis</i>	78	13	-	3	2	2	4	-	1	11	2	10	3	2	8	11	1	7	p	-
<i>Gloeotila</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
<i>Golenkinia</i>	-	-	-	-	-	-	-	-	-	4	-	p	-	-	-	-	2	3	-	p
<i>Gonatozygon</i>	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-	-	-	-	-	-
Chlorophyceae zoospore-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-
Chlorophyceae, unid.	-	-	-	6	-	21	1	13	-	-	1	p	1	2	1	-	2	-	-	8
<i>Gyromitus</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	1
<i>Kirchneriella</i>	-	-	-	p	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-
<i>Koliella</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	p	p	p	-	-
<i>Micractinium</i>	-	-	-	-	-	-	-	-	-	-	-	-	p	-	p	p	1	p	p	-
<i>Monomastix</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	1
<i>Monoraphidium</i>	-	-	-	-	-	p	-	-	1	p	p	p	p	-	-	-	-	-	p	-
<i>Oedogonium</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
<i>Oocystis</i>	5	8	-	16	2	15	1	11	2	4	2	11	2	4	2	7	2	p	2	-
<i>Paramastix</i>	-	-	-	-	-	-	-	-	-	-	1	-	-	-	3	-	-	-	-	-
<i>Pediastrum</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-

Table I-2 continued

Little Whitepine	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CHLOROPHYCEAE CONT'D																				
<i>Pedinomonas</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	2
<i>Planctonema</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p
<i>Polytoma</i>	-	-	-	-	-	-	-	p	-	-	-	-	p	-	-	-	-	p	-	-
<i>Quadrigula</i>	p	p	-	p	-	p	p	1	1	-	p	-	-	p	p	p	p	p	-	p
<i>Scenedesmus</i>	-	-	-	-	1	7	8	11	3	1	3	-	2	3	2	2	1	1	p	4
<i>Scourfieldia</i>	-	-	-	-	-	-	-	-	p	1	p	-	-	-	-	-	-	-	p	p
<i>Sphaerocystis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
<i>Sphaerosozma</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	3	-	-
<i>Spondylosium</i>	-	-	-	-	-	-	-	6	1	5	3	15	15	9	3	34	3	2	-	p
<i>Staurastrum</i>	-	-	-	-	-	-	-	2	7	-	p	-	1	-	p	6	2	1	10	3
<i>Stenopterobia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-
<i>Stauroidesmus</i>	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5
<i>Tetraëdron</i>	-	-	-	-	-	-	-	-	2	14	8	4	p	-	2	p	-	p	-	-
<i>Tetrastrum</i>	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-	-	-	-	-
<i>Xanthidium</i>	-	2	-	-	-	-	6	-	7	p	1	2	1	p	-	4	5	3	-	-
CHRYSOPHYCEAE																				
<i>Bicosoeca</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	p	-	-	-
<i>Bitrichia</i>	-	p	-	p	p	1	p	1	-	p	p	p	-	-	p	p	p	p	p	-
<i>Chromulina</i>	-	p	-	9	-	23	8	13	28	11	9	20	22	4	21	14	27	113	438	562
<i>Chrysidiastrum</i>	-	-	-	2	-	-	9	17	p	1	1	9	p	3	3	14	7	39	7	4
<i>Chrysochromulina</i>	p	p	-	1	-	p	14	29	p	36	16	1	8	20	205	140	181	163	154	24
<i>Chrysooccus</i>	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-	-	-	-
<i>Chrysoykos</i>	-	-	-	-	p	-	1	1	p	-	p	p	p	-	-	-	p	p	p	p
Chrysophyte, unid.	3	9	-	24	5	48	50	85	27	23	36	27	24	48	67	34	61	30	20	27
<i>Chrysophaerella</i>	-	-	-	-	-	-	-	-	-	-	5	-	2	54	13	17	134	247	7	3
<i>Chrysostephanosphaera</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	p
<i>Codonocladium</i>	-	-	-	-	-	-	-	-	-	-	p	-	1	p	-	p	1	p	-	-
<i>Desmarella</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	p	-	-	-
<i>Dinobryon</i>	47	23	-	9	1	32	22	8	7	4	4	3	24	14	14	18	15	21	8	27
<i>Epipyxis</i>	-	-	-	-	-	p	-	-	p	1	1	2	-	1	-	p	1	p	p	6
<i>Kephyrion</i>	-	-	-	p	p	p	3	p	2	1	p	p	p	1	p	1	1	p	p	1
<i>Mallomonas</i>	6	5	-	-	2	-	-	6	3	-	-	3	7	9	3	20	8	58	7	2
<i>Ochromonas</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	p	-	-	-	-	-	5
<i>Pseudokephyrion</i>	2	1	-	p	-	1	1	p	p	p	p	p	1	p	4	3	1	2	1	1
<i>Rhizochrysis</i>	-	-	-	-	-	-	-	-	2	1	2	-	2	12	5	11	14	13	3	3
<i>Spiniferomonas</i>	-	-	-	-	-	-	-	1	-	1	-	-	2	1	4	p	-	1	p	3
<i>Stalexomonas</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-
<i>Synura</i>	1	5	-	-	2	-	-	2	-	-	-	10	11	1	-	37	100	7	-	6
<i>Uroglena</i>	1	-	-	2	7	31	3	17	p	1	1	230	88	6	26	4	13	40	1	1
CRYPTOPHYCEAE																				
<i>Cryptaulax</i>	-	-	-	p	-	2	-	2	-	-	-	-	1	-	-	p	-	1	1	-
<i>Cryptomonas</i>	51	38	-	6	23	10	23	20	11	26	10	25	11	8	8	23	30	41	18	4
<i>Katablepharis</i>	2	1	-	p	1	1	6	7	1	2	1	3	5	1	2	10	3	3	1	8
<i>Pleuromastix</i>	-	-	-	-	-	-	-	-	p	p	1	p	-	p	p	1	p	-	-	-
<i>Rhodomonas</i>	-	-	-	-	-	1	1	1	-	p	p	2	-	p	-	-	2	-	-	1
CYANOPHYCEAE																				
<i>Anabaena</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-
<i>Aphanothece</i>	-	-	-	-	p	-	-	-	-	-	-	p	p	p	-	p	p	p	-	-
Cyanophyceae, unid.	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-
<i>Chroococcus</i>	-	-	-	-	-	p	-	-	p	-	p	p	3	-	p	p	-	-	2	-

Table I-2 continued

Little Whitepine	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CYANOPHYCEAE CONT'D																				
<i>Gomphosphaeria</i>	-	-	-	p	-	-	-	-	-	-	p	-	-	-	-	-	-	-	-	-
<i>Lyngbya</i>	l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	p	l	-	p
<i>Merismopedia</i>	p	4	-	l	p	p	p	l	p	p	p	p	p	-	p	p	p	p	p	p
<i>Oscillatoria</i>	l	-	-	p	-	l	p	-	p	p	p	l	l	-	-	-	-	-	-	p
<i>Pseudanabaena</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Rhabdoderma</i>	-	-	-	-	-	p	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Romeria</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	p	-
DINOPHYCEAE																				
Dinophyceae, unid.	36	5	-	-	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Gymnodinium</i>	-	-	-	49	-	24	147	67	24	32	25	23	47	15	32	75	54	30	20	101
<i>Peridinium</i>	145	172	-	105	46	85	148	161	162	171	141	111	331	247	86	170	249	224	156	109
EUGLENOPHYCEAE																				
<i>Euglena</i>	-	-	-	-	-	-	-	-	-	l	-	-	-	-	-	-	-	-	-	-
XANTHOPHYCEAE																				
<i>Stipitococcus</i>	-	-	-	-	-	-	54	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Isthmochloron</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	11



Phytoplankton from the family Chlorophyceae, *Xanthidium* (top) and *Scenedesmus* (bottom) (L. Heintsch)

Table I-3: Phytoplankton biovolume data for Whirligig Lake 1987-2006 ($\mu^3 \cdot \text{mL}^{-1} \times 10^3$).

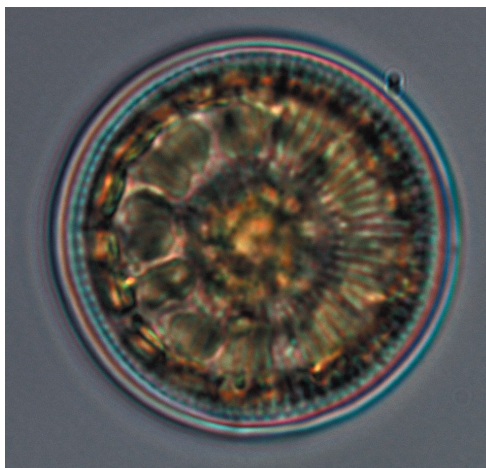
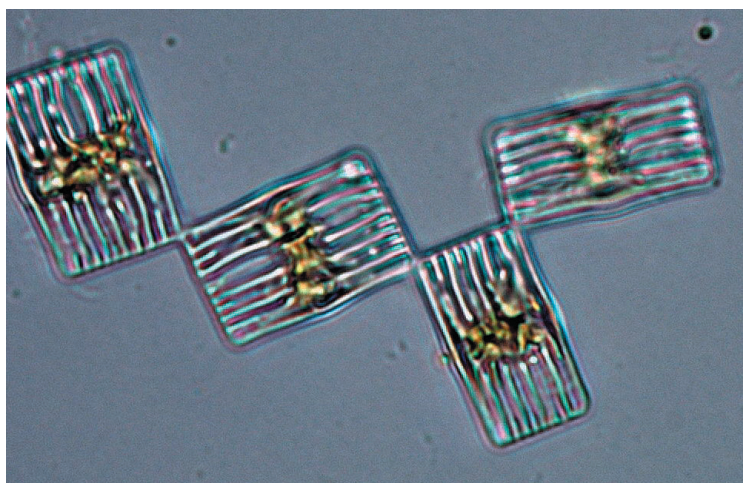
Whirligig L.	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
BACILLARIOPHYCEAE																				
<i>Actinella</i>	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Achnanthes</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p
<i>Amphora</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-
<i>Asterionella</i>	-	-	-	-	-	-	-	-	-	1	-	1	-	-	p	4	p	-	p	-
<i>Cyclotella</i>	-	-	-	-	-	-	-	-	-	1	-	p	1	p	1	p	p	-	-	-
<i>Denticula</i>	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-	-
<i>Eunotia</i>	3	-	-	-	-	-	-	-	-	-	2	-	p	1	-	-	-	-	4	1
<i>Fragilaria</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
<i>Frustulia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	2	-	-
<i>Melosira</i>	-	-	-	-	-	-	-	4	1	20	-	-	p	p	-	p	-	-	12	2
<i>Meridion</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-
<i>Neidium</i>	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
<i>Nitzschia</i>	-	-	-	-	-	-	-	-	-	-	-	p	-	-	p	-	-	-	-	-
<i>Pinnularia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
<i>Rhizosolenia</i>	-	-	-	-	-	-	-	2	1	2	-	-	-	-	-	-	-	-	-	-
<i>Stenopterobia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	1
<i>Synedra</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	p	p	p	2	-	p	p
<i>Tabellaria</i>	13	-	-	-	-	-	-	1	-	-	4	1	p	2	2	-	p	7	-	1
CHLOROPHYCEAE																				
<i>Arthrodesmus</i>	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2	1	p	-	-	-
<i>Botryococcus</i>	-	-	-	-	-	2	1	-	-	2	14	20	3	2	3	-	3	48	25	53
<i>Chlamydomonas</i>	57	25	-	26	1	9	-	11	1	3	-	p	1	1	1	3	11	2	1	2
<i>Coccomyxa</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	p
<i>Coelastrum</i>	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	p
<i>Crucigenia</i>	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Desmid, unid.	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
<i>Dictyosphaerium</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	p	-
<i>Euastrum</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-
<i>Gemmelicystis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	p	p	-	3	-	p	-
<i>Gloeocystis</i>	-	2	-	-	-	8	4	1	4	3	11	4	5	4	4	5	p	6	-	-
<i>Gloeotila</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p
<i>Golenkinia</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-
Green, unid.	-	-	-	3	-	2	-	4	2	1	1	p	-	p	p	3	2	-	p	-
<i>Gyromitus</i>	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-
<i>Kirchneriella</i>	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-
<i>Monomastix</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	1
<i>Monoraphidium</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	p	-	-	-	-
<i>Mougeotia</i>	-	-	-	-	-	-	-	-	-	2	11	-	-	14	-	-	-	-	-	p
<i>Oedogonium</i>	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
<i>Oocystis</i>	1	-	-	4	8	36	5	15	6	11	2	4	6	6	12	7	1	3	3	1
<i>Pedinomonas</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	3
<i>Pleurotaenium</i>	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-
<i>Polytoma</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	p	-	-	-	p
<i>Quadrigula</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Scenedesmus</i>	-	-	-	-	-	1	-	1	1	-	-	-	-	p	-	-	p	-	-	-
<i>Scourfieldia</i>	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	p	1	-	-	p
<i>Sphaerocystis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2
<i>Staurastrum</i>	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	p	-
<i>Tetracladus</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-
<i>Tetraëdron</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-

Table I-3 continued

Whirligig L.	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
CHLOROPHYCEAE CONT'D																				
<i>Xanthidium</i>	1	4	-	2	-	-	-	-	1	-	1	-	-	1	-	14	14	1	-	-
CHRYSOPHYCEAE																				
<i>Bicosoeca</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	1	-	-	p
<i>Bitrichia</i>	-	-	-	-	-	-	-	-	1	-	-	p	p	p	p	p	p	-	p	p
<i>Chromulina</i>	-	-	-	9	-	7	5	12	16	6	3	5	1	1	6	5	16	10	3	36
<i>Chrysidiastrum</i>	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	3	-	-	3
<i>Chrysochromulina</i>	-	-	-	-	-	-	-	8	7	-	-	-	1	-	39	13	150	1	1	8
<i>Chrysococcus</i>	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-	-	-
<i>Chrysolykos</i>	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	p	p	-	-	-
Chrysophyte, unid.	22	2	-	18	1	2	34	17	16	8	17	7	3	7	7	10	39	7	10	2
<i>Chrysosphaerella</i>	-	-	-	-	-	-	-	-	-	-	44	3	15	5	76	10	22	3	28	4
<i>Codonocladium</i>	-	-	-	-	-	1	-	1	1	-	-	p	p	2	p	1	-	-	-	-
<i>Desmarella</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	p	-	-	-
<i>Dinobryon</i>	200	97	-	11	3	6	2	84	19	12	32	5	26	15	12	6	23	9	9	24
<i>Epipyxis</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-	-	-
<i>Kephyrion</i>	-	-	-	1	-	-	-	-	1	-	-	p	1	p	p	p	1	-	p	p
<i>Mallomonas</i>	1	7	-	3	26	25	5	87	5	3	12	1	10	27	11	2	10	9	44	3
<i>Pleuromonas</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-
<i>Pseudokephyrion</i>	-	1	-	-	-	-	-	-	-	-	-	p	1	-	-	-	2	-	-	-
<i>Rhizochrysis</i>	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	7	-	-	-
<i>Spiniferomonas</i>	-	-	-	3	-	-	-	-	-	-	-	-	1	-	-	p	1	-	-	-
<i>Synura</i>	8	5	-	2	-	-	4	78	6	-	-	8	2	2	5	2	39	8	3	3
<i>Uroglena</i>	-	-	-	-	17	183	26	10	20	33	2	9	29	24	2	1	2	90	12	12
CRYPTOPHYCEAE																				
<i>Chroomonas</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
<i>Cryptaulax</i>	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	4	p	1	p	p
<i>Cryptomonas</i>	112	1061	-	94	64	28	40	29	26	35	23	15	23	37	17	39	14	17	35	17
<i>Cyathomonas</i>	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
<i>Katablepharis</i>	-	-	-	2	2	7	2	4	1	1	-	p	p	1	1	-	-	-	p	p
<i>Pleuromastix</i>	-	-	-	-	-	-	-	-	-	-	2	p	1	1	1	p	1	-	-	-
<i>Rhodomonas</i>	-	-	-	-	-	-	-	1	1	1	-	p	-	-	-	-	-	-	p	-
CYANOPHYCEAE																				
<i>Anabaena</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-
<i>Aphanothece</i>	-	-	-	-	-	-	-	-	-	-	-	p	p	p	-	-	p	-	-	-
<i>Chroococcus</i>	-	-	-	-	-	-	8	2	-	-	-	10	p	1	1	6	1	11	3	6
<i>Cyanarcus</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	p	-
<i>Lyngbya</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	p	-	-	-	-
<i>Merismopedia</i>	-	-	-	-	-	1	1	-	-	-	-	2	1	3	8	10	2	6	5	5
<i>Oscillatoria</i>	-	-	-	1	-	-	-	-	-	-	-	p	-	p	-	-	-	-	-	-
DINOPHYCEAE																				
Dinophyceae, unid.	16	10	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Gymnodinium</i>	-	-	-	9	-	12	142	7	136	6	34	29	40	80	62	90	52	137	148	27
<i>Peridinium</i>	159	59	-	53	11	3	6	-	13	25	4	-	-	1	4	2	7	1	2	10
EUGLENOPHYCEAE																				
<i>Euglena</i>	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Euglenophyceae, unid.	-	-	-	-	-	-	-	-	-	-	-	3	1	-	-	7	1	-	-	-
XANTHOPHYCEAE																				
<i>Goniochloris</i>	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Isthmochloron</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1

Table I-4: Phytoplankton biovolume data for Wilderness Lake 1987-2006 ($\mu^3 \cdot \text{mL}^{-1} \times 10^3$).

Wilderness Lake	1987	1988	Wilderness Lake	1987	1988
BACILLARIOPHYCEAE			CHRYSTOPHYCEAE		
<i>Achnanthes</i>	-	1	<i>Bitrichia</i>	p	-
<i>Asterionella</i>	1	1	<i>Chromulina</i>	-	14
<i>Eunotia</i>	-	p	<i>Chrysochromulina</i>	p	p
<i>Navicula</i>	1	1	Chrysophyte, unid.	11	37
<i>Nitzschia</i>	-	2	<i>Dinobryon</i>	23	4
<i>Tabellaria</i>	-	1	<i>Mallomonas</i>	19	-
CHLOROPHYCEAE			<i>Synura</i>	1	-
<i>Chlamydomonas</i>	1	p	<i>Uroglena</i>	1	-
<i>Euastrum</i>	-	p	CRYPTOPHYCEAE		
<i>Gloeocystis</i>	4	-	<i>Cryptomonas</i>	26	2
Green, unid.	-	3	DINOPHYCEAE		
<i>Kirchneriella</i>	4	-	Dinophyceae, unid.	3	-
<i>Oocystis</i>	7	37	<i>Gymnodinium</i>	-	4
<i>Quadrigula</i>	-	p	XANTHOPHYCEAE		
<i>Xanthidium</i>	1	-	<i>Goniochloris</i>	-	1



Phytoplankton from the family Bacillariophyceae, *Cyclotella* (top) and *Tabellaria* (bottom) (L. Heintsch)

Appendix II

Results of crustacean zooplankton enumeration and identification for the Aurora Trout Lakes,
1987 - 2006

Before species richness calculations were completed, some groups were combined and reduced into single taxonomic groups, according to current understanding of zooplankton taxonomy. These taxonomic reductions are necessary to avoid counting species/groups separately when they are in fact considered the same due to recent changes in taxonomy, or for taxa so physically similar that identifications are not reliable. These are:

Daphnia pulex + *Daphnia pulicaria* + *Daphnia catawba* + *Daphnia minnehaha* = *Daphnia pulex*
complex

Bosmina (Sinobosmina) sp. + *Bosmina longirostris* + *Bosmina freyi* + *Bosmina liederi* =
Bosmina sp.

Epischura lacustris + *Epischura lacustris copepodid* = *Epischura lacustris*

Eucyclops speratus + *Eucyclops neomacruroides* + *Eucyclops elegans* = *Eucyclops elegans*

Diaphanosoma brachyurum + *Diaphanosoma birgei* = *Diaphanosoma birgei*

Daphnia mendotae + *Daphnia rosea* = *Daphnia mendotae*

Tropocyclops prasinus mexicanus + *Tropocyclops extensus* = *Tropocyclops extensus*

Holopedium gibberum + *Holopedium glacialis* = *Holopedium gibberum*

Calanoid nauplii + *Calanoid copepodid* = *Calanoid immature*

Cyclopoid nauplii + *Cyclopoid copepodid* = *Cyclopoid immature*

Table II - 1: Guide to abbreviations used in this section. Taxa indicated with an asterisk have been combined with others as per description on the previous page.

SP CODE	ABBREVIATION	FULL NAME
101	A CURVIROSTRIS	ACANTHOLEBERIS CURVIROSTRIS
102	A HARPAE	ACROPERUS HARPAE
109	ALONA SP	ALONA SP
115	CERIODAPHNIA SP	CERIODAPHNIA SP.
118	C SPHAERICUS	CHYDORUS SPHAERICUS
119	D AMBIGUA	DAPHNIA (DAPHNIA) AMBIGUA
122	D MENDOTAE*	DAPHNIA (HYALODAPHNIA) MENDOTAE*
126	D PULEX COMPLEX*	DAPHNIA (DAPHNIA) PULEX COMPLEX *
132	E COREGONI	EUBOSMINA (EUBOSMINA) COREGONI
133	E TUBICEN	EUBOSMINA (NEOBOSMINA) TUBICEN
135	H GIBBERUM*	HOLOPEDIUM GIBBERUM*
136	I SPINIFER	ILYOCRYPTUS SPINIFER
137	L SETIFERA	LATONA SETIFERA
142	P PEDICULUS	POLYPHEMUS PEDICULUS
145	S CRYSTALLINA	SIDA CRYSTALLINA
150	E LONGISPINA	EUBOSMINA (EUBOSMINA) LONGISPINA
152	D BIRGEI*	DIAPHANOSOMA BIRGEI*
155	D ACUTIROSTRIS	DISPARALONA ACUTIROSTRIS
164	DAPHNIA SP	DAPHNIA SP.
168	BOSMINA SP*	BOSMINA SP.*
204	L MINUTUS	LEPTODIAPTOMUS MINUTUS
205	S OREGONENSIS	SKISTODIAPTOMUS OREGONENSIS
208	L SICILIS	LEPTODIAPTOMUS SICILIS
210	E LACUSTRIS*	EPISCHURA LACUSTRIS*
302	D B THOMASI	DIACYCLOPS BICUSPIDATUS THOMASI
303	C SCUTIFER	CYCLOPS SCUTIFER
304	A VERN COMPLEX	ACANTHOCYCLOPS VERNALIS COMPLEX
306	E AGILIS	EUCYCLOPS AGILIS
308	M ALBIDUS	MACROCYCLOPS ALBIDUS
309	M EDAX	MESOCYCLOPS EDAX
310	O MODESTUS	ORTHOCYCLOPS MODESTUS
338	E ELEGANS*	EUCYCLOPS ELEGANS*
347	T EXTENSUS*	TROPOCYCLOPS EXTENSUS*
345	HARPACTICOID SP	HARPACTICOID SP
	CALANOID IMMATURE*	CALANOID IMMATURE*
	CYCLOPOID IMMATURE*	CYCLOPOID IMMATURE*
	NAUPLII	NAUPLII

Table II-2: Crustacean zooplankton species presence/absence data for Aurora Whitepine Lake, 1981-2006. * indicates taxa where more than one group were combined - see p. 44 for further explanation. X = species present; - = species not present; R = rare (only one individual found in a given year).

		SAMPLE SIZE	102 - A HARPAE	109 - ALONA SP	115 - CERIODAPHNIA SP	118 - C SPHAERICUS	122 - D MENDOTAE*	126 - D PULEX COMPLEX*	135 - H GIBBERUM*	136 - I SPINIFER	137 - L SETIFERA	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	155 - D ACUTIROSTRIS	168 - DAPHNIA SP	164 - BOSMINA SP*	204 - L MINUTUS	205 - S OREGONENSIS	208 - L SICILIS	210 - E LACUSTRIS*	302 - D B THOMASI	303 - C SCUTIFER	304 - A VERN COMPLEX	306 - E AGILIS	308 - MALBIDUS	309 - M EDAX	310 - O MODESTUS	334 - E ELEGANS*	338 - T EXTENSUS*	345 - HARPACTICOID SP	IMMATURE CALANOID*	IMMATURE CYCLOPOID*		
AWP	1981	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	X	-	X	-	-	-	-	X	-	-	-	-	X	-			
AWP	1987	12	R	-	-	-	-	X	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-	-	-	-	-	X	-	-	-	-	X	X		
AWP	1988	12	R	R	-	X	-	-	R	-	R	-	-	-	-	-	X	X	-	-	-	X	-	-	-	-	-	-	X	-	-	-	X	X		
AWP	1990	12	R	-	-	X	-	-	-	-	-	R	-	X	-	-	X	X	-	-	-	-	-	-	R	-	-	X	X	R	-	-	-	X	X	
AWP	1991	12	-	-	-	X	-	X	R	-	-	X	R	R	-	-	X	X	-	-	-	R	-	-	-	-	-	X	X	-	-	-	-	X	X	
AWP	1992	7	X	X	-	X	-	X	X	-	-	R	-	X	-	-	X	X	-	-	-	X	-	-	-	-	-	X	X	-	-	-	-	X	X	
AWP	1993	6	R	R	R	X	-	X	X	-	-	-	-	X	-	-	X	X	-	-	-	-	-	-	X	-	-	X	X	-	-	-	-	X	X	
AWP	1994	6	-	R	-	X	X	X	X	-	-	X	-	X	R	-	R	X	X	X	-	X	X	-	-	-	-	X	X	-	-	-	-	X	X	
AWP	1995	4	-	X	-	X	-	X	X	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-	X	-	-	X	X	-	-	-	-	X	X	
AWP	1996	4	-	-	-	-	-	X	X	-	-	-	-	-	-	-	X	X	X	-	-	-	-	-	R	-	-	X	X	-	-	-	-	X	X	
AWP	1997	5	R	-	-	R	R	X	R	-	-	-	-	-	-	-	X	X	X	-	-	-	-	R	-	-	-	X	X	-	X	-	-	X	X	
AWP	1998	4	R	-	-	R	-	X	X	R	-	R	-	-	-	-	X	X	X	-	-	-	-	X	-	-	-	X	X	-	-	-	-	X	X	
AWP	1999	6	R	R	-	X	R	X	X	-	-	R	-	-	R	R	X	X	X	-	-	-	R	-	-	X	-	X	X	-	X	-	-	X	X	
AWP	2000	6	-	R	-	X	-	X	X	-	-	X	-	-	-	R	X	X	X	-	-	-	R	R	-	-	-	X	X	-	X	-	-	X	X	
AWP	2001	6	-	R	-	X	X	X	X	-	-	X	-	X	-	-	X	X	X	-	-	-	X	-	-	-	R	X	X	-	-	-	-	X	X	
AWP	2002	6	-	-	-	-	-	X	X	-	-	X	-	X	-	-	X	X	X	-	-	-	R	R	-	-	-	X	-	-	X	-	-	X	X	
AWP	2003	5	-	-	-	-	R	X	X	-	-	X	-	X	-	-	X	X	X	-	-	-	R	-	-	-	-	X	R	-	X	-	-	X	X	
AWP	2004	5	-	-	-	X	-	X	X	-	-	X	-	X	-	R	X	X	X	-	-	-	R	-	-	-	-	X	-	-	-	-	-	-	X	X
AWP	2005	6	-	-	-	R	-	X	X	-	R	-	-	X	X	-	X	X	X	-	-	-	R	X	-	-	-	X	-	-	X	-	-	-	X	X
AWP	2006	6	-	-	-	X	-	X	X	-	-	X	-	X	-	-	X	X	X	-	-	R	X	R	-	-	-	X	R	-	-	R	-	-	X	X

Table II-3: Crustacean zooplankton species presence/absence data for Little Whitepine Lake, 1987-2006. * indicates taxa where more than one group were combined - see p.44 for further explanation. X = species present; - = species not present; R = rare (only one individual found in a given year).

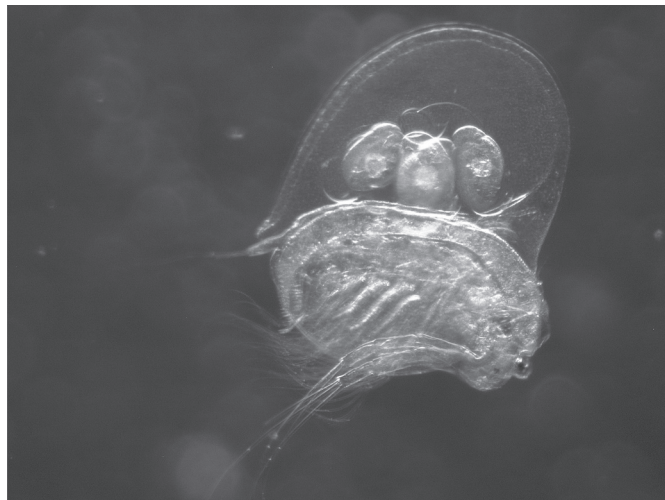
		SAMPLE SIZE	102 - A HARPAE	109 - ALONA SP	118 - C SPHAERICUS	119 - D AMBIGUA	122 - D MENDOTAE*	126 - D PULEX COMPLEX*	132 - E COREGONI	133 - E TUBICEN	135 - H GIBBERUM*	137 - L SETIFERA	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	168 - DAPHNIA SP	164 - BOSMINA SP*	204 - L MINUTUS	302 - D B THOMASI	303 - C SCUTIFER	308 - M ALBIDUS	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	IMMATURE CALANOID*	IMMATURE CYCLOPOID*
LITTLE WHITEPINE	1987	12	-	R	R	-	R	X	X	-	X	-	-	-	-	-	X	X	X	-	-	X	X	-	X	X	
LITTLE WHITEPINE	1988	12	R	-	-	-	-	X	-	-	X	-	-	-	-	X	-	X	-	-	-	-	R	X	-	X	X
LITTLE WHITEPINE	1990	12	-	-	-	-	-	X	-	-	X	-	-	-	X	-	X	X	X	-	X	-	X	X	-	X	X
LITTLE WHITEPINE	1991	12	-	-	X	-	-	X	-	R	X	R	X	-	X	X	R	X	X	X	R	-	R	X	-	X	X
LITTLE WHITEPINE	1992	7	-	-	R	-	-	X	R	-	X	-	-	X	X	X	X	X	X	X	R	-	-	X	-	X	X
LITTLE WHITEPINE	1993	6	-	-	X	-	-	X	-	-	X	-	-	-	R	X	-	X	X	R	X	-	-	-	R	X	X
LITTLE WHITEPINE	1994	6	-	-	-	-	-	X	-	-	X	-	-	-	-	X	-	X	X	X	-	-	-	-	-	X	X
LITTLE WHITEPINE	1995	4	-	-	R	-	-	X	-	-	X	-	-	-	X	X	R	X	X	-	-	-	-	X	-	X	X
LITTLE WHITEPINE	1996	4	-	-	R	-	-	X	-	-	X	-	-	R	-	X	-	X	X	-	-	-	-	X	X	X	X
LITTLE WHITEPINE	1997	5	-	-	-	-	-	X	-	-	X	-	-	-	X	X	X	X	X	X	-	-	-	R	X	X	X
LITTLE WHITEPINE	1998	4	-	-	-	-	-	-	-	-	X	-	X	-	X	X	X	X	X	X	-	-	-	-	X	X	X
LITTLE WHITEPINE	1999	6	-	-	R	-	-	X	-	-	X	-	-	-	X	X	-	X	X	X	X	-	-	X	X	X	X
LITTLE WHITEPINE	2000	6	-	-	R	-	-	-	-	-	X	-	-	-	X	X	-	X	X	X	X	-	R	X	X	X	X
LITTLE WHITEPINE	2001	6	-	-	R	-	X	R	-	-	X	-	X	-	X	X	R	X	X	X	-	R	R	-	X	X	X
LITTLE WHITEPINE	2002	6	-	-	X	-	R	R	-	R	X	-	X	-	-	X	R	X	X	-	R	-	-	-	X	X	X
LITTLE WHITEPINE	2003	5	-	-	R	-	X	X	-	R	X	R	R	-	X	X	X	X	X	R	X	-	X	-	X	X	X
LITTLE WHITEPINE	2004	5	-	-	R	-	-	R	-	-	X	-	-	-	X	X	-	X	X	R	X	-	-	-	X	X	X
LITTLE WHITEPINE	2005	6	-	-	R	-	X	X	-	-	X	-	R	-	X	X	-	X	X	X	X	-	R	-	X	X	X
LITTLE WHITEPINE	2006	6	-	R	X	R	-	X	-	-	X	R	-	X	X	X	-	X	X	-	-	-	X	-	X	X	X

Table II-4: Crustacean zooplankton species presence/absence data for Whirligig Lake, 1987-2006. * indicates taxa where more than one group were combined - see p.44 for further explanation. X = species present; - = species not present; R = rare (only one individual found in a given year).

		SAMPLE SIZE	101 - A CURVIROSTRIS	102 - A HARPAE	109 - ALONA SP	118 - C SPHAERICUS	119 - D AMBIGUA	122 - D MENDOTAE*	126 - D PULEX COMPLEX*	135 - H GIBBERUM*	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	168 - DAPHNIA SP	164 - BOSMINA SP*	204 - L MINUTUS	205 - S OREGONENSIS	302 - D B THOMASI	303 - C SCUTIFER	304 - A VERN COMPLEX	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	IMMATURE CALANOID*	IMMATURE CYCLOPOID*	
Whirligig	1987	12	-	-	-	X	-	-	X	X	-	-	-	-	-	X	X	-	-	-	R	X	X	-	X	X	
Whirligig	1988	12	-	-	R	X	-	-	-	X	-	-	-	-	-	X	X	-	-	-	R	X	X	-	X	X	
Whirligig	1990	12	-	-	R	-	-	-	X	X	-	-	-	X	-	X	X	-	-	-	-	X	X	X	X	X	
Whirligig	1991	12	-	-	R	R	-	-	X	X	X	X	-	X	-	X	X	-	R	-	-	-	X	X	-	X	X
Whirligig	1992	7	-	-	-	X	-	-	X	X	-	-	X	-	-	X	X	-	-	-	-	X	X	-	X	X	
Whirligig	1993	6	-	-	-	-	-	X	X	X	-	-	X	X	-	X	X	-	R	-	-	-	X	X	-	X	X
Whirligig	1994	6	-	-	-	R	-	-	X	X	R	-	X	-	-	X	X	-	R	-	-	-	X	X	-	X	X
Whirligig	1995	4	-	-	-	R	-	-	X	X	-	-	X	R	-	X	X	-	-	-	-	-	X	X	-	X	X
Whirligig	1996	4	-	-	-	-	X	-	X	X	-	-	X	R	-	X	X	R	-	R	-	-	X	X	-	X	X
Whirligig	1997	5	-	-	-	R	X	-	X	X	X	-	X	-	X	X	X	-	-	R	-	-	X	X	X	X	X
Whirligig	1998	4	-	-	-	-	X	-	X	X	X	-	X	-	X	X	X	-	R	-	-	-	X	X	R	X	X
Whirligig	1999	6	-	-	-	R	X	R	X	X	R	-	X	-	X	X	X	-	-	-	-	-	X	X	X	X	X
Whirligig	2000	6	-	-	-	-	X	-	X	X	X	-	X	-	X	X	X	-	-	-	-	-	X	X	-	X	X
Whirligig	2001	6	-	-	-	X	X	-	X	X	X	-	X	-	X	X	X	-	-	-	-	-	X	X	-	X	X
Whirligig	2002	6	R	R	-	R	-	R	X	X	R	-	R	X	X	X	X	-	-	-	-	-	X	X	X	X	X
Whirligig	2003	5	-	-	-	-	-	X	X	X	-	-	-	-	X	X	X	-	R	-	-	-	X	X	X	X	X
Whirligig	2004	5	-	-	-	R	-	-	X	X	R	-	-	-	X	X	X	-	-	-	-	-	X	X	X	X	X
Whirligig	2005	6	-	-	R	-	-	X	X	X	X	-	-	R	X	X	X	-	-	X	-	-	X	X	X	X	X
Whirligig	2006	6	-	-	-	-	-	R	X	X	X	-	X	-	X	X	X	-	R	-	-	-	X	X	X	X	X

Table II-5: Crustacean zooplankton species presence/absence data for Wilderness Lake, 1987-1988. * indicates taxa where more than one group were combined - see p.44 for further explanation. X = species present; - = species not present; R = rare (only one individual found in a given year).

		SAMPLE SIZE	101 - A CURVIROSTRIS	118 - C SPHAERICUS	137 - L SETIFERA	142 - P PEDICULUS	164 - BOSMINA SP*	204 - L MINUTUS	IMMATURE CYCLOPOID*	IMMATURE CALANOID*
Wilderness	1987	12	X	X	-	X	X	X	X	X
Wilderness	1988	2	-	-	R	-	-	X	-	X



Two crustacean zooplankton species commonly found in the study lakes; *Daphnia catawba* (part of the *Daphnia pulex* complex) (Top); *Holopedium gibberum* (Bottom) (L. Witty)

Table II-6: Crustacean zooplankton density data (number per m³) for Aurora Whitepine Lake, 1981-2006. * indicates taxa where more than one group were combined - see p.44 for further explanation. Superscripts indicate where replicate samples were taken.

	102 - A HARPAE	109 - ALONA SP	115 - CERIODAPHNIA SP.	118 - C SPHAERICUS	122 - D MENDOTAE	126 - D PULEX COMPLEX *	135 - H GIBBERUM*	136 - I SPINIFER	137 - L SETIFERA	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	155 - D ACUTIROSTRIS	164 - BOSMINA SP *	168 - DAPHNIA SP	204 - L MINUTUS	205 - S OREGONENSIS	208 - L SICILIS	210 - E LACUSTRIS*	302 - D B THOMASI	303 - C SCUTIFER	304 - A VERN COMPLEX	306 - E AGILIS	308 - M ALBIDUS	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	347 - E ELEGANS*	345 - HARPACTICOID SP	CALANOID IMMATURE*	CYCLOPOID IMMATURE*	NAUPLII
6/1/81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	2.1	0.0	0.1	
5/27/87 ^a	13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.5	0.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	472.3	222.2	0.0
5/27/87 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	138.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	791.8	430.6	0.0
6/22/87 ^a	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	252.7	0.0	285.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	582.3	76.9	0.0
6/22/87 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	604.0	0.0	648.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0	1378.5	188.7	0.0
7/29/87 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	172.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	192.7	0.0	0.0	0.0	669.4	1463.4	0.0
7/29/87 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	129.3	0.0	0.0	0.0	312.5	355.6	0.0
8/27/87 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	742.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1125.6	0.0	0.0	0.0	1029.8	22961.7	0.0
8/27/87 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	417.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	778.2	0.0	0.0	0.0	911.0	5678.7	0.0
10/1/87 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.6	0.0	0.0	0.0	91.3	572.8	0.0
10/1/87 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	109.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.6	0.0	0.0	0.0	147.9	155.7	0.0
10/21/87 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	126.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.3	27.1	0.0
10/21/87 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7	58.2	0.0
5/25/88 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	123.4	137.1	0.0
5/25/88 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	231.4	81.0	0.0
6/20/88 ^a	0.0	0.0	0.0	24.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.7	0.0	594.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1	0.0	0.0	0.0	773.5	350.1	0.0
6/20/88 ^b	0.0	0.0	0.0	0.0	0.0	0.0	7.2	0.0	7.2	0.0	0.0	0.0	0.0	0.0	35.9	0.0	459.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	0.0	0.0	0.0	839.2	316.1	0.0
7/28/88 ^a	0.0	0.0	0.0	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	484.2	0.0	586.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	1907.3	2841.3	0.0
7/28/88 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	221.8	0.0	454.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1528.0	1503.4	0.0
8/31/88 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	182.2	0.0	694.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	192.4	0.0	0.0	0.0	1212.9	1916.9	0.0
8/31/88 ^b	0.0	0.0	0.0	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	202.5	0.0	823.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	354.4	0.0	0.0	0.0	968.6	1781.9	0.0
9/20/88 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1747.0	0.0	1924.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	1935.8	830.2	0.0
9/20/88 ^a	11.1	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1199.2	0.0	1510.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	111.0	0.0	0.0	0.0	1665.6	1199.2	0.0
11/2/88 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	506.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.2	0.0
11/2/88 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	805.2	0.0	0.0	0.0	18.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0
5/15/90 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	35.5	7.1	0.0
5/15/90 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	642.9	0.0	0.0
6/19/90 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	140.3	0.0	50.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.2	40.1	0.0

Table II-6 continued

	102 - A HARPAE	109 - ALONA SP	115 - CERIODAPHNIA SP.	118 - C SPHAERICUS	122 - D MENDOTAE	126 - D PULEX COMPLEX *	135 - H GIBBERUM*	136 - I SPINIFER	137 - L SETIFERA	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	155 - D ACUTIROSTRIS	164 - BOSMINA SP *	168 - DAPHNIA SP	204 - L MINUTUS	205 - S OREGONENSIS	208 - L SICILIS	210 - E LACUSTRIS*	302 - D B THOMASI	303 - C SCUTIFER	304 - A VERN COMPLEX	306 - E AGILIS	308 - M ALBIDUS	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	347 - E ELEGANS*	345 - HARPACTICOID SP	CALANOID IMMATURE*	CYCLOPOID IMMATURE*	NAUPLII
6/19/90 ^b	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	10.0	0.0	0.0	370.8	0.0	200.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	340.7	200.4	0.0	
8/1/90 ^a	0.0	0.0	0.0	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.6	0.0	470.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9	328.3	0.0	0.0	0.0	523.5	3617.2	0.0	
8/1/90 ^b	0.0	0.0	0.0	26.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	133.1	0.0	346.0	0.0	0.0	0.0	0.0	0.0	8.9	0.0	0.0	230.7	0.0	0.0	0.0	381.5	5427.0	0.0	
8/30/90 ^a	0.0	0.0	0.0	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.4	0.0	179.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	348.9	0.0	0.0	0.0	414.9	2800.4	0.0	
8/30/90 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.0	0.0	226.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	433.7	0.0	0.0	0.0	386.6	3607.5	0.0	
9/26/90 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	351.8	0.0	615.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	1090.6	0.0	0.0	0.0	193.5	3992.9	0.0	
9/26/90 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	161.2	0.0	586.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.0	1583.1	0.0	0.0	0.0	88.0	5145.1	0.0	
11/1/90 ^a	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	0.0	114.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5	0.0	9.5	0.0	38.0	76.0	0.0	
11/1/90 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	47.5	0.0	
5/28/91 ^a	0.0	0.0	0.0	0.0	0.0	55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.3	0.0	13.9	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1074.1	416.7	0.0	
5/28/91 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	104.2	0.0	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.0	1444.5	444.5	0.0	
6/17/91 ^a	0.0	0.0	0.0	9.6	0.0	0.0	0.0	0.0	0.0	9.6	0.0	0.0	0.0	0.0	1413.8	0.0	559.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.9	9.6	0.0	0.0	0.0	1044.5	694.1	0.0	
6/17/91 ^b	0.0	0.0	0.0	31.8	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0	0.0	3512.2	0.0	604.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.4	21.2	0.0	0.0	0.0	2555.5	519.6	0.0	
7/24/91 ^a	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.7	0.0	754.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	211.3	0.0	0.0	0.0	0.0	3396.5	2898.3	0.0	
7/24/91 ^b	0.0	0.0	0.0	0.0	0.0	0.0	14.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5	0.0	622.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	212.3	14.2	0.0	0.0	0.0	3594.5	2193.5	0.0	
8/14/91 ^a	0.0	0.0	0.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.9	0.0	430.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	513.4	111.0	0.0	0.0	0.0	832.6	9176.8	0.0	
8/14/91 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	455.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	287.6	191.7	0.0	0.0	0.0	455.4	8125.1	0.0	
9/9/91 ^a	0.0	0.0	0.0	16.3	0.0	8.2	0.0	0.0	0.0	8.2	8.2	0.0	0.0	0.0	0.0	0.0	171.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	114.2	228.4	0.0	0.0	0.0	244.7	3153.6	0.0	
9/9/91 ^b	0.0	0.0	0.0	27.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.2	0.0	282.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	136.5	282.0	0.0	0.0	0.0	282.0	3438.6	0.0	
10/9/91 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	17.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	549.3	0.0	0.0	0.0	71.7	1599.8	0.0	
10/9/91 ^b	0.0	0.0	0.0	13.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.3	857.4	0.0	0.0	0.0	119.4	2229.1	0.0	
5/26/92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	304.6	249.2	0.0	
6/22/92	27.5	18.4	0.0	91.8	0.0	5.7	0.0	0.0	0.0	9.2	0.0	9.2	0.0	0.0	156.1	0.0	459.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5	0.0	0.0	0.0	532.5	1932.6	0.0	
7/13/92	3.9	0.0	0.0	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.0	179.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6	235.7	0.0	0.0	0.0	608.0	2152.6	0.0	
8/12/92	0.0	0.0	0.0	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.8	0.0	0.0	0.0	7.9	0.0	0.0	0.0	23.7	220.9	0.0	0.0	0.0	575.8	1175.3	0.0	
9/9/92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	184.5	0.0	228.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.7	361.6	0.0	0.0	0.0	162.4	1500.6	0.0	
10/6/92	0.0	0.0	0.0	0.0	0.0	0.0	34.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	104.7	0.0	62.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	293.1	0.0	0.0	0.0	55.8	635.1	0.0	
10/27/92	0.0	0.0	0.0	0.0	0.0	13.7	36.4	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	104.7	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	22.8	0.0	0.0	0.0	27.3	245.8	0.0	

Table II-6 continued

	102 - A HARPAE	109 - ALONA SP	115 - CERIODAPHNIA SP.	118 - C SPHAERICUS	122 - D MENDOTAE	126 - D PULEX COMPLEX *	135 - H GIBBERUM*	136 - I SPINIFER	137 - L SETIFERA	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	155 - D ACUTIROSTRIS	164 - BOSMINA SP *	168 - DAPHNIA SP	204 - L MINUTUS	205 - S OREGONENSIS	208 - L SICILIS	210 - E LACUSTRIS*	302 - D B THOMASI	303 - C SCUTIFER	304 - A VERN COMPLEX	306 - E AGILIS	308 - M ALBIDUS	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	347 - E ELEGANS*	345 - HARPACTICOID SP	CALANOID IMMATURE*	CYCLOPOID IMMATURE*	NAUPLII
6/1/93	0.0	7.3	0.0	0.0	0.0	0.0	14.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	793.7	1301.0	0.0
6/22/93	6.9	0.0	0.0	20.7	0.0	0.0	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.5	0.0	325.0	0.0	0.0	0.0	0.0	0.0	27.7	0.0	0.0	6.9	27.7	0.0	0.0	0.0	297.3	861.4	0.0
7/29/93	0.0	0.0	0.0	0.0	0.0	0.0	16.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	353.5	0.0	875.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.5	252.5	0.0	0.0	0.0	2356.8	8005.9	0.0
8/23/93	0.0	0.0	0.0	11.5	0.0	45.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	290.7	0.0	260.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	149.2	765.1	0.0	0.0	0.0	612.1	12417.5	0.0
9/29/93	0.0	0.0	9.5	0.0	0.0	85.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	265.6	0.0	417.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	417.4	0.0	0.0	0.0	237.2	4032.4	0.0
10/28/93	0.0	0.0	0.0	0.0	0.0	36.7	0.0	0.0	0.0	0.0	0.0	12.2	0.0	0.0	18.4	0.0	201.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	0.0	0.0	0.0	189.6	367.0	0.0
5/17/94	0.0	5.3	0.0	5.3	26.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.8	5.3	21.2	0.0	0.0	5.3	5.3	0.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0	0.0	248.7	84.7	0.0
6/16/94	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0	23.6	0.0	0.0	0.0	0.0	269.5	0.0	463.3	0.0	0.0	0.0	9.5	0.0	0.0	0.0	0.0	4.7	18.9	0.0	0.0	0.0	1248.1	728.0	0.0
7/20/94	0.0	0.0	0.0	0.0	14.7	117.7	0.0	0.0	0.0	0.0	0.0	5.5	0.0	0.0	44.1	0.0	183.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.2	868.1	0.0	0.0	0.0	360.5	2582.4	0.0
8/22/94	0.0	0.0	0.0	0.0	0.0	209.9	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	123.4	0.0	197.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.6	790.0	0.0	0.0	0.0	331.7	12572.4	0.0
10/4/94	0.0	0.0	0.0	4.9	9.8	117.9	137.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.9	9.8	0.0	14.7	0.0	0.0	0.0	0.0	0.0	0.0	456.0	0.0	0.0	0.0	34.4	1439.6	0.0
10/25/94	0.0	0.0	0.0	0.0	0.0	260.9	22.2	0.0	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	299.8	0.0	0.0	0.0	5.6	794.5	0.0
5/31/95	0.0	11.6	0.0	11.6	0.0	29.1	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	325.7	610.6	0.0
7/11/95	0.0	9.4	0.0	0.0	0.0	414.2	113.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	263.6	0.0	216.5	0.0	0.0	0.0	0.0	0.0	18.8	0.0	0.0	18.8	56.5	0.0	0.0	0.0	1271.0	828.5	0.0
9/20/95	0.0	0.0	0.0	0.0	0.0	118.3	118.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.8	0.0	80.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.2	393.5	0.0	0.0	0.0	64.6	6778.3	0.0
10/24/95	0.0	4.8	0.0	4.8	0.0	38.3	158.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.6	0.0	0.0	0.0	28.7	229.9	0.0
6/12/96	0.0	0.0	0.0	0.0	0.0	0.0	58.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.7	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6	5.8	0.0	0.0	0.0	517.6	1128.7	0.0
7/16/96	0.0	0.0	0.0	0.0	0.0	49.7	810.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.7	0.0	612.3	0.0	0.0	0.0	0.0	0.0	16.6	0.0	0.0	82.8	66.2	0.0	0.0	0.0	1439.8	1191.6	0.0
8/26/96	0.0	0.0	0.0	0.0	0.0	106.8	783.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	237.4	0.0	498.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.1	83.1	0.0	0.0	0.0	712.2	1744.9	0.0
9/23/96	0.0	0.0	0.0	0.0	0.0	77.7	764.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.7	0.0	145.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.1	997.4	0.0	0.0	0.0	48.6	18069.6	0.0
5/27/97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.2	0.0	0.0	143.7	47.9	0.0
6/23/97	0.0	0.0	0.0	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1525.3	14.7	234.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1407.9	704.0	0.0
7/21/97	8.6	0.0	0.0	0.0	8.6	17.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.8	8.6	368.0	0.0	0.0	0.0	0.0	8.6	0.0	0.0	0.0	34.2	25.7	0.0	0.0	0.0	7411.2	179.7	0.0
8/18/97	0.0	0.0	0.0	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2	139.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.6	172.2	0.0	0.0	0.0	1582.2	1328.1	0.0
9/15/97	0.0	0.0	0.0	0.0	0.0	40.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	116.9	122.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.5	0.0	0.0	0.0	0.0	127.0	569.1	0.0
5/12/98	0.0	0.0	0.0	0.0	0.0	12.6	0.0	6.3	0.0	0.0	0.0	0.0	0.0	0.0	25.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0	0.0	0.0	1955.4	333.2	0.0
6/22/98	0.0	0.0	0.0	6.7	0.0	361.8	6.7	0.0	0.0	6.7	0.0	0.0	0.0	0.0	428.8	113.9	167.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.3	0.0	0.0	0.0	0.0	643.3	402.0	0.0
8/18/98	0.0	0.0	0.0	0.0	0.0	297.5	1368.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	773.5	89.2	357.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.7	1576.7	0.0	0.0	0.0	12133.7	8476.4	0.0

Table II-6 continued

	102 - A HARPAE	109 - ALONA SP	115 - CERIODAPHNIA SP.	118 - C SPHAERICUS	122 - D MENDOTAE	126 - D PULEX COMPLEX *	135 - H GIBBERUM*	136 - I SPINIFER	137 - L SETIFERA	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	155 - D ACUTIROSTRIS	164 - BOSMINA SP *	168 - DAPHNIA SP	204 - L MINUTUS	205 - S OREGONENSIS	208 - L SICILIS	210 - E LACUSTRIS*	302 - D B THOMASI	303 - C SCUTIFER	304 - A VERN COMPLEX	306 - E AGILIS	308 - M ALBIDUS	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	347 - E ELEGANS*	345 - HARPACTICOID SP	CALANOID IMMATURE*	CYCLOPOID IMMATURE*	NAUPLII
9/28/98	10.1	0.0	0.0	0.0	0.0	20.2	1110.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	242.3	20.2	434.1	0.0	0.0	0.0	0.0	20.2	0.0	0.0	0.0	0.0	232.2	0.0	0.0	0.0	3382.3	1615.4	0.0
5/10/99	0.0	5.4	0.0	5.4	0.0	16.2	744.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.4	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	5.4	0.0	0.0	5210.4	598.9	0.0	
6/15/99	13.2	0.0	0.0	13.2	13.2	105.6	2376.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	779.0	52.8	686.5	0.0	0.0	0.0	0.0	0.0	0.0	26.4	0.0	0.0	0.0	0.0	0.0	2033.2	1795.6	0.0	
7/19/99	0.0	0.0	0.0	12.8	0.0	115.2	1484.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	128.0	198.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.2	0.0	0.0	0.0	0.0	882.9	262.3	0.0
8/24/99	0.0	0.0	0.0	0.0	0.0	58.0	1237.1	0.0	0.0	0.0	0.0	0.0	6.4	0.0	6.4	51.5	58.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.8	6.4	0.0	0.0	0.0	914.9	631.4	0.0
9/21/99	0.0	0.0	0.0	0.0	0.0	118.4	1313.3	0.0	0.0	4.7	0.0	0.0	0.0	4.7	14.2	47.4	113.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5	347.3	14.2	0.0	0.0	530.4	722.9	0.0
10/25/99	0.0	0.0	0.0	0.0	0.0	28.5	1156.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	182.6	154.0	0.0	
5/29/00	0.0	6.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.1	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	867.2	1644.1	0.0
6/19/00	0.0	0.0	0.0	11.1	0.0	11.1	996.8	0.0	0.0	33.2	0.0	0.0	0.0	0.0	498.4	66.5	487.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	22.2	0.0	0.0	3510.8	780.8	0.0
7/24/00	0.0	0.0	0.0	0.0	0.0	83.8	1425.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.9	21.0	188.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.9	0.0	0.0	0.0	0.0	1355.4	901.3	0.0
8/21/00	0.0	0.0	0.0	10.7	0.0	904.6	512.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.7	192.0	53.3	0.0	0.0	0.0	10.7	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	748.9	1052.6	0.0
9/18/00	0.0	0.0	0.0	5.3	0.0	133.3	1108.9	0.0	0.0	0.0	0.0	0.0	0.0	5.3	69.3	16.0	127.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	186.6	0.0	0.0	0.0	245.2	607.7	0.0
10/16/00	0.0	0.0	0.0	0.0	0.0	287.7	356.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	156.3	18.8	0.0	0.0	93.8	431.5	0.0
6/4/01	0.0	5.6	0.0	5.6	5.6	16.8	343.9	0.0	0.0	22.4	0.0	22.4	0.0	0.0	257.9	78.5	246.7	0.0	0.0	0.0	11.2	0.0	0.0	0.0	5.6	22.4	5.6	0.0	0.0	0.0	1480.2	751.3	0.0
6/25/01	0.0	0.0	0.0	13.0	0.0	117.3	638.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2189.7	117.3	599.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.1	0.0	0.0	0.0	0.0	0.0	4379.3	404.0	0.0
7/26/01	0.0	0.0	0.0	0.0	0.0	49.9	1248.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	2471.1	74.9	524.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	324.5	0.0	0.0	0.0	0.0	3519.4	1909.5	0.0
8/27/01	0.0	0.0	0.0	0.0	38.7	193.6	716.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3344.7	96.8	1142.1	0.0	0.0	0.0	19.4	0.0	0.0	0.0	696.9	0.0	0.0	0.0	0.0	0.0	483.9	1211.7	0.0
9/29/01	0.0	0.0	0.0	18.5	0.0	906.1	832.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	998.6	240.4	813.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	351.3	0.0	0.0	0.0	0.0	0.0	240.4	716.6	0.0
10/23/01	0.0	0.0	0.0	0.0	0.0	690.1	558.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	542.2	0.0	706.5	0.0	0.0	0.0	65.7	0.0	0.0	0.0	147.9	115.0	0.0	0.0	0.0	0.0	2514.0	2218.2	0.0
5/28/02	0.0	0.0	0.0	0.0	0.0	11.3	1176.4	0.0	0.0	17.0	0.0	0.0	0.0	0.0	346.9	39.6	96.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3	0.0	0.0	0.0	0.0	0.0	9114.4	2217.1	0.0
6/24/02	0.0	0.0	0.0	0.0	0.0	153.0	1568.6	0.0	0.0	0.0	0.0	267.8	0.0	0.0	17440.6	267.8	1415.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5509.3	1033.0	0.0
7/31/02	0.0	0.0	0.0	0.0	0.0	501.4	640.6	0.0	0.0	0.0	0.0	55.7	0.0	0.0	9191.6	139.3	1420.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	417.8	0.0	0.0	0.0	0.0	0.0	6099.9	696.3	0.0
8/26/02	0.0	0.0	0.0	0.0	0.0	600.4	225.1	0.0	0.0	0.0	0.0	125.1	0.0	0.0	9155.7	450.3	925.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	250.2	0.0	75.0	0.0	0.0	0.0	2476.5	1688.6	0.0
9/25/02	0.0	0.0	0.0	0.0	0.0	1124.2	337.3	0.0	0.0	0.0	0.0	318.5	0.0	0.0	9555.6	393.5	768.2	0.0	0.0	0.0	0.0	18.7	0.0	0.0	131.2	0.0	18.7	0.0	0.0	0.0	1171.0	1068.0	0.0
10/22/02	0.0	0.0	0.0	0.0	0.0	729.9	2036.8	0.0	0.0	0.0	0.0	50.9	0.0	0.0	2418.7	17.0	1867.1	0.0	0.0	0.0	17.0	0.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0	0.0	152.8	1612.5	0.0
6/2/03	0.0	0.0	0.0	0.0	0.0	6.2	442.3	0.0	0.0	24.8	0.0	6.2	0.0	0.0	596.2	12.4	260.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.4	6.2	6.2	0.0	0.0	0.0	18388.8	260.2	0.0
6/23/03	0.0	0.0	0.0	0.0	0.0	12.2	231.7	0.0	0.0	24.4	0.0	85.3	0.0	0.0	2292.1	85.3	1024.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	0.0	12.2	0.0	0.0	0.0	8193.1	1365.5	0.0
7/28/03	0.0	0.0	0.0	0.0	0.0	85.0	2549.7	0.0	0.0	0.0	0.0	42.5	0.0	0.0	5665.3	0.0	1274.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	212.5	0.0	0.0	0.0	0.0	0.0	4546.9	2422.2	0.0

Table II-6 continued

	102 - A HARPAE	109 - ALONA SP	115 - CERIODAPHNIA SP.	118 - C SPHAERICUS	122 - D MENDOTAE	126 - D PULEX COMPLEX *	135 - H GIBBERUM*	136 - I SPINIFER	137 - L SETIFERA	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	155 - D ACUTIROSTRIS	164 - BOSMINA SP *	168 - DAPHNIA SP	204 - L MINUTUS	205 - S OREGONENSIS	208 - L SICILIS	210 - E LACUSTRIS*	302 - D B THOMASI	303 - C SCUTIFER	304 - A VERN COMPLEX	306 - E AGILIS	308 - M ALBIDUS	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	347 - E ELEGANS*	345 - HARPACTICOID SP	CALANOID IMMATURE*	CYCLOPOID IMMATURE*	NAUPLII
8/25/03	0.0	0.0	0.0	0.0	0.0	504.0	661.5	0.0	0.0	0.0	0.0	15.8	0.0	0.0	3654.0	110.3	661.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.5	0.0	0.0	0.0	0.0	0.0	2480.7	1984.5	0.0
10/13/03	0.0	0.0	0.0	0.0	24.0	1321.5	816.9	0.0	0.0	0.0	0.0	24.0	0.0	0.0	2643.0	96.1	2162.4	0.0	0.0	24.0	0.0	0.0	0.0	0.0	144.2	0.0	0.0	0.0	0.0	0.0	336.4	1153.3	0.0
5/25/04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	175.8	37.0	444.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10534.7	180.4	0.0
6/21/04	0.0	0.0	0.0	5.0	0.0	25.1	20.1	0.0	0.0	10.0	0.0	5.0	0.0	0.0	5140.3	30.1	417.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0	21708.3	190.8	0.0
7/19/04	0.0	0.0	0.0	0.0	0.0	156.7	0.0	0.0	0.0	11.2	0.0	246.3	0.0	0.0	12178.9	56.0	626.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	112.0	0.0	0.0	0.0	0.0	19970.2	821.0	0.0
9/21/04	0.0	0.0	0.0	0.0	0.0	2528.0	24.3	0.0	0.0	0.0	0.0	48.6	0.0	0.0	729.2	1341.8	1020.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	218.8	0.0	0.0	0.0	0.0	8164.9	486.2	0.0
10/18/04	0.0	0.0	0.0	4.9	0.0	2128.6	4.9	0.0	0.0	0.0	0.0	24.6	0.0	0.0	1708.1	0.0	7253.0	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0	19.7	0.0	0.0	0.0	0.0	399.1	683.3	0.0
5/17/05	0.0	0.0	0.0	0.0	0.0	0.0	20.6	0.0	4.1	0.0	0.0	0.0	4.1	0.0	395.7	16.5	890.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.6	0.0	8.2	0.0	0.0	8460.5	457.6	0.0
6/20/05	0.0	0.0	0.0	3.9	0.0	104.9	3.9	0.0	0.0	0.0	0.0	0.0	3.9	0.0	3605.3	3.9	476.6	0.0	0.0	3.9	11.7	0.0	0.0	0.0	0.0	15.5	0.0	23.3	0.0	0.0	8855.2	2175.6	0.0
7/20/05	0.0	0.0	0.0	5.7	0.0	124.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2221.8	28.3	113.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	266.4	0.0	5.7	0.0	0.0	8014.5	1008.9	0.0
8/25/05	0.0	0.0	0.0	0.0	0.0	372.3	0.0	0.0	0.0	0.0	0.0	0.0	16.5	0.0	2382.5	24.8	231.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	124.1	0.0	16.5	0.0	0.0	7988.9	2184.0	0.0
9/21/05	0.0	0.0	0.0	0.0	0.0	674.5	28.1	0.0	0.0	0.0	0.0	56.2	0.0	0.0	876.9	0.0	1117.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	421.6	0.0	0.0	0.0	0.0	3878.4	1222.5	0.0
10/17/05	0.0	0.0	0.0	0.0	0.0	993.8	0.0	0.0	0.0	0.0	0.0	76.4	0.0	0.0	1911.2	0.0	9376.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	133.8	0.0	38.2	0.0	0.0	363.1	1376.1	0.0
5/23/06	0.0	0.0	0.0	8.2	0.0	36.9	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	212.9	41.0	2315.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	12.3	0.0	0.0	0.0	4.1	23569.0	2342.3	0.0	
6/20/06	0.0	0.0	0.0	12.4	0.0	484.3	0.0	0.0	0.0	0.0	0.0	211.1	0.0	0.0	8642.6	74.5	372.5	0.0	0.0	0.0	0.0	12.4	0.0	0.0	322.9	12.4	0.0	0.0	0.0	0.0	15259.7	2533.2	0.0
7/25/06	0.0	0.0	0.0	0.0	0.0	822.1	0.0	0.0	0.0	0.0	0.0	7.9	0.0	0.0	4131.4	197.6	134.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	495.4	0.0	0.0	0.0	0.0	0.0	34367.5	8155.0	0.0
8/22/06	0.0	0.0	0.0	0.0	0.0	1147.0	29.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2452.2	296.6	148.3	0.0	0.0	9.9	0.0	0.0	0.0	0.0	187.9	0.0	0.0	0.0	0.0	0.0	10148.1	830.6	0.0
9/26/06	0.0	0.0	0.0	0.0	0.0	897.3	284.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	914.5	51.8	1794.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	349.4	0.0	0.0	0.0	0.0	0.0	6210.0	685.9	0.0
10/25/06	0.0	0.0	0.0	0.0	0.0	279.2	837.6	0.0	0.0	0.0	0.0	74.5	0.0	0.0	1876.1	0.0	16679.0	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.8	372.2	0.0

Table II-7: Crustacean zooplankton density data (number per m³) for Little Whitepine Lake, 1987-2006. * indicates taxa where more than one group were combined - see p.44 for further explanation. Superscripts indicate where replicate samples were taken.

ZDATE	102 - A HARPAE	109 - ALONA SP	118 - C SPHAERICUS	119 - D AMBIGUA	122 - D MENDOTAE	126 - D PULEX COMPLEX *	132 - E COREGONI	133 - E TUBICEN	135 - H GIBBERUM*	137 - L SETIFERA	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	164 - BOSMINA SP *	168 - DAPHNIA SP	204 - L MINUTUS	302 - D B THOMASI	303 - C SCUTIFER	308 - M ALBIDUS	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	CALANOID IMMATURE*	CYCLOPOID IMMATURE*
5/26/87 ^a	0.0	0.0	0.0	0.0	0.0	35.2	0.0	0.0	17.6	0.0	0.0	0.0	0.0	0.0	52.7	0.0	52.7	0.0	0.0	0.0	0.0	35.2	0.0	2033.7	158.2
5/26/87 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	140.6	0.0	0.0	0.0	0.0	70.3	0.0	890.7	117.2
6/22/87 ^a	0.0	0.0	0.0	0.0	0.0	1277.5	0.0	0.0	1444.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	166.6	0.0	0.0	0.0	0.0	0.0	0.0	1166.4	277.7
6/22/87 ^b	0.0	0.0	0.0	0.0	0.0	422.0	0.0	0.0	644.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.4	0.0	0.0	0.0	0.0	22.2	0.0	377.6	111.1
7/29/87 ^a	0.0	0.0	19.2	0.0	0.0	615.8	0.0	0.0	1077.7	0.0	0.0	0.0	0.0	0.0	19.2	0.0	230.9	0.0	0.0	0.0	0.0	0.0	0.0	904.5	19.2
7/29/87 ^b	0.0	0.0	0.0	0.0	0.0	919.7	0.0	0.0	2155.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	149.7	0.0	0.0	0.0	0.0	0.0	0.0	876.9	0.0
8/26/87 ^a	0.0	0.0	0.0	0.0	0.0	104.8	0.0	0.0	3966.5	0.0	0.0	0.0	0.0	0.0	10.5	0.0	83.8	0.0	0.0	0.0	0.0	0.0	0.0	261.9	0.0
8/26/87 ^b	0.0	0.0	0.0	0.0	9.6	134.4	19.2	0.0	7144.1	0.0	0.0	0.0	0.0	0.0	9.6	0.0	144.0	19.2	0.0	0.0	19.2	0.0	0.0	825.8	220.8
10/1/87 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4119.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	133.2	0.0	0.0	0.0	0.0	0.0	0.0	346.3	13.3
10/1/87 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4464.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	213.1	0.0	0.0	0.0	0.0	0.0	0.0	487.0	45.7
10/21/87 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2583.9	0.0	0.0	0.0	0.0	0.0	23.1	0.0	150.0	0.0	0.0	0.0	0.0	0.0	0.0	46.1	11.5
10/21/87 ^b	0.0	11.5	0.0	0.0	0.0	0.0	0.0	0.0	3322.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	265.3	0.0	0.0	0.0	0.0	0.0	0.0	57.7	0.0
5/26/88 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.5	45.4
5/26/88 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3	32.6
6/20/88 ^a	0.0	0.0	0.0	0.0	0.0	80.8	0.0	0.0	3337.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.9	0.0	0.0	0.0	0.0	0.0	0.0	201.9	107.7
6/20/88 ^b	0.0	0.0	0.0	0.0	0.0	53.8	0.0	0.0	2189.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.4	0.0	0.0	0.0	0.0	0.0	0.0	255.7	80.8
7/27/88 ^a	0.0	0.0	0.0	0.0	0.0	288.7	0.0	0.0	2576.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2	0.0	0.0	0.0	0.0	11.1	0.0	199.9	11.1
7/27/88 ^b	0.0	0.0	0.0	0.0	0.0	145.3	0.0	0.0	2664.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.6	0.0	0.0	0.0	0.0	0.0	0.0	436.0	0.0
8/31/88 ^a	0.0	0.0	0.0	0.0	0.0	190.4	0.0	0.0	1427.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.5	0.0	0.0	0.0	0.0	0.0	0.0	1534.7	261.7
8/31/88 ^b	0.0	0.0	0.0	0.0	0.0	130.9	0.0	0.0	1104.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	0.0	11.9	11.9	0.0	1058.8	190.4
9/20/88 ^a	12.2	0.0	0.0	0.0	0.0	171.0	0.0	0.0	1133.4	0.0	0.0	0.0	0.0	0.0	0.0	36.6	158.8	0.0	0.0	0.0	0.0	0.0	0.0	2422.2	195.4
9/20/88 ^b	0.0	0.0	0.0	0.0	0.0	61.1	0.0	0.0	1563.5	0.0	0.0	0.0	0.0	0.0	0.0	15.3	152.7	0.0	0.0	0.0	0.0	15.3	0.0	2580.4	290.1
11/1/88 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	161.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	556.4	0.0	0.0	0.0	0.0	0.0	0.0	366.0	0.0
11/1/88 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	410.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	644.3	0.0	0.0	0.0	0.0	0.0	0.0	156.2	0.0
5/15/90 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.9	0.0	183.0	0.0	0.0	0.0	0.0	0.0	0.0	1304.1	148.7
5/15/90 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.8	0.0	207.3	0.0	14.8	0.0	0.0	0.0	0.0	5601.5	14.8
6/19/90 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2377.7	0.0	0.0	0.0	0.0	0.0	101.9	0.0	84.9	0.0	0.0	0.0	0.0	0.0	0.0	10697.4	67.9
6/19/90 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2411.6	0.0	0.0	0.0	0.0	17.0	169.8	0.0	186.8	0.0	17.0	0.0	0.0	0.0	0.0	12622.8	0.0

Table II-7 continued

ZDATE	102 - A HARPAE	109 - ALONA SP	118 - C SPHAERICUS	119 - D AMBIGUA	122 - D MENDOTAE	126 - D PULEX COMPLEX *	132 - E COREGONI	133 - E TUBICEN	135 - H GIBBERUM*	137 - L SETIFERA	142 - P PEDIJULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	164 - BOSMINA SP *	166 - DAPHNIA SP	204 - L MINUTUS	302 - D B THOMASI	303 - C SCUTIFER	306 - M ALBIDUS	309 - M EDAX	310 - O MODESTUS	336 - T EXTENSUS*	CALANOID IMMATURE*	CYCLOPOID IMMATURE*
7/31/90 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1369.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.5	0.0	0.0	0.0	0.0	0.0	0.0	610.8	18.5
7/31/90 ^b	0.0	0.0	0.0	0.0	0.0	18.5	0.0	0.0	1203.0	0.0	0.0	0.0	0.0	18.5	18.5	0.0	259.1	0.0	0.0	0.0	0.0	37.0	0.0	814.3	129.6
8/30/90 ^a	0.0	0.0	0.0	0.0	0.0	15.2	0.0	0.0	2885.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.2	0.0	121.9	61.0
8/30/90 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4491.0	0.0	0.0	0.0	0.0	0.0	129.5	0.0	21.6	0.0	0.0	0.0	43.2	21.6	0.0	151.1	626.1
9/25/90 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1273.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.7	33.1
9/25/90 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1373.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	165.4	16.5
10/30/90 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	519.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.5	0.0	0.0	0.0	0.0	0.0	0.0	77.0	38.5
10/30/90 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	526.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/28/91 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	279.0	0.0	0.0	0.0	10.0	10.0	69.8	0.0	119.6	0.0	0.0	0.0	10.0	0.0	0.0	1126.0	249.1
5/28/91 ^b	0.0	0.0	9.6	0.0	0.0	0.0	0.0	0.0	393.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.4	0.0	0.0	0.0	0.0	0.0	0.0	191.9	86.4
6/17/91 ^a	0.0	0.0	9.5	0.0	0.0	0.0	0.0	0.0	9803.3	0.0	0.0	0.0	9.5	0.0	0.0	0.0	0.0	0.0	9.5	0.0	0.0	0.0	0.0	521.1	104.2
6/17/91 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14235.6	0.0	0.0	0.0	10.3	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	0.0	0.0	587.0	82.4
7/24/91 ^a	0.0	0.0	7.8	0.0	0.0	0.0	0.0	0.0	100.8	0.0	31.0	0.0	0.0	0.0	54.3	0.0	1778.4	0.0	0.0	0.0	0.0	0.0	0.0	10817.1	23.3
7/24/91 ^b	0.0	0.0	8.1	0.0	0.0	16.1	0.0	0.0	209.7	0.0	0.0	0.0	0.0	0.0	72.6	8.1	3871.0	0.0	0.0	0.0	0.0	0.0	0.0	16519.0	0.0
8/14/91 ^a	0.0	0.0	0.0	0.0	0.0	59.2	0.0	0.0	133.2	0.0	0.0	0.0	0.0	0.0	592.2	0.0	1322.5	0.0	0.0	0.0	0.0	0.0	0.0	21622.8	14.8
8/14/91 ^b	0.0	0.0	0.0	0.0	0.0	142.8	0.0	0.0	232.0	0.0	0.0	0.0	0.0	0.0	945.7	0.0	1427.5	0.0	0.0	0.0	0.0	35.7	0.0	22662.1	0.0
9/9/91 ^a	0.0	0.0	0.0	0.0	0.0	1483.8	0.0	0.0	269.8	0.0	0.0	0.0	0.0	37.9	2124.5	0.0	573.3	33.7	0.0	0.0	0.0	269.8	0.0	10116.6	1281.4
9/9/91 ^b	0.0	0.0	0.0	0.0	0.0	1285.4	0.0	0.0	257.1	28.6	0.0	0.0	0.0	28.6	2570.7	0.0	1056.9	0.0	0.0	0.0	0.0	85.7	0.0	10140.1	628.4
10/9/91 ^a	0.0	0.0	0.0	0.0	0.0	224.3	0.0	0.0	9.0	0.0	0.0	0.0	0.0	9.0	556.3	0.0	556.3	0.0	0.0	0.0	0.0	0.0	0.0	1624.0	80.8
10/9/91 ^b	0.0	0.0	0.0	0.0	0.0	217.1	0.0	0.0	9.9	0.0	0.0	0.0	0.0	19.7	690.9	0.0	602.0	9.9	0.0	0.0	0.0	0.0	0.0	1717.3	59.2
5/26/92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1018.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1201.2	101.8
6/22/92	0.0	0.0	0.0	0.0	0.0	95.9	0.0	0.0	3259.6	0.0	0.0	0.0	263.6	0.0	767.0	0.0	479.4	24.0	24.0	0.0	0.0	0.0	0.0	2253.0	1078.6
7/13/92	0.0	0.0	0.0	0.0	0.0	229.5	7.4	0.0	2102.2	0.0	0.0	0.0	0.0	7.4	14.8	0.0	133.2	7.4	0.0	0.0	0.0	14.8	0.0	1099.3	318.3
8/12/92	0.0	0.0	10.7	0.0	0.0	21.5	0.0	0.0	21.5	0.0	0.0	0.0	0.0	21.5	0.0	0.0	53.7	10.7	0.0	0.0	0.0	0.0	0.0	1363.6	343.6
9/9/92	0.0	0.0	0.0	0.0	0.0	27.3	0.0	0.0	0.0	0.0	0.0	18.2	0.0	346.2	27.3	18.2	510.2	0.0	0.0	0.0	0.0	0.0	0.0	3162.1	82.0
10/5/92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	201.3	0.0	0.0	0.0	12.6	490.8	0.0	0.0	113.3	0.0	0.0	0.0	0.0	0.0	0.0	515.9	37.8
10/27/92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.6	0.0	0.0	0.0	9.7	38.9	0.0	0.0	233.2	0.0	0.0	0.0	0.0	0.0	0.0	272.0	97.2
6/1/93	0.0	0.0	20.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.4	0.0	20.4	0.0	61.1	0.0	0.0	0.0	0.0	488.6	30.5

Table II-7 continued

57

ZDATE	102 - A HARPAE	109 - ALONA SP	118 - C SPHAERICUS	119 - D AMBIGUA	122 - D MENDOTAE	126 - D PULEX COMPLEX *	132 - E COREGONI	133 - E TUBICEN	135 - H GIBBERUM*	137 - L SETIFERA	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	164 - BOSMINA SP *	168 - DAPHNIA SP	204 - L MINUTUS	302 - D B THOMASI	303 - C SCUTIFER	308 - M ALBIDUS	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	CALANOID IMMATURE*	CYCLOPOID IMMATURE*
6/22/93	0.0	0.0	14.1	0.0	0.0	28.1	0.0	0.0	42.2	0.0	0.0	0.0	0.0	0.0	14.1	0.0	168.8	0.0	14.1	0.0	0.0	0.0	0.0	239.1	42.2
7/29/93	0.0	0.0	0.0	0.0	0.0	102.7	0.0	0.0	565.6	0.0	0.0	0.0	0.0	74.7	121.4	0.0	46.7	0.0	0.0	0.0	0.0	0.0	0.0	224.1	0.0
8/23/93	0.0	0.0	0.0	0.0	0.0	47.3	0.0	0.0	9.5	0.0	0.0	0.0	9.5	2687.1	0.0	0.0	0.0	9.5	0.0	0.0	0.0	0.0	0.0	28.4	9.5
9/27/93	0.0	0.0	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	103.4	0.0	155.1	0.0	0.0	0.0	0.0	0.0	10.3	444.6	124.1
10/28/93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0	0.0	82.4	0.0	133.8	0.0	0.0	0.0	0.0	0.0	0.0	133.8	20.6
5/17/94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	204.3	8.9
6/16/94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.6	0.0	0.0	0.0	0.0	0.0	60.8	0.0	60.8	0.0	0.0	0.0	0.0	0.0	0.0	334.2	45.6
7/19/94	0.0	0.0	0.0	0.0	0.0	32.7	0.0	0.0	3606.9	0.0	0.0	0.0	0.0	10.9	0.0	0.0	261.8	43.6	0.0	0.0	0.0	0.0	0.0	1965.0	54.5
8/22/94	0.0	0.0	0.0	0.0	0.0	15.5	0.0	0.0	7.8	0.0	0.0	0.0	0.0	93.3	15.5	0.0	225.4	0.0	0.0	0.0	0.0	0.0	0.0	2821.2	38.9
10/4/94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	723.9	0.0	0.0	0.0	0.0	0.0	0.0	2368.4	18.7
10/24/94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	536.5	0.0	0.0	0.0	0.0	0.0	0.0	541.1	0.0
5/31/95	0.0	0.0	10.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0	0.0	0.0	0.0	10.6	0.0	1080.2	232.7
6/24/95	0.0	0.0	0.0	0.0	0.0	241.8	0.0	0.0	449.1	0.0	0.0	0.0	0.0	3612.3	310.9	34.5	1796.2	0.0	0.0	0.0	0.0	483.6	0.0	4697.8	69.1
9/19/95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2	155.1	1196.5	0.0	1285.1	0.0	0.0	0.0	0.0	44.3	0.0	4347.9	553.9
10/23/95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.3	20.3	81.2	0.0	703.3	0.0	0.0	0.0	0.0	10.1	0.0	977.2	50.7
6/12/96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	237.3	24.5
7/16/96	0.0	0.0	0.0	0.0	0.0	94.4	0.0	0.0	377.5	0.0	0.0	0.0	0.0	251.7	1698.8	0.0	597.7	0.0	0.0	0.0	0.0	15.7	0.0	7676.2	15.7
8/26/96	0.0	0.0	0.0	0.0	0.0	41.4	0.0	0.0	69.1	0.0	0.0	13.8	0.0	1841.6	442.0	0.0	345.3	0.0	0.0	0.0	0.0	82.9	13.8	5662.9	566.3
9/23/96	0.0	0.0	20.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	372.9	269.3	0.0	580.1	0.0	0.0	0.0	0.0	165.7	745.8	1657.4	2382.5
5/27/97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.0	0.0	0.0	0.0	76.0	0.0	76.0	0.0	38.0	19.0	0.0	0.0	0.0	0.0	836.2	3097.7	323.1
6/23/97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.5	0.0	0.0	0.0	111.8	40.7	213.4	10.2	182.9	0.0	0.0	0.0	0.0	0.0	477.6	2266.3	2825.2
7/21/97	0.0	0.0	0.0	0.0	0.0	48.1	0.0	0.0	288.8	0.0	0.0	0.0	16.0	689.8	48.1	160.4	449.2	32.1	0.0	0.0	0.0	0.0	1973.3	1042.8	19636.6
8/18/97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.5	0.0	0.0	0.0	0.0	0.0	455.7	28.5	142.4	57.0	0.0	0.0	0.0	28.5	1566.5	2947.8	22379.4
9/13/97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.5	34.2	308.1	0.0	136.9	0.0	0.0	0.0	0.0	0.0	5682.5	1078.3	6641.0
5/12/98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2	0.0	0.0	0.0	8.2	16.3	8.2	0.0	0.0	8.2	0.0	0.0	0.0	0.0	335.1	931.8	65.4
6/22/98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.3	0.0	45.2	0.0	0.0	0.0	72.3	0.0	216.8	0.0	0.0	0.0	0.0	0.0	5877.7	1126.2	1180.4
8/18/98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1788.2	0.0	0.0	0.0	188.2	17222.8	1317.6	188.2	564.7	0.0	0.0	0.0	0.0	0.0	4988.0	6682.1	11952.5
9/28/98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.4	1419.1	177.4	0.0	1170.7	71.0	0.0	0.0	0.0	0.0	3051.0	2270.5	49372.6

Table II-7 continued

ZDATE	102 - A HARPAE	109 - ALONA SP	118 - C SPHAERICUS	119 - D AMBIGUA	122 - D MENDOTAE	126 - D PULEX COMPLEX *	132 - E COREGONI	133 - E TUBICEN	135 - H GIBBERUM*	137 - L SETIFERA	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	164 - BOSMINA SP *	166 - DAPHNIA SP	204 - L MINUTUS	302 - D B THOMASI	303 - C SCUTIFER	308 - M ALBIDUS	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	CALANOID IMMATURE*	CYCLOPOID IMMATURE*
5/10/99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	0.0	0.0	0.0	9.3	0.0	0.0	0.0	55.7	0.0	18.6	0.0	0.0	0.0	2329.0	3753.6	576.0
6/15/99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1237.4	0.0	0.0	0.0	4612.2	675.0	6412.2	0.0	337.5	0.0	0.0	0.0	0.0	112.5	1462.4	10293.2	30252.6
7/19/99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	479.2	0.0	0.0	0.0	39.9	7028.1	599.0	0.0	5430.8	0.0	0.0	0.0	0.0	279.5	1198.0	3354.3	1437.6
8/24/99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0	0.0	0.0	0.0	0.0	23701.2	376.3	0.0	611.4	94.1	0.0	0.0	0.0	282.2	658.4	4044.7	3597.9
9/21/99	0.0	0.0	37.5	0.0	0.0	0.0	0.0	0.0	150.2	0.0	0.0	0.0	37.5	4605.0	150.2	0.0	1276.4	37.5	0.0	0.0	0.0	788.4	825.9	4555.0	4354.8
10/25/99	0.0	0.0	0.0	0.0	0.0	42.7	0.0	0.0	106.7	0.0	0.0	0.0	21.3	768.3	469.5	0.0	1750.1	0.0	0.0	0.0	0.0	0.0	683.0	2411.7	939.1
5/29/00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	331.6	0.0	0.0	0.0	153.0	89.3	714.2	0.0	382.6	0.0	38.3	0.0	12.8	12.8	331.6	4361.6	7932.4
6/19/00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1788.6	0.0	0.0	0.0	4390.2	325.2	16585.4	0.0	3414.6	0.0	0.0	0.0	0.0	0.0	3577.2	28448.0	6666.7
7/24/00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4986.5	0.0	0.0	0.0	433.6	16910.6	433.6	0.0	1951.2	108.4	0.0	0.0	0.0	325.2	1409.2	3685.6	26117.6
8/21/00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	154.9	0.0	0.0	0.0	0.0	8826.9	658.2	0.0	967.9	38.7	0.0	0.0	0.0	116.1	967.9	2129.3	4684.5
9/18/00	0.0	0.0	38.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4476.2	964.7	0.0	385.9	38.6	0.0	0.0	0.0	77.2	1003.3	2045.1	5556.6
10/16/00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.7	0.0	0.0	0.0	59.1	216.8	374.5	0.0	709.5	19.7	0.0	0.0	0.0	0.0	2246.7	1044.5	7489.2
6/4/01	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	83.6	0.0	0.0	0.0	167.2	209.1	355.4	0.0	836.2	0.0	0.0	0.0	0.0	0.0	1797.8	2884.9	8320.3
6/25/01	0.0	0.0	36.6	0.0	0.0	0.0	0.0	0.0	439.0	0.0	548.8	0.0	585.4	1024.4	2414.7	0.0	475.6	0.0	0.0	36.6	0.0	0.0	914.7	2414.7	658.6
7/26/01	0.0	0.0	0.0	0.0	0.0	9.7	0.0	0.0	338.8	0.0	0.0	0.0	87.1	2322.9	367.8	9.7	261.3	19.4	0.0	0.0	9.7	0.0	183.9	803.3	754.9
8/27/01	0.0	0.0	0.0	0.0	17.3	0.0	0.0	0.0	51.8	0.0	0.0	0.0	34.6	2764.3	1336.1	0.0	120.9	17.3	0.0	0.0	0.0	0.0	0.0	1157.6	1148.9
9/29/01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	0.0	0.0	0.0	47.0	65.8	47.0	0.0	84.7	0.0	0.0	0.0	0.0	0.0	0.0	282.2	244.6
10/23/01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.2	0.0	0.0	0.0	0.0	24.5	0.0	0.0	32.7	0.0	0.0	0.0	0.0	0.0	163.4	212.4	114.4
5/28/02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6	0.0	0.0	0.0	95.6	1501.7	95.6
6/24/02	0.0	0.0	15.7	0.0	0.0	0.0	0.0	0.0	251.0	0.0	15.7	0.0	0.0	329.5	1412.1	0.0	345.2	0.0	0.0	0.0	0.0	0.0	243.2	3365.5	509.9
7/31/02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.6	0.0	0.0	0.0	0.0	8502.4	792.3	0.0	154.6	0.0	0.0	0.0	0.0	0.0	5256.0	5545.9	2898.6
8/26/02	0.0	0.0	0.0	0.0	0.0	38.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4826.5	3696.9	0.0	38.5	0.0	0.0	0.0	0.0	0.0	8780.2	16592.5	19250.1
9/25/02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.2	92.9	0.0	0.0	0.0	0.0	1533.1	673.6	0.0	46.5	0.0	0.0	0.0	0.0	0.0	35180.1	25288.3	34926.5
10/22/02	0.0	0.0	0.0	0.0	8.1	0.0	0.0	0.0	122.0	0.0	0.0	0.0	0.0	56.9	32.5	8.1	65.0	0.0	0.0	0.0	0.0	0.0	16130.1	12053.1	17686.9
6/2/03	0.0	0.0	0.0	0.0	0.0	7.7	0.0	7.7	46.5	0.0	0.0	0.0	7.7	193.6	0.0	0.0	85.2	0.0	15.5	0.0	0.0	0.0	4026.3	9412.6	9350.6
6/23/03	0.0	0.0	0.0	0.0	9.1	0.0	0.0	0.0	227.2	0.0	9.1	0.0	18.2	1090.4	245.3	9.1	63.6	0.0	0.0	0.0	0.0	0.0	13085.0	836.0	40133.0
7/28/03	0.0	0.0	10.7	0.0	0.0	21.5	0.0	0.0	128.9	10.7	0.0	0.0	0.0	2147.5	3710.9	0.0	139.6	0.0	0.0	0.0	10.7	0.0	3298.6	268.4	5207.8
8/25/03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0	0.0	0.0	0.0	0.0	828.9	2398.6	0.0	11.8	11.8	0.0	0.0	0.0	0.0	599.6	646.7	4268.1

Table II-7 continued

65

ZDATE	102 - A HARPAE	109 - ALONA SP	118 - C SPHAERICUS	119 - D AMBIGUA	122 - D MENDOTAEE	126 - D PULEX COMPLEX *	132 - E COREGONI	133 - E TUBICEN	135 - H GIBBERUM*	137 - L SETIFERA	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	164 - BOSMINA SP *	168 - DAPHNIA SP	204 - L MINUTUS	302 - D B THOMASI	303 - C SCUTIFER	308 - M ALBIDUS	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	CALANOID IMMATURE*	CYCLOPOID IMMATURE*
10/13/03	0.0	0.0	0.0	0.0	20.4	30.6	0.0	0.0	51.0	0.0	0.0	0.0	10.2	30.6	244.7	10.2	285.5	0.0	0.0	0.0	10.2	0.0	2990.8	15105.3	11742.2
5/25/04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	21.9	11.0	54.8	0.0	0.0	0.0	987.3	2139.1	329.1
6/21/04	0.0	0.0	18.5	0.0	0.0	0.0	0.0	0.0	905.4	0.0	0.0	0.0	0.0	92.4	3843.3	0.0	73.9	0.0	0.0	0.0	0.0	0.0	4804.1	20313.2	9164.8
7/19/04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4828.5	0.0	0.0	0.0	0.0	2795.4	1101.2	0.0	338.8	0.0	0.0	0.0	0.0	0.0	6353.2	5082.6	5717.9
9/21/04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	108.9	0.0	0.0	0.0	15.6	373.4	217.8	0.0	980.2	0.0	0.0	0.0	0.0	0.0	1991.6	1151.4	7095.1
10/18/04	0.0	0.0	0.0	0.0	0.0	8.6	0.0	0.0	137.6	0.0	0.0	0.0	8.6	77.4	146.3	0.0	481.8	0.0	0.0	0.0	0.0	0.0	3303.5	2176.5	18165.1
5/17/05	0.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0	27.4	0.0	0.0	0.0	0.0	0.0	18.3	0.0	27.4	0.0	27.4	0.0	0.0	0.0	474.8	1406.0	18.3
6/20/05	0.0	0.0	27.5	0.0	82.6	27.5	0.0	0.0	523.1	0.0	27.5	0.0	110.1	936.0	468.0	0.0	963.5	27.5	110.1	0.0	27.5	0.0	3234.7	4267.0	12109.9
7/20/05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	520.3	0.0	0.0	0.0	0.0	2688.3	2471.5	0.0	693.8	0.0	0.0	0.0	0.0	0.0	1734.4	2948.5	24795.3
8/25/05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.5	0.0	0.0	0.0	22.2	800.5	1267.5	0.0	378.0	22.2	0.0	0.0	0.0	0.0	1445.4	1445.4	8539.0
9/21/05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.7	130.9	3268.5	0.0	486.4	0.0	0.0	0.0	0.0	0.0	897.9	1878.7	7786.8
10/17/05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	167.2	0.0	0.0	0.0	185.8	55.8	669.0	0.0	1300.8	0.0	0.0	0.0	0.0	0.0	5096.8	952.4	6424.4
5/23/06	0.0	0.0	19.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.8	0.0	0.0	19.1	0.0	0.0	0.0	0.0	0.0	1622.2	1568.6	8455.3
6/20/06	0.0	0.0	120.0	0.0	0.0	0.0	0.0	0.0	479.9	0.0	0.0	0.0	2759.4	0.0	8398.2	0.0	359.9	0.0	0.0	0.0	0.0	0.0	6698.5	2174.5	38807.0
7/25/06	0.0	0.0	0.0	0.0	0.0	28.9	0.0	0.0	664.9	14.5	0.0	0.0	14.5	332.4	5665.8	0.0	375.8	0.0	0.0	0.0	14.5	0.0	708.2	2124.7	57.8
8/22/06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.7	0.0	0.0	21.7	0.0	3295.4	8498.6	0.0	140.9	0.0	0.0	0.0	0.0	0.0	184.3	2457.1	1734.4
9/26/06	0.0	11.0	0.0	11.0	0.0	0.0	0.0	0.0	110.0	0.0	0.0	0.0	242.1	44.0	1437.8	0.0	264.1	0.0	0.0	0.0	0.0	0.0	407.1	1430.5	1613.9
10/25/06	0.0	0.0	0.0	0.0	0.0	77.1	0.0	0.0	180.0	0.0	0.0	0.0	17.1	0.0	85.7	0.0	925.8	0.0	0.0	0.0	8.6	0.0	788.6	94.3	128.6

Table II-8: Crustacean zooplankton density data (number per m³) for Whirligig Lake, 1987-2006. * indicates taxa where more than one group were combined - see p.44 for further explanation. Superscript letters indicate where replicate samples were taken.

ZDATE	101 - A CURVIROSTRIS	102 - A HARPAE	109 - ALONA SP	118 - C SPHAERICUS	119 - D AMBIGUA	122 - D MENDOTAE	126 - D PULEX COMPLEX *	135 - H GIBBERUM*	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	164 - BOSMINA SP *	168 - DAPHNIA SP	204 - L MINUTUS	205 - S OREGONENSIS	302 - D B THOMASI	303 - C SCUTIFER	304 - A VERN COMPLEX	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	CALANOID IMMATURE*	CYCLOPOID IMMATURE*
5/26/87 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.6	0.0	81.4	0.0	0.0	0.0	0.0	32.6	0.0	0.0	114.0	325.7
5/26/87 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.5	0.0	0.0	0.0	0.0	39.1	39.1	0.0	195.4	605.8
6/22/87 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.4	0.0	54.9	0.0	0.0	0.0	0.0	178.3	0.0	0.0	137.1	1911.8
6/22/87 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.6	0.0	55.8	0.0	0.0	0.0	18.6	279.2	74.5	0.0	279.2	2940.8
7/29/87 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	134.3	0.0	134.3	0.0	0.0	0.0	0.0	201.5	67.2	0.0	1208.8	4230.8
7/29/87 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.4	0.0	0.0	0.0	0.0	226.7	25.2	0.0	428.2	5155.1
8/27/87 ^a	0.0	0.0	0.0	17.5	0.0	0.0	70.0	35.0	0.0	0.0	0.0	0.0	17.5	0.0	87.6	0.0	0.0	0.0	0.0	105.1	0.0	0.0	788.0	1120.7
8/27/87 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5	0.0	35.0	0.0	0.0	0.0	0.0	350.2	0.0	0.0	595.4	1365.9
10/1/87 ^a	0.0	0.0	0.0	24.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	171.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	195.4	244.3
10/1/87 ^b	0.0	0.0	0.0	40.7	0.0	0.0	0.0	20.4	0.0	0.0	0.0	0.0	0.0	0.0	264.7	0.0	0.0	0.0	0.0	20.4	0.0	0.0	142.5	122.2
10/21/87 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.1	0.0	108.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.3	72.4
10/21/87 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.1	0.0	54.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.2	18.1
5/26/88 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.3	0.0	0.0	0.0	0.0	45.3	45.3	0.0	0.0	135.8
5/26/88 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.3	0.0	45.3	0.0	0.0	0.0	0.0	45.3	0.0	0.0	45.3	45.3
6/20/88 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.0	0.0	0.0	0.0	0.0	0.0	0.0	275.0	0.0	0.0	0.0	14.5	14.5	43.4	0.0	463.2	2220.9
6/20/88 ^b	0.0	0.0	16.1	0.0	0.0	0.0	0.0	32.2	0.0	0.0	0.0	0.0	0.0	0.0	386.0	0.0	0.0	0.0	0.0	48.3	32.2	0.0	579.0	2463.0
7/28/88 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.5	0.0	0.0	0.0	0.0	132.3	26.5	0.0	119.1	3298.8
7/28/88 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.8	0.0	0.0	0.0	0.0	88.2	58.8	0.0	176.4	2455.4
8/31/88 ^a	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.1	0.0	0.0	0.0	0.0	287.4	82.1	0.0	20.5	2319.9
8/31/88 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.9	0.0	0.0	0.0	0.0	197.6	0.0	0.0	89.8	2101.3
9/20/88 ^a	0.0	0.0	0.0	18.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.5	0.0	0.0	0.0	0.0	199.9	72.7	0.0	0.0	963.3
9/20/88 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.1	0.0	0.0	0.0	0.0	0.0	0.0	23.1	0.0	0.0	0.0	0.0	46.3	0.0	0.0	185.1	1480.5
11/2/88 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.5	0.0	46.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.5	0.0
11/2/88 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/15/90 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3	32.6	0.0	65.1	65.1
5/15/90 ^b	0.0	0.0	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3	0.0	358.2	211.7
6/19/90 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.5	0.0	0.0	0.0	0.0	22.3	155.9	0.0	400.9	1135.9
6/19/90 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.3	0.0	72.4	0.0	0.0	0.0	0.0	0.0	36.2	0.0	343.8	1122.0

Table II-8 continued

ZDATE	101 - A CURVIROSTRIS	102 - A HARPAE	109 - ALONA SP	118 - C SPHAERICUS	119 - D AMBIGUA	122 - D MENDOTAE	126 - D PULEX COMPLEX *	135 - H GIBBERUM*	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	164 - BOSMINA SP *	168 - DAPHNIA SP	204 - L MINUTUS	205 - S OREGONENSIS	302 - D B THOMASI	303 - C SCUTIFER	304 - A VERN COMPLEX	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	CALANOID IMMATURE*	CYCLOPOID IMMATURE*
7/31/90 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.5	0.0	0.0	0.0	0.0	375.6	0.0	590.2	0.0	0.0	0.0	0.0	321.9	134.1	0.0	670.7	4941.4
7/31/90 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.8	0.0	0.0	0.0	0.0	563.4	0.0	885.3	0.0	0.0	0.0	0.0	482.9	134.1	0.0	724.3	13391.7
8/30/90 ^a	0.0	0.0	0.0	0.0	0.0	0.0	16.2	0.0	0.0	0.0	0.0	32.3	7241.9	0.0	323.3	0.0	0.0	0.0	0.0	598.1	0.0	32.3	242.5	2554.1
8/30/90 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5043.5	0.0	452.6	0.0	0.0	0.0	0.0	307.1	16.2	0.0	258.6	2629.5
9/25/90 ^a	0.0	0.0	0.0	0.0	0.0	0.0	32.0	16.0	0.0	0.0	0.0	0.0	3882.5	0.0	32.0	0.0	0.0	0.0	0.0	480.0	0.0	0.0	64.0	640.0
9/25/90 ^b	0.0	0.0	0.0	0.0	0.0	0.0	34.3	0.0	0.0	0.0	0.0	0.0	2914.2	0.0	137.1	0.0	0.0	0.0	0.0	274.3	17.1	0.0	154.3	394.3
10/31/90 ^a	0.0	0.0	0.0	0.0	0.0	0.0	24.9	0.0	0.0	0.0	0.0	0.0	970.3	0.0	99.5	0.0	0.0	0.0	0.0	149.3	0.0	0.0	24.9	248.8
10/31/90 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	845.9	0.0	0.0	0.0	0.0	0.0	0.0	199.0	0.0	0.0	24.9	149.3
5/28/91 ^a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.7	0.0	0.0	0.0	1551.9	0.0	357.6	0.0	0.0	0.0	0.0	191.6	9.6	0.0	843.0	2184.2
5/28/91 ^b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.3	9.6	0.0	0.0	0.0	613.1	0.0	172.4	0.0	0.0	0.0	0.0	67.1	9.6	0.0	536.5	1941.5
6/17/91 ^a	0.0	0.0	20.4	20.4	0.0	0.0	20.4	244.3	0.0	20.4	0.0	0.0	3691.4	0.0	447.9	0.0	0.0	0.0	0.0	590.4	81.4	0.0	61.1	14494.1
6/17/91 ^b	0.0	0.0	0.0	0.0	0.0	0.0	10.7	490.5	0.0	10.7	0.0	0.0	4862.2	0.0	447.8	0.0	0.0	0.0	0.0	490.5	42.7	0.0	85.3	20304.0
7/24/91 ^a	0.0	0.0	0.0	0.0	0.0	0.0	274.9	1060.4	0.0	0.0	0.0	0.0	1492.4	0.0	73.6	0.0	0.0	0.0	0.0	942.5	1256.7	0.0	392.7	22346.0
7/24/91 ^b	0.0	0.0	0.0	0.0	0.0	0.0	942.5	981.8	0.0	0.0	0.0	0.0	2798.2	0.0	24.5	0.0	0.0	0.0	0.0	981.8	589.1	0.0	314.2	17568.7
8/14/91 ^a	0.0	0.0	0.0	0.0	0.0	0.0	1845.7	2062.8	0.0	0.0	0.0	0.0	1520.0	0.0	81.4	0.0	0.0	0.0	0.0	1791.4	1302.8	0.0	108.6	19083.7
8/14/91 ^b	0.0	0.0	0.0	0.0	0.0	0.0	4598.5	1642.3	0.0	0.0	0.0	119.7	2135.0	0.0	119.7	0.0	0.0	0.0	0.0	1724.4	1642.3	0.0	236.1	21557.6
9/9/91 ^a	0.0	0.0	0.0	0.0	0.0	0.0	593.7	288.4	0.0	0.0	0.0	21.2	31.8	0.0	95.4	0.0	0.0	0.0	0.0	1668.1	441.0	0.0	10.6	11563.4
9/9/91 ^b	0.0	0.0	0.0	0.0	0.0	0.0	398.3	221.3	0.0	0.0	0.0	33.2	11.1	0.0	132.8	0.0	0.0	0.0	0.0	1711.0	730.1	0.0	33.2	7664.2
10/8/91 ^a	0.0	0.0	0.0	0.0	0.0	0.0	3016.0	1168.2	0.0	0.0	0.0	0.0	66.4	0.0	26.6	0.0	0.0	0.0	0.0	185.8	26.6	0.0	26.6	1588.6
10/8/91 ^b	0.0	0.0	0.0	0.0	0.0	0.0	3257.1	1339.0	0.0	0.0	0.0	11.3	124.4	0.0	11.3	0.0	11.3	0.0	0.0	181.0	0.0	0.0	22.6	1436.3
5/26/92	0.0	0.0	0.0	0.0	0.0	0.0	24.2	1531.5	0.0	0.0	0.0	0.0	1575.1	0.0	12.1	0.0	0.0	0.0	0.0	12.1	0.0	0.0	533.1	1054.1
6/22/92	0.0	0.0	0.0	13.4	0.0	0.0	1288.0	3091.3	0.0	0.0	0.0	0.0	590.3	0.0	429.3	0.0	0.0	0.0	0.0	93.9	53.7	0.0	241.5	7084.1
7/13/92	0.0	0.0	0.0	0.0	0.0	0.0	1248.6	2008.5	0.0	0.0	0.0	0.0	244.3	0.0	190.0	0.0	0.0	0.0	0.0	27.1	271.4	0.0	108.6	3045.4
8/12/92	0.0	0.0	0.0	0.0	0.0	0.0	1169.1	960.3	0.0	0.0	0.0	0.0	125.3	0.0	104.4	0.0	0.0	0.0	0.0	83.5	313.2	0.0	438.4	2045.9
9/9/92	0.0	0.0	0.0	11.1	0.0	0.0	690.9	236.9	0.0	0.0	19.7	0.0	3730.9	0.0	177.7	0.0	0.0	0.0	0.0	197.4	217.1	0.0	414.5	2069.2
10/5/92	0.0	0.0	0.0	0.0	0.0	0.0	1676.9	2587.2	0.0	0.0	136.9	0.0	24639.5	0.0	342.2	0.0	0.0	0.0	0.0	136.9	513.3	0.0	410.7	1984.9
10/27/92	0.0	0.0	0.0	0.0	0.0	0.0	327.7	384.7	0.0	0.0	0.0	0.0	4502.9	0.0	1168.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	342.0	228.0
6/1/93	0.0	0.0	0.0	0.0	0.0	0.0	23.5	2255.0	0.0	0.0	0.0	23.5	704.7	0.0	469.8	0.0	0.0	0.0	0.0	328.8	0.0	0.0	5172.1	258.4

Table II-8 continued

ZDATE	101 - A CURVIROSTRIS	102 - A HARPAE	109 - ALONA SP	118 - C SPHAERICUS	119 - D AMBIGUA	122 - D MENDOTAE	126 - D PULEX COMPLEX *	135 - H GIBBERUM*	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	164 - BOSMINA SP *	168 - DAPHNIA SP	204 - L MINUTUS	205 - S OREGONENSIS	302 - D B THOMASI	303 - C SCUTIFER	304 - A VERN COMPLEX	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	CALANOID IMMATURE*	CYCLOPOID IMMATURE*
6/22/93	0.0	0.0	0.0	0.0	0.0	0.0	26.7	854.7	0.0	0.0	0.0	0.0	106.8	0.0	547.5	0.0	0.0	0.0	0.0	106.8	106.8	0.0	2617.5	560.9
7/29/93	0.0	0.0	0.0	0.0	0.0	0.0	2737.6	64.2	0.0	0.0	0.0	0.0	385.0	0.0	577.5	0.0	0.0	0.0	0.0	342.2	192.5	0.0	1390.2	2917.9
8/23/93	0.0	0.0	0.0	0.0	0.0	14.0	191.9	415.8	0.0	0.0	28.0	14.0	3190.7	0.0	1055.6	0.0	14.0	0.0	0.0	1119.6	383.8	0.0	1535.4	2175.1
9/28/93	0.0	0.0	0.0	0.0	0.0	27.1	271.4	81.4	0.0	0.0	0.0	0.0	502.2	0.0	556.4	0.0	0.0	0.0	0.0	461.4	40.7	0.0	475.0	1058.6
10/28/93	0.0	0.0	0.0	0.0	0.0	0.0	450.8	54.6	0.0	0.0	13.7	0.0	1666.4	0.0	3606.1	0.0	0.0	0.0	0.0	13.7	13.7	0.0	409.8	382.5
5/17/94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.9	0.0	0.0	0.0	0.0	0.0	21.1	0.0	1868.3	73.9
6/16/94	0.0	0.0	0.0	0.0	0.0	0.0	347.3	104.2	17.4	0.0	17.4	0.0	312.6	0.0	538.3	0.0	0.0	0.0	0.0	34.7	0.0	0.0	4653.6	798.8
7/20/94	0.0	0.0	0.0	0.0	0.0	0.0	1346.2	210.3	0.0	0.0	42.1	0.0	420.7	0.0	1009.6	0.0	42.1	0.0	0.0	462.8	967.6	0.0	2271.7	7984.6
8/22/94	0.0	0.0	0.0	0.0	0.0	0.0	2435.7	292.3	0.0	0.0	1607.6	0.0	194.9	0.0	243.6	0.0	0.0	0.0	0.0	730.7	1899.8	0.0	828.1	7176.4
10/4/94	0.0	0.0	0.0	22.1	0.0	0.0	1492.8	0.0	0.0	0.0	751.9	0.0	0.0	0.0	287.5	0.0	0.0	0.0	0.0	597.1	376.0	0.0	552.9	1901.9
10/24/94	0.0	0.0	0.0	0.0	0.0	0.0	825.5	31.6	0.0	0.0	286.4	0.0	10.5	0.0	1326.7	0.0	0.0	0.0	0.0	168.5	303.2	0.0	353.8	1297.2
5/31/95	0.0	0.0	0.0	0.0	0.0	0.0	33.7	505.3	0.0	0.0	84.2	0.0	960.0	0.0	185.3	0.0	0.0	0.0	0.0	50.5	84.2	0.0	808.5	4008.6
7/24/95	0.0	0.0	0.0	0.0	0.0	0.0	279.2	0.0	0.0	0.0	325.7	15.5	93.1	0.0	465.3	0.0	0.0	0.0	0.0	62.0	341.2	0.0	666.9	5994.1
9/18/95	0.0	0.0	0.0	0.0	0.0	0.0	879.3	195.4	0.0	0.0	716.5	0.0	683.9	0.0	1237.6	0.0	0.0	0.0	0.0	716.5	651.4	0.0	1050.3	2735.7
10/24/95	0.0	0.0	0.0	20.4	0.0	0.0	592.9	368.0	0.0	0.0	511.1	0.0	327.1	0.0	5577.6	0.0	0.0	0.0	0.0	81.8	61.3	0.0	613.4	1443.5
6/12/96	0.0	0.0	0.0	0.0	751.7	0.0	62.6	1973.1	0.0	0.0	720.3	0.0	94.0	0.0	219.2	23.5	0.0	23.5	0.0	94.0	0.0	0.0	4429.4	970.9
7/16/96	0.0	0.0	0.0	0.0	2116.9	0.0	1310.5	970.2	0.0	0.0	705.6	0.0	617.4	0.0	2161.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4527.8	1360.9
8/26/96	0.0	0.0	0.0	0.0	640.0	0.0	194.8	1224.4	0.0	0.0	0.0	27.8	194.8	0.0	1140.9	0.0	0.0	0.0	0.0	417.4	111.3	0.0	2254.0	4090.5
9/23/96	0.0	0.0	0.0	0.0	183.1	0.0	586.1	1098.9	0.0	0.0	36.6	0.0	0.0	0.0	293.0	0.0	0.0	0.0	0.0	366.3	201.5	0.0	695.9	3858.2
5/27/97	0.0	0.0	0.0	0.0	26.0	0.0	26.0	2497.4	0.0	0.0	78.0	0.0	130.1	0.0	884.5	0.0	0.0	26.0	0.0	0.0	0.0	104.1	16129.0	2185.2
6/23/97	0.0	0.0	0.0	0.0	102.7	0.0	51.3	4381.3	136.9	0.0	17.1	0.0	0.0	0.0	376.5	0.0	0.0	0.0	0.0	51.3	0.0	0.0	8899.5	2567.2
7/21/97	0.0	0.0	0.0	0.0	102.0	0.0	408.1	4013.1	0.0	0.0	153.0	0.0	2040.6	357.1	1836.5	0.0	0.0	0.0	0.0	1071.3	0.0	0.0	6189.7	5356.5
8/18/97	0.0	0.0	0.0	24.4	316.6	0.0	560.1	1363.7	0.0	0.0	0.0	0.0	48.7	0.0	1241.9	0.0	0.0	0.0	0.0	754.9	292.2	0.0	6623.6	7402.9
9/15/97	0.0	0.0	0.0	0.0	100.0	0.0	600.1	160.0	0.0	0.0	0.0	0.0	260.0	240.0	820.1	0.0	0.0	0.0	0.0	1320.1	0.0	0.0	6560.7	1320.1
5/12/98	0.0	0.0	0.0	0.0	71.4	0.0	153.0	959.0	20.4	0.0	0.0	0.0	387.7	10.2	2056.7	0.0	10.2	0.0	0.0	81.6	0.0	10.2	38205.5	40.8
6/22/98	0.0	0.0	0.0	0.0	13.2	0.0	66.1	0.0	0.0	0.0	13.2	0.0	13.2	0.0	158.6	0.0	0.0	0.0	0.0	105.8	0.0	0.0	10244.5	66.1
8/18/98	0.0	0.0	0.0	0.0	1784.8	0.0	649.0	2433.8	0.0	0.0	2271.5	0.0	14764.8	0.0	649.0	0.0	0.0	0.0	0.0	730.1	324.5	0.0	19627.6	5192.0
9/28/98	0.0	0.0	0.0	0.0	240.9	0.0	1059.8	963.4	0.0	0.0	240.9	0.0	9248.8	433.5	2312.2	0.0	0.0	0.0	0.0	770.7	96.3	0.0	9248.8	3709.1

Table II-8 continued

ZDATE	101 - A CURVIROSTRIS	102 - A HARPAE	109 - ALONA SP	118 - C SPHAERICUS	119 - D AMBIGUA	122 - D MENDOTAE	126 - D PULEX COMPLEX *	135 - H GIBBERUM*	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	164 - BOSMINA SP *	168 - DAPHNIA SP	204 - L MINUTUS	205 - S OREGONENSIS	302 - D B THOMASI	303 - C SCUTIFER	304 - A VERN COMPLEX	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	CALANOID IMMATURE*	CYCLOPOID IMMATURE*
5/10/99	0.0	0.0	0.0	0.0	141.7	0.0	43.6	261.7	0.0	0.0	174.4	0.0	32.7	0.0	1351.9	0.0	0.0	0.0	0.0	163.5	0.0	32.7	26161.0	1461.0
6/15/99	0.0	0.0	0.0	23.2	766.6	0.0	232.3	7433.2	23.2	0.0	232.3	0.0	69.7	116.1	302.0	0.0	0.0	0.0	0.0	69.7	46.5	0.0	17091.6	3066.2
7/19/99	0.0	0.0	0.0	0.0	1028.2	41.1	287.9	3865.9	0.0	0.0	1110.4	0.0	82.3	164.5	370.1	0.0	0.0	0.0	0.0	987.0	123.4	0.0	22367.5	3372.4
8/24/99	0.0	0.0	0.0	0.0	563.7	0.0	563.7	2124.7	0.0	0.0	260.2	0.0	2428.2	0.0	1127.4	0.0	0.0	0.0	0.0	346.9	86.7	0.0	8758.8	1994.6
9/21/99	0.0	0.0	0.0	0.0	336.4	0.0	672.8	269.1	0.0	0.0	605.5	0.0	515.8	269.1	695.2	0.0	0.0	0.0	0.0	762.5	112.1	22.4	4530.2	874.6
10/25/99	0.0	0.0	0.0	0.0	111.4	0.0	980.4	623.9	0.0	0.0	1091.8	0.0	2005.3	111.4	4545.5	0.0	0.0	0.0	0.0	22.3	0.0	0.0	445.6	178.3
5/29/00	0.0	0.0	0.0	0.0	23.2	0.0	104.5	1718.9	23.2	0.0	394.9	0.0	197.4	104.5	1324.0	0.0	0.0	0.0	0.0	23.2	0.0	0.0	37154.2	209.1
6/19/00	0.0	0.0	0.0	0.0	23.2	0.0	441.3	5017.4	69.7	0.0	46.5	0.0	69.7	81.3	867.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10964.0	1130.5
7/24/00	0.0	0.0	0.0	0.0	0.0	0.0	108.4	7226.7	0.0	0.0	94.9	0.0	149.1	81.3	1842.8	0.0	0.0	0.0	0.0	203.3	0.0	0.0	21700.4	2005.4
8/21/00	0.0	0.0	0.0	0.0	47.8	0.0	1339.1	2486.8	0.0	0.0	47.8	0.0	2247.7	0.0	1004.3	0.0	0.0	0.0	0.0	669.5	334.8	0.0	12242.9	9756.1
9/18/00	0.0	0.0	0.0	0.0	66.3	0.0	508.0	861.3	0.0	0.0	375.4	0.0	706.7	220.8	750.9	0.0	0.0	0.0	0.0	331.3	176.7	0.0	4770.3	574.2
10/16/00	0.0	0.0	0.0	0.0	0.0	0.0	1370.7	776.3	0.0	0.0	335.7	0.0	797.2	21.0	7384.4	0.0	0.0	0.0	0.0	62.9	104.9	0.0	2244.8	1825.2
6/4/01	0.0	0.0	0.0	0.0	0.0	0.0	203.3	4065.0	29.0	0.0	58.1	0.0	1074.3	58.1	1074.3	0.0	0.0	0.0	0.0	58.1	0.0	0.0	53641.4	5589.4
6/25/01	0.0	0.0	0.0	11.0	0.0	0.0	198.7	4591.1	22.1	0.0	33.1	0.0	463.5	44.1	419.4	0.0	0.0	0.0	0.0	132.4	0.0	0.0	12401.2	540.8
7/26/01	0.0	0.0	0.0	16.9	16.9	0.0	677.5	6639.6	0.0	0.0	16.9	0.0	18212.5	203.3	16.9	0.0	0.0	0.0	0.0	321.8	0.0	0.0	26416.3	6673.4
8/27/01	0.0	0.0	0.0	0.0	0.0	0.0	573.9	2247.7	0.0	0.0	0.0	0.0	5069.3	0.0	47.8	0.0	0.0	0.0	0.0	669.5	0.0	0.0	10616.9	4065.0
9/29/01	0.0	0.0	0.0	41.9	83.8	0.0	1173.6	964.1	0.0	0.0	83.8	0.0	2221.5	922.1	1341.3	0.0	0.0	0.0	0.0	1173.6	503.0	0.0	3395.2	1173.6
10/23/01	0.0	0.0	0.0	0.0	0.0	0.0	2013.8	4728.0	0.0	0.0	569.1	0.0	3502.2	0.0	25680.4	0.0	0.0	0.0	0.0	350.2	43.8	0.0	218.9	87.6
5/28/02	10.4	0.0	0.0	0.0	0.0	0.0	83.1	519.6	0.0	0.0	10.4	0.0	311.8	41.6	2161.5	0.0	0.0	0.0	0.0	571.5	0.0	0.0	31599.5	997.6
6/24/02	0.0	62.8	0.0	0.0	0.0	0.0	627.8	3201.9	62.8	0.0	0.0	0.0	4080.8	376.7	1506.8	0.0	0.0	0.0	0.0	125.6	62.8	0.0	43644.8	3688.4
7/31/02	0.0	0.0	0.0	11.7	0.0	11.7	234.7	117.3	0.0	0.0	0.0	23.5	8448.7	164.3	281.6	0.0	0.0	0.0	0.0	328.6	35.2	11.7	33033.3	3074.4
8/26/02	0.0	0.0	0.0	0.0	0.0	0.0	379.0	1124.7	0.0	0.0	0.0	0.0	2689.5	0.0	61.1	0.0	0.0	0.0	0.0	330.1	171.2	12.2	20342.3	3227.4
9/25/02	0.0	0.0	0.0	0.0	0.0	0.0	1899.9	1266.6	0.0	0.0	0.0	42.2	802.2	1182.2	675.5	0.0	0.0	0.0	0.0	295.5	0.0	42.2	13806.2	1688.8
10/22/02	0.0	0.0	0.0	0.0	0.0	0.0	6102.9	1861.4	0.0	0.0	0.0	0.0	206.0	22.9	5218.0	0.0	0.0	0.0	0.0	45.8	0.0	22.9	4050.8	1510.5
6/2/03	0.0	0.0	0.0	0.0	0.0	0.0	64.4	386.2	0.0	0.0	0.0	0.0	42.9	10.7	622.2	0.0	0.0	0.0	0.0	118.0	10.7	0.0	15447.3	1727.1
6/23/03	0.0	0.0	0.0	0.0	0.0	0.0	416.9	6270.2	0.0	0.0	0.0	0.0	1701.1	528.1	611.5	0.0	0.0	0.0	0.0	194.6	0.0	0.0	22343.2	8838.9
7/28/03	0.0	0.0	0.0	0.0	0.0	0.0	440.1	4694.4	0.0	0.0	0.0	0.0	456.4	81.5	489.0	0.0	0.0	0.0	0.0	423.8	114.1	0.0	7970.7	6161.4
8/25/03	0.0	0.0	0.0	0.0	0.0	0.0	494.5	1213.9	0.0	0.0	0.0	0.0	1906.3	179.8	179.8	0.0	0.0	0.0	0.0	337.2	157.4	45.0	7193.4	1191.4

Table II-8 continued

ZDATE	101 - A CURVIROSTRIS	102 - A HARPAE	109 - ALONA SP	118 - C SPHAERICUS	119 - D AMBIGUA	122 - D MENDOTAE	126 - D PULEX COMPLEX *	135 - H GIBBERUM*	142 - P PEDICULUS	145 - S CRYSTALLINA	150 - E LONGISPINA	152 - D BIRGEI*	164 - BOSMINA SP *	168 - DAPHNIA SP	204 - L MINUTUS	205 - S OREGONENSIS	302 - D B THOMASI	303 - C SCUTIFER	304 - A VERN COMPLEX	309 - M EDAX	310 - O MODESTUS	338 - T EXTENSUS*	CALANOID IMMATURE*	CYCLOPOID IMMATURE*
10/13/03	0.0	0.0	0.0	0.0	0.0	79.5	1656.1	1172.5	0.0	0.0	0.0	0.0	218.6	159.0	2434.5	0.0	19.9	0.0	0.0	198.7	99.4	0.0	1589.9	477.0
5/25/04	0.0	0.0	0.0	8.5	0.0	0.0	34.1	435.4	0.0	0.0	0.0	0.0	51.2	25.6	222.0	0.0	0.0	0.0	0.0	34.1	0.0	42.7	20493.6	1889.5
6/21/04	0.0	0.0	0.0	0.0	0.0	0.0	224.7	6091.2	0.0	0.0	0.0	0.0	823.8	0.0	767.6	0.0	0.0	0.0	0.0	131.1	0.0	0.0	14525.5	674.0
7/19/04	0.0	0.0	0.0	0.0	0.0	0.0	853.7	3122.0	20.3	0.0	0.0	0.0	2439.0	223.6	630.1	0.0	0.0	0.0	0.0	528.5	0.0	0.0	15117.4	1138.2
9/21/04	0.0	0.0	0.0	0.0	0.0	0.0	1576.0	685.9	0.0	0.0	0.0	0.0	1891.2	43.8	218.9	0.0	0.0	0.0	0.0	262.7	0.0	29.2	6566.7	569.1
10/18/04	0.0	0.0	0.0	0.0	0.0	0.0	1665.0	1526.3	0.0	0.0	0.0	0.0	1214.1	0.0	8498.6	0.0	0.0	0.0	0.0	0.0	173.4	0.0	1561.0	1075.3
5/17/05	0.0	0.0	0.0	0.0	0.0	0.0	44.9	2018.4	0.0	0.0	0.0	0.0	11.2	56.1	2819.3	0.0	0.0	0.0	0.0	67.3	11.2	0.0	43132.1	650.4
6/20/05	0.0	0.0	0.0	0.0	0.0	0.0	181.7	2550.6	28.7	0.0	0.0	0.0	650.4	9.6	363.5	0.0	0.0	19.1	0.0	38.3	0.0	0.0	11726.4	5356.3
7/20/05	0.0	0.0	0.0	0.0	0.0	0.0	953.9	2549.4	0.0	0.0	0.0	0.0	3329.9	0.0	34.7	0.0	0.0	0.0	0.0	381.5	0.0	17.3	19157.9	4058.3
8/25/05	0.0	0.0	0.0	0.0	0.0	0.0	800.5	1125.7	0.0	0.0	0.0	0.0	1300.8	166.8	16.7	0.0	0.0	0.0	0.0	333.5	0.0	16.7	10806.8	5403.4
9/21/05	0.0	0.0	0.0	0.0	0.0	0.0	3252.0	1158.5	0.0	0.0	0.0	20.3	508.1	203.3	365.9	0.0	0.0	0.0	0.0	670.7	20.3	0.0	6849.6	569.1
10/17/05	0.0	0.0	42.5	0.0	0.0	85.1	6123.4	2608.3	0.0	0.0	0.0	0.0	2721.7	85.1	20998.6	0.0	0.0	0.0	0.0	297.7	212.6	0.0	127.6	1956.2
5/23/06	0.0	0.0	0.0	0.0	0.0	0.0	145.0	1570.6	54.4	0.0	54.4	0.0	779.3	90.6	1184.0	0.0	0.0	0.0	0.0	72.5	0.0	18.1	46408.5	5962.3
6/20/06	0.0	0.0	0.0	0.0	0.0	0.0	382.6	3672.9	102.0	0.0	102.0	0.0	3443.3	306.1	331.6	0.0	0.0	0.0	0.0	637.7	0.0	25.5	23498.6	5279.8
7/25/06	0.0	0.0	0.0	0.0	0.0	0.0	428.5	802.6	10.2	0.0	20.4	0.0	1414.7	81.6	10.2	0.0	10.2	0.0	0.0	224.4	10.2	0.0	15022.7	3611.5
8/22/06	0.0	0.0	0.0	0.0	0.0	0.0	700.4	940.6	0.0	0.0	0.0	0.0	3535.5	20.0	20.0	0.0	0.0	0.0	0.0	440.3	140.1	0.0	9606.0	8405.3
9/26/06	0.0	0.0	0.0	0.0	0.0	57.8	2890.7	3006.4	0.0	0.0	173.4	0.0	2370.4	751.6	1214.1	0.0	0.0	0.0	0.0	404.7	0.0	0.0	21847.1	2601.7
10/25/06	0.0	0.0	0.0	0.0	0.0	0.0	1973.1	559.8	0.0	0.0	14.0	0.0	1175.5	42.0	7119.6	0.0	0.0	0.0	0.0	70.0	28.0	0.0	125.9	454.8

Table II-9: Crustacean zooplankton density data (number per m³) for Wilderness Lake, 1987-1988.
 * indicates taxa where more than one group were combined - see p.44 for further explanation.

ZDATE	101 - A CURVIROSTRIS	118 - C SPHAERICUS	137 - L SETIFERA	142 - P PEDICULUS	164 - BOSMINA SP *	204 - L MINUTUS	CALANOID IMMATURE*	CYCLOPOID IMMATURE*
5/26/1987	0.0	0.0	0.0	0.0	156.6	250.3	15782.7	0.0
5/26/1987	0.0	0.0	0.0	0.0	364.5	296.1	14942.7	0.0
6/22/1987	0.0	0.0	0.0	79.4	555.7	2363.9	34320.1	0.0
6/22/1987	0.0	0.0	0.0	44.1	396.9	1793.5	28160.9	0.0
7/28/1987	0.0	0.0	0.0	0.0	840.0	122251.1	35919.6	0.0
7/28/1987	0.0	25.7	0.0	0.0	1157.2	8023.0	28233.7	24.7
8/25/1987	36.4	0.0	0.0	0.0	7076.5	8869.8	35428.5	0.0
8/25/1987	18.2	0.0	0.0	0.0	6368.9	10614.7	22131.1	0.0
10/1/1987	0.0	0.0	0.0	0.0	738.3	10249.1	5493.7	21.7
10/1/1987	0.0	0.0	0.0	0.0	2135.4	10134.0	5439.9	0.0
10/20/1987	0.0	18.3	0.0	0.0	1214.3	9819.1	751.1	0.0
10/20/1987	0.0	18.3	0.0	0.0	1465.5	8793.6	537.4	12.2
5/25/1988	0.0	0.0	0.0	0.0	0.0	0.0	526.2	0.0
5/25/1988	0.0	0.0	23.3	0.0	0.0	162.8	1907.5	0.0



A commonly found zooplankton species in the study lakes: *Mesocyclops edax* (L.Witty)

Table II-10: Average zooplankton richness data (number of species per collection) for the Aurora Trout Lakes, 1987-2006.

	Aurora Whitepine		Little Whitepine		Whirligig		Wilderness	
	Richness	Sample size	Richness	Sample size	Richness	Sample size	Richness	Sample size
1987	2.5	12	4.1	12	3.6	12	2.8	12
1988	3.3	12	3.5	12	3.1	12	1.5	2
1990	3.8	12	3.7	12	4.1	12	-	-
1991	4.7	12	5.6	12	6.6	12	-	-
1992	5.3	7	5.7	7	6.3	7	-	-
1993	5.8	6	4.8	6	7.0	6	-	-
1994	6.8	6	3.5	6	6.2	6	-	-
1995	6.8	4	5.0	4	7.3	4	-	-
1996	6.3	4	5.8	4	7.8	4	-	-
1997	5.0	5	6.6	5	7.2	5	-	-
1998	6.3	4	6.3	4	7.8	4	-	-
1999	7.2	6	7.0	6	8.5	6	-	-
2000	6.7	6	7.3	6	7.5	6	-	-
2001	7.5	6	7.0	6	7.3	6	-	-
2002	6.7	6	5.3	6	7.5	6	-	-
2003	7.4	5	8.0	5	6.4	5	-	-
2004	6.6	5	5.8	5	5.8	5	-	-
2005	7.0	6	7.0	6	6.7	6	-	-
2006	6.3	6	6.7	6	7.5	6	-	-