Special Report Number 82

A COMPENDIUM OF CRUSTACEAN ZOOPLANKTON AND *MYSID DILUVIANA* COLLECTIONS FROM SELECTED COLORADO RESERVOIRS AND LAKES 1991–2009

Patrick J. Martinez, Michael D. Gross and Estevan M. Vigil

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COLORADO DIVISION OF WILDLIFE
AQUATIC WILDLIFE RESEARCH

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Layout & production by Sandy Cochran

FOREWORD

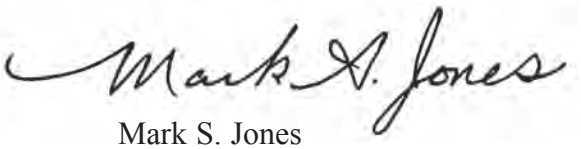
Coloradoans are fortunate to have a wide variety of fishing opportunities, including cold and warm water lakes and reservoirs. The Colorado Division of Wildlife strives to create a broad diversity of fishing opportunities in these waters.

The management of fisheries in coldwater lakes and reservoirs in Colorado presents a unique challenge to fishery biologists. Many of these waters are oligotrophic, which means they are characterized by low input of inorganic nutrients, low production of organic matter and low synthesis of organic nutrients, which in turn limits planktonic algae or primary productivity. Low primary productivity limits the ability of these waters to support robust zooplankton populations and subsequently fishery productivity. Colorado's coldwater lakes and reservoirs typically have short, fairly simple food webs which makes the presence and abundance of the various zooplankters critical to the management of sportfish. As the author states, crustacean zooplankters "represent the cornerstone of reservoir foodwebs".

This publication represents almost two decades of crustacean zooplankton monitoring performed primarily under Federal Aid in Fish and Wildlife Restoration Projects F-89, F-85, F-242 and F-325. Special emphasis was also placed on monitoring of *Mysis diluviana* in specific waters since this non-native crustacean has been shown to negatively impact *Daphnia*, a large and important food item for planktivorous fish species such as kokanee and rainbow trout.

The abundance and size of zooplankton in reservoirs provides valuable insight into the general "health" and function of these important fishery resources. It is hoped that this Colorado Division of Wildlife Special Report 82 will provide a basis for future evaluations and we believe it will provide future biologists and limnologists with a valuable reference tool to better manage Colorado's lakes and reservoirs.

Sincerely,



Mark S. Jones
Aquatic Research Leader

Cover photo is a female calanoid copepod *Leptodiaptomus nudus*. Captured from Highline Reservoir August 2001.

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A COMPENDIUM OF CRUSTACEAN ZOOPLANKTON AND *MYSIS DILUVIANA* COLLECTIONS FROM SELECTED COLORADO RESERVOIRS AND LAKES 1991–2009

EXECUTIVE SUMMARY

Some species of crustacean zooplankton represent the cornerstone of reservoir food webs, being an important food of larval, juvenile or adult fish. The fluctuation of some reservoirs limits the development of productive littoral zones and aquatic plants, leaving the open-water limnetic zone as a primary energy pathway for sustaining sport fish populations. While all reservoirs and lakes contain a variety of crustacean zooplankton species that are consumed by fish, the seasonal presence and abundance of *Daphnia* is of particular interest. Among the largest zooplankters, *Daphnia* often serve as a primary food of some coldwater and warmwater fish species. In coldwater reservoirs in particular, *Daphnia pulicaria* is the preferred food of kokanee *Oncorhynchus nerka* and rainbow trout *O. mykiss*.

This publication summarizes data associated with the collection of crustacean zooplankton performed as part of research on Colorado's large coldwater lakes and reservoirs and includes data from some smaller or lower elevation reservoirs. The sampling at coldwater reservoirs and lakes was performed under Federal Aid in Fish and Wildlife Restoration Projects F-89, F-85, and F-242 from 1991 to 2009 and reported in annual progress or final reports, entitled Coldwater Reservoir Ecology, from 1992 to 2010. Collections from the warmwater reservoir Highline Lake were made under Federal Aid in Fish and Wildlife Restoration Project F-325 from 1999 to 2002 and reported in annual progress reports entitled Westslope Warmwater Fisheries from 2000 to 2003. Additional data from Highline Lake in 2005 and 2006 was included in the 2007 Great Outdoors Colorado annual report also entitled Westslope Warmwater Fisheries. Data for Rifle Gap Reservoir, a mid-elevation reservoir, appeared in the 2009 Coldwater Reservoir Ecology annual report.

From 1991 to 2009, 25 lakes and reservoirs in Colorado were sampled on a single date, periodically, or routinely to monitor crustacean zooplankton populations. Detailed seasonal density and size structure data are summarized in tables and discussed in brief descriptions of these sampling results. As an aid in the identification of these species, and to verify and update nomenclature, labeled micrographs show key distinguishing features of most of the species mentioned herein. These micrographs were also used to validate previously assigned identities of crustacean zooplankton in some waters and to the extent possible, former misidentifications contained in annual reports are corrected in this compendium.

Mysis diluviana, formerly *Mysis relicta*, was sampled in 14 Colorado lakes and reservoirs from 1991 to 2009. *M. diluviana* can be a potent competitor for the *Daphnia* utilized as food by fish, eliminating *Daphnia* or truncating its seasonal abundance. At some waters, sampling was performed primarily to document the establishment or persistence of mysid populations. In several larger reservoirs, mysids were more frequently monitored to study their population dynamics and potential impacts to *Daphnia* and sport fish populations. Detailed density and size structure data are summarized in tables and discussed in brief descriptions of these sampling results.

INTRODUCTION

The importance of crustacean zooplankton in the diet of many fishes is widely recognized. In particular, the genus *Daphnia* includes some of the most preferred foods of kokanee *Oncorhynchus nerka*, trout, and warmwater panfish. *Daphnia* can exist nearshore in shallow water or in the limnetic zone over deep water providing food resources for fishes in the expanses of open water of lakes and reservoirs of all sizes. Other species of crustacean zooplankton also contribute to the diet of fishes, particularly during periods when *Daphnia* are scarce. Historical limnological studies in Colorado document the diversity and distribution of crustacean zooplankton in the state (Pennak 1957; Reed & Olive 1958; Pennak 1966).

The crustacean zooplankton species documented herein were sampled as part of Colorado Division of Wildlife research on lakes and reservoirs supported, in part, by Federal Aid in Sport Fish Restoration and Great Outdoors Colorado. From 1991 to 2009, 25 lakes and reservoirs in Colorado were sampled on a single date, periodically, or routinely to monitor crustacean zooplankton populations. Specimens identified included 19 species of cladocerans from 6 families, Daphniidae, Sididae, Chydoridae, Bosminidae, Holopedidae, and Leptodoridae, two species of cyclopoid copepods, and four species of calanoid copepods.

New microscope equipment acquired in 2007 provided the ability to view individual specimens of crustacean zooplankton in greater detail. This equipment facilitated identification of several species from the family Chydoridae that have previously gone undetected (ie. *Alona affinis*, *Camptocercus macrurus*, *Chydorus sphaericus*, *Eurycercus lamellatus*, *Leydigia acanthocercoides*, and *Pleuroxus denticulatus*), and revealed the presence of the cyclopoid copepod *Mesocyclops edax* in some waters. Due to the low numbers and small sizes of these more recently detected species, it is likely that they do not represent significant components in the food webs of sport fish food in the various reservoirs in which they were captured.

Mysis diluviana, formerly *Mysis relicta* (Vainola 1986, Vainola et al. 1994; Audzijonyte and Vainola 2005; Dooh et al. 2006), was widely introduced into Colorado lakes and reservoirs (Finnell 1977; Nesler 1986; Martinez and Bergersen 1989). Because *M. diluviana* may compete with sport fish for *Daphnia* (Martinez and Bergersen 1989, Nesler and Bergersen 1991; Martinez and Wiltzius 1995) or reconfigure food webs that support coldwater fishes (Martinez et al. 2009), mysids were also sampled in 14 Colorado lakes and reservoirs from 1991 to 2009. At some waters, sampling was performed primarily to document the establishment or persistence of mysid populations. In several larger reservoirs, mysids were more frequently monitored to study their population dynamics and potential impacts to *Daphnia* and sport fish populations.

DESCRIPTIONS OF STUDY WATERS

Figure 1 shows the locations of the 27 lakes and reservoirs sampled for crustacean zooplankton or *M. diluviana*. A brief description of the individual waters is provided beginning on page 4.

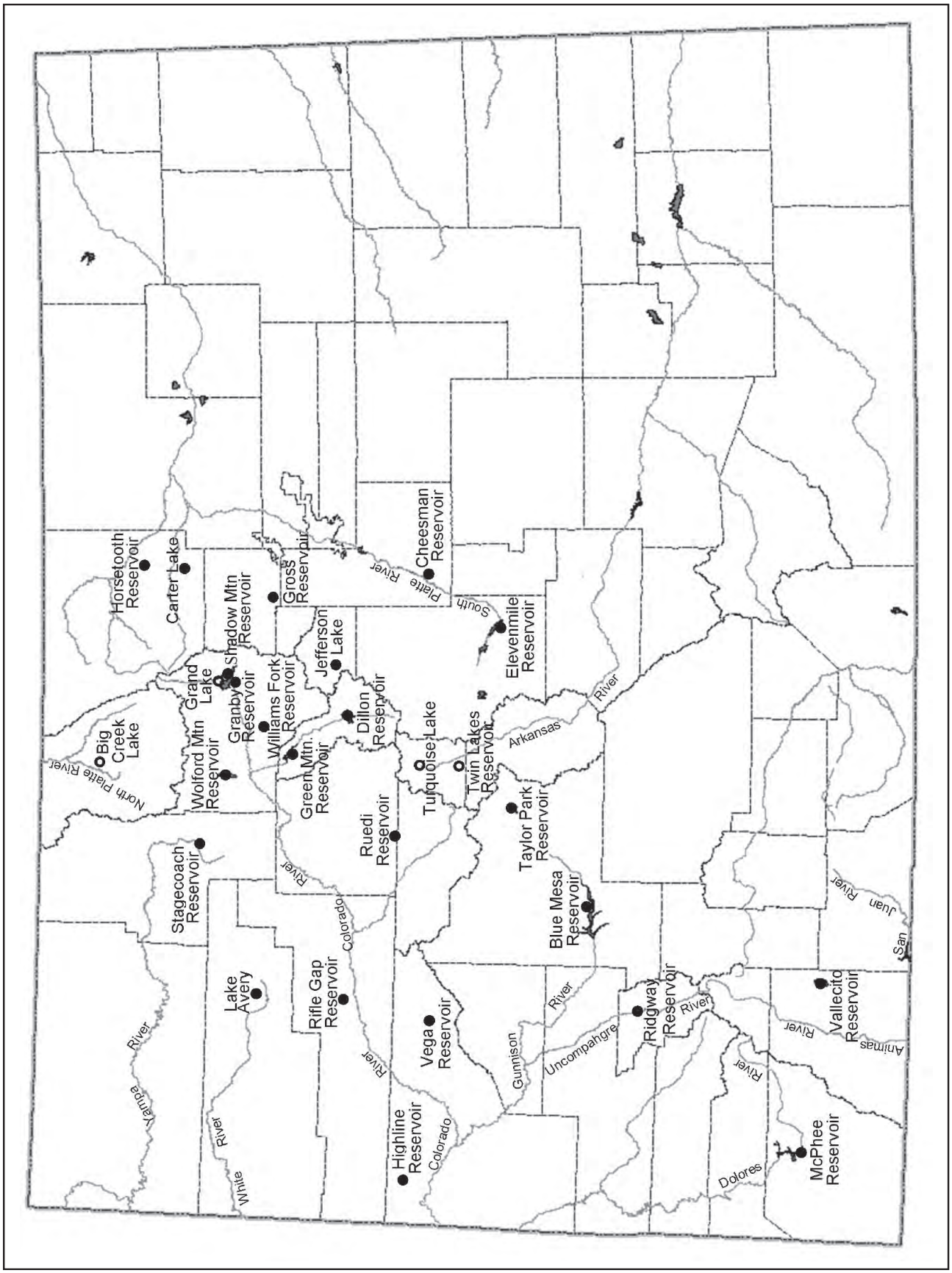

Figure 1. Map of Colorado showing lakes and reservoirs sampled for crustacean zooplankton and/or *Mysis diluviana* (N=27). Black dots denote reservoirs (n=23) and open circles denote natural lakes or natural lake basins which have been impounded (n=4).

Lake Avery (aka Big Beaver Reservoir) was constructed in 1964 on Big Beaver Creek, a tributary of the White River. It is located just west of Buford, Colorado in Rio Blanco County, and is part of the Colorado Division of Wildlife's Oak Ridge State Wildlife Area. At a maximum water surface elevation of 2,132 m, the reservoir has a surface area of 99 ha and a maximum depth of 24 m.

Big Creek Lake, on the South Fork of Big Creek, is considered the third largest natural lake in Colorado (Burkhard and Babcock 1967), but its natural water surface level was raised by a small dike. It is located 54 km northwest of Walden, Colorado in Jackson County, within the Routt National Forest. At a maximum water surface elevation of 2,742 m, the lake has a surface area of 142 ha and maximum depth of 17 m.

Blue Mesa Reservoir is located on the Gunnison River west of the town of Gunnison, Colorado in Gunnison County. The reservoir is part of the U.S. Bureau of Reclamation's Curecanti water storage and hydropower generation project. It lies within the National Park Service's Curecanti National Recreation Area. Created in 1965 by the construction of the Blue Mesa Dam, it is the largest reservoir in Colorado. At a maximum water surface elevation of 2,292 m, Blue Mesa Reservoir has a surface area of 3,706 ha and a maximum depth of 101 m. The reservoir is about 32 km long and has over 150 km of shoreline. Blue Mesa Reservoir supported a large kokanee *Oncorhynchus nerka* population, which served as a primary source of kokanee eggs and provided prey for trophy-sized and state record lake trout *Salvelinus namaycush* (Johnson and Martinez 2000; Martinez et al. 2009).

Carter Lake is a reservoir located in the foothills about 19 km west of the town of Berthoud, Colorado in Larimer County. It is a part of the U.S. Bureau of Reclamation's Colorado-Big Thompson Project. Recreation is administered by Larimer County Parks. At a maximum water surface elevation of 1,762 m, the reservoir has a surface area of 584 ha and a maximum depth of 49 m.

Cheesman Reservoir (aka Cheesman Lake) was constructed on the South Platte River in 1905 and is managed by the Denver Water Board. It is located about 53 km southeast of Bailey, Colorado in Jefferson County, within the Pike National Forest. At a maximum water surface elevation of 2,085 m, it has a surface area of 354 ha and a maximum depth of 58 m.

Dillon Reservoir (aka Lake Dillon) was constructed in 1963 on the Blue River in Summit County. It is surrounded by the towns of Frisco, Dillon and Silverthorne, Colorado and lies within the White River National Forest. It is the largest water storage facility in the Denver Water Board's system. At a maximum water surface elevation of 2,750 m, the reservoir has a surface area of 1,393 ha and a maximum depth of 57 m.

Elevenmile Reservoir was constructed in 1932 on the South Platte River and is operated by the Denver Water Board. It is located about 80 km west of the town of Colorado Springs, Colorado in Park County. The reservoir lies within the Pike National Forest and recreation is administered by Colorado State Parks. At a maximum water surface elevation of 2,620 m, the reservoir has a surface area of 1,377 ha and a maximum depth of 33 m.

Granby Reservoir (aka Lake Granby) is situated on the Colorado River in Grand County and is the second largest body of water in Colorado. Impounded in 1949 as part of the Colorado-Big Thompson Project, water from Granby Reservoir is pumped back into Shadow Mountain Reservoir and flows through Grand Lake and the Adams Tunnel to supplement Front Range water supplies. Granby Reservoir is located about 10 km north of the town of Granby, Colorado and lies within the U.S. Forest Service's Arapaho National Recreation Area. At a maximum water surface elevation of 2,524 m, the reservoir has a surface area of 2,936 ha and a maximum depth of 66 m.

Grand Lake, in Grand County, was formed by glacial activity and is the second largest natural lake in Colorado. It is bordered by the town of Grand Lake and is adjacent to Rocky Mountain National Park. Since 1957, it has been part of the Colorado-Big Thompson Project, which diverts water east under the Continental Divide to Colorado's Front Range. At a maximum water surface elevation of 2,550 m, the lake has a surface area of 204 ha and it is Colorado's deepest natural lake at approximately 81 m.

Green Mountain Reservoir was constructed on the Blue River in 1943 to help replace Colorado

River water that is transferred to Colorado's Front Range through the Colorado-Big Thompson Project. The reservoir is located in Summit County, about 25 km southeast of the town of Kremmling, Colorado. At a maximum water surface elevation of 2,425 m, the reservoir has a surface area of 859 ha and a maximum depth of 59 m. The reservoir's water level fluctuates significantly as water is released to supplement flows in the Colorado River.

Gross Reservoir, on South Boulder Creek, is located in the foothills about 11 km southwest of the city of Boulder in Boulder County. The reservoir was built in the 1950's and serves to store and regulate water received from west of the Continental Divide through the Moffat Tunnel. At a maximum water surface elevation of 2,221 m, the reservoir has a surface area of 166 ha and a maximum depth of 85 m.

Highline Lake is a reservoir located approximately 32 km northwest of Grand Junction, Colorado in Mesa County. It receives water from the Government Highline Canal, which diverts water from the Colorado River near Cameo, Colorado. Recreation is administered by Colorado State Parks. At a maximum water surface elevation of 1,431 m, the reservoir has a surface area of 64 ha and a maximum depth of 15 m.

Horsetooth Reservoir is located in the foothills, just west of Fort Collins, Colorado in Larimer County. Horsetooth Reservoir is part of the Colorado-Big Thompson Project and receives nearly all of its water from water diversions west of the Continental Divide. At a maximum water surface elevation of 2,523 m, the reservoir has a surface area of 768 ha and a maximum depth of 62 m.

Jefferson Lake is a reservoir located about 11 km northwest of the town of Jefferson, Colorado. The reservoir is in Park County and lies within the Pike National Forest. At a maximum surface elevation of 3,257 m it covers 58 ha and has a maximum depth of 30 m.

McPhee Reservoir was completed on the Dolores River in 1985. Located in Montezuma County just north of the town of Dolores, Colorado, the reservoir lies within the San Juan National Forest. It is the principle storage feature of the U.S. Bureau of Reclamation's Dolores Project which delivers irrigation water from the Dolores River drainage through a system of canals and tunnels. At a maximum water surface elevation of 2,110 m, the reservoir has a surface area of 2,112 ha and a maximum depth of 80 m.

Ridgway Reservoir is located on the Uncompahgre River, a tributary of the Gunnison River, about 10 km north of the town of Ridgway, Colorado in Ouray County. At a maximum water surface elevation of 2,094 m, the reservoir has a surface area of 404 ha and a maximum depth of 61 m.

Rifle Gap Reservoir was built on Rifle Creek, a tributary of the Colorado River, in 1967 by the U.S. Bureau of Reclamation. It is located about 11 km north of the town of Rifle, Colorado in Garfield County. At a maximum water surface elevation of 1,816 m, the reservoir has a surface area of 145 ha and a maximum depth of 26 m.

Ruedi Reservoir was constructed in 1968 on the Fryingpan River, about 24 km east of the town Basalt, Colorado. It lies within the White River National Forest and straddles the boundary between Eagle and Pitkin counties. At a maximum water surface elevation of 2,371 m, the reservoir has a surface area of 403 ha and a maximum depth of 74 m.

Shadow Mountain Reservoir was built in 1946 as part of the Colorado Big-Thompson Project. It serves as a conduit for water pumped from Granby Reservoir, which flows into Grand Lake and through the Adams Tunnel to supplement the water supplies of northeastern Colorado. The reservoir is located about 22 km northeast of the town of Granby, Colorado in Grand County. It lies within the U.S. Forest Service's Arapaho National Recreation Area and is adjacent to Rocky Mountain National Park. At a maximum water surface elevation of 2,550 m, the reservoir has a surface area of 544 ha and a shallow maximum depth of 11 m.

Stagecoach Reservoir was built on the Yampa River in 1988. It is located in Routt County about 11 km east of the town of Oak Creek, Colorado in Routt County. Recreation is administered by Colorado State Parks. At a maximum water surface elevation of 2,196 m, the reservoir has a surface area of 315 ha and a maximum depth of 44 m.

Taylor Park Reservoir was built in 1937 on the Taylor River, a tributary of the Gunnison River, as part of the U.S. Bureau of Reclamation's Uncompahgre Project. It is located about 56 km northeast of Gunnison, Colorado in Gunnison County and lies within the Gunnison National Forest. At a maximum water surface elevation of 2,843 m, it has a surface area of 813 ha and a maximum depth of 46 m.

Turquoise Lake was a natural lake that was enlarged in 1969 by the construction of Sugarloaf Dam (Nesler 1981). The reservoir is part of the U.S. Bureau of Reclamation's Fryingpan-Arkansas Project, a trans-mountain system that diverts water from the Fryingpan River drainage west of the Continental Divide to supplement the water supplies of southeastern Colorado. It is located about 7 km west of Leadville, Colorado in Lake County and lies within the San Isabel National Forest. At a maximum water surface of 3,008 m, the reservoir has a surface area of 667 ha and a maximum depth of 39 m.

Twin Lakes originally consisted of two glacially formed natural lakes. The lower lake was the largest natural lake in Colorado (Pennak 1966). Damming of the natural outlet of the larger lower lake, Lake Creek (a tributary of the Arkansas River), impounded both lakes creating a reservoir having two basins connected by a narrow channel. Twin Lakes is part of the U.S. Bureau of Reclamation's Fryingpan-Arkansas Project and it is also operated as a pumped-back facility for hydropower generation. It is about 37 km southwest of Leadville, Colorado in Lake County and lies within the San Isabel National Forest. At a maximum water surface elevation of 2,804 m, Twin Lakes has a surface area of 2,946 ha and a maximum depth of 67 m.

Vallecito Reservoir was constructed on the Los Pinos River, a tributary of the San Juan River, in 1941. It is located about 29 km northeast of Durango, Colorado in La Plata County, within the San Juan National Forest. At a maximum water surface elevation of 2,336 m, it has a surface area of 1,100 ha and a maximum depth of 37 meters.

Vega Reservoir was constructed in 1962 on Plateau Creek, a tributary of the Colorado River, as part of the U.S. Bureau of Reclamation's Collbran Project. It is located 16 km east of the town of Collbran in Mesa County. Recreation is administered by Colorado State Parks.
At a maximum water surface elevation of 2,426 m, the reservoir has a surface area of 364 ha and a maximum depth of 28 m.

Williams Fork Reservoir on the Williams Fork River, a tributary of the Colorado River, was enlarged in 1959. The Denver Water Board manages the reservoir's water and recreation. The reservoir is located about 25 km east of the town of Kremmling in Grand County. At a maximum water surface elevation of 2,380 m, it has a surface area of 653 ha and a maximum depth of 54 m.

Wolford Mountain Reservoir was built in 1996 on Muddy Creek, a tributary of the Colorado River. The Colorado River Water Conservation District manages the reservoir's water and recreation. The reservoir is located about 8 km north of the town of Kremmling, Colorado in Grand County. At a maximum water surface elevation of 2,282 m, it has a surface area of 627 ha and a maximum depth of 33 m.

METHODS

Sampling of crustacean zooplankton and *Mysis diluviana* (formerly *M. relicta*) in coldwater reservoirs and lakes was performed under Federal Aid in Sport Fish Restoration Projects F-89, F-85, and F-242 from 1991 to 2009 and reported in annual progress or final reports, entitled Coldwater Reservoir Ecology, from 1992 to 2010. Data for Rifle Gap Reservoir also appeared in the 2009 Coldwater Reservoir Ecology annual report. Collections from the warmwater reservoir Highline Lake were made under Federal Aid in Sport Fish Restoration Project F-325 from 1999 to 2002 and reported in annual progress reports entitled Westslope Warmwater Fisheries from 2000 to 2003. Additional data from Highline Lake in 2005 and 2006 was included in the 2007 Great Outdoors Colorado annual report also entitled Westslope Warmwater Fisheries. Table 1 shows the years in which each reservoir was sampled for crustacean zooplankton and/or *Mysis diluviana*.

Crustacean Zooplankton

Crustacean zooplankton was sampled in 25 lakes and reservoirs from1991 to 2009 including: Lake Avery, Big Creek Lake, Blue Mesa Reservoir, Cheesman Reservoir, Dillon Reservoir, Elevenmile Reservoir, Grand Lake, Granby Reservoir, Green Mountain Reservoir, Gross Reservoir, Highline Reservoir, Jefferson Lake, McPhee Reservoir, Ridgway Reservoir, Rifle Gap Reservoir, Ruedi Reservoir, Shadow Mountain Reservoir, Stagecoach Reservoir, Taylor Park Reservoir, Turquoise Lake, Twin Lakes Reservoir, Vallecito Reservoir, Vega Reservoir, Williams Fork Reservoir, and Wolford Mountain Reservoir (Table 1).

Crustacean zooplankton was sampled at standardized stations in each reservoir (Appendix 1). Stations were assigned to capture potential differences in productivity among different basins or arms of reservoirs, in different proximities to reservoir inlets or outlets, to safeguard boat access or deployment of the sampler, and to avoid the dewatering of a particular station due to reservoir drawdown. All sampling for crustacean zooplankton was conducted during daylight hours. Sampling in the early 1990s relied on locating sampling stations by visual landmarks or underwater features revealed by sonar. The availability of affordable and reliable GPS units by the mid-1990s allowed designation of waypoints for returning to standardized sampling stations. These UTM coordinates are provided for individual reservoirs, where available (Appendix 1), and correspond to the NAD27 CONUS datum. **Due to potential errors in reporting coordinates, inaccuracies in GPS devices, poor satellite reception, or changes in reservoir configuration due to varying water levels, the UTM coordinates provided should be used with caution.**

Crustacean zooplankton was sampled by oblique tows made in the 0-5 or 0-10 m stratum with a Clarke-Bumpus metered sampler (Lind 1974) fitted with a 153 mm net. Two samples were collected at each station. Samples were placed in 4 oz. Whirl-Pac bags and preserved in 70% ethanol. Information recorded at the time of sampling included the water names, date and time of day sampled, water strata sampled, and the beginning and ending meter count on the Clarke-Bumpus sampler. Samples were typically collected in the upper portion of the water column from 0-10 m. At shallower stations, the water column was sampled from the surface to a depth of 5 m, or to a depth that prevented the sampler from contacting the substrate. In general, it was desirable to strive for a meter count of about 200 revolutions of the sampler's impeller for each sample taken, which approximated 1,000 L of water filtered to acquire a sample of the crustacean zooplankton.

To estimate the density of crustacean zooplankton in each sample, the sample was diluted to a known volume, which was recorded, for subsampling. After gentle stirring to homogenize the specimens in the dilution, a Hensen-Stempl pipette was used to extract a random 1-ml aliquot which was transferred to a 1-ml Sedgewick-Rafter counting cell. Complete counts of the individual species of crustacean zooplankters, excluding copepod nauplii, were made in three aliquots and recorded. Species identifications of crustacean zooplankton species were made using common keys (Ward and Whipple 1959; Pennak 1978 and 1989; Balcer et al. 1984). Additional sources were consulted to confirm the identity of some specimens and to update nomenclature

Table 1. Colorado lakes and reservoirs sampled for crustacean zooplankton (Z) and/or *Mysis diluviana* (M) from 1991 to 2009.

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Avery											Z	Z			Z				
Big Creek	Z,M	Z,M																	
Blue Mesa			Z	Z,M		M		Z,M	Z	Z	Z		Z	Z	Z	Z	Z	Z,M	Z
Carter								M	M										
Cheesman		Z																	
Dillon	M	M	Z,M	Z,M	Z,M	Z,M		Z,M	Z,M	Z,M		Z,M	Z,M		Z,M	Z,M	Z,M	Z,M	Z,M
Elevenmile			Z	Z											Z	Z			
Granby	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M
Grand				Z											Z				
Green Mountain															Z,M	Z			
Gross		Z,M																	
Highline								Z	Z	Z	Z	Z	Z		Z	Z	Z		
Horsetooth									M				M		M	M			
Jefferson															Z,M				
McPhee		Z	Z	Z				Z				Z	Z	Z	Z	Z			
Ridgway															Z				
Rifle Gap																		Z	
Ruedi		M		Z,M			Z						Z,M						
Shadow Mountain															Z,M				
Stagecoach												X							
Taylor Park	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M	Z,M
Turquoise		Z,M																	
Twin Lakes	Z,M	Z,M	Z,M	Z,M		Z,M													
Vallecito		Z	Z	Z				Z						Z	Z	Z			
Vega									Z							Z	Z		
Williams Fork					Z	Z									Z	Z			
Wolford Mountain											Z					Z			

of species identified in samples (Brandalova 1972; Grogg 1977; Dodson 1981; Korinek 1981; Lieberman 1983; Evans 1985; Havel et al. 1998; NOAA-GLERL. 2001; Aliberti 2003; Hudson and Lesko 2003; McLaughlin 2005). Appendix 2 provides diagnostic characters for 18 species.

To obtain length frequencies of individual crustacean zooplankton species, all individuals in at least one aliquot were measured for length to the nearest 0.1 mm. A stage micrometer was used to verify or calibrate ocular or digital calipers used for making length measurements. Daphnids were measured from the top of the helmet to the base of the tail spine. *Bosmina* was measured from the top of the head capsule to the base of the mucro. Other cladocerans were measured from the top of the head capsule to the posterior of the carapace. Copepods were measured from the tip of the metasome to the end of the urosome, excluding setae.

The counts for the individual species of crustacean zooplankton in the three aliquots were averaged to obtain a mean number for each species in a 1-ml aliquot. The estimated number of crustacean zooplankters per liter was calculated for each species as follows:

Number of revolutions x Liters per revolution
= Liters of water filtered.

Liters of watered filtered / Dilution volume in ml
= Concentration factor.

Mean number of zooplankters per aliquot /
Concentration factor = Number per liter.

The mean densities of individual crustacean zooplankton species from the two samples taken at each station were averaged to establish a mean station density. The mean station densities were then averaged to establish a lakewide mean densities for each species of crustacean zooplankton in the water column from 0-10 m. In reservoirs where shallower stations occurred, the means station densities for crustacean zooplankton species were weighted by the proportion of the water depth sampled at each station. These weighted values from each station were then summed by species to estimate the lake wide mean densities of crustacean zooplankton. Due to the importance of *Daphnia* in the diets of sport fish, data summaries and discussions focus on the abundance and relative lengths of these species identified in samples.

Samples of crustacean zooplankton collected from selected Colorado reservoirs were preserved in 20 ml scintillation vials filled with 70 % ethanol. Aliquots from some of these archived samples were placed in a Sedgewick-Rafter counting cell for examination and photographing of specific distinguishing features or other aspects of crustacean zooplankton anatomy. Specimens were viewed through a compound microscope fitted with a Vitt 5x (M Plan APO HL 5/0.13 ∞/0 f=200), an Optem 10x (HR 10x/0.45 ∞/0 f=200), or an Optem 20x (HR 20x/.60 ∞/0 f=200) high resolution objectives. An Optem Zoom125C optical tube allowed magnification changes with each objective. Micrographs were captured using an Infinity X 21 megapixel digital camera (5120 x 4096 resolution), which was fitted to the microscope and viewed on a 17 inch computer screen. Final microscopy magnification ranged from 49x at the low range (e.g. micrograph of multiple *Diacyclops thomasi*) up to 1830x at the highest final magnification range (e.g. micrograph of *Alona affinis* basal spine). Captured images were enhanced with Image Pro Plus, Infinity Capture and Infinity Analyze software packages to refine image quality.

Mysis diluviana

Mysis diluviana was sampled in 14 reservoirs from1991 to 2009 including: Big Creek Lake, Blue Mesa Reservoir, Carter Reservoir, Dillon Reservoir, Granby Reservoir, Green Mountain Reservoir, Gross Reservoir, Horsetooth Reservoir, Jefferson Lake, Ruedi Reservoir, Shadow Mountain Reservoir, Taylor Park Reservoir, Turquoise Lake, and Twin Lakes. Sampling for mysids was conducted during the night, timed as closely as possible to the new moon during the summer months. This timing sought to minimize the effect of moonlight in suppressing the upward extent of *M. diluviana*'s nightly vertical migration into surface waters, and to maximize the likelihood of capturing mysids while they were off-bottom.

M. diluviana was sampled at standardized stations (Figures 3-7, 9-12,17, 20), which were assigned to represent varying water depths > 10 m, including the deepest portions of each reservoir, at which mysids would be expected to occur during summer. In the early 1990s, the location of sampling stations during the night relied upon landmarks, the horizon, barricade blinkers strategically placed on the shoreline, and water depth and substrate features as indicated by sonar. The availability of affordable and reliable GPS units by the mid-1990s allowed designation of waypoints for returning to standardized sampling stations. These UTM coordinates are provided for individual reservoirs, where available, and correspond to the NAD27 CONUS datum (Appendix 1). **Due to potential errors in reporting coordinates, inaccuracies in GPS devices, poor satellite reception, or changes in reservoir configuration due to varying water levels, the UTM coordinates provided should be used with caution, particularly when navigating at night.**

Mysids were sampled with a vertical tow net having 1-m diameter mouth and a 3-m long body that tapered to an 8-cm cod-end collar that attached to a homemade quick-disconnect collection bucket (Martinez 1992). The quick-disconnect coupler for the detachable collection bucket was weighted to facilitate the decent of the net to the reservoir bottom. The net's descent was monitored on the sonar screen to begin retrieval immediately after the net's stainless steel mouth-frame touched the reservoir bottom to avoid the inclusion of mud or debris in the sample. The net was retrieved using a davit and anchor windlass to maintain a steady retrieval rate of 0.37 m/s. Duplicate samples collected at each station were placed in 18 oz. Whirl-Pac bags, identified with a rag paper label, and preserved with 70% ethanol.

In the lab, all samples were enumerated, and the counts from the two samples collected at each station were averaged to represent an average station density. These station densities were averaged to obtain a mean density of mysids per vertical tow of the meter-net. This density per tow value was divided by 0.785 m^2, the area of the vertical tow nets' 1-m diameter mouth, to convert it to the number of mysids per square meter, which represents the lakewide index of mysid abundance (number of mysids/m^2). During the processing of mysid samples, one sample from each station was randomly chosen for length measurements of individual mysids. After 1997-1998, all mysids in samples from Dillon, Granby and Taylor Park reservoirs were measured. Mysids were measured for total length to the nearest millimeter from the tip of the rostrum to the tip of the telson, excluding setae.

CRUSTACEAN ZOOPLANKTON SPECIES RESULTS AND DISCUSSION

Table 2 provides a summary of the species of crustacean zooplankton sampled as part of this study from 1991 to 2009. Appendix 2 contains information and micrographs to aid in the identification of 18 selected species of crustacean zooplankton. Additional ecological information about some of these species is also included in Appendix 2. Appendix 3 contains detailed data from the sampling of individual waters for crustacean zooplankton from 1991 to 2009.

Appendix 3 also contains updated and corrected identifications for some crustacean zooplankton species in some waters. A dedicated effort was expended to ensure the accuracy of crustacean zooplankton species identification in CDOW Coldwater Reservoir Ecology and Westslope Warmwater Fisheries reports. However, the use of more advanced microscopy equipment in recent years enabled viewing individual zooplankters and their structure in much greater detail, providing for a more definitive identification process. In addition, nomenclature changes have been made for several species and information provided at the end of Appendix 3 describes these changes and lists species that had previously gone unnoticed. The Tables in Appendix 3 incorporate these updates and corrections in nomenclature.

Crustacean zooplankton was sampled in Lake Avery during 2001, 2002, and 2005 (Martinez 2002a, 2003a, 2006a). Species identified included the cladocerans *Bosmina longirostris, Ceriodaphnia quadrangula, Daphnia galeata mendotae,* and *Daphnia pulicaria*, the cyclopoid copepod *Diacyclops thomasi,* and the calenoid copepod *Leptodiaptomus nudus*. All of these species were present in the three sampled years except for *Leptodiaptomus nudus,* which was not detected in the 2005 samples. During the three years sampled, mean *Daphnia* densities ranged from 14.7/L in 2001 to 38.6/L 2002. *Daphnia g. mendotae* lengths ranged from 0.5 mm-1.5 mm. During 2005, *D. pulicaria* lengths ranged up to 2.1 mm. In 2001 and 2002, the largest *D. pulicaria* recorded was 1.7 mm with few animals larger than 1.4 mm.

Big Creek Lake was sampled for crustacean zooplankton during 1991 and 1992 (Martinez 1992, 1993). Species identified included the cladocerans *Bosmina longirostris, Daphnia rosea, Diaphanosoma brachyurum*, the cyclopoid copepod *Diacyclops thomasi*, and the calanoid copepods *Leptodiaptomus nudus,* and *Leptodiaptomus judayi.* All of these species were present during the two years sampled, except for *L. nudus*, which was not detected in the 1992 samples. Mean *Daphnia* densities ranged from 0.6/L in 1991 to 5.2/L in 1992. *D. rosea* lengths ranged from 0.4 mm-1.8 mm.

Crustacean zooplankton was sampled by the Colorado Division of Wildlife in Blue Mesa Reservoir in 1993, 1994, 1998, 1999, 2000, 2003, 2004, 2005, 2006, 2007, 2008, and 2009 (Martinez 1994, 1995, 2000a, 2004a, 2005, 2006a, 2007a, 2008, 2009, and 2010). Sampling for crustacean zooplankton was performed by personnel from Colorado State University in 1995, 1996, 1997, 2001, and 2002 (Wise 1997; Johnson and Koski 2005). Species identified in samples collected by the Colorado Division of Wildlife included the cladocerans *Bosmina longirostris, Ceriodaphnia quadrangula, Daphnia galeata mendotae, Daphnia pulicaria, and Diaphanosoma birgei*, the cyclopoid copepod *Diacyclops thomasi*, and the calanoid copepod *Leptodiaptomus nudus.* Most cladoceran species were detected in all years sampled, except for *C. quadrangula*, which was detected sporadically since 2000, and *D. birgei*, which was detected only in samples collected in1994. The copepods *D. thomasi* and *L. nudus* occurred in samples from all years, except in 2003 and 2004 when *L. nudus* was not detected. Mean *Daphnia* densities ranged from 1.0/L in 2000 to 25.1/L in 2005. *D. g. mendotae* lengths ranged up to 2.3 mm in 2007. *D. pulicaria* lengths frequently exceeded 2.0 mm in most years, reaching 2.9 mm in 1999.

Crustacean zooplankton was sampled in Cheesman Reservoir in 1992 (Martinez 1993). Species identified included the cladocerans *Alona affinis*, *Bosmina longirostris, Ceriodaphnia quadrangula, Daphnia galeata mendotae,* and

Daphnia pulicaria, the cyclopoid copepod *Diacyclops thomasi*, and the calanoid copepods *Leptodiaptomus nudus* and *Leptodiaptomus judayi.* *Daphnia* densities in 1992 were at 5.6/L. *D. g. mendotae* sizes ranged from 0.2 mm-1.6 mm. *D. pulicaria* sizes ranged from 0.8 mm-1.6 mm.

Dillon Reservoir was sampled yearly for crustacean zooplankton from 1993-2009, excluding 1997, 2001, and 2004 (Martinez 1994, 1995, 1996, 1997, 2000a, 2001a, 2003a, 2004a, 2006a, 2007a, 2008, 2009, and 2010). Species identified in collections included the cladocerans *Bosmina longirostris, Ceriodaphnia quadrangula, Chydorus sphaericus, Daphnia galeata mendotae, Daphnia pulicaria*, and *Daphnia rosea*, the cyclopoid copepod *Diacyclops thomasi,* and the calanoid copepod *Leptodiaptomus nudus*. *B. longirostris*, *D. g. mendotae*, and *D. thomasi* occurred in samples from each year. *D. pulicaria* occurred in samples collected in 1993 and 1996, but did not reappear in collections until 2003, subsequently occurring in samples collected in 2005, 2007, and 2009. *C. quadrangula* was present only during 2000 and 2002 and *C. sphaericus* was present only in 2005. *L. nudus* was only present in 2002 and 2007 samples. *Daphnia* densities ranged from none in 1993 to 5.7/L in 2006. *Daphnia* densities were dominated by *D. g. mendotae*, with *D. pulicaria* being absent in most years or having very low densities <0.1/L. *D. g. mendotae* lengths ranged up to 1.8 mm in 1998.

Crustacean zooplankton was sampled in Elevenmile Reservoir during 1993, 1994, 2005, and 2006 (Martinez 1994, 1995, 2006a, and 2007a). Species identified in samples included the cladocerans *Alona guttata*, *Bosmina longirostris, Ceriodaphnia quadrangula, Daphnia galeata mendotae, Daphnia pulicaria*, and *Daphnia rosea*, the cyclopoid copepod *Diacyclops thomasi*, and the calanoid copepods *Leptodiaptomus nudus* and *Leptodiaptomus judayi.* New microscopy and digital imaging equipment purchased in 2007 facilitated identification of several species that were previously undetected in Elevenmile Reservoir. These included cladocerans from the *Chydoridae* family (*Camptocercus macrurus*, *Chydorus sphaericus*, and *Eurycercus lamellatus)* and an additional cyclopoid copepod, *Mesocyclops edax*. Though these undetected species may have been present in earlier samples, their small size likely limits their contribution to the food web of sport fish in the reservoir. During the four years sampled, mean *Daphnia* densities ranged from 0.9/L in 1993 to14.8/L in 2006. *D. g. mendotae* lengths sizes ranged up to 1.9 mm in 2005. In 1993, *D. pulicaria* specimens were exceptionally large, with individuals exceeding 3 mm. In subsequent years the size structure of *D. pulicaria* was smaller, but remained large in comparison to that in other reservoirs with specimens up to 2.7 mm in length.

The crustacean zooplankton in Granby Reservoir has been intensively studied in the past (Finnell and Reed 1969; Nelson 1971, 1981; Martinez 1986; Martinez and Bergersen 1991). In addition to this historic sampling, Granby Reservoir was sampled yearly for crustacean zooplankton from 1991-2009 (Martinez 1992, 1993, 1994, 1995, 1996, 1997, 1998, 2000a, 2001a, 2002a, 2003a, 2004a, 2005, 2006a, 2007a, 2008, 2009, and 2010). Species identified included the cladocerans *Alona guttata*, *Bosmina longirostris, Ceriodaphnia quadrangula, Chydorus sphaericus, Daphnia galeata mendotae, Daphnia pulicaria, Daphnia longiremis, Daphnia rosea, Diaphanosoma birgei, Diaphanosoma brachyurum,* and *Leptodora kindtii*. Also present in samples from each year were the cyclopoid copepod *Diacyclops thomasi* and the calanoid copepod *Leptodiaptomus nudus.* Cladocerans present in most years were *B. longirostris, D. g. mendotae,* and *D. pulicaria.* *A. guttata* was observed only in the 1992 samples and *C. sphaericus* was detected only in 2003. *C. quadrangula* was detected only in samples collected in 1995, 1998, 1999, and 2001. *D. longiremis* and *D. rosea* were detected only in 2003 and 2006 samples, respectively. The occurrence of *Diaphanosoma* was sporadic, with *D. birgei* being detected only in samples collected in 1993, 1997, 2000, 2001, and 2002 and *D. brachyurum* only being detected in samples collected in 2000, 2002, 2008, and 2009. The detection of *L. kindtii* was similarly sporadic, with specimens being reported only in samples collected in 1992, 1998, 2000, 2002, and 2003. *Daphnia* were absent or scarce in samples from multiple years, but ranged up to 17/L in 2003. *D. g. mendotae* lengths

ranged up to 2.3 mm in 1998 and *D. pulicaria* lengths ranged up to 2.9 mm in 2000.

Grand Lake was sampled for crustacean zooplankton in 1994 and 2005 (Martinez 1995, 2006a). The mid-July 1994 samples contained the cladocerans *Bosmina longirostris, Daphnia galeata mendotae,* and *Daphnia pulicaria* in low abundance, the cyclopoid copepod *Diacyclops thomasi* and the calanoid copepod *Leptodiaptomus* spp. When sampled in late-June 2005, the previously observed species of cladocerans were not present, and the copepods were in low abundance.

Green Mountain Reservoir was sampled for crustacean zooplankton during 2005 and 2006 (Martinez 2006a, 2007a). Samples in both years contained the cladocerans *Bosmina longirostris, Daphnia galeata mendotae,* and *Daphnia pulicaria,* the cyclopoid copepod *Diacyclops thomasi*, and the calanoid copepod *Leptodiaptomus nudus.* During the two years sampled, mean *Daphnia* densities ranged from 7.3/L - 15.1/L, with the highest abundance occurring in 2005. Both species of *Daphnia* displayed larger maximum lengths in 2006 with *D. g. mendotae* 1.8 mm and *D. pulicaria* up to 2.2 mm.

Crustacean zooplankton was sampled in Gross Reservoir in 1992 (Martinez 1993). Species identified in samples included the cladocerans *Bosmina longirostris, Daphnia galeata mendotae, Daphnia pulicaria*, the cyclopoid copepod *Diacyclops thomasi*, and the calanoid copepods *Leptodiaptomus nudus,* and *Skistodiptomus oregonensis.* Mean total *Daphnia* densities were 2.3/L. *D. g. mendotae* lengths ranged from 0.5 mm-2.1 mm, and *D. pulicaria* lengths ranged from 0.6 mm-1.9 mm.

Crustacean zooplankton was sampled in Highline Lake from 1998 to 2003, and from 2005 to 2007 (Martinez 1999, 2000b, 2001b, 2002b, 2003b, 2004b, 2006b, 2007b, and unpublished data). Samples contained bosminids, daphnids and chydorids, including *Bosmina longirostris, Ceriodaphnia quadrangula, Chydorus sphaericus, Daphnia galeata mendotae, Daphnia pulicaria, Diaphanosoma birgei*, and *Dunhevedia crassa*. Copepods included the cyclopoid copepod *Diacyclops thomasi* and the calanoid copepod *Leptodiaptomus nudus.* Digital microscopy equipment facilitated identification of additional crustacean zooplankton species in Highline Lake. The cyclopoid copepod *Mesocyclops edax* was present in samples from 2001, 2003, and 2004, and the chydorid *Leydigia acanthocercoides* was identified in samples collected in 2005. Throughout the years in which zooplankton was sampled, mean *Daphnia* densities ranged from 1.6/L in 2001 to 42.3/L in 1999. *D. g. mendotae* lengths ranged up to 2.0 mm in 2005 and *D. pulicaria* lengths ranged up to 1.7 mm in 2002.

Crustacean zooplankton was sampled in Jefferson Lake in 2005 (Martinez 2006a). Species identified in samples included the cladocerans *Bosmina longirostris, Daphnia galeata mendotae,* and *Daphnia pulicaria,* and the cyclopoid copepod *Diacyclops thomasi*. The mean *Daphnia* density on the date sampled in 2005 was 5.6/L. *D. g. mendotae* lengths ranged from 0.6 mm-1.4 mm and *D. pulicaria* lengths ranged from 0.4 mm-1.7 mm.

Crustacean zooplankton was sampled in McPhee Reservoir during 1992, 1993, 1994, 1998, and 2002, 2003, 2004, 2005, and 2006 (Martinez 1993, 1994, 1995, 2000a, 2004a, 2005, 2006a, and 2007a). The cladocerans, *Bosmina longirostris, Ceriodaphnia quadrangula, Daphnia galeata mendotae,* and *Daphnia pulicaria,* and the cyclopoid copepod *Diacyclops thomasi* were present in nearly all years sampled. *D. longiremis* was present during 2002 and 2003, and *D. rosea* was present only in 2005 samples. A number of chydorids were present sporadically throughout the years sampled including *Alona guttata* in 1993, *Alona affinis* in 2005, *Chydorus sphaericus* during 2004-2006, and *Pleuroxus denticulatus* in 2006. The calanoid copepods *Leptodiaptomus judayi* and *Leptodiaptomus connexus* were present only in samples from 1992-1994 and may have been too scarce for detection in subsequent years. A third calenoid, *Leptodiaptomus nudus*, was present only in samples collected from 2002 to 2006. Members of the family Sididae, *Diaphanosoma brachyurum* and *Diaphanosoma birgei*, were present during 2002, 2003, 2005, and 2006. Throughout all years of sampling, mean *Daphnia* densities ranged from a low of 1.0/L in 1992 to a high of 13.5/L in 2005.
D. pulicaria lengths ranged up to 2.1 mm in 1993 and *D. g. mendotae* ranged up to 1.9 mm in 1993.

Crustacean zooplankton was sampled in Ridgway Reservoir on two dates during 2005 (Martinez 2006a). Species identified included the cladocerans *Bosmina longirostris, Ceriodaphnia quadrangula, Daphnia galeata mendotae,* and *Daphnia pulicaria,* and the cyclopoid copepod *Diacyclops thomasi*. Daphnids sampled were primarily *D. g. mendotae* and mean *Daphnia* densities ranged from 3.9/L-11.9/L. *D. g. mendotae* lengths ranged from 0.3 mm-1.6 mm and *D. pulicaria* lengths ranged from 0.7 mm-1.5 mm.

Rifle Gap Reservoir was sampled for crustacean zooplankton on three dates during 2008 (Martinez 2009). Species identified in samples included the cladocerans *Bosmina longirostris, Ceriodaphnia quadrangula, Daphnia galeata mendotae,* and *Daphnia pulicaria*, the cyclopoid copepod *Diacyclops thomasi*, and the calanoid copepod *Leptodiaptomus nudus*. Digital microscopy equipment facilitated the identification of another cyclopoid, *Mesocyclops edax*. Mean *Daphnia* densities ranged from 4.7/L-12.9/L. *D. g. mendotae* lengths ranged from 0.3 mm-2.1 and *D. pulicaria* lengths ranged from 0.7 mm- 2.1 mm.

Crustacean zooplankton sampling in Ruedi Reservoir was conducted during 1994, 1997, and 2003 (Martinez 1995, 1998, and 2004a). Species identified in samples included the cladocerans *Bosmina longirostris, Daphnia galeata mendotae, Daphnia pulicaria, Simocephalus espinosus*, and the cyclopoid copepod *Diacyclops thomasi*. *S. espinosus* was only found in 1994 samples and *B. longirostris* was not present in the 2003 samples. Also, *D. pulicaria* was not found in samples taken in 1997. *Daphnia* abundance was relatively low during the years when the reservoir was sampled with mean *Daphnia* densities ranging from <0.1/L – 0.8/L. When present in samples, *D. pulicaria* specimens were never longer than 1.0mm. *D. g. mendotae* sizes were also comparatively small, ranging from 0.4mm to 1.3mm.

Crustacean zooplankton was sampled in Shadow Mountain Reservoir on three dates during 2005 (Martinez 2006). Species identified in samples included the cladocerans *Bosmina longirostris, Daphnia galeata mendotae,* and *Daphnia pulicaria*, the cyclopoid copepod *Diacyclops thomasi*, and calanoid copepod *Leptodiaptomus nudus.* Mean *Daphnia* densities ranged from 0.2/L-38.3/L with *D. g. mendotae* dominating the daphnid population. Individual lengths of *D. g. mendotae* ranged from 0.4 mm-2.1 mm, and lengths of *D. pulicaria* ranged from 0.7 mm-2.2 mm.

Sampling for crustacean zooplankton was conducted in Stagecoach Reservoir in 2002 (Martinez 2003). Species identified in samples included the cladocerans *Bosmina longirostris, Ceriodaphnia quadrangula,* and *Daphnia pulicaria,* the cyclopoid copepod *Diacyclops thomasi* and the calanoid copepod *Leptodiaptomus nudus*. *D. pulicaria*, the only daphnid present in samples, occurred at a density of 6.0/L and ranged in length from 0.8mm-2.6mm.

Crustacean zooplankton was sampled annually in Taylor Park Reservoir from 1991-2009 (Martinez 1992, 1993, 1994, 1995, 1995, 1996, 1997, 1998, 2000a, 2001a, 2002a, 2003a, 2004a, 2005, 2006a, 2007a, 2008, 2009, and 2010). Species collected included the cladocerans *Bosmina longirostris, Daphnia galeata mendotae, Daphnia pulicaria, Daphnia longiremis, Diaphanosoma birgei,* and an unidentified species of *Alona*. Samples also contained the cyclopoid copepod *Diacyclops thomasi* and the calanoid copepod *Leptodiaptomus nudus.* *B. longirostris* appeared infrequently in samples after 1999, occurring only in samples from 2002 and 2007. Conversely, *L. nudus* was not detected in samples taken prior to 1999, but was present in samples collected thereafter. *D. birgei* and *D. longiremis* were only found in 2002. Throughout all years of sampling, mean *Daphnia* densities ranged from lows of <0.1/L in 1992 and 1993 to a high of 9.6/L in 1996. *D. pulicaria* lengths ranged from 0.3 mm-2.7 mm and *D. g. mendotae* lengths ranged from 0.4 mm-2.2 mm.

Crustacean zooplankton was sampled in Turquoise Reservoir during 1992 (Martinez 1993). Species present in collections included the cladocerans *Bosmina longirostris, Daphnia galeata mendotae,* and *Holopedium gibberum*, and the cyclopoid copepod *Diacyclops thomasi.* The mean *Daphnia* density was 11.6/L, consisting of only *D. g. mendotae*, which ranged in length from 0.4 mm-1.3 mm.

The crustacean zooplankton of Twin Lakes, in the original natural lakes and in the impounded reservoir, has been intensively studied by past investigations (Lieberman 1983 and 1993). As part of this study, crustacean zooplankton sampling was conducted from 1991-1994 and in 1996 (Martinez 1992, 1993, 1994, 1995, and 1997). Species present in these collections from the 1990s included the cladocerans *Bosmina longirostris, Daphnia rosea*, *Daphnia galeata mendotae,* and *Daphnia pulicaria*, the cyclopoid copepod *Diacyclops thomasi*, and the calanoid copepods *Leptodiaptomus connexus* and *Leptodiaptomus judayi. D. g. mendotae* was not present in these collections prior to 1996 and *L. connexus* was detected only in1992. *D. rosea* was not found in samples taken after 1994. In these samples from the 1990s, mean *Daphnia* densities (consisting almost exclusively of *D. pulicaria*) were low, ranging from none collected in June of 1993 to a high of only 1.2/L in 1991. *D. pulicaria* lengths ranged from 0.5 mm-2.5 mm and *D. g. mendotae* lengths ranged from 0.5 mm-1.1 mm.

Crustacean zooplankton in Vallecito Reservoir was sampled from 1992 to 1994, in 1998, and from 2004 to 2006 (Martinez 1993, 1994, 1995, 2000a, 2005, 2006a, and 2007a). Species identified in samples included the cladocerans *Bosmina longirostris, Ceriodaphnia quadrangula, Daphnia galeata mendotae, Daphnia longiremis, Daphnia rosea,* and *Daphnia pulicaria,* the cyclopoid copepod *Diacyclops thomasi*, and the calanoid copepod *Leptodiaptomus nudus.* An unidentified species of *Diaphanosoma* was observed in 1992. *D. longiremis* was detected only in 1998 and *D. rosea* occurred only in the 2005 and 2006 collections. *C. quadrangula* was only detected in the 2006 samples and *L. nudus* was observed only in 2004-2006. Throughout all years of sampling, mean *Daphnia* densities ranged from 0.3/L in 1993 up to 21/L during 2005. The maximum observed length of *D. pulicaria*, 2.4 mm, was recorded in 2004, and the maximum observed length *D. g. mendotae*, 1.9 mm, occurred in most years.

Crustacean zooplankton was sampled in Vega Reservoir during 1999, 2006, and 2007 (Martinez 2000a, 2007a, and 2008). Species identified in samples included the cladocerans *Bosmina longirostris, Daphnia galeata mendotae,* and *Daphnia pulicaria*, and the cyclopoid copepod *Diacyclops thomasi*. Unidentified species of *Alona* and *Ceriodaphnia* were present in samples collected in 1999. In the three years of sampling, mean *Daphnia* densities ranged from 3.3/L in 2007 to 25.1/L in 2006. *D. g. mendotae* lengths ranged from 0.4 mm-1.7 mm and *D. pulicaria* lengths ranged from 0.4 mm-2.4mm.

Williams Fork Reservoir was sampled for crustacean zooplankton during 1995, 1996, 2005, and 2006 (Martinez 1996, 1997, 2006a, and 2007a). Species identified in samples included the cladocerans *Bosmina longirostris, Daphnia galeata mendotae, Daphnia pulicaria*, and the calanoid copepod *Leptodiaptomus nudus*. Four additional cladoceran species were identified in the 2006 samples: *Alona affinis*, *Ceriodaphnia quadrangula*, *Daphnia rosea*, and *Leptodora kindtii*. *B. longirostris* was not detected in 2005. During the years sampled, mean *Daphnia* densities ranged from 2.4/L in 2005 to 18.7/L in 1995. *D. g. mendotae* lengths ranged from 0.4 mm-2.2 mm and *D. pulicaria* lengths ranged from 0.7 mm-3.1 mm.

Crustacean zooplankton was sampled in Wolford Mountain Reservoir in 2001 and 2006 (Martinez 2002a and 2007). Species identified in samples included the cladocerans *Bosmina longirostris, Daphnia galeata mendotae,* and *Daphnia pulicaria,* and *Leptodora kindtii*. Also identified were the cyclopoid copepod *Diacyclops thomasi* and the calanoid copepod *Leptodiaptomus nudus*. In 2006, *B. longirostris* and *L. kindtii* were not detected in samples, but specimens of *Daphnia rosea* were identified. During the two years of sampling, mean *Daphnia* densities ranged from 1.5/L in 2006 to 7.16/L in 2001. *D. g. mendotae* lengths ranged from 0.5 mm-2.1 mm and *D. pulicaria* lengths ranged from 0.4 mm-2.7 mm.

Table 2. Occurrence of crustacean zooplankton species in lakes and reservoirs sampled from 1991-2009.

Species Known To Occur	Avery	Big Creek	Blue Mesa	Cheesman	Dillon	Elevenmile	Grand	Granby	Green Mtn	Gross	Highline	Jefferson	McPhee	Ruedi	Ridgway	Rifle Gap	Shadpw Mtn	Stagecoach	Taylor Park	Turquoise	Twin Lakes	Vallecito	Vega	Williams Fk	Wolford Mtn
Alona spp.																			X				X	X	
Alona affinis				X									X											X	
Alona guttata						X		X					X												
Bosmina longirostris	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Camptocercus macrurus						X																			
Ceriodaphnia quadrangula	X		X	X	X	X		X			X		X		X	X		X				X		X	
Ceriodaphnia spp.			X					X			X		X										X		
Chydorus sphaericus					X	X		X			X		X												
Daphnia galeata mendotae	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X
Daphnia longiremis								X					X						X			X			
Daphnia pulicaria	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X
Daphnia rosea		X			X	X		X					X								X	X		X	X
Daphnia spp.			X		X	X		X	X		X	X	X	X	X	X	X		X			X	X	X	X
Diacyclops thomasi	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Diaphanosoma birgei			X					X			X		X						X						
Diaphanosoma brachyurum		X						X					X												
Diaphanasoma spp.			X					X			X								X			X			
Dunhevedia crassa											X														
Eurycercus lamellatus						X																			
Holopedium gibberum																				X					
Leptodiaptomus spp.			X			X	X	X					X						X			X	X		X
Leptodiaptomus connexus													X								X				
Leptodiaptomus judayi		X		X		X							X								X				
Leptodiaptomus nudus	X	X	X	X	X	X	X	X	X	X	X		X			X	X	X	X			X	X	X	X
Leptodora kindtii								X																X	X
Leydigia acanthocercoides											X														
Mesocyclops edax						X					X					X									
Pleuroxus denticulatus													X												
Simocephalus espinosus														X											
Skistodiaptomus oregonensis										X															

MYSIS DILUVIANA RESULTS AND DISCUSSION

Table 3 summarizes the occurrence, estimated annual densities (number per square meter), overall mean densities of *Mysis diluviana* (Figure 2) for 14 lakes and reservoirs sampled from 1991 to 2009. Table 4 summarizes sampling dates, length frequencies, and mean lengths for *Mysis diluviana* collected in 12 lakes and reservoirs from 1991 to 2009. Appendix 4 contains the detailed data from the sampling of individual waters on each date sampled.

Mysis diluviana was introduced into Big Creek Lake from 1969-1972 (Nesler 1986). Sampling in 1991 and 1992 (Martinez 1992 and 1993) found *M. diluviana* at low densities averaging about 24/m^2 (Table 3).

Blue Mesa has been sampled periodically to determine if *M. diluviana* populations were present (Martinez 1992, 1994, 1997, 2000a, and 2009). No mysids were collected during sampling performed in 1991, 1994, 1996, 1998 and 2008 (Table 3).

M. diluviana was believed to be introduced into Carter via trans-mountain water diversion (Nesler 1986). Sampling for *M. diluviana* was conducted in 1999 and 2000 (Martinez 2000a, Martinez 2001a) and moderate densities, averaging 225/m^2, were detected in both years (Table 3; Johnson and Hobgood 2000).

M. diluviana was introduced into Cheesman Reservoir from 1971 to 1974 (Nesler 1986). Sampling for *Mysis* was conducted at ten stations in Cheesman Reservoir in August, 1992 (Martinez 1993). No mysids were collected and it appeared that thermal and dissolved oxygen condition may have precluded the establishment of a *M. diluviana* population in the reservoir (Martinez 1993).

M. diluviana was introduced into Dillon Reservoir in 1970 (Nesler 1986). Sampling for *M. diluviana* was conducted from 1991 to 2009, excluding 1997, 2001, and 2004 (Martinez 1992, 1993, 1994, 1995, 1996, 1997, 2000a, 2001a, 2003a, 2004a, 2006a, 2007a, 2008, 2009, and 2010), and it was found to be present in all years sampled (Table 3). Predation by *M. diluviana* is believed to contribute to the low densities of *Daphnia* in the reservoir (Martinez 1991). Nelson (1981) reported that *Daphnia* were relatively abundant in the reservoir in 1974 and 1975, but scarce or absent by 1978-1980, after *M. diluviana* had become established. The decline in *Daphnia* abundance contributed to declines in the reservoir's kokanee, rainbow trout *Oncorhynchus mykiss*, and brown trout *Salmo trutta* fisheries (Nelson, 1981; Davis 1982; Stuber et al. 1985). More recently, Arctic char *Salvelinus alpinus* have been stocked into the reservoir periodically as a species better suited to the cold, oligotrophic conditions and the availability of mysids as prey (Martinez 1996). The density of *M. diluviana* averaged about 261/m^2 during the 16 years sampled (Table 3). Mysids entrained in the outflow from Dillon Reservoir supplement the prey of trout in the dam's tailrace and for a short distance downstream.

M. diliviana was introduced into Granby Reservoir in 1971 (Nesler 1986) to supplement the prey base for fish, particularly kokanee (Martinez and Bergersen 1989). Sampling for *M. diluviana* was conducted yearly from 1991-2009 (Martinez 1992, 1993, 1994, 1995, 1996, 1997, 1998, 2000a, 2001a, 2002a, 2003a, 2004a, 2005, 2006a, 2007a, 2008, 2009, and 2010) and mysids were present in all years (Table 3). Historic zooplankton collections have contributed to an understanding of the impacts of *M. diluviana* on *Daphnia*, including the initial disappearance of the deepwater species *Daphnia longiremis* (Finnell and Reed 1969; Nelson 1971). Research indicated that *M. diluviana* predation on zooplankton truncated the seasonal appearance and abundance of *Daphnia*, functionally shortening the season for optimal kokanee growth (Martinez 1986; Martinez and Bergersen 1991). Historically, kokanee stocking, reservoir fluctuation, and *M. diluviana* have contributed to fluctuations in *Daphnia* species composition, abundance and size structure (Martinez and Wiltzius 1995). *M. diluviana* also appears to have shifted energy flow in the reservoir from primarily pelagic (open, near-surface waters) production toward a benthic energy pathway that benefits and likely increases recruitment of deepwater species such as lake trout (Johnson et al. 2001; Martinez et al. 2009). The density of *M. diluviana* averaged about 500/m^2 during the 19 years sampled (Table 3). The highest mysid density recorded in Colorado was in Granby Reservoir in 1996 at 1,365/m^2.

M. diluviana was introduced into Green Mountain in 1974 (Nesler 1986). Very few mysids (4-5) were collected in deepwater samples in 1979 and 1980 (Nelson 1981). It was believed that *M. diluviana* would not develop a dense population due to the reservoir's low retention time and lack of pronounced thermal stratification (Nelson 1981; Martinez and Bergersen 1991). These factors may have prevented *M. diluviana* from establishing in Green Mountain reservoir. No mysids were collected during sampling in September of 2005 in water ranging in depth from 10-50 m (Table 3).

M. diluviana was introduced into Gross Reservoir from 1971-1974 (Nesler 1986). Sampling conducted during 1992 (Martinez 1993) confirmed that mysids occurred at low density (Table 3)

M. diluviana was introduced into Horsetooth Reservoir via trans-mountain water diversion from Grand Lake (Nesler 1986). *M. diluviana* was believed to be eliminated from Horsetooth Reservoir by rainbow smelt *Osmerus mordax* in 1987-1988 (Johnson and Goettl 1999). Horsetooth Reservoir was sampled to determine the presence of *M. diluviana* during 1999, 2003, 2005, and 2006 (Martinez 2000a, 2004a, 2006a, and 2007a). No mysids were present in collections in 1999, but in 2003 a single specimen was captured (Table 3). Samples collected in 2005 and 2006 confirmed that *M. diluviana* had reappeared in the reservoir at very low densities averaging about 2/m^2 (Table 3).

M. diluviana was introduced into Jefferson Lake in 1972 (Nesler 1986). Sampling for mysids in Jefferson Lake was conducted in 2005 (Martinez 2006) and mysids were found to be present at moderate densities (383/m^2; Table 3)

M. diluviana was introduced into Ruedi Reservoir in 1970 (Nesler 1986). Sampling for *M. diluviana* was conducted during 1992, 1994, and 2003 (Martinez 1993, 1995, and 2004a), and mysids were found to occur at moderate to high densities (121-612/m^2 (Table 3). *M. diluviana* entrained in the outflow from Ruedi Reservoir have been shown to supplement the food resources of rainbow trout and brown trout, dramatically increasing the growth and body condition of trout in the dam's tailrace and for up to 5 km below the reservoir's outlet (Nehring 1991).

M. diluviana was believed to be introduced into Shadow Mountain Reservoir passively by downstream transport (Nesler 1986) from Grand Lake. However, some mysids survive being pumped from Granby Reservoir. When sampled for *M. diluviana* in 2005 (Martinez 2006), mysids were found at low density (10/m^2; Table 3) in the deeper portion of the reservoir near the dam.

M. diluviana was introduced into Taylor Park Reservoir in 1973 and 1974 (Nesler 1986), and specimens were first collected in the reservoir in 1981 (Weiler 1982). Sampling for *M. diluviana* was conducted annually from 1991- 2009, excluding 1997 (Martinez 1992, 1993, 1994, 1995, 1995, 1996, 1997, 2000a, 2001a, 2002a, 2003a, 2004a, 2005, 2006a, 2007a, 2008, 2009, and 2010). *M. diluviana* was present, and averaged about 292/m^2, during the 18 years sampled (Table 3). *M. diluviana* entrained in the outflow from Taylor Park Reservoir have been shown to supplement the food resources of rainbow trout and brown trout, dramatically increasing the growth and body condition of trout in the dam's tailrace and for up to 5 km below the reservoir's outlet (Nehring 1991).

M. diluviana was introduced into Turquoise Reservoir in 1972, but did not appear to establish a population until 1983 (Nesler, 1981 and 1986). Sampling conducted in 1992 (Martinez 1993) found mysids to be present at a low density (17/m^2; Table 3).

M. diluviana was originally introduced into Colorado in 1957 via a transplant from Clear Lake, Minnesota into Twin Lakes (Klein 1957). Once a thriving population established by the late 1960s, mysids from Twin Lakes served as a source for transplants into 51 lakes and reservoirs in Colorado, and into several other waters in other states (Finnell 1977; Nesler 1986; Martinez and Bergersen 1989). *M. diluviana* has been intensively studied in Twin Lakes (Bergersen et al. 1993). Mysids were sampled as part of this study from 1991 to 1994, and in 1996 (Martinez 1992, 1993, 1994, 1995, and 1997). During this time period, *M. diluviana* was present at an average, moderate density of about 105/m^2 (Table 3).

Figure 2. *Mysis diluviana* female (note brood pouch), approximately 20mm long. Photo by Terry Wygant.

Table 3. *Mysis diluviana* occurrence, estimated annual densities (number per square meter), and overall mean densities for 14 lakes and reservoirs sampled from 1991 to 2009.

Year	*Mysis diluviana* density (number/m²)													
	Big Creek	Blue Mesa	Carter	Dillon	Granby	Green Mountain	Gross	Horsetooth	Jefferson	Ruedi	Shadow Mountain	Taylor Park	Turquoise	Twin Lakes
1991	37.7			368.0	202.6							125.8		58.2
1992	10.0			352.3	178.2		82.2			121.0		456.0	17.3	100.4
1993				340.8	230.6							165.3		71.7
1994		0.0		269.9	541.1					518.5		170.2		118.8
1995				371.8	674.1							92.7		
1996		0.0		235.0	1365.3							182.4		156.4
1997					381.7									
1998		0.0		246.4	294.2							196.4		
1999			342.5	236.2	566.0			0.0				196.5		
2000			108.7	222.8	843.4							366.1		
2001					378.2							261.5		
2002				336.3	460.1							503.7		
2003				25.3	29.9			1.3		250.6		240.8		
2004					237.5							398.9		
2005				451	215	0.0		1.3	383.2		10.2	447.1		
2006				88.5	515.8			2.7				387.5		
2007				228.7	1185.9							469.5		
2008		0.0		204.7	891.8							159.7		
2009				206.9	314							433.3		
No. years	2	4	2	16	19	1	1	4	1	3	1	18	1	5
Minimum	37.7	0.0	108.7	25.3	29.9	0.0	82.2	1.3	383.2	121	10.2	92.7	17.3	58.2
Maximum	10.0	0.0	342.5	371.8	1365.3	0.0	82.2	2.7	383.2	518.5	10.2	503.7	17.3	156.4
Mean no./m²	**23.9**	**0.0**	**225.6**	**261.5**	**500.3**	**0.0**	**82.2**	**2.0**	**383.2**	**296.7**	**10.2**	**291.9**	**17.3**	**101.1**

Table 4. Summary of sampling dates and length frequencies for *Mysis diluviana* collected in 12 lakes and reservoirs (Big Creek, Blue Mesa, Carter, Cheesman, Dillon, Granby, Gross, Horsetooth, Jefferson, Ruedi, Shadow Mountain, Taylor Park, Turquoise and Twin Lakes) from 1991 to 2009.

Water	Year	Date	Mysid total length in mm (tip of rostrum to tip of telson, excluding setae)																							Total Measured	Total *Mysis*
			3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26		
Big Creek	1991	9-Oct						4	12	1	33	74	25	4	4	3											160	355
	1992	30-Aug							4	4	10	4	2		1	1											26	47
Carter	1999	11-Oct						14	39	241	236	313	284	323	400	242	138	98	72	81	41	35	14	5			2576	5377
	2000	25-Oct							6	17	21	14	20	59	104	100	83	50	26	9	1						510	1387
Dillon	1991	2-Oct						4	87	128	41	37	94	103	94	65	16	5	1								675	5777
	1992	3-Sep				18	94	362	552	291	230	343	142	336	369	72	28	1									2838	5532
	1993	18-Aug			1	6	17	35	73	46	29	18	11	9	8	16	11	7	1								288	5351
	1994	30-Aug				2	9	26	150	266	101	65	53	37	92	42	56	65	86	99	6	1	1				1157	4232
	1995	27-Aug			2	11	102	272	303	115	41	39	31	21	100	181	95	56	20	4	1						1394	5837
	1996	11-Jul		45	157	226	134	44	13	5	5	8	41	76	53	25	10	4	2								848	3689
	1998	13-Aug			83	168	253	224	146	179	98	98	186	225	121	60	15	3									1859	3880
	1999	3-Sep					13	40	141	437	157	203	167	145	149	47	80	70	60	61	10	2	1	1			1784	3709
	2000	27-Jul		10	40	90	125	127	136	98	56	75	107	139	92	35	12	5									1147	3497
	2002	17-Jul		21	62	170	334	476	373	295	202	137	51	54	103	113	66	50	15	7							2529	5279
	2003	22-Jul		5	7	22	27	37	38	27	14	25	60	74	36	8	1										381	381
	2005	11-Aug				1	2	20	79	89	133	245	302	314	192	42	24	17	35	57	66	35	3	1			1657	7080
	2006	15-Aug			2	10	28	72	81	115	91	127	110	39	11	1											685	1390
	2007	18-Jul		7	9	36	208	366	373	321	283	173	35	3	13	26	21	10	8	1	0	1					1895	3590
	2008	28-Aug			4	32	147	303	272	252	183	114	105	203	99	21	5										1741	3214
	2009	22-Jul		69	104	170	264	186	114	96	85	44	17	46	82	52	26	9	1								1384	3249

Table 4. *Continued*. Summary of sampling dates and length frequencies for *Mysis diluviana* collected in 12 lakes and reservoirs (Big Creek, Blue Mesa, Carter, Cheesman, Dillon, Granby, Gross, Horsetooth, Jefferson, Ruedi, Shadow Mountain, Taylor Park, Turquoise and Twin Lakes) from 1991 to 2009.

Water	Year	Date	Mysid total length in mm (tip of rostrum to tip of telson, excluding setae)																							Total Measured	Total *Mysis*
			3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26		
Granby	1991	6-Oct					1	4	41	63	51	323	695	415	75	29	31	59	26	1							1814	3181
	1992	29-Aug					5	21	68	88	105	495	300	222	32	22	34	38	86	61	5	1					1583	2798
	1993	17-Aug					3	23	54	90	96	92	111	80	41	14	24	28	28	35	32	20	8		2		781	3619
	1994	7-Jul		60	27	33	22	45	27	42	42	29	44	48	47	59	28	35	13	6							607	8495
	1995	26-Aug					5	55	171	202	176	153	110	70	17	38	87	99	62	33	9	2					1289	10584
	1996	15-Sep				16	126	639	832	754	276	142	39	66	250	276	116	62	22	9							3625	21435
	1997	27-Sep		14	99	199	145	90	72	134	544	861	542	138	35	18	2	4									2897	5995
	1998	19-Sep			9	47	146	165	128	125	103	101	92	148	315	364	300	169	34	10	2						2258	4619
	1999	10-Sep			11	24	324	450	591	398	383	467	348	364	262	314	234	138	79	90	27	5					4509	8887
	2000	7-Sep		2	25	63	150	171	202	175	156	171	167	223	290	144	71	44	18	6	19	17					2114	13241
	2001	11-Oct			4	89	104	128	217	244	292	349	307	386	378	282	140	43	16	8							2987	5938
	2002	11-Jun	64	758	255	164	93	41	10	21	230	742	639	227	106	75	21	3									3449	7223
	2003	19-Sep				1	1	3	12	8	23	63	60	85	41	23	23	36	47	30	10	3					469	469
	2004	17-Aug		1			1	5	30	38	88	221	393	614	275	61	13	20	21	30	14	6	2				1833	3727
	2005	10-Aug				1	2	20	79	89	133	245	302	314	192	42	29	17	35	56	66	35	3	1			1661	3375
	2006	24-Aug			2	12	99	355	511	428	635	675	202	64	148	125	232	245	43	20	1						3797	8097
	2007	13-Jul		38	533	1740	1522	928	461	327	166	99	275	688	903	502	221	59	31	11	10						8959	18618
	2008	29-Aug			5	51	265	632	772	750	410	293	258	583	1190	1139	695	284	96	37	11	3					7474	14001
	2009	23-Jul		602	237	267	225	128	93	88	53	76	129	248	154	81	35	25	14	4							2532	4929
Gross	1992	17-Sep						3	10	38	24	14	53	115	91	22	4	1	4	2							378	645
Horsetooth	2005	28-Sep									1			3			3			4			1	3			15	16
	2006	17-Aug		2		4		1		2	3	4	1	4	3	1		3	3	2							33	33
Jefferson	2005	9-Aug			13	57	148	249	256	225	177	151	68	62	57	61	91	43	24	19	8	5		2			1703	3609
Ruedi	1992	6-Aug		29	86	159	210	140	93	50	65	35	62	53	20	15	2	2									1021	1899
	1994	31-Aug		2	2	1	3	12	13	18	31	17	12	39	33	29	33	25	29	13	3	2					317	8139
	2003	18-Jul		27	32	90	378	729	748	576	248	91	16	9	42	56	49	51	22	20	6	1	1				3192	3192

Table 4. *Continued.* Summary of sampling dates and length frequencies for *Mysis diluviana* collected in 12 lakes and reservoirs (Big Creek, Blue Mesa, Carter, Cheesman, Dillon, Granby, Gross, Horsetooth, Jefferson, Ruedi, Shadow Mountain, Taylor Park, Turquoise and Twin Lakes) from 1991 to 2009.

Water	Year	Date	Mysid total length in mm (tip of rostrum to tip of telson, excluding setae)																							Total Measured	Total *Mysis*
			3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26		
ShadowMtn	**2005**	**7-Sep**									1	6	2	7	9	1	4										**30**	**48**
Taylor Park	**1991**	**2-Oct**							8	46	30	51	338	311	79	16	13	8	2								**902**	**1976**
	1992	**28-Aug**			2	42	170	233	264	404	116	9	12	33	92	57	22	2	1								**1459**	**7159**
	1993	**25-Aug**					1	7	26	26	44	42	44	30	48	99	98	49	10	5	2	1					**532**	**2597**
	1994	**10-Aug**			10	13	15	16	17	25	13	26	31	49	88	14	6	14	10	25		19	5	5	3	1	**405**	**2672**
	1995	**21-Aug**					1	16	33	46	72	85	50	24	1	1	6	9	4	1							**349**	**1456**
	1996	**10-Aug**					1	16	33	46	72	85	50	24	1	1	6	9	4	1	12	2	2				**1144**	**2863**
	1998	**14-Aug**				1	12	59	75	156	300	346	171	48	63	51	55	91	27	3							**1458**	**3303**
	1999	**24-Aug**					2	6	24	56	73	161	228	313	244	81	68	89	30	35	40	39	9				**1557**	**3085**
	2000	**3-Aug**				6	35	120	162	335	254	209	99	50	30	28	31	34	25	13	3						**1434**	**3350**
	2001	**25-Sep**				2	0	23	63	145	151	281	271	277	311	255	173	138	92	73	39	12	4				**2310**	**4106**
	2002	**10-Jul**	1	92	202	374	434	696	667	576	184	44	21	73	132	134	112	28	7	1							**3777**	**7907**
	2003	**24-Jul**		9	27	157	266	324	313	521	458	335	60	72	358	444	216	133	56	30	2	2	1				**3784**	**3784**
	2004	**15-Jul**			1	24	58	229	423	537	694	384	102	27	59	91	107	69	44	13	2	1					**2865**	**5635**
	2005	**4-Aug**				1	8	5	11	28	8	12	1	2		1											**3301**	**7020**
	2006	**18-Jul**		2	50	217	303	383	473	453	212	44	73	200	174	55	14	5	1								**2659**	**5475**
	2007	**17-Jul**		33	102	214	355	412	372	339	173	68	32	118	214	178	110	30	3	1							**2786**	**5897**
	2008	**3-Jul**		143	118	191	242	121	20	1	3	47	167	219	101	33	16	14	8								**1444**	**2507**
	2009	**16-Jul**		11	55	134	413	727	855	546	106	8	14	88	149	112	90	32	9	1							**3350**	**6803**
Turquoise	**1992**	**30-Jul**				3	14	29	37	34	18	7	1		7	2	1	6									**159**	**189.9**
Twin Lakes	**1991**	**4-Oct**			20	39	99	55	19	8	1	65	81	47	14	5	2	1	1	1							**458**	**913**
	1992	**27-Aug**		1	33	52	28	26	34	164	269	185	88	25	9	1	12	1	1								**929**	**1569**
	1993	**19-Aug**			8	38	26	21	29	35	35	28	28	17	6	6	5	1									**283**	**1156**
	1994	**21-Jul**		70	43	44	41	42	52	63	59	51	57	44	43	28	16	5	6		1						**665**	**1865**
	1996	**9-Jul**		4	22	82	103	134	107	38	6	5	10	25	26	27	23	16	3	1							**637**	**2210**

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APPENDIX ONE

Lake and Reservoir Maps and Sampling Station Locations

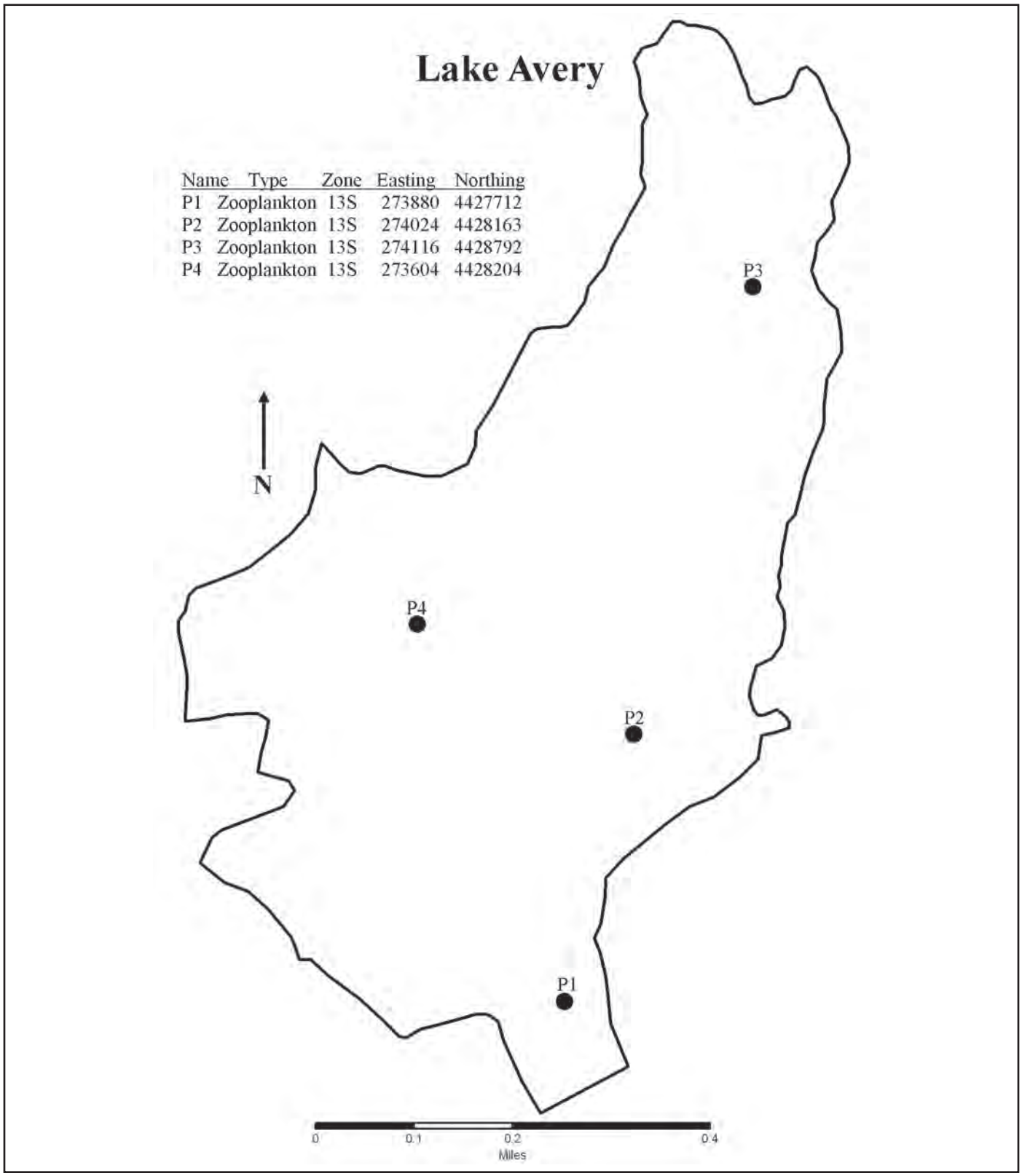


Figure A1-1. Map of Lake Avery (aka Big Beaver Reservoir) showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots).

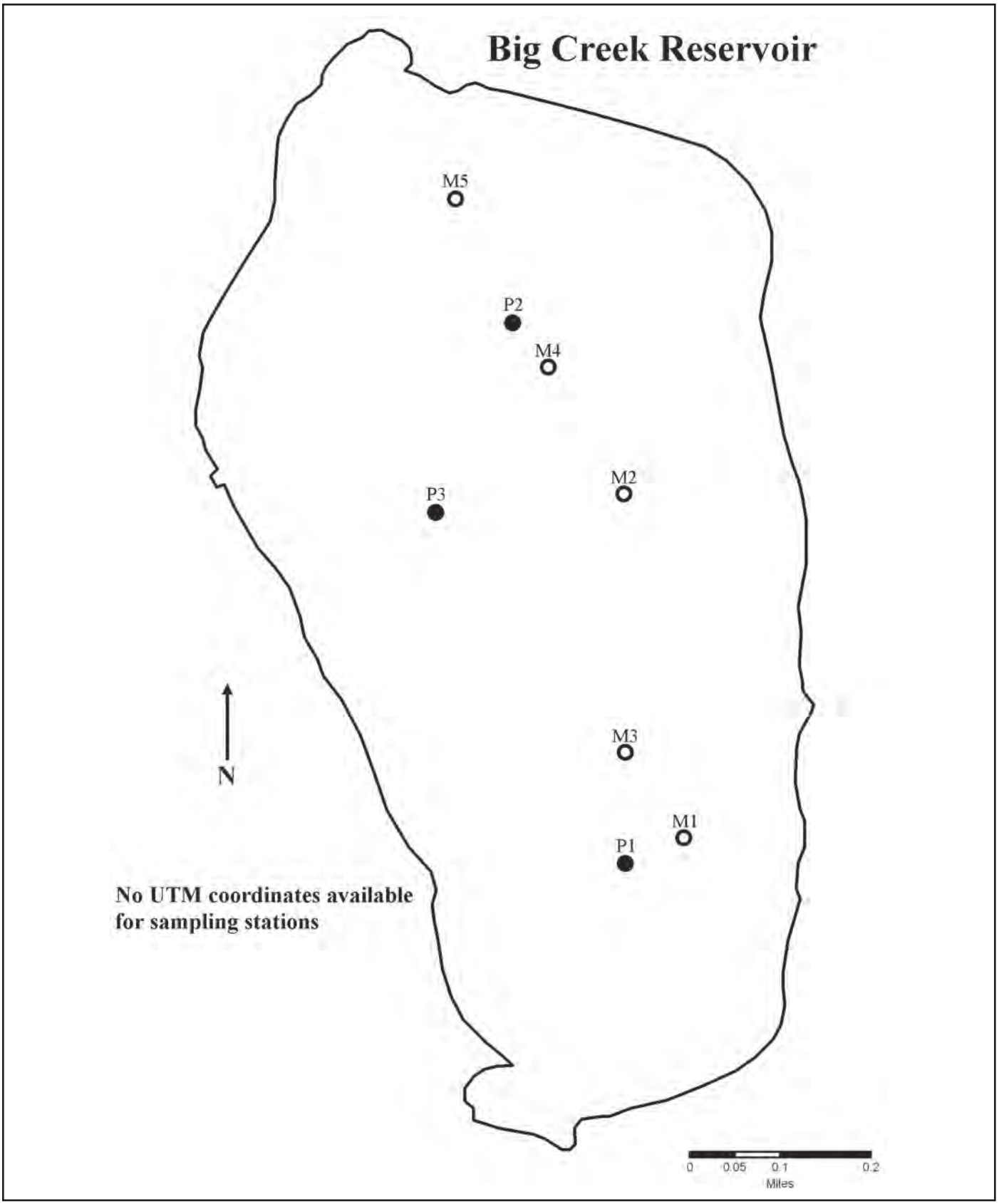
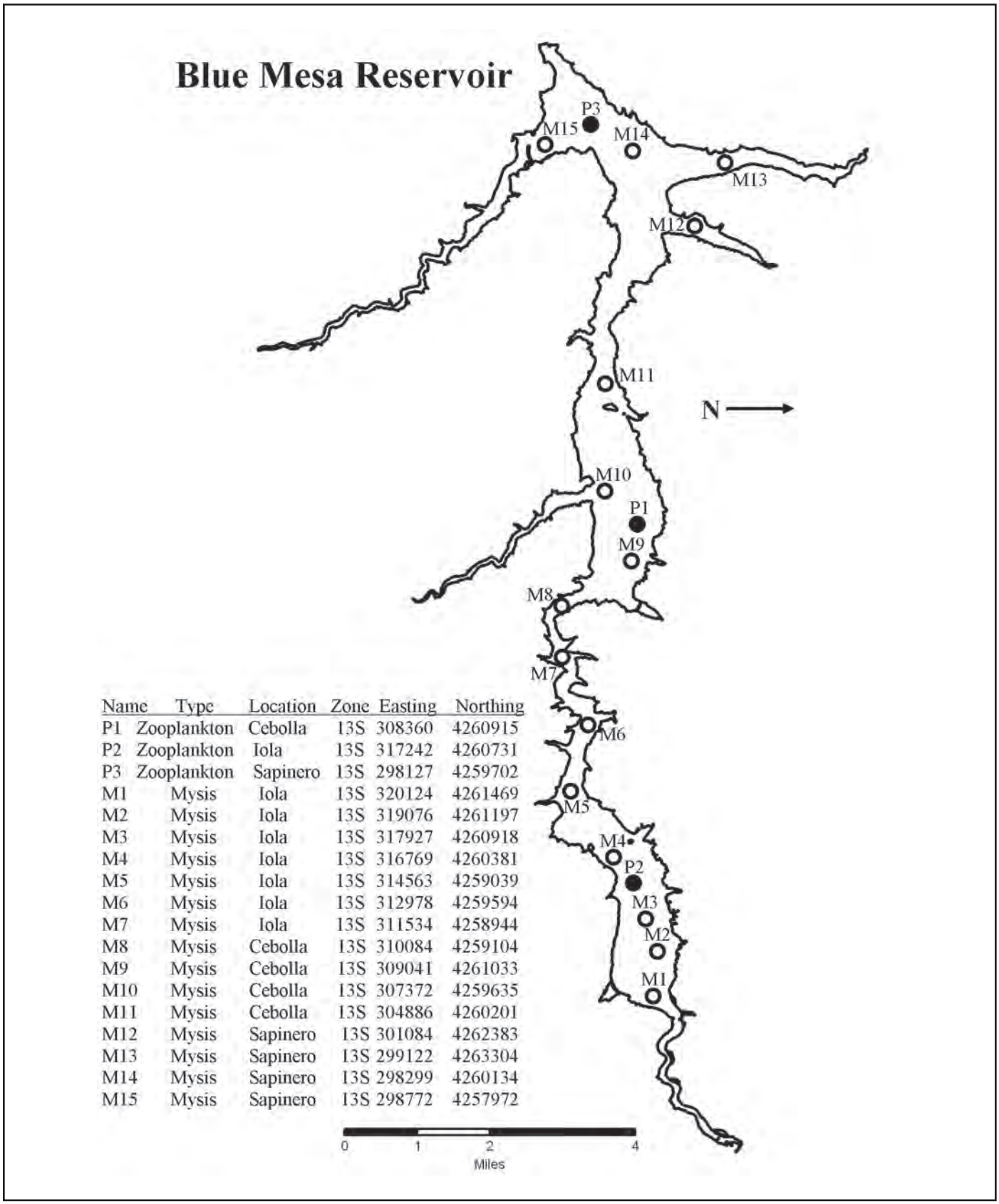
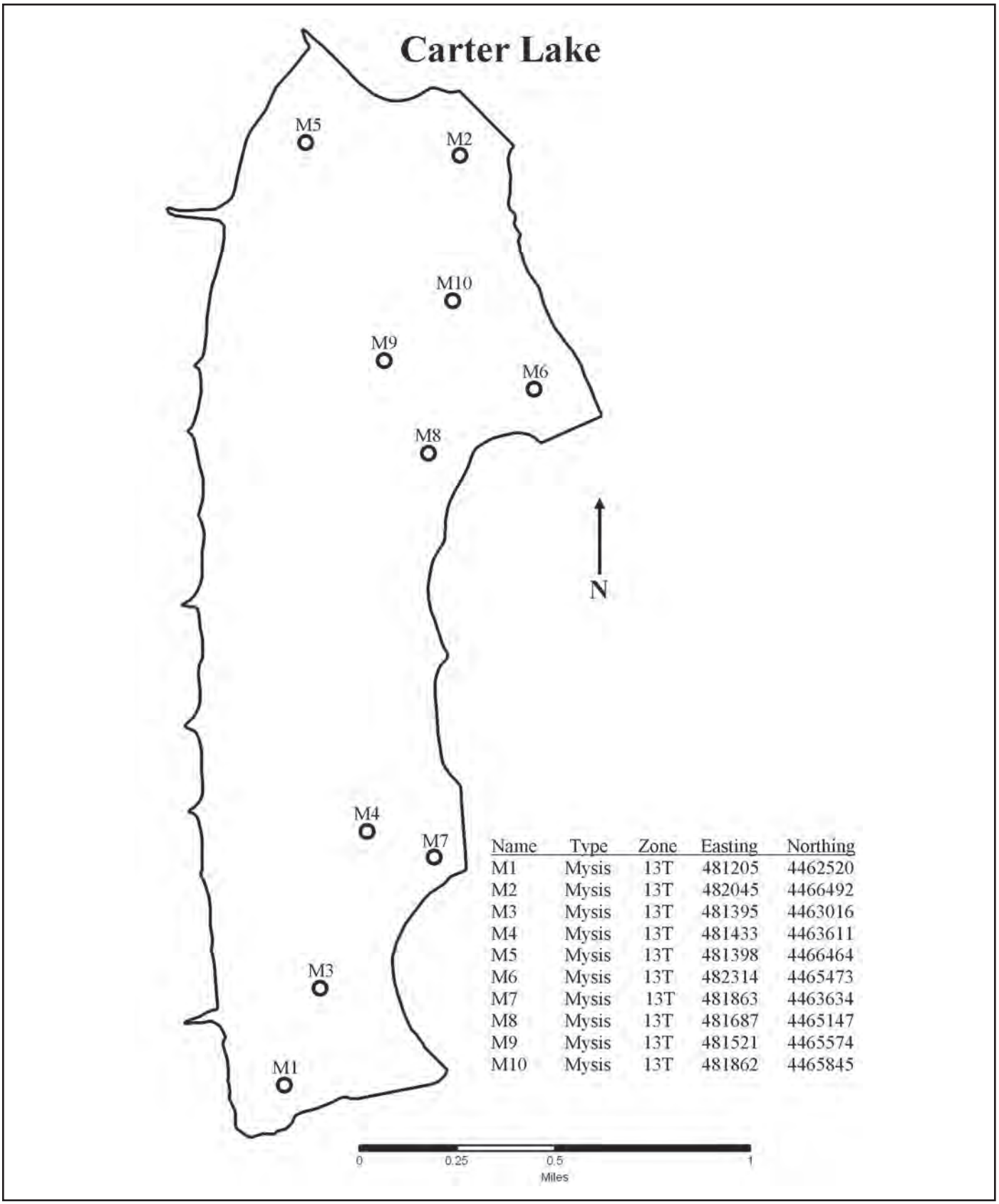


Figure A1-2. Map of Big Creek Lake showing approximate locations of sampling stations for crustacean zooplankton (black dots) and *Mysis diluviana* (open circles).



Name	Type	Location	Zone	Easting	Northing
P1	Zooplankton	Cebolla	13S	308360	4260915
P2	Zooplankton	Iola	13S	317242	4260731
P3	Zooplankton	Sapinero	13S	298127	4259702
M1	Mysis	Iola	13S	320124	4261469
M2	Mysis	Iola	13S	319076	4261197
M3	Mysis	Iola	13S	317927	4260918
M4	Mysis	Iola	13S	316769	4260381
M5	Mysis	Iola	13S	314563	4259039
M6	Mysis	Iola	13S	312978	4259594
M7	Mysis	Iola	13S	311534	4258944
M8	Mysis	Cebolla	13S	310084	4259104
M9	Mysis	Cebolla	13S	309041	4261033
M10	Mysis	Cebolla	13S	307372	4259635
M11	Mysis	Cebolla	13S	304886	4260201
M12	Mysis	Sapinero	13S	301084	4262383
M13	Mysis	Sapinero	13S	299122	4263304
M14	Mysis	Sapinero	13S	298299	4260134
M15	Mysis	Sapinero	13S	298772	4257972

Figure A1-3. Map of Blue Mesa Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots) and *Mysis diluviana* (open circles).



Name	Type	Zone	Easting	Northing
M1	Mysis	13T	481205	4462520
M2	Mysis	13T	482045	4466492
M3	Mysis	13T	481395	4463016
M4	Mysis	13T	481433	4463611
M5	Mysis	13T	481398	4466464
M6	Mysis	13T	482314	4465473
M7	Mysis	13T	481863	4463634
M8	Mysis	13T	481687	4465147
M9	Mysis	13T	481521	4465574
M10	Mysis	13T	481862	4465845

Figure A1-4. Map of Carter Reservoir showing approximate locations of sampling stations and UTM coordinates (datum NAD27 CONUS) for *Mysis diluviana* (open circles).

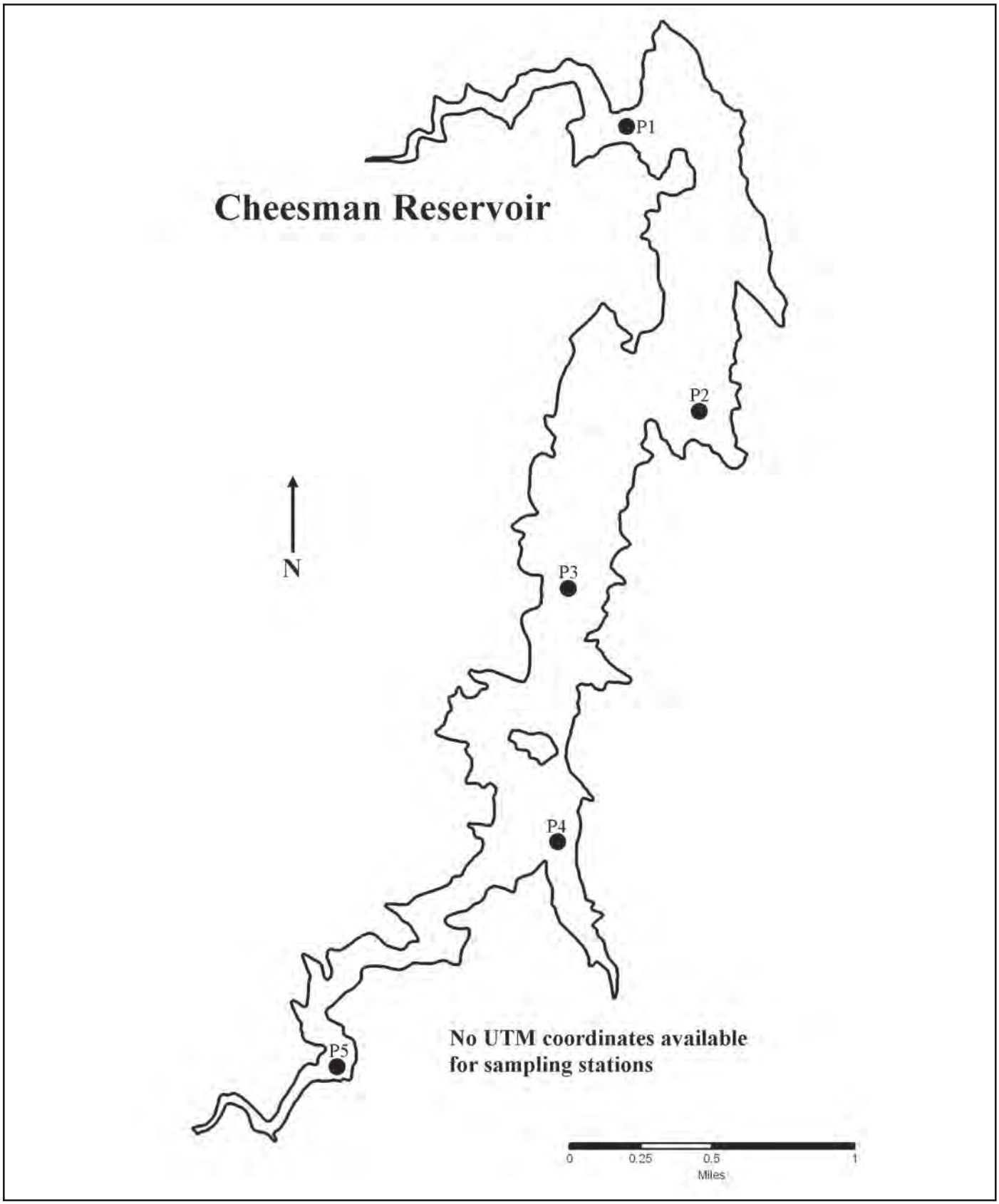
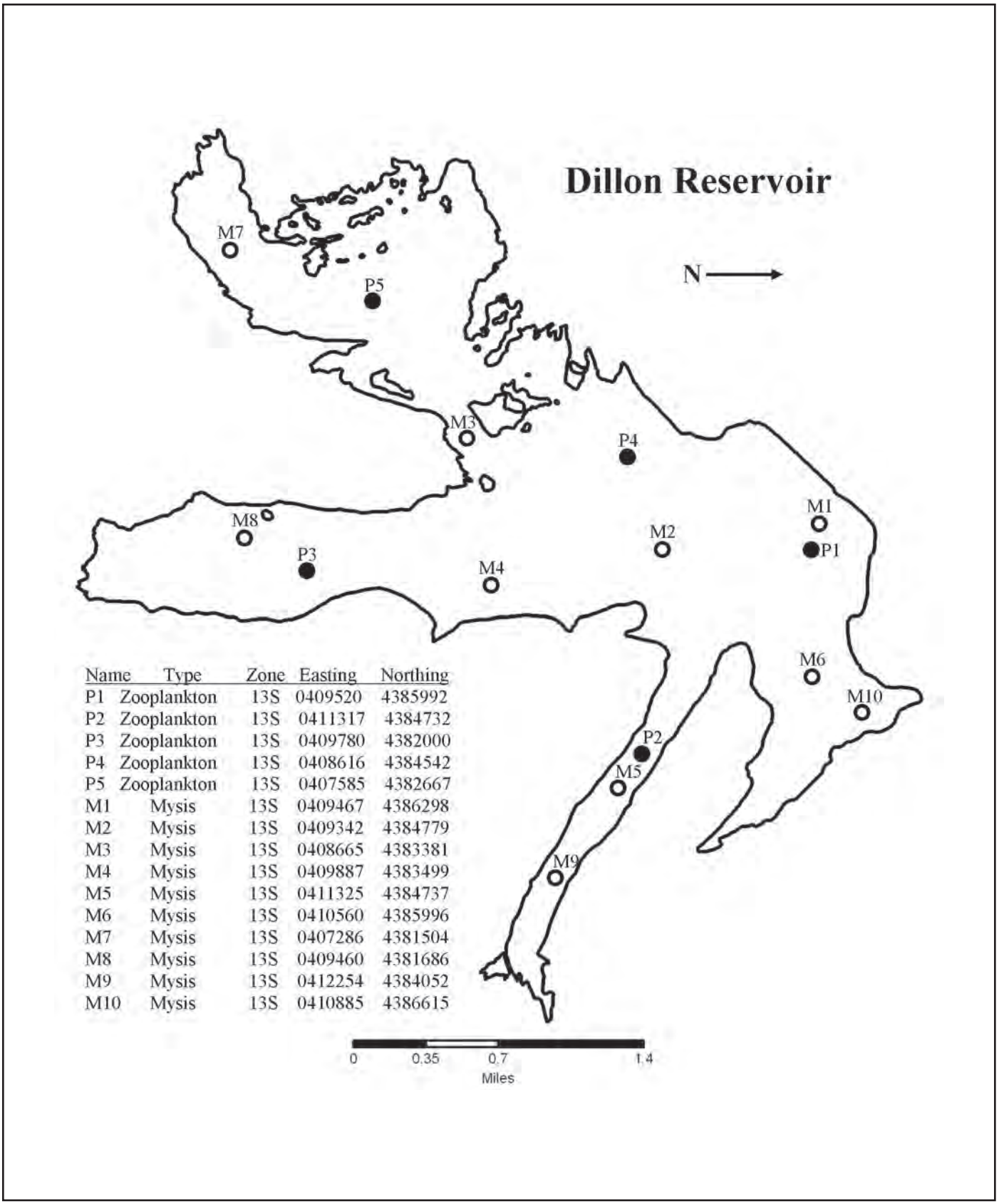
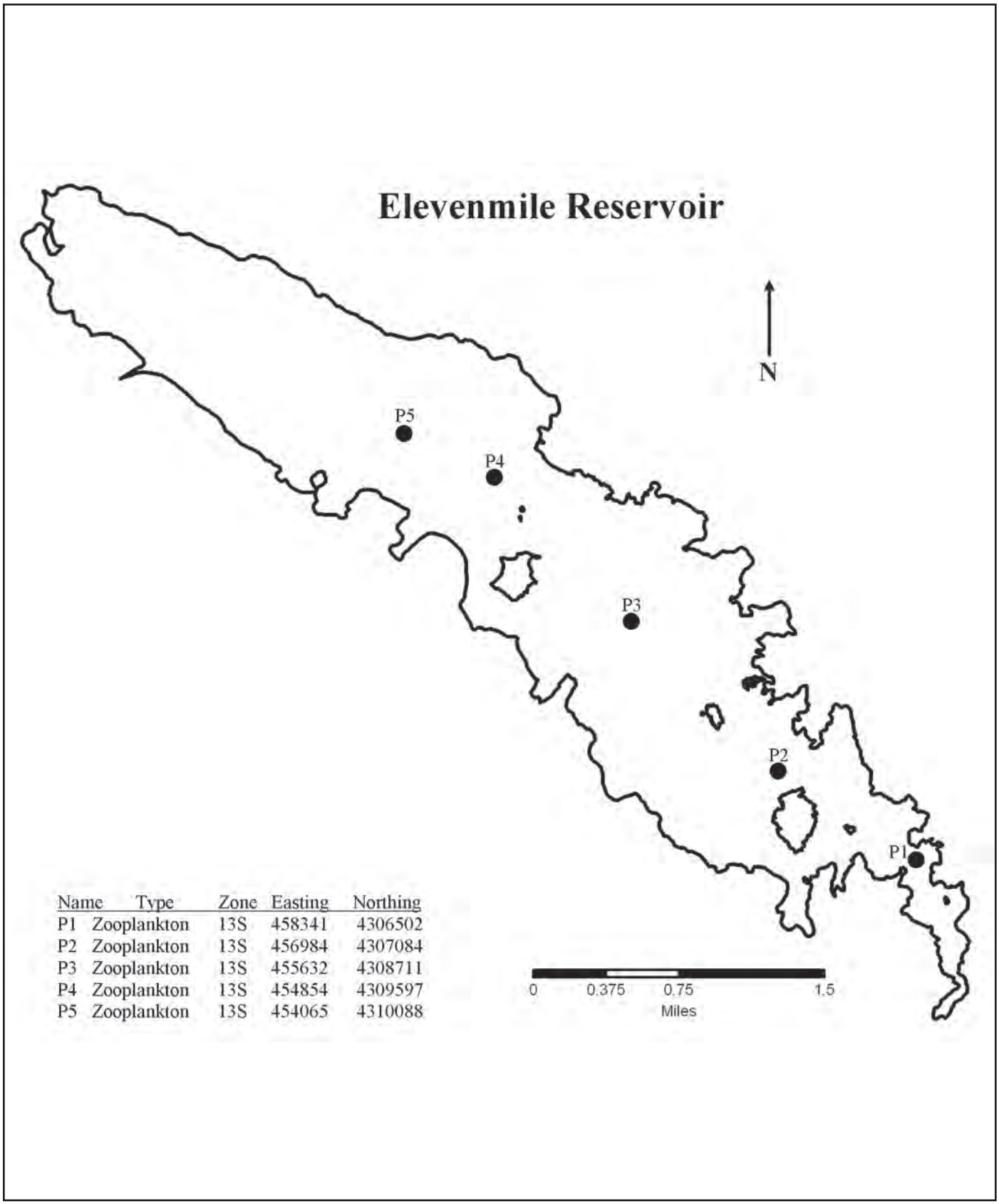


Figure A1-5. Map of Cheesman Reservoir showing approximate locations of sampling stations for crustacean zooplankton (black dots).



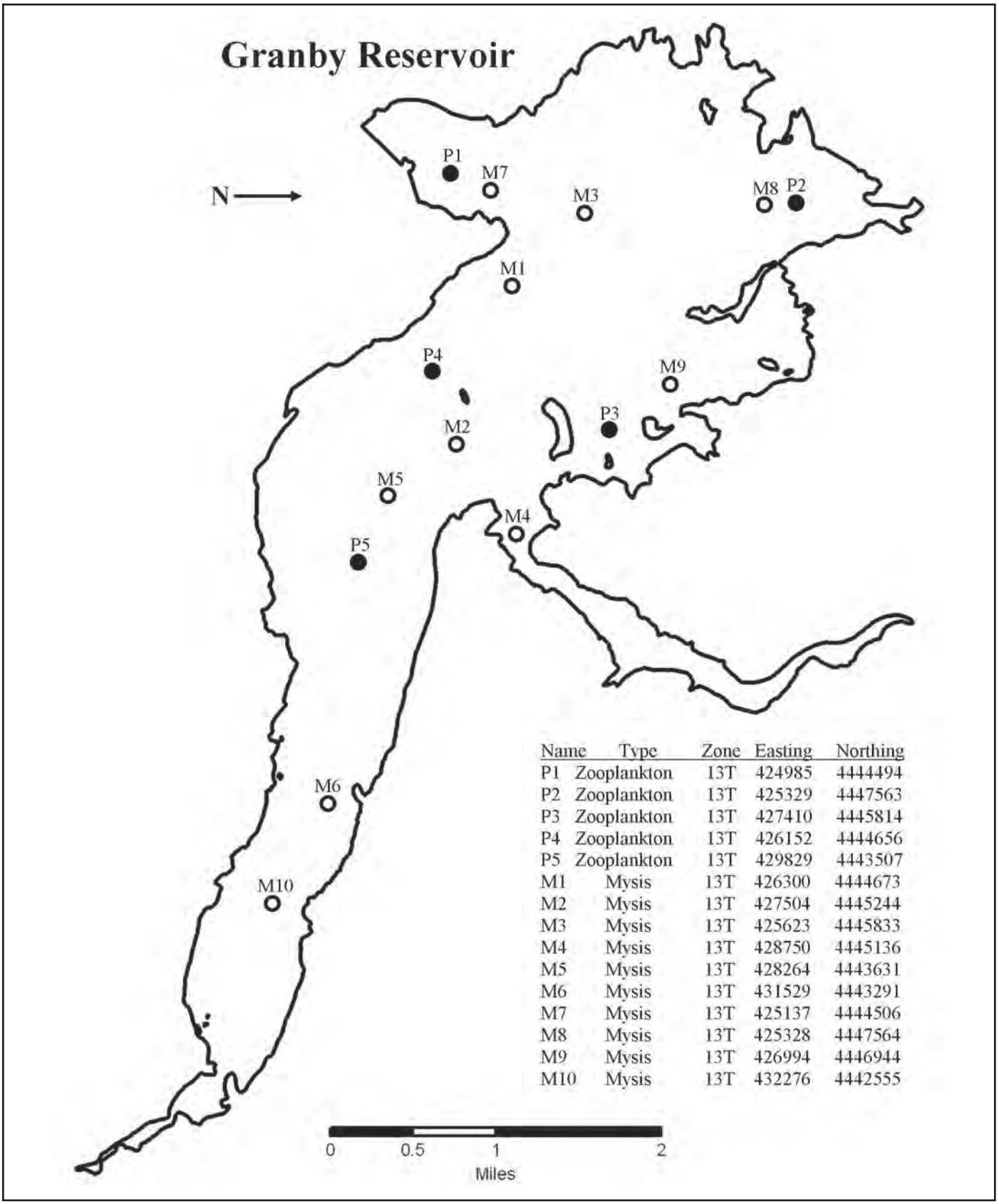
Name	Type	Zone	Easting	Northing
P1	Zooplankton	13S	0409520	4385992
P2	Zooplankton	13S	0411317	4384732
P3	Zooplankton	13S	0409780	4382000
P4	Zooplankton	13S	0408616	4384542
P5	Zooplankton	13S	0407585	4382667
M1	Mysis	13S	0409467	4386298
M2	Mysis	13S	0409342	4384779
M3	Mysis	13S	0408665	4383381
M4	Mysis	13S	0409887	4383499
M5	Mysis	13S	0411325	4384737
M6	Mysis	13S	0410560	4385996
M7	Mysis	13S	0407286	4381504
M8	Mysis	13S	0409460	4381686
M9	Mysis	13S	0412254	4384052
M10	Mysis	13S	0410885	4386615

Figure A1-6. Map of Dillon Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots) and *Mysis diluviana* (open circles).



Name	Type	Zone	Easting	Northing
P1	Zooplankton	13S	458341	4306502
P2	Zooplankton	13S	456984	4307084
P3	Zooplankton	13S	455632	4308711
P4	Zooplankton	13S	454854	4309597
P5	Zooplankton	13S	454065	4310088

Figure A1-7. Map of Elevenmile Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots).



Name	Type	Zone	Easting	Northing
P1	Zooplankton	13T	424985	4444494
P2	Zooplankton	13T	425329	4447563
P3	Zooplankton	13T	427410	4445814
P4	Zooplankton	13T	426152	4444656
P5	Zooplankton	13T	429829	4443507
M1	Mysis	13T	426300	4444673
M2	Mysis	13T	427504	4445244
M3	Mysis	13T	425623	4445833
M4	Mysis	13T	428750	4445136
M5	Mysis	13T	428264	4443631
M6	Mysis	13T	431529	4443291
M7	Mysis	13T	425137	4444506
M8	Mysis	13T	425328	4447564
M9	Mysis	13T	426994	4446944
M10	Mysis	13T	432276	4442555

Figure A1-8. Map of Granby Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots) and *Mysis diluviana* (open circles).

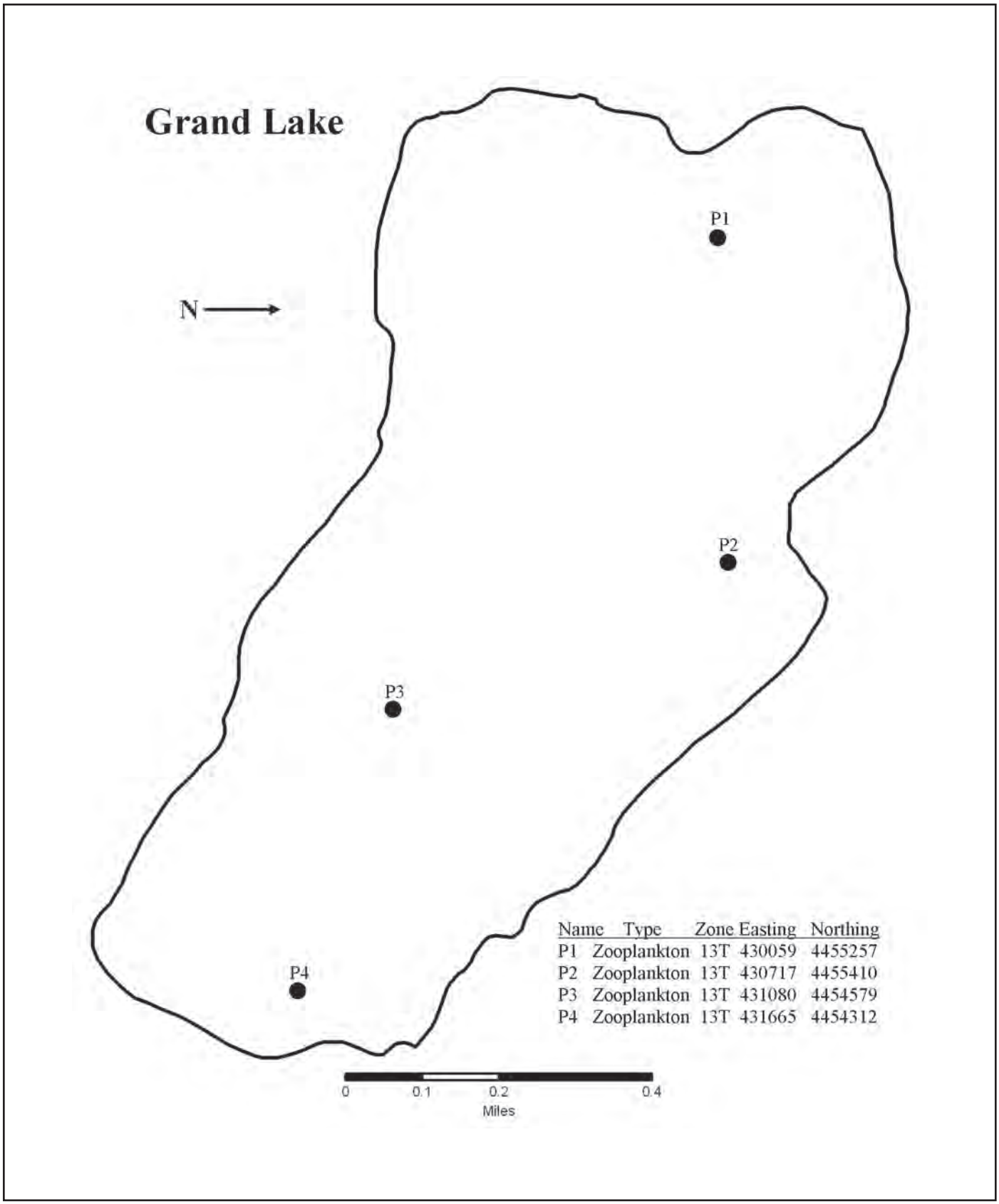
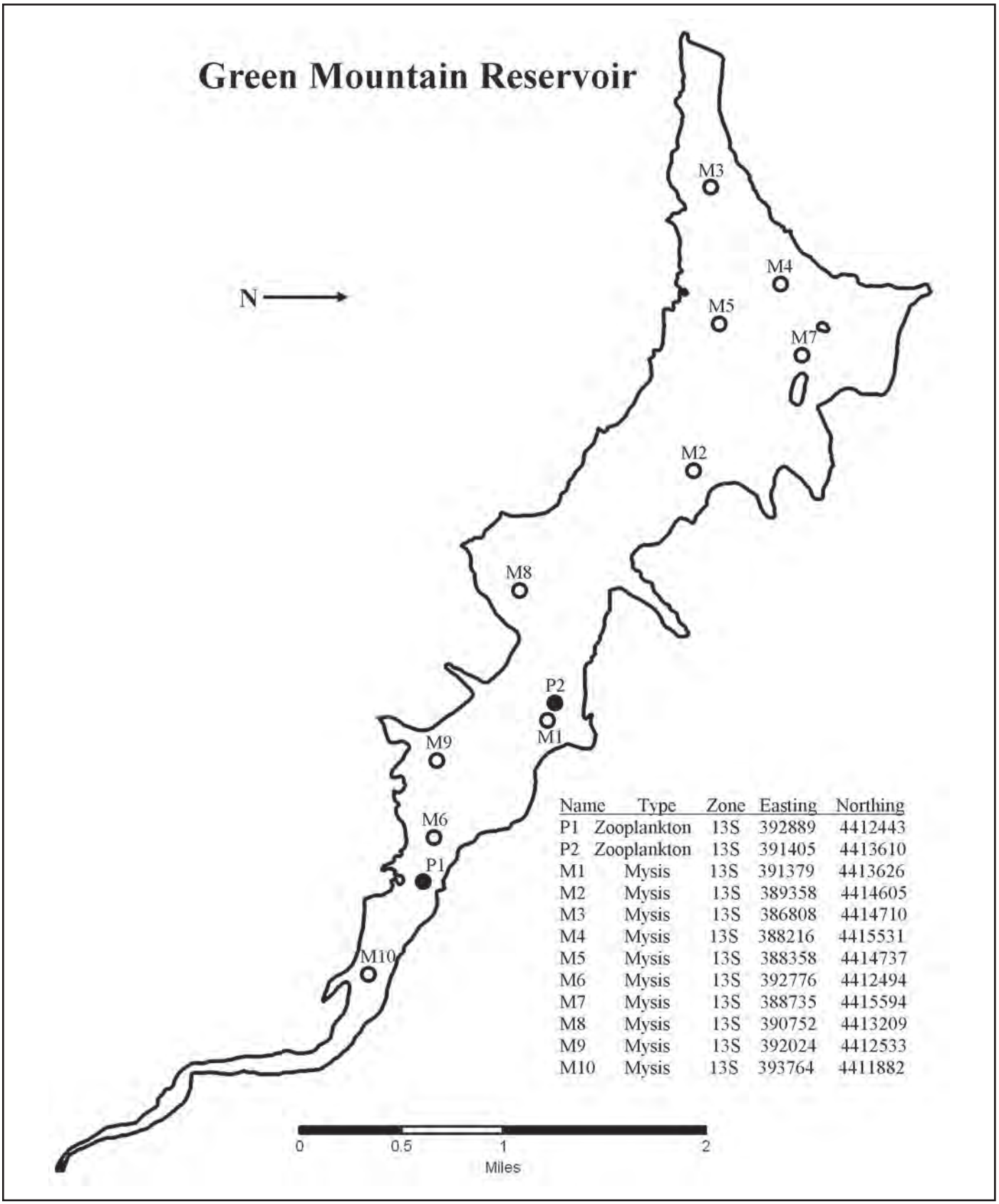


Figure A1-9. Map of Grand Lake showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots).



Name	Type	Zone	Easting	Northing
P1	Zooplankton	13S	392889	4412443
P2	Zooplankton	13S	391405	4413610
M1	Mysis	13S	391379	4413626
M2	Mysis	13S	389358	4414605
M3	Mysis	13S	386808	4414710
M4	Mysis	13S	388216	4415531
M5	Mysis	13S	388358	4414737
M6	Mysis	13S	392776	4412494
M7	Mysis	13S	388735	4415594
M8	Mysis	13S	390752	4413209
M9	Mysis	13S	392024	4412533
M10	Mysis	13S	393764	4411882

Figure A1-10. Map of Green Mountain Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots) and *Mysis diluviana* (open circles).

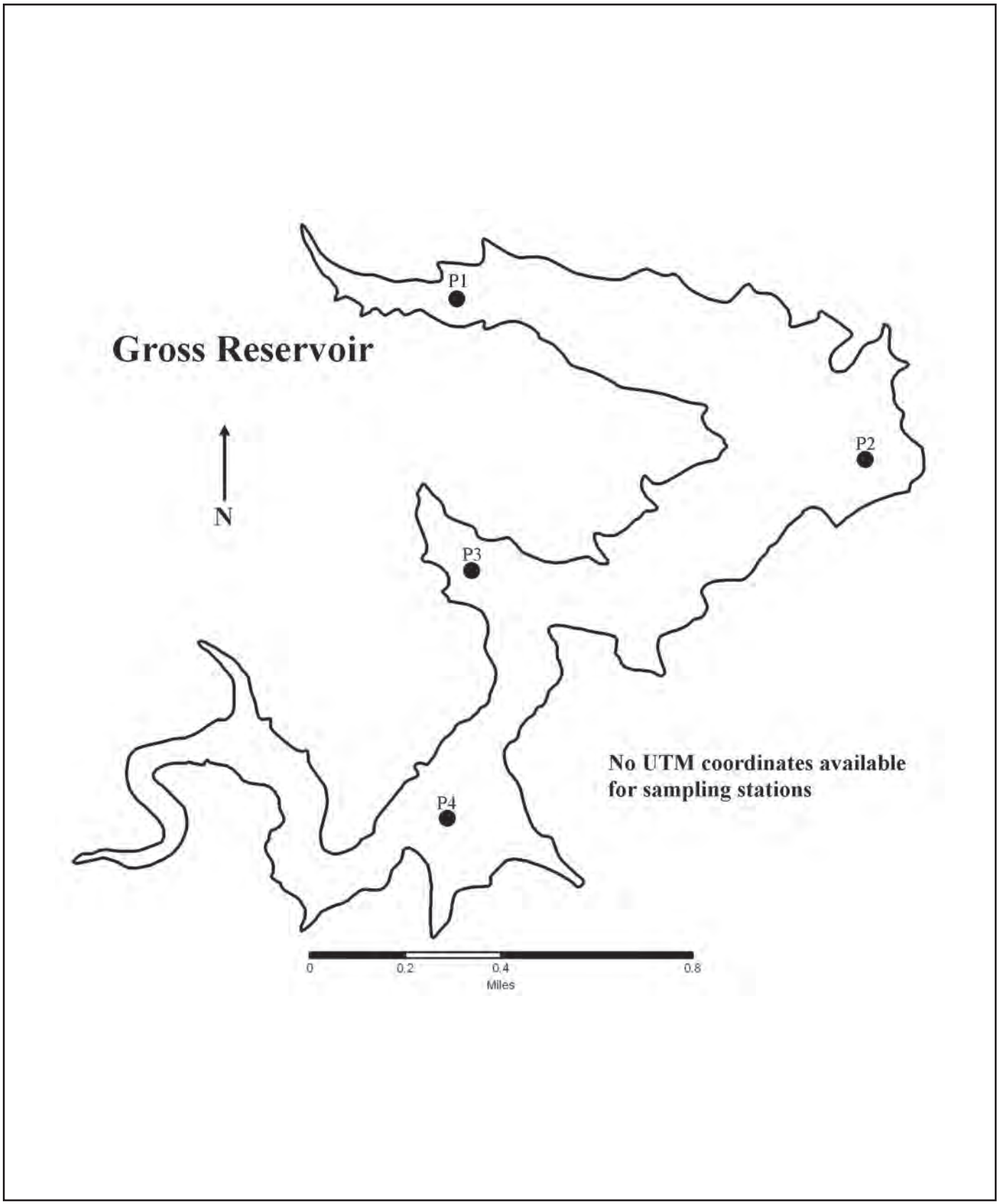


Figure A1-11. Map of Gross Reservoir showing approximate locations of sampling stations for crustacean zooplankton (black dots).

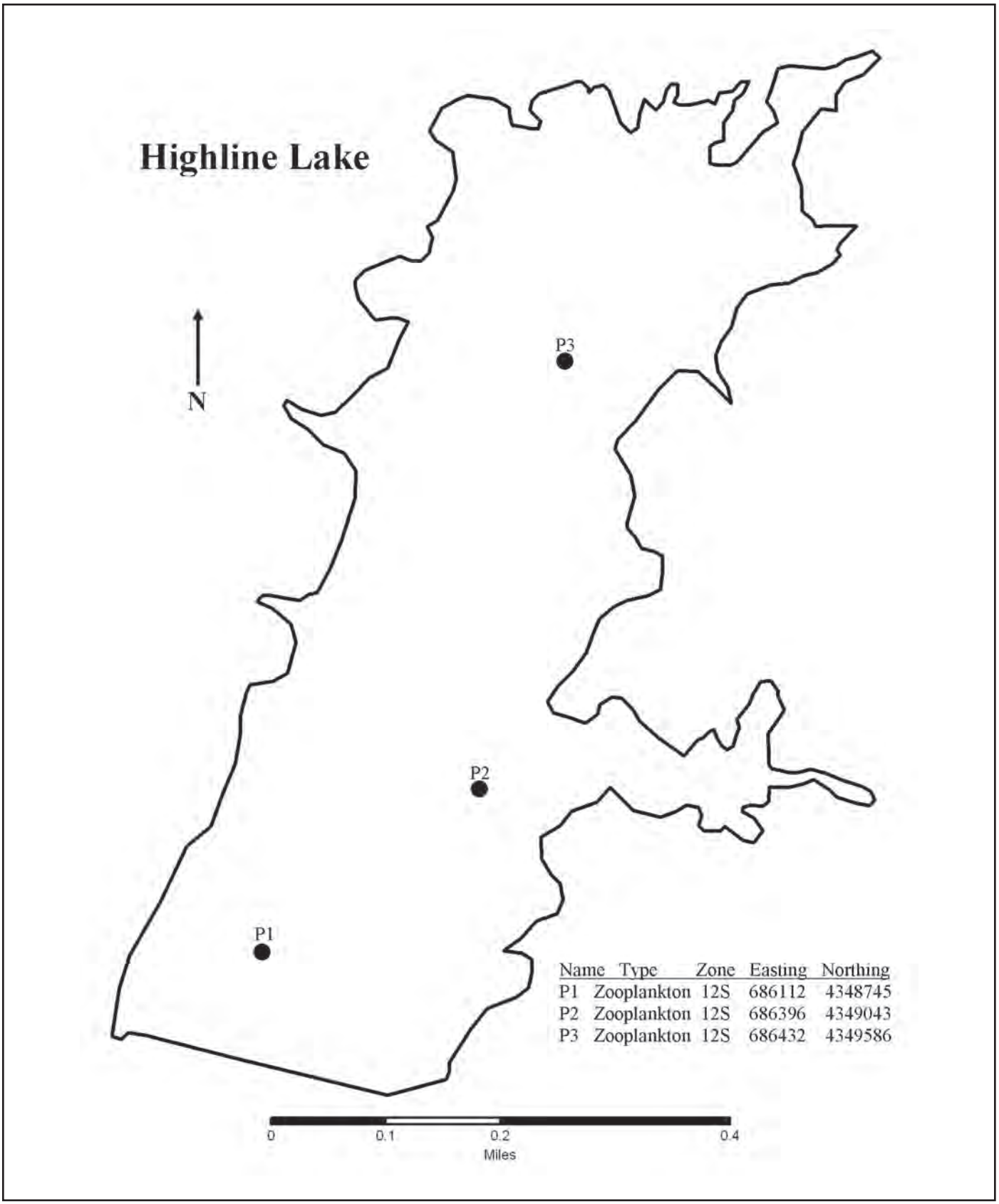
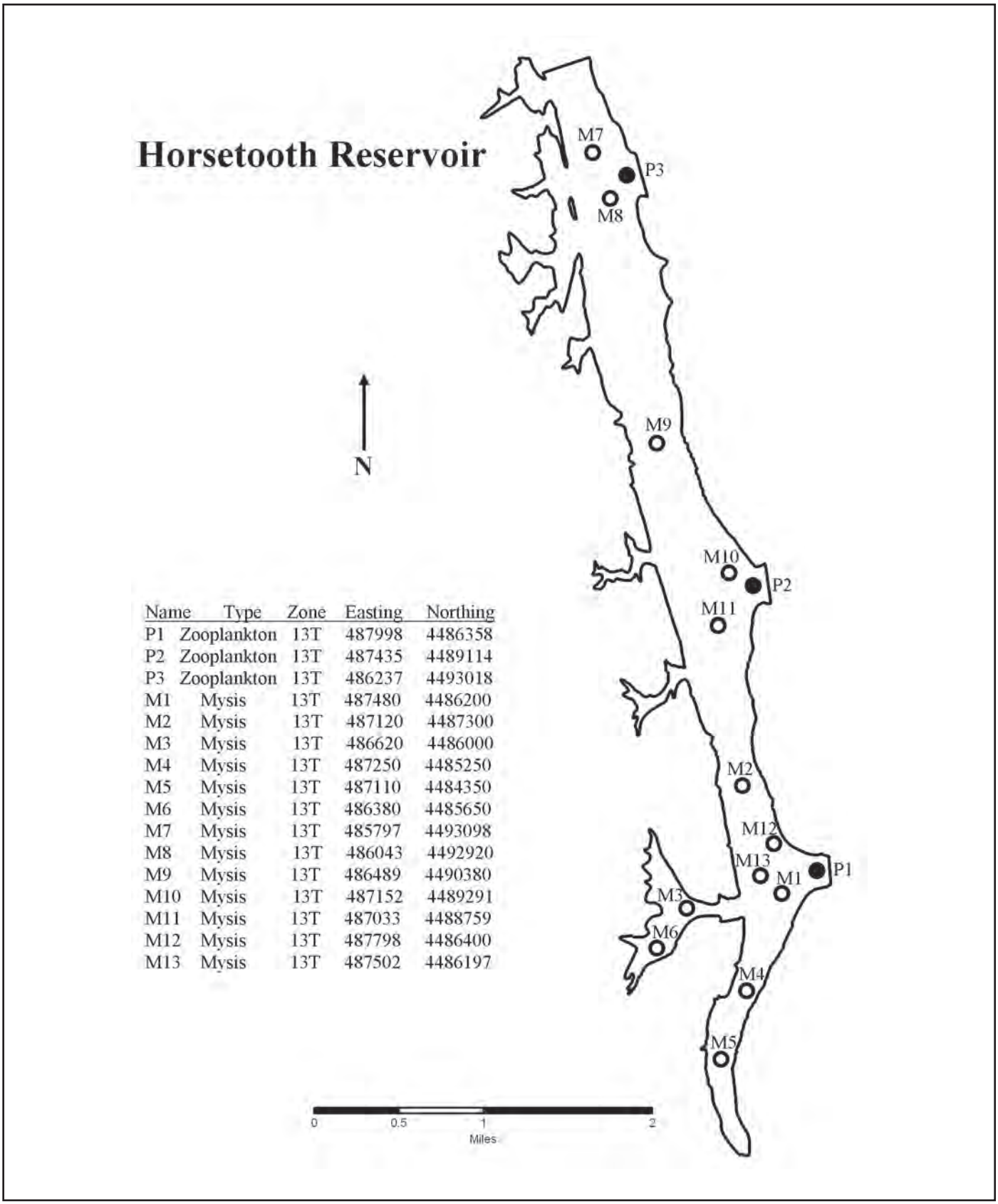


Figure A1-12. Map of Highline Lake showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots).



Name	Type	Zone	Easting	Northing
P1	Zooplankton	13T	487998	4486358
P2	Zooplankton	13T	487435	4489114
P3	Zooplankton	13T	486237	4493018
M1	Mysis	13T	487480	4486200
M2	Mysis	13T	487120	4487300
M3	Mysis	13T	486620	4486000
M4	Mysis	13T	487250	4485250
M5	Mysis	13T	487110	4484350
M6	Mysis	13T	486380	4485650
M7	Mysis	13T	485797	4493098
M8	Mysis	13T	486043	4492920
M9	Mysis	13T	486489	4490380
M10	Mysis	13T	487152	4489291
M11	Mysis	13T	487033	4488759
M12	Mysis	13T	487798	4486400
M13	Mysis	13T	487502	4486197

Figure A1-13. Map of Horsetooth Reservoir showing showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots) and *Mysis diluviana* (open circles)

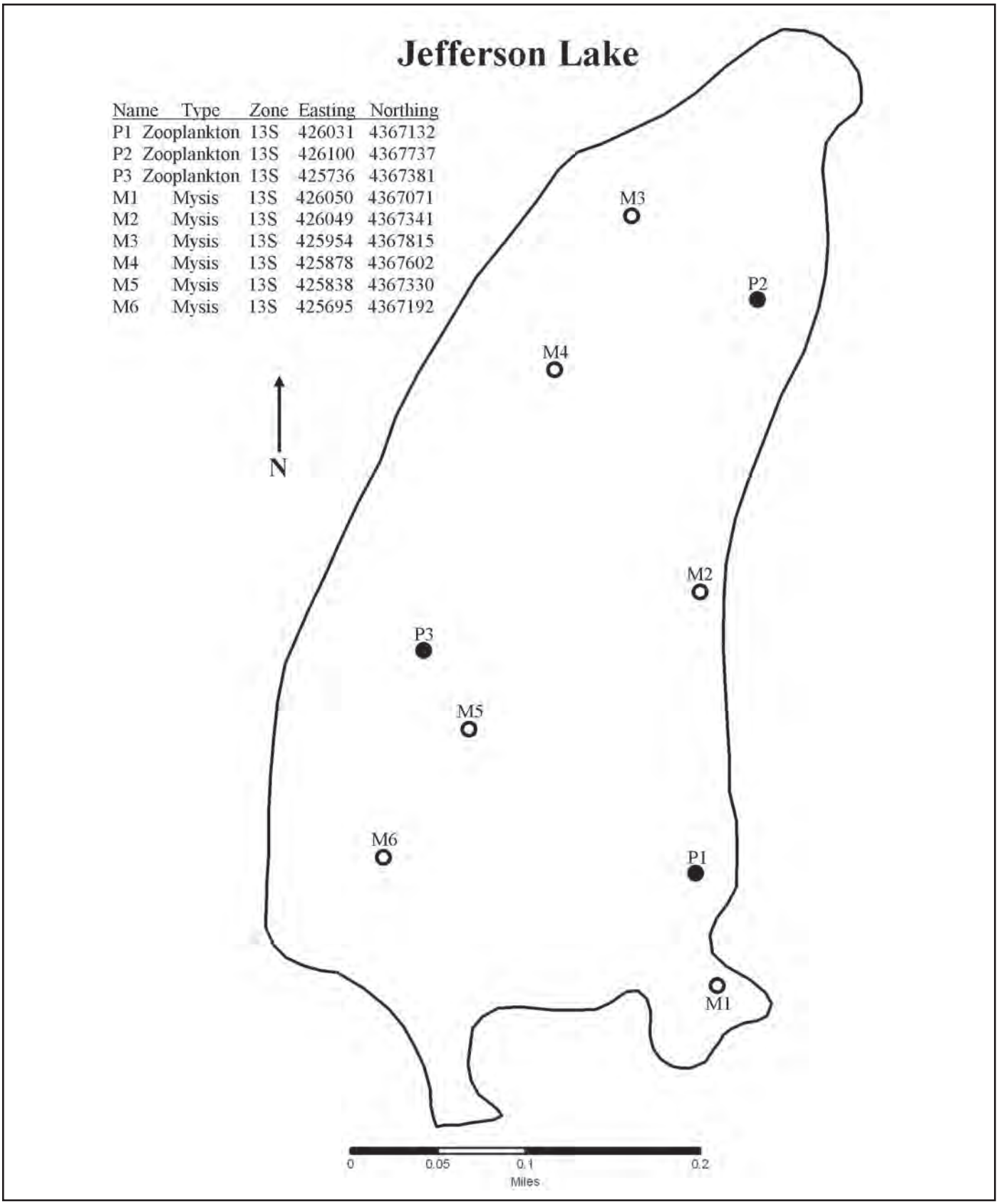


Figure A1-14. Map of Jefferson Lake showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots) and *Mysis diluviana* (open circles).

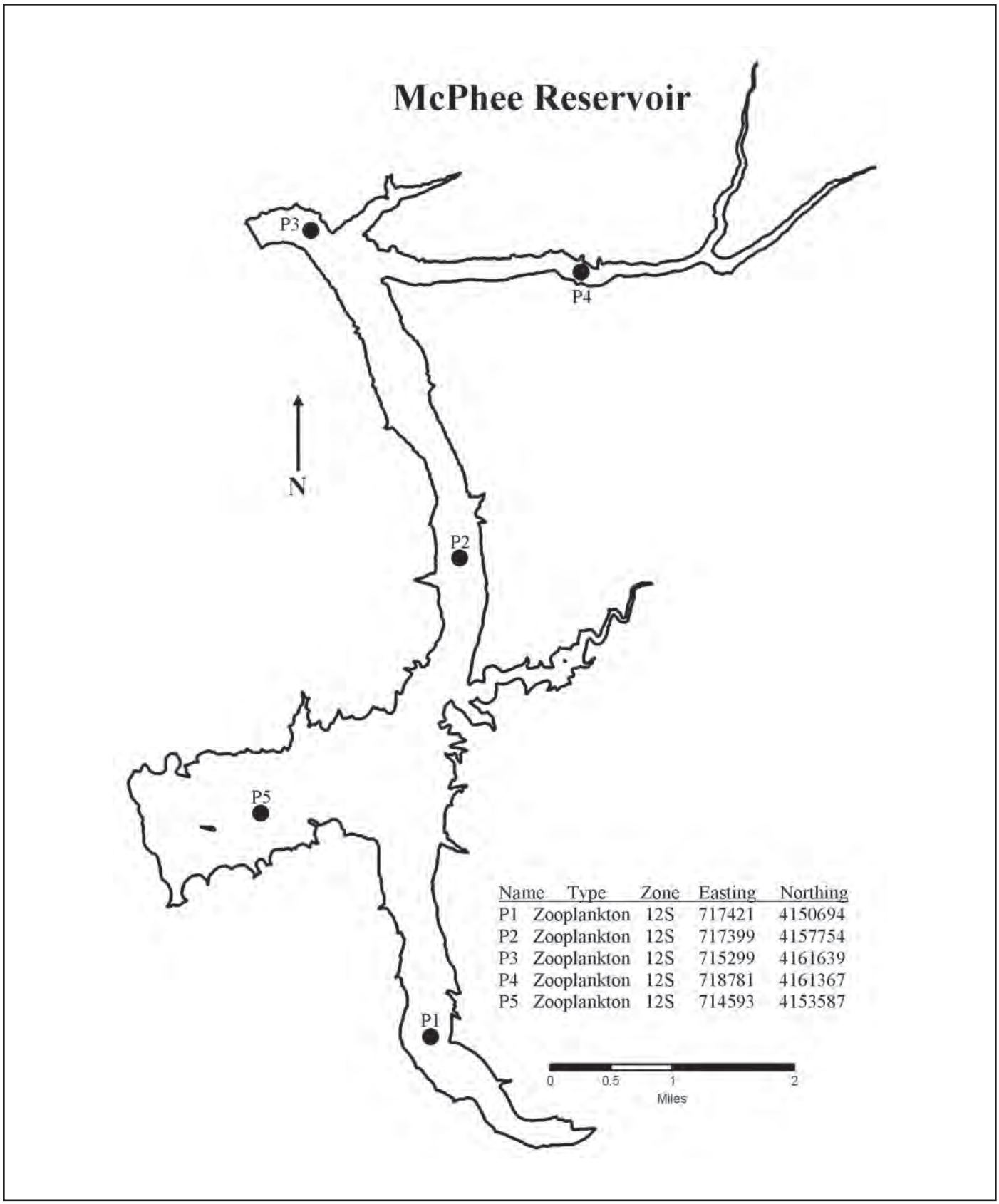


Figure A1-15. Map of McPhee Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots).

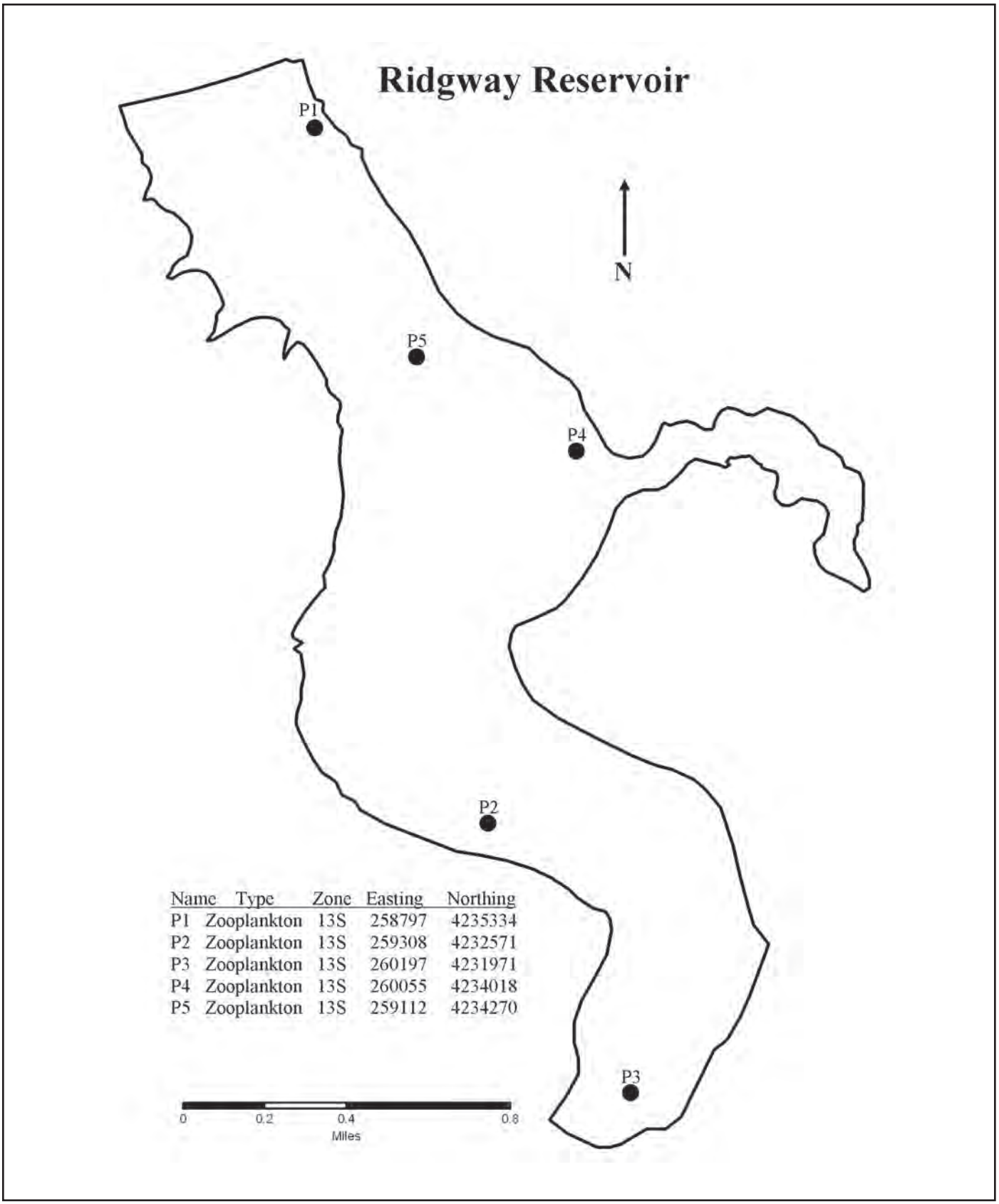


Figure A1-16. Map of Ridgway Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots).

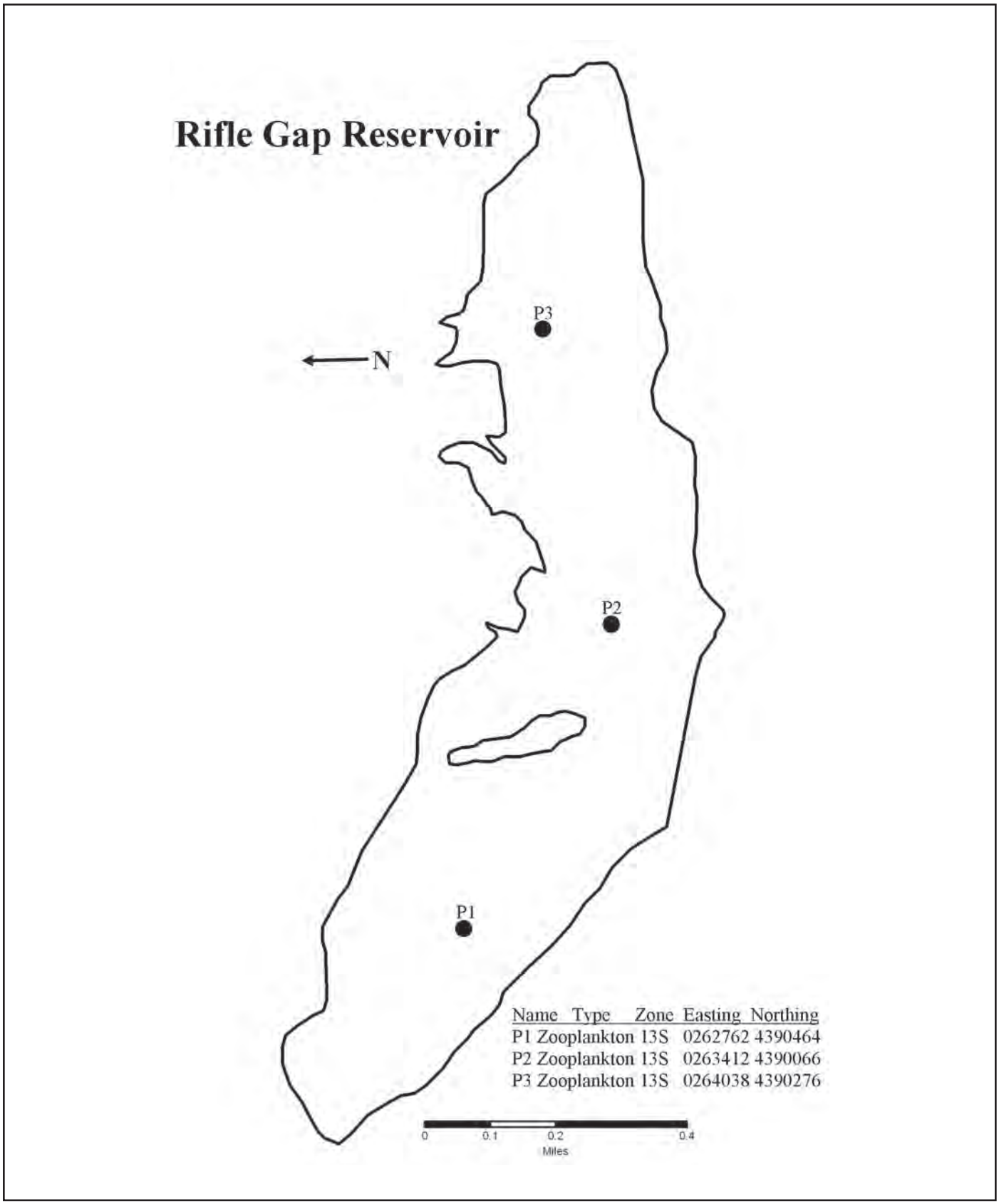
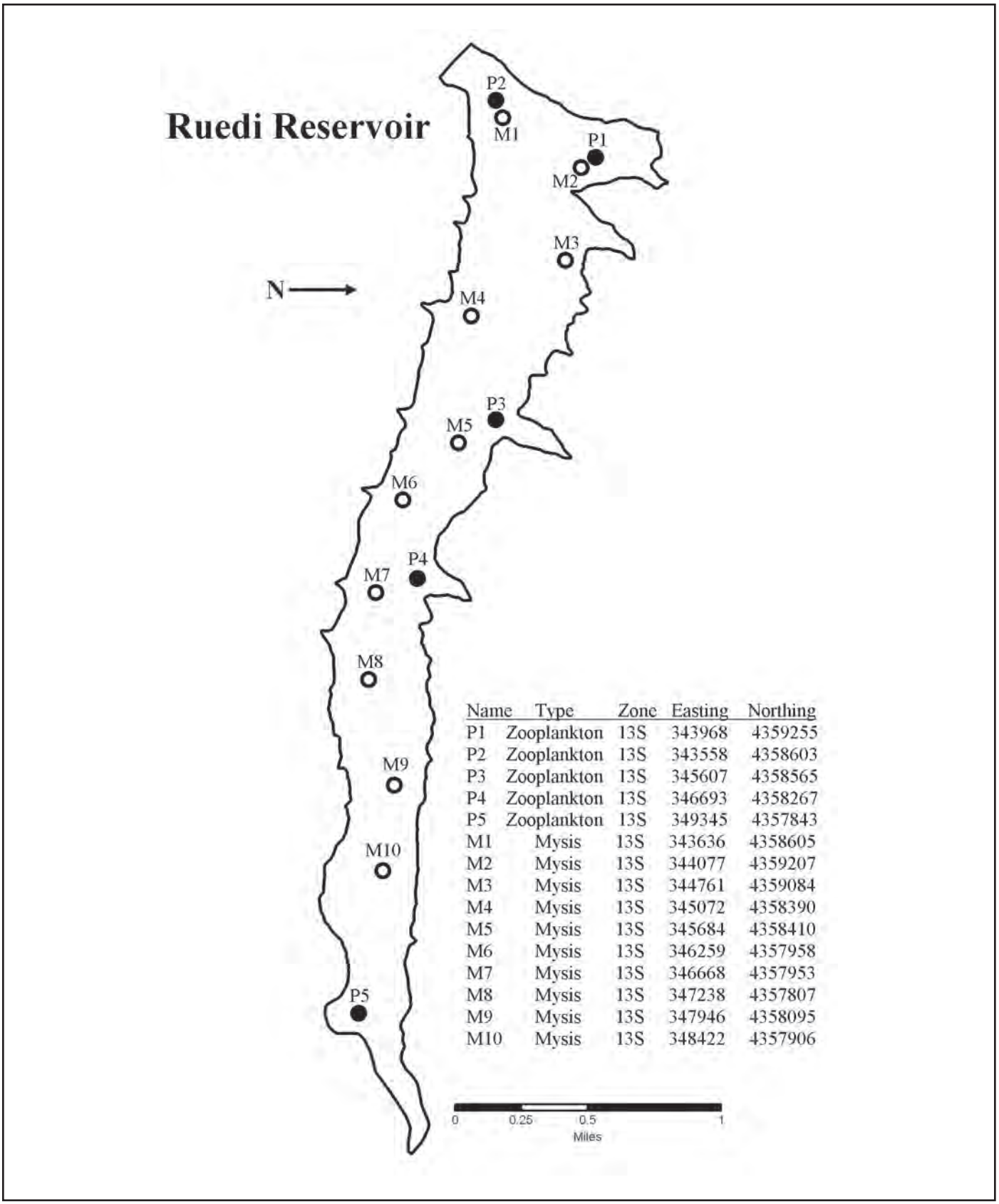


Figure A1-17. Map of Rifle Gap Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots).



Name	Type	Zone	Easting	Northing
P1	Zooplankton	13S	343968	4359255
P2	Zooplankton	13S	343558	4358603
P3	Zooplankton	13S	345607	4358565
P4	Zooplankton	13S	346693	4358267
P5	Zooplankton	13S	349345	4357843
M1	Mysis	13S	343636	4358605
M2	Mysis	13S	344077	4359207
M3	Mysis	13S	344761	4359084
M4	Mysis	13S	345072	4358390
M5	Mysis	13S	345684	4358410
M6	Mysis	13S	346259	4357958
M7	Mysis	13S	346668	4357953
M8	Mysis	13S	347238	4357807
M9	Mysis	13S	347946	4358095
M10	Mysis	13S	348422	4357906

Figure A1-18. Map of Ruedi Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots) and *Mysis diluviana* (open circles).

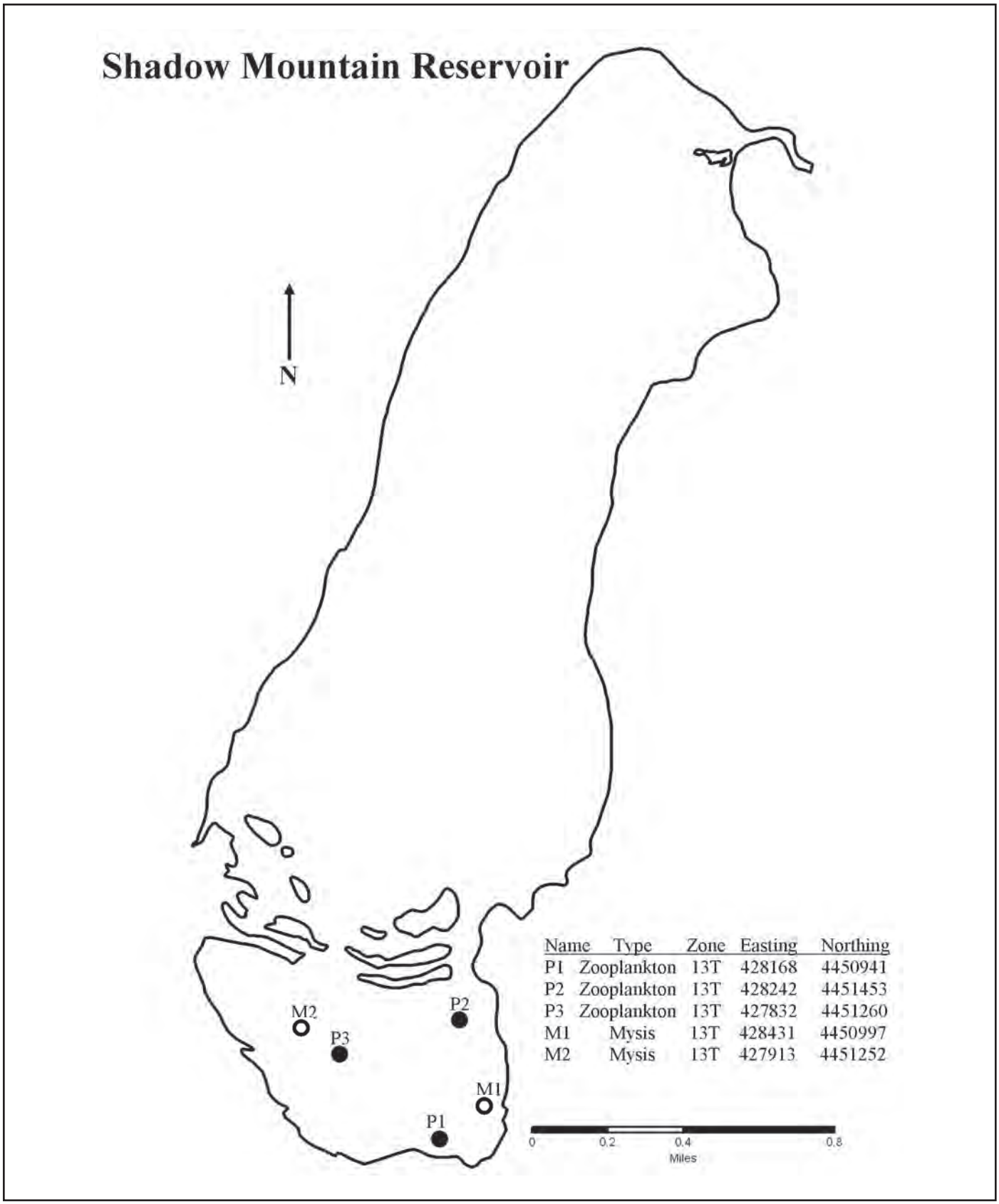


Figure A1-19. Map of Shadow Mountain Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots) and *Mysis diluviana* (open circles).

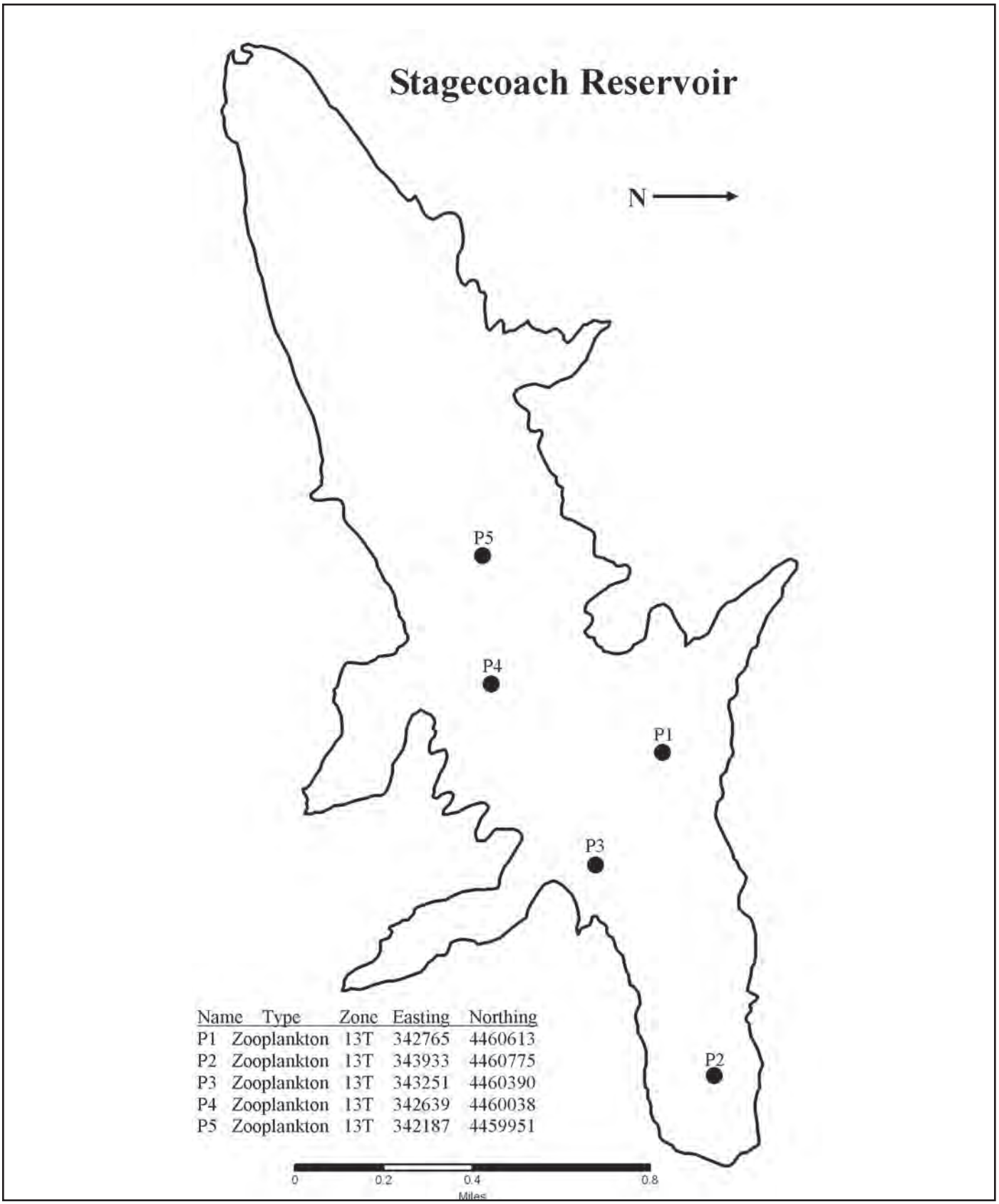


Figure A1-20. Map of Stagecoach Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots).

Name	Type	Zone	Easting	Northing
P1	Zooplankton	13S	363098	4298423
P2	Zooplankton	13S	360867	4297808
P3	Zooplankton	13S	361363	4298823
P4	Zooplankton	13S	362667	4300348
P5	Zooplankton	13S	363717	4300295
M1	Mysis	13S	360792	4297810
M2	Mysis	13S	361177	4298411
M3	Mysis	13S	361398	4298157
M4	Mysis	13S	362241	4299163
M5	Mysis	13S	363255	4299812
M6	Mysis	13S	362355	4299777
M7	Mysis	13S	363460	4299120
M8	Mysis	13S	363381	4298203
M9	Mysis	13S	363677	4300362
M10	Mysis	13S	362794	4300612

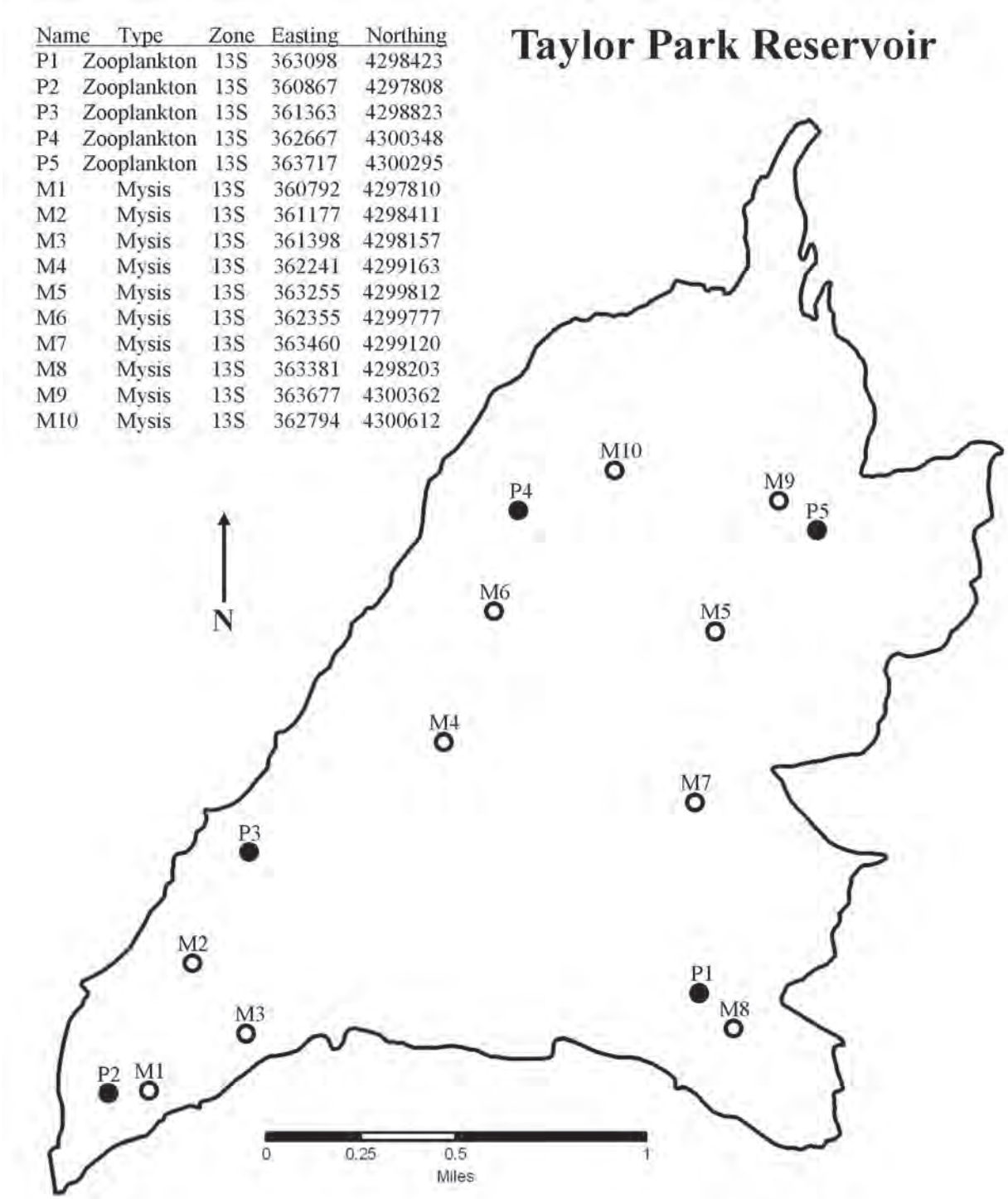


Figure A1-21. Map of Taylor Park Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots) and *Mysis diluviana* (open circles).

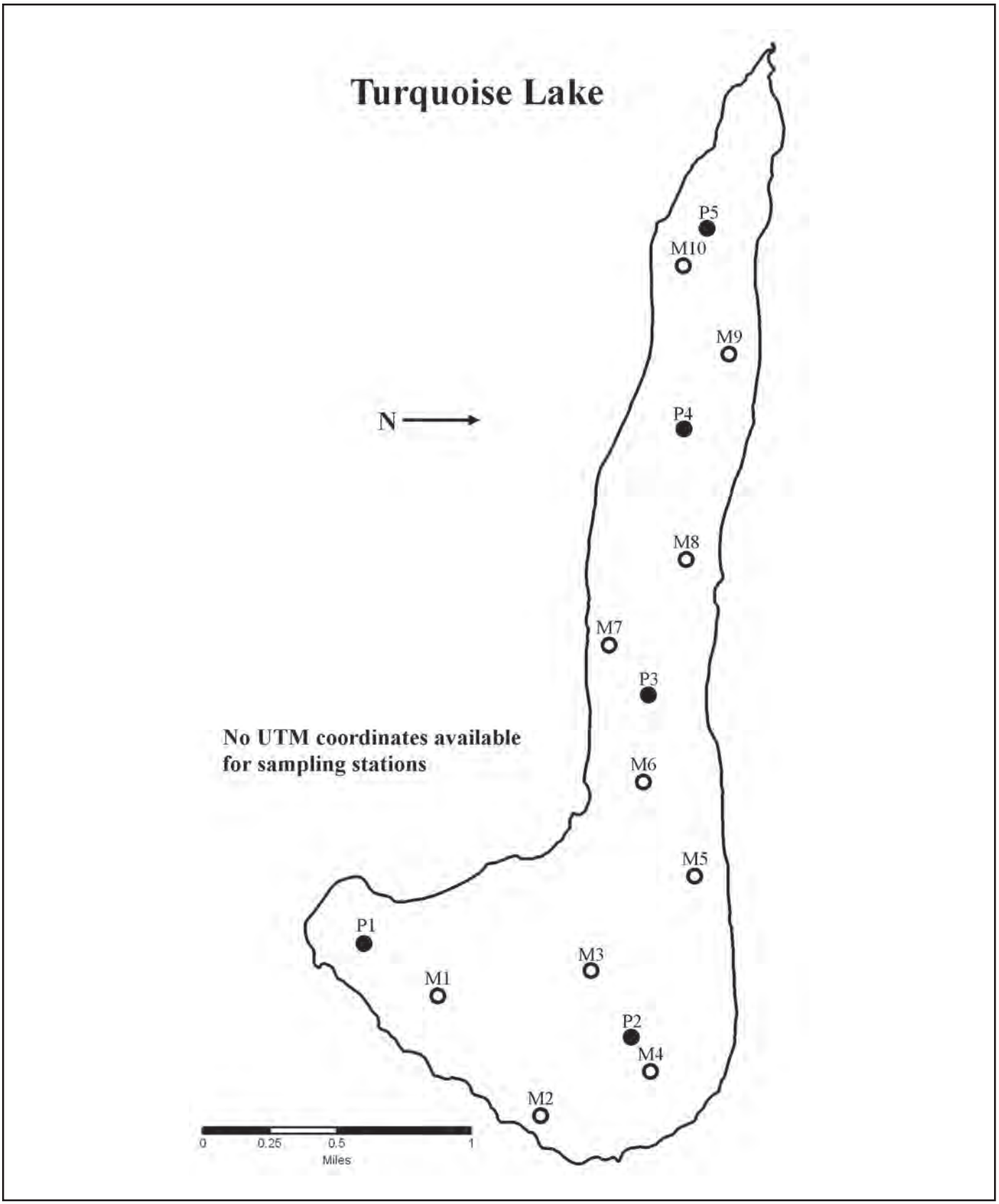
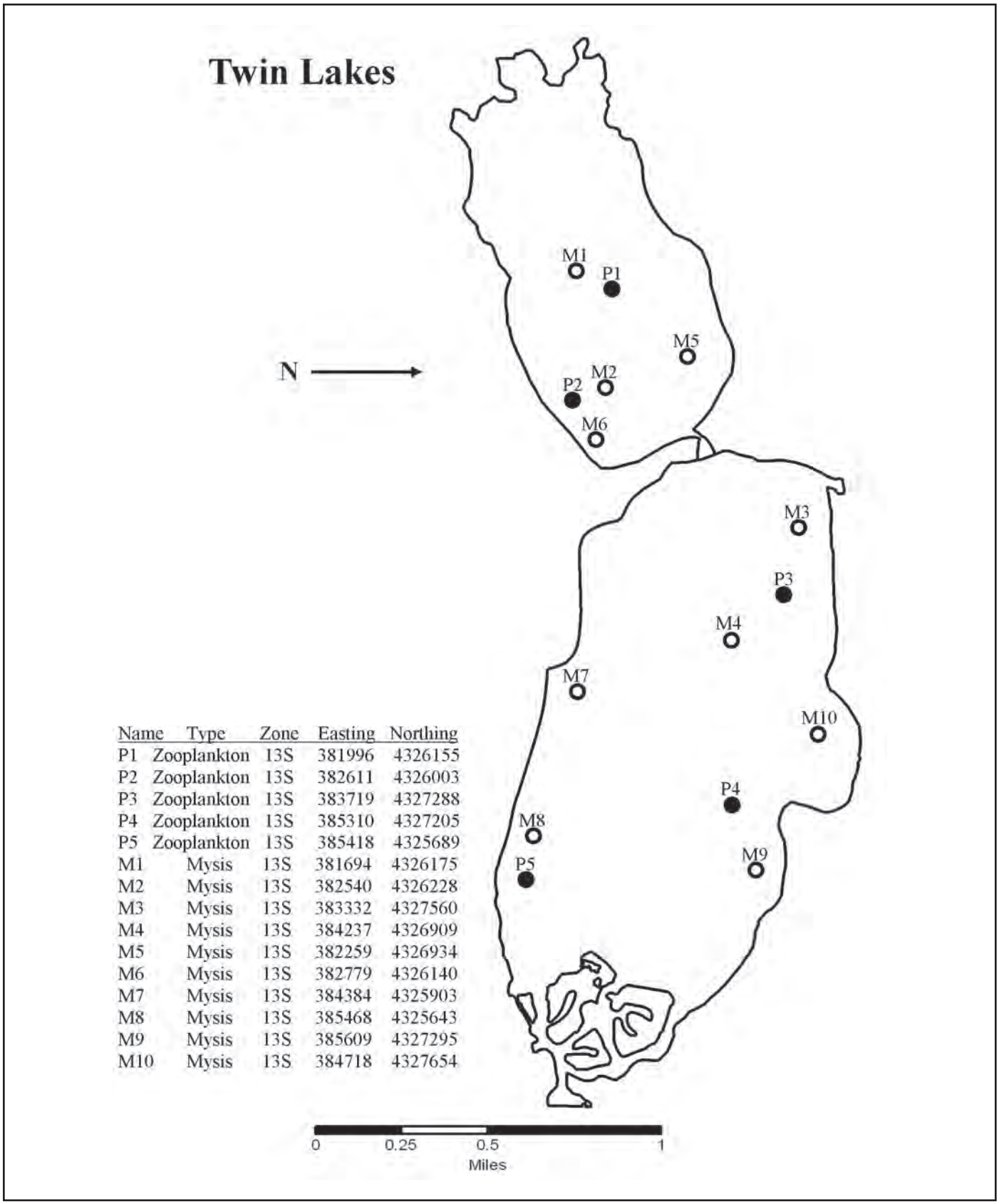
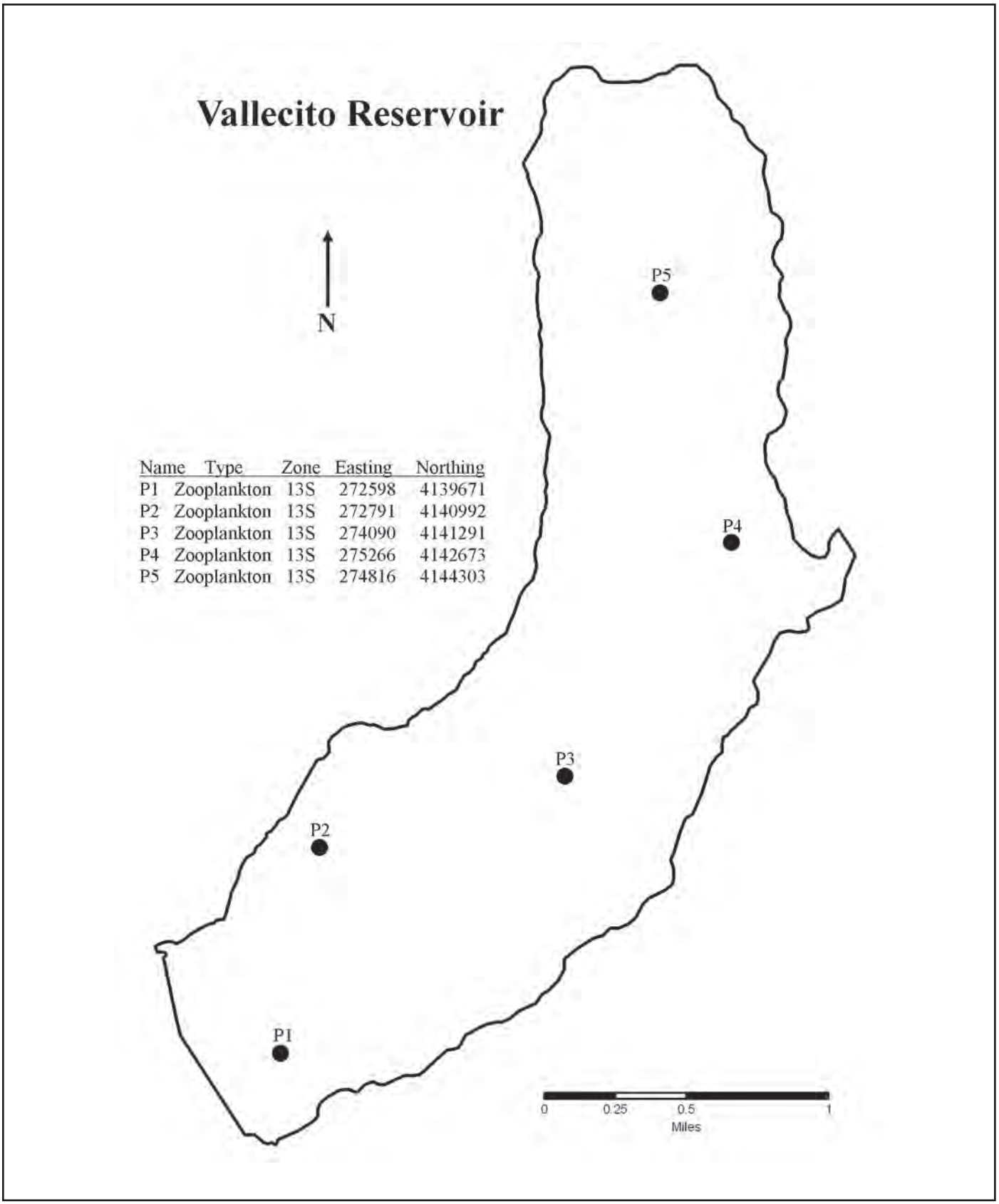


Figure A1-22. Map of Turquoise Lake showing approximate locations of sampling stations for crustacean zooplankton (black dots) and *Mysis diluviana* (open circles).



Name	Type	Zone	Easting	Northing
P1	Zooplankton	13S	381996	4326155
P2	Zooplankton	13S	382611	4326003
P3	Zooplankton	13S	383719	4327288
P4	Zooplankton	13S	385310	4327205
P5	Zooplankton	13S	385418	4325689
M1	Mysis	13S	381694	4326175
M2	Mysis	13S	382540	4326228
M3	Mysis	13S	383332	4327560
M4	Mysis	13S	384237	4326909
M5	Mysis	13S	382259	4326934
M6	Mysis	13S	382779	4326140
M7	Mysis	13S	384384	4325903
M8	Mysis	13S	385468	4325643
M9	Mysis	13S	385609	4327295
M10	Mysis	13S	384718	4327654

Figure A1-23. Map of Twin Lakes showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots) and *Mysis diluviana* (open circles).



Name	Type	Zone	Easting	Northing
P1	Zooplankton	13S	272598	4139671
P2	Zooplankton	13S	272791	4140992
P3	Zooplankton	13S	274090	4141291
P4	Zooplankton	13S	275266	4142673
P5	Zooplankton	13S	274816	4144303

Figure A1-24. Map of Vallecito Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots).

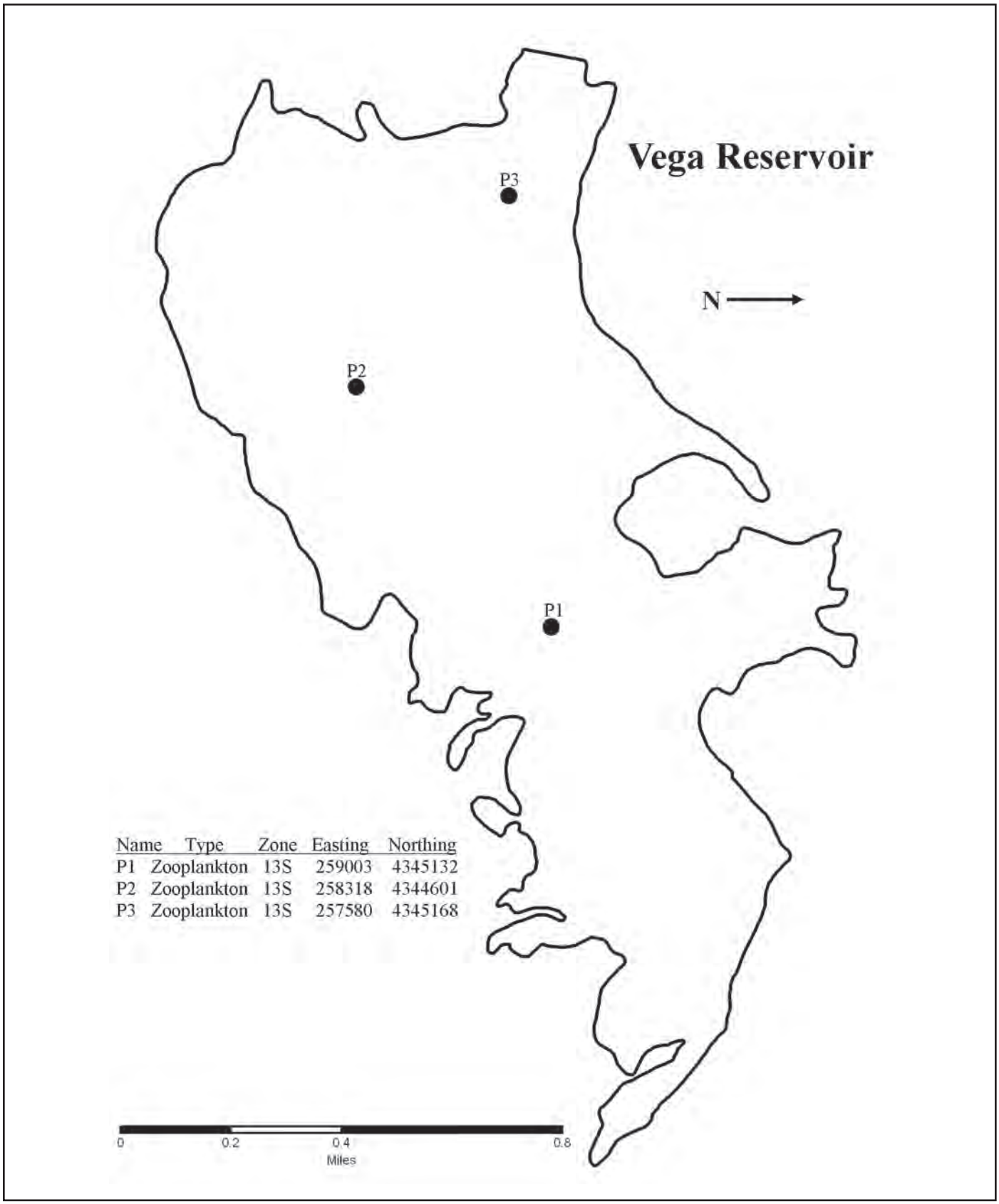


Figure A1-25. Map of Vega Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots).

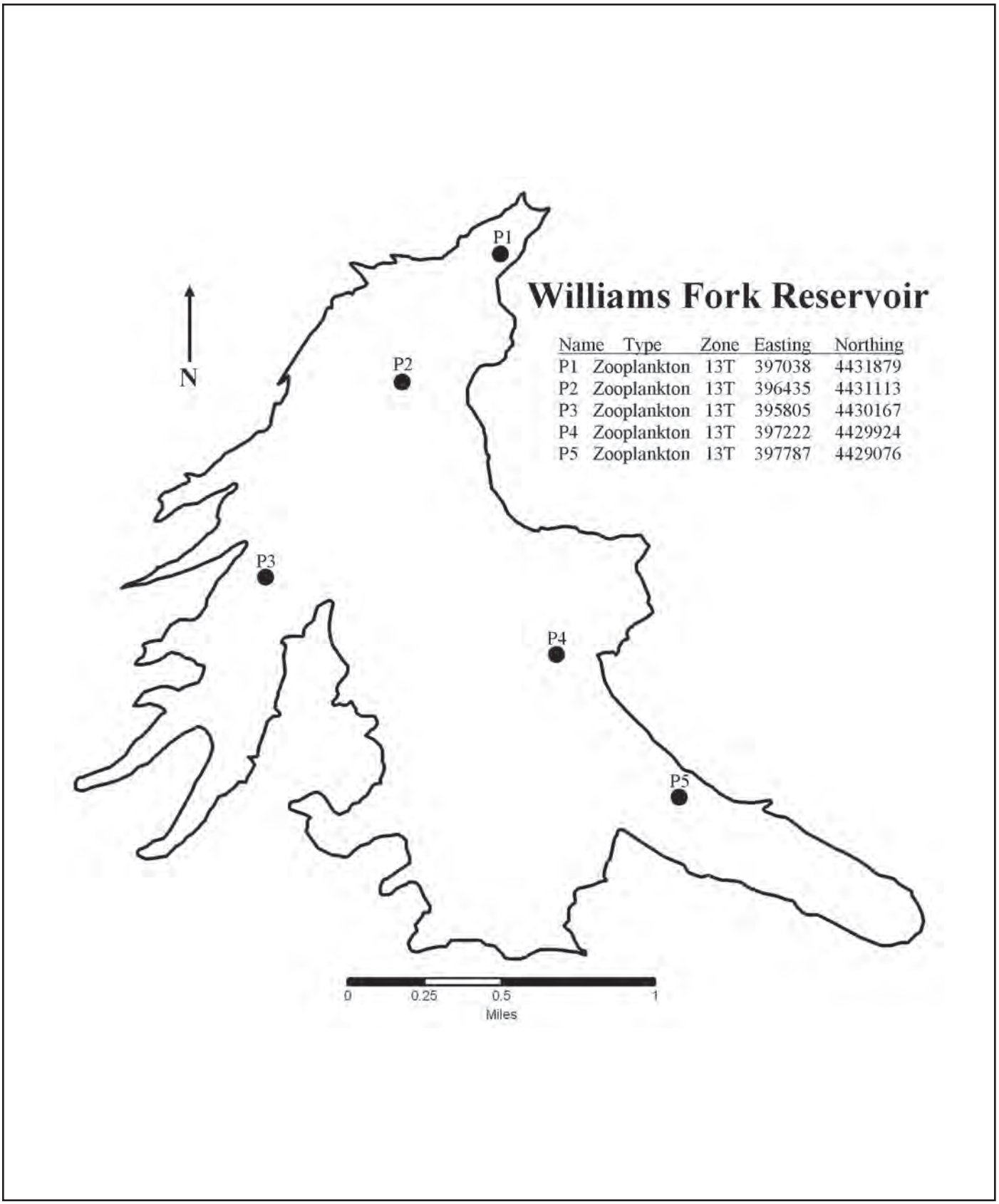


Figure A1-26. Map of Williams Fork Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots).

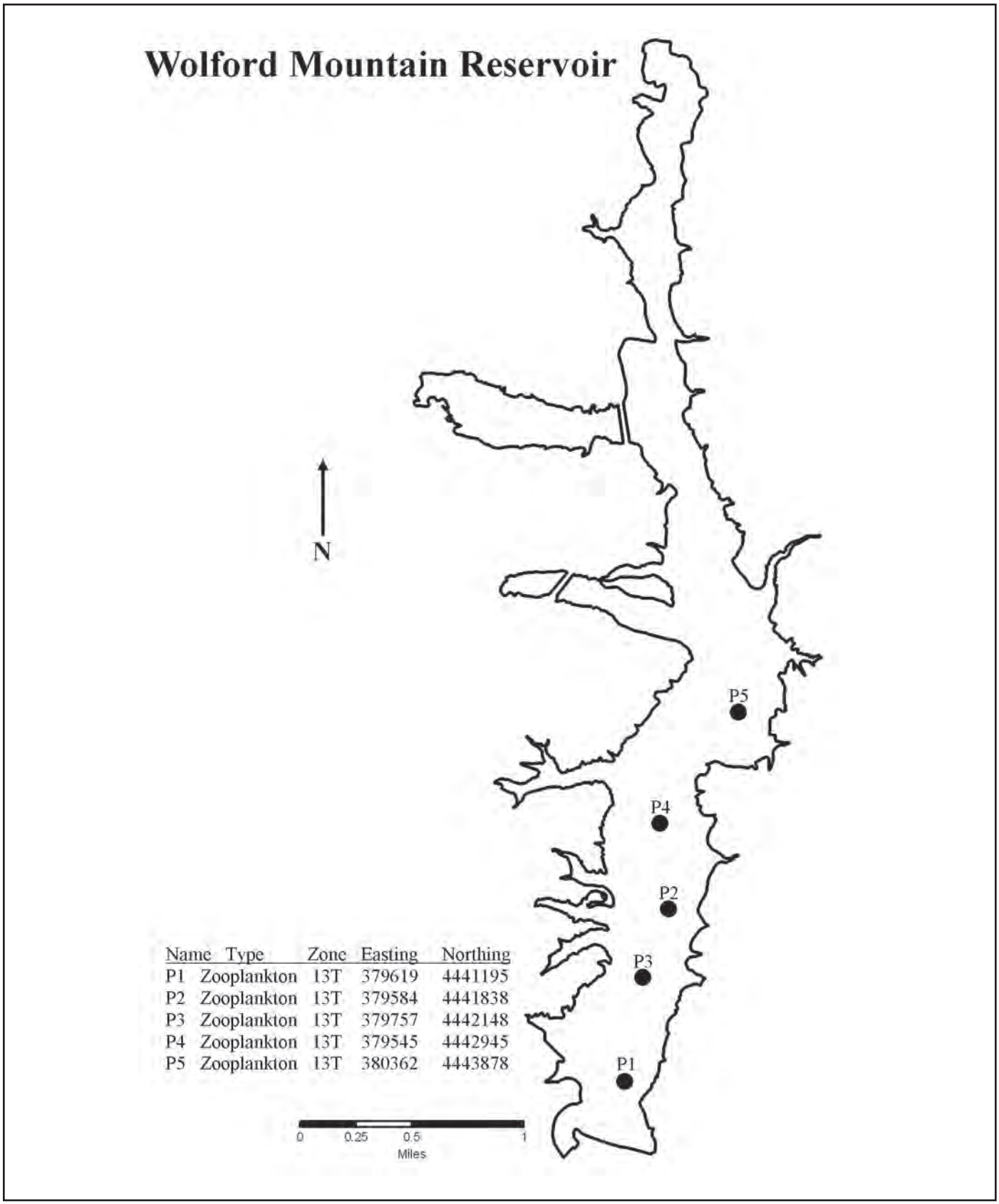


Figure A1-27. Map of Wolford Mountain Reservoir showing approximate locations and UTM coordinates (datum NAD27 CONUS) of sampling stations for crustacean zooplankton (black dots).

APPENDIX TWO

Distinguishing Features of 18 Selected Crustacean Zooplankton Species

The distinguishing features of *Holopedium gibberum* (Figure A2-1) include: animal enclosed in a transparent, gelatinous mantle (Figure A2-2); ventral margin of valves with fine spines; large postabdomen with numerous (up to 20) anal spines and a basal spine (Figure A2-3); and long abdominal setae set on a single long conical projection (Figure A2-4). ♀ 1.5mm-2.2mm, ♂ 0.5mm-0.6mm. Range south in mountains west to California.

In Colorado, known to occur in Sellars (unpublished data) and Turquoise lakes (Table 2). Photographed specimens were captured in Sellars Lake, July, 2007.

Diplostraca: Holopediidae: *Holopedium gibberum* references for identification (Ward and Whipple 1959; Havel et al.1998; NOAA-GLERL 2001; Aliberti et al. 2003).

FIGURE A2-1. *Holopedium gibberum.*

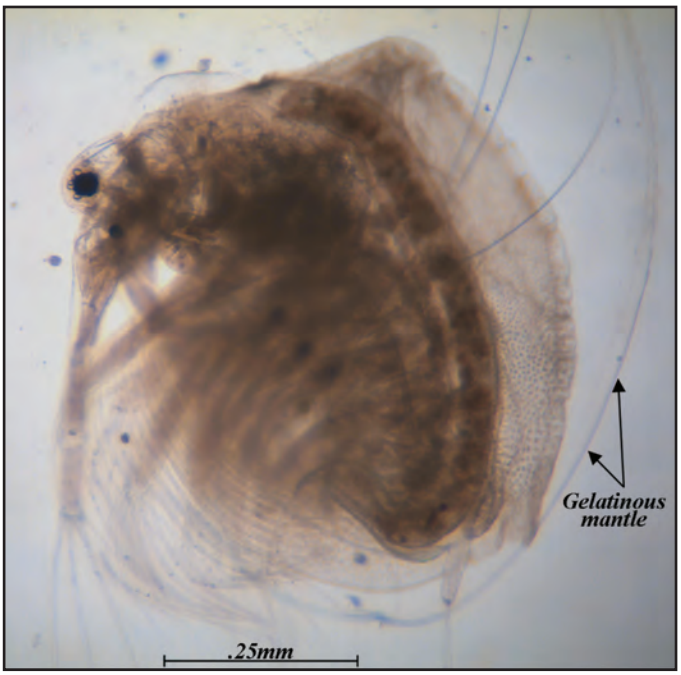


FIGURE A2-2. The transparent, gelatinous mantle of *Holopedium gibberum.*

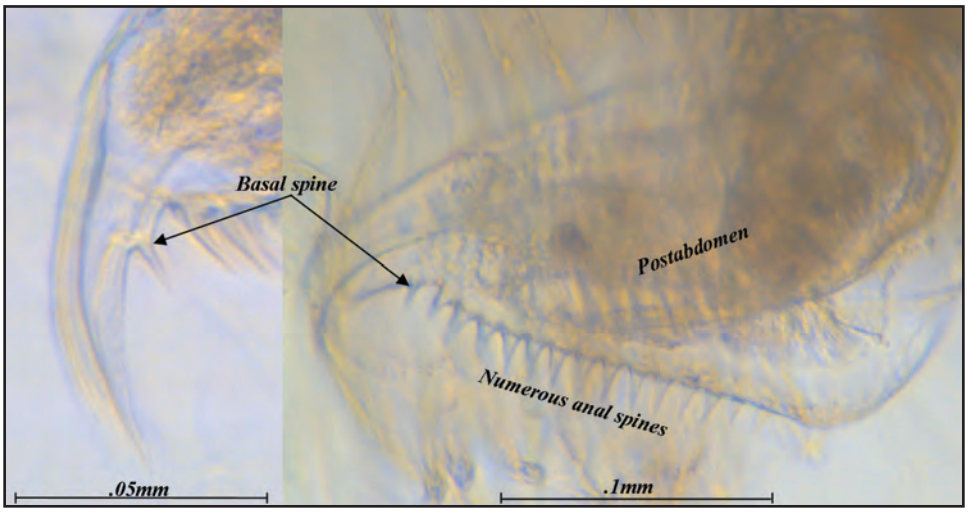


FIGURE A2-3. The ventral margin of valves with fine spines; large postabdomen with numerous (up to 20) anal spines and a basal spine of *Holopedium gibberum.*

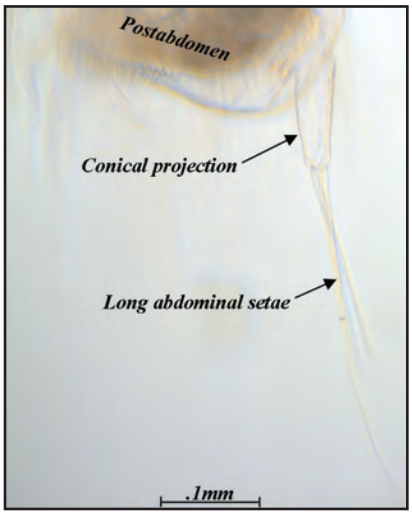


FIGURE A2-4. The long abdominal setae set on a single long conical projection of *Holopedium gibberum.*

The distinguishing features of *Diaphanosoma birgei* (Figure A2-5) include: eye in the middle of head near ventral margin (Figure A2-6); at least 15 setae on antennae (Fiure A2-7); and 3 basal spines, dorsal ramus of antenna with two segments (Figure A2-8). Length 0.8mm - 1.2mm. Range: Common and widely distributed.

In Colorado, known to occur in Blue Mesa, Granby, Highline, McPhee, and Taylor Park reservoirs (Table 2). Photographed specimens were captured in Granby Reservoir, August, 2003, McPhee Reservoir, July, 2005, and Highline Reservoir, July, 2001 and July, 2004.

Diplostraca: Sididae: *Diaphanosoma birgei* references for identification (Ward and Whipple 1959; Havel et al.1998; NOAA-GLERL 2001; Aliberti et al. 2003).

FIGURE A2-5. *Diaphanosoma birgei.*

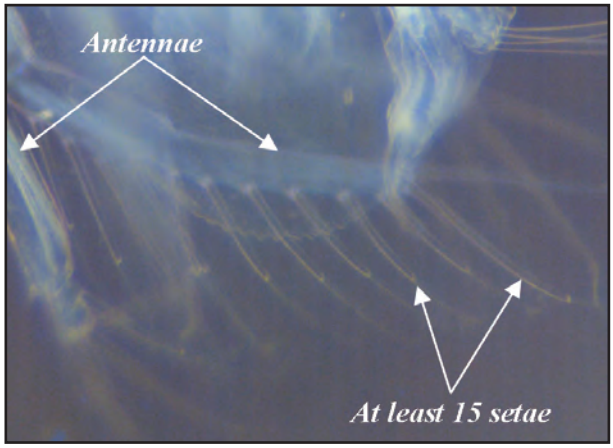


FIGURE A2-7. At least 15 setae on antennae of *Diaphanosoma birgei.*

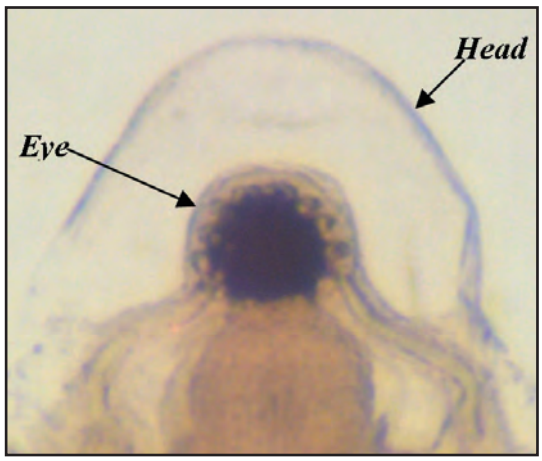


FIGURE A2-6. The distinguishing eye in the middle of head near ventral margin of *Diaphanosoma birgei.*

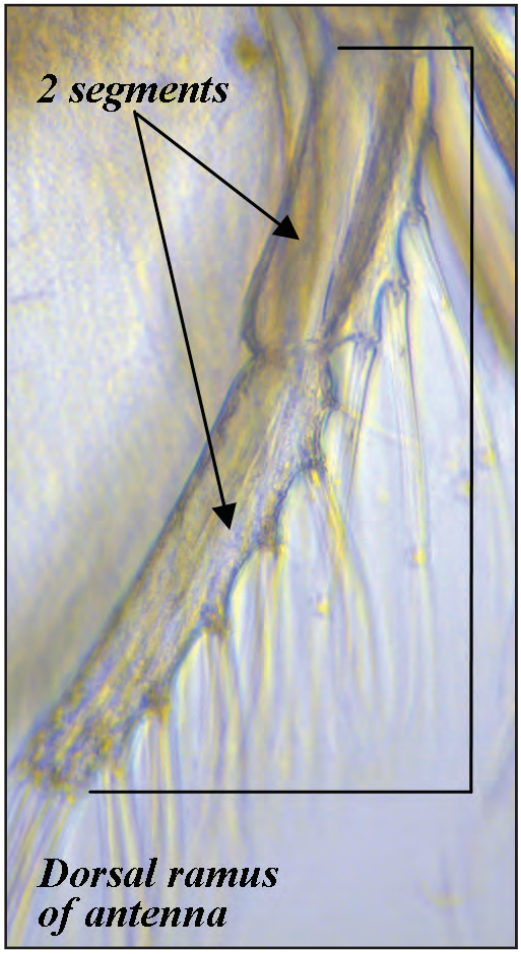


FIGURE A2-8. The 3 basal spines, dorsal ramus of antenna with two segments of *Diaphanosoma birgei.*

The distinguishing features of *Diaphanosoma brachyurum* (Figures A2-9 and A2-10) include: reflexed antenna not reaching past end of head (Figure A2-11); claws with 3 basal spines (Figure A2-12); at least 15 setae on antennae (Figure A2-13); large eye near the edge of head (Figure A2-14); and dorsal ramus of antenna with two segments (Figure A2-15). Length ♀ 0.8mm-0.9mm, ♂ CA around 0.4mm. Range: Common in marshes and weedy margins of lakes.

In Colorado, known to occur in Big Creek Lake, Granby Reservoir, Highline Lake, and McPhee Reservoir (Table 2). Photographed specimens were captured in Highline Lake, 2001, McPhee Reservoir, August, 2006, Granby Reservoir, August, 2001, and August, 2008.

Diplostraca: Sididae: *Diaphanosoma brachyurum* references for identification (Ward and Whipple 1959; Havel et al.1998; NOAA-GLERL 2001; Aliberti et al. 2003).

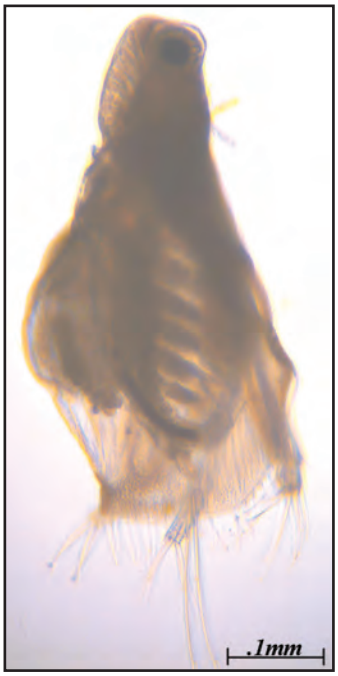


FIGURE A2-9. *Diaphanosoma brachyurum.*

FIGURE A2-10. *Diaphanosoma brachyurum.*

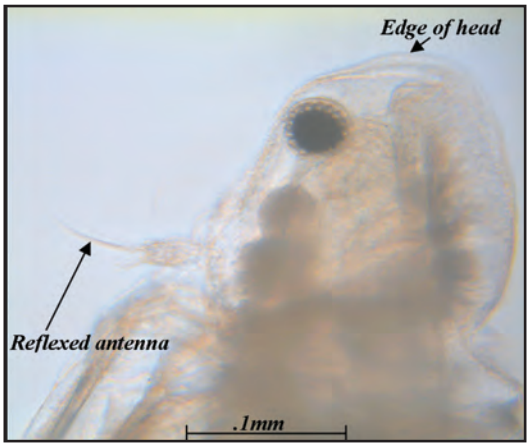


FIGURE A2-11. The reflexed antenna not reaching past end of head of *Diaphanosoma brachyurum.*

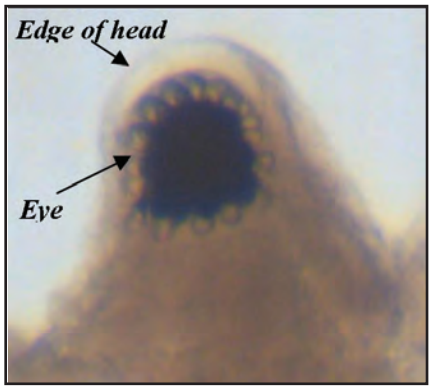


FIGURE A2-14. The large eye near the edge of head of *Diaphanosoma brachyurum.*

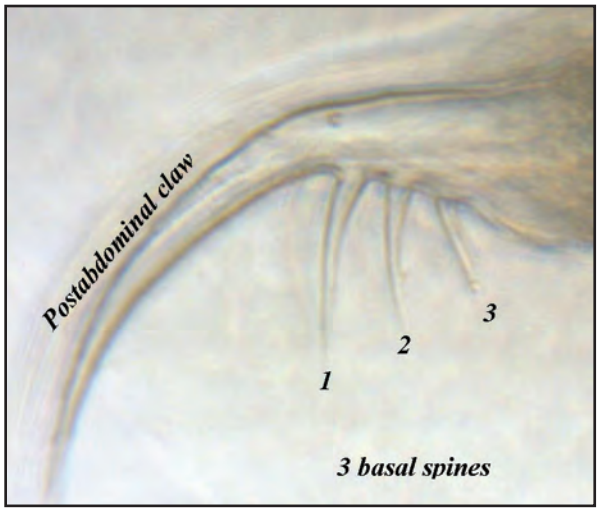


FIGURE A2-12. The claws with 3 basal spines of *Diaphanosoma brachyurum.*

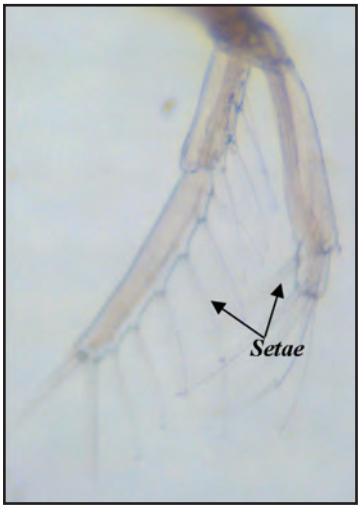


FIGURE A2-13. At least 15 setae on antennae of *Diaphanosoma brachyurum.*

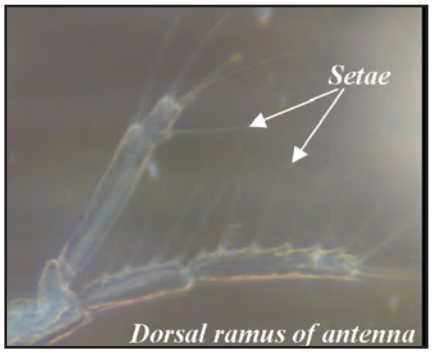


FIGURE A2-15. The dorsal ramus of antenna with two segments of *Diaphanosoma brachyurum.*

The distinguishing features of *Leptodora kindtii* (Figure A2-16) include: elongated and slender head (Figure A2-17); large eye filling anterior end (Figure A2-17); body and legs not covered in a bivalve carapace (Figure A2-18); six pairs of somewhat flattened segmented legs (Figures A2-19 and A2-20); stomach in last abdominal segment (Figure A2-21); and very long body, adults may get up to 18 mm long (the largest cladoceran in the world). Range: Common in northern states but found as far south as Texas.

In Colorado, known to occur in Granby, Williams Fork, and Wolford Mountain reservoirs (Table 2). Photographed specimen was captured in Wolford Mountain Reservoir, August, 2001.

Diplostraca: Leptodoridae: *Leptodora kindtii* references for identification (Ward and Whipple 1959; Havel et al.1998; NOAA-GLERL 2001; Aliberti et al. 2003)

FIGURE A2-16. *Leptodora kindtii.*

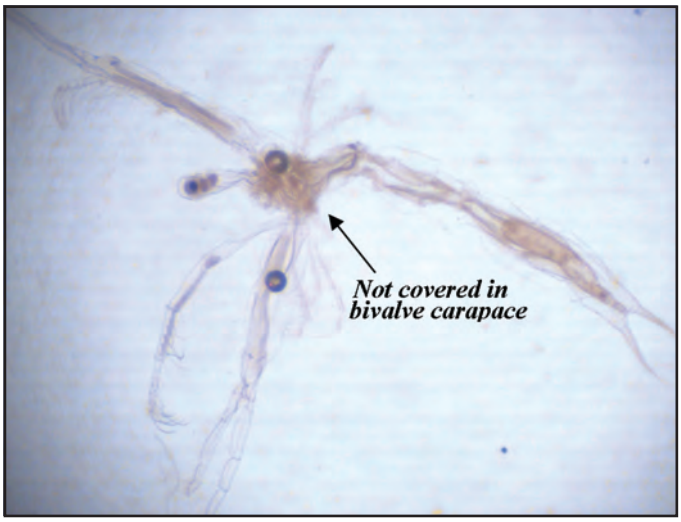


FIGURE A2-18. The body and legs not covered in a bivalve carapace of *Leptodora kindtii.* .

FIGURE A2-17. The elongated and slender head and large eye filling anterior end of *Leptodora kindtii.*

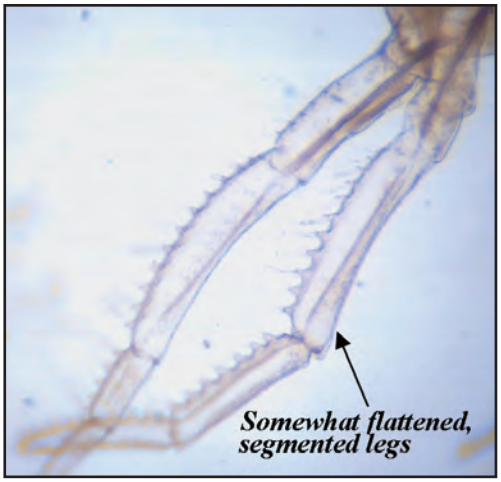


FIGURE A2-19. The six pairs of somewhat flattened segmented legs of *Leptodora kindtii.*

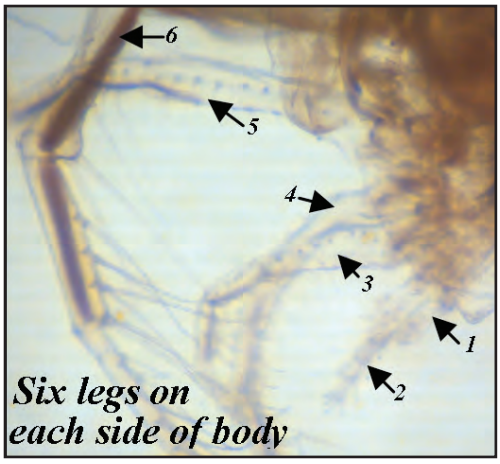


FIGURE A2-20. The six pairs of somewhat flattened segmented legs of *Leptodora kindtii.*

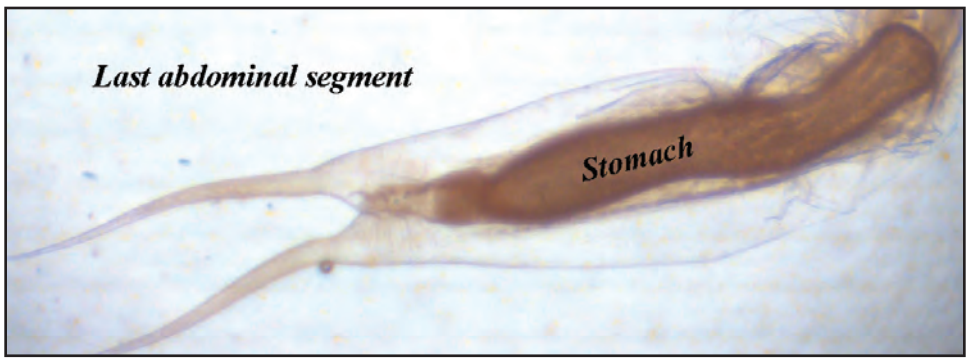


FIGURE A2-21. The stomach in last abdominal segment of *Leptodora kindtii.* .

The distinguishing features of *Bosmina longirostris* (Figure A2-22) include: 1st antenna formed into a tusk like feature (Figure A2-23); postabdominal claw with stout pecten (Figure A2-24); sensory bristle midway between eye and tip of rostrum (Figure A2-25); and short mucro is present (Figure A2-26). Protozoan epibionts (Figure A2-27) are often attached to *B. longirostris*. Length ♀ 0.4mm - 0.6mm, ♂ 0.4mm - 0.5mm. Range: Abundant in nearly all reservoirs and lakes throughout Colorado. Common within temperate and tropical climates in lakes and ponds throughout North America, Europe, and Africa, mostly in the littoral areas.

Bosmina longirostris, a cladoceran, is in the Bosminidae family. Though it does not represent a significant component of any fish's diet in Colorado's reservoirs and lakes, it is preyed upon by *Mysis diluviana*, various juvenile planktivorous fish and cyclopoid copepods, as well as other large sized cladocerans such as *Leptodora kindtii*. Examination of stomach contents of *M. diluviana* from Granby Reservoir in 1982 showed that *Bosmina* was consumed for most of the year and was the second most prefered prey of *Mysis*, only surpassed by *Daphnia pulicaria*. (Martinez 1986).

Likely occurs in most Colorado lakes and reservoirs (Table 2). Photographed specimens were captured in McPhee Reservoir, August, 2006, Dillon Reservoir, August, 2005 and August, 2008.

Diplostraca: Bosminidae: *Bosmina longirostris* references for identification (Ward and Whipple 1959; Havel et al.1998; NOAA-GLERL 2001; Aliberti et al. 2003).

FIGURE A2-22. *Bosmina longirostris.*

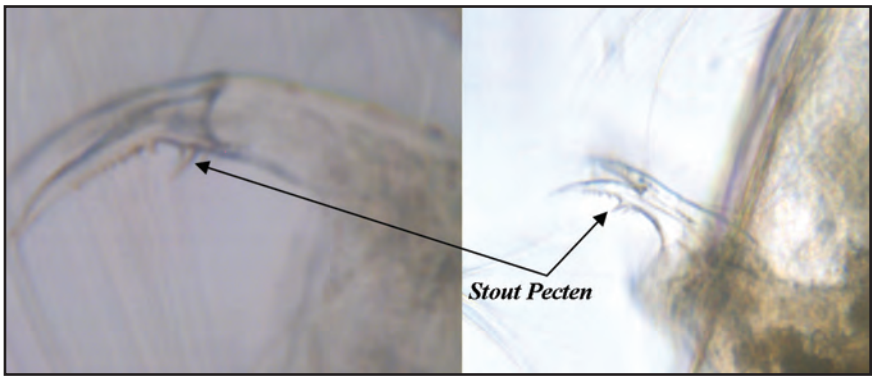


FIGURE A2-24. The postabdominal claw with stout pecten of *Bosmina longirostris.*

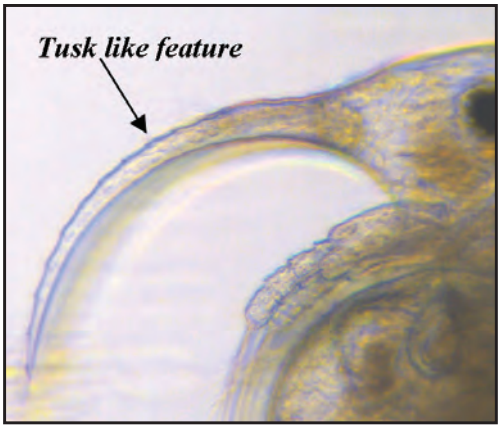


FIGURE A2-23. The 1st antenna formed into a tusk like feature of *Bosmina longirostris.*

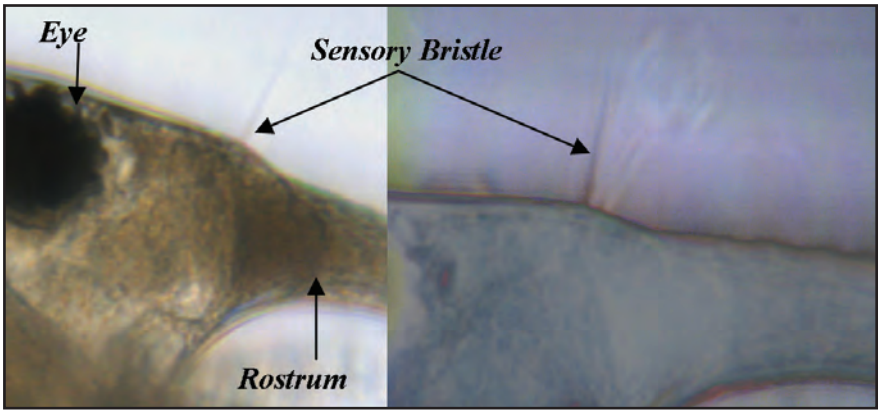


FIGURE A2-25. The sensory bristle midway between eye and tip of rostrum of *Bosmina longirostris.*

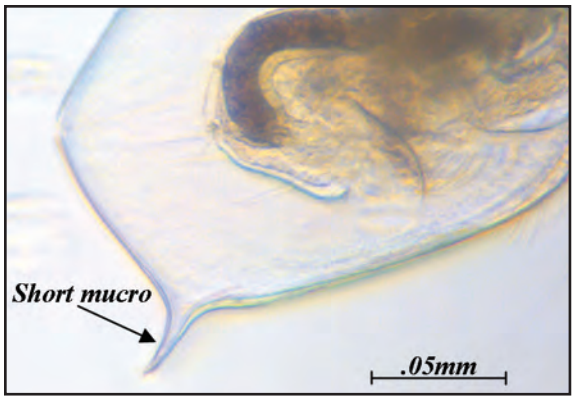


FIGURE A2-26. The short mucro is present in *Bosmina longirostris.*

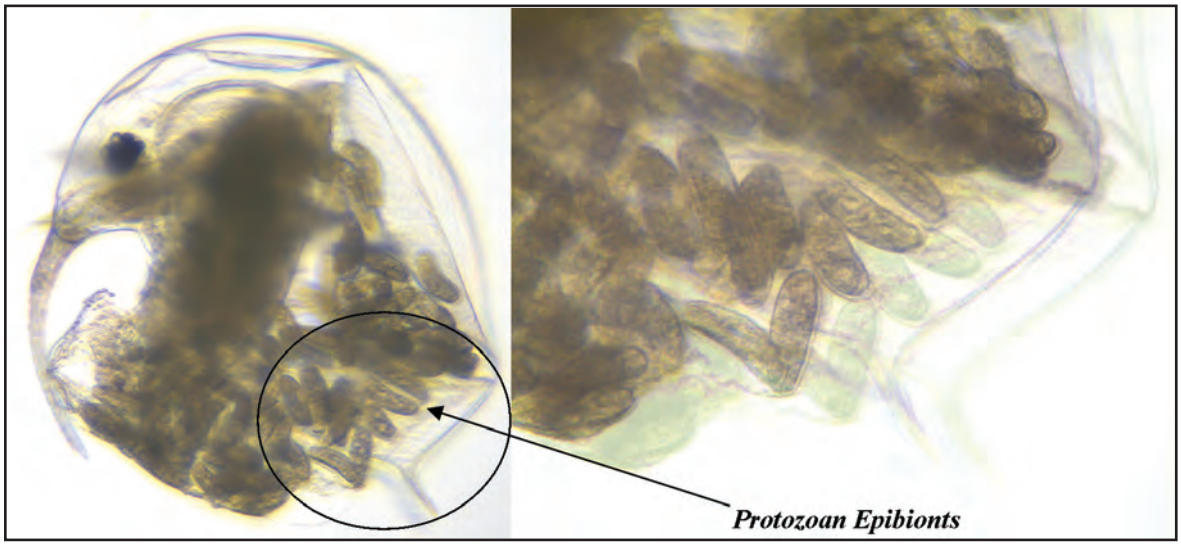


FIGURE A2-27. Protozoan epibionts are often attached to *Bosmina longirostris.*

FIGURE A2-28. Incubating neonates of *Bosmina longirostris.*

The distinguishing features of *Alona affinis* (Figure A2-29) include: greatest height usually near middle of valves (Figure A2-29); postabdomen large with 14-16 marginal denticles and a lateral row of small squamae (Figure A2-30); claws long and denticulate with long basal spine and 4-5 spinules inside of basal spine (Figure A2-31); and rostrum not much longer than 1st antennae and abruptly narrowed at the tip (Figure A2-32). Length ♀ to 1.0mm, ♂ to 0.7mm. Range: Very abundant in all parts of North America. Found in margin of ponds and lakes among weeds.

In Colorado, known to occur in Cheesman, McPhee, and Williams Fork reservoirs (Table 2). Photographed specimen was captured in Williams Fork Reservoir August, 2006.

Diplostraca: Chydoridae: *Alona affinis* references for identification (Ward and Whipple 1959; Havel et al.1998; NOAA-GLERL 2001; Aliberti et al. 2003).

FIGURE A2-29. Greatest height usually near middle of valves of *Alona affinis*.

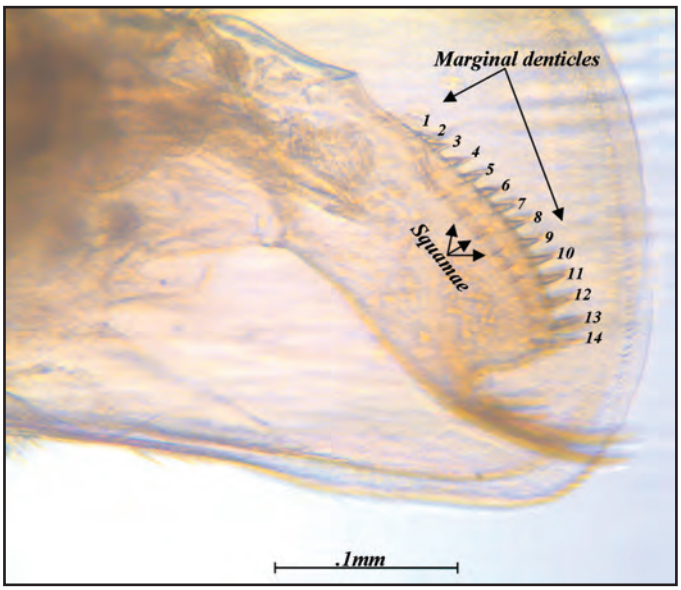


FIGURE A2-30. The large postabdomen with 14-16 marginal denticles and a lateral row of small squamae of *Alona affinis*.

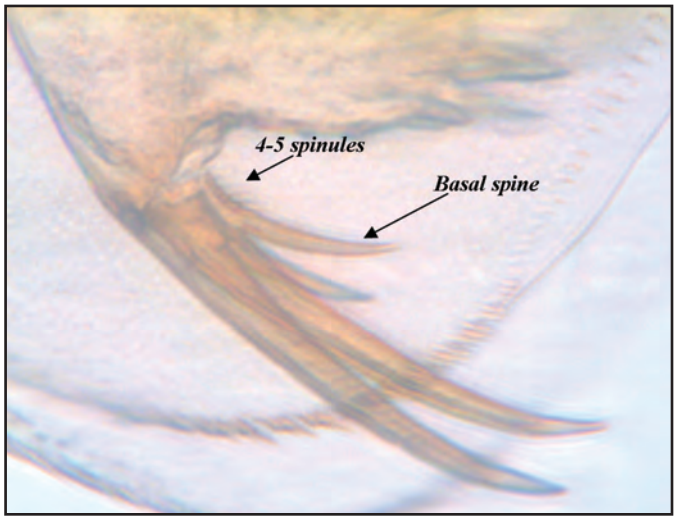


FIGURE A2-31. The claws long and denticulate with long basal spine and 4-5 spinules inside of basal spine of *Alona affinis*.

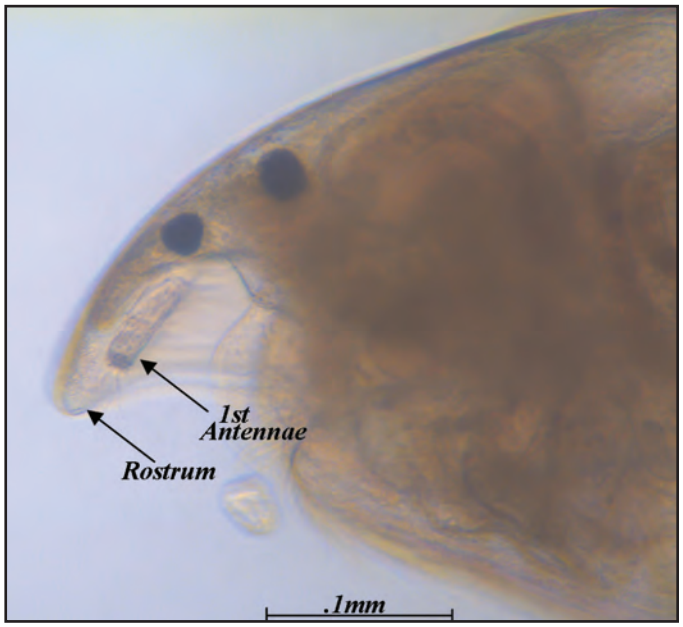


FIGURE A2-32. The rostrum not much longer than 1st antennae and abruptly narrowed at the tip of *Alona affinis*.

The distinguishing features of *Camptocercus macrurus* (Figure A2-33) include: oval form; crest on head (Figure A2-34); rounded angles on valves (Figure A2-33); ventral margin concave in middle (Figure A2-35); small teeth at inferoposteal angle (Figure A2-36); longitudinally striated (Figure A2-36); postabdomen very long and slender with lateral squamae and 20 to 30 marginal denticles (Figure A2-37); claws long and straight with 1 basal spine (Figure A2-37); and color is usually yellow transparent (Figure A2-36). Length ♀ to 1mm. Range: Rare, but reported from most regions in the U.S.

In Colorado, known to occur in Elevnmile Reservoir (Table 2). Photographed specimens were captured in Elevenmile Reservoir 2005.

Diplostraca: Chydoridae: *Camptocercus macrurus* references for identification (Ward and Whipple 1959; Havel et al.1998; NOAA-GLERL 2001; Aliberti et al. 2003).

FIGURE A2-33. The rounded angles on valves of *Camptocercus macrurus.*

FIGURE A2-34. The oval form; crest on head of *Camptocercus macrurus.*

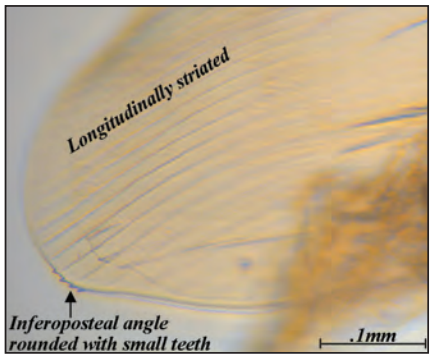


FIGURE A2-36. The small teeth at inferoposteal angle and longitudinally striated features of *Camptocercus macrurus.*

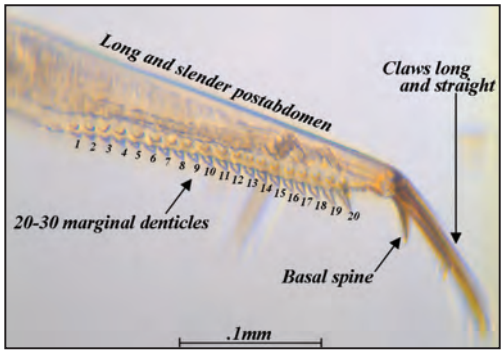


FIGURE A2-37. The postabdomen is very long and slender with lateral squamae and 20 to 30 marginal denticles of *Camptocercus macrurus.*

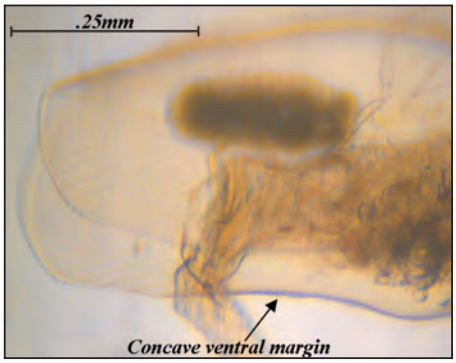


FIGURE A2-35. The ventral margin concave in middle of *Camptocercus macrurus.*

The distinguishing features of *Chydorus sphaericus* (Figure A2-38) include: spherical or elliptical body (Figure A2-38); postabdomen with 8-9 marginal denticles (Figure A2-39); small claws with very minute proximal basal spine (Figure A2-39); and color is yellow to brown (Figure A2-38). Length ♀ 0.3mm – 0.5mm, ♂ around 0.2mm. Range: The most common Cladoceran on earth; found most places around the world.

Known to occur in Dillon Reservoir, Elevenmile Reservoir, Granby Reservoir, Highline Lake, and McPhee Reservoir in Colorado (Table 2). Photographed specimens were captured in Dillon Reservoir, August, 2005, and McPhee Reservoir, July, 2005.

Diplostraca: Chydoridae: *Chydorus sphaericus* references for identification (Ward and Whipple 1959; Havel et al.1998; NOAA-GLERL 2001; Aliberti et al. 2003).

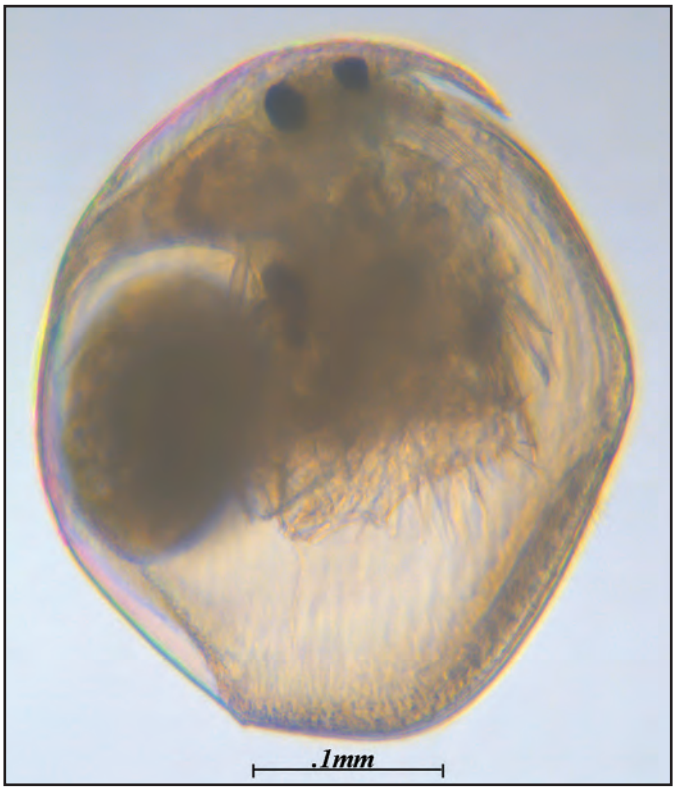


FIGURE A2-38. The spherical or elliptical body of *Chydorus sphaericus.*

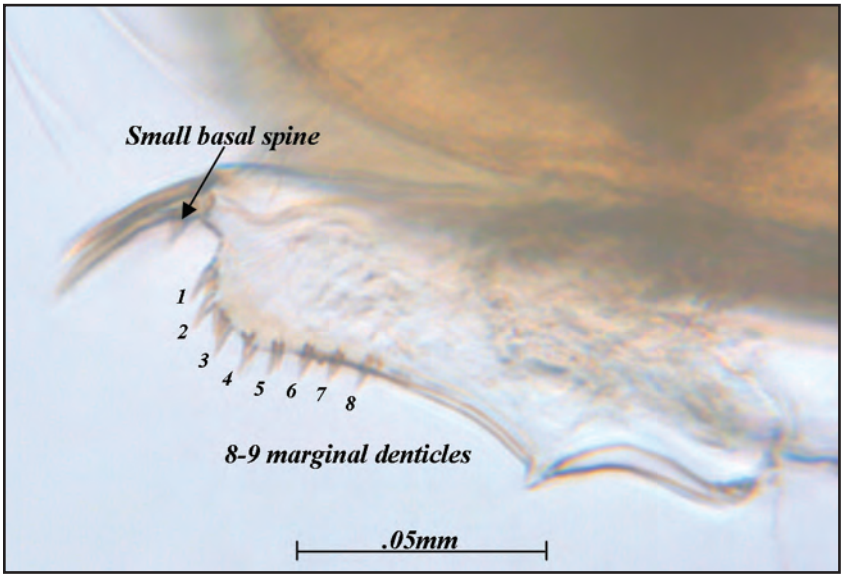


FIGURE A2-39. The postabdomen with 8-9 marginal denticles of *Chydorus sphaericus.*

The distinguishing features of *Eurycercus lamellatus* (Figure A2-40) include: Antennules short and thick (Figure A2-41); more than half the length of the antennule is reaching beyond the rostrum; (Figure A2-41); dorsal margin of postabdomen with nearly 100 or more saw-like teeth, teeth gradually decrease in length toward base of anal setae (Figure A2-42); and claws on spiniferous projection with basal spines (Figure A2-42). Length ♀ 3mm or more, ♂ to 1.4mm. Range: Absent in far north, common elsewhere; in permanent pools or margins of lakes among weeds.

In Colorado, known to occur in Elevenmile Reservoir (Table 2). Photographed specimen was captured in Elevenmile Reservoir, 2005.

Diplostraca: Chydoridae: *Eurycercus lamellatus* references for identification (Ward and Whipple 1959; Havel et al.1998; NOAA-GLERL 2001; Aliberti et al. 2003).

FIGURE A2-40. *Eurycercus lamellatus.*

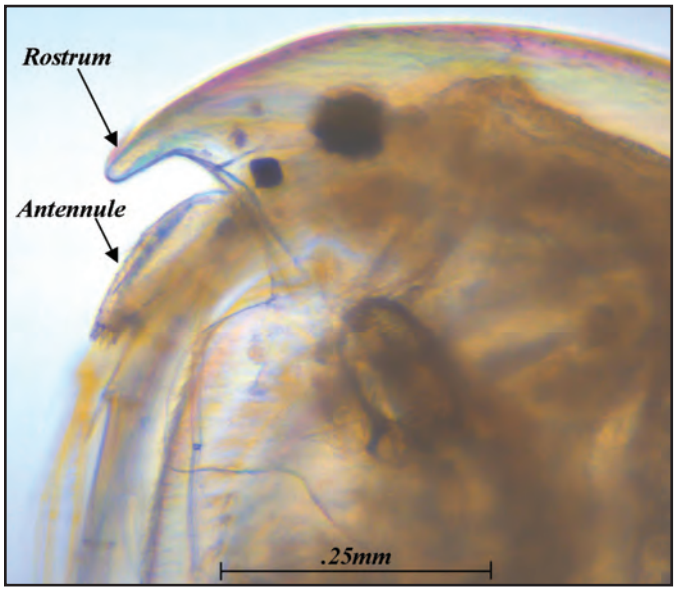


FIGURE A2-41. The short and thick antennules of *Eurycercus lamellatus.*

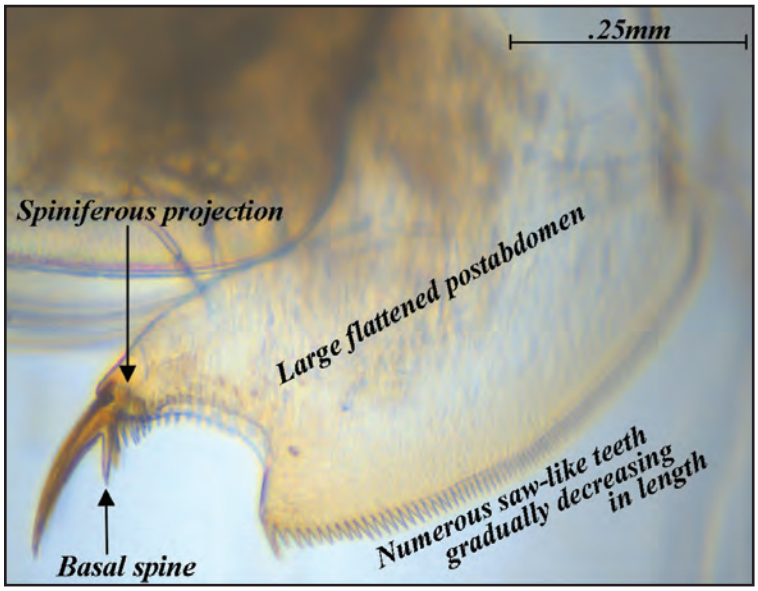


FIGURE A2-42. The distinguishing features of *Eurycercus lamellatus.*

The distinguishing features of *Leydigia acanthocercoides* (Figure A2-43) include: general shape is oval (Figure A2-43); relatively small head (Figure A2-43); rostrum not much longer than 1st antennae (Figure A2-44); postabdomen very large and compressed with numerous clusters of spines (Figure A2-45); distal clusters of spines very long (Figure A2-46); long and slender postabdominal claws without a basal spine (Figure A2-46); eye smaller than ocellus (Figure A2-44); and a yellowish color (Figure A2-43). Length to 1.0mm or larger. Range: Rare; southern U.S. and southward.

In Colorado, known to occur in Highline Lake (Table 2). Photographed specimen was captured from Highline Lake, June, 2005.

Diplostraca: Chydoridae: *Leydigia acanthocercoides* references for identification (Ward and Whipple 1959; Havel et al.1998; NOAA-GLERL 2001; Aliberti et al. 2003).

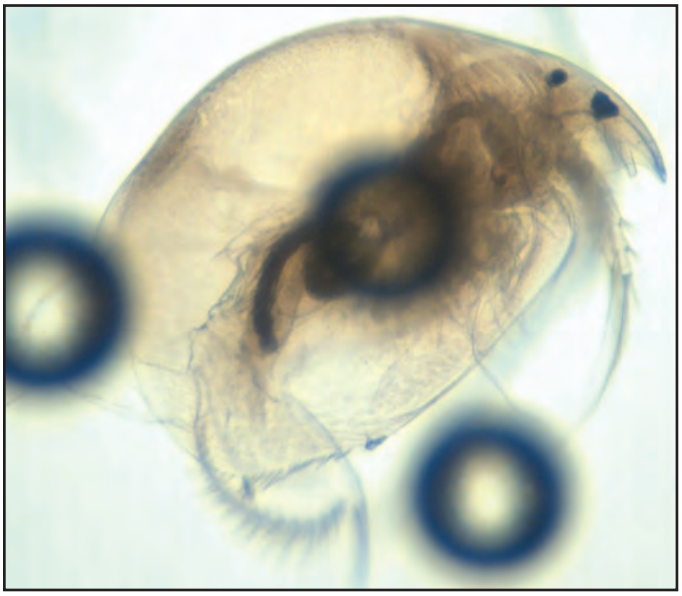


FIGURE A2-43. The general oval shape and small head of *Leydigia acanthocercoides*.

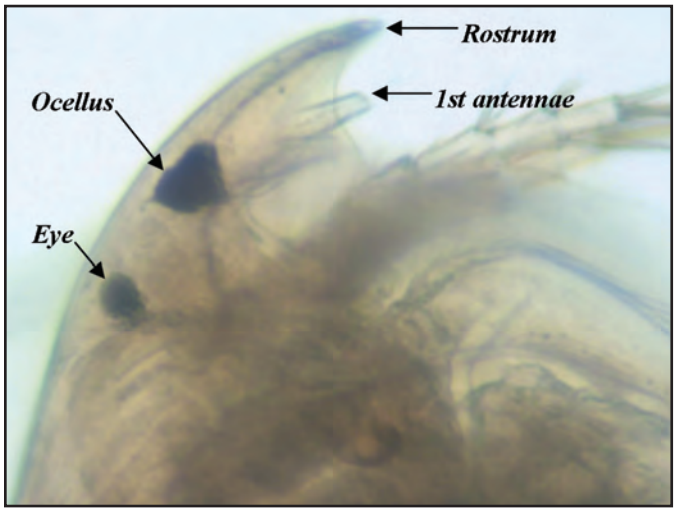


FIGURE A2-44. The rostrum not much longer than 1st antennae of *Leydigia acanthocercoides*.

FIGURE A2-45. The postabdomen is very large and compressed with numerous clusters of spines of *Leydigia acanthocercoides.*

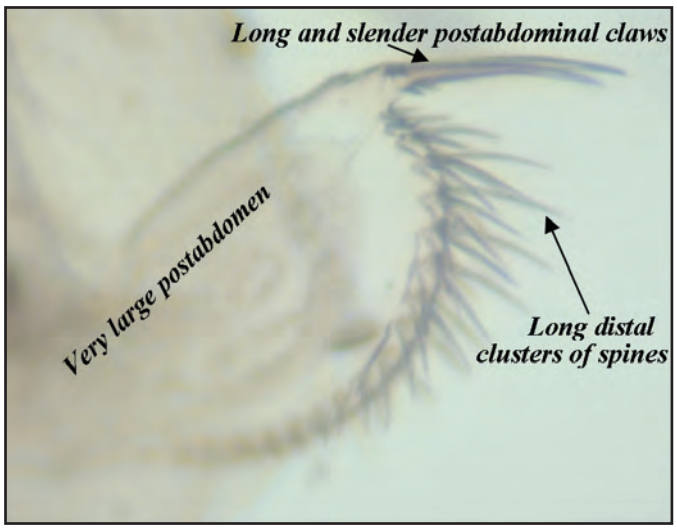


FIGURE A2-46. The long and slender postabdominal claws without a basal spine of *Leydigia acanthocercoides*.

The distinguishing features of *Pleuroxus denticulatus* include (Figure A2-47): postabdomen of moderate length with a sharp angle (Figure A2-48); cluster of fine denticles at apex (Figure A2-48); and ventral posterior carapace teeth (Figure A2-49). Length ♀ 0.5mm – 0.6mm, ♂ around 0.36mm. Range: A highly variable species; Common everywhere in weedy water.

Known to occur in McPhee Reservoir, Colorado (Table 2). Photographed specimen was captured in Sagehen Bay, McPhee Reservoir, August, 2006.

Diplostraca: Chydoridae: *Pleuroxus denticulatus* references for identification (Ward and Whipple 1959; Havel et al.1998; NOAA-GLERL 2001; Aliberti et al. 2003).

FIGURE A2-47. *Pleuroxus denticulatus*.

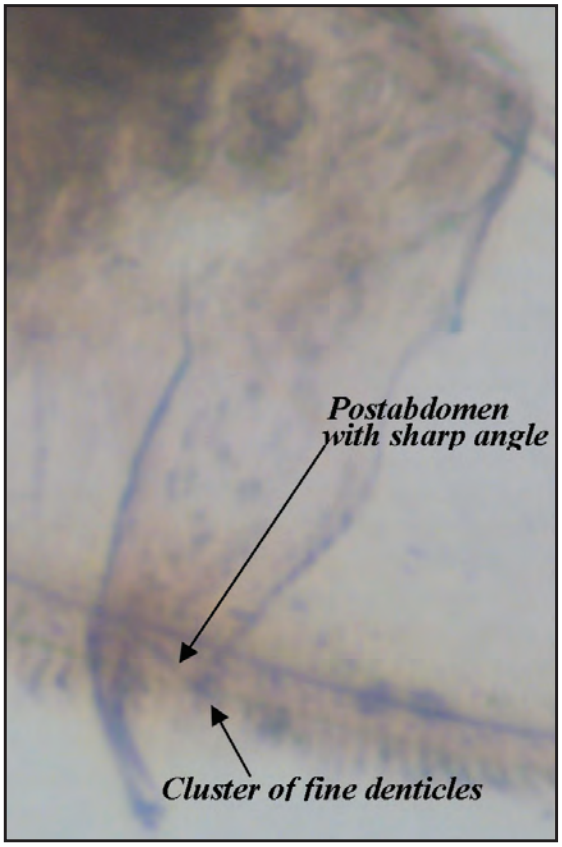


FIGURE A2-48. The postabdomen of moderate length with a sharp angle of *Pleuroxus denticulatus*.

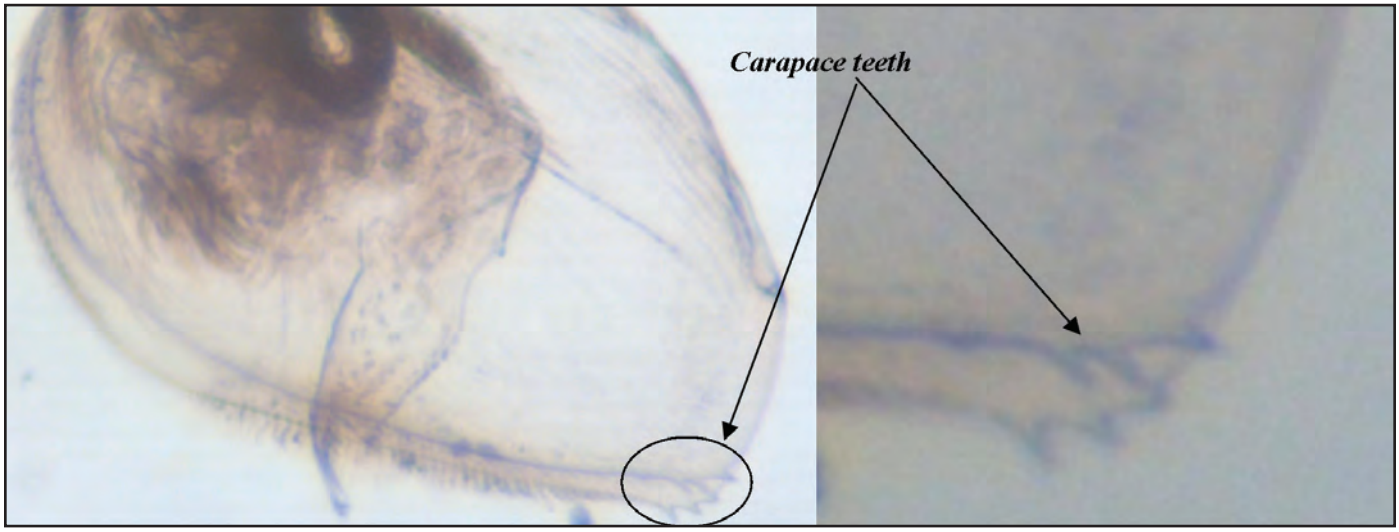


FIGURE A2-49. The ventral posterior carapace teeth of *Pleuroxus denticulatus*.

The distinguishing features of *Ceriodaphnia quadrangula* (Figure A2-50) include: general form rounded or oval (Figure A2-50); angulated head before antennules (Figure A2-51); 7-9 slender anal spines (Figure A2-52); claws not pectinate (Figure A2-52); antennules with sense hair (Figure A2-53); and usually a transparent to pinkish opaque color. Length ♀ to 1.0mm, ♂ to 0.6mm. Range: Common in all regions among weeds, also limnetic.

In Colorado, *C. quadrangula* likely occurs in many waters and is known to occur in Avery, Blue Mesa, Cheesman, Dillon, Elevenmile, Granby, Highline, McPhee, Ridgway, Rifle Gap, Stagecoach, Vallecito, and Williams Fork reservoirs (Table 2). Photographed specimens were captured in Highline Reservoir, July 2001, July, 2003 and McPhee Reservoir, July, 2005.

Diplostraca: Daphniidae: *Ceriodaphnia quadrangula* references for identification (Ward and Whipple 1959; Havel et al.1998; NOAA-GLERL 2001; Aliberti et al. 2003).

FIGURE A2-50. The rounded or oval general form of *Ceriodaphnia quadrangula.*

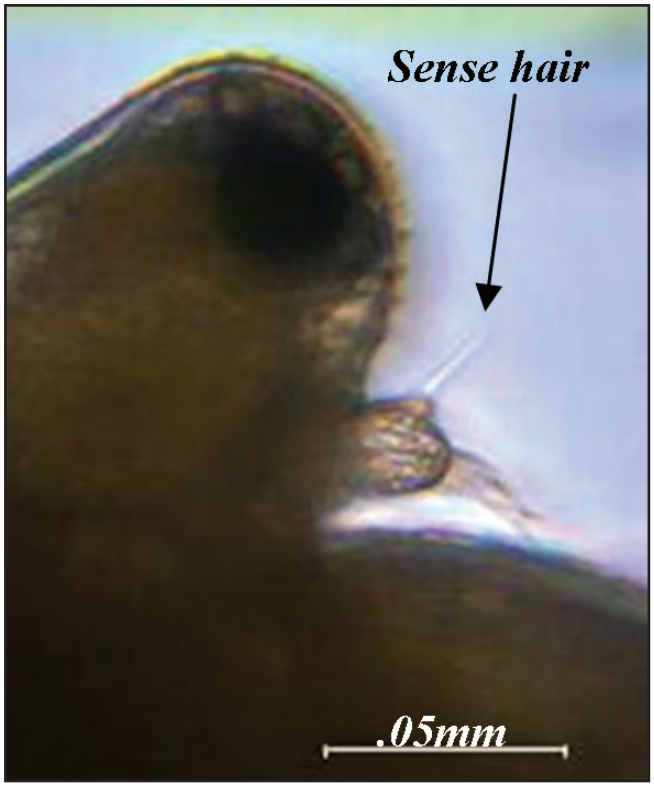


FIGURE A2-53. The antennules with sense hair of *Ceriodaphnia quadrangula.*

FIGURE A2-51. The angulated head of *Ceriodaphnia quadrangula.*

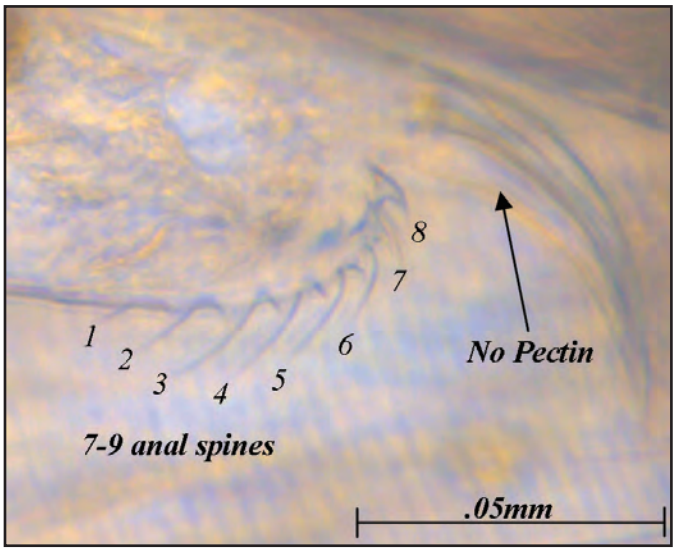


FIGURE A2-52. The 7-9 anal spines of *Ceriodaphnia quadrangula*. Claws not pectinate.

The distinguishing features of *Daphnia galeata mendotae* (Figure A2-54) (Figure A2-55) include: a broad helmet that is usually but not always pointed (Figure A2-56); no pecten on postabdominal claw (Figure A2-57); 9-11 hooked anal spines that decrease in length and 1st anal spine angles away from the others (Figure A2-57); first abdominal process longer than the second, second abdominal process longer than the third (Figure A2-58). Length ♀ 1.3mm – 3mm, ♂ around 1mm. Range: Lakes in northern part of continent, common in lakes of glaciated regions (Pennak 1978), infrequent in mountainous regions of the U.S.

In Colorado, D. g. mendotae occurs in many lakes and reservoirs (Table 2). Photographed specimens captured in Wolford Mountain Reservoir, August, 2001, Highline Lake, July, 2001 and July, 2003, Dillon Reservoir, August, 2005 and August, 2006.

Diplostraca: Daphniidae: *Daphnia galeata mendotae* references for identification (Ward and Whipple 1959; Pennak 1978; Pennak 1989; Havel et al. 1998; NOAA-GLERL 2001; Aliberti et al. 2003)

FIGURE A2-54. *Daphnia galeata mendotae.*

FIGURE A2-55. *Daphnia galeata mendotae.*

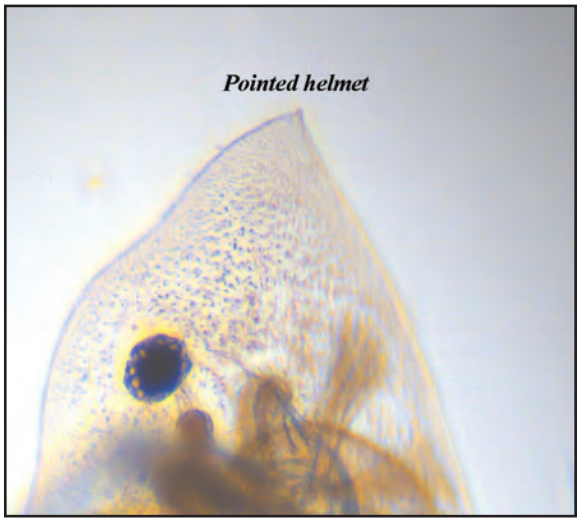


FIGURE A2-56. The broad helmet is usually but not always pointed of *Daphnia galeata mendotae.*

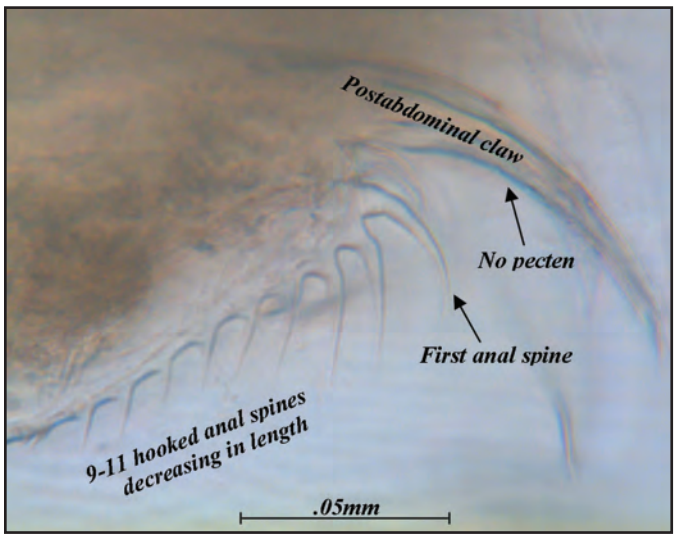


FIGURE A2-57. The 9-11 hooked anal spines that decrease in length and 1st anal spine angles away from the others of *Daphnia galeata mendotae.*

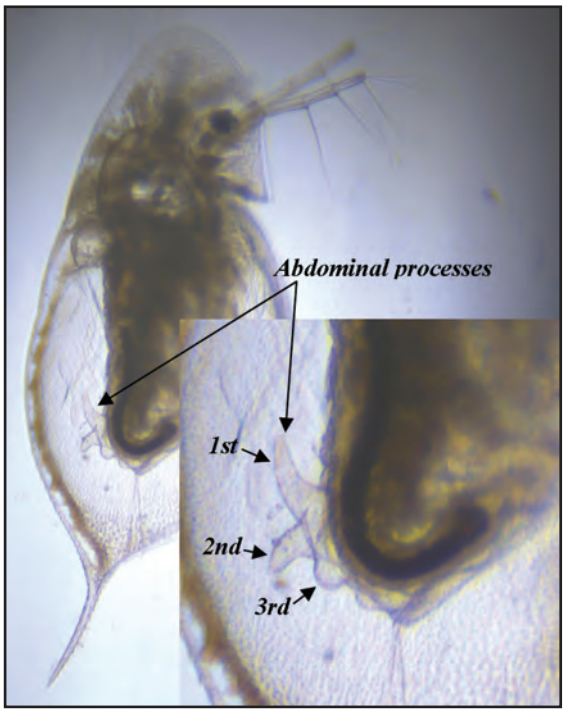


FIGURE A2-58. The first abdominal process longer than the second, second abdominal process longer than the third of *Daphnia galeata mendotae.*

The distinguishing features of *Daphnia pulicaria* (Figure A2-59) include: pecten present on the postabdominal claw (Figure A2-60); anal spines are not hooked (Figure A2-60); first anal spine does not angle away from the others (Figure A2-60); 10-16 anal spines gradually decreasing in length away from the claw (Figure A2-60); abdominal processes gradually decreasing in length, the 2nd about 3/4 as long as the 1st (Figure A2-61); and elongated head reticulations between the eye and tip of rostrum (Figures A2-62 and A2-63). Length ♀ 1.3mm – 2.2mm, occasionally larger, ♂ around 1.1mm. Range: a widespread and variable species, living in lakes and occasionally ponds all over North America.

Daphnia typically reproduce parthenogenetically from spring until the end of the summer, producing new generations of daughters which mature and continue the parthenogenetic cycle of female-only reproduction. After every adult molt, a clutch of one or more eggs (up to 100 in large species) is produced and nurtured in the brood chamber, located dorsally beneath the carapace and enclosed by the abdominal processes. The eggs develop immediately and embryos hatch in about one day. The embryos are reared in the brood chamber for about three days before the young *Daphnia* (neonates) (Figure A2-64) are expelled. Juvenile *Daphnia* molt several times in about 5-10 days before they begin producing eggs. Once mature, they may produce clutches of eggs every three to four days, depending of the availability of food. The onset of harsh environmental conditions such as winter or drought trigger a sexual cycle in which parthenogenetic males are produced to fertilize haploid eggs produced by the females. These fertilized eggs develop into resting eggs, or ephippium (Figure A2-65), which consists of two large eggs in protective case that is cast off during the next molt. Ephippia endure unfavorable conditions, hatching in the spring or when favorable conditions return. Only females hatch from resting eggs, resuming the parthenogenetic cycle of reproduction until adverse environmental trigger the production of males and resting eggs.

In Colorado, *D. pulicaria* occurs in many lakes and reservoirs (Table 2). Photographed specimens were captured in Highline Lake, July, 2003, Sellars Lake, July, 2007, and Granby Reservoir, August, 2000 and August, 2008.

Diplostraca: Daphniidae: *Daphnia pulicaria* references for identification (Ward and Whipple 1959; Brandalova 1972; Grogg 1977; Pennak 1978; Dodson 1981; Pennak 1989; Havel et al. 1998; NOAA-GLERL 2001; Aliberti et al. 2003).

FIGURE A2-59. *Daphnia pulicaria*.

FIGURE A2-61. *Daphnia pulicaria* abdominal processes gradually decrease in length.

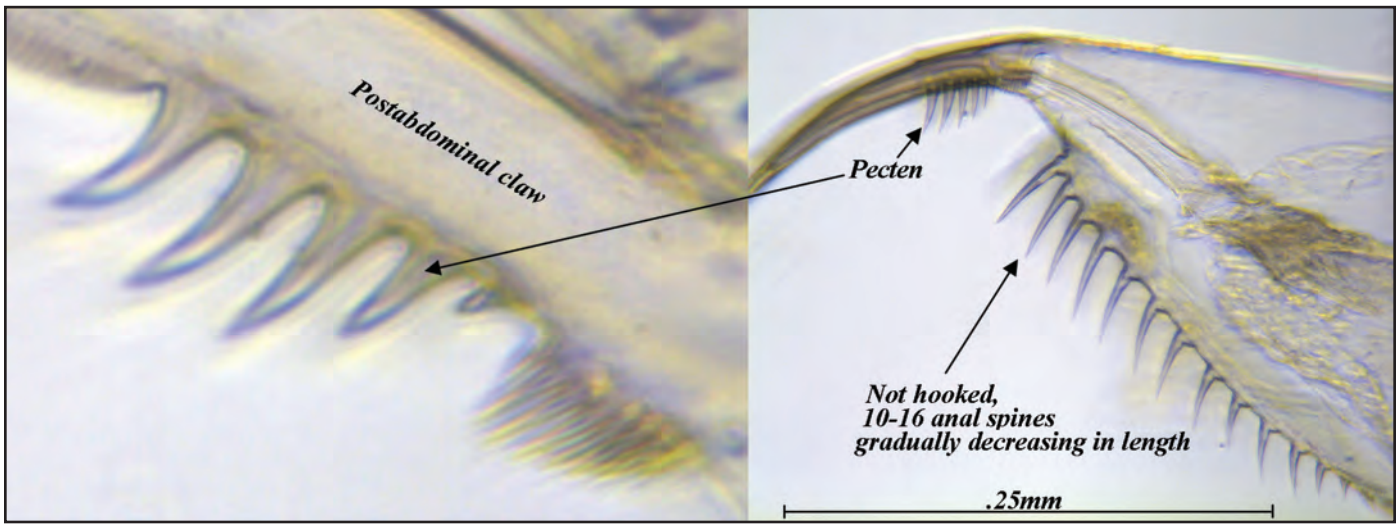


FIGURE A2-60. Pecten and unhooked anal spines on postabdominal claw of *Daphnia pulicaria*.

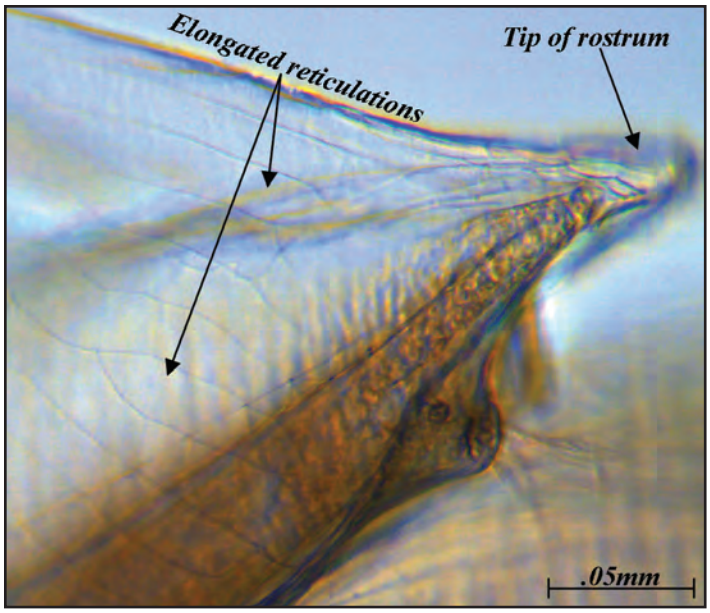


FIGURE A2-62. The elongated head reticulations between the eye and tip of rostrum of *Daphnia pulicaria*.

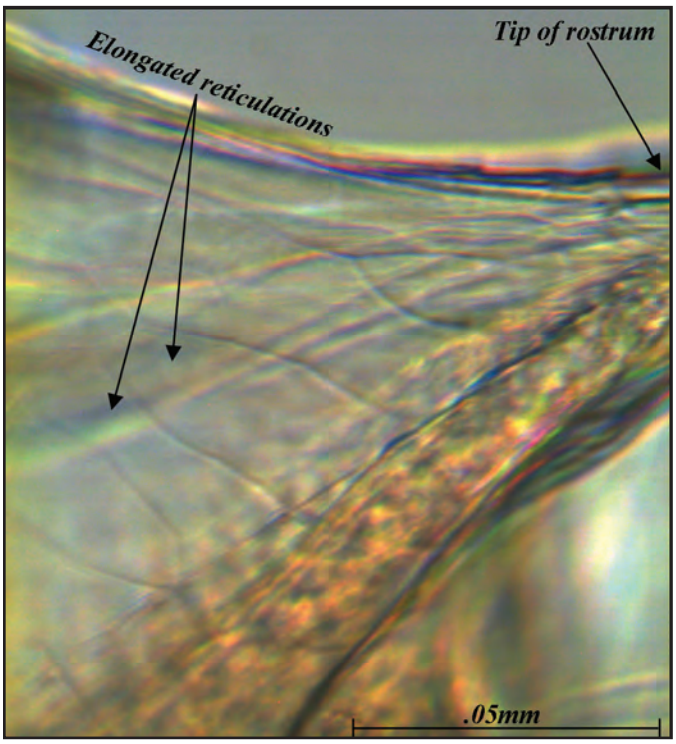


FIGURE A2-63. The elongated head reticulations between the eye and tip of rostrum of *Daphnia pulicaria*.

FIGURE A2-64. *Daphnia pulicaria* showing embryos in the brood chamber.

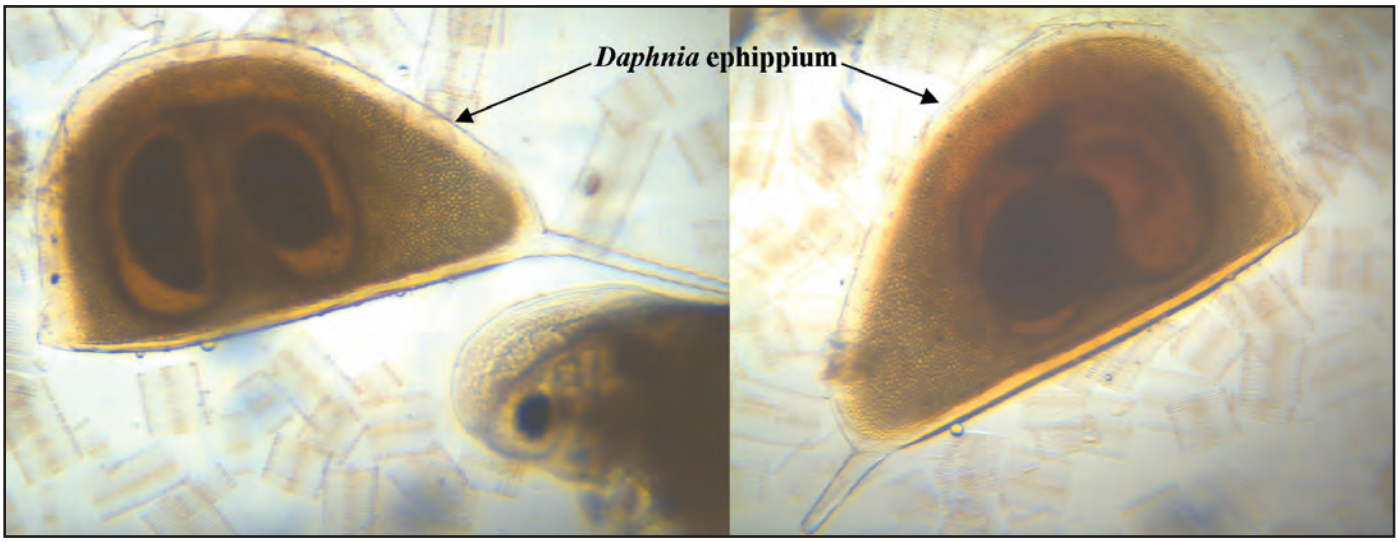


FIGURE A2-65. Resting eggs, or ephippium of *Daphnia pulicaria*.

The distinguishing features of *Leptodiaptomus judayi* (Figure A2-66) include: each caudal ramus has 5 setae; inner margin of right 5th leg exopod bearing a triangular hyaline lamella (Figure A2-67); and segment 23 of ♂right antenna with a slender blunt process (Figure A2-68). Length : ♀ around 0.93mm, ♂ around 0.9mm. Range: Lakes in the Rocky Mountains.

In Colorado, *L. judayi* is known to occur in Big Creek Lake, Elevenmile Reservoir, Cheesman Reservoir, McPhee Reservoir, and Twin Lakes (Table 2). Photographed specimens captured in Twin Lakes, August, 1989.

Calanoida: Diaptomidae: *Leptodiaptomus judayi* references for identification (Ward and Whipple 1959; Lieberman 1983; Havel et al. 1998; NOAA-GLERL 2001; Aliberti et al. 2003; Hudson and Lesko 2003).

FIGURE A2-66. *Leptodiaptomus judayi*.

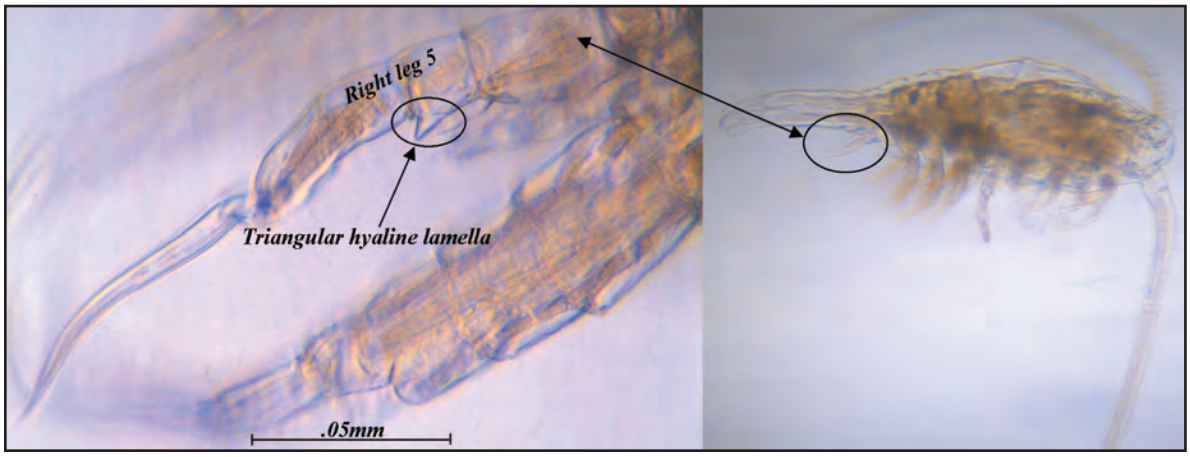


FIGURE A2-67. Inner margin of right 5th leg exopod bearing a triangular hyaline lamella of *Leptodiaptomus judayi*.

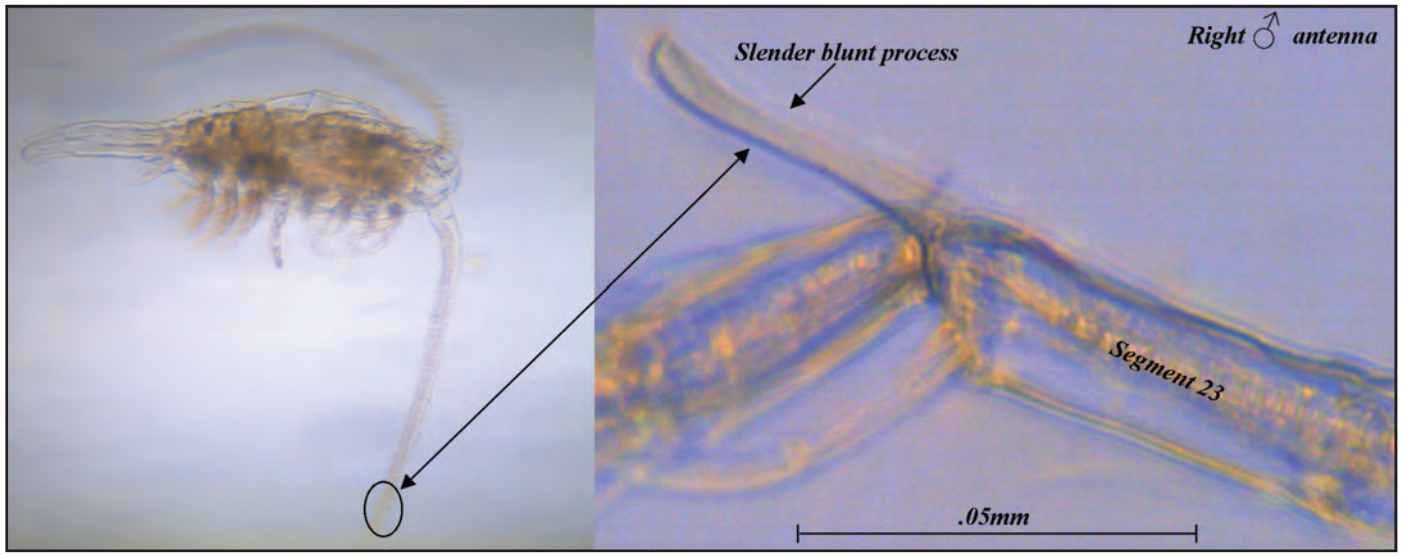


FIGURE A2-68. Segment 23 of ♂ right antenna with a slender blunt process of *Leptodiaptomus judayi*.

The distinguishing features of *Leptodiaptomus nudus* (Figures A2-69, A2-70 and A2-71) include: each caudal ramus has 5 setae (Figure A2-72); and third segment from the end (segment 23) of the right antenna has a slender curved process which is usually pointed (Figure A2-73); and leg 5 ♂ right exopod 2 has lateral spine placed above the middle of segment (Figure A2-74). Eggs or spermatophores often present on females (Figure A2-75). Length ♀ 1.1mm - 1.3mm, ♂ 1.1mm. Range: Lakes, ponds. Rocky Mountain states; Alaska east to Manitoba and Hudson Bay region.

L. nudus is present in many Colorado lakes and reservoirs (Table 2). Photographed specimens captured in Highline Lake, August, 2001, McPhee Reservoir, July, 2005, and August, 2006.

Calanoida: Diaptomidae: *Leptodiaptomus nudus* references for identification (Ward and Whipple 1959; Lieberman 1983; Havel et al. 1998; NOAA-GLERL 2001; Aliberti et al. 2003; Hudson and Lesko 2003).

FIGURE A2-69. *Leptodiaptomus nudus* ♀ carrying clutch of eggs in egg sac.

FIGURE A2-70. *Leptodiaptomus nudus.*

FIGURE A2-71. *Leptodiaptomus nudus.*

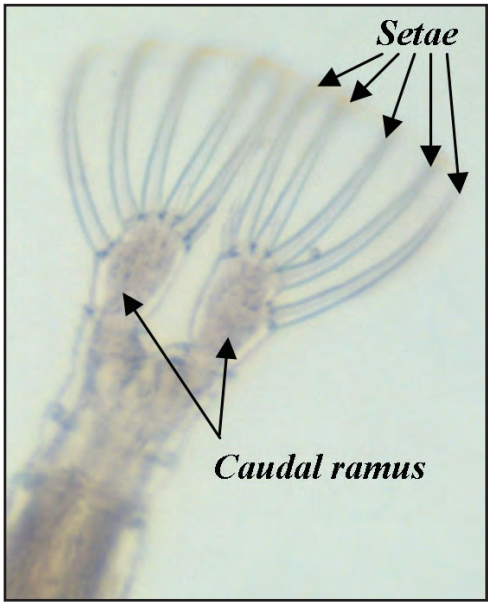


FIGURE A2-72. Caudal ramus of *Leptodiaptomus nudus* showing setae.

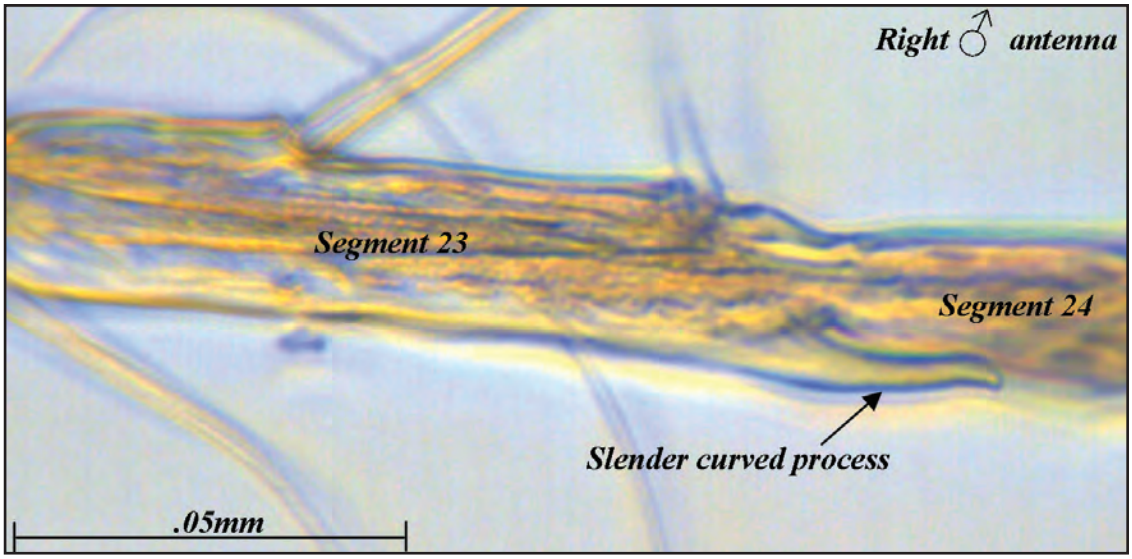


FIGURE A2-73. Segment 23 of the right antenna of *Leptodiaptomus nudus* ♂ showing slender curved process.

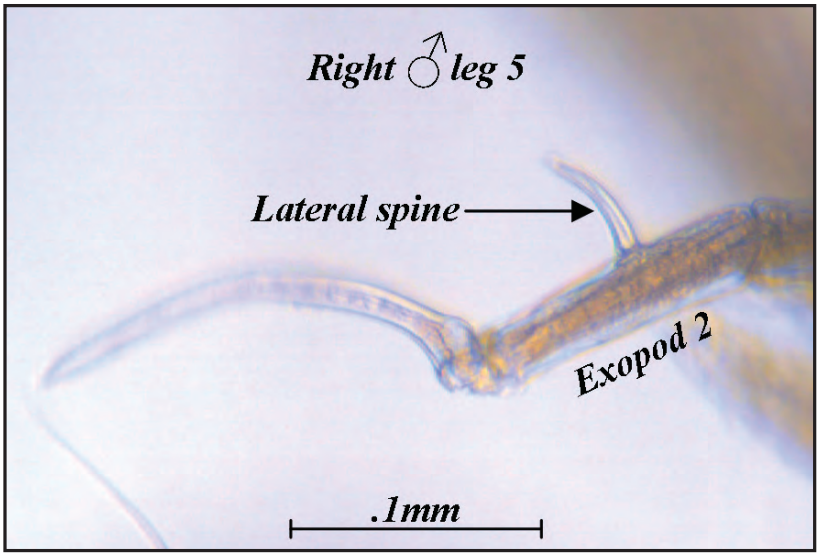


FIGURE A2-74. Right leg 5, exopod 2, of *Leptodiaptomus nudus* ♂ showing lateral spine.

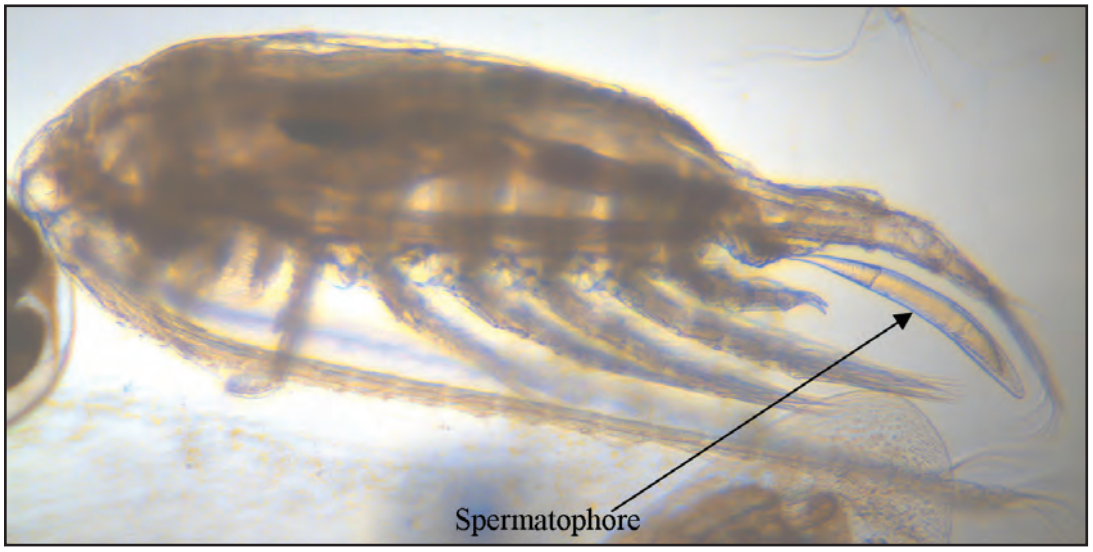


FIGURE A2-75. *Leptodiaptomus nudus* ♀ carrying spermatophore.

The distinguishing features of *Diacyclops thomasi* (Figures A2-76 and A2-82) include: 17 antennule segments (Figure A2-77); caudal rami about 6-7 times long as they are wide (Figure A2-78); lateral spine approximately 55% from the base to the apex of rami (Figure A2-79); inner setae <1/2 the length of ramus (Figure A2-80); no hair on inner ramus (Figure A2-80); and outer terminal spine from endopod of leg 4 about twice as long as inner terminal spine (Figure A2-81). Length ♀ 0.9mm – 1.17mm, ♂ around 0.8mm. Range: A widely distributed and common limnetic species in North America.

In Colorado, *D. thomasi* occurs in many lakes and reservoirs (Table 2). Photographed specimens captured in Dillon Reservoir, August, 2005, and August, 2008, McPhee Reservoir, August, 2006, and Rifle Gap Reservoir, August, 2008.

Cyclopoida: Cyclopidae: *Diacyclops thomasi* references for identification (Ward and Whipple 1959; Havel et al. 1998; NOAA-GLERL 2001; Aliberti et al. 2003; Hudson and Lesko 2003).

FIGURE A2-76. *Diacyclops thomasi.*

FIGURE A2-77. *Diacyclops thomasi* antenna showing 17 segments.

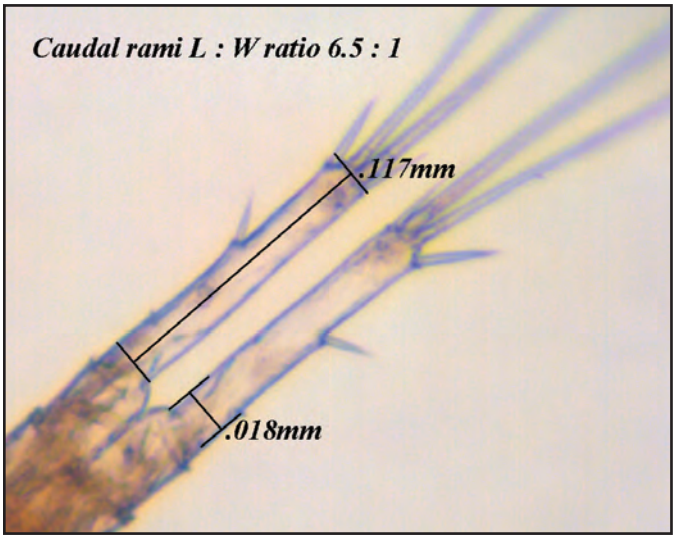


FIGURE A2-78. Caudal rami of *Diacyclops thomasi* illustrating determination of ramus length:width ratio.

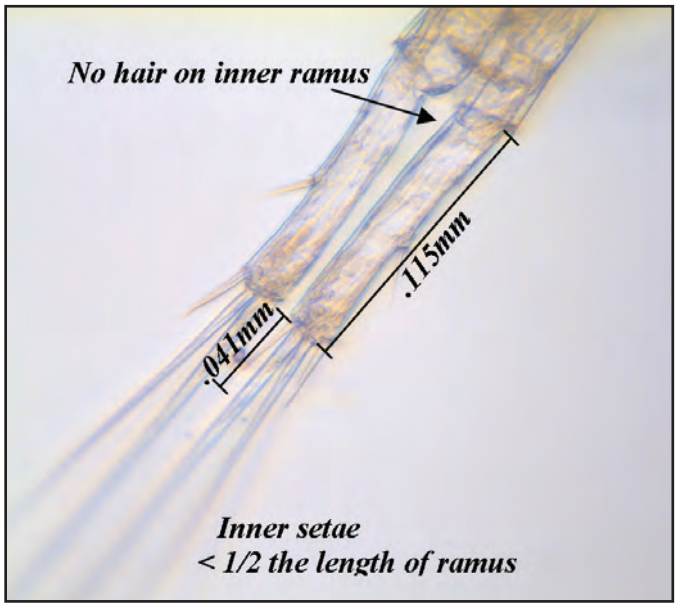


FIGURE A2-80. Caudal rami of *Diacyclops thomasi* comparing length of the inner setae to the length of the ramus, and showing the absence of hair on the inner ramus.

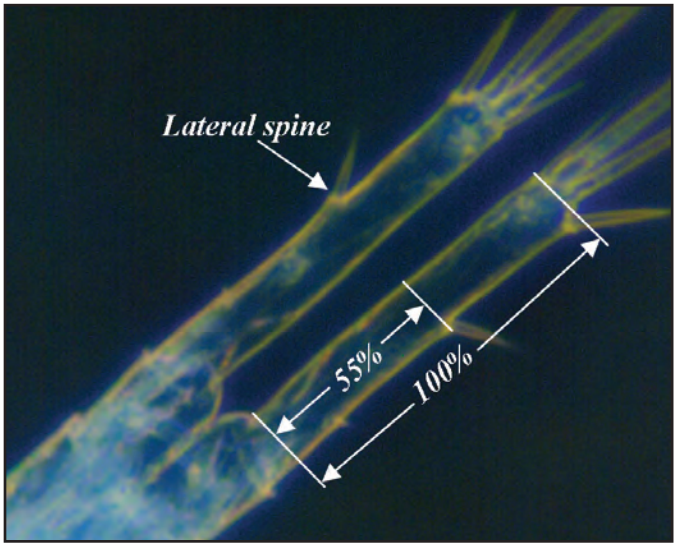


FIGURE A2-79. Caudal rami of *Diacyclops thomasi* showing position of lateral spine at approximately 55% of the distance from the base of the ramus to its apex.

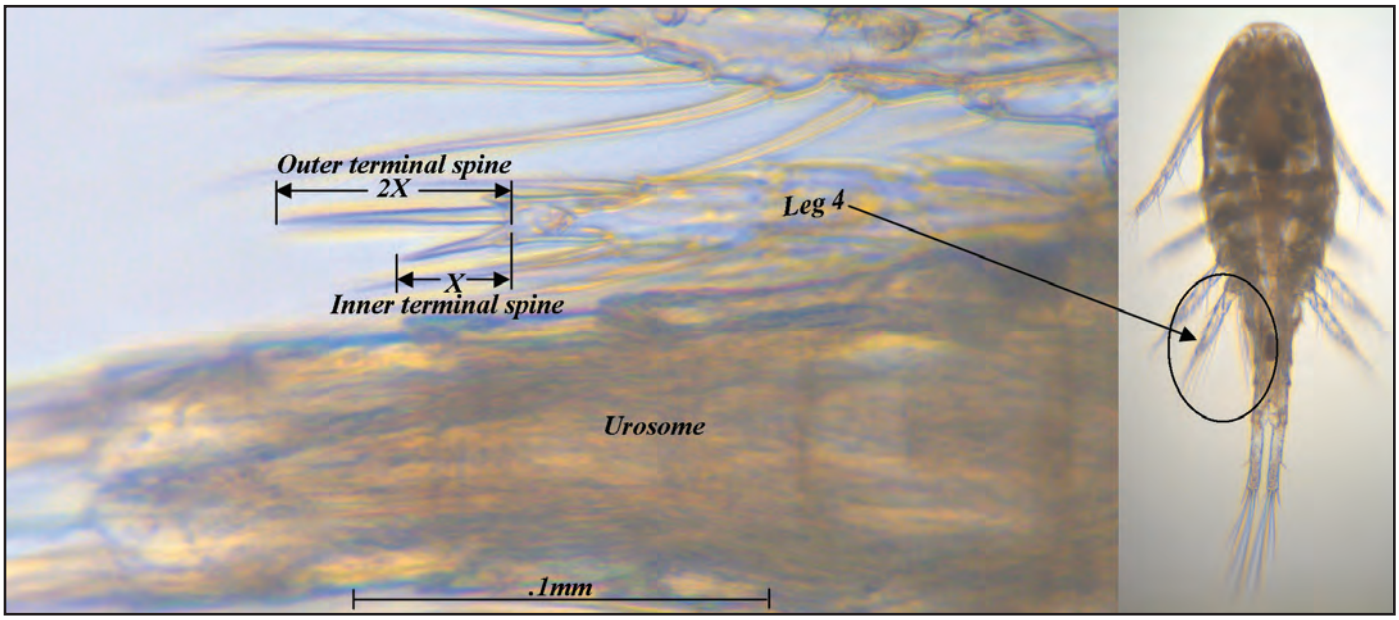


FIGURE A2-81. Leg 4 of *Diacyclops thomasi* showing the outer terminal spine of endopod about twice as long as the inner terminal spine.

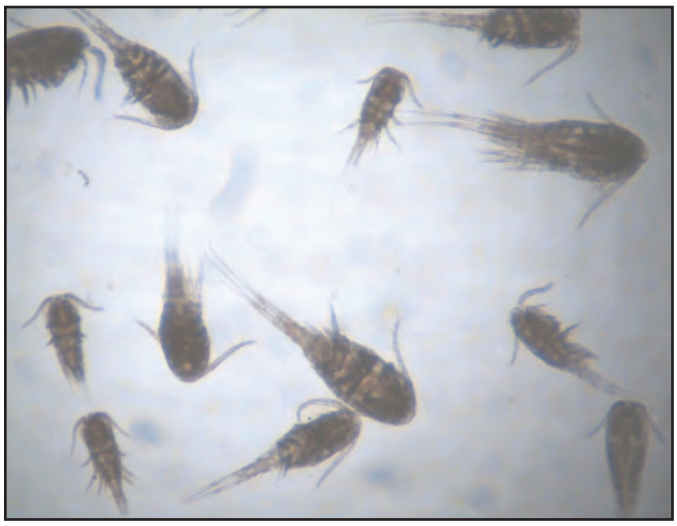


FIGURE A2-82. *Diacyclops thomasi.*

The distinguishing features of *Mesocyclops edax* (Figure A2-83) include: 1st antenna with 17 segments (Figure A2-84); serrated hyaline membrane present on distal segment of 1st antenna (Figure A2-85); hair on inner ramus (Figure A2-86); long palmately spread setae on the caudal rami (Figure A2-87); lateral setae inserted near middle of caudal rami (Figure A2-87); and 5th leg is 2 segmented with 2 long terminal setae on distal segment (Figure A2-88). Length ♀ 1.0mm - 1.5mm, ♂ 0.75mm - 0.9mm. Range: A very common and widespread limnetic copepod throughout eastern and central North America.

In Colorado, *M. edax* is known to occur in Elevenmile Reservoir, Highline Lake, and Rifle Gap Reservoir. Photographed specimens captured in Highline Lake, 2001 and 2004.

Cyclopoida: Cyclopidae: *Mesocyclops edax* references for identification (Ward and Whipple 1959; Havel et al. 1998; NOAA-GLERL 2001; Aliberti et al. 2003; Hudson and Lesko 2003).

FIGURE A2-83. *Mesocyclops edax* ♀ carrying clutch of eggs in egg sac.

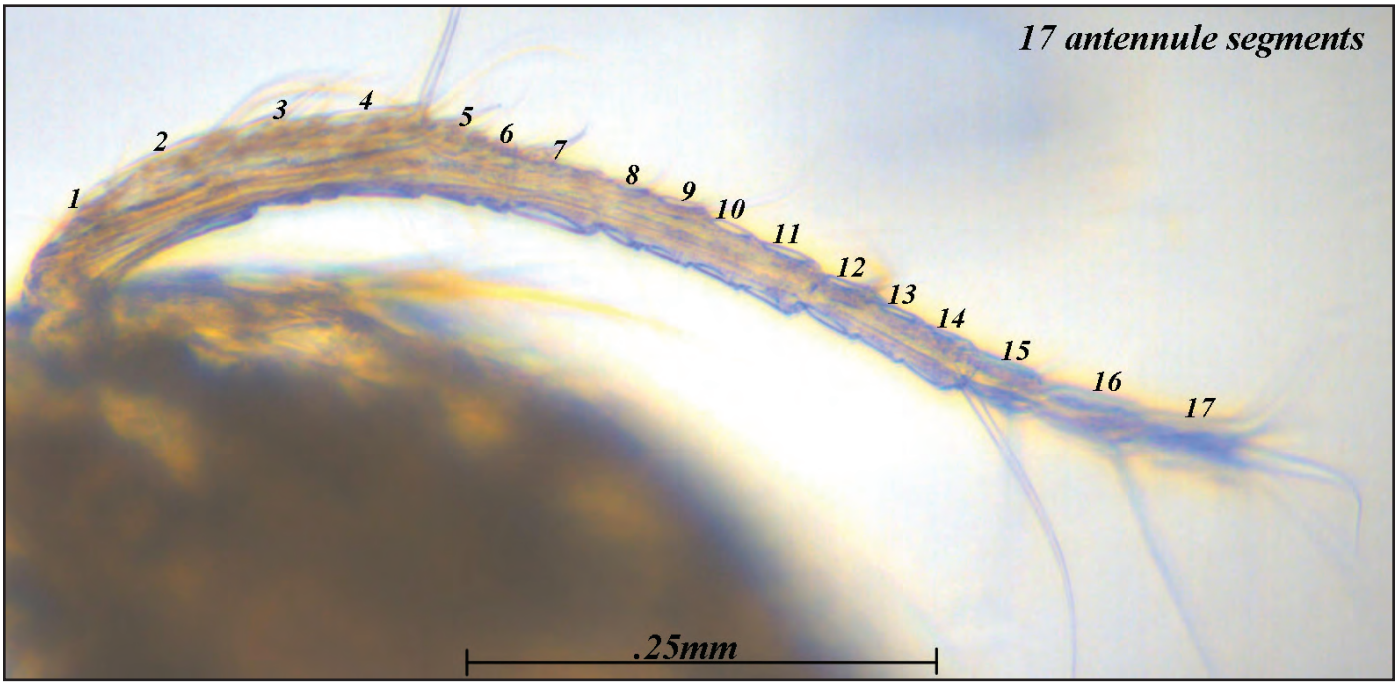


FIGURE A2-84. First antenna of *Mesocyclops edax* showing 17 segments.

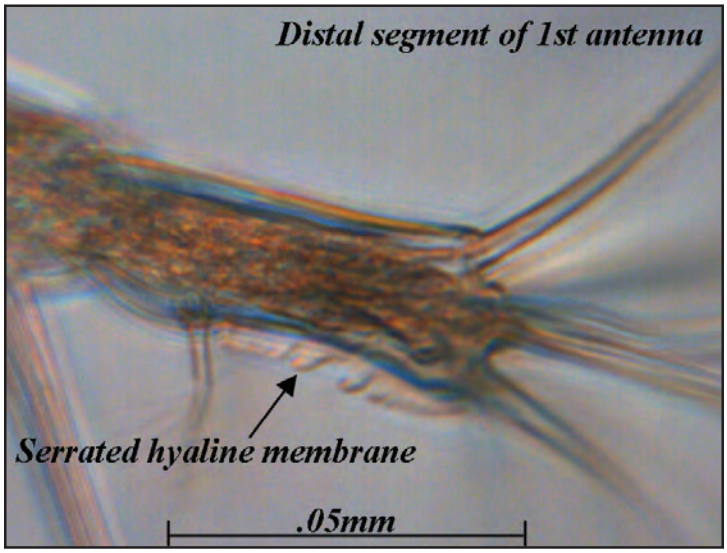


FIGURE A2-85. Distal segment of first antenna of *Mesocyclops edax* showing serrated hyaline membrane.

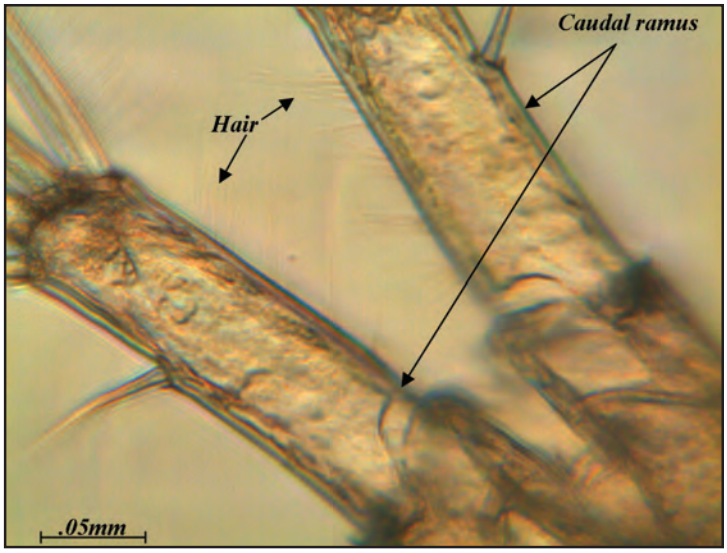


FIGURE A2-86. Caudal rami of *Mesocyclops edax* showing hair on inner side of each ramus.

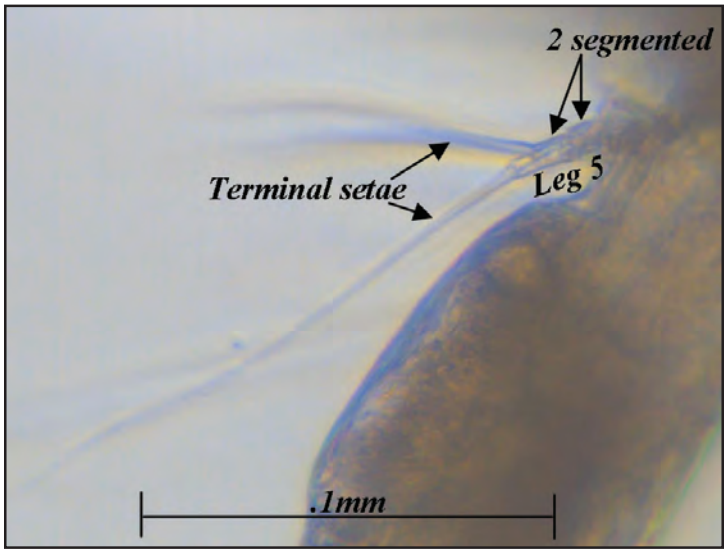


FIGURE A2-88. Two-segmented 5th leg of *Mesocyclops edax* showing two long, terminal setae on distal segment.

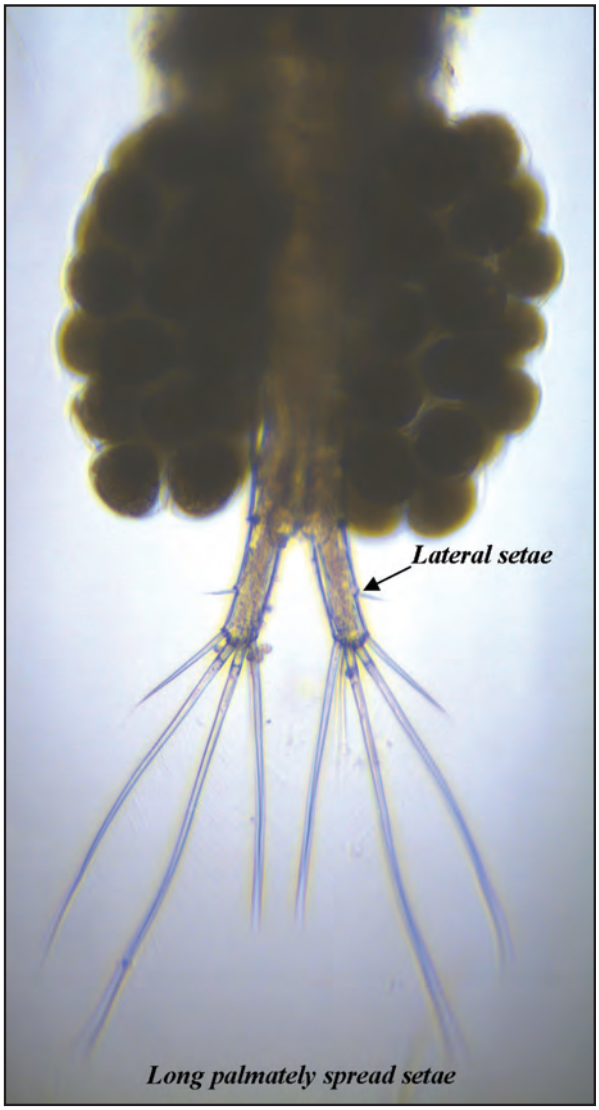


FIGURE A2-87. Caudal rami of *Mesocyclops edax* showing lateral setae on outside of each ramus and long, palmately spread setae.

Table A3-1. Crustacean zooplankton species sampled in Lake Avery, 1 November 2001. Mean weighted *Daphnia* density = 38.6/L.

Zooplankton species	Station 1 (10m)			Station 2 (10m)			Station 3 (3m vertical tow)			Weighted Mean/L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris		0.3	0.2		0.6	0.3		2.6	1.3	0.4
Diacyclops thomasi	10.9	12.0	11.5	6.9	10.1	8.5	25.0	10.3	17.6	11.0
Daphnia g. mendotae	4.6	4.7	4.6	0.5	0.6	0.6	12.5	28.2	20.4	5.0
Daphnia pulicaria	10.3	11.0	10.7	13.4	19.5	16.5	33.3	30.8	32.1	15.9
Leptodiaptomus nudus	1.8	1.7	1.8	6.5	0.6	3.6		15.4	7.7	3.5
Ceriodaphnia quadrangula	2.7	1.0	1.9				33.3		16.7	3.2
Mean total no./L	30.5			29.4			95.7			39.1

Table A3-2. Crustacean zooplankton species sampled in Lake Avery, 18 July 2002 - Mean *Daphnia* density = 14.7/L.

Zooplankton species	Station 1 (0-10m)				Station 2 (0-10m)				Station 3 (0-5m)				Station 4 (0-10m)				Weighted Mean/L
	a	b	mean	wtd.	a	b	mean	wtd.	a	b	mean	wtd.	a	b	mean	wtd.	
Bosmina longirostris	2.1	1.9	2.0	0.6	1.2	1.3	1.3	0.4	1.9	3.3	2.6	0.3	1.6	2.7	2.2	0.6	1.9
Ceriodaphnia quadrangula	0.9	0.9	0.9	0.3	1.8	0.7	1.3	0.4	3.0	2.7	2.9	0.4	1.5	1.2	1.4	0.4	1.5
Diacyclops thomasi	20.1	23.9	22.0	6.4	29.7	30.1	29.9	8.7	17.7	24.8	21.3	2.8	19.4	26.6	23.0	6.7	24.6
Daphnia g. mendotae	9.5	12.0	10.8	3.1	9.9	10.3	10.1	2.9	17.8	20.7	19.3	2.5	9.2	12.4	10.8	3.1	11.6
Daphnia pulicaria	4.5	2.1	3.3	1.0	2.3	3.3	2.8	0.8	2.1	2.2	2.2	0.3	2.9	3.8	3.4	1.0	3.1
Leptodiaptomus nudus	6.1	7.8	7.0	2.0	5.3	7.5	6.4	1.9	5.7	6.1	5.9	0.8	3.5	6.0	4.8	1.4	6.1
Mean total no./L	46.0			13.4	51.8			15.1	54.2			7.1	45.6			13.2	48.8

Table A3-3. Crustacean zooplankton species sampled in Lake Avery, 21 June 2005 - Mean *Daphnia* density = 23.6/L.

Zooplankton species	Station #1 (0-10m)			Station #2 (0-10m)			Station #3 (0-10m)			Station #4 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0	0	0	0.2	0	0.1	0.5	0.9	0.7	0.3	0	0.2	0.2
Unidentified *Daphnia* spp.	1.9	0.4	1.2	0.7	1.9	1.3	1.9	1.9	1.9	1.7	3.8	2.7	1.8
Diacyclops thomasi	4	7.4	5.7	3.5	6.6	5	11.7	11.8	11.8	7.9	8.5	8.2	7.7
Daphnia g. mendotae	0.9	0.2	0.6	0.2	1.3	0.8	4.7	2.8	3.8	2.7	3.8	3.3	2.1
Daphnia pulicaria	8.7	8.5	8.6	15.1	11.2	13.2	30.9	35.5	33.2	24.3	23.2	23.8	19.7
Mean total no./L	16.0			20.4			51.4			38.1			31.5

Table A3-4. Crustacean zooplankton species sampled in Lower Big Creek Reservoir, 20 August 1991. Mean *Daphnia* density = 0.6/L.

Zooplankton species	Station P1		Station P2		Station P3		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris	1	1.9	0.6	0.6	0.2	0.1	0.8
Daphnia rosea	0.1	0.7	0.5	0.9	0.3	0.2	0.6
Diaphanosoma brachyurum	11.5	11.2	8.7	8.9	10.3	10.0	10.1
Diacyclops thomasi	2.8	2.9	1.7	2.1	2.3	2.1	2.3
Leptodiaptomus nudus	18	22.4	15.1	15.7	15.8	15	17
Mean total no./L	36.9		27.4		28.3		30.8

Table A3-5. Crustacean zooplankton species sampled in Lower Big Creek Reservoir, 8 October 1991. Mean *Daphnia* density = 0.3/L.

Zooplankton species	Station P1		Station P2		Station P3		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris	0.2	0.2	<0.1	0.1	<0.1		<0.1
Daphnia rosea	0.1	0.1	0.4	0.3	0.4	0.1	0.3
Diaphanosoma brachyurum	0.2	0.1	0.1	0.2	0.1	0.1	0.2
Diacyclops thomasi	2.4	3.7	6.4	5.7	1.7	1.9	3.7
Leptodiaptomus judayi	17.2	20.3	19.3	20.9	10.6	12.7	16.9
Mean total no./L	22.4		26.9		13.9		21.1

Table A3-6. Crustacean zooplankton species sampled in Lower Big Creek Reservoir, 29 June 1992 . Mean *Daphnia* density = 0.7/L.

Zooplankton species	Station P1		Station P2		Station P3		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris	0.3	0.1	0.3	0.1		<0.1	0.1
Daphnia rosea	0.3	0.3	1.1	1.1	0.7	0.4	0.7
Diaphanosoma brachyurum			0.1	0.3	0.1	0.1	0.1
Diacyclops thomasi	0.4	0.7	0.8	1.8	0.5	1	0.8
Leptodiaptomus judayi	8.1	5.6	6.3	7.2	6.4	6.9	6.8
Mean total no./L	7.7		9.6		8.2		8.5

Table A3-7. Crustacean zooplankton species sampled in Lower Big Creek Reservoir, 30 August 1992. Mean *Daphnia* density = 5.2/L.

Zooplankton species	Station P1		Station P2		Station P3		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris	0.2	0.1	0.2	0.2	0.3	0.1	0.2
Daphnia rosea	4.3	5.6	6.5	4.4	5.4	4.5	5.2
Diaphanosoma brachyurum	6.4	4.4	6.1	5.3	6.6	6.5	5.9
Diacyclops thomasi	6.4	4.2	5.3	2.9	6.5	8.2	5.6
Leptodiaptomus judayi	0.7	0.7	2.2	2.3	1.7	1.7	1.6
Mean total no./L	16.6		17.8		20.9		18.5

Table A3-8. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 8 June 1993. Mean *Daphnia* density = 6.4/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	2.9	2.7	2.3	4.4	6.7	6.7	5.1	15.9	2.2	**Sample lost**	5.4
Daphnia g. mendotae	3.5	5.9	0.8	2.8	7.1	7.5	2.3	2.4	1.1		3.7
Daphnia pulicaria	1.2	1.6	1.6	2.6	3.1	5	3.6	4.4	0.8		2.7
Diacyclops thomasi	25.7	22.8	57	41.9	82.9	97.5	86.4	84.6	72.2		63.4
Mean total no./L	33.2		56.7		108.3		102.9		76.3		75.2

Table A3-9. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 20 July 1993. Mean *Daphnia* density = 13.9/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.7	1.8	3.5	3.2	1	2.5	0.6	0.8	0.5	0.4	1.5
Daphnia g. mendotae	3.1	3.9	5.9	4.9	4.2	2.5	2.8	1.7	2.5	1.1	3.3
Daphnia pulicaria	4.9	5.6	7.8	9	12.3	12.3	17.5	12.5	12	12.4	10.6
Diacyclops thomasi	20.8	21.1	41.4	47.6	36.5	34.2	35.6	31.4	29.2	30.9	32.9
Leptodiaptomus nudus			0.2	0.3			0.1	0.1	0.5	0.6	0.2
Mean total no./L	31.0		62.0		52.8		51.6		45.1		48.5

Table A3-10. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 16 September 1993. Mean *Daphnia* density = 3.4/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.4			0.1		0.2		0.3			0.1
Daphnia g. mendotae	1.2	0.3	0.1	0.2	0.8	1	1.2	1.9	0.2	0.4	0.7
Daphnia pulicaria	2.8	1.3	0.5	1.1	2.8	5.8	2.3	4.4	1.1	4.5	2.7
Diacyclops thomasi	5.9	7.5	6	7	4.7	7	3.5	3.6	0.9	1.7	4.8
Leptodiaptomus nudus	2.9	1.7	1.6	1.3	2	3.3	1.9	2.6	3.4	8.6	2.9
Mean total no./L	12.0		9.0		13.8		10.9		10.4		11.2

Table A3-11. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 21-23 May 1994. Mean *Daphnia* density = 6.3/L.

Zooplankton species	Station P1- Sapinero		Station P2 - Cebolla		Station P3 - Iola		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris	5.1	1.5	25.6	24.4	7.3	12.4	12.7
Ceriodaphnia spp.				0.8	0.4		0.6
Daphnia g. mendotae	6.0	3.0	6.2	5.8	0.7	3.0	4.1
Daphnia pulicaria	1.2	3.0	4.3	2.8	1.1	0.7	2.2
Diacyclops thomasi	22.6	24.7	46.2	43.6	41.3	57.9	39.4
Mean total no./L	33.6		80.3		62.7		59.0

Table A3-12. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 6 June 1994. Mean *Daphnia* density = 24.0/L.

Zooplankton species	Station P1- Sapinero		Station P2 - Cebolla		Station P3 - Iola		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris	**Sample not collected at this station**		23.5	31.2	18	27.4	25.1
Ceriodaphnia spp.				0.7	0.3		0.5
Daphnia g. mendotae			18.4	22.1	11.6	11.0	15.9
Daphnia pulicaria			6.9	12.9	4.8	7.9	8.1
Diacyclops thomasi			35.1	40.5	26.2	31.3	33.2
Mean total no./L			96.3		69.5		82.8

Table A3-13. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 22-24 June 1994. Mean *Daphnia* density = 19.2/L.

Zooplankton species	Station P1 - Sapinero		Station P2 - Cebolla		Station P3 - Iola		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris	6	5	7.3	5.2	1.7	1.5	4.5
Ceriodaphnia spp.	0.1	0.1	0.1	0.5		0.1	0.1
Daphnia g. mendotae	5.6	12.3	9.5	16.7	14.7	12.7	11.9
Daphnia pulicaria	6.4	5.6	13.1	4	7.3	7.3	7.3
Diaphanosoma birgei	0.1						0.1
Diacyclops thomasi	14.2	19.3	27.6	19.6	14.9	22.8	19.8
Leptodiaptomus nudus		0.2					0.2
Mean total no./L	37.7		51.7		41.6		43.9

Table A3-14. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 5-7 July 1994. Mean *Daphnia* density = 15.1/L.

Zooplankton species	Station P1 - Sapinero		Station P2 - Cebolla		Station P3 - Iola		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris	1.8	1.8	3	1.9	2.2	1.4	2
Ceriodaphnia spp.			0.1	0.9	0.7	0.4	0.6
Daphnia g. mendotae	6.9	9.2	4.6	2.8	13.3	14.1	8.5
Daphnia pulicaria	3	2.1	3.9	5.1	11.1	14.1	6.6
Diaphanosoma birgei						0.4	0.4
Diacyclops thomasi	19.7	27.9	17.5	10.1	27.8	30.2	22.2
Leptodiaptomus nudus		1.3		0.8	11.1	14.1	4.9
Mean total no./L	37.6		25.8		70.7		45.2

Table A3-15. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 18-21 July 1994. Mean *Daphnia* density = 13.8/L.

Zooplankton species	Station P1 - Sapinero		Station P2 - Cebolla		Station P3 - Iola		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris	0.7	0.7	1.9	2.3	1.4	1.9	1.5
Ceriodaphnia spp.		0.1	0.4	0.7			0.4
Daphnia g. mendotae	6.7	7.7	3.4	5.7	2.9	3.0	4.9
Daphnia pulicaria	9.9	8.9	7.8	12	7.7	7.3	8.9
Diacyclops thomasi	22.2	22.8	17.7	19	19.8	20.4	20.2
Leptodiaptomus nudus	0.3	0.2	0.6	0.2	0.4	0.7	0.4
Mean total no./L	40.2		36.0		29.9		36.3

Table A3-16. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 30-1 August 1994. Mean *Daphnia* density = 10.1/L.

Zooplankton species	Station P1 - Sapinero		Station P2 - Cebolla		Station P3 - Iola		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris	0.1	0.3	1.8	1.2	1.8	1.6	1.1
Ceriodaphnia spp.	0.4	0.3	1.1	1.1	0.4		0.6
Daphnia g. mendotae	6.7	4.9	4.6	4.6	2.7	2.3	4.3
Daphnia pulicaria	9.0	6.5	5.7	2.8	5.9	4.9	5.8
Diacyclops thomasi	18.2	25.2	11.2	12.6	9.5	11.0	14.6
Leptodiaptomus nudus	1.1	1.1	0.6	0.9	1.2	0.9	1.0
Mean total no./L	37.0		24.2		21.4		27.4

Table A3-17. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 14-18 August 1994. Mean *Daphnia* density = 11.8/L.

Zooplankton species	Station P1 - Sapinero		Station P2 - Cebolla		Station P3 - Iola		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris	0.1		0.1	0.1		0.2	0.1
Ceriodaphnia spp.	1.4	1.6	3	3.1	1.9	1.7	2.1
Daphnia g. mendotae	5.3	9.6	8.4	6	10	5.8	7.5
Daphnia pulicaria	4.8	3.0	2.2	3.7	6.7	5.4	4.3
Diaphanosoma birgei		0.1					0.1
Diacyclops thomasi	9.6	11.6	13	10.8	13.7	11.0	11.6
Leptodiaptomus nudus	3.3	4.2	1.1	3.1	3.9	3.9	3.3
Mean total no./L	27.5		27.4		32.3		29.0

Table A3-18. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 16-17 September 1994. Mean *Daphnia* density = 10.7/L.

Zooplankton species	Station P1 - Sapinero		Station P2 - Cebolla		Station P3 - Iola		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris	0.6	0.9		0.2	0.6	0.2	0.5
Ceriodaphnia spp.	11.9	6	15.6	18.7	6.9	11	12.9
Daphnia g. mendotae	8	2.4	3.5	5.4	6	4.0	4.9
Daphnia pulicaria	10.2	3.9	1.8	2.5	9.5	6.7	5.8
Diaphanosoma birgei							
Diacyclops thomasi	4.9	3	3.5	4.1	4.9	4.3	4.1
Leptodiaptomus nudus	4.8	3.8	0.6	1.2	2.6	1.4	2.4
Mean total no./L	30.4		28.8		32.5		30.6

Table A3-19. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 7 July 1998. Mean *Daphnia* density = 6.0/L.

Zooplankton species	Station P1- Sapinero		Station P2 - Cebolla		Station P3 - Iola		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris	0.8	0.6	0.1		0.6	0.7	0.5
Ceriodaphnia spp.					0.1		<0.1
Daphnia g. mendotae	1.4	1.6	0.9	0.2	0.6	0.6	0.9
Daphnia pulicaria	4.9	5.7	3.7	2.7	6.9	6.5	5.1
Diacyclops thomasi	10.8	12.1	6.1	3.2	20.5	14.3	11.2
Leptodiaptomus sp.	0.5	0.2	0.6	0.3	1.2	1.2	0.7
Mean total no./L	19.3		8.9		26.6		18.4

Table A3-20. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 14 July 1999. Mean *Daphnia* density = 11.2/L.

Zooplankton species	Station P1 - Sapinero		Station P2 - Cebolla		Station P3 - Iola		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris	1.5	2.7	1.9	2	1.8	1.6	1.9
Diaphanosoma spp.			0.1		0.4	0.6	0.3
Daphnia g. mendotae	1.1	1.4	0.7	0.1	0.7	1.4	0.9
Daphnia pulicaria	8.3	12.6	4.1	3.2	15.6	18.2	10.3
Diacyclops thomasi	17.2	29.5	11.8	7.9	26.8	43.4	22.8
Leptodiaptomus spp.	0.3	0.4	0.3	0.2	1.3	4.5	1.2
Mean total no./L	37.5		16.2		58.2		37.4

Table A3-21. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 4 August 1999. Mean *Daphnia* density = 9.4/L.

Zooplankton species	Station P1 - Sapinero		Station P2 - Cebolla		Station P3 - Iola		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris			0.2			0.2	0.1
Daphnia g. mendotae	0.3	0.7	0.2	0.2	0.5		0.3
Daphnia pulicaria	11	8.9	8.9	7.4	4.3	14.4	9.1
Diacyclops b. thomasi	16.2	16.7	7.6	9.1	11.2	16	12.8
Leptodiaptomus spp.	5	3.9	7.5	12.5	8.6	13.1	8.4
Mean total no./L	31.4		26.3		34.2		30.7

Table A3-22. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 23 September 1999. Mean *Daphnia* density = 4.3/L.

Zooplankton species	Station P1 - Sapinero		Station P2 - Cebolla		Station P3 - Iola		Mean no./L
	a	b	a	b	a	b	
Bosmina longirostris		0.2	0.1	0.1	0.3	0.3	0.2
Ceriodaphnia spp.	0.1	1	0.7	2.1	0.1	2.1	1
Daphnia g. mendotae	3.6	3.1	1.8	2.2	5.7	2.8	3.2
Daphnia pulicaria	0.3	0.2	1.3	1.5	1.9	1.4	1.1
Diaphanosoma spp.				0.1			<0.1
Diacyclops thomasi	1.3	2.2	3.4	3.5	1.8	2	2.4
Leptodiaptomus spp.	0.3	0.1	0.5	0.5	0.8	1.8	0.7
Mean total no./L	6.2		8.9		10.5		8.6

Table A3-23. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 13 April 2000. Mean *Daphnia* density = 1.0 /L.

Zooplankton Species	Station P1 - Sapinero (0-10 m)			Station P2 - Cebolla (0-10 m)			Station P3 - Iola (0-10 m)			Mean no./L
	a	b	mean	a	b	mean	a	b	Wtd. mean	
Bosmina longirostris	0.7	0.8	0.8	0.3	0.3	0.3	1.6	0.7	1.1	0.7
Diacyclops thomasi	23.7	27.9	25.8	5.0	5.4	5.2	8.7	0.3	4.5	11.8
Daphnia g. mendotae							0.4	0.7	0.6	0.2
Daphnia pulicaria	0.2	0.1	0.2	0.1		0.1	0.5	1.6	1.1	0.5
Leptpdiaptomus nudus			0.0	<0.1		<0.1				<0.1
Mean total no./L	26.8			5.6			7.3			13.2

Table A3-24. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 19 May 2000. Mean *Daphnia* density 0-5m=17.6/L, 0-10m=12.5/L.

Zooplankton Species	Station P1 - Sapinero			Station P2 - Cebolla			Station P3 - Iola			Wtd. Mean no./L
	(0-5m)	(0-10m)	Wtd. mean	(0-5 m)	(0-10 m)	Wtd. mean	(0-5 m)	(0-10 m)	Wtd. mean	
Bosmina longirostris	1.7	1.2	1.4	4.3	4.3	4.3	23.8	17.8	19.8	8.5
Diacyclops thomasi	23.1	24.8	24.2	71.8	43.7	53.1	24.7	33.7	30.6	36.0
Daphnia g. mendotae	3.3		0.6	0.8		0.3	0.4	0.4	0.4	0.4
Daphnia pulicaria	14.0	15.5	15.0	9.4	5.6	6.8	24.8	16.0	19.0	13.6
Leptpdiaptomus nudus							0.4	0.4	0.4	0.1
Mean total no./L	41.2			64.5			70.2			58.6

Table A3-25. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 16 June 2000. Mean *Daphnia* density 0-5m=20.8/L, 0-10m=15.7/L.

Zooplankton Species	Station P1 - Sapinero			Station P2 - Cebolla			Station P3 - Iola			Wtd. Mean
	(0-5m)	(0-10m)	Wtd. mean	(0-5 m)	(0-10 m)	Wtd. mean	(0-5 m)	(0-10 m)	Wtd. mean	no./L
Bosmina longirostris	3.0	1.2	0.9	4.5	1.4	2.4	5.4	8.4	7.4	3.6
Diacyclops thomasi	13.4	17.9	16.4	43.7	11.2	22.6	12.4	15.3	14.3	17.8
Daphnia g. mendotae	1.5	0.3	0.7	3.1	0.4	1.3	2.1	1.4	1.6	1.2
Daphnia pulicaria	15.9	10.9	12.6	23.9	0.3	8.2	15.8	33.8	27.8	16.2
Leptpdiaptomus nudus		0.2	0.1		0.1	0.1		0.2	0.1	0.1
Mean total no./L	30.7			34.6			51.2			38.8

Table A3-26. Crustacean zooplankton species sampled inBlue Mesa Reservoir, 11 July 2000. Mean *Daphnia* density 0-5m=14.7/L, 0-10m= 14.4/L.

Zooplankton Species	Station P1 - Sapinero			Station P2 - Cebolla			Station P3 - Iola			Wtd. Mean
	(0-5m)	(0-10m)	Wtd. mean	(0-5 m)	(0-10 m)	Wtd. mean	(0-5 m)	(0-10 m)	Wtd. mean	no./L
Bosmina longirostris	0.3	0.4	0.4		0.4	0.2	0.7	0.2	0.3	0.3
Diacyclops thomasi	13	16.9	15.6	14.2	13.2	13.5	14	11.2	12.2	13.8
Daphnia pulicaria	11.1	13.3	12.6	15.7	14	14.5	17.2	15.9	16.3	14.5
Leptpdiaptomus nudus	0.4	0.1	0.2	0.2	0.4	0.4	1.1	1.2	1.2	0.6
Mean total no./L	28.8			28.6			30.0			29.1

Table A3-27. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 2 August 2000. Mean *Daphnia* density 0-5m=13.1/L ,0-10 m=18.4/L.

Zooplankton Species	Station P1 - Sapinero			Station P2 - Cebolla			Station P3 - Iola			Wtd. Mean
	(0-5m)	(0-10m)	Wtd. mean	(0-5m)	(0-10m)	Wtd. mean	(0-5m)	(0-10m)	Wtd. mean	no./L
Bosmina longirostris		0.2	0.1	0.3		0.1				0.1
Diacyclops thomasi	5.6	5.6	5.6	13.0	17.8	16.2	8.4	9.5	9.1	10.3
Daphnia g. mendotae	0.4	0.3	0.3	0.0	0.0	0.0	0.0	0.4	0.3	0.2
Daphnia pulicaria	6.3	4.3	5.0	24.2	35.1	31.5	8.5	15.2	12.9	16.5
Ceriodaphnia quadrangula							0.4	0.4	0.4	0.1
Leptpdiaptomus nudus	3.1	1.5	2.5	4.3	11.0	8.7	3.0	4.6	4.1	5.1
Mean total no./L	13.5			56.5			26.8			32.3

Table A3-28. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 17 August 2000. Mean *Daphnia* density = 12.7/L.

Zooplankton Species	Station P1 - Sapinero (0-10 m)			Station P2 - Cebolla (0-10 m)			Station P3 - Iola			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	**No samples to process**			**No samples to process**				0.1	<0.1	<0.1
Diacyclops thomasi							3.5	4.5	4.0	4.0
Daphnia g. mendotae							0.0	0.3	0.2	0.2
Daphnia pulicaria							11.2	13.8	12.5	12.5
Leptpdiaptomus nudus							6.8	6.2	6.5	6.5
Ceriodaphnia quadrangula							0.1	1.0	0.6	0.6
Mean total no./L							23.9			23.9

Table A3-29. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 12 September 2000. Mean *Daphnia* density = 4.2/ L.

Zooplankton Species	Station P1 - Sapinero (0-10 m)			Station P2 - Cebolla (0-10 m)			Station P3 - Iola (0-10 m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris		0.2	0.2	0.4	0.1	0.3				0.1
Diacyclops thomasi	3.5	3.4	3.5	4.1	3.4	3.8	2.4	1.5	2.0	3.1
Daphnia g. mendotae	2.4	2.5	2.5	1.7	2.5	2.1	0.8	1.0	0.9	1.8
Daphnia pulicaria	2.2	2.1	2.2	3.0	2.3	2.7	2.1	2.4	2.3	2.4
Leptpdiaptomus nudus	2.0	2.1	2.1	1.5	1.8	1.7	3.8	5.3	4.6	2.8
Ceriodaphnia quadrangula	1.0	0.3	0.7	2.0	2.5	2.3	2.4	2.2	2.3	1.8
Mean total no./L	11.1			12.9			12.1			12.0

Table A3-30. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 11 June 2003. Mean *Daphnia* density = 18.7/L.

Zooplankton Species	Station P1 - Sapinero (0-10 m)			Station P2 - Cebolla (0-10 m)			Station P3 - Iola (0-10 m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.8	1.7	1.3	13.1	16.2	14.6	14.7	21.1	17.9	11.3
Unindentified *Daphnia spp.*	0.8	0.7	0.8	2.0	2.9	2.4	1.1	2.3	1.7	1.6
Daphnia g. mendotae	0.6	0.2	0.4	0.2	0.3	0.3	0.3	1.7	1.0	0.6
Daphnia pulicaria	11.4	10.5	11.0	21.5	29.1	25.3	12.2	14.5	13.3	16.5
Diacyclops thomasi	26.8	27.0	26.9	14.8	20.1	17.4	18.4	16.3	17.3	20.6
Mean total no./L	40.3			60.1			51.2			50.5

Table A3-31. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 23 July 2003. Mean *Daphnia* density = 12.6/L.

Zooplankton Species	Station P1 - Sapinero (0-10 m)			Station P2 - Cebolla (0-10 m)			Station P3 - Iola (0-10 m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.2	0.9	0.6	0.8		0.8	0.3	1.1	0.7	0.6
Unindentified *Daphnia spp.*	0.7	1.1	0.9	1.7	3.0	2.3	1.7	1.1	1.4	1.6
Daphnia g. mendotae	2.2	2.6	2.4	2.1	1.7	1.9	0.7	0.6	0.6	1.6
Daphnia pulicaria	7.2	2.6	4.9	14.3	15.9	15.1	8.9	7.4	8.1	9.4
Diacyclops thomasi	22.1	18.3	20.2	34.4	34.0	34.2	13.2	18.8	16.0	23.5
Mean total no./L	28.9			54.4			26.9			36.8

Table A3-32. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 22 August 2003. Mean *Daphnia* density = 5.0/L.

Zooplankton Species	Station P1 - Sapinero (0-10 m)			Station P2 - Cebolla (0-10 m)			Station P3 - Iola (0-10 m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris							0.9	1.4	1.2	0.4
Ceriodaphnia megalops	0.3	0.9	0.6	1.3	0.8	1.0	5.3	2.5	3.9	1.9
Unindentified *Daphnia spp.*		0.3	0.3	0.6	0.4	0.5				0.2
Daphnia g. mendotae	0.3	0.4	0.3	0.7	0.3	0.5	0.2	0.7	0.4	0.4
Daphnia pulicaria	4.3	2.0	3.1	3.6	3.3	3.5	7.4	5.6	6.5	4.4
Diacyclops thomasi	9.9	8.9	9.4	7.2	6.1	6.7	8.4	7.7	8.1	8.0
Mean total no./L	13.8			12.2			20.0			15.3

Table A3-33. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 15 July 2004. Mean *Daphnia* density = 4.7/L.

Zooplankton species	Station P1 - Sapinero (0-10 m)			Station P2 - Cebolla (0-10 m)			Station P3 - Iola (0-10 m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Diacyclops thomasi	5.8	5.1	5.4	7	6.8	6.9	1.6	**Data Not Available**	1.6	4.6
Ceriodaphnia quadrangula	1.2	1.4	1.3	0.4	0.4	0.4	0.2		0.2	0.6
Daphnia g. mendotae	1.5	0.4	0.9		0.5	0.2	0.1		0.1	0.4
Daphnia pulicaria	8.4	7.6	8	2.3	3.5	2.9	0.8		0.8	3.9
Unidentified *Daphnia spp.*	1.5	0.3	0.9	0	0.4	0.2	0.1		0.1	0.4
Bosmina longirostris	0	0.4	0.2	0.1	0	0.1	0.5		0.5	0.3
Mean total no./L	16.7			10.7			3.3			10.2

Table A3-34. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 23 June 2005. Mean *Daphnia* density = 23.1/L.

Zooplankton Species	Station P1 - Sapinero (0-10 m)			Station P2 - Cebolla (0-10 m)			Station P3 - Iola (0-10 m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	1.9	3.8	2.9	7	5.8	6.4	6.8	8	7.4	5.5
Unidentified *Daphnia spp.*	2.5	3.3	2.9	2.4	5.2	3.8	0	4.6	2.3	3
Daphnia g. mendotae	6.3	4.9	5.6	5.8	8.8	7.3	11.9	13.8	12.8	8.6
Daphnia pulicaria	11	9.8	10.4	11.6	21.2	16.4	4.8	10.7	7.8	11.5
Diacyclops thomasi	20.4	21.4	20.9	15.3	20.6	17.9	10.4	15.9	13.1	17.3
Leptodiaptomus nudus	0.6	0.3	0.4	1.2	0	0.6	0.3	0.3	0.3	0.4
Mean total no./L	43.0			52.5			43.7			46.4

Table A3-35. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 04 August 2005. Mean *Daphnia* density = 25.1/L.

Zooplankton Species	Station P1 - Sapinero (0-10 m)			Station P2 - Cebolla (0-10 m)			Station P3 - Iola (0-10 m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0	0.3	0.1	0	0	0				>0.1
Unidentified *Daphnia spp.*	1.1	0.8	1	1.7	0	0.9		0.9	0.4	0.8
Daphnia g. mendotae		0.6	0.3							0.1
Daphnia pulicaria	25.4	32.2	28.8	24.4	21.6	23	26	15.8	20.9	24.2
Diacyclops thomasi	9.3	6.8	8.1	7.2	7.6	7.4	18	10.4	14.2	9.9
Leptodiaptomus nudus	5.4	10.2	7.8	2.9	5.2	4	5.9	6	5.9	5.9
Mean total no./L	46.0			35.3			41.1			40.8

Table A3-36. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 17 May 2006. Mean *Daphnia* density = 5.7/L.

Zooplankton Species	Station P1 - Sapinero (0-10 m)			Station P2 - Cebolla (0-10 m)			Station P3 - Iola (0-10 m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.3	1.1	0.7	0.4		0.2		0.5	0.3	0.4
Unidentified *Daphnia spp.*	6	5.4	5.7	1.5	1.1	1.3	0.6		0.3	2.4
Diacyclops thomasi	23.1	21.8	22.4	47.3	28.9	38.1	37.0	36.9	36.9	32.5
Daphnia g.mendotae	7.0	4.6	5.8	1.8	1.6	1.7	0.9	0.8	0.8	2.8
Daphnia pulicaria	1.3	0.9	1.1	0.4	0.6	0.5	0.3			0.5
Leptodiaptomus nudus		0.3	0.1							
Mean total no./L	39.3			59.0			43.2			47.1

Table A3-37. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 18 July 2006. Mean *Daphnia* density = 10.2/L.

Zooplankton Species	Station P1 - Sapinero (0-10 m)			Station P2 - Cebolla (0-10 m)			Station P3 - Iola (0-10 m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris				0.3		0.2	1.9	0.5	1.2	0.5
Ceriodaphnia quadrangula	4.3	1.9	3.1		1.8	0.9	1.0	1.0	1.0	1.7
Unidentified *Daphnia spp.*	2.6	0.7	1.7	3.0	1.4	2.2	1.5	1.0	1.2	1.7
Diacyclops thomasi	9.5	13.4	11.4	5.7	6.9	6.3	12.1	14.1	13.1	10.3
Daphnia g. mendotae	2.2	3.7	2.9	3.7	2.5	3.1	1.5	2.9	2.2	2.7
Daphnia pulicaria	6.5	4.8	5.7	6.4	7.2	6.8	4.4	5.3	4.8	5.8
Leptodiaptomus nudus	15.6	18.2	16.9	11.7	10.5	11.1	10.6	5.3	8.0	12.0
Mean total no./L	41.7			30.6			31.5			34.6

Table A3-38. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 01 June 2007. Mean *Daphnia* density = 5.8/L.

Zooplankton Species	Sapinero (0-10m)			Cebolla (0-10m)			Iola (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	2.2	3.5	2.9	17.9	18.2	18.1	20.7	21.7	21.2	14
Diacyclops thomasi	5.1	7.8	6.5	4.9	4.7	4.8	2.3	3.6	3	4.7
Leptodiaptomus nudus	0.3	0.3	0.3	0.5	0.5	0.5	1.6	0.9	1.3	0.7
Daphnia g. mendotae	0.8	0.7	0.8	0.7	2.5	1.6	1.9	1.1	1.5	1.3
Daphnia pulicaria	2.5	2.6	2.6	3.9	5	4.5	3.8	1.5	2.7	3.2
Unidentified *Daphnia spp.*	1.8	2	1.9	0.5	1.1	0.8	0.7	1.5	1.1	1.3
Mean total no./L	14.8			30.2			30.7			25.2

Table A3-39. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 16 July 2007. Mean *Daphnia* density = 9.7/L.

Zooplankton Species	Sapinero (0-10m)			Cebolla (0-10m)			Iola (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.1	0	0.1	0.8	0.3	0.6	0	0	0	0.2
Diacyclops thomasi	9.7	7.3	8.5	10.5	8	9.3	4	6.3	5.2	7.6
Leptodiaptomus nudus	4	1.8	2.9	3.9	4.4	4.2	8.8	13.2	11	6.0
Daphnia g. mendotae	4	4.7	4.4	4.1	3.3	3.7	5.7	3	4.4	4.1
Daphnia pulicaria	6	5.8	5.9	5.3	3.4	4.4	2.8	3.1	3	4.4
Unidentified *Daphnia spp.*	1.7	1.6	1.7	3.4	1.9	1.4	0.8	0.4	0.6	1.2
Mean total no./L	23.4			23.5			24.1			23.6

Table A3-40. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 09 June 2009. Mean *Daphnia* density = 6.6/L.

Zooplankton Species	Sapinero (0-10m)			Cebola (0-10m)			Iola (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	4.4	4.6	4.5	2.8	2.6	2.7	1.7	2.0	1.8	3.0
Unidentified *Daphnia spp.*	0.4	0.3	0.3	1.2	1.5	1.3	0.8	0.8	0.8	0.8
Daphnia mendotae	2.1	2.3	2.2	1.4	1.8	1.6	1.7	1.6	1.6	1.8
Daphnia pulicaria	2.8	2.9	2.9	2.3	3.8	3.1	5.0	6.9	5.9	4.0
Diacyclops thomasi	11.0	8.5	9.8	6.4	3.8	5.1	8.4	10.5	9.4	8.1
Leptodiaptomus nudus	1.6	1.8	1.7	1.3	2.2	1.7	0.6	0.4	0.5	1.3
Mean total no./L	19.6			13.8			19.6			17.7

Table A3-41. Crustacean zooplankton species sampled in Blue Mesa Reservoir, 12 August 2009. Mean *Daphnia* density = 8.6/L.

Zooplankton Species	Sapinero (0-10m)			Cebola (0-10m)			Iola (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Ceriodaphnia quadrangula	0.0	0.0	0.0	0	0.4	0.2	0.18	0.53	0.4	0.2
Bosmina longirostris	0.0	0.0	0.0	0.4	0.0	0.2	0.0	0.0	0.0	0.1
Unidentified *Daphnia spp.*	2.5	2.8	2.7	2.0	2.4	2.2	2.0	3.9	2.9	2.6
Daphnia mendotae	1.7	1.7	1.7	0.5	1.2	0.9	1.6	1.2	1.4	1.3
Daphnia pulicaria	6.8	4.0	5.4	2.9	5.4	4.1	4.4	4.9	4.7	4.7
Diacyclops thomasi	11.3	10.9	11.1	13.2	14.1	13.6	6.0	7.7	6.9	10.5
Leptodiaptomus nudus	11.6	14.4	13.0	19.8	19.4	19.6	9.2	11.4	10.3	14.3
Mean total no./L	20.8			21.2			16.3			19.4

Table A3-42. Crustacean zooplankton species sampled in Cheesman Reservoir, 19 August 1992. Mean *Daphnia* density = 5.6/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia pulicaria	0.2	0.1			0.1	0.2	0.1			0.3	0.1
Daphnia g. mendotae	1	0.9	2.2	3.1	3.6	4.3	8.5	12.1	8.8	10.3	5.5
Ceriodaphnia quadrangula	18.9	13.2	23.2	20.3	13.3	14.9	11.4	19.8	14.6	20	17
Bosmina longirostris	9	6.2	4.6	4.3	4.7	4.9	6.4	7.9	5.9	8.1	6.2
Diacyclops thomasi	10	6.7	11.4	9.2	11.7	12.3	12.5	20.6	2.3	26.1	12.3
Leptodiaptomus judayi	3.4	2.4	1.7	2	2.5	2.3	1.7	3.3	4.9	0.3	2.5
Leptodiaptomus nudus						0.1	1	0.2	0.1		0.1
Alona affinis	0.1						0.1				<0.1
Mean total no./L	35.9		41.1		37.4		52.8		50.9		43.7

Table A3-43. Crustacean zooplankton species sampled in Dillon Reservoir, 17 June 1993. Mean *Daphnia* density = 0.0/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Diacyclops thomasi	8.5	9.1	10.2	8.5	6.8	7.3	24.3	28.1	8.8	10.6	12.2
Mean total no./L	8.8		9.4		7.1		26.2		9.7		12.2

Table A3-44. Crustacean zooplankton species sampled in Dillon Reservoir, 8 August 1993. Mean *Daphnia* density = 0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris		0.1	0.3	0.9	0.4	1.6	0.5	0.2	2.3	2.2	0.9
Daphnia pulicaria		0.1									<0.1
Daphnia g. mendotae					0.1		0.1		0.6	0.7	0.1
Diacyclops thomasi	11.7	12.6	15.4	14	20.5	16.6	15.8	17.2	41.3	33.3	19.8
Mean total no./L	12.3		15.3		19.6		16.9		46.1		20.8

Table A3-45. Crustacean zooplankton species sampled in Dillon Reservoir, 26 August 1993. Mean *Daphnia* density = 0.3/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	1.4	1.1	4.9	4.5	3.7	3.4	2.1	2.7	2.3	1.4	2.8
Daphnia pulicaria								0.1	0.1		<0.1
Daphnia g. mendotae			0.1			0.1	0.1	0.2	1.1	1.2	0.3
Diacyclops thomasi	15.4	14.8	24.1	24.8	17.2	14.1	20.5	20	30.5	31.4	21.3
Mean total no./L	16.4		29.2		19.3		22.9		34.0		24.4

Table A3-46. Crustacean zooplankton species sampled in Dillon Reservoir, 1 October 1993. Mean *Daphnia* density = 0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris		0.1	0.2	0.1	0.7	1	0.4	0.5	1	0.8	0.5
Daphnia g. mendotae		0.1							0.7		0.1
Diacyclops thomasi	4.5	4.1	36.2	58.3	37	34.6	8.7	12.5	31.9	26.2	25.4
Mean total no./L	4.4		47.4		36.7		11.1		30.0		26.0

Table A3-47. Crustacean zooplankton species sampled in Dillon Reservoir, 1 June 1994. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia g. mendotae									<0.1		<0.1
Diacyclops thomasi	2.5	1.5	1.8	1.4	2.8	2	1.9	2.4	1.4	1.6	1.9
Mean total no./L	2.0		1.6		2.4		2.2		1.5		1.9

Table A3-48. Crustacean zooplankton species sampled in Dillon Reservoir, 8 July 1994. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.1		0.1	0.2	2.6	3.6	0.3	0.2	7.2	6.2	2.1
Daphnia g. mendotae									<0.1		<0.1
Diacyclops thomasi	11.5	9.7	12.7	58.3	18.1	18.4	11.2	11.2	28.1	23.3	20.3
Mean total no./L	10.7		35.7		21.4		11.5		32.4		22.4

Table A3-49. Crustacean zooplankton species sampled in Dillon Reservoir, 18 August 1994. Mean *Daphnia* density = 1.2/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	16.6	10.6	16	8.2	16.1	12.6	6	4.6	14.1	16.2	12.1
Daphnia g. mendotae	0.9	0.5	0.2	0.1			0.4	0.7	5.2	3.6	1.2
Diacyclops thomasi	28.8	23.1	30.2	19.3	40.1	22.9	25.4	24.7	58.8	55.0	32.8
Mean total no./L	40.3		37.1		45.9		30.9		76.5		46.1

Table A3-50. Crustacean zooplankton species sampled in Dillon Reservoir, 28 June 1995. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia g. mendotae									<0.1		<0.1
Diacyclops thomasi	2.0	2.5					5.4	4.6	8.1	9.8	5.4
Mean total no./L	2.2						5.0		9.0		5.5

Table A3-51. Crustacean zooplankton species sampled in Dillon Reservoir, 27 August 1995. Mean *Daphnia* density = 0.6/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	1.6	0.4			0.4	1.0			5.3	8.0	2.8
Daphnia g. mendotae						0.2			0.9	0.9	0.6
Diacyclops thomasi	10.9	19.1			7.0	17.7			21.4	26.6	17.1
Mean total no./L	16.0				13.3				31.6		20.5

Table A3-52. Crustacean zooplankton species sampled in Dillon Reservoir, 22 June 1996. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia pulicaria	0.3										<0.1
Bosmina longirostris	0.2		0.2				0.1		0.1	0.1	<0.1
Diacyclops thomasi	8.8	4.4	9.3	4.0	4.4	1.8	11.0	6.9	43.8	12.8	10.7
Mean total no./L	6.9		6.8		3.1		9.0		28.4		10.8

Table A3-53. Crustacean zooplankton species sampled in Dillon Reservoir, 10 July 1996. Mean *Daphnia* density = <0.0/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.1						0.2		0.3	0.4	0.1
Diacyclops thomasi	10.6	18.2	16.6	15.1	18.7	23.2	11.9	18.3	39.1	42.7	21.5
Mean total no./L	14.5		15.9		21.0		15.2		41.3		21.6

Table A3-54. Crustacean zooplankton species sampled in Dillon Reservoir, 1 August 1996. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	<0.1	<0.1	0.1		0.9	0.5	0.5	0.4	1.8	0.6	0.5
Daphnia g. mendotae									0.1		<0.1
Daphnia pulicaria									0.1	0.1	<0.1
Diacyclops thomasi	19.5	16.8	20.5	19.9	30.5	30.2	26.1	22.2	32.4	24.9	24.3
Mean total no./L	18.2		21.9		30.6		24.6		30.0		25.0

Table A3-55. Crustacean zooplankton species sampled in Dillon Reservoir, 15 July 1998. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.4	0.3	1	1.2	0.4	0.3	0.4	0.3	2.6	3.5	1.1
Daphnia g. mendotae							0.1	0.1	0.2	0.3	<0.1
Diacyclops thomasi	10.9	10	15	13.9	13.6	12.4	16.2	15.8	41	30	17.9
Mean total no./L	10.8		15.6		13.4		16.5		38.8		19.0

Table A3-56. Crustacean zooplankton species sampled in Dillon Reservoir, 12 August 1998. Mean *Daphnia* density = 0.3/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	14.2	21.2	14.7	12.8	9.4	4.4	13.6	12.8	12.3	11.6	12.7
Daphnia g. mendotae		0.1	0.1	0.3		0.1	0.1	0.3	0.6	1.3	0.3
Diacyclops thomasi	20.4	20.5	17.6	18	22.3	19.4	15.5	16.2	19.2	27	19.4
Mean total no./L	37.0		31.6		27.8		29.1		36.0		32.4

Table A3-57. Crustacean zooplankton species sampled in Dillon Reservoir, 2 August 1999. Mean *Daphnia* density = 0.0/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	1.1	0.9	3.3	2.9	0.2	1.7	1.8	3.5	12.7	14.9	4.3
Diacyclops thomasi	22.7	20.5	39.5	35.1	51.7	42.5	26.5	31.6	23.1	40.8	33.4
Mean total no./L	22.6		40.4		48.0		31.7		46.0		37.7

Table A3-58. Crustacean zooplankton species sampled in Dillon Reservoir, 2 September 1999. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	5.5	6.8	7.3	8.2	0.6	0.5	3.6	6.4	8.3	5.2	5.2
Daphnia g. mendotae								0.1			<0.1
Diacyclops thomasi	18.1	29.9	24.5	18.5	25.7	25.7	19.6	23.7	33.8	36.6	25.6
Mean total no./L	30.1		29.2		26.2		26.7		41.9		30.8

Table A3-59. Crustacean zooplankton species sampled in Dillon Reservoir, 27 July 2000. Mean *Daphnia* density = 0.0/L.

Zooplankton species	Station 1			Station 2			Station 3			Station 4			Station 5			Wtd.Mean no./L
	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	
Bosmina longirostris	13.4	1.0	5.2	1.5	0.3	0.7	1.3	0.7	0.9	9.1	3.4	5.3	10.7	6.6	8.0	4.0
Diacyclops thomasi	25.2	23.2	23.9	13.3	13.3	13.3	14.4	17.6	16.5	30.8	23.7	26.1	35.5		11.8	18.3
Ceriodaphnia quadrangula													3.0	34.2	22.9	4.6
Mean total no./L	29.1			14.0			17.4			31.4			42.7			26.9

Table A3-60. Crustacean zooplankton species sampled in Dillon Reservoir, 16 July 2002. Mean *Daphnia* density = >.01/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	2.5	1.9	2.2	28.1	26.6	27.4	2.6	1.8	2.2	2.4	1.2	1.8	12.9	15.2	14.1	9.5
Ceriodaphnia quadrangula	0.1		0.1													>.01
Diacyclops thomasi	23.4	18.7	21.1	28.2	25.0	26.6	16.9	17.4	17.2	31.1	29.3	30.2	51.8	54.9	53.4	29.7
Daphnia g. mendotae	0.1		0.1													>.01
Leptodiaptomus nudus	0.1	0.1	0.1													>.01
Mean total no./L	23.6			54.0			19.4			32.0			67.5			39.3

Table A3-61. Crustacean zooplankton species sampled in Dillon Reservoir, 8 August 2005. Mean *Daphnia* density = 0.5/L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 4 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	12	7.4	9.7	7.8	9.6	8.7	7.4	9.2	8.3	3.9	4.8	4.3	7.2	13	10.1	8.2
Daphnia g. mendotae	0.2	0.1	0.2					0.2	0.1	0.2	0.1	0.2	2.2	1.6	1.9	0.5
Daphnia pulicaria	0.2		0.1										0.2		0.1	>0.01
Diacyclops thomasi	22.2	14.2	18.2	17.1	27.9	22.5	35.2	23.1	29.2	8.5	11.3	9.9	34.3	55	44.7	24.9
Mean total no./L	28.2			31.2			37.5			14.4			56.8			33.6

Table A3-62. Crustacean zooplankton species sampled in Dillon Reservoir, 14 August 2006. Mean *Daphnia* density =5.9/L.

Zooplankton Species	Station #1 (0-10m)			Station #2 (0-10m)			Station #3 (0-10m)			Station #4 (0-10m)			Station #5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	10.8	10.6	10.7	8.3	6.2	7.2	15.3	10.4	12.8	13.8	28.6	21.2	15.5	10.6	13	13
Unidentified *Daphnia spp.*	0.3	0.8	0.5	1.3	0.5	0.9	0.2	0.2	0.2	1.6	0.7	1.1	1.3	1.9	1.6	0.9
Diacyclops thomasi	10.8	9.3	10.1	11.3	13.7	12.5	12.5	8.7	10.6	16.9	16.1	16.5	23.2	23.1	23.2	14.6
Daphnia g. mendotae	6	6.1	6	1.5	1.4	1.4	0.8	0.6	0.7	5.2	2.7	4	11.8	11.7	11.8	4.8
Daphnia rosea	0.3		0.1													0.2
Mean total no./L	27.5			22.1			24.3			42.8			49.6			33.5

Table A3-63. Crustacean zooplankton species sampled in Dillon Reservoir, 18 July 2007. Mean *Daphnia* density <0.1/L.

Zooplankton Species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.7	1	0.9	10.2	16.2	13.2	0.8	1	0.9	0.6	2.8	1.7	17.9	11.7	14.8	6.3
Diacyclops thomasi	0.8	0.3	0.6	16.3	16.2	16.3	2.8	5.9	4.4	7.3	22.7	15	25.6	22.7	24.2	12.1
Leptodiaptomus nudus		0.1	<0.1							0.1		<0.1				<0.1
Daphnia g. mendotae				0.1		<0.1				0.1	0.1	0.1				<0.1
Daphnia pulicaria				0.1		<0.1										<0.1
Mean total no./L	1.5			29.6			5.3			16.8			39.0			18.4

Table A3-64. Crustacean zooplankton species sampled in Dillon Reservoir, 21 July 2009. Mean *Daphnia* density = 0.1/L.

Zooplankton Species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.8	0.2	0.5	0.1	0.2	0.2	7.2	6.5	6.8	0.4	0.4	0.4	9.8	7.4	8.6	3.3
Daphnia g. mendotae													0.1		0.1	0.1
Dapnia pulicaria										0.1						0.0
Diacyclops thomasi	7.6	4.0	5.8	13.2	8.0	10.6	19.5	18.0	18.8	7.2	7.4	7.3	13.5	18.7	16.1	11.7
Mean total no./L	6.2			10.8			25.6			7.7			24.8			15.0

Table A3-65. Crustacean zooplankton species sampled in Elevenmile Reservoir, 24 June 1993. Mean *Daphnia* density = 3.8/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia g. mendotae	1.6	4	1.2	1.5	1.2	1.6	0.8	1.7	0.4	0.9	1.5
Daphnia pulicaria	4.7	4	0.9	1	0.9	0.9	2.5	5	0.9	2.6	2.3
Bosmina longirostris	0.7	1.7	0.6	1.6	0.9	2.5	0.2	1.8	0.9	0.9	1.2
Diacyclops thomasi	101.2	67.1	109.4	66.5	98.5	58.3	78.7	66.3	68.9	82.1	79.7
Leptodiaptomus spp.	1.1	1.3	2.7	1.2	1.2	0.7	2.3	3.2	4.1	3.2	2.1
Mean total no./L	93.7		93.3		83.4		81.3		82.5		86.8

Table A3-66. Crustacean zooplankton species sampled in Elevenmile Reservoir, 5 August 1993. Mean *Daphnia* density = 14.8/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia g. mendotae	1.2	1.7	1.1	Sample lost	1.7	2.9	1.8	1.1	1	1	1.5
Daphnia pulicaria	12.9	16.9	11.7		10	14	10.8	9.7	18.7	15.3	13.3
Bosmina longirostris	2.9	2.8	1.7		2.3	1.9	1.3	0.6	3	0.7	1.9
Ceriodaphnia spp.	0.1							0.3		0.7	0.1
Diacyclops thomasi	25.2	26.9	18.9		27.8	19.8	23.3	17.5	27.7	31.7	24.3
Leptodiaptomus spp.	2.1	3.3	1.4		2.5	1.9	1.8	2.8	1	0.7	1.9
Mean total no./L	48.0		34.8		42.4		35.5		50.8		43.0

Table A3-67. Crustacean zooplankton species sampled in Elevenmile Reservoir, 21 October 1993. Mean *Daphnia* density = 13.2/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia pulicaria	5.8	3.7	16.7	17.7	Sample lost	8	10	11	16	30.3	13.2
Bosmina longirostris	1.2	0.4	5.2	6.7		5.3	2.5	1.7	1.1	2.7	3
Ceriodaphnia quadrangula	3.2	2.5		0.3		0.3		0.3	0.4		0.8
Diacyclops thomasi	7.1	6.1	8.2	13.7		20.7	22.5	21.7	16	21.3	15.3
Leptodiaptomus spp.	0.9	0.6	1.5	0.3		0.7	0.6	0.7	0.4	1	0.7
Mean total no./L	15.8		35.2		35.0		35.5		44.6		33.0

Table A3-68. Crustacean zooplankton species sampled in Elevenmile Reservoir, 2 June 1994. Mean *Daphnia* density = 14.3/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia g. mendotae	0.6	0.1	0.2	0.2		0.3	0.7	0.3	0.5	0.6	0.4
Daphnia pulicaria	16.5	14.9	14.1	18.7	11.8	11.2	14.4	10.8	13.2	13.4	13.9
Bosmina longirostris	0.2	0.3	0.2	0.4	0.4	0.3	0.5	0.1			0.3
Diacyclops thomasi	7.6	5.7	7.9	7.8	8.6	6.1	14.1	13.4	9.9	10.6	9.2
Leptodiaptomus judayi	0.4	0.3			0.1	0.1	0.5	0.3			0.2
Leptodiaptomus spp.			0.2							0.1	<0.1
Mean total no./L	23.5		25.2		19.7		27.8		24.1		24.2

Table A3-69. Crustacean zooplankton species sampled in Elevenmile Reservoir, 28 July 1994. Mean *Daphnia* density = 7.8/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia g. mendotae	1.3	1.4	0.5	1.2	0.5	0.7	0.9	1	0.7	0.5	0.9
Daphnia pulicaria	6.2	9.2	5.2	7	5.9	8.4	7.3	7.1	6.8	5.6	6.9
Bosmina longirostris	0.6	0.4	0.5	0.3	0.5		0.6	1	0.3	0.4	0.5
Diacyclops thomasi	43.1	17	26.5	18.1	28.1	23.4	30.9	25.5	26.7	22.5	26.2
Leptodiaptomus judayi	0.3	0.5	0.8	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4
Mean total no./L	40.1		30.3		34.2		37.5		32.2		34.9

Table A3-70. Crustacean zooplankton species sampled in Elevenmile Reservoir, 29 July 2005. Mean *Daphnia* density = 11.2/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	1.0	1.7	1.3	0.2		0.1	0.5	0.3	0.4	0.6		0.3	0.8	0.6	0.7	0.6
Unidentified *Daphnia spp.*	0.2	0.3	0.3	0.5	1.1	0.8	0.8	0.7	0.8	0.9	0.5	0.7	0.4	1.0	0.7	0.6
Alona guttata										0.3		0.1				>0.01
Daphnia mendotae	1.4	1.7	1.5	1.0	1.1	1.1	0.3	0.3	0.3							0.6
Daphnia pulicaria	7.0	7.3	7.1	13.1	9.2	11.2	16.1	15.9	16.0	9.4	7.7	8.5	5.9	8.0	6.9	10.0
Daphnia rosea					0.4	0.2										>0.01
Diacyclops thomasi	12.4	11.4	11.9	7.3	9.5	8.4	13.7	14.9	14.3	16.8	12.8	14.8	14.5	15.1	14.8	12.8
Leptodiaptomus nudus	2.9	3.3	3.1	1.6	4.0	2.8	3.3	6.2	4.8	4.7	0.0	2.4	0.8	3.2	2.0	3.0
Mean total no./L	25.2			24.5			36.6			26.9			25.1			27.6

Table A3-71. Crustacean zooplankton species sampled in Elevenmile Reservoir, 22 August 2006. Mean *Daphnia* density = 0.9/L.

Zooplankton Species	Station #1 (10m)			Station #4 (10m)			Mean no./L
	a	b	mean	a	b	mean	
Bosmina longirostris	0.4	0.2	0.3	0.2	0	0.1	0.2
Ceriodaphnia quadrangula	0	0	0	0.1	0	0	<0.1
Unidentified *Daphnia spp.*	0.3	0.1	0.2	0.1	0.1	0.1	0.2
Diacyclops thomasi	2.5	2.3	2.4	2.4	1.7	2	2.2
Daphnia g. mendotae	0.3	0.3	0.3	0.1	0.2	0.1	0.2
Daphnia pulicaria	0.9	0.4	0.7	0.6	0.4	0.5	0.6
Leptodiaptomus nudus	0.3	0.3	0.3	0.4	0.6	0.5	0.4
Mean total no./L	4.2			3.4			3.9

Table A3-72. Crustacean zooplankton species sampled in Granby Reservoir, 7 August 1991. Mean *Daphnia* density = 5.5/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.4	0.2	0.8	0.5	0.4	0.6	0.4	0.6	0.2	0.1	0.4
Daphnia g. mendotae	3.5	3.5	2.6	1.8	2.6	1.9	1.5	2.1	3.1	2.5	2.5
Daphnia pulicaria	2.1	2.7	2.1	2.6	3.6	2.7	2.4	3.1	2.7	1.7	3
Diacyclops thomasi	18.9	18.6	12	12.0	13.7	14.8	12.4	14.2	11.8	14.4	14.3
Leptodiaptomus nudus	<0.1		0.1	0.1	0.2	0.2	0.2	0.1	<0.1	0.2	0.1
Mean total no./L	25.0		19.4		20.5		18.6		18.4		20.3

Table A3-73. Crustacean zooplankton species sampled in Granby Reservoir, 5 October 1991. Mean *Daphnia* density = 2.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	<0.1	<0.1	0.1	<0.1		<0.1	<0.1	<0.1	<0.1		<0.1
Daphnia g. mendotae	0.6	0.6	1.1	0.8	0.8	0.8	0.9	1.3	0.9	0.8	0.9
Daphnia pulicaria	0.5	0.8	1.2	1.1	0.6	0.9	1.7	1.7	1.6	1.7	1.2
Diacyclops thomasi	4.4	4.8	5.4	5.3	5.3	6.4	7.1	7.7	6.8	6.1	6
Leptodiaptomus nudus	0.4	0.2	0.3	0.6	0.8	0.9	0.8	1	0.9	0.8	0.7
Mean total no./L	6.2		7.2		8.4		11.1		10.0		8.8

Table A3-74. Crustacean zooplankton species sampled in Granby Reservoir, 8 June 1992. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	<0.1	0.2	0.1	<0.1	0.4	0.1	<0.1	<0.1	<0.1	<0.1	0.1
Daphnia g. mendotae	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1				<0.1
Daphnia pulicaria			<0.1				<0.1				<0.1
Diacyclops thomasi	12.6	32	17.8	18.3	28.6	27	17.1	23.1	38.2	36.7	25.2
Mean total no./L	22.5		18.3		28.1		20.2		37.5		25.3

Table A3-75. Crustacean zooplankton species sampled in Granby Reservoir, 27 June 1992. Mean *Daphnia* density = 1.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.1	0.3	0.9	0.6	0.8	2.1	3.6	3.5	2.5	5.4	2
Daphnia g. mendotae	0.2	0.2	0.2	0.3	0.4	0.4	0.3	0.3	0.4	0.8	0.5
Daphnia pulicaria	0.1	0.2	0.1	<0.1	0.1	0.1	0.1	0.1	0.1		0.6
Diacyclops thomasi	38.9	49.9	35.1	26.2	33.5	47.1	45.5	44.9	31.4	48.8	40.1
Leptodiaptomus nudus			<0.1						<0.1	<0.1	<0.1
Mean total no./L	45.0		32.0		42.3		49.2		44.7		43.2

Table A3-76. Crustacean zooplankton species sampled in Granby Reservoir, 28 July 1992. Mean Daphnia density = 11.9/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.5	0.2	1.3	1.1	0.9	1.2	0.5	0.9	0.9	0.9	0.9
Daphnia g. mendotae	3.4	5.3	10.7	8.2	7.8	10	12.3	14	11.2	7.7	9.1
Daphnia pulicaria	1.5	2.3	1.2	2	1.4	3.1	1.2	1.2	1.8	1.6	2.8
Diacyclops thomasi	15.3	22.1	14.3	18.1	19	26.1	16.8	17.5	14.7	12.8	17.7
Leptodiaptomus nudus									<0.1		<0.1
Alona guttata				<0.1							<0.1
Mean total no./L	25.6		28.5		34.8		37.6		25.9		30.5

Table A3-77. Crustacean zooplankton species sampled in Granby Reservoir, 18 August 1992. Mean *Daphnia* density = 8.6/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.8	2	1	0.9	1.3	1.4	0.6	0.3	1.3	1.1	1.1
Daphnia g. mendotae	3.7	3.9	6	5.8	2.5	3.9	6	14.5	3.7	5	5.5
Daphnia pulicaria	3.1	2.4	3.5	3.3	2.3	2.2	2.1	6.6	1	2	3.1
Diacyclops thomasi	20.0	17.8	9.6	10.5	11.4	14.8	15.7	27.8	17.3	16.7	16.2
Leptodiaptomus nudus			<0.1								<0.1
Mean total no./L	26.9		21.3		19.9		36.8		24.1		25.8

Table A3-78. Crustacean zooplankton species sampled in Granby Reservoir, 29 August 1992. Mean *Daphnia* density = 4.8/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.1	0.2	0.2		0.2	0.4	0.3	0.2	0.6	0.1	0.2
Daphnia g. mendotae	1.5	1.3	2.3	2.6	1.5	2.2	2.7	1.8	3.5	2	2.1
Daphnia pulicaria	2.6	2.6	2.3	1.8	1.8	3.8	3.2	3.4	3	2.4	2.7
Diacyclops thomasi	7.4	5.2	4.6	5.9	5.6	8.4	9.3	11.4	12.8	7.7	7.8
Leptodiaptomus nudus				<0.1	<0.1				<0.1		<0.1
Mean total no./L	10.4		9.8		12.0		16.2		16.1		12.8

Table A3-79. Crustacean zooplankton species sampled in Granby Reservoir, 15 September 1992. Mean *Daphnia* density = 4.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris		<0.1		<0.1	0.1	<0.1		0.1	<0.1	0.1	<0.1
Daphnia g. mendotae	1.6	0.9	1.8	2.1	3.9	1.9	0.3	0.7	0.6	0.7	1.3
Daphnia pulicaria	2.2	1.6	3.3	3.9	6.2	2.7	2.5	2.4	2.2	1.2	2.8
Diacyclops thomasi	3.5	4.6	7.6	7.3	9.1	8.8	8.9	7.7	9.3	9.2	7.6
Leptodiaptomus nudus			<0.1	<0.1		<0.1			<0.1		<0.1
Mean total no./L	7.2		13.4		16.5		11.3		11.1		11.8

Table A3-80. Crustacean zooplankton species sampled in Granby Reservoir, 12 October 1992. Mean *Daphnia* density = 4.5/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris				0.1			<0.1	<0.1	<0.1		<0.1
Daphnia g. mendotae	0.2	0.3	1.1	1.6	0.6	1	0.4	0.1	0.1	0.2	0.6
Daphnia pulicaria	0.7	0.7	4.9	5.8	9.5	7.2	0.1	3.2	3.6	3.8	3.9
Diacyclops thomasi	1.6	1.5	0.9	0.9	1.4	2	1.3	0.8	0.6	0.5	1.2
Leptodiaptomus nudus		<0.1	0.1	0.2			<0.1	<0.1	0.1	<0.1	<0.1
Mean total no./L	25.0		19.4		20.5		18.6		18.4		5.7

Table A3-81. Crustacean zooplankton species sampled in Granby Reservoir, 16 June 1993. Mean *Daphnia* density = 0.0/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris		<0.1			76	108.6					<0.1
Diacyclops thomasi	7.5	15.3	76	91.9			39.4	43.9	61.8	75.6	59.6
Leptodiaptomus nudus				0.1							<0.1
Mean total no./L	11.4		84.0		92.3		41.7		68.7		59.6

Table A3-82. Crustacean zooplankton species sampled in Granby Reservoir, 9 July 1993. Mean *Daphnia* density = 0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	<0.1	<0.1	0.1				0.2		0.1		<0.1
Daphnia g. mendotae	0.2	0.1	0.3	0.1	0.1		0.1	<0.1	0.1		0.1
Daphnia pulicaria	0.1	<0.1		<0.1						<0.1	<0.1
Diacyclops thomasi	30.1	34.5	41.6	38.8	58.8	38.6	45.2	26.4	25.2	27.8	33.6
Mean total no./L	32.5		40.5		48.8		36.0		26.6		33.7

Table A3-83. Crustacean zooplankton species sampled in Granby Reservoir, 4 August 1993. Mean *Daphnia* density = 2.4/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.3	0.1	0.5	0.7	1.6	1	0.1	0.8	0.2	1.4	0.7
Daphnia g. mendotae	0.8	0.8	0.3	0.4	2.9	5.3	1.6	2.1	2	4.7	2.1
Daphnia pulicaria	0.3	0.1	0.2	0.1	0.1	0.5	0.5	0.6	0.2	0.1	0.3
Diacyclops thomasi	41.1	50.2	26.9	28.4	28.4	28.6	33.6	38.4	33.4	35.9	34.5
Leptodiaptomus nudus	<0.1				0.1						<0.1
Mean total no./L	46.9		28.8		34.3		38.9		39.0		37.6

Table A3-84. Crustacean zooplankton species sampled in Granby Reservoir, 27 August 1993. Mean *Daphnia* density = 8.0/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.3	0.4	1.0	1.0	1.1	0.3	0.7	0.7	0.7	0.5	0.7
Daphnia g. mendotae	5.2	5.3	7.5	3.6	8.5	6.8	7.1	7.2	14.6	7.5	7.3
Daphnia pulicaria	0.6	0.9	0.3	0.3	0.5	0.9	0.8	0.9	1.5	0.3	0.7
Diacyclops thomasi	14.9	12.7	12.9	9.1	11.8	20.7	10.4	10.6	20.1	12.6	13.6
Diaphanosoma birgei	0.2	0.3			0.1	0.1	0.1	0.1			0.1
Mean total no./L	20.4		17.9		25.4		19.3		28.9		22.4

Table A3-85. Crustacean zooplankton species sampled in Granby Reservoir, 30 September 1993. Mean *Daphnia* density = 1.0/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	<0.1	<0.1	0.1	0.1	**Weather precluded sampling at this station**			<0.1	0.2	0.2	0.1
Daphnia g. mendotae	1	1.3	0.4	0.3			0.7	0.2	0.8	0.7	0.7
Daphnia pulicaria	0.1	0.1	0.2	0.3			0.4	0.2	0.5	0.7	0.3
Diacyclops thomasi	6.1	11.6	9.7	9.7			11.6	7.8	9.7	9.1	9.4
Leptodiaptomus nudus	0.1		0.1								<0.1
Mean total no./L	10.2		10.5				10.5		11.0		10.5

Table A3-86. Crustacean zooplankton species sampled in Granby Reservoir, 26 May 1994, Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	2.4	1.4	0.4	0.6	1.8	0.5	2.0	1.4	0.4	0.2	1.1
Daphnia g. mendotae				<0.1		<0.1					<0.1
Daphnia pulicaria		<0.1						0.1		0.3	
Diacyclops thomasi	17.0	20.3	5.7	6.0	14.1	9.8	26.9	20.6	3.8	2.0	11
Leptodiaptomus nudus		<0.1									<0.1
Mean total no./L	12.1		6.4		13.2		25.5		3.2		12.1

Table A3-87. Crustacean zooplankton species sampled in Granby Reservoir, 6 July 1994. Mean *Daphnia* density = 0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.3	0.4	2.2	0.7	4.6	2	3.4	2.5	2.9	1.8	2.1
Daphnia g. mendotae	0.1	0.2		0.1	0.1	0.2	0.1		0.2		0.1
Daphnia pulicaria		0.1	0.1		0.1						<0.1
Diacyclops thomasi	17.2	20.7	23.6	19.7	31.7	14	22.8	30.2	27.3	24.1	23.2
Leptodiaptomus nudus								0.1			<0.1
Mean total no./L	19.7		23.4		26.5		29.7		28.3		25.6

Table A3-88. Crustacean zooplankton species sampled in Granby Reservoir, 17 August 1994. Mean *Daphnia* density = 6.3/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.9	0.8	1.6	1.9	1.9	0.9	1.0	0.8	0.3	0.3	1
Daphnia g. mendotae	4.2	5.7	5.2	7	5.8	5.5	9.1	8.1	4.9	5.6	6.1
Daphnia pulicaria	0.2	0.2	0.1	0.3	0.3		0.1	0.1	0.1	0.1	0.2
Diacyclops thomasi	11.8	7.7	12.5	9.2	13.2	12	14.1	11.2	7.2	7.1	10.6
Leptodiaptomus nudus	0.2	0.1				0.1				0.1	<0.1
Mean total no./L	16.1		19.0		20.1		22.3		13.0		17.9

Table A3-89. Crustacean zooplankton species sampled in Granby Reservoir, 6 July 1995. Mean Daphnia density = <0.0/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Diacyclops thomasi	16.1	19.7	12.9	13.2	13.7	19.7	22.9	28.7	26.3	35	20.8
Mean total no./L	17.9		13.1		16.7		25.8		30.7		20.8

Table A3-90. Crustacean zooplankton species sampled in Granby Reservoir, 3 August 1995. Mean *Daphnia* density = 0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	1.0		1.5	1.7	0.3	0.5	0.1	0.3	0.1	0.1	0.6
Daphnia g. mendotae						0.1			0.1	0.1	0.1
Diacyclops thomasi	38.1	23.4	12.2	18	27.3	21.2	30.5	20.6	23.8	27.8	24.3
Mean total no./L	31.8		16.7		24.8		25.7		26.0		25.0

Table A3-91. Crustacean zooplankton species sampled in Granby Reservoir, 26 August 1995. Mean *Daphnia* density = 1.3/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.2	0.4	0.9	3.1	0.3	1.2	0.4	0.9	1.4	1.3	1.0
Daphnia g. mendotae	0.3	0.2	0.5	1.0	1.7	2.2		0.3	1.2	0.5	0.9
Daphnia pulicaria	0.2				0.6						0.4
Diacyclops thomasi	36.1	62.6	31.6	39	19.6	42.7	28.5	49.7	32.3	43.4	38.5
Ceriodaphnia spp.							0.1		0.2		0.2
Mean total no./L	50.0		38.1		34.4		40.1		40.2		41.0

Table A3-92. Crustacean zooplankton species sampled in Granby Reservoir, 29 September 1995. Mean *Daphnia* density = 2.9/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris					0.3	0.3	0.4	0.1		0.5	0.2
Daphnia g. mendotae	0.3		13.8	13.3					0.5	1.4	2.9
Daphnia pulicaria			0.5								<0.1
Diacyclops thomasi	12.5	14.8	52.7	45.2	19.5	29.3	17.7	36.4	24.2	34.9	28.7
Leptodiaptomus nudus				0.2						0.2	0.2
Mean total no./L	13.9		63.0		24.7		27.3		31.2		35.5

Table A3-93. Crustacean zooplankton species sampled in Granby Reservoir, 20 June 1996. Mean *Daphnia* density = <0.0/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Diacyclops thomasi	4.1	4.8	8.1	8.4	4.4	5.8	6.4	5.1	10.1	11.5	6.9
Mean total no./L	4.5		8.3		5.1		5.8		10.8		6.9

Table A3-94. Crustacean zooplankton species sampled in Granby Reservoir, 18 July 1996. Mean *Daphnia* density = 0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris		0.1				0.1	0.1		0.1	0.3	<0.1
Daphnia g. mendotae	0.4	0.1			0.1	0.1					<0.1
Daphnia pulicaria	0.4							0.4			0.1
Diacyclops thomasi	47.2	37.2	47.6	32.5	20.6	23.7	20.0	16.3	39.6	20.3	30.5
Leptodiaptomus nudus	0.4	0.3									0.1
Mean total no./L	43.1		40.1		22.3		18.4		30.2		30.8

Table A3-95. Crustacean zooplankton species sampled in Granby Reservoir, 2 August 1996. Mean *Daphnia* density = 0.5/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.1			0.1		0.1			0.3		<0.1
Daphnia g. mendotae	0.1		0.1		0.6	0.4	0.1	0.2	1.5	1.8	0.5
Daphnia pulicaria	0.2								0.1		<0.1
Diacyclops thomasi	43.3	22.9	51	42.2	61.8	34.4	68.2	45.5	46.1	44.3	46
Leptodiaptomus nudus										0.1	<0.1
Mean total no./L	33.3		46.7		48.7		57.0		48.0		46.7

Table A3-96. Crustacean zooplankton species sampled in Granby Reservoir, 23 August 1996. Mean *Daphnia* density = 0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris										0.2	<0.1
Daphnia pulicaria		0.2		0.3		0.1	0.2	0.4			0.1
Diacyclops thomasi	115.9	104.9	58.1	50.4	62.3	80.8	85.3	95.3	55.9	73.4	78.3
Leptodiaptomus nudus							0.2				<0.1
Mean total no./L	110.5		54.4		71.6		90.7		64.8		78.4

Table A3-97. Crustacean zooplankton species sampled in Granby Reservoir, 14 September 1996. Mean *Daphnia* density = 0.0/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Diacyclops thomasi	92.9	65.2	65.4	43	76.9	78.1	50.4	56.6	66.2	57.2	65.2
Leptodiaptomus nudus					0.2	0.2					<0.1
Mean total no./L	79.1		54.2		77.7		53.5		61.7		65.2

Table A3-98 Crustacean zooplankton species sampled in Granby Reservoir, 18 July 1997. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris		<0.1	0.5	0.2	1.3	1.2	0.2	0.1	0.1	0.2	0.4
Daphnia g. mendotae					<0.1			<0.1	<0.1	<0.1	<0.1
Diacyclops thomasi	9.8	17.1	20.6	12.4	19.1	11.9	10.7	16.4	12.1	19.7	15
Mean total no./L	13.5		16.9		16.8		13.7		16.1		15.4

Table A3-99. Crustacean zooplankton species sampled in Granby Reservoir, 27 September 1997. Mean *Daphnia* density = 0.3/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.7	0.1	0.4	1.3	0.8	1.1	0.2	<0.1	1.1	0.9	0.7
Daphnia g. mendotae	0.2	0.1	0.4	0.7	0.3	0.4	0.1	0.1	0.3	0.2	0.3
Daphnia pulicaria			0.1								<0.1
Diaphanosoma birgei	0.1	0.3	0.2	1.2	1.0	0.9	0.3	0.3	0.3	0.1	0.5
Diacyclops thomasi	10.8	7.4	42	25.3	14.1	21.6	15.6	10.4	15.3	9.6	17.2
Leptodiaptomus nudus				0.1							<0.1
Mean total no./L	9.9		35.9		20.1		13.5		14.0		18.7

Table A3-100. Crustacean zooplankton species sampled in Granby Reservoir, 14 July 1998. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	1.1	1.2	2.4	0.8	4.8	3.2	3.2	4.9	2.2	3.8	2.8
Daphnia g. mendotae	<0.1	<0.1	0.1	<0.1	<0.1	0.1	<0.1	0.2	0.1		<0.1
Daphnia pulicaria				<0.1							<0.1
Diacyclops thomasi	21.3	49.5	33.6	19.2	26.7	33.1	25.6	30.5	16.3	30.4	28.6
Leptodiaptomus sp.		<0.1									<0.1
Mean total no./L	36.6		28		33.9		32.2		26.4		31.4

Table A3-101. Crustacean zooplankton species sampled in Granby Reservoir, 11 August 1998. Mean *Daphnia* density = 11.5/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris				<0.1	0.1	<0.1	**Sample dried and could not be processed**	<0.1	0.2	0.1	<0.1
Ceriodaphnia spp.			0.7	<0.1	0.2	0.1					0.1
Daphnia g. mendotae	15.1	13.7	10.6	13.2	18.8	12.1		6.8	8.7	8.7	11.5
Daphnia longiremis				0.2							<0.1
Daphnia pulicaria				0.2	0.2						<0.1
Leptodora kindtii			0.3		0.1	<0.1		<0.1			<0.1
Diacyclops thomasi	6.1	18.3	9.2	10.4	12.2	10.0		13.5	25.3	36.0	15.5
Leptodiaptomus sp.	<0.1										
Mean total no./L	26.6		22.4		26.9		20.3		39.5		27.1

Table A3-102. Crustacean zooplankton species sampled in Granby Reservoir, 19 September 1998. Mean *Daphnia* density = 6.5/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia g. mendotae	5.2	7.3	5.6	6.1	2.6	2.3	10.3	7.9	9.3	7.3	6.4
Daphnia pulicaria		0.1	0.1	0.2		<0.1	0.2	<0.1	0.1	0.1	0.1
Diacyclops thomasi	13.8	21.7	13	12.4	20.1	17.8	18.1	17.6	11	10.7	15.7
Leptodiaptomus sp.			<0.1	0.1							<0.1
Mean total no./L	24.1		18.8		21.4		27.1		19.7		22.2

Table A3-103. Crustacean zooplankton species sampled in Granby Reservoir, 7 July 1999. Mean *Daphnia* density = 0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.2			0.1		0.1				<0.1	< 0.1
Daphnia g. mendotae	0.5								0.3		0.1
Daphnia pulicaria									0.2		<0.1
Diacyclops thomasi	35.4	39.1	33.2	44.8	39.5	30.2	30.4	27.7	35	39.1	35.5
Leptodiaptomus spp.				0.1							<0.1
Mean total no./L	37.6		39.1		34.9		29.1		37.3		35.6

Table A3-104. Crustacean zooplankton species sampled in Granby Reservoir, 3 August 1999. Mean *Daphnia* density = 3.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.1		1.7			0.2			0.3		0.1
Ceriodaphnia spp.	0.1						0.1				<0.1
Diaphanosoma spp.			0.5		0.1	0.1		0.1		0.1	0.1
Daphnia g. mendotae	2.2	0.9	2.7	1.8	2.8	4.2	1.8	1.2	4.1	2.9	2.5
Daphnia pulicaria	0.1	0.4	0.3	0.7	0.9	1.2	0.7	0.5	0.3	0.2	0.6
Diacyclops thomasi	59.5	57.1	71.2	91.7	46.9	66.7	67.8	80.7	66.7	55.6	66.4
Mean total no./L	60.2		85.3		61.6		76.5		65.1		69.7

Table A3-105. Crustacean zooplankton species sampled in Granby Reservoir, 10 September 1999. Mean *Daphnia* density = 4.0/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.1	0.3		0.6	1.4			0.1	0.1		0.3
Ceriodaphnia spp.				0.3							<0.1
Diaphanosoma spp.	0.3	0.4	0.4	0.3	0.2	0.2	0.4	0.4	1.5	1.3	0.5
Daphnia g. mendotae	1.2	0.9	1.4	2.1	0.4	0.2	0.3	1	2.2	2.5	1.2
Daphnia pulicaria	2.5	2.5	4.5	3.9	0.9	1.3	3.2	3.1	1.5	1.7	2.8
Diacyclops thomasi	33.1	36.5	21.6	26.1	13	16.3	37.6	38.7	24.6	28.7	27.6
Leptodiaptomus spp.						0.2	0.2		0.1	0.1	<0.1
Mean total no./L	38.9		30.6		17.1		42.5		32.2		32.4

Table A3-106. Crustacean zooplankton species sampled in Granby Reservoir, 13 July 2000. Mean *Daphnia* density = 1.7/L.

Zooplankton Species	Station 1			Station 2			Station 3			Station 4			Station 5			Wtd. Mean no./L
	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	
Bosmina longirostris				14.4	0.3	5.0	0.3	0.3	0.3	0.3	0.1	0.2				1.8
Diacyclops thomasi				25.9	14.0	17.9	42.3	33.2	36.2	45.8	43.5	44.3				32.8
Daphnia g. mendotae	**No samples**			14.4	0.0	4.8	0.1	0.0	<0.1	0.0	0.0	0.0	**No samples**			1.6
Daphnia pulicaria	**to process**			0.0	0.3	0.2	0.0	0.0	0.0	0.0	0.1	0.1	**to process**			0.1
Leptpdiaptomus nudus				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
Diaphanosoma birgei				0.0	0.1	0.1	0.1	0.0	<0.1	0.0	0.0	0.0				<0.1
Mean total no./L	0.0			28.0			36.7			44.6			0.0			36.4

Table A3-107. Crustacean zooplankton species sampled in Granby Reservoir, 26 July 2000. Mean *Daphnia* density = 0.9/L.

Zooplankton Species	Station 1			Station 2			Station 3			Station 4			Station 5			Wtd. Mean no./L
	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	
Bosmina longirostris	0.0	0.0	0.0	0.3	0.1	0.2	1.5	0.4	0.8	0.8	0.5	0.6	5.4	6.7	6.3	1.6
Diacyclops thomasi	52.8	43.9	46.8	33.7	30.2	31.3	26.0	38.0	34.0	30.6	37.6	35.2	27.7	35.5	32.8	36.0
Daphnia g. mendotae	0.1	0.1	0.1	0.3	0.3	0.3	0.4	0.2	0.2	0.3	0.3	0.3	1.5	1.5	1.5	0.5
Daphnia pulicaria	0.4	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.6	0.1	0.3	1.3	1.3	1.3	0.4
Leptpdiaptomus nudus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.2	1.2	1.2	0.3
Diaphanosoma birgei	0.1	0.0	<0.1	0.5	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Mean total no./L	47.1			32.2			35.2			36.5			43.2			38.8

Table A3-108. Crustacean zooplankton species sampled in Granby Reservoir, 26 August 2000. Mean *Daphnia* density = 5.5/L.

Zooplankton Species	Station 1			Station 2			Station 3			Station 4			Station 5			Wtd. Mean no./L
	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	(0-5m)	(0-10m)	Wtd.	
Bosmina longirostris	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<0.1
Diacyclops thomasi	11.7	10.7	11.2	4.7	5.8	5.3	14.0	12.6	13.3	12.4	13.3	12.9	11.0	11.7	11.4	10.8
Daphnia g. mendotae	2.1	0.4	1.3	1.6	2.9	2.3	3.4	3.2	3.3	0.4	0.6	0.5	3.3	4.2	3.8	2.2
Daphnia pulicaria	2.6	3.2	2.9	0.3	1.0	0.7	2.7	2.6	2.7	1.4	1.5	1.5	7.4	4.4	5.9	2.7
Leptpdiaptomus nudus	0.3	0.0	0.3	0.1	0.2	0.2	0.2	0.1	0.2	0.0	0.2	0.2	0.2	0.4	0.3	0.2
Diaphanosoma birgei	11.7	8.1	9.9	4.3	4.4	4.4	8.5	13.1	10.8	7.1	5.3	6.2	7.4	5.2	6.3	7.5
Mean total no./L	25.6			13.0			30.3			21.3			27.7			23.6

Table A3-109. Crustacean zooplankton species sampled in Granby Reservoir, 6 September 2000. Mean *Daphnia* density = 3.4/L.

Zooplankton Species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Wtd. Mean no./L
	a	b	Wtd.	a	b	Wtd.	a	b	Wtd.	a	b	Wtd.	a	b	Wtd.	
Diacyclops thomasi	13.2	24.2	18.7	14.5	14.4	14.5	14.8	15.4	15.1	15.0	17.3	16.2	11.3	15.8	13.6	15.6
Daphnia g. mendotae	0.4	0.4	0.4	0.4	0.8	0.6	0.0	0.3	0.2	0.2	0.1	0.2	1.0	1.0	1.0	0.5
Daphnia pulicaria	0.4	0.2	0.3	4.6	6.3	5.5	1.7	2.2	2.0	1.3	1.8	1.6	6.4	4.3	5.4	2.9
Leptpdiaptomus nudus	0.2	0.1	0.2	0.2	0.5	0.4	0.5	0.3	0.4	0.1	0.3	0.2	0.0	0.6	0.3	0.3
Diaphanasoma birgei	1.4	2.3	1.9	5.2	5.5	5.4	2.6	2.3	2.5	1.4	2.3	1.9	1.3	3.5	2.4	2.8
Mean total no./L	21.5			26.4			20.2			20.1			22.7			22.2

Table A3-110. Crustacean zooplankton species sampled in Granby Reservoir, 19 June 2001. Mean *Daphnia* density = 0.0/L.

Zooplankton Species	Station 1 (10m)			Station 2 (10m)			Station 3 (10m)			Station 4 (10m)			Station 5 (10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.2	0.0
Diacyclops thomasi	29.2	30.0	29.6	14.2	14.7	14.5	49.7	21.3	35.5	25.7	31.3	28.5	24.8	30.1	27.5	27.1
Leptodiaptomus nudus	0.0	0.0	0.0	0.4	0.6	0.5	1.2	0.0	0.6	0.0	0.4	0.2	1.5	0.8	1.2	0.5
Mean total no./L	29.6			15.0			36.1			28.7			28.8			27.7

Table A3-111. Crustacean zooplankton species sampled in Granby Reservoir, 1 August 2001. Mean *Daphnia* density = 0.1/L.

Zooplankton Species	Station 1 (10m)			Station 2 (10m)			Station 3 (10m)			Station 4 (10m)			Station 5 (10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.8	0.6	0.7	0.5	0.8	0.7	0.6	0.5	0.6	0.8	1.0	0.9	0.4	0.8	0.6	0.7
Diacyclops thomasi	18.2	5.9	12.1	10.3	15.3	12.8	10.8	10.0	10.4	17.5	14.4	16.0	14.7	11.4	13.0	12.9
Daphnia g. mendotae	0.6	0.0	0.3	0.0	0.6	0.3	0.2	0.0	0.1	0.0	0.3	0.1	0.0	0.0	0.0	0.1
Daphnia pulicaria	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leptodiaptomus nudus	26.7	17.5	22.1	15.8	15.9	15.9	18.5	19.5	19.0	21.0	23.1	22.1	16.8	17.6	17.2	19.3
Diaphanosoma birgei	1.4	1.0	1.2	5.5	3.1	4.3	6.7	6.4	6.6	8.1	12.3	10.2	5.1	6.7	5.9	5.6
Mean total no./L	36.4			34.1			36.7			49.3			36.8			38.6

Table A3-112. Crustacean zooplankton species sampled in Granby Reservoir, 11 and 12 June 2002. Mean *Daphnia* density = >0.1/L.

Zooplankton species	Station1 (0-5m)				Station2 (0-5m)				Station3 (0-10m)				Station4 (0-10m)				Station5 (0-10m)				Mean no./L	Wtd. Mean/L
	a	b	mean	wtd.	a	b	mean	wtd.	a	b	mean	wtd.	a	b	mean	wtd.	a	b	mean	wtd.		
Bosmina longirostris	0.1	0.1	0.1	>0.1	0.2	0.0	0.1	>0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.3	0.1	0.1	>0.1
Diacyclops thomasi	22.8	30.3	26.6	3.3	18.0	12.7	15.4	2.0	19.9	16.7	18.3	4.6	26.4	19.7	23.1	5.8	30.5	57.8	44.2	11.1	25.5	5.4
Diaphanosoma birgei	0.0	0.0	0.0	0.0	0.9	0.6	0.8	0.1	0.1	0.0	0.1	>0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	>0.1
Daphnia mendotae	0.5	0.7	0.6	>0.1	0.4	0.1	0.1	>0.1	0.1	0.1	0.1	>0.1	0.0	0.1	0.1	>0.1	0.2	0.2	0.2	0.1	>0.1	>0.1
Daphnia pulicaria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	>0.1	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.1	0.1	>0.1
Leptpdiaptomus nudus	0.4	0.0	0.2	>0.1	0.2	1.5	0.9	0.1	0.7	0.1	0.4	0.1	0.7	0.7	0.7	0.2	0.4	2.9	1.7	0.4	0.8	0.2
Mean total no./L	27.5			3.4	17.3			2.2	19.0			4.8	23.9			6.0	46.6			11.7	26.9	5.6

Table A3-113. Crustacean zooplankton species sampled in Granby Reservoir, 19 June 2002. Mean *Daphnia* density = 0.0/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.0	0.0	0.0	0.1	0.1	0.1	**Station not sampled**			**Station not sampled**			**Station not sampled**			0.1
Diacyclops thomasi	25.0	58.8	42.0	36.2	26.6	31.4										36.7
Leptpdiaptomus nudus	0.3	0.3	0.3	1.4	1.5	1.5										0.9
Mean total no./L	42.0			31.5												36.8

Table A3-114. Crustacean zooplankton species sampled in Granby Reservoir, 25 July 2002. Mean *Daphnia* density = 3.4/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	3.3	4.6	4.0	3.9	2.6	3.3	8.0	4.5	6.3	16.2	16.2	16.2	11.5	10.8	11.2	8.2
Diacyclops thomasi	22.1	21.0	21.6	26.9	31.3	29.1	32.1	23.7	27.9	27.9	35.6	31.8	20.6	22.3	21.5	26.4
Diaphanosoma birgei	0.5	0.7	0.6	0.0	0.2	0.1	1.2	1.2	1.2	2.7	5.5	4.1	4.2	4.7	4.5	2.1
Daphnia mendotae	1.4	1.4	1.4	1.0	0.6	0.8	4.0	2.0	3.0	4.9	5.2	5.1	4.9	6.4	5.7	3.2
Daphnia pulicaria	0.7	0.1	0.4	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.6	0.2	0.4	0.2
Leptpdiaptomus nudus	10.3	10.6	10.5	2.8	3.6	3.2	3.4	2.3	2.9	9.0	10.4	9.7	2.3	3.8	3.1	5.9
Mean total no./L	38.5			36.5			41.4			66.9			46.4			45.9

Table A3-115. Crustacean zooplankton species sampled in Granby Reservoir, 12 September 2002. Mean *Daphnia* density = 7.4/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Diacyclops thomasi	7.2	8.4	7.8							12.7	9.5	11.1				9.5
Diaphanosoma birgei	0.4	0.8	0.6							0.3	0.7	0.5				0.6
Daphnia mendotae	2.0	1.8	1.9							0.2	1.0	0.6				1.3
Daphnia pulicaria	6.3	9.5	7.9	**Station not sampled**			**Station not sampled**			4.5	4.0	4.3	**Station not sampled**			6.1
Leptpdiaptomus nudus	0.0	0.0	0.0							0.2	0.0	0.1				0.1
Leptodora kindtii	0.0	0.0	0.0							0.0	0.2	0.1				0.1
Mean total no./L	18.2									16.6						17.4

Table A3-116. Crustacean zooplankton species sampled in Granby Reservoir, 25 and 26 June 2003. Mean *Daphnia* density = 17.7/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.0	0.0	0.0	0.1
Unident. *Daphnia spp.*	6.0	1.2	3.6	6.8	1.0	3.9	1.9	1.7	1.8	2.1	1.4	1.7	1.9	3.2	2.6	2.7
Daphnia mendotae	0.3	0.0	0.2	0.4	0.2	0.3	0.0	0.2	0.1	0.0	0.0	0.0	0.8	0.0	0.4	0.2
Daphnia pulicaria	14.4	16.0	15.2	9.6	11.0	10.3	14.3	17.2	15.8	22.2	16.2	19.2	16.1	10.6	13.4	14.8
Diacyclops thomasi	11.2	9.3	10.3	26.4	29.4	27.9	36.2	32.6	34.4	29.4	21.9	25.7	31.8	29.7	30.8	25.8
Leptodiaptomus nudus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.0	0.4	0.2	0.1
Mean total no./L	29.3			42.4			52.1			47.0			47.2			43.6

Table A3-117. Crustacean zooplankton species sampled in Granby Reservoir, 19 August 2003. Mean *Daphnia* density = 3.6/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chydorus sphaericus	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Unident. *Daphnia spp.*	1.7	1.5	1.6	3.2	1.5	2.4	1.2	1.2	1.2	2.0	1.7	1.9	1.5	2.3	1.9	1.8
Daphnia longiremis	0.3	0.1	0.2	0.0	0.2	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2
Daphnia mendotae	0.1	0.1	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Daphnia pulicaria	0.6	1.3	1.0	0.9	1.8	1.3	1.0	1.1	1.0	2.5	2.4	2.4	2.1	2.5	2.3	1.6
Diacyclops thomasi	5.8	7.5	6.7	2.7	3.6	3.2	6.7	9.4	8.0	9.2	7.1	8.2	7.3	5.2	6.3	6.5
Leptodiaptomus nudus	12.3	10.6	11.5	16.3	7.2	11.7	3.0	4.1	3.6	7.9	5.0	6.5	3.3	3.9	3.6	7.4
Leptodora kindtii	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mean total no./L	20.9			18.9			14.0			19.1			14.3			17.4

Table A3-118. Crustacean zooplankton species sampled in Granby Reservoir, 17 August 2004. Mean *Daphnia* density = 8.2/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Diacyclops thomasi	8.6	27.7	18.2	9.6	10.6	10.1	11.7	8.6	10.2	18.4	6.8	12.6	12.7	14.3	13.5	12.9
Unident. *Daphnia spp.*	0.4	0.6	0.5	0.9	0.5	0.7	0	0.7	0.3	0	0.5	0.2	0.9	0.9	0.9	0.5
Daphnia g. mendotae	0.4	1.9	1.2	1.9	1.3	1.6	1.7	0.4	1	4.3	1.3	2.8	0.7	0	0.4	1.4
Daphnia pulicaria	4.8	7	5.9	6.6	4.6	5.6	4.7	7.1	5.9	10.4	9.9	10.2	4.7	3	3.9	6.3
Leptodiaptomus nudus	2.5	5.7	4.1	5.5	2.4	4	2.3	3.2	2.8	4.8	1.5	3.2	4.5	4.9	4.7	3.7
Mean total no./L	29.8			21.9			20.2			28.9			23.3			24.8

Table A3-119. Crustacean zooplankton species sampled in Granby Reservoir, 30 June 2005. Mean *Daphnia* density = 0.2/L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0	0.3	0.1	0	0	0	0	0	0	0	0	0	0.6	0	0.3	0.1
Daphnia g. mendotae	0.2	0.3	0.3	0.3	0	0.1	0	0	0	0.4	0	0.2	0.3	0	0.2	0.1
Daphnia pulicaria	0.2	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0.1
Diacyclops thomasi	44	43.5	43.7	43.9	44	43.9	71.8	86.4	79.1	80.6	79.7	80.2	63.9	58.9	61.4	61.7
Leptodiaptomus nudus	0	0.5	0.3	0.6	0	0.3	0	0	0	0	0	0	0	0	0	0.1
Mean total no./L	44.6			44.4			79.1			80.3			61.9			62.1

Table A3-120. Crustacean zooplankton species sampled in Granby Reservoir, 27 July 2005. Mean *Daphnia* density = 16.6/L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0	0	0	3	5	4	0	1	0.5	0.4	0.4	0.4	0.5	0	0.2	1
Unident. *Daphnia spp.*	0	2	1	2.2	0.8	1.5	1	3.5	2.3	1.8	2	1.9	0.9	2.6	1.7	1.7
Daphnia g. mendotae	3.9	2	3	3.9	3.8	3.8	5.6	7.5	6.6	4.4	3.6	4	7.4	4.3	5.8	4.6
Daphnia pulicaria	6.1	19.8	13	5.6	5.4	5.5	4.6	11.4	8	10.5	9.1	9.8	24.5	6	15.3	10.3
Diacyclops thomasi	40.4	34.1	37.2	39.8	40.8	40.3	38.5	55.7	47.1	21.9	24.2	23.1	52.8	27.6	40.2	37.6
Leptodiaptomus nudus	0	3.6	1.8	2.2	5	3.6	8.2	7	7.6	6.1	6.3	6.2	5.1	6.3	5.7	5
Mean total no./L	56.0			58.8			72.0			45.4			69.0			60.2

Table A3-121. Crustacean zooplankton species sampled in Granby Reservoir, 27 June 2006. Mean *Daphnia* density = 0.9/L.

Zooplankton Species	Station #1 (0-10m)			Station #2 (0-10m)			Station #3 (0-10m)			Station #4 (0-10m)			Station #5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris		0.3	0.2					0.3	0.2	0.8		0.4	0.3	0.4	0.4	0.2
Unident. *Daphnia* spp.				0.2		0.2										0.2
Diacyclops thomasi	39.4	46.8	43.1	39.1	30.2	34.6	51	36.7	43.8	43	61.8	52.4	62.3	50.9	56.6	46.1
Daphnia g. mendotae	0.4		0.4													0.4
Daphnia pulicaria								0.3	0.3							0.3
Leptodiaptomus nudus	3.9	2.8	3.4	1.5	0.3	0.9	1	3	2	2.5	0.5	1.5	2.6	0.4	1.5	1.8
Mean total no./L	46.8			35.6			46.2			54.3			58.4			48.3

Table A3-122. Crustacean zooplankton species sampled in Granby Reservoir, 15 August 2006. Mean *Daphnia* density = 5.1/L.

Zooplankton Species	Station #1 (0-10m)			Station #2 (0-10m)			Station #3 (0-10m)			Station #4 (0-10m)			Station #5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris				0.2		0.1					1.3	0.6				0.1
Unident. *Daphnia* spp.		0.2	0.1	0.2	0.5	0.3	0.7	0.6	0.6	0.6	0.9	0.7	1.8	1.7	1.7	0.7
Diacyclops thomasi	12.7	17.2	15	12	14.9	13.4	13	21.3	17.2	21.9	17.9	19.9	21.6	19.8	20.7	17.2
Daphnia g. mendotae	0.5	1.8	1.1	1.3	1.2	1.2	0.9	0.8	0.9	0.9	0.9	0.9	2.2	1.9	2	1.2
Daphnia pulicaria	6.3	4.5	5.4	0.4	0.2	0.3	2.2	2.1	2.1	1.7	5.6	3.6	4.4	4.4	4.4	3.2
Daphnia rosea				0.2		0.1	0.2		0.1				0.4	0.2	0.3	0.1
Leptodiaptomus nudus	2.3	0.9	1.6		0.2	0.1	0.7	0.2	0.4		1.3	0.6	0.2	0.6	0.4	0.6
Mean total no./L	23.2			15.6			21.4			26.4			29.6			23.2

Table A3-123. Crustacean zooplankton species sampled in Granby Reservoir, 14 July 2007. Mean *Daphnia* density < 0.1/L.

Zooplankton Species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris				0.2		0.1	0.7	0.3	0.5	0.2		0.1	0.3	0.5	0.4	0.2
Diacyclops thomasi	51.8	73	62.4	43.4	31.9	37.7	65.1	43.5	54.3	18.1	72.8	45.5	40.9	31.5	36.2	47.2
Leptodiaptomus nudus	0.9	3.4	2.2	1.6	0.9	1.3	4.8	5.2	5	3.2	10.4	6.8	3.7	2.6	3.2	3.7
Daphnia g. mendotae											0.4	0.2				<0.1
Daphnia pulicaria										0.2		0.1				<0.1
Mean total no./L	64.6			39.1			59.8			52.7			39.8			51.1

Table A3-124. Crustacean zooplankton species sampled in Granby Reservoir, 10 June 2009. Mean *Daphnia* density = 0.0/L.

Zooplankton Species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Leptodiaptomus nudus	0.2	0.2	0.2	0.1	0.0	0.1	0.3	0.3	0.3	0.1	0.0	0.0	0.8	0.5	0.6	0.3
Diacyclops b. thomasi	4.1	2.9	3.5	4.5	7.8	6.1	15.8	12.8	14.3	7.6	15.2	11.4	33.3	29.3	31.3	13.3
Dapnia pulicaria	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mean total no./L	3.7			6.2			14.6			11.4			31.9			13.6

Table A3-125. Crustacean zooplankton species sampled in Granby Reservoir, 23 July 2009. Mean *Daphnia* density =0.5/L.

Zooplankton Species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Unidentified *Daphnia* spp.	0.2	0.3	0.3	0.0	0.0	0.0	0.3	0.0	0.1	0.3	0.3	0.3	0.8	0.4	0.6	0.3
Bosmina longirostris	1.0	1.3	1.2	0.4	0.0	0.2	0.3	0.0	0.1	0.0	0.0	0.0	0.2	0.6	0.4	0.4
Daphnia g. mendotae	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.1	0.0	0.8	0.4	0.1
Daphnia pulicaria	0.2	0.0	0.1	0.0	0.3	0.2	0.0	0.0	0.0	0.3	0.0	0.1	0.0	0.6	0.3	0.1
Diacyclops b. thomasi	39.9	33.9	36.9	42.5	41.6	42.0	19.2	46.9	33.1	47.9	56.5	52.2	22.9	31.7	27.3	38.3
Leptodiaptomus nudus	1.0	1.3	1.2	3.9	2.5	3.2	5.1	3.6	4.4	6.2	7.1	6.7	6.3	6.6	6.5	4.4
Mean total no./L	39.7			45.5			37.7			59.4			35.5			43.6

Table A3-126. Crustacean zooplankton species sampled in Granby Reservoir, 13 August 2009. Mean *Daphnia* density = 8.9/L.

Zooplankton Species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Unidentified *Daphnia* spp.	3.6	1.4	2.5		1.9	1.9	1.9	1.6	1.8	1.6	1.4	1.5	4.1	2.7	3.4	2.2
Bosmina longirostris	0.0	0.0	0.0		0.0	0.0	0.0	0.5	0.2	0.0	0.0	0.0	0.2	0.5	0.3	0.1
Daphnia g. mendotae	2.5	2.6	2.5		2.1	2.1	1.9	3.3	2.6	3.5	2.7	3.1	9.7	8.8	9.3	3.9
Daphnia pulicaria	2.5	1.6	2.0		2.7	2.7	1.7	1.6	1.6	2.1	0.9	1.5	6.4	5.9	6.2	2.8
Diacyclops thomasi	26.2	24.5	25.3		24.7	24.7	15.8	20.0	17.9	19.0	20.6	19.8	12.4	13.4	12.9	20.1
Leptodiaptomus nudus	1.6	1.2	1.4		0.4	0.4	1.2	1.2	1.2	1.2	2.5	1.8	2.3	14.3	8.3	2.6
Diaphanosoma brachyurum	0.9	0.5	0.7		3.1	3.1	2.1	1.9	2.0	2.1	1.8	2.0	3.9	5.4	4.7	2.5
Mean total no./L	34.4			34.9			27.3			29.7			45.1			34.3

Table A3-127. Crustacean zooplankton species sampled in Grand Lake, 30 June 2005. Mean *Daphnia* density = 0.0/L.

Zooplankton species	Station #1 (0-10m)			Station #2 (0-10m)			Station #3 (0-10m)			Station #4 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Diacyclops thomasi	2.3	3.6	3	2.4	2.5	2.5	2	4.8	3.4	4	4.9	4.4	3.3
Leptodiaptomus nudus							0.1						<0.1
Mean total no./L	3.0			2.5			3.4			4.4			3.3

Table A3-128. Crustacean zooplankton species sampled in Green Mountain Reservoir, 07 September 2005. Mean *Daphnia* density = 15.1/L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longiristris	0	0.7	0.4	0	0	0	0	3.1	1.6	0	0	0	0	0	0	0.4
Daphnia g. mendotae	0	1.1	0.6	0.2	1.3	0.8	0.9	1.5	1.2	1	0.4	0.7	0.8	0.5	0.7	0.8
Daphnia pulicaria	12.1	7.8	9.9	12.3	10.9	11.6	11.8	9.2	10.5	10.3	18.1	14.2	12.5	15.4	13.9	12
Unident. *Daphnia spp.*	0.3	0	0.2	2.6	4	3.3	3.9	2.5	3.2	1	1.8	1.4	3.5	3.1	3.3	2.3
Diacyclops thomasi	3.4	1.9	2.6	1.3	2.9	2.1	1.3	0.8	1.1	3.2	2	2.6	2.9	2.1	2.5	2.2
Leptodiaptomus nudus	13.8	0	6.9	9	8.5	8.8	8.3	7.1	7.7	6.9	11	8.9	7.7	3.1	5.4	7.5
Mean total no./L	20.6			26.6			25.3			27.9			25.9			25.2

Table A3-129. Crustacean zooplankton species sampled in Gross Reservoir, 16 September 1992. Mean *Daphnia* density = 2.3/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Mean no./L
	a	b	a	b	a	b	a	b	
Daphnia pulicaria	0.3	0.2	0.4	0.1	0.1	0.3	0.1	0.04	0.2
Daphnia g. mendotae	1.3	1.2	4.2	3.4	1.6	1.5	2.3	1.1	2.1
Bosmina longirostris	0.1	<0.1	<0.1			0.1	0.1	<0.1	0.1
Diacyclops thomasi	3.4	1.9	4.3	4	2.1	1.3	2	1.3	2.2
Leptodiaptomus nudus	<0.1	<0.1	0.1	0.3	0.1	0.1	<0.1	0.04	0.1
Skistodiaptomus oregonensis								<0.1	<0.1
Mean total no./L	3.3		7.9		3.6		3.6		4.7

Table A3-130. Crustacean zooplankton species sampled in Highline Lake, 8 July 1998. Mean *Daphnia* density = 16.3/L.

Zooplankton species	Station 1		
	a	b	mean
Bosmina longirostris	3.7	3.2	3.5
Daphnia g. mendotae	15.2	14.3	14.8
Ceriodaphnia spp.		0.1	<0.1
Diacyclops thomasi	19.6	14.9	17.3
Leptodiaptomus nudus	6.2	7.7	7
Unidentified *Daphnia spp.*	1.8	1.1	1.5
Mean total no./L	44.0		

Table A3-131. Crustacean zooplankton species sampled in Highline Lake, 13 May 1999. Mean weighted *Daphnia* density = 8.3/L.

Zooplankton species	Station 1 (0-6m)			Station 2 (0-10m)			Station 3 (0-4m)		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	6.3	2.1	4.2	4.6	3.8	4.2	83.7	76.4	80.1
Daphnia g. mendotae	2.3	1.3	1.8	1.9	1.2	1.55	26.7	31.7	29.2
Diacyclops thomasi	1.7	1.5	1.6	1.7	1.4	1.55	36	32.3	34.2
Daphnia pulicaria	0.4	0.3	0.35	0.1	0	0.05	6	5.2	5.1
Diaphanosoma birgei	0	0	0	0	0	0	0.3	0.3	0.3
Leptodiaptomus nudus	0.2	0	0.1	0.1	0.2	0.15	1.2	0.7	0.9
Mean total no./L	8.1			7.5			150.7		

Table A3-132. Crustacean zooplankton species sampled in Highline Lake, 18 May 1999. Mean weighted *Daphnia* density = 11.5/L.

Zooplankton species	Station 1 (0-6m)			Station 2 (0-10m)			Station 3 (0-4m)		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	7.1	4.7	10.4	13	12.8	12.9	75.1	108.8	92.0
Daphnia g. mendotae	9.2	5.7	7.45	6.8	8.2	7.5	27.1	26.6	26.9
Diacyclops thomasi	4.1	4.5	4.3	10	13.4	11.7	32.1	30.7	31.4
Daphnia pulicaria	0.9	0.2	0.55	0	0	0	0	0	0.0
Diaphanosoma birgei	0	0.9	0.45	0.1	0	0.05	0	0	0.0
Leptodiaptomus nudus	0.6	0.2	0.4	0	0.3	0.15	0.5	0	0.3
Ceriodaphnia quadrangula	1.2	1.1	1.15	0.3	0	0.15	0.9	0	0.5
Mean total no./L	24.7			32.5			150.9		

Table A3-133. Crustacean zooplankton species sampled in Highline Lake, 8 June 1999. Mean weighted *Daphnia* density = 12.6/L.

Zooplankton species	Station 1 (0-6m)			Station 2 (0-10m)			Station 3 (0-4m)		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	1.4	0.8	1.1	1.8	3.1	2.25	29.6	8	18.8
Daphnia g. mendotae	7.5	13.5	10.5	7.5	8	7.75	32.7	21.7	27.2
Diacyclops thomasi	6.9	7	6.85	5.3	8	6.65	32.4	12.6	22.5
Daphnia pulicaria	0.1	0	0.05	0.1	0.1	0.1	0	0.2	0.1
Diaphanosoma birgei	0.1	0.1	0.1	0	0.2	0.1	0	0	0
Leptodiaptomus nudus	1.6	2.3	1.85	1.6	1.5	1.55	3.5	1.1	2.3
Ceriodaphnia quadrangula	0.1	0.3	0.2	0	0.5	0.25	0.5	0.6	0.6
Mean total no./L	20.7			18.7			71.5		

Table A3-134. Crustacean zooplankton species sampled in Highline Lake, 15 June 1999. Mean weighted *Daphnia* density = 42.3/L.

Zooplankton species	Station 1 (0-6m)			Station 2 (0-10m)			Station 3 (0-4m)		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	34.8	36	35.4	13	8.3	10.7	35.7	70.6	53.2
Daphnia g. mendotae	44	53.2	48.6	20.7	18.4	18.6	90.7	93.8	92.3
Diacyclops thomasi	41.2	25.2	33.2	18.8	27.5	23.2	28.6	37.5	28.1
Diaphanosoma birgei	0	0	0	0	0	0	0	4.4	2.2
Leptodiaptomus nudus	4	0	2	3.9	6.8	5.4	2.1	0	1.1
Ceriodaphnia quadrangula	0	0	0	0	0	0	0	4.4	2.2
Mean total no./L	119.2			57.7			178.9		

Table A3-135. Crustacean zooplankton species sampled in Highline Lake, 23 June 1999. Mean weighted *Daphnia* density = 11.2/L.

Zooplankton species	Station 1 (0-6m)			Station 2 (0-10m)			Station 3 (0-4m)		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	10.2	2.1	6.2	2.9	**No data available**	2.9	7.1	21.4	14.3
Daphnia g. mendotae	6.9	2.1	4.5	7.8		7.8	25.5	33.2	29.4
Diacyclops thomasi	21.5	12.4	16.9	24.1		24.1	26.2	40.4	33.3
Diaphanosoma birgei	0	0	0	1.5		1.5	0.7	0	0.4
Leptodiaptomus nudus	2.1	6.5	4.3	10.6		10.6	1.7	10.7	6.2
Ceriodaphnia quadrangula	1.1	0.5	0.8	0		0	0.7	1.1	0.9
Mean total no./L	32.6			46.9			84.4		

Table A3-136. Crustacean zooplankton species sampled in Highline Lake, 29 June 1999. Mean weighted *Daphnia* density = 17.7/L.

Zooplankton species	Station 1 (0-6m)			Station 2 (0-10m)			Station 3 (0-4m)		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	2.6	0	1.3	0	7.2	3.6	7.1	10	6.7
Daphnia g. mendotae	21.4	11.9	16.7	10.1	15.9	13	35.7	25.3	30.5
Diacyclops thomasi	47.4	33.3	40.4	36.7	31.9	34.3	57.1	37.1	47.1
Daphnia pulicaria	0	0	0	0	0	0	1.1	0	0.6
Diaphanosoma birgei	0.6	0.7	0.7	0	0.4	0.2	4.6	0	2.3
Leptodiaptomus nudus	14	16.7	15.4	9.1	7.3	8.2	10.7	7.6	9.2
Ceriodaphnia quadrangula	0	1.7	0.9	0	0	0	2.5	4.1	3.3
Mean total no./L	75.2			59.3			99.6		

Table A3-137. Crustacean zooplankton species sampled in Highline Lake, 13 July 1999. Mean weighted *Daphnia* density = 3.3/L.

Zooplankton species	Station 1 (0-6m)			Station 2 (0-10m)			Station 3 (0-4m)		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	1.3	4.6	2.9	2.3	1.9	2.1	7.1	1.0	4.1
Daphnia g. mendotae	1.9	6.7	4.3	3.3	1.4	2.4	7.1	1.0	4.1
Diacyclops thomasi	12.8	28.8	20.8	17.8	11.6	14.7	23.9	9.6	16.8
Dunhevedia crassa	0	0.3	0.2	0	0	0.0	0.0	0.0	0.0
Diaphanosoma birgei	0	1.6	0.8	0	0	0.0	1.1	0.0	0.5
Leptodiaptomus nudus	4.8	17.3	6.1	11.6	3.3	7.5	9.6	7.1	8.4
Ceriodaphnia quadrangula	0.3	0.9	0.6	0.4	1.4	0.9	1.07	0	0.5
Mean total no./L	35.6			25.5			34.26		

Table A3-138. Crustacean zooplankton species sampled in Highline Lake, 28 July 1999. Mean weighted *Daphnia* density = 10.5/L.

Zooplankton species	Station 1 (0-6m)			Station 2 (0-10m)			Station 3 (0-4m)		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	13.1	14.7	13.9	13.5	4.3	8.4	9.6	52.5	26.1
Daphnia g. mendotae	5.5	13.9	8.7	15.7	10.1	12.9	9.6	1.4	5.5
Diacyclops thomasi	47.2	57.5	50.1	30.4	13.5	22.0	39.9	27.5	38.7
Daphnia pulicaria	0	0.8	0.4	0	1.0	0.5	3.6	1.1	2.4
Diaphanosoma birgei	3.6	1.9	2.8	1.4	1.9	1.7	7.1	1.1	4.1
Leptodiaptomus nudus	5.5	2.8	4.2	4.8	2.9	3.9	13.2	11.8	12.5
Ceriodaphnia quadrangula	15.8	13.1	14.5	31.9	14.1	23	45.4	72.5	59.0
Mean total no./L	94.5			72.3			148.2		

Table A3-139. Crustacean zooplankton species sampled in Highline Lake, 18 August 1999. Mean weighted *Daphnia* density = 17.7/L.

Zooplankton species	Station 1 (0-6m)			Station 2 (0-10m)			Station 3 (0-4m)		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	1.4	1.4	1.4	1	0.4	0.7	23.7	35.7	29.7
Daphnia g. mendotae	3.4	7.4	5.4	14.9	7.9	11.4	34.9	64.3	49.6
Diacyclops thomasi	26.6	24.6	25.6	19.6	14.5	17.1	31	41.8	36.4
Daphnia pulicaria	0.6	0.6	0.6	0.4	0	0.2	1.7	0	0.9
Diaphanosoma birgei	2	0	1	0	2.9	1.5	0	6.1	3.1
Leptodiaptomus nudus	0	5.4	2.7	3.9	1.9	2.9	2.4	11.9	7.2
Ceriodaphnia quadrangula	2	10	6	3.9	3.3	3.6	0	66.8	33.4
Mean total no./L	42.7			37.3			160.2		

Table A3-140. Crustacean zooplankton species sampled in Highline Lake, 7 September 1999. Mean weighted *Daphnia* density = 11.3/L.

Zooplankton species	Station 1 (0-6m)			Station 2 (0-10m)			Station 3 (0-4m)		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	1.3	0.6	0.95	1.5	1.1	1.3	4.2	3.2	3.7
Daphnia g. mendotae	12.2	3.5	7.85	5.2	8.5	6.85	17.3	28.4	22.9
Diacyclops thomasi	5.2	4.2	4.7	5.9	6.6	6.25	6.7	12.4	9.6
Daphnia pulicaria	3.1	0.7	1.9	1	0.4	0.7	0.2	0.2	0.2
Diaphanosoma birgei	2	0.4	1.2	1.2	0	0.6	0.4	0.4	0.4
Leptodiaptomus nudus	1.6	1.3	5.8	0.9	1.7	1.3	2.4	1.7	2.1
Ceriodaphnia quadrangula	1.3	1	1.15	0.8	2.6	1.7	2.9	2.8	2.9
Mean total no./L	23.6			18.7			41.6		

Table A3-141. Crustacean zooplankton species sampled in Highline Lake, 21 September 1999. Mean weighted *Daphnia* density = 17.3/L.

Zooplankton species	Station 1 (0-6m)			Station 2 (0-10m)			Station 3 (0-4m)		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	1.9	0.8	1.4	2.5	1.2	1.9	3.3	1.9	2.6
Daphnia g. mendotae	12.6	15.6	14.1	13.2	9.3	11.3	29	26.3	27.7
Diacyclops thomasi	4.8	6.1	4.0	7.1	5.7	12.8	16.5	7.3	23.8
Daphnia pulicaria	1.1	1.5	1.3	0.1	1.4	0.8	11.3	0.1	5.7
Diaphanosoma birgei	0	0	0.0	0.0	0.0	0.0	2.6	0.1	1.4
Leptodiaptomus nudus	1.1	1	1.1	1.0	1.4	1.2	1.7	1	1.4
Ceriodaphnia quadrangula	1.9	4.1	3	0.5	1.5	1	3.5	1.2	2.4
Mean total no./L	24.75			28.85			64.8		

Table A3-142. Crustacean zooplankton species sampled in Highline Lake, 16 May 2000. Mean wieghted *Daphnia* density = 32.3/L.

Zooplankton species	Station 1 (0-6 m) w=0.3			Station 2 (0-10 m) w=0.5			Station 2 (0-5 m)			Station 3 (0-4 m) w=0.2		
	a	b	mean	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	0.9	0.6	0.7	6.9		6.9	2.1		2.1	21.4	20.3	20.9
Diacyclops thomasi	3.0	3.0	3.0	26.3		26.3	11.8		11.8	30.7	54.6	42.7
Daphnia g. mendotae	4.4	1.4	2.9	38.3		38.3	12.7		12.7	48.3	74.0	61.2
Leptopdiaptomus nudus	0.2	0.4	0.3	0.8		0.8	0.1		0.1	1.3	1.7	1.5
Mean total no./L	6.9			72.3			26.8			126.2		

Table A3-143. Crustacean zooplankton species sampled in Highline Lake, 12 June 2000. Mean weighted *Daphnia* density = 19.6/L.

Zooplankton species	Station 1 (0-8 m) w=0.38			Station 2 (0-9 m) w=0.43			Station 3 (0-4 m) w=0.19		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	0.8	1.4	1.1	1.1	0.7	0.9	2.2	2.1	2.2
Diacyclops thomasi	24.3	36.0	30.2	30.0	21.0	25.5	67.7	58.6	63.2
Daphnia g. mendotae	11.9	19.0	15.5	15.3	13.7	14.5	57.3	20.5	38.9
Daphnia pulicaria	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Leptopdiaptomus nudus	1.4	2.6	2.0	1.3		1.3	6.5	3.9	5.2
Ceriodaphnia quadrangula	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mean total no./L	48.9			42.1			109.4		

Table A3-144. Crustacean zooplankton species sampled in Highline Lake, 6 July 2000. Mean weighted *Daphnia* density = 7.2 /L.

Zooplankton species	Station 1 (0-6 m) w=0.3			Station 2 (0-10 m) w=0.5			Station 3 (0-4 m) w=0.2		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	0.5	1.3	0.9	3.9	1.8	2.9	18.7	20.5	19.6
Diacyclops thomasi	14.4	13.3	13.9	16.6	14.7	15.7	31.0	38.0	34.5
Daphnia g. mendotae	2.4	4.3	3.4	5.6	5.6	5.6	14.2	8.5	11.4
Daphnia pulicaria	1.5	1.6	1.6	0.8	0.8	0.8	0.0	2.5	1.3
Leptopdiaptomus nudus	2.7	1.3	2.0	3.7	5.7	4.7	19.0	14.2	16.6
Ceriodaphnia quadrangula	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.6	1.0
Mean total no./L	21.6			29.5			84.3		

Table A3-145. Crustacean zooplankton species sampled in Highline Lake, 1 August 2000. Mean weighted *Daphnia* density = 8.8 /L.

Zooplankton species	Station 1 (0-8 m) w=0.38			Station 2 (0-9 m) w=0.43			Station 3 (0-4 m) w=0.19		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	1.6	1.8	1.7	0.5	0.5	0.5	0.8	1.1	0.9
Diacyclops thomasi	14.0	13.5	13.8	16.7	15.0	15.9	4.7	3.1	3.9
Daphnia g. mendotae	8.4	8.6	8.5	17.9	6.3	12.1	1.5	2.5	2.0
Diaphanosoma birgei	0.6	0.8	0.7	2.3	1.7	2.0	0.0	0.8	0.4
Leptopdiaptomus nudus	14.3	10.3	12.3	4.4	7.7	6.1	1.8	4.2	3.0
Dunhevedia crassa	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Ceriodaphnia quadrangula	19.3	18.2	18.8	16.7	22.4	19.6	22.3	25.2	23.8
Mean total no./L	55.8			56.1			34.0		

Table A3-146. Crustacean zooplankton species sampled in Highline Lake, 28 August 2000. Mean weighted *Daphnia* density = 3.8 /L.

Zooplankton species	Station 1 (0-6 m) w=0.3			Station 2 (0-10 m) w=0.5			Station 3 (0-4 m) w=0.2		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	2.7	3.4	3.1	4.3	6.8	5.5	5.5	8.9	7.2
Diacyclops thomasi	6.8	9.7	8.3	6.4	8.0	7.2	8.2	7.9	8.1
Daphnia g. mendotae	1.6	3.7	2.7	2.4	3.7	3.0	5.9	3.6	4.8
Daphnia pulicaria	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0
Diaphanosoma birgei	1.6	2.9	2.3	3.0	4.0	3.5	4.0	4.1	4.0
Leptopdiaptomus nudus	3.7	7.7	5.7	3.8	3.6	3.7	5.3	5.5	5.4
Ceriodaphnia quadrangula	9.2	12.8	11.0	13.9	19.9	16.9	21.3	24.2	22.8
Mean total no./L	32.9			39.9			52.2		

Table A3-147. Crustacean zooplankton species sampled in Highline Lake, 19 September 2000. Mean weighted *Daphnia* density = 5.5/L.

Zooplankton species	Station 1 (0-6 m) w=0.3			Station 2 (0-10 m) w=0.5			Station 3 (0-4 m) w=0.2		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	1.2	2.2	1.7	2.4	3.1	2.7	9.6	9.3	9.4
Ceriodaphnia quadrangula	2	2.8	2.6	3.6	4.4	4	11	2.5	11.8
Leptpdiaptomus nudus	2	3.1	2.6	4.9	3.5	4.2	12	13.9	13
Daphnia g. mendotae	0.7	0.9	0.8	1	1	1	1.8	4.3	3
Diacyclops thomasi	1.1	2.1	1.6	1	1.2	1.1	4.6	5.7	5.2
Diaphanosoma birgei	6	11.8	8.9	12	10.4	11.2	25.3	36	30.7
Mean total no./L	18.2			24.2			73		

Table A3-148. Crustacean zooplankton species sampled in Highline Lake, 15 June 2001. Mean weighted *Daphnia* density = 3.4/L.

Zooplankton species	Station 1 (0-6 m) w=0.3			Station 2 (0-10 m) w=0.5			Station 3 (0-4 m) w=0.2		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	10.7	13.5	12.1	7.5	4.5	6	12.3	7.2	9.8
Ceriodaphnia quadrangula	0.3	0.3	0.3	0.5	0.1	0.3	0.1	0	0.1
Leptpdiaptomus nudus	2.8	2.7	2.8	3.7	3	3.4	2.5	5.4	4
Daphnia g. mendotae	19	17.6	18.3	15.7	17.1	16.4	46.1	50.9	48.5
Diacyclops thomasi	24.5	23.4	24	22.3	20.7	21.5	21.9	23.8	22.9
Diaphanosoma birgei	0.1	0.5	0.3	0.1	0.1	0.1	0	0	0
Mean total no./L	57.7			47.6			85.2		

Table A3-149. Crustacean zooplankton species sampled in Highline Lake, 3 July 2001. Mean weighted *Daphnia* density = 2.1/L.

Zooplankton species	Station 1 (0-6 m) w=0.3			Station 2 (0-10 m) w=0.5			Station 3 (0-4 m) w=0.2		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	3.8	3.5	3.7	2.6	5.3	4	4	18.6	11.3
Ceriodaphnia quadrangula	0.6	0	0.3	0.1	0	0.3	0.3	0	0.2
Leptpdiaptomus nudus	4.8	3.5	4.2	4.3	3.8	4.1	3.6	13.9	8.8
Daphnia g. mendotae	1.2	1	1.1	1.4	2.5	1.9	1.1	6.8	4.0
Diacyclops thomasi	15.5	11.1	13.3	21.5	18.2	19.9	5.5	21.2	13.5
Diaphanosoma birgei	0.1	0.3	0.2	0	0.5	0.3	0.8	0.3	0.6
Mean total no./L	22.7			30.1			38.1		

Table A3-150. Crustacean zooplankton species sampled in Highline Lake, 24 July 2001. Mean weighted *Daphnia density* = 10.4/L.

Zooplankton species	Station 1 (0-6 m) w=0.3			Station 2 (0-10 m) w=0.5			Station 3 (0-4 m) w=0.2		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	2.9	6.2	4.6	1.2	1.7	1.5	2.9	3.5	3.2
Ceriodaphnia quadrangula	16.9	16.5	16.7	9.4	12.8	11.1	42	82	62
Leptpdiaptomus nudus	5.4	4.7	5.1	2.9	3.4	3.2	4.6	10.9	7.8
Daphnia g. mendotae	12.5	12	12.3	7.2	7.6	7.4	11.7	18.1	14.9
Diacyclops thomasi	11.2	11.2	11.2	8.9	7.6	8.3	8.3	10.3	9.3
Diaphanosoma birgei	0.8	0.2	0.5	0.2	0.2	0.12	0	0.4	0.2
Mean total no./L	50.3			31.5			97.4		

Table A3-151. Crustacean zooplankton species sampled in Highline Lake, 16 August 2001. Mean weighted *Daphnia* density = 1.6/L.

Zooplankton species	Station 1 (0-6 m) w=0.3			Station 2 (0-10 m) w=0.5			Station 3 (0-4 m) w=0.2		
	a	b	mean	a	b	mean	a	b	mean
Bosmina longirostris	0.8	0.9	0.9	1.2	1.1	1.2	4.6	0.7	2.7
Ceriodaphnia quadrangula	1.6	1	1.3	1.3	3.3	2.3	10.4	4.1	7.3
Leptpdiaptomus nudus	8.3	6	7.2	2.1	2.4	2.3	2	1.1	1.6
Daphnia g. mendotae	1.5	0.8	1.2	1.7	1.8	1.8	2.8	1.8	2.3
Diacyclops thomasi	1.5	1.1	1.3	10.8	10.9	10.9	25.4	9.2	17.3
Diaphanosoma birgei	2	2.1	2.1	4.3	2.2	3.25	6.2	2.2	4.2
Mean total no./L	13.8			21.6			35.3		

Table A3-152. Crustacean zooplankton species sampled in Highline Lake, 31 May 2002. Mean *Daphnia* density = 38.5/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	5.9	7.5	6.7	9.6	8.0	8.8	33.8	35.8	34.8	16.6
Diaphanosoma birgei	0.0	0.1	0.1	0.1	0.2	0.2	0.8	0.7	0.8	0.4
Diacyclops thomasi	10.4	10.3	10.4	9.6	12.2	10.9	15.5	13.2	14.4	11.9
Daphnia g. mendotae	19.3	23.4	21.4	28.0	31.6	29.8	53.8	74.9	64.4	38.5
Leptodiaptomus nudus	2.7	1.5	2.1	2.4	2.1	2.3	2.1	5.1	3.6	2.7
Mean total no./L	40.7			52.0			118.0			70.2

Table A3-153. Crustacean zooplankton species sampled in Highline Lake, 17 June 2002. Mean *Daphnia* density = 10.5/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	3.6	3.4	3.5	4.2	2.4	3.3	5.3	10.7	8.0	4.9
Ceriodaphnia quadrangula	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	>0.1
Chydorus spaericus	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1
Diaphanosoma birgei	0.5	0.5	0.5	0.3	0.2	0.3	1.3	1.7	1.5	0.8
Diacyclops thomasi	27.3	27.6	27.5	21.4	21.5	21.5	18.2	24.8	21.5	23.5
Daphnia g. mendotae	7.7	7.8	7.8	6.3	5.0	6.7	15.1	18.8	17.0	10.5
Leptodiaptomus nudus	8.2	8.9	8.6	5.6	6.7	12.3	4.1	5.5	4.8	8.6
Mean total no./L	48.1			44.2			52.9			48.2

Table A3-154. Crustacean zooplankton species sampled in Highline Lake, 28 May 2003. Mean *Daphnia* density = 20.4/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.6	0.5	0.6	1.6	2.7	2.2	3.5	2.3	2.9	1.4
Daphnia g. mendotae	18.2	27.2	22.7	36.0	40.2	38.1	25.8	15.5	20.7	20.4
Diacyclops thomasi	6.3	17.3	11.8	28.7	40.2	34.4	2.1	12.0	7.1	13.3
Leptodiaptomus nudus	0.8	2.7	1.7	4.9	3.9	4.4	2.1	0.3	1.2	1.8
Mean total no./L	36.8			79.0			31.8			49.2

Table A3-155. Crustacean zooplankton species sampled in Highline Lake, 17 July 2003. Mean *Daphnia* density = 9.0/L.

Zooplankton species	Station #1 (0-10m)			Station #2 (0-10m)			Station #3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	1.8	0.9	1.3	1.4	0.8	1.1	2.7	3.5	3.1	1.4
Ceriodaphnia quadrangula		0.1	0.1	0.4	0.2	0.3	0.7	0.7	0.7	0.3
Daphnia g. mendotae	9.4	12.7	11	16.1	9.8	13	13.7	9.9	11.8	9
Diacyclops thomasi	12.9	9.3	11.1	17.3	6	11.6	10.8	11.4	11.1	8.5
Leptodiaptomus nudus	5.2	9.1	7.1	6.2	4.8	5.5	11.8	9.9	37.5	5.9
Mean total no./L	30.7			31.5			37.8			33.3

Table A3-156. Crustacean zooplankton species sampled in Highline Lake, 16 June 2005. Mean *Daphnia* density = 10.3/L.

Zooplankton species	Station #1 (0-10m)			Station #2 (0-10m)			Station #3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.4		0.4	0.1	1.6	0.9	1.3	2.3	1.8	1
Ceriodaphnia quadrangula	0		0	0	0	0	0	0.2	0.1	0
Unidentified *Daphnia* spp.	0.5		0.5	0.6	1.3	1	1.6	4	2.8	1.4
Diacyclops thomasi	8.7		8.7	11.5	8.4	9.9	14.5	18.2	16.4	11.7
Daphnia g. mendotae	5.1		5.1	8	7.9	8	8.4	18.8	13.6	8.9
Leptodiaptomus nudus	2		2	1.6	3	2.3	2.5	2.3	2.4	2.2
Diaphanosoma spp.	0.1		0.1	0.4	0	0.2	0.4	1.1	0.7	0.3
Mean total no./L	16.9			22.3			37.8			25.7

Table A3-157. Crustacean zooplankton species sampled in Highline Lake, 15 May 2006. Mean *Daphnia* density = 19.8/L.

Zooplankton species	Station #1 (0-10m)			Station #2 (0-10m)			Station #3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	12.9	8	10.5	11.7	8.4	10.1	73.4	102.8	88.1	36.2
Ceriodaphnia quadrangula	0.3	0	0.2	0	0	0	0	0	0	0.1
Unidentified *Daphnia* spp.	1.3	0	0.6	0.3	0.6	0.4	4.9	3.3	4.1	1.7
Diacyclops thomasi	41.7	28.3	35	41.9	26.8	34.3	129.1	67.5	98.3	55.9
Daphnia g. mendotae	7.1	3.7	5.4	5.6	14	9.8	34.9	43.2	39	18.1
Leptodiaptomus nudus	0	0	0	0.3	0.6	0.4	0.6	0	0.3	0.3
Mean total no./L	51.7			55.1			229.8			112.2

Table A3-158. Crustacean zooplankton species sampled in Jefferson Lake, 08 August 2005. Mean *Daphnia* density = 6.5/L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Mean No./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	5.3	6.4	5.8	14.1	8.4	11.2	3.4	3.5	3.5	6.8
Daphnia pulicaria	0.0	0.5	0.3	0.9	0.2	0.5	0.4	0.0	0.2	0.3
Daphnia g. mendotae	4.8	5.1	4.9	7.2	4.7	5.9	4.3	5.0	4.6	5.2
Unidentified *Daphnia spp.*	1.5	1.0	1.3	0.0	1.6	0.8	1.1	1.0	1.0	1
Diacyclops thomasi	8.3	9.7	9.0	17.0	14.9	15.9	13.3	11.9	12.6	12.5
Mean total no./L	21.3			34.5			22.0			25.9

Table A3-159. Crustacean zooplankton species sampled in McPhee Reservoir, 3 June 1992. Mean *Daphnia* density = 10.0/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	1.3	0.8	0.1	0.1	0.2	0.2	0.1	0.3	0.1	0.2	0.4
Daphnia g. mendotae	18.4	14.1	3.3	4.6	1.4	2.4	2.7	3	3.7	4.9	5.9
Daphnia pulicaria	4.8	9.6	3.1	2	4.2	2.8	4	2.9	2.4	3.9	4.1
Diacyclops thomasi	52.2	45.7	8.7	11.2	8.7	5.8	11	14.2	7.6	11.4	17.7
Leptodiaptomus spp.		0.1						<0.1			<0.1
Mean total no./L	73.3		17.1		12.9		19.3		17.2		28.1

Table A3-160. Crustacean zooplankton species sampled in McPhee Reservoir, 12 August 1992. Mean *Daphnia* density = 4.2/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.6	0.6	0.2	0.4	0.4	0.2	0.1	0.2	0.1	0.1	0.3
Ceriodaphnia quadrangula							0.2	0.2	0.1	0.1	0.1
Daphnia g. mendotae	2.4	1.9	2.6	2.7	2.5	2.5	0.8	1.3	3.8	4	2.5
Daphnia pulicaria	0.3	0.3	2.9	2.3	1.8	1.7	1.6	1.4	2.1	2.4	1.7
Diacyclops thomasi	0.9	1	1	1.7	5.7	6.5	5.8	4.6	5	3.4	3.6
Leptodiaptomus connexus	1.5	1.4	4.4	3.7	2	1.1	3.2	3.7	0.7	0.9	2.3
Leptodiaptomus judayi	<0.1		2.4	3.7	1.3	1.4	2.5	3	0.6	1.3	1.6
Mean total no./L	8.9		21.3		12.3		15.7		16.7		15.1

Table A3-161. Crustacean zooplankton species sampled in McPhee Reservoir, 7 October 1992. Mean *Daphnia* density = 1.0/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.5	0.5	0.1	0.3	<0.1	0.3	0.2	0.6	0.2	0.3	0.3
Ceriodaphnia quadrangula	7.7	6.9	3.6	4.3	2	3.2	9.3	7.4	4.4	2.8	5.2
Daphnia g. mendotae	0.9	1.3	0.2	0.3	0.3	0.3	0.3	0.6	0.7	0.3	0.5
Daphnia pulicaria	0.5	0.6	0.3	0.3	0.5	0.9	0.2	0.2	0.9	0.7	0.5
Diacyclops thomasi	9.1	11.1	3.6	3.5	2.8	4.3	8.1	7.8	6.8	6.2	6.3
Leptodiaptomus connexus	0.5	0.3	0.5	0.6	0.3	0.3	1.5	1.1	0.6	0.4	0.6
Leptodiaptomus judayi	0.8	0.5	0.5	0.5	0.3	0.3	1.3	1	0.5	0.5	0.6
Mean total no./L	20.6		9.3		7.9		19.8		12.7		14.0

Table A3-162. Crustacean zooplankton species sampled in McPhee Reservoir, 10 June 1993. Mean *Daphnia* density = 2.6/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Alona guttata					<0.1						<0.1
Bosmina longirostris	0.3	0.4	0.1	0.1	0.2	0.2	0.2		0.1		0.2
Ceriodaphnia quadrangula	0.1					0.1			0.1		<0.1
Daphnia g. mendotae	0.5	0.6	1	0.5	1.1	1.5	0.6	**Sample**	0.8	0.9	0.8
Daphnia pulicaria	4.1	2.8	0.6	0.5	0.3	0.7	0.3	**lost**	2.7	4	1.8
Diacyclops thomasi	8.4	11.7	4.3	3.8	5.9	4.2	4.4		4.9	8.5	6.2
Leptodiaptomus connexus	0.1	0.1	<0.1		0.1	<0.1			0.1	0.1	0.1
Leptodiaptomus judayi	0.1	0.1	0.1	0.1	<0.1						<0.1
Mean total no./L	14.7		5.5		7.2		5.5		11.1		9.0

Table A3-163. Crustacean zooplankton species sampled in McPhee Reservoir, 9 September 1993. Mean *Daphnia* density = 6.3/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.1	0.2	0.1	0.1		0.1	0.5	0.1			0.1
Ceriodaphnia quadrangula	0.3	0.3	0.6	0.3	0.4	0.8	2	2.4	2.5	1.9	1.2
Daphnia g. mendotae	4.4	4.9	1.1	1.1	1	2.7	3.3	1.9	11.8	7.4	4
Daphnia pulicaria	1.7	1.6	0.4	0.9	0.4	2.7	1	0.6	6.2	7.7	2.3
Diacyclops thomasi	3.2	3.8	2.3	2.9	3	2.5	4.7	5.6	9.7	9.3	4.4
Leptodiaptomus connexus	1.1	1.6	0.7	1.2	1.3	0.8	3.6	4.3	5.3	4.7	2.5
Leptodiaptomus judayi	1.1	0.3	0.6	0.3	0.4	0.8	2	2.4	2.5	1.9	2.5
Mean total no./L	13.0		7.2		8.5		19.2		38.3		17.0

Table A3-164. Crustacean zooplankton species sampled in McPhee Reservoir, 23 August 1994. Mean *Daphnia* density = 2.5/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris								0.1	0.2		<0.1
Ceriodaphnia quadrangula	0.2	0.3	0.1	0.1	0.1	0.2	0.4	0.4	0.2		0.2
Daphnia g. mendotae	1.6	1.2	0.4	0.8	2.1	2.2	1.1	0.8	7.2	4.9	2.2
Daphnia pulicaria	0.8	0.7	0.1	0.1	0.1	0.4		0.1	0.1		0.3
Diacyclops thomasi	6.2	4	7.1	5.3	5.4	7.2	9.9	7.9	16.5	13.1	8.3
Leptodiaptomus connexus	0.5	0.1	1.3	0.8	1.1	0.6	2.1	2.3	0.7	0.5	1
Leptodiaptomus judayi	1.2	0.6	0.8	0.8	0.7	0.6	1.5	1.9	0.5	0.5	0.9
Mean total no./L	9.8		8.9		10.6		14.4		22.0		12.9

Table A3-165. Crustacean zooplankton species sampled in McPhee Reservoir, 5 August 1998. Mean *Daphnia* density = 2.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris			0.2		0.2	0.2	0.1	0.6			0.1
Ceriodaphnia spp.	0.3	0.5	0.3	0.2	0.2	0.3	0.2	0.3		0.3	0.3
Daphnia g. mendotae	3	2.9	0.2	1.8	1.3	1	0.8	1	2.1	2.7	1.7
Daphnia longiremis	0.2	0.4	0.5	1.5	0.1	0.2	0.4	0.5	0.7	2.1	0.6
Daphnia pulicaria	0.5	0.3	0.2	0.1	0.2	0.2	0.3	0.4	1.1	0.6	0.4
Diacyclops thomasi	8.1	5.9	7.8	6.9	5.8	6	14.4	15.6	6	6	8.3
Leptodiaptomus spp.	6.6	6.6	8.1	6.3	3.4	5.2	11.4	17.1	20.1	10.7	9.6
Mean total no./L	17.7		17.1		12.2		31.6		26.2		21.0

Table A3-166. Crustacean zooplankton species sampled in McPhee Reservoir, 27 June 2002. Mean *Daphnia* density = 6.4/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	14.7	21.4	18.1	18.1	18.1	18.1	11.6	7.9	9.8	52.8	48.5	50.7	14.6	14	14.3	37
Diacyclops thomasi	21.3	23.4	22.3	21.9	20.2	21.1	13.2	11.8	12.5	58.9	50.8	54.9	15.7	14	14.9	25.1
Diaphanosoma birgei	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.4	0.3	0.6	0.6	0.6	0.5	0.2	0.4	0.3
Daphnia longiremis	104	1.9	1.7	0.8	1.3	1.1	0.5	1	0.8	1.1	1.2	1.2	0.7	0.6	0.7	1.1
Daphnia g. mendotae	7.5	5.7	6.6	2.9	3.1	3	5.0	1.8	3.4	7.2	4.9	6.1	8.2	6.9	7.6	5.3
Leptodiaptomus nudus	0.5	0.4	0.5	0.3	0	0.2	2	0	1	0.3	0.5	0.4	0.1	0.3	0.2	0.5
Mean total no./L	49.4			43.6			27.8			113.9			38.1			54.6

Table A3-167. Crustacean zooplankton species sampled in McPhee Reservoir, 08 August 2003. Mean *Daphnia* density = 1.5/L.

Zooplankton species	Station 1(0-5m)				Station 2(0-5m)				Station 3(0-10m)				Station 4(0-10m)				Station 5(0-10m)				Mean no./L	Wtd. Mean/L
	a	b	mean	wtd.	a	b	mean	wtd.	a	b	mean	wtd.	a	b	mean	wtd.	a	b	mean	wtd.		
Bosmina longirostris	5.0	5.0	5.0	0.6	19.3	22.5	20.9	2.6	21.1	16.8	18.9	4.7	21.4	30.8	26.1	6.5	14.7	12.2	13.4	3.4	16.9	3.6
C. quadrangula	1.8	1.7	1.7	0.2	1.2	1.3	1.2	0.2	1.1	0.8	0.9	0.2	1.2	2.0	1.6	0.4	1.3	1.0	1.1	0.3	1.3	0.3
Daphnia g. mendotae	4.6	5.3	4.9	0.6	5.2	5.7	5.4	0.7	6.0	5.4	5.7	1.4	8.7	12.9	10.8	2.7	6.8	5.7	6.2	1.6	6.6	1.4
Daphnia pulicaria	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.2	0.1	0.2	0.0	1.0	1.3	1.1	0.3	0.4	0.4	0.4	0.1	0.4	0.1
Diacyclops thomasi	13.2	10.4	11.8	1.5	18.0	14.1	16.1	2.0	16.1	13.6	14.8	3.7	23.2	29.4	26.3	6.6	27.4	21.6	24.5	6.1	18.7	4.0
Diaphanosoma birgei	2.6	2.6	2.6	0.3	1.6	3.0	2.3	0.3	1.2	2.0	1.6	0.4	2.5	2.5	2.5	0.6	2.2	2.1	2.2	0.5	2.2	0.4
Leptodiaptomus nudus	1.2	1.3	1.3	0.2	0.6	1.3	0.9	0.1	0.9	0.8	0.8	0.2	1.0	0.9	0.9	0.2	1.4	1.3	1.4	0.3	1.1	0.2
Mean total no./L	27.3			3.4	47.0			5.9	43.0			10.7	69.3			17.3	49.2			12.3	47.1	9.9

Table A3-168. Crustacean zooplankton species sampled in McPhee Reservoir, 22 July 2004. Mean *Daphnia* density = 11.2/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.1	0	0	5.3	6.1	5.7	1.2	5.9	3.5	0.6	3.2	1.9	2.6	0	1.3	2.5
Daphnia g. mendotae	2.4	3.4	2.9	4.6	7.5	6.0	0.8	0.7	0.7	0.3	6.8	3.5	3.0	0	1.5	2.9
Daphnia pulicaria	5.2	6.8	6	12.6	16.5	14.5	2.3	6.2	4.2	10.8	6.8	8.8	8.5	0	4.2	7.5
Leptodiaptomus nudus	2.9	6.4	4.6	11.8	9.0	10.4	2.3	4.8	3.5	10.2	6.8	8.5	15.5	0	7.7	6.9
Diacyclops thomasi	3.0	5.4	4.2	15.2	17.2	16.2	4.0	13.7	8.8	30.2	17.2	23.7	20.3	0	10.1	12.6
Unident.Daphnia spp.	0.2	0.2	0.2	2.3	2.5	2.4	0.8	0.7	0.7	0.3	0.8	0.5	0	0	0	0.8
Mean total no./L	17.9			55.2			21.4			46.9			24.8			33.2

Table A3-169. Crustacean zooplankton species sampled in McPhee Reservoir, 22 July 2005. Mean *Daphnia* density = 13.5/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	4.9	2.0	3.4	2	0.6	1.3	0.7	0.6	0.6	0.7	0.7	0.7	0	0	0	1.2
C. quadrangula	0	1.1	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0.1
Diaphanosoma birgei	0.3	0.6	0.4	0	0.3	0.1	0.3	0	0.2	0	0	0	0	0	0	0.2
Unident. *Daphnia spp.*	2.6	0	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0.3
Daphnia g. mendotae	7.5	3.9	5.7	1.7	1.2	1.4	1.0	1.6	1.3	0	0	0	2.2	2.5	2.4	2.2
Daphnia pulicaria	8.5	8.1	8.3	13.4	13.0	13.2	11.4	10.9	11.2	12.1	11.5	11.8	6.4	12.0	9.2	10.7
Daphnia rosea	1.3	0	0.7	0.8	0.3	0.6	0	0	0	0	0.4	0.2	0	0	0	0.3
Daphnia schoedleri	0.3	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	<0.1
Diacyclops thomasi	9.8	7.0	8.4	7.8	10.9	9.4	13.8	17.8	15.8	14.5	18.5	16.5	12.2	8.4	10.3	12.1
Leptodiatomus nudus	14.4	11.2	12.8	4.2	13.0	8.6	6	5.9	6	5.7	6.7	6.2	17.5	8.7	13.1	9.3
Mean total no./L	41.9			34.6			35.0			35.3			35.0			36.4

Table A3-170. Crustacean zooplankton species sampled in McPhee Reservoir, 01 Aug 2006. Mean *Daphnia* density = 7.1/L.

Zooplankton species	Station #1 (0-10m)			Station 2 (0-10m)			Station #3 (0-10m)			Station #4 (0-10m)			Station #5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	2.0	1.7	1.9	0.5	1.0	0.8	0.4	0.83	0.6	2.0	6.8	4.4	1.2	0.6	0.9	1.7
C. quadrangula	7.2	6.6	6.9	10.3	14.0	12.1	12.4	11.25	11.8	19.3	18.1	18.7	4.7	9.5	7.1	11.3
Unident. *Daphnia spp.*	0.7	1.1	0.9		0.5	0.3	0.9	2.5	1.7	4.4	2	3.2		0.9	0.4	1.3
Diaphanosoma birgei		0.9	0.4				0.9	0.42	0.6					0.6	0.3	0.3
Diacyclops thomasi	11.9	8.6	10.2	12.7	14.2	13.5	12.8	11.25	12	36.9	25.7	31.3	13.2	10.9	12.0	15.8
Daphnia g. mendotae	1.6	1.1	1.4	2.9	3.8	3.4	15.0	13.75	14.4	1.6	2.0	1.8	2.6	3.2	2.9	4.8
Daphnia pulicaria	0.2	1.1	0.7	1.0	0.8	0.9	0.9		0.4	4.0	1.6	2.8				1
Leptodiatomus nudus	4.0	4.9	4.5	3.4	4.8	4.1	6.0	5.0	5.5	3.6	1.6	2.6	6.1	6.9	6.5	4.6
Mean total no./L	26.8			35.0			47.1			64.9			30.1			40.8

Table A3-171. Crustacean zooplankton species sampled in Ridgway Reservoir, 22 June 2005. Mean *Daphnia* density = 3.9/L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean No./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	37.1	47.7	42.4	114.2	53.0	83.6	73.4	100.5	86.9	14.0	27.2	20.6	23.5	25.8	24.6	51.6
Daphnia g. mendotae	7.0	6.4	6.7	0.0	2.0	1.0	4.5	2.9	3.7	2.0	5.1	3.5	0.7	3.8	2.2	3.4
Daphnia pulicaria	0.0	0.0	0.0	0.8	0.0	0.4	0.0	0.5	0.2	0.3	0.0	0.1	0.0	0.0	0.0	0.2
Unidentified *Daphnia spp.*	0.9	0.4	0.7	0.4	0.4	0.4	0.0	0.0	0.0	0.6	0.3	0.5	0.0	0.0	0.0	0.3
Diacyclops thomasi	32.9	27.7	30.3	88.2	36.1	62.2	86.5	93.8	90.1	24.8	33.0	28.9	35.4	30.7	33.0	48.9
Mean total no./L	80.1			147.6			181.0			53.6			59.9			104.4

Table A3-172. Crustacean zooplankton species sampled in Ridgway Reservoir, 20 July 2005. Mean *Daphnia* density = 11.9 /L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean No./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	2.2	1.9	2.0	0.8	1.4	1.1	0.0	0.0	0.0	1.8	1.6	1.7	2.7	2.5	2.6	1.5
Ceriodaphnia quadrangula	0.0	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.3	0.1
Daphnia g. mendotae	8.5	8.5	8.5	10.2	9.8	10.0	11.1	13.2	12.2	12.2	10.5	11.3	6.9	9.4	8.2	10.0
Daphnia pulicaria	0.3	0.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.4	0.6	1.1	0.4	0.7	0.4
Unidentified *Daphnia spp.*	0.0	1.3	0.6	1.1	2.5	1.8	3.3	0.5	1.9	2.3	1.2	1.7	0.5	2.5	1.5	1.5
Diacyclops thomasi	6.9	6.3	6.6	9.8	9.4	9.6	2.9	3.4	3.2	5.0	8.5	6.7	7.5	12.3	9.9	7.2
Mean total no./L	18.6			22.6			17.2			22.1			23.2			20.7

Table A3-173. Crustacean zooplankton species sampled in Rifle Gap Reservoir, 04 June 2008. Mean *Daphnia* density = 7.3/L.

Zooplankton species	Station #1 (0-10m)			Station #2 (0-10m)			Station #3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.1	0.2	0.2	0.3	0.1	0.2	0.1	0.4	0.3	0.2
Diacyclops thomasi	6.8	7.4	7.1	12.2	10.3	11.2	3.4	4.2	3.8	7.4
Daphnia g. mendotae	0.5	0.5	0.5	0.8	0.3	0.6	0.1	0.7	0.4	0.5
Daphnia pulicaria	8.7	10.1	9.4	5.2	7.6	6.4	3.1	6.1	4.6	6.8
Leptodiaptomus nudus	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.1	0.0	<0.1
Mean total no./L	17.2			18.5			9.1			14.9

Table A3-174. Crustacean zooplankton species sampled in Rifle Gap Reservoir, 19 August 2008. Mean *Daphnia* density = 15.3/L.

Zooplankton species	Station #1 (0-10m)			Station #2 (0-10m)			Station #3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	3.2	0.0	1.6	0.2	0.0	0.1	0.5	0.8	0.6	0.8
Unidentified *Daphnia spp.*	5.3	2.1	3.7	2.2	3.7	2.9	0.5	0.4	0.5	2.4
Daphnia pulicaria	6.8	7.3	7.0	5.5	4.9	5.2	4.3	3.2	3.8	5.3
Diacyclops thomasi	34.2	19.0	26.6	6.4	13.5	9.9	5.0	8.1	6.6	14.4
Daphnia g. mendotae	10.0	3.8	6.9	6.2	12.8	9.5	5.9	6.8	6.4	7.6
Leptodiaptomus nudus	12.1	10.7	11.4	6.4	7.0	6.7	3.8	6.4	5.1	7.8
Mean total no./L	57.2			34.4			22.9			38.2

Table A3-175. Crustacean zooplankton species sampled in Rifle Gap Reservoir, 09 October 2008. Mean *Daphnia* density = 6.2/L.

Zooplankton species	Station #1 (0-10m)			Station #2 (0-10m)			Station #3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.0	0.0	0.0	0.0	0.2	0.1	0.3	0.4	0.4	0.1
Unidentified *Daphnia spp.*	1.2	2.1	1.7	1.6	1.2	1.4	1.0	1.7	1.4	1.5
Daphnia pulicaria	3.4	2.1	2.8	2.9	1.9	2.4	2.5	4.9	3.7	2.9
Diacyclops thomasi	10.6	8.2	9.4	4.5	5.1	4.8	11.3	9.4	10.4	8.2
Daphnia g. mendotae	2.4	2.1	2.3	1.8	1.9	1.8	0.9	1.6	1.2	1.8
Leptodiaptomus nudus	4.1	1.4	2.8	1.1	0.7	0.9	1.4	0.7	1.1	1.6
Mean total no./L	18.9			11.4			18.0			16.1

Table A3-176. Crustacean zooplankton species sampled in Ruedi Reservoir, 5 August 1992. Mean *Daphnia* density = 5.8/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris									<0.1	0.1	<0.1
Daphnia g. mendotae	3	3.2	2.8	2.4	7.1	5.6	3	3.9	11	16.4	5.8
Diacyclops thomasi	15.7	18.1	21.6	17.6	31.3	19	32.6	28.3	33.1	35.6	22.3
Ceriodaphnia quadrangula		<0.1							0.1	<0.1	<0.1
Simocephalus espinosus									<0.1		<0.1
Mean total no./L	20		22.2		31.5		33.9		33.3		28.1

Table A3-177. Crustacean zooplankton species sampled in Ruedi Reservoir, 18 June 1997. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	**No samples collected**				**No samples collected**					0.1	<0.1
Daphnia g. mendotae										0.1	<0.1
Diacyclops thomasi			17.4	16.5					29.2	41.4	26.2
Mean total no./L			17.0						35.4		26.2

Table A3-178. Crustacean zooplankton species sampled in Ruedi Reservoir, 28 July 1997. Mean *Daphnia* density = 0.8/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	**No samples collected**		7	16.5	**No samples collected**				6.5	9.6	10
Daphnia g. mendotae			0.1	2.5					0.3	0.3	0.8
Diacyclops thomasi			94.2	100.3					64	89.3	87
Mean total no./L			110.4						85.1		97.8

Table A3-179. Crustacean zooplankton species sampled in Ruedi Reservoir, 16 July 2003. Mean *Daphnia* density = 0.5/L.

Zooplankton species	Sation 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Unidentified *Daphnia spp.*	0.6	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Daphnia g. mendotae	0.6	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Daphnia pulicaria	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.9	0.3
Diacyclops thomasi	147.6	131.6	139.6	95.3	97.2	96.3	85.0	65.0	75.0	103.6
Mean total no./L	140.2			96.3			75.9			104.1

Table A3-180. Crustacean zooplankton species sampled in Shadow Mountain Reservoir, 01 July 2005. Mean *Daphnia* density = 0.2/L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	2.0	0.8	1.4	0.7	1.1	0.9	4.3	2.3	3.3	1.9
Daphnia g. mendotae	0.1	0	<0.1	0	0	0	0.3	0.6	0.5	0.2
Diacyclops thomasi	9.4	4.8	7.1	3.8	7.0	5.4	6.6	10.9	8.7	7.1
Mean total no./L	8.5			6.3			12.5			9.1

Table A3-181. Crustacean zooplankton species sampled in Shadow Mountain Reservoir, 27 July 2005. Mean *Daphnia* density = 38.3/L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	37.8	41.4	39.6	22.7	21.2	21.9	30	47.4	38.7	33.4
Unidentified *Daphnia spp.*	0	0.6	0.3	0.5	3.0	1.7	3.7	0	1.8	1.3
Daphnia g. mendotae	44.7	43.3	44	28.1	26.1	27.1	41.1	37.5	39.3	36.8
Daphnia pulicaria	0	0	0	0.5	0.4	0.4	0.6	0	0.3	0.2
Diacyclops thomasi	33.7	34.6	34.2	15.0	16.7	15.8	27.0	28.7	27.8	25.9
Leptodiaptomus nudus	0	0.6	0.3	0	0	0	0	0.6	0.3	0.2
Mean total no./L	118.4			67.0			108.3			97.9

Table A3-182. Crustacean zooplankton species sampled in Shadow Mountain Reservoir, 06 September 2005. Mean *Daphnia* density = 9.0/L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0	0	0	0	0.7	0.3	0	0	0	0.1
Unidentified *Daphnia spp.*	0	0.8	0.4	0.5	1.0	0.8	0	0	0	0.4
Daphnia g. mendotae	4.1	3.6	3.9	14.3	11.8	13.0	7.6	6.8	7.2	8.0
Daphnia pulicaria	0.1	0.6	0.4	0.8	0.7	0.7	1.0	0.6	0.8	0.6
Diacyclops thomasi	4.5	4.4	4.4	6.5	4.7	5.6	9.0	9.6	9.3	6.4
Leptodiaptomus nudus	0.2	0.1	0.2	0	0.3	0.2	1.1	0.3	0.7	0.4
Mean total no./L	9.2			20.6			18.0			15.9

Table A3-183. Crustacean zooplankton species sampled in Stagecoach Reservoir, 17 July 2002. Mean *Daphnia* density = 6.0/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1
Ceriodaphnia quadrangula	0.0	0.2	0.1	0.0	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.2	0.1
Diacyclops thomasi	9.5	15.7	12.6	11.3	15.9	13.6	12.3	14.5	13.4	17.4	14.3	15.9	13.9	20.0	17.0	14.5
Daphnia pulicaria	9.4	10.3	9.9	9.8	8.4	9.1	12.5	13.7	13.1	8.3	8.4	8.4	4.4	6.1	5.3	6.0
Leptodiaptomus nudus	15.2	20.7	18.0	17.3	12.3	14.8	7.0	7.9	7.5	10.9	18.3	14.6	18.2	19.8	19.0	14.8
Mean total no./L	40.8			37.5			34.3			39.0			41.5			38.6

Table A3-184. Crustacean zooplankton species sampled in Taylor Park Reservoir, 13 August 1991. Mean *Daphnia* density = 7.4/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia g. mendotae	0.8	0.8	1.1	0.7	0.7	0.6	1.3	1.4	**Not sampled. Station was added October 1991 to better cover the limnetic area.**		1.0
Daphnia pulicaria	6.9	6.3	5.3	4.8	5.3	5.2	8.5	8.6			6.4
Diacyclops thomasi	18.6	13.5	9.9	12.4	12.0	11.4	14.8	17.0			13.7
Mean total no./L	23.5		17.2		17.7		25.9				21.1

Table A3-185. Crustacean zooplankton species sampled in Taylor Park Reservoir, 1 October 1991. Mean *Daphnia* density = 0.7/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia g. mendotae	<0.1		0.4	0.1	0.1	0.1	0.4	0.3	0.1	0.1	0.2
Daphnia pulicaria	0.1	<0.1	0.4	0.1	0.3	0.2	0.7	1.1	0.8	0.7	0.5
Diacyclops thomasi	6.2	3.1	11.9	11.6	11.7	10.3	12.3	15.6	14.3	16.5	11.4
Mean total no./L	4.8		12.4		11.4		15.3		16.3		12.0

Table A3-186. Crustacean zooplankton species sampled in Taylor Park Reservoir, 23 June 1992. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris			<0.1								<0.1
Daphnia g. mendotae	<0.1										<0.1
Daphnia pulicaria		<0.1								<0.1	<0.1
Diacyclops thomasi	30.0	15.1	19.2	11.1	30.0	18.0	47.4	36.3	9.5	12.5	23.0
Mean total no./L	22.6		15.6		24.0		41.9		11.0		23.0

Table A3-187. Crustacean zooplankton species sampled in Taylor Park Reservoir, 26 August 1992. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris		<0.1				<0.1					<0.1
Daphnia g. mendotae				<0.1		<0.1					<0.1
Diacyclops thomasi	43.6	27.6	36.1	24.8	58.4	44.0	40.1	17.7	33.3	16.7	34.2
Mean total no./L	35.6		30.5		51.2		28.9		25.0		34.3

Table A3-188. Crustacean zooplankton species sampled in Taylor Park Reservoir, 9 June 1993. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.2	<0.1		<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1
Daphnia g. mendotae		<0.1						<0.1			<0.1
Daphnia pulicaria	0.1				<0.1						<0.1
Diacyclops thomasi	1.0	0.6	0.1	0.1	0.7	0.5	0.3	0.2	1.6	1.4	0.7
Mean total no./L	1.1		0.1		0.6		0.3		1.5		0.7

Table A3-189. Crustacean zooplankton species sampled in Taylor Park Reservoir, 21 July 1993. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris				<0.1							<0.1
Daphnia g. mendotae									0.1		<0.1
Diacyclops thomasi	68.1	58.5	42.8	49.0	30.0	26.6	25.6	41.3	13.8	22.4	37.8
Mean total no./L	63.3		45.9		28.3		33.5		18.1		37.8

Table A3-190. Crustacean zooplankton species sampled in Taylor Park Reservoir, 25 August 1993. Mean *Daphnia* density = 5.9/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.1						0.1	0.2			<0.1
Daphnia g. mendotae	2.1	1.7	0.3	0.7	0.7	2.8	1.0	1.6	1.0	3.6	1.6
Daphnia pulicaria	2.5	4.7	0.5	0.5	4.0	10.0	6.9	5.7	5.4	3.2	4.3
Diacyclops thomasi	62.5	52.4	67.4	75.9	72.1	63.6	29.6	37.1	52.2	34.6	54.7
Mean total no./L	63.0		72.7		76.6		41.1		50.0		60.6

Table A3-191. Crustacean zooplankton species sampled in Taylor Park Reservoir, 7 September 1993. Mean *Daphnia* density = 8.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris			0.1			0.1					<0.1
Daphnia g. mendotae	6.3	8.5	7.2	6.1	9.5	14.3	6.0	6.4	8.2	8.8	8.1
Diacyclops thomasi	9.6	7.8	18.8	15.6	10.2	8.7	9.1	7.3	9.2	8.2	10.5
Mean total no./L	16.1		23.9		21.4		14.4		17.2		18.6

Table A3-192. Crustacean zooplankton species sampled in Taylor Park Reservoir, 29 June 1994. Mean *Daphnia* density = 4.3/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris										<0.1	<0.1
Daphnia g. mendotae	2.8	2.6	1.2	1.0	1.3	1.3	1.6	2.3	2.8	2.4	1.9
Daphnia pulicaria	4.0	3.6	0.6	1.0	1.3	1.7	3.1	2.3	3.4	2.8	2.4
Diacyclops thomasi	29.1	34.0	11.9	9.9	19.5	18.0	26.2	23.3	10.4	8.9	19.1
Mean total no./L	38.1		12.8		21.6		29.2		15.5		15.5

Table A3-193. Crustacean zooplankton species sampled in Taylor Park Reservoir, 11 August 1994. Mean *Daphnia* density = 6.0/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia g. mendotae	0.9	0.5	0.3	0.6	0.5	0.2	0.7	0.6	0.2	0.1	0.5
Daphnia pulicaria	7.8	7.9	5.4	3.6	4.9	5.2	5.1	6.1	4.1	4.4	5.5
Diacyclops thomasi	2.6	2.9	9.5	8.0	6.7	4.4	4.8	3.4	3.4	3.9	5.0
Mean total no./L	11.4		13.8		11.1		10.4		8.2		11.0

Table A3-194. Crustacean zooplankton species sampled in Taylor Park Reservoir, 10 July 1995. Mean *Daphnia* density = 0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia g. mendotae	0.1	0.2				0.1					0.1
Diacyclops thomasi	16.5	26.4	13.9	12.7	13.5	16.2	9.8	14.6	14.2	13.6	15.1
Mean total no./L	21.6		13.3		15.0		12.2		13.9		15.2

Table A3-195. Crustacean zooplankton species sampled in Taylor Park Reservoir, 21 August 1995. Mean *Daphnia* density = 8.7/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.3	0.4									0.4
Daphnia g. mendotae	0.3	0.3	1.0	0.5	2.3	1.1	3.7	4.2	0.4	0.9	1.5
Daphnia pulicaria	0.3	0.3	7.6	5.1	18.9	18.1	7.8	8.6	2.1	3.0	7.2
Diacyclops thomasi	35.7	26.8	20.3	20.8	24.4	28.0	39.2	29.7	23.7	26.2	27.5
Mean total no./L	32.2		27.7		46.4		46.6		28.1		36.5

Table A3-196. Crustacean zooplankton species sampled in Taylor Park Reservoir, 30 July 1996. Mean *Daphnia* density = 9.6/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris		0.3				0.2					<0.1
Daphnia g. mendotae	0.3		0.6		0.2		0.3				0.3
Daphnia pulicaria	22.2	23.0	8.3	8.5	5.9	4.2	4.8	8.9	2.8	4.6	9.3
Diacyclops thomasi	21.0	24.8	30.3	42.8	21.6	25.2	19.9	25.9	10.7	21.5	24.4
Mean total no./L	45.8		45.3		28.7		29.9		19.8		40.0

Table A3-197. Crustacean zooplankton species sampled in Taylor Park Reservoir, 22 September 1996. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia g. mendotae	<0.1						**Water too shallow for sampling**				<0.1
Daphnia pulicaria			<0.1	<0.1						<0.1	<0.1
Diacyclops thomasi	1.8	1.8	10.3	10.3	22.6	27.7			8.9	8.3	11.5
Mean total no./L	1.8		10.3		25.1				8.6		11.5

Table A3-198. Crustacean zooplankton species sampled in Taylor Park Reservoir, 6 August 1997. Mean *Daphnia* density = 0.7/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.2	0.1	0.1		0.2		<0.1		0.1		<0.1
Daphnia g. mendotae	0.1	0.2	0.5	0.1	0.3	0.6	0.4	0.3	0.6	0.4	0.4
Daphnia pulicaria	0.1	0.3		0.2	0.3	0.2	0.2	0.1	0.5	0.5	0.3
Diacyclops thomasi	52.9	41.5	70.2	36.8	32.3	16.1	34.4	20.7	35.5	17.8	35.8
Mean total no./L	47.6		53.9		24.9		28.1		27.7		36.5

Table A3-199. Crustacean zooplankton species sampled in Taylor Park Reservoir, 31 July 1998. Mean *Daphnia* density = 2.9/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.1	0.4	0.1		0.1				0.1		0.1
Daphnia g. mendotae	1.6	1.1	0.1	0.1	0.7	0.6	0.9	0.8	0.3	0.7	0.7
Daphnia pulicaria	1.9	3.0	0.8	0.7	1.7	2.6	3.6	4.0	1.7	2.1	2.2
Diacyclops thomasi	32.9	47.0	27.9	22.0	46.3	40.4	20.1	25.8	18.1	11.9	29.2
Leptodiaptomus spp.	0.2										<0.1
Mean total no./L	44.1		25.9		46.2		27.6		17.5		32.2

Table A3-200. Crustacean zooplankton species sampled in Taylor Park Reservoir, 23 August 1999. Mean *Daphnia* density =6.9/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Alona spp.		0.1	**Samples lost preservative. Could not be processed**			0.1					<0.1
Bosmina longirostris	0.5						0.1				0.1
Diaphanosoma spp.	0.3										<0.1
Daphnia g. mendotae	2.1	0.2			0.1	0.1	0.3	0.2	0.1	0.1	0.4
Daphnia pulicaria	12	2.5			7.8	6.9	8.4	4.9	4.8	4.6	6.5
Diacyclops thomasi	6.8	5.7			6.7	5.7	10.3	6.1	5.5	3.9	6.3
Leptodiaptomus spp.	0.3										<0.1
Mean total no./L	15.3				13.7		15.1		9.5		13.4

Table A3-201. Crustacean zooplankton species sampled in Taylor Park Reservoir, 3 August 2000. Mean *Daphnia* density -0-5m=4.0/L, 0-10m=6.4/L

Zooplankton Species	Station 1			Station 2			Station 3			Station 4			Station 5			Wtd. Mean no/L
	(0-5 m)	(0-10 m	Wtd.	(0-5 m)	(0-10 m	Wtd.	(0-5 m)	(0-10 m	Wtd.	(0-5 m)	(0-10 m	Wtd.	(0-5 m)	(0-10 m	Wtd.	
Diacyclops thomasi	1.5	41.6	28.2	11.0	24.0	19.8	15.3	24.0	21.2	5.4	20.4	15.4	13.1	24.2	20.5	21.0
Daphnia g. mendotae	0.3	0.1	0.2	0.4	0.7	0.6	5.4	0.0	1.8	0.0	0.0	0.0	0.5	0.0	0.2	0.6
Daphnia pulicaria	1.5	0.7	1.0	3.4	5.6	4.8	0.0	8.3	5.5	5.6	9.4	8.2	3.1	7.0	5.7	5.0
Leptodiaptomus nudus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.2	0.4	0.4	0.1
Mean total no./L	29.4			25.2			28.6			23.6			26.8			26.7

Table A3-202. Crustacean zooplankton species sampled in Taylor Park Reservoir, 9 August 2001. Mean *Daphnia* density = 7.5/L.

Zooplankton Species	Station 1 (5 m)			Station 2 (10 m)			Station 3 (10 m)			Station 4 (5 m)			Station 5 (5 m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Diacyclops thomasi	39.4	40.3	39.9	22.7	26.0	24.3	19.4	20.7	20.1	25.4	24.0	24.7	23.3	4.6	13.9	24.6
Daphnia g. mendotae	1.2	1.7	1.4	1.4	0.5	0.9	0.9	1.0	1.0	0.6	0.7	0.7	0.0	3.0	1.5	1.1
Daphnia pulicaria	2.9	2.6	2.7	7.7	9.7	8.7	8.7	5.4	7.1	7.5	6.8	7.2	6.7	6.1	6.4	6.4
Leptpdiaptomus nudus	2.4	2.3	2.3	0.1	0.1	0.1	0.2	0.2	0.2	1.1	0.3	0.7	4.4	1.2	2.8	1.2
Mean total no./L	46.4			34.0			28.3			33.3			24.7			33.4

Table A3-203. Crustacean zooplankton species sampled in Taylor Park Reservoir, 9 July 2002. Mean *Daphnia* density = 1.4/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	1.0	0.3	0.7	0.0	0.0	0.0	0.0	>0.1	>0.1	>0.1	0.2	0.1	0.1	0.1	0.1	0.2
Diacyclops thomasi	32.3	31.4	31.9	29.7	30.1	29.9	28.4	35.1	31.8	45.9	43.3	44.6	21.3	30.3	25.8	32.8
Diaphanosoma birgei	>0.1	0.0	>0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	>0.1
Daphnia g. mendotae	0.2	0.1	0.2	0.1	0.1	0.1	0.3	0.2	0.3	0.1	0.0	0.1	0.0	0.0	0.0	1.4
Daphnia longiremis	0.1	0.0	0.1	0.0	0.0	0.0	0.0	>0.1	>0.1	0.0	0.0	0.0	0.0	0.0	0.0	>0.1
Daphnia pulicaria	>0.1	>0.1	>0.1	0.0	0.0	0.0	>0.1	>0.1	>0.1	>0.1	0.0	>0.1	0.0	>0.1	>0.1	>0.1
Leptodiaptomus nudus	0.0	>0.1	>0.1	0.0	>0.1	>0.1	>0.1	0.0	>0.1	>0.1	>0.1	>0.1	0.0	0.1	0.1	>0.1
Mean total no./L	32.9			30.1			32.1			44.8			26.0			33.2

Table A3-204. Crustacean zooplankton species sampled in Taylor Park Reservoir, 12 June 2003. Mean *Daphnia* density = 0.2/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Unidentified *Daphnia spp.*	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	<0.1
Daphnia pulicaria	0.2	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.7	0.3	0.5	0.4	0.3	0.3	0.2
Diacyclops thomasi	44.3	16.9	30.6	20.2	21.8	21.0	22.7	11.0	16.9	26.7	29.9	28.3	25.5	12.3	18.9	23.1
Leptodiaptomus nudus	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0
Mean total no./L	30.7			21.1			17.0			29.0			19.3			23.4

Table A3-205. Crustacean zooplankton species sampled in Taylor Park Reservoir, 23 July 2003. Mean *Daphnia* density = 9.3/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Unidentified *Daphnia spp.*	0.0	0.8	0.4	0.6	0.5	0.6	0.4	0.6	0.5	0.9	0.7	0.8	0.7	1.1	0.9	0.6
Daphnia g. mendotae	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Daphnia pulicaria	15.1	12.5	13.8	7.1	9.4	8.3	2.4	3.9	3.2	6.3	9.4	7.9	8.6	12.4	10.5	8.7
Diacyclops thomasi	24.9	22.8	23.8	16.2	16.7	16.4	13.2	12.6	12.9	19.8	19.7	19.8	20.1	24.9	22.5	19.1
Leptodiaptomus nudus	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.2	0.6	0.7	0.4	0.5	0.3
Mean total no./L	38.5			25.2			16.6			29.0			34.4			28.7

Table A3-206. Crustacean zooplankton species sampled in Taylor Park Reservoir, 14 July 2004. Mean *Daphnia* density = < 0.1/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Diacyclops thomasi	48.2	39	43.6	76	81	78.5	51.9	65.8	58.9	60.1	30.6	45.4	26	12	19	49.1
Daphnia pulicaria	0	0	0	0	0	0	0	0	0	0.3	0	0.1	0	0	0	<0.1
Daphnia g. mendotae	0	0	0	0	0	0	0.4	0	0.2	0	0.2	0.1	0	0	0	<0.1
Leptodiaptomus nudus	0	0	0	0	0	0	0	0.2	0.1	0	0	0	0	0.1	0.1	<0.1
Neonates	0.3	0	0.1	0	0	0	0	0.5	0.2	0	1.2	0.6	0	0	0	0.2
Mean total no./L	43.7			78.5			59.4			46.2			19.1			49.4

Table A3-207. Crustacean zooplankton species sampled in Taylor Park Reservoir, 03 August 2005. Mean *Daphnia* density = 2.1/L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Unidentified *Daphnia spp.*	0	0.4	0.2	0.4	0	0.2	0.5	0.5	0.5	0.5	0.9	0.7	1	1	1	0.5
Daphnia g. mendotae	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	<0.1
Daphnia pulicaria	0.4	0.4	0.4	0	0	0	0	0	0	2	4.1	3.1	4.4	4.5	4.5	1.6
Diacyclops thomasi	120.3	98	109.2	110.3	85.2	97.7	79.9	85.6	82.8	72.7	62.6	67.6	58.1	59.5	58.8	83.2
Leptodiaptomus nudus	0.4	0.8	0.6	0	0	0	0	0.5	0.2	0	0	0	0.3	0.3	0.3	0.2
Mean total no./L	47.5			35.0			39.3			38.2			35.5			39.1

Table A3-208. Crustacean zooplankton species sampled in Taylor Park Reservoir, 17 July 2006. Mean *Daphnia* density = 3.6/L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Unidentified *Daphnia spp.*	0.3	0.5	0.4	0.2	0.1	0.2	0.3	0.4	0.4	0.8	0.8	0.8	1.2	0.6	0.9	0.5
Diacyclops thomasi	18.2	13.8	16	17.5	16.9	17.2	23.4	15.8	19.6	15.3	16.6	16	17.5	16	16.7	17.1
Daphnia g. mendotae	0.4	1.5	1	0.5	0.2	0.4	0.3	0.9	0.6	0.3	1	0.7	0.8	1	0.9	0.7
Daphnia pulicaria	2.4	1.9	2.1	1.6	0.8	1.2	4.9	3.5	4.2	2.6	1	1.8	3.5	2.2	2.9	2.4
Leptodiaptomus nudus	0.7	1.4	1.1	0.6	1.9	1.3	1.2	1.2	1.2	1.2	0.8	1	1	0.6	0.8	1.1
Mean total no./L	20.6			20.2			26.0			20.3			22.2			21.9

Table A3-209. Crustacean zooplankton species sampled in Taylor Park Reservoir, 17 July 20079. Mean *Daphnia* density = 5.6/L.

Zooplankton Species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris		0.1	<0.1													<0.1
Diacyclops thomasi	18.4	18	18.2	15	35.2	25.1	13.8	43.2	28.5	42.1	39.7	40.9	26.2	24.7	25.5	27.6
Leptodiaptomus nudus	0.8	0.4	0.6	0.3	0.6	0.5		0.3	0.2		0.7	0.4		0.2	0.1	0.4
Daphnia g. mendotae	1.5	1.3	1.4		0.2	0.1	0.2	1.8	1	1.5	1	1.3	0.4	0.6	0.5	0.9
Daphnia pulicaria	3.2	4.4	3.8	0.3	1.1	0.7	1.1	2.4	1.8	10.2	7.4	8.8	5.5	3.1	4.3	3.9
Unident. *Daphnia spp.*	1.2	0.9	1.1	0.1		0.1	<0.1	0.9	0.5	1.9	1.3	1.6	0.7	1	0.9	0.8
Mean total no./L	25.1			26.4			31.9			52.9			31.2			33.5

Table A3-210. Crustacean zooplankton species sampled in Taylor Park Reservoir, 16 July 2009. Mean *Daphnia* density = 0.5/L.

Zooplankton Species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Unidentified *Daphnia spp.*	0.4	0.3	0.3	0.0	1.1	0.5	0.0	0.0	0.0	0.0	0.4	0.2	0.4	0.2	0.3	0.3
Daphnia g. mendotae	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.6	0.3	0.2	0.0	0.1	0.2	0.3	0.3	0.2
Daphnia pulicaria	0.4	0.2	0.3	0.0	0.0	0.0	1.0	0.0	0.5	0.6	0.0	0.3	0.4	0.3	0.4	0.3
Leptodiaptomus nudus	0.9	0.2	0.5	0.0	0.0	0.0	1.7	0.0	0.9	0.6	0.2	0.4	0.2	0.3	0.3	0.4
Diacyclops b. thomasi	26.8	34.4	30.6	75.1	101.1	88.1	64.7	68.2	66.5	36.7	39.5	38.1	25.7	23.3	24.5	49.5
Mean total no./L	31.9			88.6			68.1			39.1			25.7			50.7

Table A3-211. Crustacean zooplankton species sampled in Turquoise Lake- 29 July 1992. Mean *Daphnia* density = 11.6/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia g. mendotae	16.9	24.0	12.2	12.0	14.0	9.0	6.7	6.7	7.6	7.3	11.6
Bosmina longirostris	5.1	6.0	1.8	4.3	5.4	5.2	5.6	4.2	6.4	6.9	5.1
Diacyclops thomasi	5.0	7.6	6.3	6.7	10.8	10.8	9.9	8.3	15.8	11.8	9.3
Holopedium gibberum			0.1								<0.1
Mean total no./L	32.3		21.7		27.6		20.7		27.9		26.0

Table A3-212. Crustacean zooplankton species sampled in Twin Lakes, 15 August 199. Mean *Daphnia* density = 0.8/L.

Zooplankton species	Upper Twin Lake				Lower Twin Lake- mean *Daphnia* density = 3.5/liter						Mean no./L
	Station P1		Station P2		Station P3		Station P4		Station P5		
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris					0.2	0.2	<0.1		0.1	0.1	0.1
Daphnia pulicaria	<0.1	<0.1			1.7	1.2	0.9	1	1.1	0.8	0.7
Daphnia rosea					0.2	0.5	0.1		<0.1	<0.1	0.1
Diacyclops thomasi	0.8	0.9	0.9	1.3	4.7	6.5	7.0	6.7	5.7	4.7	3.9
Leptodiaptomus judayi	10.2	8.2	4.2	3.9	4.7	6.1	9.4	8.5	6.1	4.5	6.6
Mean total no./L	10.1		4.8		13.1		17.0		11.6		11.4

Table A3-213. Crustacean zooplankton species sampled in Twin Lakes, 3 October 1991. Mean *Daphnia* density = 1.2/L.

Zooplankton species	Upper Twin Lake				Lower Twin Lake						Mean no./L
	Station P1		Station P2		Station P3		Station P4		Station P5		
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.1	<0.1	0.1	0.2	0.6	0.3	0.1	0.2	1.1	1	0.4
Daphnia pulicaria	0.1		<0.1	<0.1	0.3	0.3	2.9	3	0.7	0.8	0.8
Daphnia rosea	0.1	<0.1			0.9	0.6	0.3	0.4	0.3	0.3	0.4
Diacyclops thomasi	1.2	0.9	1.6	1.3	8	6.7	6.0	5.8	8	8.1	4.8
Leptodiaptomus judayi	4.1	4.2	4.4	5.5	0.2	0.3	0.1	0.2	0.1	0.2	2
Mean total no./L	5.6		6.6		9.3		9.7		10.5		8.4

Table A3-214. Crustacean zooplankton species sampled in Twin Lakes, 25 June 1992. Mean *Daphnia* density = 0.7/L.

Zooplankton species	Upper Twin Lake				Lower Twin Lake						Mean no./L
	Station P1		Station P2		Station P3		Station P4		Station P5		
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris					0.2	0.2				<0.1	<0.1
Daphnia pulicaria					1.3	1	0.2	0.2	1.3	0.7	0.5
Daphnia rosea					0.2	0.2	0.1	0.4	0.5	0.2	0.2
Diacyclops thomasi	0.5	0.2	1	0.5	9.6	9.9	6.3	6.8	5.5	2.9	4.3
L. connexus			<0.1				<0.1				<0.1
Leptodiaptomus judayi	0.6	0.5	0.4	0.3	0.2	0.4	0.3	0.4	0.2	0.5	0.4
Mean total no./L	0.9		1.1		11.6		7.2		5.9		5.4

Table A3-215. Crustacean zooplankton species sampled in Twin Lakes, 27 August 1992. Mean *Daphnia* density = 0.5/L.

Zooplankton species	Upper Twin Lake				Lower Twin Lake						Mean no./L
	Station P1		Station P2		Station P3		Station P4		Station P5		
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris					<0.1	<0.1	<0.1				<0.1
Daphnia pulicaria	<0.1			<0.1	0.2	0.4	0.2	0.3	0.1	0.1	0.1
Daphnia rosea			<0.1		0.2	0.2	0.1	0.1	<0.1	0.1	0.4
Diacyclops thomasi	0.9		1	1.7	5.7	6.5	5.8	4.6	5	3.4	3.6
L. connexus									0.1	0.1	<0.1
Leptodiaptomus judayi	0.4		0.8	1.8	1.3	1	1.1	0.7	0.8	0.7	0.9
Mean total no./L	1.5		2.8		7.8		6.6		5.2		4.7

Table A3-216. Crustacean zooplankton species sampled in Twin Lakes, 23 June 1993. Mean *Daphnia* density = 0.0/L.

Zooplankton species	Upper Twin Lake				Lower Twin Lake						Mean no./L
	Station P1		Station P2		Station P3		Station P4		Station P5		
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	<0.1										<0.1
Diacyclops thomasi	0.1	<0.1	0.1		8.7	6.5	3.9	2.7	2.3	3.2	2.8
Leptodiaptomus judayi	0.2	0.3	0.1	0.1	1.3	1.4	1	0.8	0.7	0.8	0.7
Mean total no./L	0.4		0.1		9.0		4.2		3.5		3.5

Table A3-217. Crustacean zooplankton species sampled in Twin Lakes, 6 August 1993. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Upper Twin Lake				Lower Twin Lake						Mean no./L
	Station P1		Station P2		Station P3		Station P4		Station P5		
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	<0.1										<0.1
Daphnia pulicaria	0.2	0.1		0.1	0.1						<0.1
Diacyclops thomasi	3.2	2.7	4	4.4	16.8	16.2	10.6	11.4	15.7	17.4	10.2
Leptodiaptomus judayi	0.1	3.4	0.8	1	3.9	3.9	2.6	3.7	3.3	4	2.7
Mean total no./L	4.9		5.1		20.4		14.2		20.2		12.9

Table A3-218. Crustacean zooplankton species sampled in Twin Lakes, 20 July 1994. Mean *Daphnia* density = 3.5/L.

Zooplankton species	Upper Twin Lake				Lower Twin Lake						Mean no./L
	Station P1		Station P2		Station P3		Station P4		Station P5		
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris		0.1		0.1	0.2	0.3			0.2	0.2	0.1
Daphnia pulicaria		<0.1	0.1	0.1	7	6.6	5.3	5.2	5.5	3.4	3.3
Daphnia rosea			<0.1	<0.1	0.7	0.6	0.3	0.3	0.1	0.2	0.2
Diacyclops thomasi	1.5	2.3	3.8	3.9	7	10	9.4	13.7	9.9	7.9	5
Leptodiaptomus judayi	0.1	0.6	0.8	0.8	1.4	1.4	1.8	1.9	3.3	1.7	1.4
Mean total no./L	2.4		4.9		17.7		19.1		16.3		12.1

Table A3-219. Crustacean zooplankton species sampled in Twin Lakes, 9 July 1996. Mean *Daphnia* density = <0.1/L.

Zooplankton species	Upper Twin Lake				Lower Twin Lake						Mean no./L
	Station P1		Station P2		Station P3		Station P4		Station P5		
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris			<0.1					0.2			<0.1
Daphnia g. mendotae				<0.1							<0.1
Daphnia pulicaria								0.2			<0.1
Diacyclops thomasi	1.0	1.5	1	0.8	8.6	6.7	6.0	6.0	10.3	8.4	5.1
Leptodiaptomus judayi	4.2	1.8	0.8	0.7	3.4	2.1	7.9	6.5	1.5	1.1	3
Mean total no./L	4.3		1.7		10.9		13.4		10.7		8.2

Table A3-220. Crustacean zooplankton species sampled in Twin Lakes, 31 July 1996. Mean *Daphnia* density = 0.1/L.

Zooplankton species	Upper Twin Lake				Lower Twin Lake						Mean no./L
	Station P1		Station P2		Station P3		Station P4		Station P5		
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.1	0.3	0.2		0.1	0.2	0.1				0.1
Daphnia g. mendotae		0.1		0.1	0.2	0.1	0.1		0.1	0.3	0.1
Daphnia pulicaria	0.2	0.1			0.1		0.1			0.1	<0.1
Diacyclops thomasi	4.4	3.9	7.2	6.1	8.1	6.2	9.1	10.7	7.3	5.1	6.8
Leptodiaptomus judayi	3	3.2	7.2	5.4	3.2	3	7.1	6.7	4.4	3.6	5
Mean total no./L	7.7		13.1		10.6		17.0		10.5		12.0

Table A3-221. Crustacean zooplankton species sampled in Vallecito Reservoir, 4 June 1992. Mean *Daphnia* density = 10.6/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	1	1.7	2.4	3.0	3.7	3.2	9.7	4.4	0.8	1.5	2.5
Daphnia g. mendotae	6.7	7.2	10.1	11.7	10.2	9.4	11.6	12.7	10.2	10.2	10
Daphnia pulicaria	0.9	0.3	0.7	0.9	0.4	1.2	0.5	0.2	0.4	0.2	0.6
Diacyclops thomasi	10.2	9.9	12.1	11	9.7	9.8	13.7	13.1	8	7	10.5
Mean total no./L	19.0		26.0		23.8		30.0		19.2		23.6

Table A3-222. Crustacean zooplankton species sampled in Vallecito Reservoir, 12 August 1992. Mean *Daphnia* density = 6.7/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	2.5	1.4	1.8	2.9	2.1	1.7	2.6	2	2.4	2.9	2.2
Daphnia g. mendotae	4	2.8	4.4	7.8	4.4	2.8	2.3	2.9	5.1	7.8	4.4
Daphnia pulicaria	3.2	2.1	2.7	3.9	1.6	1.4	1.1	1.3	1.7	3.9	2.3
Diacyclops thomasi	1.9	1.6	2.1	2.9	2.2	1.9	2.7	2.6	2.1	2.9	2.3
Diaphanasoma spp.								0.2			<0.1
Mean total no./L	9.8		14.3		9.1		8.9		14.4		11.2

Table A3-223. Crustacean zooplankton species sampled in Vallecito Reservoir, 6 October 1992. Mean *Daphnia* density = 3.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.1				<0.1	<0.1					<0.1
Daphnia g. mendotae	1.4	1.6	0.6	0.8	1.2	0.9	2.8	1.5	4.7	4.8	2.2
Daphnia pulicaria	1.1	0.7	0.5	0.9	0.7	1.5	1.2	0.9	0.9	0.8	0.9
Diacyclops thomasi	11.5	12.4	21.2	4.1	5.4	2	6.5	4.6	5.1	5.1	7.8
Mean total no./L	14.4		14.1		6.5		9.0		10.7		10.9

Table A3-224. Crustacean zooplankton species sampled in Vallecito Reservoir, 10 June 1993. Mean *Daphnia* density = 0.3/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.9	4.1	1.7	2.0	1.0	1.3	1.6	0.1	0.2	0.7	1.4
Daphnia g. mendotae		0.3	0.3	0.5	0.1	0.2	0.1	0.3	0.2	0.3	0.2
Daphnia pulicaria	0.2	0.1			0.2	0.1					0.1
Diacyclops thomasi	31	46.7	27.4	33.8	26	19.6	33.4	35.3	19.8	32.3	29.5
Mean total no./L	41.8		32.9		24.3		35.4		26.8		31.2

Table A3-225. Crustacean zooplankton species sampled in Vallecito Reservoir, September 1993. Mean *Daphnia* density = 2.9/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.5		0.7	1.7	3.2	1.3	0.2	1.3	0.6	1.5	1
Daphnia g. mendotae	1	0.6	1.2	1.9	2.8	2.6	2	2.2	3	2.7	2
Daphnia pulicaria	1.9	0.8	0.7	0.4	1.1	0.3	1	0.5	1.8	0.5	0.9
Diacyclops thomasi	27.5	18.1	18	22.5	20.7	20.9	14.3	14	12.1	11.7	18
Mean total no./L	25.5		32.9		24.3		35.4		26.8		21.9

Table A3-226. Crustacean zooplankton species sampled in Vallecito Reservoir, 13 September 1994. Mean *Daphnia* density = 9.7/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris		0.1		0.1	0.4	0.1	**Stations could not be sampled due to shallow depth of water < 10 m**				0.1
Daphnia g. mendotae	9.4	9.3	9.7	11.4	8.7	8.1					9.5
Daphnia pulicaria	0.7	0.6	0.1	0.5	0.2	0.3					0.2
Diacyclops thomasi	15.6	18.3	16.1	16.5	15.2	17.9					16.6
Mean total no./L	27.2		27.3		25.6						26.4

Table A3-227. Crustacean zooplankton species sampled in Vallecito Reservoir, 6 August 1998. Mean *Daphnia* density = 16.8/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	18.9	15.0	10.0	9.3	8.7	7.0	**Stations could not be sampled due to shallow depth of water < 10 m**				11.5
Daphnia g. mendotae	14.5	12.6	15.1	14.1	19.1	17.2					15.4
Daphnia longiremis	0.8	0.6	0.3	0.5	0.6	0.3					0.5
Daphnia pulicaria	1.9	0.8	0.3	0.6	1.2	0.7					0.9
Diacyclops thomasi	48.3	40.2	29.2	25.5	36.6	26					34.3
Leptodiaptomus spp.	0.9	0.0	0.0	0.0	0.0	0.0					0.2
Mean total no./L	77.3		52.5		58.7						62.8

Table A3-228. Crustacean zooplankton species sampled in Vallecito Reservoir, 21 July 2004. Mean *Daphnia* density = 7.5/L.

Zooplankton species	Station P1 (0-10m)			Station P2 (0-10m)			Station P3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	0.0	0.0	0.0	0.0	Data N/A	0.0	1.2	0.3	0.7	0.2
Daphnia g. mendotae	0.0	0.7	0.4	0.5		0.5	2.3	2.1	2.2	1.1
Daphnia pulicaria	2.1	3.4	2.8	4.8		4.8	9.3	13.7	11.5	6.4
Diacyclops thomasi	2.7	5.8	4.3	16.5		16.5	22.2	20.4	21.3	14
Leptodiaptomus nudus	0.0	0.0	0.0	0.2		0.2	3.5	2.1	2.8	1
Unidentified *Daphnia spp.*	0.0	0.0	0.0	0.0		0.0	0.0	0.3	0.1	<0.1
Mean total no./L	7.5						38.6			22.7

Table A3-229. Crustacean zooplankton species sampled in Vallecito Reservoir, 21July 2005. Mean *Daphnia* density = 21.0/L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Unidentified *Daphnia spp.*	3.9	1.3	2.6	0.5	3.6	2	0	0.4	0.2	1.6
Daphnia g. mendotae	7.5	15	11.2	23.9	10.3	17.1	8.4	12.9	10.7	13
Daphnia pulicaria	9.2	12.1	10.6	3.3	6.2	4.7	4.6	3	3.8	6.4
Daphnia rosea	0.9	0	0.4	0	0	0	0	0	0	>0.1
Diacyclops thomasi	16.2	22.1	19.2	10.8	12.8	11.8	5.5	23.9	14.7	15.2
Leptodiaptomus nudus	0	0	0	0.5	0	0.2	0	0.4	0.2	>0.1
Mean total no./L	44.1			35.9			29.5			35.9

Table A3-230. Crustacean zooplankton species sampled in Vallecito Reservoir, 03 August 2006. Mean *Daphnia* density = 2.8/L.

Zooplankton Species	Station #1 (0-10m)			Station #2 (0-10m)			Station #3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Bosmina longirostris	1.2	1.3	1.2	2.5	1.2	1.9	4.3	1.7	3	2
Ceriodaphnia quadrangula					0.2	0.1				<0.1
Unidentified *Daphnia spp.*	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.1	0.2	0.2
Diacyclops thomasi	3	2.8	2.9	2.9	4.1	3.5	6.7	3.6	5.2	3.8
Daphnia g. mendotae	0.2	0.4	0.3	1.2	0.6	0.9	0.6	0.7	0.7	0.6
Daphnia pulicaria	1.8	1.3	1.6	1.1	0.9	1	4.4	2.4	3.4	2
Daphnia rosea								0.1	0.1	<0.1
Leptodiaptomus nudus	0.1	0.3	0.2	0.2	0.2	0.2	0.5	0.2	0.4	0.2
Mean total no./L	6.4			7.8			12.9			9.0

Table A3-231. Crustacean zooplankton species sampled in Vega Reservoir, 19 July 1999. Mean *Daphnia* density = 4.3/L.

Zooplankton species	Station P1		Station P2		Station P3		Mean no./L
	a	b	a	b	a	b	
Alona spp.		0.1					<0.1
Bosmina longirostris	4	3.2	9.9	6.1	17.1	18.1	9.7
Ceriodaphnia spp.						0.2	<0.1
Daphnia g. mendotae	5.8	5.2	25.6	10	15.6	19.2	13.6
Daphnia pulicaria	1.6	1.2	4.9	3.6	0.9	1.1	2.2
Diacyclops thomasi	25.2	16.1	35	18	17.3	30.2	23.6
Leptodiaptomus spp.	6	3.6	6.6	1.9	4.9	6.8	5
Mean total no./L	36.0		60.8		65.7		54.1

Table A3-232. Crustacean zooplankton species sampled in Vega Reservoir, 25 May 2006. Mean *Daphnia* density = 4.4/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Diacyclops thomasi	13.2	11.4	12.4	8.6	6.1	7.4	10	9.2	9.6	9.8
Unindentified *Daphnia spp.*		0.58	0.3	0.103		0.1				0.1
Daphnia g. mendotae	2.7	1.9	2.3	2	1.5	1.7	0.7	0.4	0.6	1.5
Daphnia pulicaria	3.5	2.9	3.2	5.3	3.6	4.5	0.8	0.6	0.7	2.8
Leptodiaptomus nudus	3.5	2.1	2.8	4	2.3	3.1	0.8	0.3	0.5	2.1
Mean total no./L	20.9			16.8			11.4			16.4

Table A3-233. Crustacean zooplankton species sampled in Vega Reservoir, 13 June 2006. Mean *Daphnia* density = 12.7/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Diacyclops thomasi	16.2	32.2	24.2	11.2	18.6	14.9	20.2	25	22.6	20.6
Unindentified *Daphnia spp.*		0.542	0.3	0.135		0.1				0.1
Daphnia g. mendotae	1.1	2.2	1.6	1.4	1.6	1.4	2.6	2.1	2.3	1.8
Daphnia pulicaria	8.2	17.4	12.8	7.5	8.2	7.9	10.7	12.7	11.7	10.8
Leptodiaptomus nudus	1.3	3.5	2.4	0.9	1.6	1.2	1.9	1.6	1.7	1.8
Mean total no./L	41.3			25.5			38.3			35.0

Table A3-234. Crustacean zooplankton species sampled in Vega Reservoir, 11 August 2006. Mean *Daphnia* density = 25.1/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Diacyclops thomasi	7.6	7.9	7.7	9.4	9.2	9.3	23.9	n/a	23.9	13.6
Unindentified *Daphnia spp.*		0.2	0.1	0.2	0.3	0.2		n/a		0.1
Daphnia g. mendotae	13.5	9.8	11.6	8.5	8.9	8.7	6.8	n/a	6.8	9
Daphnia pulicaria	19	10.5	14.8	15	17.3	16.2	16.8	n/a	16.8	15.9
Leptodiaptomus nudus	2.8	1.7	2.2	2.2	3.1	2.7	1.9	n/a	1.9	2.3
Mean total no./L	36.5			37.1			49.4			41.0

Table A3-235. Crustacean zooplankton species sampled in Vega Reservoir, 19 October 2006. Mean *Daphnia* density = 6.7/L.

Zooplankton species	Station 1 (0-10m)			Station 2 (0-10m)			Station 3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Diacyclops thomasi	2.6	5.8	4.2	1.5	2.8	2.1	1.6	1.8	1.7	2.7
Unindentified *Daphnia spp.*	0.1									<0.1
Daphnia g. mendotae	2	3.7	2.8	0.9	0.6	0.8	0.4	0.4	0.4	1.3
Daphnia pulicaria	6.1	14.2	10.1	6.5	3.5	5	1.1	1	1.1	5.4
Ceriodaphnia quadrangula	2.7	3.2	3	3.3	3.2	3.3	3.4	3.4	3.4	3.2
Leptodiaptomus nudus	1.1	1.5	1.3	0.3	0.1	0.2	0.2	0.3	0.2	0.6
Bosmina longirostris	1.7	6.4	4.1	1.5	1.1	1.3	0.5	0.7	0.6	2
Mean total no./L	25.6			12.7			7.4			15.2

Table A3-236. Crustacean zooplankton species sampled in Vega Reservoir, 04 June 2007. Mean *Daphnia* density = 3.3/L.

Zooplankton species	Station 1 (0-1			Station 2 (0-10m)			Station 3 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	
Diacyclops thomasi	68.6	65.6	67.1	43	39.6	41.3	**No sample due to weather**	29.6	29.6	46
Daphnia g. mendotae	1.1		0.6	0.7	0.8	0.8		0.6	0.6	0.7
Daphnia pulicaria	1		0.5	3.7	4	3.9		3.5	3.5	2.6
Leptodiaptomus nudus		0.3	0.2							<0.1
Bosmina longirostris	1.8	0.7	1.3	0.2	0.4	0.3				0.5
Mean total no./L	69.7			46.3			33.7			49.8

Table A3-237. Crustacean zooplankton species sampled in William's Fork Reservoir, 13 June 1995. Mean *Daphnia* density = 3.5/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.3	0.2	0.1	0.3		0.1		0.4	3.2	0.5	0.6
Daphnia g. mendotae	3.6	2.7	7.4	5	1.5	1.2	1.6	1.4	2.7	5.2	3.2
Daphnia pulicaria	0.1	0.6	0.1	0.4		0.3		0.1			0.3
Diacyclops thomasi	39.3	37.3	22.7	37.3	55.8	43.3	19.5	39.8	30.8	27.6	35.3
Mean total no./L	42.1		36.7		51.2		31.6		35.0		39.5

Table A3-238. Crustacean zooplankton species sampled in William's Fork Reservoir, 2 August 1995. Mean *Daphnia* density = 18.7/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.3	1.8	2.1	2.8		3.6	19.7	9.6	32.2	24.1	10.7
Daphnia g. mendotae	13.1	12.9	13	11.1		11.9	15.6	14.7	18.3	15.6	14
Daphnia pulicaria	1.4	2.1	2.4	3.7		13.5	2.4	5.7	5.6	5.7	4.7
Diacyclops thomasi	14.2	15.9	20.3	18.2		0.4	22.8	12.9	23	25.9	17.1
Mean total no./L	30.8		36.8		29.4		51.8		75.2		46.5

Table A3-239. Crustacean zooplankton species sampled in William's Fork Reservoir, 30 September 1995. Mean *Daphnia* density = 3.4/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Daphnia g. mendotae					0.2				1.9	0.6	0.9
Daphnia pulicaria	1.9	0.8	0.9	1.0	0.7	0.9	3.3	4.5	8.0	3.1	2.5
Diacyclops thomasi	1.9	3.5	5.9	6.5	2.3	6.0	7.1	6.3	12.7	16.1	6.8
Mean total no./L	4.0		7.1		5.2		10.6		21.2		10.2

Table A3-240. Crustacean zooplankton species sampled in William's Fork Reservoir, 21 June 1996. Mean *Daphnia* density = 4.6/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	1.6	2.3	4	5.5	10.5	1.6	15.7	10	2.9	2.5	5.7
Daphnia g. mendotae	1.6	2.9	1.3	1.6	1.2	1.4	1.3	1.1	1	0.2	1.4
Daphnia pulicaria	3.2	2.2	3.1	3.1	2.5	5	2.9	1.9	3.5	5	3.2
Diacyclops thomasi	12.6	16.4	20.5	17	30.2	33.7	19.4	15.6	11.2	14.2	19.1
Mean total no./L	21.4		28.1		43.1		34.0		20.3		29.4

Table A3-241. Crustacean zooplankton species sampled in William's Fork Reservoir, 2 August 1996. Mean *Daphnia* density = 11.1/L.

Zooplankton species	Station P1		Station P2		Station P3		Station P4		Station P5		Mean no./L
	a	b	a	b	a	b	a	b	a	b	
Bosmina longirostris	0.1					0.2	0.2	0.2	1		<0.1
Daphnia g. mendotae	2	1.7	1.4	0.7	0.8	1.3	0.8	1.1	0.1	0.3	1
Daphnia pulicaria	10	9.9	7.3	7.9	14.7	11.9	13	8.6	10	7.5	10.1
Diacyclops thomasi	12.8	13.2	18	19.2	27.6	26.1	22.6	17.5	24.2	17.5	19.9
Leptodiaptomus nudus			0.3								
Mean total no./L	24.9		27.4		41.3		32.0		29.9		31.1

Table A3-242. Crustacean zooplankton species sampled in William's Fork Reservoir, 28 July 2005. Mean *Daphnia* density = 2.3/L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Unidentified *Daphnia spp.*	0	0	0	0	0.6	0.3	0	0	0	0	0.2	0.1	0	0	0	<0.1
Daphnia g. mendotae	0	0	0	0	0.3	0.2	0	0.3	0.2	0	0	0	0	0	0	<0.1
Daphnia pulicaria	1.2	2.1	1.6	1.6	3.0	2.3	2.1	2.5	2.3	1.8	3.4	2.6	2.6	2.4	2.5	2.3
Diacyclops thomasi	47.6	43.5	45.5	33.1	30.9	32	29.7	42.1	35.9	37.4	31.6	34.5	30.2	25.8	28	35.2
Leptodiaptomus nudus	0.3	0.3	0.3	0.5	0	0.3	1.3	0.6	0.9	1.2	0.7	0.9	4.3	5.8	5.0	1.5
Mean total no./L	47.5			35.0			39.3			38.2			35.5			39.1

Table A3-243. Crustacean zooplankton species sampled in William's Fork Reservoir, 8 August 2006. Mean *Daphnia* density =3.7/L.

Zooplankton Species	Station 1 (0-10)			Station 2 (0-10m)			Station 3 (0-10m)			Station 4 (0-10m)			Station 5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Alona spp.				0.2		0.1										0
Bosmina longirostris	0.2		0.1					0.16	0.1				0.2	0.5	0.3	0.1
Leptodiaptomus nudus	2.2	2.8	2.5	5.3	4.3	4.8	4.3	3.11	3.7	3.1	5	4.1	6.3	2.9	4.6	3.9
Ceriodaphnia quadrangula														0.2	0.1	0
Unidentified *Daphnia spp.*	0.3	0.6	0.5	0.4	0.4	0.4	0.7	0.98	0.8	0.3	0.6	0.4	1.3	0.9	1.1	0.6
Diacyclops thomasi	4.7	7.9	6.3	4.4	4.4	4.4	7	5.73	6.4	3.6	3.4	3.5	3.9	3.8	3.9	4.9
Daphnia g. mendotae	1	0.7	0.8	0.4	0.6	0.5	0.6	0.98	0.8	0.4	0.6	0.5	1.7	0.2	1	0.7
Daphnia pulicaria	2.4	1.8	2.1	3.5	3.8	3.65	2.9	2.46	2.68	1.2	2.2	1.7	1.7	2	1.9	2.4
Daphnia rosea				0.1												<0.1
Mean total no./L	12.3			13.8			14.4			10.2			13.0			12.7

Table A3-244. Crustacean zooplankton species sampled in Wolford Mountain Reservoir, 8 August 2001. Mean *Daphnia* density= 7.1/L.

Zooplankton species	Station P1			Station P2			Station P3			Station P4			Station P5			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Leptodiaptomus nudus	0.6	1.1	0.9	0.7	0.5	0.6	0.8	0.4	0.6	0.3	0.2	0.3	0.3	0.3	0.3	0.5
Daphnia pulicaria	2.3	3.9	3.1	2.6	3.1	2.9	2.3	1.7	2.0	1.3	1.1	1.2	0.8	1.1	1.0	2.0
Daphnia g. mendotae	6.4	6.3	6.4	3.8	7.1	5.5	5.1	6.1	5.6	4.3	5.8	5.1	2.8	3.4	3.1	5.1
Diacyclops thomasi	58.6	65.3	62.0	34.1	42.2	38.2	32.8	43.7	38.3	31.0	26.6	28.8	19.8	23.9	21.9	37.8
Leptodora kindti	0.1	0.1	0.1	0.1		0.1	0.1	0.1	0.1	0.2		0.1		0.1	0.1	0.1
Bosmina longirostris								0.2	0.1							0.0
Mean total no./L	72.5			47.2			46.8			35.5			26.3			45.6

Table A3-245. Crustacean zooplankton species sampled in Wolford Mountain Reservoir, 08 August 2006. Mean *Daphnia* density = 1.6/L.

Zooplankton species	Station P1 (0-10m)			Station P2 (0-10m)			Station P3 (0-10m)			Station P4 (0-10m)			Station P5 (0-10m)			Mean no./L
	a	b	mean	a	b	mean	a	b	mean	a	b	mean	a	b	mean	
Unident. *Daphnia spp.*	0.1	0.2	0.2	0.2		0.1	0.1	0.3	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.2
Diacyclops thomasi	6.5	7.5	7	5.1	5.3	5.2	6.2	6.1	6.1	9.8	7	8.4	3.5	4	3.8	6.1
Daphnia g. mendotae	0.3	0.3	0.3	0.4	0.3	0.4	0.1	0.1	0.1	0.6	0.3	0.4	0.2	0.3	0.2	0.3
Daphnia pulicaria	1	0.4	0.8	0.6	1.1	0.8	0.8	0.9	0.5	1.5	1.6	1.5	1.2	0.8	0.8	1.0
Daphnia rosea				0.1	0.1	0.1		0.1		0.1		0.1				0.1
Leptodiaptomus nudus	2.3	0.8	1.5	1.2	1.5	1.4	0.9	1.2	1.1	5.3	4.5	4.9	0.7	0.6	0.6	1.9
Mean total no./L	9.8			8.0			8.4			15.5			5.9			9.6

Crustacean Zooplankton Length Frequencies in 27 Lakes and Reservoirs in Colorado, 1991-2009

Table A3-246. Length frequencies and mean lengths of crustacean zooplankters in samples from Lake Avery, 1 November 2001, and 18 July 2002.

Length in mm	Lake Avery - 1 November 2001						Lake Avery - 18 July 2002					
	Bl	*Dt*	*Dp*	*Dgm*	*Cq*	*Ln*	*Bl*	*Cq*	*Dt*	*Dgm*	*Dp*	*Ln*
0.2		1					16	1				
0.3	1	3	1				37	12	10			
0.4		1					10	19	9			5
0.5	1	3	3	2				13	7	3		12
0.6		1	6	3				10	16	4		17
0.7		3	15	3	2			7	15	3	3	20
0.8		9	15	7				1	11	6	2	8
0.9	1	12	12	2					8	14	10	10
1.0		9	9	3		2			3	21	15	1
1.1		5	7	1		1			2	14	9	3
1.2		2	7			2				6	15	2
1.3		1	3	2		3				2	13	
1.4		1	1			2				5	7	
1.5			1							3	4	1
1.6		1	3									1
1.7		1	1									1
Totals	3	53	84	23	2	10	63	63	81	81	78	81
Mean Length	0.58	0.91	0.95	0.85	0.71	1.25	0.33	0.51	0.68	1.04	1.17	0.77

Length frequency of crustacean zooplankton (measured to nearest 0.01mm) collected in Colorado lakes and reservoirs from 1991-2009.
Aa = Alona affinis, Ag = Alona guttata, A. spp. = unidentified Alona, Bl = Bosmina longirostris, Cq = Ceriodaphnia quadrangula, C. spp. = unidentified Ceriodaphnia, Cs = Chydorus sphaericus, Db = Diaphanosoma birgei, Dbr = Diaphanosoma brachyurum, Dia = unidentified Diaphanosoma, Dt = Diacyclops thomasi, Dgm = Daphnia galeata mendotae, Dl = Daphnia longiremis, Dp = Daphnia pulicaria, D. spp. = unidentified Daphnia, Dr = Daphnia rosea, Hg = Holopedium gibberum, Lc = Leptodiaptomus connexus, Lj = Leptodiaptomus judayi, Lk = Leptodora kindtii, Ln=Leptodiaptomus nudus, L. spp. = unidentified Leptodiaptomus, Se = Simocephalus espinosus, So = Skistodiaptomus oregonensis.

Table A3-247. Length frequency and mean lengths of crustacean zooplankters in samples from Lake Avery, 21 June 2005.

Length in mm	Lake Avery - 21 June 2005				
	Bl	*D. spp.*	*Dt*	*Dgm*	*Dp*
0.3	1				
0.4	1		1		
0.5	1		13	1	
0.6		1	10	4	
0.7		8	3	10	3
0.8		9	5	24	6
0.9		8	16	4	28
1		5	8	4	43
1.1		8	5	1	29
1.2		3	8		42
1.3		2	2		3
1.4		3	2		9
1.5				1	5
1.6		1			3
1.7		1			5
1.8					6
1.9					11
2					5
2.1					2
Totals	3	49	73	49	200
Mean Length	0.40	1.12	0.90	0.89	1.20

Table A3-248. Length frequencies and mean lengths of crustacean zooplankters in samples from Big Creek Lake, 20 August 1991, and 8 October 1991.

Length in mm	Big Creek Lake - 20 August 1991					Big Creek Lake - 8 October 1991				
	Dr	*Dbr*	*Bl*	*Dt*	*Lj*	*Dr*	*Dbr*	*Bl*	*Dt*	*Lj*
0.2			11							
0.3			28	1	1			10	1	
0.4		6	14	6			1	9	3	
0.5	6	13		14	6	1	7		10	
0.6	14	24		22	19		3		19	2
0.7	9	12		14	13	1	5		20	11
0.8	5	4		1	14	5	9		4	26
0.9	2	1		2	7	10	5		1	13
1.0						3			2	8
1.1	1					1				
1.2	3					1				
1.3	3					1				
1.4	6					8				
1.5	1					3				
1.6	1					1				
1.7	1									
1.8						1				
Totals	52	60	53	60	60	37	30	19	60	60
Mean length	0.87	0.60	0.31	0.59	0.69	1.01	0.70	0.35	0.63	0.82

Table A3-249. Length frequencies and mean lengths of crustacean zooplankters in samples from Big Creek Lake, 29 June 1992, and 30 August 1992.

Length in mm	Big Creek Lake - 29 June 1992					Big Creek Lake - 30 August 1992				
	Dr	*Dbr*	*Bl*	*Dt*	*Lj*	*Dr*	*Dbr*	*Bl*	*Dt*	*Lj*
0.2								3		
0.3			6					16	1	
0.4		2	5	1		1	3	2	15	
0.5	3	1	1	1	6	3	7		12	
0.6	10			5	4	3	9		17	2
0.7	3	3		7	11	8	14		11	4
0.8	2	2		7	15	12	18		2	15
0.9	2			14	8	9	6		1	27
1.0	1			1	10	6	3			8
1.1				3	4	3				1
1.2	4			5	2					3
1.3	3			4		2				
1.4	1			5		3				
1.5	3					8				
1.6	2					2				
1.7										
1.8	1									
Totals	35	8	12	53	60	60	60	21	60	60
Mean length	0.96	0.63	0.36	0.93	0.82	1.02	0.71	0.30	0.60	0.88

Table A3-250. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 8 June 1993, 20 July 1993, and 16 September 1993.

Length in mm	Blue Mesa Reservoir - 8 June 1993				Blue Mesa Reservoir - 20 July 1993					Blue Mesa Reservoir - 16 September 1993				
	Dgm	*Dp*	*Bl*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*	*Ln*	*Dgm*	*Dp*	*Bl*	*Dt*	*Ln*
0.2			2											
0.3			45				24	1				2		
0.4			24	3			28	3				3	3	
0.5	2		14	15			10	6				1	6	3
0.6	9	1		26	4		1	19	1	3			18	7
0.7	27	6		12	20			24	1	8	3		16	2
0.8	11	5		10	20	7		21	1	7	6		24	13
0.9	4	5		10	16	15		12		6	5		17	10
1	3	7		7	9	15		7		1	8		5	7
1.1	1	8		2	7	16		7		1	8		4	10
1.2	3	6		8	4	17			1	1	8			12
1.3	3	4		2	2	7					8			9
1.4		6		1		7					11			4
1.5		5			2	4					4			3
1.6	2	4				3			3		2			1
1.7	1	3				2					4			4
1.8						2					6			1
1.9		1				3					2			1
2						2					1			
2.1											1			
2.2														
2.3						1								
2.4									1					
Totals	66	62	85	96	84	101	63	100	8	27	77	6	93	87
Mean length	0.82	1.16	0.36	0.76	0.88	1.20	0.38	0.78	1.01	0.80	1.27	0.38	0.75	1.07

Table A3-251. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 21-23 May 1994, 6 June 1994, and 22-24 June 1994.

Length in mm	Blue Mesa Reservoir - 21-23 May 1994				Blue Mesa Reservoir - 6 June 1994				Blue Mesa Reservoir - 22-24 June 1994			
	Dgm	*Dp*	*Bl*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*
0.2			2									
0.3			14				17	1			8	
0.4	1		11				15	8			30	
0.5			16	5			8	10			7	9
0.6	4		8	9			1	5				14
0.7	12		3	10	11			9	2			21
0.8	10	2		11	11			5	6			13
0.9	6	2		9	6	2		1	11	4		2
1.0	4	6		9	5	11		1	19	7		1
1.1	3	3		2	1	5			9	5		
1.2	2	7		1	3	5			9	9		
1.3		11				4				4		
1.4		5			1	4				4		
1.5						2				8		
1.6		1				1				5		
1.7		5								4		
1.8						3				7		
1.9										2		
2.0						1						
Total	42	37	54	56	38	38	41	40	56	59	45	60
Mean length	0.82	1.42	0.44	0.79	0.83	1.24	0.38	0.59	1.00	1.37	0.40	0.69

Table A3-252. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 5-7 July 1994, 18-21 July 1994, and 30 July-1 August 1994.

Length in mm	Blue Mesa Reservoir - 5-7 July 1994					Blue Mesa Reservoir - 18-21 July 1994						Blue Mesa Reservoir - 30 July - 1 August 1994					
	Dgm	*Dp*	*Bl*	*Dt*	*Ln*	*Dgm*	*Dp*	*Bl*	*C. spp.*	*Dt*	*Ln*	*Dgm*	*Dp*	*Bl*	*C. spp.*	*Dt*	*Ln*
0.2								1									
0.3			7					5						9			
0.4			10	1				22	1	7				10	3	1	
0.5			3	8				5	1	7					9	7	1
0.6			2	15	2					9	1	1			1	11	3
0.7	1			14	2				4	15	2	6			3	12	6
0.8	12			13	2	6			1	17	1	9				23	1
0.9	17	2		8		11				4	2	10	1			19	1
1.0	14	3			3	11	5			3	1	5	2			2	1
1.1	5	6				7	7				1	5	4				
1.2	3	7				5	11				2	6	9				3
1.3	2	5				6	9				3	6	6				5
1.4		7				4	6					4	12				1
1.5		6				2	7						5				
1.6		5					3						8				
1.7							5						1				
1.8		2					6						9				
1.9		1					2						4				
2.0							1										
Total	54	44	22	59	10	52	62	33	7	62	13	52	61	19	16	75	22
Mean length	0.95	1.21	0.40	0.69	0.80	1.07	1.39	0.39	0.64	0.68	1.00	1.00	1.45	0.35	0.51	0.74	0.94

Table A3-253. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 14-18 August 1994, and 16-17 September 1994.

Length in mm	Blue Mesa Reservoir - 14-18 August 1994						Blue Mesa Reservoir - 16-17 September 1994					
	Dgm	*Dp*	*Bl*	*C. spp.*	*Dt*	*Ln*	*Dgm*	*Dp*	*Bl*	*C. spp.*	*Dt*	*Ln*
0.2									2			
0.3			1						3			
0.4			1	1	7				4	7	5	
0.5				14	17	3				18	12	3
0.6				9	11	4	1			15	12	4
0.7	5			9	18	10	10			17	16	2
0.8	9			2	10	6	11	1		5	9	2
0.9	16	1		1	1	6	10	4			5	7
1.0	11	5			1	5	6	9				6
1.1	6	6			1	3	3	3				2
1.2	6	4				2	2	5				
1.3	2	10				3	1	6				
1.4	1	7				1	2	6				
1.5	1	5				1	7	6				1
1.6	1	10					1	6				
1.7		4						3				1
1.8		3					1	3				4
1.9		2						1				4
2.0								2				4
2.1												1
Total	58	57	2	36	66	44	55	55	9	62	59	41
Mean length	0.98	1.40	0.35	0.60	0.63	0.88	1.00	1.34	0.32	0.59	0.65	1.21

Table A3-254. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 30 July 1998, 14 July 1999, and 4 August 1999.

Length in mm	Blue Mesa Reservoir - 30 July 1998					Blue Mesa Reservoir - 14 July 1999						Blue Mesa Res. - 4 Aug 1999			
	Dgm	*Dp*	*Bl*	*Dt*	*L. spp.*	*Dgm*	*Dp*	*Bl*	*Dia spp.*	*Dt*	*L. spp.*	*Dgm*	*Dp*	*Dt*	*L. spp.*
0.2								2							
0.3			9	5				14		4				3	
0.4			19	19	8			13		15				10	4
0.5	1		6	16	10		1	9	1	14	5	2		12	15
0.6	6			6					1	17	5	1		5	8
0.7	10	1		5	5		2			17	3			3	5
0.8	7	4		7	2	7	5		1	7	1			5	5
0.9	4	1		2	2	3	11		1	6	3		6	1	2
1.0	8	1			4	3	10			2			3	1	1
1.1	1	2			4	4	10		1	2	3		7		
1.2	4	3			3	2	21			3	3		4		
1.3	2	8			1		21				4	1	10		1
1.4		8			1	1	19			4	1	2	7		
1.5		6			1		10						7		
1.6		9				1	11						5		
1.7		5					4				2		6		
1.8		5				1	4						3		
1.9		5					4								
2.0		1													
2.1		1					4				1				
2.2															
2.3							1				1				
2.4							1								
2.5															
2.6							1								
2.7															
2.8							1								
2.9							1								
Total	43	60	34	60	41	22	142	38	5	91	32	6	58	40	41
Mean length	0.76	1.46	0.39	0.53	0.76	1.08	1.38	0.42	0.83	0.69	1.04	0.99	1.37	0.59	0.68

Table A3-255. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 23 September 1999, and 13 April 2000.

Length in mm	Blue Mesa Reservoir - 23 September 1999						Blue Mesa Reservoir - 13 April 2000			
	Dgm	*Dp*	*Bl*	*C. spp.*	*Dt*	*L. spp.*	*Bl*	*Dt*	*Dgm*	*Dp*
0.2							1	1		
0.3			1		2		8	0		
0.4	5			6	7	1	16	4		
0.5	2				7	1	2	8		
0.6	6				9			10	2	
0.7	10	1			11			22	1	1
0.8	11	3			9			10		2
0.9	5	4		1	5	4		1		1
1.0	1	1			1			1		
1.1	1	2				1				1
1.2	2							1	1	
1.3	6	2								
1.4	4	2								
1.5		2								
1.6	2	1								
1.7		1								
1.8		1								
1.9		2				2				
2.0										
2.1										
2.2		1								
Total	55	23	1	7	51	9	27	58	4	5
Mean length	0.91	1.31	0.33	0.49	0.69	1.08	0.43	0.70	0.90	0.90

Table A3-256. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 19 May 2000, and 16 June 2000.

Length in mm	Blue Mesa Reservoir - 19 May 2000					Blue Mesa Reservoir - 16 June 2000				
	Bl	*Dt*	*Dgm*	*Dp*	*Ln*	*Bl*	*Dt*	*Dgm*	*Dp*	*Ln*
0.2	17					8				
0.3	16	5				20	1		2	
0.4	8	9		1		11			1	
0.5	2	18		2		1	2			
0.6		6		10			17	3	2	
0.7		9	4	9			18	14	5	
0.8		5		16			12	4	6	
0.9		5		5			9	4	6	
1.0		2		1			1	4	13	1
1.1				2					17	
1.2				2					3	
1.3				4	1					
1.4				1					1	
1.5			1	1	1				2	
1.6				2					2	
1.7				3					1	
1.8				1					1	
Totals	43	59	5	59	2	40	60	29	62	1
Mean Length	0.34	0.63	0.85	0.95	1.41	0.35	0.75	0.81	1.05	1.09

Table A3-257. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 11 July 2000, and 2 August 2000.

Length in mm	Blue Mesa Reservoir - 11 July 2000					Blue Mesa Reservoir - 2 August 2000					
	Bl	*Dt*	*Dgm*	*Dp*	*Ln*	*Bl*	*Dt*	*Dgm*	*Dp*	*Ln*	*Cq*
0.2	3										
0.3	3	1				1	2				1
0.4	4	16					7			5	
0.5		7			4		15			10	
0.6		8		1	1		13	1		7	
0.7		14		1			20	1		12	1
0.8		7		2			1	2	2	5	
0.9		2		9	2		3		4	10	
1.0		3		10					11	4	
1.1		1		7				1	7		
1.2				6					6		
1.3				9	2				7	1	
1.4				4					3	1	
1.5				2					2		
1.6				7					3		
1.7				1					2		
1.8				1					10		
1.9									2		
2.0									3		
2.1											
Totals	10	59	0	60	9	1	61	5	62	55	2
Mean Length	0.36	0.65	0.00	1.23	0.81	0.30	0.63	0.84	1.34	0.83	0.56

Table A3-258. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 17 August 2000, and 12 September 2000.

Length in mm	Blue Mesa Reservoir - 17 August 2000						Blue Mesa Reservoir - 12 September 2000					
	Bl	*Dt*	*Dgm*	*Dp*	*Ln*	*Cq*	*Bl*	*Dt*	*Dgm*	*Dp*	*Ln*	*Cq*
0.2						1						1
0.3	2	5			1	4	2	3				4
0.4		9		1	1	17		8				18
0.5		14	1		11	14		9	2		1	13
0.6		14	4		6	11		11	4		4	10
0.7		24	8	2	11	7		17	10	1	8	6
0.8		11	6	2	15	1		9	8	2	15	1
0.9		4	3	7	16			3	3	8	18	
1.0			4	7	8				5	6	9	
1.1			3	6	1				3	5		
1.2			4	10	3				4	7		
1.3			4	14					4	12	1	
1.4			5	10					5	4		
1.5			1	10	1				1	7	1	
1.6				4						2		
1.7				7						7		
1.8				1	1							
1.9				1	1						1	
2.0					1						2	
2.1				1						1		
Totals	2	81	43	82	77	55	2	60	49	62	60	53
Mean Length	0.34	0.66	1.01	1.32	0.88	0.54	0.34	0.66	0.99	1.30	0.93	0.54

Table A3-259. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 11 June 2003, and 23 July 2003.

Length in mm	Blue Mesa Reservoir - 11 June 2003						Blue Mesa Reservoir - 23 July 2003					
	Bl	*Dt*	*Dgm*	*Dp*	*D. spp.*	*Ln*	*Bl*	*Dt*	*Dgm*	*Dp*	*D. spp.*	*Ln*
0.1												
0.2	16	1					3	3				
0.3	41			3			1	23				1
0.4	16	10	1	2	2	1		30				8
0.5	1	17	1	2			1	26				6
0.6		19	1	4	5			17	2		2	10
0.7		22	3	16	2			12	2	1		6
0.8	1	28	5	37	7			4	5	1	3	2
0.9		24	2	78	8			2	8	3	4	2
1.0		11		79	1			4	2	15	3	2
1.1		6		50	1			1	2	12	2	1
1.2	1	2		45					3	20	2	1
1.3		3		12					3	25	4	1
1.4				5					1	10	3	
1.5		1		2	1				1	15		1
1.6		1		8					1	7		
1.7				9						7		
1.8				8						1		
1.9				6						2		
2.0				4						2		
2.1				4						1	1	1
2.2				1						2		
2.3										2		
2.4										1		
2.5										3		
Totals	76	145	13	375	27	1	5	122	30	130	24	42
Mean Length	0.37	0.81	1.12	0.77	0.85	0.48	0.33	0.55	1.05	1.42	1.11	0.74

Table A3-260. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 22 August 2003, and 15 July 2004

Length in mm	Blue Mesa Reservoir - 22 August 2003							Blue Mesa Reservoir - 15 July 2004				
	Bl	*Cq*	*Dt*	*Dgm*	*Dp*	*D. spp.*	*Ln*	*Bl*	*Dt*	*Cq*	*Dgm*	*Dp*
0.1												
0.2	4						1	5				
0.3	5	7	3				3	3	4			
0.4	1	19	11				3	4	7	2		
0.5		16	17				8	2	8	2		
0.6		19	19			1	15		17	1	1	
0.7		10	10	2	4	2	13		10		1	2
0.8		2	4	6	14	2	13		20		6	2
0.9			1	9	21	4	5		7		1	1
1				5	59	4			6	4	4	8
1.1				7	36	1				1	1	3
1.2				1	29	2					2	16
1.3					23	1				2	3	19
1.4					23	3				1	6	17
1.5				2	18		1			1	2	14
1.6					15					1	1	14
1.7					26					1		10
1.8					11							6
1.9					15							
2					8							
2.1					4							
2.2												
2.3												
2.4												
2.5												
Totals	10	73	65	32	306	20	62	14	79	16	28	112
Mean length	0.31	0.56	0.60	1.01	1.33	1.05	0.70	0.32	0.68	1.02	1.12	1.37

Table A3-261. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 23 June 2005, and 4 August 2005.

Length in mm	Blue Mesa Reservoir - 23 June 2005						Blue Mesa Reservoir - 04 August 2005					
	Bl	*D. spp.*	*Dt*	*Dgm*	*Dp*	*Ln*	*Bl*	*D. spp.*	*Dt*	*Dgm*	*Dp*	*Ln*
0.2	1											
0.3	12		1				1		1			
0.4	15		4						6			1
0.5	4		7			1			32		1	6
0.6			23	3	2	2			42			7
0.7		11	31	8	1			1	47			4
0.8		6	20	40	6			1	17		2	7
0.9		15	14	33	26			3	14	1	6	4
1		6	7	12	23			4	1		8	1
1.1		9	2	12	32			1	3		3	
1.2		6		13	24			3	2		18	2
1.3		6		4	7			1			8	2
1.4				4	8			1			22	
1.5		2		3	1			1		1	19	1
1.6				2	6						13	
1.7					3						18	
1.8					3						4	1
1.9				1	2				1		7	
2											8	
2.1											2	
2.2											4	
2.3											5	
2.4											1	
Totals	32	61	109	135	144	3	1	16	166	2	149	36
Mean length	0.43	0.98	0.75	0.97	1.13	0.57	0.30	1.07	0.67	1.20	1.51	0.81

Table A3-262. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 17 May 2006, and 18 July 2006.

Length in mm	Blue Mesa Reservoir - 17 May 2006						Blue Mesa Reservoir - 18 July 2006						
	Bl	*D. spp.*	*Dt*	*Dgm*	*Dp*	*Ln*	*Bl*	*Cq*	*D. spp.*	*Dt*	*Dgm*	*Dp*	*Ln*
0.4			25				1	4		14			7
0.5	1	1	25			1	1	6		18			12
0.6		1	30	6				2	1	6			8
0.7		3	27	18	4			7	2	11	3		15
0.8		3	22	7	3			3	3	3	2	2	10
0.9			13	6	4			2	1	6	7	4	4
1.0			9	1	7				4	2	9	10	6
1.1			9	4	1				3		2	8	3
1.2		1	6	4	2				3		6	22	2
1.3			2	1	3				1		2	7	
1.4		1		2					2		4	6	
1.5			1	2	1				2		4	5	
1.6				1					1		2	4	
1.7									1			5	
1.8									1		1	2	
1.9					1							3	
2.0									1			1	
2.1												4	
2.2												3	
2.3					1							1	
Totals	1	10	169	52	27	1	2	24	26	60	42	87	67
Mean length	0.50	0.82	0.70	0.89	1.07	0.50	0.45	0.62	1.17	0.59	1.13	1.33	0.71

Table A3-263. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 1 June 2007, and 16 July 2007.

Length in mm	Blue Mesa Reservoir - 01 June 2007						Blue Mesa Reservoir - 16 July 2007					
	Bl	*D. spp.*	*Dt*	*Dgm*	*Dp*	*Ln*	*Bl*	*D. spp.*	*Dt*	*Dgm*	*Dp*	*Ln*
0.2	15		1						3			
0.3	80		3				1		8			1
0.4	38		6	1					17			10
0.5	13		5	6					28			34
0.6			14	22	3				15			9
0.7			11	31	6	2		2	8	1	1	6
0.8		1	7	40	24	1			16	6	6	7
0.9			3	22	24				3	4	7	4
1			7	19	21	1			1	13	6	4
1.1			1	4	23	2	1	1	1	17	24	3
1.2			1	4	14	2		1		13	14	4
1.3				2	9			1		21	22	2
1.4				1	11			2		9	9	2
1.5					9					11	7	
1.6					2			1		9	13	
1.7					3					2	2	
1.8					2					9	2	
1.9								1		3	1	
2										5	2	
2.1										3	2	
2.2												
2.3										1		
Totals	146	1	59	152	151	8	2	9	100	127	118	86
Mean length	0.33	0.80	0.67	0.80	1.10	0.98	0.70	1.26	0.56	1.35	1.30	0.67

Table A3-264. Length frequencies and mean lengths of crustacean zooplankters in samples from Blue Mesa Reservoir, 15 July 2009, and 12 August 2009.

Length in mm	Blue Mesa - 15 July 2009						Blue Mesa Reservoir- 12 August 2009						
	Bl	*Dt*	*Dgm*	*Dp*	*D. spp.*	*Ln*	*Bl*	*Dt*	*Dgm*	*Dp*	*D. spp.*	*Ln*	*Cq*
0.1													
0.2													
0.3	1	6				2		2					
0.4		22				1	1	17				13	
0.5		21				3		19				46	2
0.6		17				5		22			1	30	
0.7		12	3	2		3		18	3	1	1	15	
0.8		7	8	3	1	6		13	5		2	6	
0.9		6	11	13	2	4		6	4	4		6	
1		5	8	22	2	5		1	4	13	1	6	
1.1		2	9	16	2	5		1	2	7	3	2	
1.2		1	7	21	1	1			4	16	3	2	
1.3			6	13	2				4	10	0		
1.4			2	17	1				4	13	1		
1.5				4	0					10	2		
1.6				12	3					12	1		
1.7				5	1					11	1	1	
1.8			1	3					1	15			
1.9				2						9			
2				5						2			
2.1				4						4			
2.2				4						1			
2.3				2									
2.4				2									
Totals	1	99	55	150	15	35	1	99	31	128	16	127	2
Mean Length	0.32	0.65	1.08	1.38	1.27	0.84	0.40	0.66	1.11	1.50	1.20	0.67	0.52

Table A3-265. Length frequency and mean lengths of crustacean zooplankters in samples from Cheesman Reservoir, 19 August 1992

Length in mm	Cheesman Reservoir - 19 August 1992							
	Dgm	*Dp*	*Aa*	*Bl*	*Cq*	*Dt*	*Lj*	*Ln*
0.2	2			20				
0.3	2			55	12	1		
0.4	1		1	25	25	3	6	2
0.5	3		1		20	9	7	1
0.6	11		1		32	19	17	
0.7	9				10	38	12	5
0.8	14	1				17	5	1
0.9	11	3			1	8	4	1
1.0	13	3				5	17	1
1.1	11	2					17	3
1.2	7						11	1
1.3	7	1					4	1
1.4	7	1						
1.5	2							
1.6	2	1						
Total	100	12	3	100	100	100	100	16
Mean length	0.95	1.08	0.50	0.31	0.51	0.70	0.86	0.83

Table A3-266. Length frequencies and mean lengths of crustacean zooplankters in samples from Dillon Reservoir, 17 June 1993, 7 August 1993, 26 August 1993, and 1 October 1993.

Dillon Reservoir											
Length in mm	**17June1993**	**7 August 1993**			**26 August 1993**				**1 October 1993**		
	Dt	*Dgm*	*Bl*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*	*Dgm*	*Bl*	*Dt*
0.2			4				2			3	
0.3			36				40			23	
0.4	3		15	1	1		47	3		14	1
0.5	8	2	8		6		8	2			5
0.6	22	5	2	7	5			18	1		14
0.7	23	5		18	7			31			32
0.8	21	3		35	5			20	1		27
0.9	10			15				11			13
1.0	10			11				11			7
1.1	1	1		6		1		4			1
1.2	2			2							
1.3											
1.4											
1.5											
1.6									1		
Total	100	16	65	100	24	1	97	100	3	41	100
Mean length	0.74	0.69	0.35	0.79	0.64	1.10	0.36	0.76	1.07	0.33	0.75

Table A3-267. Length frequencies and mean lengths of crustacean zooplankters in samples from Dillon Reservoir, 1 June 1994, 8 July 1994, 18 August 1994, and 28 June 1995.

Dillon Reservoir										
Length in mm	**1 June 1994**		**8 July 1994**			**18 August 1994**			**28 June 1995**	
	Dgm	*Dt*	*Dgm*	*Bl*	*Dt*	*Dgm*	*Bl*	*Dt*	*Dgm*	*Dt*
0.2				8			1			
0.3		4		24	3		41			
0.4	1	19	1	15	13	2	45			
0.5		26	1	1	10	11	10	3	1	
0.6		26			13	10	1	9		1
0.7		13			12	6		30		5
0.8		2			19	12		32		10
0.9			1		15	7		13		17
1.0		4			10	4		10		14
1.1		3			2	1		3		3
1.2		3			5	1				4
1.3						1				3
Total	1	100	3	48	102	100	98	100	1	57
Mean length	0.40	0.59	0.60	0.32	0.73	0.79	0.37	0.79	0.50	0.94

Table A3-268. Length frequencies and mean lengths of crustacean zooplankters in samples from Dillon Reservoir, 27 August 1995, 22 June 1996, 10 July 1996, and 1 August 1996.

Dillon Reservoir												
Length in mm	**27 August 1995**			**22 June 1996**			**10 July 1996**		**1 August 1996**			
	Dgm	*Bl*	*Dt*	*Dp*	*Bl*	*Dt*	*Bl*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*
0.2		5					2					
0.3		21			5		3				29	
0.4		7									16	1
0.5	1					1		1				
0.6			2			15		15				10
0.7			7			19		34				28
0.8			23			7		22	1			41
0.9			10			19		12				14
1.0			9			11		11				6
1.1	2		3	1		17		2	1	1		
1.2			2	2		5				1		
1.3						1						
Total	3	33	56	3	5	95	5	97	2	2	45	100
Mean length	0.90	0.31	0.86	1.17	0.30	0.87	0.26	0.77	0.95	1.15	0.34	0.77

Table A3-269. Length frequencies and mean lengths of crustacean zooplankters in samples from Dillon Reservoir, 15 July 1998, 12 August 1998, 2 August 1999, and 2 September 1999.

Dillon Reservoir										
Length in mm	**15 July 1998**			**12 August 1998**			**2 August 1999**		**2 September 1999**	
	Dgm	*Bl*	*Dt*	*Dgm*	*Bl*	*Dt*	*Bl*	*Dt*	*Bl*	*Dt*
0.2					7		23		24	
0.3		13			53		32	1	58	
0.4	1	22	3	1	37	1	9	4	6	3
0.5	4	21	38	8	3	7		12		4
0.6	4	14	26	11		13		13		16
0.7	2		24	5		28		11		9
0.8			4	2		27		7		14
0.9			4	3		13		1		3
1.0			1	2		10		1		1
1.1				1		1				
1.2										
1.3										
1.4										
1.5										
1.6				1						
1.7										
1.8				1						
Total	11	70	100	100	35	100	64	50	88	50
Mean length	0.56	0.45	0.60	0.34	0.72	0.76	0.32	0.66	0.32	0.73

Table A3-270. Length frequencies and mean lengths of crustacean zooplankters in samples from Dillon Reservoir, 27 July 2000, 16 July 2002, and 21 July 2003.

Length in mm	Dillon Reservoir - 27 July 2000			Dillon Reservoir - 16 July 2002					Dillon Reservoir - 21 July 2003			
	Bl	*Dt*	*Cq*	*Bl*	*Cq*	*Dt*	*Dgm*	*Ln*	*Bl*	*Dt*	*Dgm*	*Dp*
0.2	30			42					46			
0.3	40		1	49		3			48	10		
0.4	14	6	1	11	1	10			9	9	1	
0.5		17				26		1	1	30	6	
0.6		40				24				32	1	
0.7		23				18				13	1	
0.8		10				16	1			5		
0.9		4				4				3	4	
1.0						1					1	
1.1												
1.2												
1.3												
1.4												
1.5												
1.6												
1.7												
1.8												1
Totals	84	100	2	102	1	102	1	1	104	102	14	1
Mean Length	0.32	0.67	0.41	0.31	0.42	0.65	0.84	0.56	0.31	0.60	0.72	1.81

Table A3-271. Length frequencies and mean lengths of crustacean zooplankters in samples from Dillon Reservoir, 8 August 2005, 14 August 2006, and 18 July 2007.

Length in mm	Dillon Reservoir - 8 August 2005				Dillon Reservoir - 14 August 2006					Dillon Reservoir - 18 July 2007			
	Bl	*Dgm*	*Dp*	*Dt*	*Bl*	*Dt*	*Dgm*	*Dr*	*D.. spp.*	*Bl*	*Dt*	*Dgm*	*Dp*
0.1										1			
0.2	2				12					22			
0.3	74			2	58	1	1			72	13		
0.4	52			13	70	7	1		5	26	34		
0.5	7	2		31	10	17	14		6	2	56		
0.6		1		90		39	34		10		80	1	
0.7		5		116		43	16		2		69		
0.8		3	1	73		30	33		3		66		
0.9		3		53		26	22		7		41		
1		4	1	17		14	9				12	1	1
1.1		1		1		1	10		1			1	
1.2		3					12	1	1				
1.3							1						
1.6							1						
Totals	135	22	2	396	150	178	154	1	35	123	371	3	1
Mean length	0.34	0.86	0.90	0.71	0.35	0.72	0.80	1.20	0.67	0.30	0.66	0.90	1.00

Table A3-272. Length frequency and mean lengths of crustacean zooplankters in samples from Dillon Reservoir, 21 July 2009.

Length in mm	Dillon Reservoir - 21 July 2009			
	Bl	*Dt*	*Dgm*	*Dp*
0.1	1			
0.2	22			
0.3	27	2		
0.4	9	15		
0.5	2	34	1	
0.6		99		
0.7		101		
0.8		98		
0.9		24		
1.0		1		
1.1				
1.2				1
Totals	61	374	1	1
Mean Length	0.33	0.72	0.53	1.28

Table A3-273. Length frequencies and mean lengths of crustacean zooplankters in samples from Elevenmile Reservoir, 24 June 1993, and 5 August 1993.

Length in mm	Elevenmile Reservoir - 24 June 1993					Elevenmile Reservoir - 5 August 1993					
	Dgm	*Dp*	*Bl*	*Dt*	*L spp.*	*Dgm*	*Dp*	*Bl*	*Cq*	*Dt*	*L spp.*
0.2			3					3			
0.3			30					31			
0.4			17	3				11		5	
0.5			9	23				2		9	4
0.6	12	4	1	15						12	3
0.7	15	2		16	4				1	13	3
0.8	9	6		15	10	5				18	4
0.9	4	5		6	28	8	1			12	
1.0	5	3		6	10	1	5			11	2
1.1		6		5	7	2	19			5	8
1.2	1	7			7	4	15			1	2
1.3	1	10		1	1	2	14			1	5
1.4	1	6			3		2				
1.5		11			2	2	3				2
1.6	1	1			1	1	2				1
1.7		4			2		5				2
1.8	1	3			1		5				
1.9		1			1						
2.0		1					1				
2.1		1					3				
2.2							2				
2.3							1				
2.4							3				
2.5							1				
2.6							1				
2.9							1				
3.0							2				
Totals	50	71	60	100	77	25	91	47	1	87	36
Mean length	0.82	1.25	0.36	0.63	1.03	1.06	1.40	0.33	0.70	0.77	1.02

Table A3-274. Length frequency and mean lengths of crustacean zooplankters in samples from Elevenmile Reservoir, 10 October 1993.

Length in mm	Elevenmile Reservoir - 10 October 1993				
	Dp	*Bl*	*Cq*	*Dt*	*L spp.*
0.3		17			
0.4		24	1		
0.5		13	3	4	
0.6		2	5	3	1
0.7	1		3	6	
0.8	1		4	13	
0.9	2		2	10	2
1.0	6			10	
1.1	9			23	
1.2	3			16	1
1.3	3			3	2
1.4	6				1
1.5	7				
1.6	5				2
1.7	3				1
1.8	9				
1.9	6				1
2.0	10				
2.1	8				
2.2	5				
2.3	2				
2.4	1				
2.7	1				
2.8					
2.9	1				
3.0					
3.1	1				
Totals	90	56	18	88	11
Mean length	1.7	0.4	0.7	1.0	1.3

Table A3-275. Length frequencies and mean lengths of crustacean zooplankters in samples from Elevenmile Reservoir, 2 June 1994, and 28 July 1994.

Length in mm	Elevenmile Reservoir - 2 June 1994					Elevenmile Reservoir - 28 July 1994				
	Dgm	*Dp*	*Bl*	*Dt*	*Lj*	*Dgm*	*Dp*	*Bl*	*Dt*	*Lj*
0.2			1					3		
0.3			7					15		
0.4			6	1				10		
0.5			2	6	2			2	11	1
0.6				16	1				27	
0.7	3			14	4	6			22	2
0.8	3	2		15		22			14	4
0.9	8	2		15		32	1		4	
1.0		9		8	5		5		1	6
1.1		8		2	1	1	4		1	5
1.2		10		2						3
1.3		6		1			4			
1.4		14					4			
1.5		8					8			
1.6		6					9			
1.7		2					9			
1.8		2					12			
1.9		1					2			
2.0		5					17			
2.1		3					7			
2.2		1					6			
2.3							1			
2.4							4			
2.5							1			
2.6		1					2			
Totals	12	80	16	80	13	61	96	30	80	21
Mean length	0.98	1.40	0.36	0.78	1.00	0.85	1.77	0.34	0.68	0.96

Table A3-276. Length frequency and mean lengths of crustacean zooplankters in samples from Elevenmile Reservoir, 29 July 2005.

Length in mm	Elevenmile Reservoir - 29 July 2005							
	Ag	*Bl*	*D. spp.*	*Dgm*	*Dp*	*Dr*	*Dt*	*Ln*
0.3		4					1	
0.4		5					1	2
0.5							18	4
0.6			1				30	2
0.7	1		1	2			28	3
0.8			2	6	3		31	1
0.9			2	6	15		19	3
1.0			1	2	19		6	1
1.1			4	1	17		10	1
1.2			3		21		5	3
1.3				3	9			1
1.4				1	16		2	3
1.5					11	1		
1.6				4	16			
1.7				1	13			
1.8			4	1	10			
1.9			3	1	17		1	
2.0					23			
2.1			1		12			
2.2					13			
2.3					11			
2.4					3			
2.5			1		3			
2.6					6			
2.7					1			
Totals	1	9	23	28	239	1	152	24
Mean length	0.70	0..36	1.35	1.13	1.61	1.50	0.76	0.87

Table A3-277. Length frequency and mean lengths of crustacean zooplankters in samples from Elevenmile Reservoir, 22 August 2006.

Length in mm	Elevenmile Reservoir - 22 August 2006						
	Bl	*Cq*	*D. spp.*	*Dt*	*Dgm*	*Dp*	*Ln*
0.3	4						
0.4	4	1		1			1
0.5				14			4
0.6				8			1
0.7			1	11			2
0.8				11	2		
0.9			1	18	10		2
1.0			2	2	6	3	1
1.1			4	1		5	
1.2						7	1
1.3						5	
1.4				1		5	
1.5			3	2		6	
1.6					1	1	
1.7						5	
1.8						3	
1.9			1			4	
2.0			1			1	
2.1						2	
2.3						1	
2.4						1	
2.6			1				
2.7						1	
Totals	8	1	14	69	19	50	12
Mean length	0.35	0.40	1.36	0.76	0.96	3.33	0.70

Table A3-278. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 7 August 1991, and 5 October 1991.

Length in mm	Granby Reservoir - 7 August 1991					Granby Reservoir - 5 October 1991				
	Dgm	*Dp*	*Bl*	*Dt*	*Ln*	*Dgm*	*Dp*	*Bl*	*Dt*	*Ln*
0.2	1		11					2		
0.3			56					14		
0.4			17	5	2	1		4	3	
0.5	2			20	1	4			13	1
0.6	6			26	4	17			29	4
0.7	4			27	3	39			24	3
0.8	7	1		16	7	22	1		28	1
0.9	15	2		5	5	2	4		3	10
1.0	15	3		3	8	3	7			10
1.1	31	15			6	1	5			25
1.2	10	16			6	1	9			31
1.3	3	9			4		6			10
1.4	2	9			1		6			3
1.5	3	13					12			1
1.6		12					11			
1.7	1	6			1		9			1
1.8		8					13			
1.9		6					5			
2.0					1		11			
2.1										
2.2							1			
Total	100	100	84	100	49	100	100	20	100	100
Mean length	1.07	1.40	0.31	0.65	0.98	0.65	1.52	0.31	0.67	1.10

Table A3-279. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 8 June 1992, and 27 June 1992.

Length in mm	Granby Reservoir - 8 June 1992				Granby Reservoir - 27 June 1992			
	Dgm	*Dp*	*Bl*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*
0.2			*8*				*29*	
0.3			9	1			31	3
0.4			4	8	8		21	3
0.5	3	1	1	22	20	1	6	8
0.6	1			26	8	1	1	23
0.7				22	9	1		17
0.8	1			10	5	1		22
0.9				4	4			12
1.0		1		4	5	1		8
1.1				2	2			4
1.2					5	8		
1.3		1			2	6		
1.4					2	3		
1.5					2	1		
1.6						1		
Total	5	3	22	99	72	24	88	100
Mean length	0.58	0.93	0.30	0.64	0.74	1.20	0.31	0.73

Table A3-280. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 28 July 1992, and 18 August 1992.

Length in mm	Granby Reservoir - 28 July 1992						Granby Reservoir - 18 August 1992				
	Dgm	*Dp*	*Bl*	*Dt*	*Ln*	*Ag*	*Dgm*	*Dp*	*Bl*	*Dt*	*Ln*
0.2			18						18		
0.3			48						52		
0.4			16	7		1			16		
0.5	1		14	16					8	21	
0.6	3	3		17		1				27	
0.7	9	7		23			7	2		23	1
0.8	28	17		23			7	2		14	
0.9	19	8		12			15	9		8	
1.0	6	21		1			21	15		5	
1.1	3	7		1			20	9		1	
1.2	3	3					15	10			
1.3	5	4			1		6	12			1
1.4	4	8					3	4			
1.5	7	6					3	10			
1.6	5	2					3	9			
1.7	5	4						6			
1.8	1	3						3			
1.9		6						4			
2.0	1	1						5			
Total	100	100	96	100	1	2	100	100	94	99	2
Mean length	1.14	1.04	0.32	0.68	1.30	0.50	1.04	1.32	0.30	0.70	1.00

Table A3-281. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 29 August 1992, and 15 September 1992.

Length in mm	Granby Reservoir - 29 August 1992					Granby Reservoir - 15 September 1992				
	Dgm	*Dp*	*Bl*	*Dt*	*Ln*	*Dgm*	*Dp*	*Bl*	*Dt*	*Ln*
0.2			14					9		
0.3			37					4		
0.4			5	1					1	
0.5	1			18		1			2	
0.6	2			27		1			19	
0.7	4			24		20	2		31	
0.8	8	1		21		41	2		23	
0.9	1	2		6		8	14		17	
1.0	9	1		2		4	11		5	
1.1	11	3		1		3	5		2	
1.2	14	9				3	5			2
1.3	17	5			2		4			2
1.4	10	3				2	4			
1.5	10	5				1	6			
1.6	5	5				5	7			
1.7	4	12				3	8			
1.8	2	4				3	10			
1.9	1	5				2	14			
2.0	1						5			
2.1							2			
2.2							2			
Total	100	55	56	100	2	97	100	13	100	4
Mean length	1.23	1.47	0.28	0.68	1.30	0.95	1.40	0.23	0.75	1.42

Table A3-282. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 12 October 1992, 3 June 1993, and 16 June 1993.

Length in mm	Granby Reservoir - 12 October 1992					Granby Reservoir - 3 June 1993			Granby Reservoir - 16 June 1993		
	Dgm	*Dp*	*Bl*	*Dt*	*Ln*	*Dp*	*Dbt*	*Ln*	*Bl*	*Dt*	*Ln*
0.2			2								
0.3			3				8		1		
0.4				1			12				
0.5				2	1		17			2	
0.6				3	1		12			13	
0.7	3			5			8			27	
0.8	8	7		19	1	1	5			31	
0.9	21	16		42			3			7	
1.0	5	15		22						3	
1.1	5	6		5			3			1	
1.2	2	7		1	1		1			5	
1.3	1	5			1					2	1
1.4		2			2		1				1
1.5	1	4			2						
1.6		2			1						
1.7											
1.8	1	1									
1.9		4									
2.0		6									
2.1		8									
2.2		11						1			
2.3		13									
2.4		7									
2.5		1									
2.6		1									
Total	47.0	116	5	100	10	1	70	1	1	91	2
Mean length	0.95	1.60	0.26	0.88	1.18	0.80	0.59	2.20	0.30	0.76	1.35

Table A3-283. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 9 July 1993, and 4 August 1993.

Length in mm	Granby Reservoir - 9 July 1993				Granby Reservoir - 4 August 1993				
	Dgm	*Dp*	*Bl*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*	*Ln*
0.2								*3*	
0.3			3				25	3	
0.4	2		5	2			39	2	
0.5	7		4	4	9		8	7	
0.6	9			9	15	1		21	
0.7	3			27	10	1		15	
0.8	1			34	9	4		22	
0.9				9	8	2		11	
1.0		1		9	12	3		14	
1.1		1		2	7	7		2	1
1.2	1	1		4	5	6			
1.3	1	1			7	4			
1.4	2				3	7			
1.5					2	1			
1.6	1				2	5			1
1.7					1				
1.8						2			
1.9						1			
2.0						1			
2.1									
2.2									
Total	26	5	13	100	90	45	72	100	2
Mean length	0.69	1.24	0.40	0.78	0.91	1.25	0.38	0.73	1.35

Table A3-284. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 27 August 1993, and 30 September 1993.

Length in mm	Granby Reservoir - 27 August 1993					Granby Reservoir - 30 September 1993				
	Dgm	*Dp*	*Bl*	*Dt*	*Db*	*Dgm*	*Dp*	*Bl*	*Dt*	*Ln*
0.2			2							
0.3			49	1				10		
0.4			29	3		1	1	7	5	
0.5	2		3	17	3	6	2		5	
0.6	7	4		23	6	14	4		9	
0.7	18	11		28	1	21	9		29	
0.8	33	13		14	2	14	9		18	
0.9	9	10		9	2	7	7		5	2
1.0	6	8		4		1	11		8	2
1.1	10	2				3	3		1	1
1.2	1	4				2				
1.3	2	1				1				
1.4	1	1				1	3			1
1.5	2	2				2	1			
1.6		3								
1.7	4	7								
1.8	1	6				1	3			
1.9	2	6								
2.0	2	1					1			
2.1										
2.2		1								
2.3		1					1			
Total	99	81	83	100	14	74	55	18	80	6
Mean length	0.94	1.18	0.34	0.68	0.66	0.79	0.97	0.35	0.73	1.05

Table A3-285. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 17 August 1994, 6 July 1995, and 3 August 1995.

Granby Reservoir								
Length in mm	17 August 1994					6 July 1995	3 Aug 1995	
	Dgm	*Dp*	*Bl*	*Dt*	*Ln*	*Dt*	*Bl*	*Dt*
0.2			2				1	
0.3			10				17	
0.4			43				8	
0.5	3		4	4				
0.6	11			18		2		10
0.7	10	1		16		18		25
0.8	15	2		38	1	22		26
0.9	14	5		12	1	12		22
1.0	11	2		11		12		11
1.1	5	2		1		25		4
1.2	8				1	6		1
1.3	6	4			3	3		
1.4	8	1						
1.5	6	2						
1.6	4							
Total	101	19	89	100	6	100	26	99
Mean length	0.99	1.10	0.36	0.77	1.13	0.93	0.33	0.82

Table A3-286. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 26 August 1995, and 29 September 1995.

Length in mm	Granby Reservoir - 26 August 1995				Granby Reservoir - 29 September 1995				
	Dgm	*Dp*	*Bl*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*	*Ln*
0.2			6						
0.3			21				5		
0.4			7				2		
0.5			1					2	
0.6	1			6				3	
0.7	2			15				24	
0.8				27	1			40	
0.9	2			17	4			19	
1.0	2			26	4			8	
1.1	2			9	2			4	
1.2	4				2				1
1.3	2				3				
1.4	1				2				
1.5									
1.6					2				
1.7		1			1	1			
1.8		1			1	1			
1.9					1				
Total	16	2	35	100	23	2	7	100	1
Mean length	1.05	1.75	0.31	0.87	1.23	1.75	0.33	0.62	1.20

Table A3-287. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 20 June 1996, 18 July 1996, and 2 August 1996.

Granby Reservoir										
Length in mm	**20June1996**	**18 July 1996**				**2 August 1996**				
	Dt	*Dgm*	*Bl*	*Dt*	*Ln*	*Dgm*	*Dp*	*Bl*	*Dt*	*Ln*
0.2			1							
0.3			1					5		
0.4								1	2	
0.5		1			1	3			1	
0.6	2			5		2			22	
0.7	12			21		5			42	
0.8	11			28		2			13	
0.9	24	1		18		5			7	
1.0	22	1		18	1	11	1		11	
1.1	12			8		1			2	
1.2	14			1	2	1				
1.3						2				
1.4						1				
1.5										
1.6										1
1.7						1				
1.8										
1.9										
2.0										
2.1										
2.2							1			
2.3										
2.4							1			
Total	97	3	2	99	4	34	3	6	100	1
Mean length	0.95	0.80	0.25	0.85	0.98	0.92	1.87	0.32	0.74	1.60

Table A3-288. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 23 August 1996, 14 September 1996, and 17 July 1997.

Granby Reservoir								
Length in mm	**23 August 1996**			**14 September 1996**		**17 July 1997**		
	Dp	*Bl*	*Dt*	*Dt*	*Ln*	*Dgm*	*Bl*	*Dt*
0.2		1						
0.3							47	
0.4							22	5
0.5	1			1		1	3	3
0.6	1		5	20				19
0.7			53	42		1		37
0.8			19	18		1		22
0.9	1		11	16		1		3
1.0	1		11	3				1
1.1			1					
1.2								
1.3					1			
Totals	4	1	100	100	1	4	72	90
Mean Length	0.75	0.30	0.77	0.74	1.30	0.73	0.34	0.69

Table A3-289. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 27 September 1997, and 14 July 1998.

Length in mm	Granby Reservoir - 27 September 1997					Granby Reservoir - 14 July 1998				
	Dgm	*Bl*	*Db*	*Dt*	*Ln*	*Dgm*	*Dp*	*Bl*	*Dt*	*L spp.*
0.2		6								
0.3		47	2					93		
0.4		21	5	5				29	11	
0.5	13	3	7	3		4		23	38	
0.6	29		29	19		4		17	28	1
0.7	13		18	35		2			13	
0.8	6		10	22		3			5	
0.9	4		12	3	4				3	
1.0	2		1	1		4			2	
1.1	4					2				
1.2	3				1	2				
1.3	1									
1.4							1			
Totals	75	77	84	88	5	21	1	100	100	1
Mean Length	0.73	0.33	0.67	0.69	0.96	0.80	1.40	0.43	0.58	0.60

Table A3-290. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 11 August 1998, and 19 September 1998.

Length in mm	Granby Reservoir - 11 August 1998							Granby Reservoir - 19 September 1998			
	Dgm	*Dp*	*Dl*	*Bl*	*C spp.*	*Dt*	*L spp.*	*Dgm*	*Dp*	*Dt*	*L spp.*
0.2				1							
0.3				4	3						
0.4				5	3	2					
0.5				3	2	15				4	1
0.6					3	27		3		22	
0.7	4					27		9		25	
0.8	7					14		19		32	
0.9	13					2		17	2	15	
1.0	25					1		11	8	2	1
1.1	16	2	1			2	1	10	3		1
1.2	4							10	2		
1.3	6		1					5			
1.4	3		1					2	1		
1.5	6	1						2	1		
1.6	3							2			
1.7	1							4	1		
1.8	2	1									
1.9		1	1					1			
2.0								2	1		
2.1		1						2			
2.2									1		
2.3								1			
2.4									1		
2.5									1		
Total	90	6	4	13	11	90	1	100	22	100	3
Mean length	1.10	1.62	1.50	0.37	0.45	0.66	1.10	1.07	1.33	0.74	0.87

Table A3-291. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 7 July 1999, and 3 August 1999.

Length in mm	Granby Reservoir - 7 July 1999				Granby Reservoir - 3 August 1999				
	Dgm	*Bl*	*Dt*	*L spp.*	*Dgm*	*Dp*	*Bl*	*D. spp.*	*Dt*
0.2									
0.3		1	2				2		10
0.4		2	6		1				31
0.5			10		13			1	27
0.6			13		11				24
0.7			8		17			1	12
0.8			7		6	2		1	7
0.9	1		3		6				3
1.0			2		4	1			
1.1					3	3			
1.2									
1.3					2	2			
1.4	1			1	3	4			
1.5					3	2			
1.6									
1.7						6			
1.8					1	2			
1.9						1			
2.0					1	2			
2.1						1			
2.2									
2.3									
2.4									
2.5									
2.6									
Total	2	3	51	1	71	26	2	3	104
Mean length	1.20	0.42	0.85	1.42	0.87	1.54	0.32	0.71	0.58

Table A3-292. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 10 September 1999, and 13 July 2000.

Length in mm	Granby Reservoir - 10 September 1999						Granby Reservoir - 13 July 2000		
	Dgm	*Dp*	*Bl*	*D. spp.*	*Dt*	*L. spp.*	*Bl*	*Dt*	*Dp*
0.2			1				2		
0.3							5		
0.4							1	9	
0.5				2	8			12	1
0.6	1			4	34			22	
0.7	1			4	37	1		15	1
0.8	4	2		6	14			2	
0.9	7	1		1	1			2	1
1.0	3	1		2					1
1.1	2	9				1			1
1.2	3	5							
1.3	1	9							
1.4		14							
1.5	2	4							
1.6		5							
1.7	2	6				1			
1.8		7				1			
1.9		1							
2.0		1							
2.1		2							
2.2		1							
2.3		3							
2.4		1							
2.5		3							
2.6		1							
Totals	26	76	1	19	98	4	8	62	5
Mean Length	1.11	1.58	0.27	0.78	0.67	1.36	0.35	0.64	0.88

Table A3-293. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 26 July 2000, and 26 August 2000.

Length in mm	Granby Reservoir - 26 July 2000						Granby Reservoir - 26 August 2000				
	Bl	*Db*	*Dt*	*Dgm*	*Dp*	*Ln*	*Db*	*Dt*	*Dgm*	*Dp*	*Ln*
0.3	15									1	
0.4	18	1	1				8	8		4	
0.5	5	2	6				10	9	2	8	
0.6	1	2	19	6	4		17	22	3	3	5
0.7		2	28	2	3	1	20	22	14	10	1
0.8		1	29	4			17	13	24	10	
0.9		1	14	2	1		7	17	11	8	1
1.0			3	3	1			9	6	11	2
1.1		1		2	1			1	1	7	
1.2				1			1		1	7	
1.3				1	1				6	3	1
1.4					1				1	2	
1.5					4				1		
1.6					1				1	2	
1.7					1				1	4	
1.8				1						2	
1.9					2				2		
2.0										4	
2.1					1					2	
2.2										1	
2.3										2	
2.4										1	
2.5										1	
2.6										3	
2.7										1	
2.8											
2.9										1	
Totals	39	10	100	22	21	1	80	101	74	98	10
Mean Length	0.33	0.65	0.67	0.83	1.14	0.61	0.70	0.75	0.96	1.20	0.83

Table A3-294. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 6 September 2000, 16 June 2001, and 1 August 2001.

Granby Reservoir														
Length in mm	Granby Reservoir - 6 September 2000					16 June 2001		1 August 2001						
	Db	*Dt*	*Dgm*	*Dp*	*Ln*	*Dt*	*Ln*	*Bl*	*Db*	*Dt*	*Dp*	*Dgm*	*Cq*	*Ln*
0.2		2						4						
0.3	6	9				1		5	11	2				
0.4	5	9				8		2	16	7		1		4
0.5	14	21		1		26			25	19	1			5
0.6	27	22	3	5	1	45	1		11	17			2	23
0.7	21	27	13	7		42	1		14	31				41
0.8	17	14	3	4	2	16	2		17	23				24
0.9	4	2	4	15	2	6	1		13	11				9
1.0	1			8	2	8	1		2	2				9
1.1				6		2	0			3				5
1.2				9	2	1	2							4
1.3				7		2	1							4
1.4				4										1
1.5				1			1							
1.6			1	3										2
1.7				3										
1.8				4										
1.9				2										
2.0				1										
2.1				2										
2.2				1										
2.3				1										
2.4														
2.5				1										
Totals	95	106	24	85	9	157	10	11	109	115	1	1	2	131
Mean Length	0.76	0.73	0.90	1.32	1.03	0.71	0.98	0.32	0.64	0.71	0.43	0.55	0.64	0.82

Table A3-295. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 12 June 2002, and 19 June 2002.

Length in mm	Granby Reservoir - 12 June 2002						Granby Reservoir - 19 June 2002		
	Bl	*Db*	*Dt*	*Dgm*	*Dp*	*Ln*	*Bl*	*Dt*	*Ln*
0.2	1		1				1		
0.3	2	3	3			2			
0.4		4	27	1		2		7	3
0.5	2	2	31	1		1		13	2
0.6		1	24	5		3		11	3
0.7			7		2	1		19	3
0.8			3	2		2			1
0.9			4		1	4			3
1.0						4			3
1.1						4			1
1.2									
1.3						1			
Totals	5	10	100	9	3	24	1	40	19
Mean Length	0.40	0.43	0.56	0.64	0.80	0.84	0.23	0.60	0.76

Table A3-296. Length frequency and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 25 July 2002.

Length in mm	Granby Reservoir - 25 July 2002					
	BI	*Db*	*Dt*	*Dgm*	*Dp*	*Ln*
0.1	1					
0.2	49			1		
0.3	47	6	5	1		
0.4	4	12	12	5		3
0.5	1	11	30	27	3	1
0.6		7	23	9	2	5
0.7	1	5	20	20	2	4
0.8		1	12	1	1	5
0.9		2	4	10	2	17
1.0			2	7	4	17
1.1				1	2	23
1.2				2	1	8
1.3					1	11
1.4				1	1	2
1.5				1	1	
1.6					1	
1.7				2		
Totals	103	44	108	88	21	96
Mean Length	0.30	0.55	0.64	0.75	1.00	1.04

Table A3-297. Length frequency and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 12 September 2002.

Length in mm	Granby Reservoir - 12 September 2002					
	Db	*Dt*	*Dgm*	*Dp*	*Ln*	*Lk*
0.3		2				
0.4	1	4				
0.5	2	8				
0.6	5	18	1			
0.7	1	8	2	2		
0.8	1	3	6	3		
0.9			2	2	1	
1.0			4	6		
1.1			2	7		
1.2			1	4		
1.3				2		
1.4			2	1		
1.5			1	3		
1.6				1		
1.7						
1.8				2		
1.9				2		
2.0				2		
2.1						
2.2						
2.3				1		
2.4				2		
2.5						
2.6						
2.8				1		1
3.5						1
4.1						1
Totals	10	43	22	41	1	3
Mean Length	0.61	0.62	1.01	1.39	0.92	3.51

Table A3-298. Length frequency and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 26 June 2003.

Length in mm	Granby Reservoir - 26 June 2003						
	Bl	*Db*	*Dt*	*Dgm*	*Dp*	*D. spp.*	*Ln*
0.1			1				
0.2	1		2				
0.3	1		16		4		
0.4			36				
0.5			72		3		
0.6			109		4	2	
0.7		1	82	1	37	14	
0.8			47	6	96	31	
0.9		1	20	2	196	49	
1.0			6		128	5	1
1.1			7		64	5	
1.2			1	1	42	2	
1.3			1		25	4	
1.4			1		16		
1.5					17		
1.6					14		
1.7					12		
1.8					15		
1.9					8		
2.0					8	1	
2.1					6		
2.2					7		
2.3					8		
2.4					6		
2.5					1		
2.6					2		
2.7					2		
Totals	2	2	401	10	721	113	1
Mean Length	0.31	0.84	0.67	0.89	1.10	0.93	0.11

Table A3-299. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 19 August 2003, and 17 August 2004.

Length in mm	Granby Reservoir - 19 August 2003									Granby Reservoir - 17 August 2004			
	Bl	*Cs*	*Db*	*Dt*	*Dgm*	*Dl*	*Dp*	*D. spp.*	*Ln*	*Dt*	*Dgm*	*Dp*	*Ln*
0.1									1				
0.2	1	2		1									1
0.3				5					7				
0.4			1	10					21	4			1
0.5				19					20	27			9
0.6				26		1			19	73	6	1	22
0.7				27	2	1	3		10	58	18	4	14
0.8				14	1	4	2	6	11	52	20	12	13
0.9				4		4	15	13	6	22	8	27	1
1.0						3	31	25	15	5	4	41	7
1.1						7	41	52	9	1	5	27	4
1.2				1	1	4	43	52	3		1	13	1
1.3						1	10	23	3		5	20	2
1.4							25	31	1		3	12	
1.5							14	23			2	14	
1.6						1	16	16			1	8	
1.7							4	8				7	
1.8							8	4			1	16	
1.9							8	1				7	
2.0							7	4			1	5	
2.1							5	2				13	
2.2							5					6	
2.3							2					5	
2.4							6					3	
2.5							3	1					
2.6							3						
Totals	1	2	1	107	4	26	251	261	126	242	75	241	75
Mean length	0.27	0.21	0.40	0.66	0.88	1.06	1.41	1.31	0.73	0.69	0.92	1.34	0.73

Table A3-300. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 30 June 2005, and 27 July 2005.

Length in mm	Granby Reservoir - 30 June 2005					Granby Reservoir - 27 July 2005					
	Bl	*Dgm*	*Dp*	*Dt*	*Ln*	*Bl*	*D. spp.*	*Dgm*	*Dp*	*Dt*	*Ln*
0.2						1					
0.3	1			1		5				1	
0.4				27						28	12
0.5		2		77				2		52	12
0.6				136	1		2	6	1	52	5
0.7		1		141			7	12		82	3
0.8			1	93			13	26	12	45	2
0.9				60			3	33	20	23	1
1.0		1		18			3	7	32	8	
1.1				5			3	4	36	5	2
1.2				6	1		1	8	37	2	1
1.3				1			1		8		1
1.4			1				2	3	6	1	
1.5							3	2	5		
1.6							1	2	3		1
1.7		1					1	1	6		
1.8							1		3		
1.9								1	5		
2.0								1	4		
2.1									3		
2.2									4		
2.3									1		
2.4									2		
2.5									1		
Totals	1	5	2	565	2	6	41	108	218	299	40
Mean length	0.30	0.88	1.10	0.69	0.90	0.28	0.99	0.93	1.07	0.67	0.62

Table A3-301. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 27 June 2006, 15 August 2006.

Length in mm	Granby Reservoir - 27 June 2006						Granby Reservoir - 15 August 2006						
	Bl	*D. spp.*	*Dt*	*Dgm*	*Dp*	*Ln*	*Bl*	*D. spp.*	*Dt*	*Dgm*	*Dp*	*Dr*	*Ln*
0.2	2						1						
0.3		1	5			1	2				1		
0.4			24				1	3	3	3			
0.5			49			1		3	4	2			
0.6			75			2		6	27	3	1		
0.7			63			1		3	42	3			
0.8			20	1		2		2	59	6			4
0.9			14		1	2		3	68	4	1		4
1.0			1			3			28	1	2		2
1.1			15			7		1	10	2	2	1	
1.2			1			4			3	8	3	2	
1.3			1			2				2	4		
1.4						2		2		7	7	1	
1.5						1				1	11		
1.6								2		3	23		
1.7								1		4	8		
1.8										2	13		
1.9								3		1	19	1	
2.0										1	7		
2.1											14		
2.2											10		
2.3								1			2		
2.4										1			
2.7											1		
Totals	2	1	268	1	1	28	4	30	244	54	129	5	10
Mean length	0.20	0.30	0.65	0.80	0.90	1.02	0.30	0.98	0.82	1.16	1.73	1.36	0.90

Table A3-302. Length frequency and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 14 July 2007.

Length in mm	Granby Reservoir - 14 July 2007				
	Bl	*Dt*	*Dgm*	*Dp*	*Ln*
0.2		6			
0.3	3	24			
0.4		79			2
0.5		130	1		15
0.6		180			6
0.7		108			5
0.8		47			8
0.9		13			2
1.0		10			6
1.1		6			5
1.2					4
1.3				1	3
1.4			1		3
1.5					2
1.6					
1.7					3
Totals	3	603	2	1	64
Mean length	0.30	0.59	0.95	1.30	0.88

Table A3-303. Length frequencies and mean lengths of crustacean zooplankters in samples from Granby Reservoir, 10 June 2009, 23 July 2009, and 13 August 2009.

Length in mm	Granby Res -10 June 2009			Granby Reservoir - 23 July 2009						Granby Reservoir - 13 August 2009						
	Dt	*Ln*	*Dp*	*Bl*	*Dt*	*Dgm*	*Dp*	*D. spp.*	*Ln*	*Bl*	*Dbt*	*Dgm*	*Dp*	*D. spp.*	*Ln*	*Db*
0.1	2															
0.2	0				5					2						
0.3	3			1	21				1		1					3
0.4	38	1		1	54	1			6		10					8
0.5	123	1			123	2	1	1	14		33	2		2		8
0.6	154	6			127		1		4		40	5	5	5		5
0.7	56				55				5		37	27	8	2	1	4
0.8	82	1			52	1	1		6		65	30	13	1		4
0.9	66				9				5		62	18	13		1	1
1.0	25		1				2		7		30	11	18	4		1
1.1	21	1							2		4	5	10	2	3	
1.2	9	1				1	1		3			10	11		4	
1.3	4	4							3			4	4	1	2	
1.4		2					1		1			6	6	1	1	1
1.5	1	1											6			
1.6												5	1	1		
1.7		1										5	1			
1.8												2	2	1		
1.9	1												7			
2.0													2			
2.1														1		
2.2													2			
2.3													1			
Totals	585	19	1	2	446	5	7	1	57	2	282	130	110	21	12	35
Mean Length	0.73	1.03	1.07	0.41	0.62	0.73	0.97	0.51	0.79	0.25	0.80	1.01	1.19	1.03	1.19	0.63

Table A3-304. Length frequency and mean lengths of crustacean zooplankters in samples from Grand Lake, 30 June 2005.

Grand Lake		
Length in mm	**30 June 2005**	
	Dt	*Ln*
0.4	5	
0.5	23	
0.6	37	
0.7	34	
0.8	33	
0.9	35	1
1	22	
1.1	11	
1.2	24	
1.3	8	
1.4	3	1
Totals	235	2
Mean length	0.83	1.15

Table A3-305. Length frequencies and mean lengths of crustacean zooplankters in samples from Green Mountain Reservoir, 7 August 2005, and 8 August 2006.

Length in mm	Green Mountain Reservoir - 07 August 2005						Green Mountain Reservoir - 8 August 2006					
	Bl	*Dgm*	*Dp*	*D. spp.*	*Dt*	*Ln*	*Bl*	*D.. spp.*	*Dt*	*Dgm*	*Dp*	*Ln*
0.4	2				1	3	1		1			
0.5		2	4		7	10			2	2		9
0.6		7	6	4	17	9		1	8			8
0.7		10	7	5	28	16		1	28	2	1	4
0.8		13	1	7	43	17		1	17	11	4	5
0.9		12	2	11	30	8		6	15	20	11	5
1		10	3	11	14	15		4	8	10	13	7
1.1		8	2	9	1	7		4		5	11	2
1.2		14	2	18	2	10		1		8	8	7
1.3		12	2	5		6				1	4	
1.4		6	3	6				4		11	6	3
1.5		3	1	8				1		6	7	
1.6		2		4				2			5	
1.7		1		1				1			5	
1.8										1	3	
1.9											4	
2											4	
2.1											2	
2.2											1	
Totals	2	100	33	89	143	101	1	26	79	77	89	50
Mean length	0.40	1.02	0.88	1.11	0.79	0.85	0.40	1.12	0.77	1.06	1.31	0.85

Table A3-306. Length frequency and mean lengths of crustacean zooplankters in samples from Gross Reservoir, 16 September 1992.

Length in mm	Gross Reservoir - 16 September 1992					
	Dgm	*Dp*	*Bl*	*Dt*	*Ln*	*So*
0.2			*2*			
0.3			*7*			
0.4			1	2	2	
0.5	3			5	2	
0.6	3	1		6		
0.7	14	1		7		
0.8	16	6		14		
0.9	9	7		9		
1.0	3	6		18	3	1
1.1	3	3		15	6	
1.2	5	5		4		
1.3	2	1			1	
1.4	4	1			1	
1.5	2	2				
1.6	8	1				
1.7	1	2				
1.8	1	1				
1.9	2	1				
2.0	2					
2.1	2					
Totals	80	38	10	80	15	1
Mean length	1.07	1.11	0.29	0.88	0.90	1.00

Table A3-307. Length frequency and mean lengths of crustacean zooplankters in samples from Highline Lake, 8 July 1998.

Length in mm	Highline Lake - 8 July 1998				
	Bl	*Dgm*	*C spp.*	*Dt*	*Ln*
0.3	6				
0.4	9			4	3
0.5	4			1	1
0.6	1	1	1	4	1
0.7		1		6	1
0.8		3		4	
0.9		3		3	5
1.0		6			5
1.1		5			3
1.2		2			
1.3		1			
Totals	20	22	1	22	19
Mean Length	0.40	0.98	0.60	0.66	0.83

Table A3-308. Length frequencies and mean lengths of crustacean zooplankters in samples from Highline Lake, 13 May 1999, and 18 May 1999.

Length in mm	Highline Lake - 13 May 1999						Highline Lake - 18 May 1999						
	Bl	*Dgm*	*Dt*	*Dp*	*Db*	*Ln*	*Bl*	*Dgm*	*Dt*	*Dp*	*Db*	*Ln*	*Cq*
0.2	6						15						
0.3	68				2		53	2	1		1		1
0.4	52	10	4	1			63	20	9		1		2
0.5	15	31	8	3	1		19	27	13		2		2
0.6	1	23	13	1		2	1	20	17				1
0.7		17	24	5		1		4	17				2
0.8		14	17	5				11	12		2	1	1
0.9		7	11	9	1	2		15	12				1
1.0			3	2		2		13	5		1		1
1.1		5	2			1		7	1				
1.2		8	3	3		2		8					
1.3		10	2	1		1		4		1			
1.4		4	1	1		1		2					
1.5		3											
1.6		1											
Totals	143	133	88	31	4	12	151	133	87	1	7	1	11
Mean Length	0.40	0.81	0.79	0.89	0.56	1.03	0.40	0.78	0.72	1.35	0.67	0.88	0.67

Table A3-309. Length frequencies and mean lengths of crustacean zooplankters in samples from Highline Lake, 8 June 1999, and 15 June 1999.

Length in mm	Highline Lake - 8 June 1999							Highline Lake - 15 June 1999					
	Bl	*Dgm*	*Dt*	*Dp*	*Db*	*Ln*	*Cq*	*Bl*	*Dgm*	*Dt*	*Db*	*Ln*	*Cq*
0.2	16							20					
0.3	53	1	4			1	1	33	1	8			
0.4	27	2	17			3	3	24	6	17		2	2
0.5	3	20	19			5	3		13	16		4	
0.6	1	32	9		1	7			31	20		1	
0.7		46	6		1	3			22	11		2	
0.8		25	9			1			16	5	2	2	
0.9		18	8		1	1	2		5	1		2	
1.0		11	7						5	2		1	
1.1		8	3			2			3			2	
1.2		8		1		1			2				
1.3		4							5				
1.4		4				1			5				
1.5		1							1				
Totals	100	180	82	1	3	25	9	77	115	80	2	16	2
Mean Length	0.36	0.82	0.67	1.25	0.77	0.70	0.56	0.35	0.79	0.59	0.83	0.75	0.41

Table A3-310. Length frequency and mean lengths of crustacean zooplankters in samples from Jefferson Lake, 8 August 2005.

Length in mm	Jefferson Lake - 08 August 2005				
	Bl	*D. spp.*	*Dt*	*Dgm*	*Dp*
0.3	21				
0.4	22		2	1	
0.5	9	1	9	1	
0.6		2	11	5	1
0.7		3	21	8	
0.8		4	27	10	1
0.9		3	18	18	
1.0		3	7	22	1
1.1				10	
1.2		2		18	4
1.3		1		6	
1.4				7	1
1.5		3		8	
1.6		2		3	
1.7		2		7	
Totals	52	26	95	124	8
Mean length	0.38	1.06	0.75	1.08	1.08

Table A3-311. Length frequencies and mean lengths of crustacean zooplankters in samples from McPhee Reservoir, 3 June 1992, and 12 August 1992.

Length in mm	McPhee Reservoir - 3 June1992					McPhee Reservoir - 12 August 1992						
	Dgm	*Dp*	*Bl*	*Dt*	*L. spp.*	*Dgm*	*Dp*	*Bl*	*Cq*	*Dt*	*Lc*	*Lj*
0.2			17					7				
0.3			19					27	1			
0.4			12	7				12	2	5	4	5
0.5	1	1	2	32		1			3	13	9	12
0.6	7	6		27		3			2	17	15	18
0.7	23	8		15	1	5	2		3	25	23	11
0.8	10	20		11		12	8			20	10	3
0.9	12	13		2		17	11			16	9	11
1.0	17	15				20	15			4	9	7
1.1	6	6		1		7	12				15	13
1.2	4	7		1		8	5				4	3
1.3	8	3			1	7	11				1	
1.4	8	7				5	6				1	
1.5	2	5				4	4					
1.6	1	1				6	7					
1.7	1	5					3					
1.8	1					2	8					
1.9	2					2	4					
2.0						2						
Totals	100	100	50	96	2	99	98	46	11	100	100	83
Mean length	0.99	1.09	0.34	0.65	1.06	1.19	1.27	0.36	0.59	0.74	0.84	0.70

Table A3-312. Length frequency and mean lengths of crustacean zooplankters in samples from McPhee Reservoir, 7 October 1992.

Length in mm	McPhee Reservoir - 7 October 1992						
	Dgm	*Dp*	*Bl*	*Cq*	*Dt*	*Lc*	*Lj*
0.2			13				
0.3			38	2			
0.4			23	17	4		1
0.5	1			19	9		2
0.6	7	5		37	19	2	5
0.7	10	5		18	25	4	13
0.8	11	9		7	16	7	16
0.9	15	11			12	16	23
1.0	12	15			8	37	28
1.1	13	8			7	18	11
1.2	6	6				7	1
1.3	5	4				4	
1.4	3	9				2	
1.5	1	10					
1.6		2					
1.7	2	2					
1.8		2					
Totals	86	88	74	100	100	97	100
Mean length	1.01	1.13	0.36	0.61	0.72	1.03	0.92

Table A3-313. Length frequency and mean lengths of crustacean zooplankters in samples from McPhee Reservoir, 3 June 1993.

Length in mm	McPhee Reservoir - 3 June1993							
	Dgm	*Dp*	*Ag*	*Bl*	*Cq*	*Dt*	*Lc*	*Lj*
0.2								
0.3				18				
0.4				15	1			
0.5	3		1	4	3	5		
0.6	8				1	15		2
0.7	29	5			1	15	2	
0.8	19	6				28	2	2
0.9	8	7				11		
1.0	3	8				9	2	
1.1	4	15			1	6		2
1.2	2	8			1	1	2	1
1.3	2	5				1	1	1
1.4		7						
1.5	2	5						
1.6		10						1
1.7		11						
1.8		5						
1.9	2	4						
2.0		1						
2.1		1						
Totals	82	98	1	37	8	91	9	9
Mean length	0.83	1.30	0.50	0.36	0.69	0.80	0.97	1.01

Table A3-314. Length frequency and mean lengths of crustacean zooplankters in samples from McPhee Reservoir, 12 August 1993.

Length in mm	McPhee Reservoir - 12 August 1993						
	Dgm	*Dp*	*Bl*	*Cq*	*Dt*	*Lc*	*Lj*
0.2			1				
0.3			5		1		
0.4			6		3	1	
0.5	4			23	11	6	6
0.6	13	1		21	18	9	9
0.7	23			20	19	16	15
0.8	13	9		6	23	20	28
0.9	8	8		3	16	22	28
1.0	12	16			5	12	13
1.1	10	12			4	9	2
1.2	6	7				2	1
1.3	5	12					
1.4	4	6					
1.5		6					
1.6		5					
Totals	98	82	12	73	100	97	97
Mean length	0.88	1.12	0.34	0.52	0.73	0.83	0.81

Table A3-315. Length frequency and mean lengths of crustacean zooplankters in samples from McPhee Reservoir, 23 August 1994.

Length in mm	McPhee Reservoir - 23 August 1994						
	Dgm	*Dp*	*Bl*	*Cq*	*Dt*	*Lc*	*Lj*
0.3			1				
0.4			2	9			
0.5	5			12	1		5
0.6	8			7	10	1	3
0.7	19				26	3	5
0.8	15	4			31	8	6
0.9	15	2			28	15	26
1.0	11	9			3	38	25
1.1	7	4			1	13	13
1.2	7	7					2
1.3	6	1					1
1.4	2	3				1	1
1.5							
1.6		1					
Totals	95	32	3	28	100	79	87
Mean Length	0.88	1.00	0.37	0.49	0.79	0.97	0.92

Table A3-316. Length frequency and mean lengths of crustacean zooplankters in samples from McPhee Reservoir, 5 August 1998, and 27 June 2002.

Length in mm	McPhee Reservoir - 5 August 1998							McPhee Reservoir - 27 June 2002					
	Dgm	*Dl*	*Dp*	*Bl*	*C. spp.*	*Dt*	*L. spp.*	*Bl*	*Db*	*Dt*	*Dgm*	*DI*	*Ln*
0.3				1	1			23		2			
0.4				11	16	3	6	52		6		1	
0.5		2		8	11	12	8	23	3	12	6	11	
0.6	1	1			7	34	22		4	20	17	27	1
0.7	10	4	1		4	33	18	1	3	30	25	9	
0.8	23	9				14	12	1	1	24	15	4	
0.9	14	7	6			4	19		4	8	13	6	4
1.0	24	13	14				11		5	1	16	3	2
1.1	14	6	5				3				6		6
1.2	11	6	8				1				2	2	5
1.3	1		13								1		5
1.4	1		5										1
1.5	1		2										
Total	100	49	54	20	39	100	100	98	20	103	101	63	24
Mean length	0.85	0.94	1.15	0.45	0.49	0.66	0.74	0.35	0.73	0.62	0.74	0.61	1.04

Table A3-317. Length frequencies and mean lengths of crustacean zooplankters in samples from McPhee Reservoir, 8 August 2003, and 22 July 2004.

Length in mm	McPhee Reservoir - 08 August 2003								McPhee Reservoir - 22 July 2004				
	Bl	*Cq*	*Db*	*Dt*	*Dgm*	*Dl*	*Dp*	*Ln*	*Dt*	*Ln*	*Bl*	*Dp*	*Dgm*
0.1	4	1											
0.2	52			1					1		10		
0.3	45	10	1	25				1	11	1	16		
0.4	21	20	5	22	6			9	29	9	5		
0.5		20	16	31	9	1		7	18	23			1
0.6	1	23	13	24	17			5	15	15		1	2
0.7		8	9	18	24		2	6	22	7		5	11
0.8			19	5	26		5	9	16	7		15	9
0.9		2	16	2	14		4	17	8	7	1	32	17
1.0			14		5		2	11	3	5		31	9
1.1			4		3		1	3				27	10
1.2			5		3		1	4				25	11
1.3					1		2			1		13	5
1.4					1		1			1		9	3
1.5					1							13	6
1.6					2		1					10	4
1.7							1					11	1
1.8							1					5	
1.9												1	
2.0												1	
Totals	123	84	102	128	112	1	21	72	123	76	32	199	89
Mean length	0.32	0.55	0.80	0.55	0.81	0.57	1.09	0.82	0.62	0.60	0.30	1.16	1.04

Table A3-318. Length frequency and mean lengths of crustacean zooplankters in samples from McPhee Reservoir, 22 July 2005.

Length in mm	McPhee Reservoir - 22 July 2005								
	Bl	*Cq*	*Db*	*D. spp.*	*Dgm*	*Dp*	*Dr*	*Dt*	*Ln*
0.2	2								
0.3	6					1			
0.4	6	1			1	1		2	2
0.5	1		1			1		3	18
0.6		2	1		2	3		10	17
0.7					4	3	1	20	12
0.8		1		2	14	10	2	31	12
0.9				1	19	41	2	31	6
1.0			1		8	30		7	9
1.1			1	1	8	24		8	7
1.2			1	1	6	34	1		4
1.3				2	4	19			
1.4					3	17	1		
1.5				1	1	24	2		1
1.6						17			
1.7						15			
1.8						8			
1.9						2			
Totals	15	4	5	8	70	250	9	112	88
Mean length	0.34	0.60	0.88	1.11	0.97	1.22	1.07	0.81	0.75

Table A3-319. Length frequency and mean lengths of crustacean zooplankters in samples from McPhee Reservoir, 1 August 2006.

Length in mm	McPhee Reservoir - 01 August 2006							
	Bl	*Cq*	*D. spp.*	*Db*	*Dt*	*Dgm*	*Dp*	*Ln*
0.3	5	4						
0.4	9	33	1		6			
0.5	1	35	6		18			2
0.6		72	2		57	2	1	6
0.7		38	8	1	32	3	1	11
0.8		9	6	1	12	14	1	11
0.9		1	3	1	7	15	4	10
1.0		1	1	2	3	19	4	10
1.1			3	2	2	12	6	9
1.2			4	1		16	1	5
1.3			1		1	12	3	1
1.4						13	3	
1.5			1			9	3	
1.6						2		
Totals	15	193	36	8	138	117	27	65
Mean length	0.37	0.57	0.82	0.98	0.66	1.11	1.11	0.88

Table A3-320. Length frequencies and mean lengths of crustacean zooplankters in samples from Ridgway Reservoir, 22 June 2005, and 20 July 2005.

Length in mm	Ridgway Reservoir - 22 June 2005					Ridgway Reservoir - 20 July 2005					
	Bl	*Dgm*	*Dp*	*D. spp.*	*Dt*	*Bl*	*Cq*	*Dgm*	*Dp*	*D. spp.*	*Dt*
0.2	3										
0.3	77					7		2			
0.4	104				6	23	1	1			5
0.5	8	12		2	16	1	3	1		1	4
0.6		9		1	54			16		3	33
0.7		11		1	73			39	3	10	73
0.8		7	1	1	58			49	1	4	53
0.9		12		1	30			28	1	7	14
1		16	1	1	3			19	2	4	1
1.1		7		1	2			19	4	4	
1.2		6	1					38		6	
1.3		1						19		2	
1.4								12			
1.5		1	1					6		1	
1.6								1			
Totals	192	82	4	8	242	31	4	250	11	42	183
Mean length	0.36	0.84	1.12	0.76	0.71	0.38	0.46	0.96	0.93	0.92	0.72

Table A3-321. Length frequencies and mean lengths of crustacean zooplankters in samples from Rifle Gap Reservoir, 4 June 2008, and 19 August 2008.

Length in mm	Rifle Gap Reservoir - 4 June 2008					Rifle Gap Reservoir - 19 August 2008					
	Bl	*Dt*	*Dgm*	*Dp*	*Ln*	*Bl*	*Dt*	*Dgm*	*Dp*	*D. spp.*	*Ln*
0.1		1									
0.2		1				2	2				
0.3		2				2	5	13			1
0.4	1	3					14	13		2	9
0.5	2	5					15	16			8
0.6	1	14					14	16		1	12
0.7	0	21	2	1			4	24	2	2	4
0.8	0	41	10	12			14	20	6		5
0.9	1	46	5	6			9	9	10	1	4
1.0		26	2	15			4	7	12	1	2
1.1		24	2	15				2	7		1
1.2		7	3	15			1	7	8		3
1.3		0	2	21			1	2	8	1	1
1.4		1	3	13	1		2	1	9		
1.5			0	12					6	1	1
1.6			1	19					7	1	
1.7			1	10					12		
1.8			2	12					8		
1.9			0	4					9		
2.0			1	2					2		
2.1			1	2							
Totals	5	192	35	159	1	4	85	130	106	10	51
Mean Length	0.61	0.89	1.17	1.38	1.47	0.31	0.69	0.74	1.40	0.95	0.75

Table A3-322. Length frequency and mean lengths of crustacean zooplankters in samples from Rifle Gap Reservoir, 9 October 2008.

Length in mm	Rifle Gap Reservoir - 09 October 2008					
	Bl	*Dt*	*Dgm*	*Dp*	*D. spp.*	*Ln*
0.3	4					
0.4		15				
0.5		13	1			
0.6		16				
0.7		15	7		2	
0.8		25	13	4	1	1
0.9		8	7	7	4	2
1.0		6	4	8		10
1.1		1	2	4		1
1.2		1	5	9	1	3
1.3		1	7	14	2	
1.4		1	6	9		
1.5			3	12	4	
1.6			3	11	2	
1.7				1	1	
1.8			1	7		
1.9				2		
Totals	4	102	59	88	17	17
Mean Length	0.36	0.75	1.11	1.37	1.24	1.05

Table A3-323. Length frequencies and mean lengths of crustacean zooplankters in samples from Ruedi Reservoir, 5 August 1992, 18 June 1997, and 28 July 1997.

Length in mm	Ruedi Reservoir - 5 August 1992					Ruedi Reservoir - 18 June 1997			Ruedi Reservoir - 28 July 1997		
	Dp	*Bl*	*Cq*	*Dt*	*Se*	*Dgm*	*Bl*	*Dt*	*Dgm*	*Bl*	*Dt*
0.2		29								2	
0.3		34					1			12	
0.4		33				1			1	20	
0.5		4	1	5			1	5		5	5
0.6	1		3	19	1			10	6	1	11
0.7				38				9	7		6
0.8	1			26				6	3		9
0.9			1	10				6	1		8
1	1			2				2			1
1.1								2	3		
1.2											
1.3									1		
Totals	3	100	5	100	1	1	2	40	22	40	40
Mean length	0.80	0.31	0.64	0.75	0.60	0.40	0.40	0.73	0.76	0.38	0.72

Table A3-324. Length frequency and mean lengths of crustacean zooplankters in samples from Ruedi Reservoir, 16 July 2003.

Length in mm	Ruedi Reservoir - 16 July 2003			
	Dt	*Dgm*	*Dp*	*D. spp.*
0.1	1			
0.2				
0.3	1			
0.4	18			
0.5	54			
0.6	122			
0.7	71			
0.8	47			
0.9	8			
1.0	3			
1.1	3			
1.2	1			
Totals	329	1	1	1
Mean Length	0.68	unmeasurable	unmeasurable	unmeasurable

Table A3-325. Length frequencies and mean lengths of crustacean zooplankters in samples from Shadow Mountain Reservoir, 1 July 2005, 27 July 2005, and 6 September 2005.

Length in mm	Shadow Mountain - 1 July 2005			Shadow Mountain - 27 July 2005					Shadow Mountain - 6 September 2005					
	Bl	*Dgm*	*Dt*	*Bl*	*D. spp.*	*Dgm*	*Dp*	*Dt*	*Bl*	*D. spp.*	*Dgm*	*Dp*	*Dt*	*Ln*
0.2	2		1	2										
0.3	35		5	77				3	1					
0.4	15	2	5	54		2		5			1			
0.5	2	1	23	7	3	12		13		3	7		1	
0.6	1	2	21	2	5	30		21	1	4	27		11	
0.7	1	4	30		2	27		17		2	18	1	16	
0.8	1		34		2	16	1	15			11		27	
0.9		1	35		1	15	1	9			6	3	24	
1		1	21			8		3		2	10	1	8	
1.1			12		1	13		2			3	3	2	
1.2			21		1	9	1	1			6	2	2	3
1.3			8			7		2			3	2		1
1.4		1	2		1	8					10	1		1
1.5			2			2					11	1		
1.6											14	3		
1.7			1								6	1		
1.8											9			
1.9											3	1		
2											2			
2.1											3			
2.2												1		
Totals	142	91	16	142	16	149	3	91	2	11	150	20	91	5
Mean length	0.35	0.72	0.84	0.35	0.76	0.85	0.97	0..69	0.45	0.66	1.11	1.31	0.81	1.26

Table A3-326. Length frequency and mean lengths of crustacean zooplankters in samples from Stagecoach Reservoir, 17 July 2002.

Length in mm	Stagecoach Reservoir - 17 July 2002				
	Bl	*Cq*	*Dt*	*Dp*	*Ln*
0.2	2		3		1
0.3		1	11		5
0.4		1	17		24
0.5		1	10		17
0.6		1	13		13
0.7			14		9
0.8			22	5	6
0.9			8	5	8
1.0			3	4	2
1.1			1	18	2
1.2				23	2
1.3				17	3
1.4				10	4
1.5				2	1
1.6				3	3
1.7				0	2
1.8				1	
1.9				2	
2.0				1	
2.1				2	
2.2				1	
2.3				5	
2.4				1	
2.5				1	
2.6				1	
Totals	2	4	102	102	102
Mean Length	0.26	0.52	0.65	1.38	0.75

Table A3-327. Length frequencies and mean lengths of crustacean zooplankters in samples from Taylor Park Reservoir, 13 August 1991, 1 October 1991, 23 June 1992, and 26 August 1992

Length in mm	Taylor Park - 13 August 1991			Taylor Park - 1 October 1991			Taylor Park - 23 June 1992				Taylor Park - 26 August 1992		
	Dgm	*Dp*	*Dt*	*Dgm*	*Dp*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*	*Dgm*	*Bl*	*Dt*
0.2												1	
0.3			1										
0.4			8			3				1		1	3
0.5	3		26	1		15	1		1	6	1		13
0.6	4		29	1		26				19			30
0.7	10	1	13	23		44				29			20
0.8	44	4	2	27	3	11				23			29
0.9	13	10	1	2	3	1				10			3
1.0	3	11		9	10			1		7	1		2
1.1	2	9		2	4					4			
1.2	1	6		2	3								
1.3		3		2	7					1			
1.4		3			6			1					
1.5		2			2								
1.6		4			3								
1.7		5		1	4								
1.8					2								
1.9		5			7								
2.0		5			11								
2.1		6			4								
2.2		5			5								
2.3		1			5								
2.4					4								
2.5					5								
2.6					4								
2.7					1								
Total	80	80	80	70	93	100	1	2	1	100	2	2	100
Mean length	0.80	1.42	0.53	0.84	1.74	0.65	0.50	1.20	0.50	0.75	0.75	0.30	0.68

Table A3-328. Length frequencies and mean lengths of crustacean zooplankters in samples from Taylor Park Reservoir, 9 June 1993, 21 July 1993, 25 August 1993, and 17 September 1993.

Taylor Park Reservoir														
Length in mm	**9 June 1993**				**21 July 1993**			**25 August 1993**				**17 September 1993**		
	Dgm	*Dp*	*Bl*	*Dt*	*Dgm*	*Dp*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*	*Dp*	*Bl*	*Dt*
0.3			5							4				6
0.4			3	2			2	1			4		1	17
0.5		1	2	5		1	15	1			7			28
0.6			2	14			16	10	1		17			20
0.7	1	1		9			27	29	10		42			12
0.8	1			8			23	21	11		21			5
0.9		1		7	1		7	3	14		8	1		1
1.0				6			3	2	7		1	10		
1.1	1			17			8	1	6			14		
1.2				18					7			22		
1.3				3					2			8		
1.4									5			3		
1.5									7			3		
1.6									2			2		
1.7									1			2		
1.8									2			1		
1.9												5		
2.0												6		
2.1									1			7		
2.2									1			1		
2.3									1			5		
Total	3	3	12	89	1	1	101	68	78	4	100	90	1	89
Mean length	0.87	0.70	0.41	0.91	0.90	0.50	0.73	0.73	1.11	0.30	0.70	1.45	0.40	0.64

Table A3-329. Length frequencies and mean lengths of crustacean zooplankters in samples from Taylor Park Reservoir, 29 June 1994, 11 August 1994, 10 July 1995, and 21 August 1995.

Taylor Park Reservoir												
Length in mm	**29 June 1994**				**11 August 1994**			**10July1995**	**21 August 1995**			
	Dgm	*Dp*	*Bl*	*Dt*	*Dgm*	*Dp*	*Dt*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*
0.3			1								2	
0.4	1		1	13					2		1	
0.5	4			16			3		2		1	
0.6	18			21			19	3	2			12
0.7	44	1		21	2		37	14	8			17
0.8	23	7		10	14		24	27	13	1		31
0.9	5	18		11	22	4	9	14	15	1		16
1.0	1	20		10	7	7	5	14		8		7
1.1	1	9		1	1	8	2	24		12		2
1.2	1	9		2	4	11	1	3		8		2
1.3	1	5			1	8				5		
1.4		2			1	9				6		
1.5		3				3				6		
1.6		4				4				3		
1.7		4				2				10		
1.8		3				5				7		
1.9	1	2				4				3		
2.0		7				6						
2.1		1				10						
2.2		3				6						
2.3		2				6						
2.4						4						
2.5						1						
2.6						2						
Total	99	97	2	105	52	100	100	99	42	70	4	87
Mean length	0.84	1.18	0.35	0.68	0.92	1.64	0.75	0.91	0.77	1.38	0.38	0.80

Table A3-330. Length frequencies and mean lengths of crustacean zooplankters in samples from Taylor Park Reservoir, 30 July 1996, 21 August 1996, and 6 August 1997.

Length in mm	Taylor Park Reservoir - 30 July 1996				Taylor Park Res. -21 August 1996			Taylor Park Reservoir - 6 August 1997			
	Dgm	*Dp*	*Bl*	*Dt*	*Dgm*	*Dp*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*
0.2			1							2	
0.3			1	1						13	
0.4										9	
0.5					1		5	4			2
0.6	3			18			7	21	2		19
0.7	5			54			12	12	1		31
0.8	2			14		1	31	3	2		12
0.9	2	4		3			13	5	12		4
1.0	2	3					12		5		1
1.1		7				1			2		
1.2		7				1			3		
1.3		9							5		
1.4		8							4		
1.5		4							6		
1.6		10							1		
1.7		2									
1.8		7									
1.9		6									
Totals	14	86	2	90	1	3	80	45	43	24	69
Mean length	0.76	1.56	0.25	0.70	0.50	1.03	0.80	0.66	0.89	0.32	0.70

Table A3-331. Length frequencies and mean lengths of crustacean zooplankters in samples from Taylor Park Reservoir, 31 July 1998, 23 August 1999, and 3 August 2000.

Taylor Park Reservoir												
Length in mm	**31 July 1998**					**23 August 1999**			**3 August 2000**			
	Dgm	*Dp*	*Bl*	*Dt*	*L. spp.*	*Dgm*	*Dp*	*Dt*	*Dt*	*Dgm*	*Dp*	*Ln*
0.2												
0.3			5									
0.4			2	6				2	7		1	
0.5			1	24	1			3	18			
0.6	2		2	24	2			24	37		1	
0.7	15			31		1	1	31	15	2	2	1
0.8	24	3		13		4	7	15	17	10	17	
0.9	18	18		2		1	6	13	4		9	
1.0	15	17					12	1			18	
1.1	1	15				1	11	1			6	
1.2	2	7					2				7	
1.3		7					6				4	
1.4		6					4				3	
1.5		6					3				3	
1.6		3				1	2				1	
1.7		4					5				4	
1.8		5					3				2	
1.9		5					8				3	
2.0		3					9				4	
2.1							10					
2.2							4				2	
2.3							2					
2.4							2					
2.5							1					1
2.6							2					
Total	82	99	10	100	3	8	100	90	98	12	85	1
Mean length	0.80	1.24	0.40	0.63	0.57	0.99	1.44	0.76	0.68	0.83	1.18	1.65

Table A3-332. Length frequencies and mean lengths of crustacean zooplankters in samples from Taylor Park Reservoir, 9 August 2001, and 9 July 2002.

Length in mm	Taylor Park Reservoir - 9 August 2001				Taylor Park Reservoir - 9 July 2002						
	Ln	*Dp*	*Dgm*	*Dt*	*BI*	*Db*	*Dt*	*Dgm*	*DI*	*Dp*	*Ln*
0.2					4						
0.3				2	2		2				
0.4	1			9			8				
0.5	5		1	20			43				
0.6	2			27		1	35	7	1		
0.7	3		2	21			10	4			1
0.8	1	2	15	13			2	4	2	1	
0.9		8	7	2			1				
1.0	1	10	7	2							1
1.1	1	9	5					2			
1.2	3	9	3								
1.3	4	9	1							1	
1.4	1	6	2								
1.5	2	7	1					1			
1.6	1	5	1								
1.7	1	5	1								
1.8	1	4									
1.9		9	1								
2.0		6									
2.1		3						1		1	
2.2		2									
2.3	1	2									
2.4											
2.5											
2.6		1									
Totals	28	97	47	96	6	1	101	19	3	3	2
Mean length	1.12	1.49	1.03	0.66	0.28	0.60	0.59	0.88	0.76	1.42	0.92

Table A3-333. Length frequencies and mean lengths of crustacean zooplankters in samples from Taylor Park Reservoir, 12 June 2003, 23 July 2003, and 14 July 2004.

Length in mm	Taylor Park Reservoir - 12 June 2003				Taylor Park Reservoir - 23 July 2003					Taylor Park Reservoir - 14 July 2004			
	Dt	*Dp*	*D. spp.*	*Ln*	*Dt*	*Dgm*	*Dp*	*D. spp.*	*Ln*	*Dt*	*Dgm*	*Dp*	*Ln*
0.2													
0.3	16	1			6		1						
0.4	98	1			32				1	17			
0.5	159		1		59		1		1	61			
0.6	143	1		2	109		1	1	1	68	1		
0.7	144	2			89		6	1		122			
0.8	72	4	2		64	1	24	6		100			
0.9	47	1			25	1	54	3		63			
1.0	7	3			7		55	6		20			
1.1	8	2			1		40	6		7			
1.2	16	2					46	4		3		1	
1.3	2	1			1		31	4					
1.4	1						20						
1.5	1						25	1					
1.6							30						2
1.7							34	1			1		
1.8							25						
1.9							21	1					
2.0							19						
2.1							14						
2.2							5						
2.3							5						
2.4							2						
Totals	714	18	3	2	393	2	459	34	3	461	2	1	2
Mean Length	0.68	0.91	0.74	0.68	0.69	0.93	1.39	1.13	0.55	0.72	1.15	1.20	1.60

Table A3-334. Length frequencies and mean lengths of crustacean zooplankters in samples from Taylor Park Reservoir, 3 August 2005, and 17 July 2006.

Length in mm	Taylor Park Reservoir - 03 August 2005					Taylor Park Reservoir - 17 July 2006				
	D. spp.	*Dgm*	*Dp*	*Dt*	*Ln*	*D. spp.*	*Dt*	*Dgm*	*Dp*	*Ln*
0.4				2			5			
0.5				39		1	29		1	1
0.6	2			126			50	1		2
0.7	5	2	3	132		4	88	3	1	1
0.8	2			39	1	2	25	13	6	1
0.9	1		2	20		8	31	19	17	3
1.0			8	2		1	7	3	16	
1.1	1		1			3	1	1	11	2
1.2			1			1			20	3
1.3			1		1	2			5	
1.4	1		2			2			13	
1.5			2			4		1	4	5
1.6			5		3	2			8	2
1.7			4		1				8	1
1.8			2						5	
1.9			1			1			4	
2.0	1		4						7	
2.1			1			1			5	
2.2								1	3	
2.3									3	
2.4									4	
2.5									5	
2.7									1	
Totals	13	2	37	360	6	32	236	42	147	21
Mean length	0.90	0.70	1.39	0.67	1.43	1.13	0.69	0.90	1.42	1.15

Table A3-335. Length frequencies and mean lengths of crustacean zooplankters in samples from Taylor Park Reservoir, 17 July 2007, and 16 July 2009.

Length in mm	Taylor Park Reservoir - 17 July 2007						Taylor Park Reservoir - 16 July 2009				
	Bl	*Dt*	*Dgm*	*Dp*	*Ln*	*D. spp.*	*Dt*	*Ln*	*Dgm*	*Dp*	*D. spp.*
0.1							1				
0.2							1				
0.3	1	23			1		14				
0.4		55				1	65				
0.5		93				1	136	2	2		1
0.6		128	2	2			179		5	1	
0.7		104	6	2		2	72				
0.8		57	20	17		1	80				1
0.9		17	4	9	2		36		1	3	
1.0		3	1	18	1		10			3	
1.1				13	1		3				
1.2				9	1					1	
1.3			1	10	1						
1.4				1				1		1	
1.5			1	12				1		1	
1.6				4							
1.7				2				1			
1.8			3	11						1	
1.9				4							
2.0				12							
2.1				9							
2.2				4							
2.3				3							
Totals	1	480	38	142	7	5	597	5	8	11	2
Mean length	0.30	0.60	0.90	1.35	0.96	0.62	0.65	1.16	0.66	1.15	0.68

Table A3-336. Length frequency and mean lengths of crustacean zooplankters in samples from Turquoise Lake, 29 July 1992.

Length in mm	Turquoise Lake - 29 July 1992			
	Dgm	*Bl*	*Dt*	*Hg*
0.2		*24*		
0.3		42	1	
0.4	3	25	7	
0.5	17	8	14	
0.6	25	1	19	
0.7	11		38	
0.8	11		7	
0.9	17		10	1
1.0	7		2	
1.1	6		2	
1.2	1			
1.3	1			
1.4				
1.5				
1.6				
1.7	1			
Total	100	100	100	1
Mean length	0.74	0.32	0.67	0.90

Table A3-337. Length frequencies and mean lengths of crustacean zooplankters in samples from Twin Lakes, 15 August 1991, and 3 October 1991.

Length in mm	Twin Lakes- 15 August 1991					Twin Lakes - 3 October 1991				
	Dp	*Dr*	*Bl*	*Dt*	*Lj*	*Dp*	*Dr*	*Bl*	*Dt*	*Lj*
0.2								*10*		
0.3			13	2				32		
0.4			3	11				17	6	
0.5				27	10	1	3	2	18	2
0.6	1	2		33	25		11		25	6
0.7	2	9		20	45	7	23		24	18
0.8	1	7		6	16	8	10		19	47
0.9	4	1		1	2	19	7		7	10
1.0	3	1			2	10	4		1	
1.1	3					7	2			
1.2	2					5	2			
1.3	1					6	1			
1.4	1									
1.5	3	1				1	1			
1.6	5									
1.7	6									
1.8	8									
1.9	7									
2.0	6									
2.1	4									
2.2	4									
2.3										
2.4	1									
2.5	1									
Total	63	22	16	100	100	64	64	59	100	83
Mean length	1.62	0.75	0.32	0.58	0.68	0.97	0.78	0.33	0.70	0.77

Table A3-338. Length frequencies and mean lengths of crustacean zooplankters in samples from Twin Lakes, 25 June 1992, and 27 August 1992.

Length in mm	Twin Lakes- 25 June 1992						Twin Lakes- 27 August 1992					
	Dp	*Dr*	*Bl*	*Dt*	*Lc*	*Lj*	*Dp*	*Dr*	*Bl*	*Dt*	*Lc*	*Lj*
0.2			*1*									
0.3			6						1			
0.4			2						2			1
0.5	1		1	5		16				2		6
0.6	1			16		19		2		8		11
0.7		17		38		10	3	10		21	1	9
0.8	6	10		22		5	9	6		31		19
0.9	6			12		12	9			27	4	21
1.0	5			6	2	19	6			10	2	19
1.1	3			1		9	5			1	2	11
1.2	4						4					3
1.3	3						2					
1.4	3						1					
1.5	5						1					
1.6	3						2					
1.7	4											
1.8	2							1				
1.9	1						1					
2.0	2											
2.1	1											
2.2		1										
Total	50	28	10	100	2	90	43	19	3	100	9	100
Mean length	1.26	0.76	0.33	0.74	1.00	0.78	1.03	0.78	0.37	0.81	0.94	0.85

Table A3-339. Length frequencies and mean lengths of crustacean zooplankters in samples from Twin Lakes, 23 June 1993, 6 August 1993, and 11 August 1994.

Length in mm	Twin Lakes- 11 August 1994					Twin Lakes- 23 June1993			Twin Lakes- 6 August 1993			
	Bl	*Dp*	*Dr*	*Dt*	*Lj*	*Bl*	*Dt*	*Lj*	*Dp*	*Bl*	*Dt*	*Lj*
0.3	7					1						
0.4	7			3	6							
0.5	1			10	9		1			1	8	
0.6			3	20	14		15	2			15	4
0.7		3	5	25	8		26	6	2		28	5
0.8		2	9	15	13		15	15			26	18
0.9		7	4	14	8		5	9			20	23
1.0		10	1	9	14		2	12	1		3	21
1.1		7	1	4	13			18	2			17
1.2		4	1		8			7	1			4
1.3		2										1
1.4		8										
1.5		3										
1.6		6										
1.7		6										
1.8												
1.9		3										
2.0		4										
2.1		1										
2.2		1										
2.3		1										
2.4		1										
Total	15	68	24	100	93	1	64	69	6	1	100	93
Mean length	0.36	1.34	0.76	0.74	0.82	0.30	0.72	0.95	0.97	0.50	0.74	0.93

Table A3-340. Length frequencies and mean lengths of crustacean zooplankters in samples from Vallecito Reservoir, 4 June 1992, 17 August 1992, and 6 October 1992.

Length in mm	Vallecito Reservoir - 4 June 1992				Vallecito Reservoir - 17 August 1992				Vallecito Reservoir - 6 October 1992			
	Dgm	*Dp*	*Bl*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*
0.2			14				13				2	
0.3		1	59	1			56				1	
0.4			25	1			31	2			1	3
0.5	3		2	12	1			2	3			8
0.6	6	3		19	5	1		3	14			20
0.7	10	6		31	12	3		15	13	10		32
0.8	23	19		23	17	12		16	14	18		14
0.9	15	22		10	21	16		31	7	18		15
1.0	12	10		3	6	16		18	5	12		5
1.1	9	6			10	8		11	7	3		3
1.2	8	7			13	10		1	7	9		
1.3	3	3			2	8		1	8	5		
1.4	10	6			4	8			8	9		
1.5		1			6	6			9	4		
1.6		3			2	8			2	6		
1.7					1	3			3	2		
1.8										2		
1.9										1		
2.0		1				1				1		
Totals	100	88	100	100	100	100	100	100	100	100	4	100
Mean lengths	0.99	1.04	0.35	0.75	0.99	1.16	0.32	0.87	1.05	1.12	0.33	0.77

Table A3-341. Length frequencies and mean lengths of crustacean zooplankters in samples from Vallecito Reservoir, 10 June 1993, 9 September 1993, and 13 September 1994.

Length in mm	Vallecito Reservoir - 10 June 1993				Vallecito Reservoir - 9 September 1993				Vallecito Reservoir - 13 September 1994			
	Dgm	*Dp*	*Bl*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*	*Dgm*	*Dp*	*Bl*	*Dt*
0.2			2				1				3	
0.3			18				17				2	1
0.4	2		25	11			20	4				2
0.5	8		14	9	1		11	8	3			4
0.6	2	1	9	13	1			8	3			24
0.7	2	1		25	7			8	9	2		19
0.8	2	1		19	8			21	9	2		8
0.9	2	1		15	16	4		30	10	2		2
1.0		1		6	15	1		14	8	3		
1.1				1	11	6		7	7	6		
1.2	1			1	11	3			7	3		
1.3	1				4	9			4	1		
1.4					2	5						
1.5					2	3						
1.6					1	3						
Totals	20	5	68	100	79	34	49	100	60	19	5	60
Mean lengths	0.67	0.80	0.41	0.71	1.01	1.26	0.38	0.82	1.02	1.12	0.34	0.75

Table A3-342. Length frequencies and mean lengths of crustacean zooplankters in samples from Vallecito Reservoir, 6 August 1998, and 21 July 2004.

Length in mm	Vallecito Reservoir - 6 August 1998						Vallecito Reservoir - 21 July 2004			
	Dgm	*Dl*	*Dp*	*Bl*	*Dt*	*L. spp.*	*Dt*	*Ln*	*Dp*	*Dgm*
0.1										
0.2							2			
0.3				18			3			
0.4				27	13		2	1		
0.5				12	15		9	1		
0.6	2			3	16	1	17			
0.7	9	9			12		17		2	1
0.8	14	10	2		4		10		4	4
0.9	14	6	1				6		11	3
1.0	9	4	4				2		13	5
1.1	5		6						14	4
1.2	5	2	9						21	4
1.3	2		12						15	
1.4			6						7	
1.5			2						4	
1.6									2	
1.7										
1.8									1	
1.9									3	
2.0									2	
2.1									1	
2.2									2	
2.3									2	
2.4									2	
Totals	60	31	42	60	60	1	68	2	106	21
Mean lengths	0.91	0.84	1.21	0.40	0.57	0.60	0.60	0.40	1.26	0.98

Table A3-343. Length frequencies and mean lengths of crustacean zooplankters in samples from Vallecito Reservoir, 21 July 2005, and 3 August 2006.

Length in mm	Vallecito Reservoir - 21 July 2005					Vallecito Reservoir - 03 August 2006				
	D. spp.	*Dgm*	*Dp*	*Dr*	*Dt*	*D. spp.*	*Dgm*	*Dp*	*Dr*	*Dt*
0.3					1					1
0.4					7					7
0.5					3					3
0.6	1	2			15	1	2			15
0.7	5	17	1		23	5	17	1		23
0.8	4	24	2		25	4	24	2		25
0.9	2	39	8		20	2	39	8		20
1.0	2	16	12		2	2	16	12		2
1.1	2	10	17		1	2	10	17		1
1.2	2	5	10		3	2	5	10		3
1.3	1		3			1		3		
1.4		2	7				2	7		
1.5		4	4				4	4		
1.6		3	3	2			3	3	2	
1.7	1	2	1			1	2	1		
1.8			2					2		
1.9			2					2		
2.0	1		7			1		7		
2.1			1					1		
Totals	21	124	80	2	100	21	124	80	2	100
Mean length	0.99	0.95	1.27	1.60	0.74	0.99	0.95	1.27	1.60	0.74

Table A3-344. Length frequencies and mean lengths of crustacean zooplankters in samples from Vega Reservoir, 19 July 1999, and 25 May 2006.

Length in mm	Vega Reservoir - 19 July 1999						Vega Reservoir - 25 May 2006				
	Dgm	*Dp*	*A. spp.*	*Bl*	*Dt*	*L spp.*	*Dt*	*Dgm*	*Dp*	*D. spp.*	*Ln*
0.2				17							
0.3				25			1				
0.4				19			14	1	1		
0.5	1		1		7	4	40	11	1		2
0.6					11	7	48	35	1	1	2
0.7	3				14	9	25	12	2	1	4
0.8	5				11	1	18	19	18		9
0.9	18	4			6	2	15	7	21		9
1.0	14	3			1	2	3	1	5	3	4
1.1	9	5			1		2		6	2	1
1.2	2	13				2	6		16		3
1.3	8	8						1	9		1
1.4	1	1				4		1	5		
1.5						3			6		
1.6						11			10		
1.7						3			4		1
1.8		1				2			3		
1.9									4		
2.0									1		
2.1									2		
2.2									3		
2.3											
2.4											
Totals	61	35	1	61	51	50	172	88	118	7	36
Mean length	1.03	1.20	0.50	0.34	0.74	1.20	0.69	0.74	1.26	0.96	0.90

Table A3-345. Length frequencies and mean lengths of crustacean zooplankters in samples from Vega Reservoir, 13 June 2006, and 11 August 2006.

Length in mm	Vega Reservoir - 13 June 2006					Vega Reservoir - 11 August 2006				
	Dt	*Dgm*	*Dp*	*D. spp.*	*Ln*	*Dt*	*Dgm*	*Dp*	*D. spp.*	*Ln*
0.2	1									
0.3	8					5				
0.4	34	1				10	1			1
0.5	51					24	21			
0.6	41	4	3			9	23	1	1	
0.7	13	4	3			5	21	3		
0.8	16	13	15			5	22	7	1	
0.9	5	15	14	2		7	13	13		4
1.0	1	13	20				9	11	1	1
1.1		7	19	1	2		5	10		1
1.2			20		2		2	9		3
1.3			21		2		1	8		2
1.4			7		3		1	6		1
1.5			5		6			4		1
1.6			4		2		1	9		
1.7			5		4		1	9		
1.8			2					12		
1.9			3		1			12		
2.0			4					5		
2.1			2					3		
2.2			2					2		
2.3								1		
2.4			1							
Totals	170	57	150	3	22	65	121	125	3	14
Mean length	0.59	0.93	1.26	1.04	1.40	0.62	0.81	1.45	0.85	1.10

Table A3-346. Length frequencies and mean lengths of crustacean zooplankters in samples from Vega Reservoir, 19 October 2006, and 4 June 2007.

Length in mm	Vega Reservoir - 19 October 2006							Vega Reservoir - 04 June 2007			
	Dt	*Dgm*	*Bl*	*Cq*	*Dp*	*D. spp.*	*Ln*	*Dt*	*Dgm*	*Dp*	*Bl*
0.2			2					4			1
0.3	1		7					7			2
0.4	1	2	35					45			1
0.5	19	7	3	5				58		2	
0.6	16	15		30				77		2	
0.7	5	18		43		1		24		1	
0.8	12	30		14	13			29	1	4	
0.9	13	12			22			4	1		
1.0	3	6			20		2	6	1	4	
1.1					22		2				
1.2		1			35		5				
1.3					14		1		1	2	
1.4		1			2		4			1	
1.5		1			1					1	
1.6					2				1	2	
1.7					3				1	2	
1.8					2						
1.9					1						
2.0					4						
2.1					3						
2.2					1						
2.3											
Totals	70	93	47	92	145	1	14	254	6	21	4
Mean length	0.73	0.81	0.42	0.72	1.21	0.77	1.30	0.62	1.27	1.10	0.40

Table A3-347. Length frequencies and mean lengths of crustacean zooplankters in samples from Williams Fork Reservoir, 28 July 2005, and 8 August 2006.

Length in mm	Williams Fork Reservoir - 28 July 2005					Williams Fork Reservoir - 8 August 2006							
	Dp spp.	*Dgm*	*Dp*	*Dt*	*Ln*	*A spp.*	*Bl*	*Cq*	*Dp spp.*	*Dt*	*Dgm*	*Dp*	*Ln*
0.2				1									
0.3				12						1			1
0.4				52		1		1		10			2
0.5				114						17			20
0.6				109	2		1			19			18
0.7				58						37			9
0.8				31	1	1			1	37		1	8
0.9	1	2	1	17	2				5	20	2	1	6
1.0	1		4	14	1				5	11		7	9
1.1			5	2					3	2	1	7	5
1.2			7	2	1				4		12	19	10
1.3			3		1				2		6	8	3
1.4			4		1				1	1	7	20	4
1.5			10		2				3	1	7	28	4
1.6			6		2				6		7	14	3
1.7			3		1				4	1	5	18	
1.8			2						1		3	8	
1.9			4						2		1	10	1
2.0	1		8						2		3	5	
2.1			3						4		1	4	
2.2			5								1	5	
2.3			7									3	
2.4			4						1			5	
2.5			2									7	
2.6			2						1			2	
2.7												1	
2.8			2									1	
2.9									2			1	
3.0			1									1	
3.1			1										
Totals	3	2	84	412	14	2	1	1	47	157	57	176	113
Mean length	1.30	0.90	1.79	0.59	1.19	0.60	0.60	0.40	1.53	0.74	1.45	1.63	0.78

Table A3-348. Length frequencies and mean lengths of crustacean zooplankters in samples from Wolford Mountain Reservoir, 8 August 2001, and 8 August 2006.

Length in mm	Wolford Mtn. Reservoir - 8 August 2001				Wolford Mtn. Reservoir - 8 August 2006					
	Ln	*Dgm*	*Dt*	*Dp*	*D. spp.*	*Dt*	*Dgm*	*Dp*	*Dr*	*Ln*
0.2										
0.3			1							
0.4			7	2		3				
0.5	2	2	14	1		19	2			4
0.6	1	20	28	2		32	1			6
0.7	2	19	24	9	1	58	3		1	8
0.8	3	7	19	9	1	57	4	3		5
0.9		7	5	14	1	48	12	4		7
1.0	1	7		7	2	17	6	10		5
1.1	1	6		9	1	2	1	13		3
1.2	3	9		6	2			17		5
1.3	5	2		6	1		1	6		4
1.4	4	4	1	7	2		1	14		5
1.5	10	4		3	1			6		8
1.6	4	3		3	3		1	2		1
1.7		5	1	2	2			3		4
1.8		2		1			1	4		
1.9		2		1	2		4	14		
2.0		1			2		1	10	2	
2.1							2	6	3	
2.2					1			6		
2.3					1			10		
2.4					1			9	1	
2.5					1			7		
2.7								1		
Totals	36	100	100	82	25	236	40	145	7	65
Mean length	1.27	1.04	0.71	1.10	1.60	0.76	1.12	1.65	1.91	1.05

APPENDIX FOUR

Mysis diluviana Counts per Sample and Station, and Estimated Mean Densities (number/m2) in 12 Lakes and Reservoirs in Colorado, 1991-2009

Table A4-1. Summary of nighttime *Mysis diluviana* sampling in Big Creek Lake on 8 October 1991, and 29 August 1992. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Lower Big Creek Lake - 8 October 1991 - 6 stations – mean *Mysis*/m^2 = 37.7						
Sample Number	Sampling stations (water depth in meters)					Data Summary
	A - 9m	B - 17m	C - 14m	D - 17m	E - 15m	F - 12m	
1	17	8	21	60	75	51	232
2	3	11	11	50	24	24	123
Sum	20	19	32	110	99	75	**355**
Mean	10	9.5	16	55	49.5	37.5	**29.6**
Lower Big Creek Lake - 29 August 1992 - 6 stations – mean *Mysis*/m^2 = 10.0						
Sample Number	Sampling stations (water depth in meters)					Data Summary
	A - 9m	B - 17m	C - 14m	D - 17m	E - 15m	F - 12m	
1	4	0	7	0	0	9	20
2	3	0	8	1	2	13	27
Sum	7	0	15	1	2	22	**47**
Mean	3.5	0	7.5	0.5	1	11	**7.8**

Table A4-2. Summary of nighttime *Mysis diluviana* sampling in Carter Lake on 7 October 1999, and 24 August 2000. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Carter Lake - 7 October 1999 - 10 stations – mean *Mysis*/m^2 =342.5											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	#1-33m	#2-34m	#3-34m	#4-38m	#5-29m	#6-18m	#7-23m	#8-9m	#9-16m	#10-7m	
1	278	494	298	353	250	231	394	56	113	37	2504
2	351	443	512	487	247	151	504	28	124	26	2873
Sum	629	937	810	840	497	382	898	84	237	63	**5377**
Mean	314.5	468.5	405	420	248.5	191	449	42	118.5	31.5	**268.9**
Carter Lake - 24 October 2000 - 10 Stations - mean *Mysis*/m^2 = 108.7											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A	B- 13 m	A- 8 m	B- 17 m	C- 12 m	D- 5 m	A- 25 m	B- 24 m	C- 29 m	D- 20 m	
1	Station dry ; no sample taken	92	24	160	54	1	133	0	4	316	692
2		56	13	118	30	1	230	76	0	227	695
Sum		148	37	278	84	2	363	76	4	543	**1387**
Mean		74	18.5	139	42	1	181.5	38	2	271.5	**85.3**

Table A4-3. Summary of nighttime *Mysis diluviana* sampling in Dillon Reservoir on 1 October 1991, 2 September 1992, 17 August 1993, 29 August 1994, 26 August 1995, 10 July 1996, 12 August 1998, 2 September 1999, 26 July 2000, 16 July 2002, 21 July 2003, 10 August 2005, 14 August 2006, 17 July 2007, 27 August 2008, and 21 July 2009. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Dillon Reservoir - 1 October 1991 - 10 stations – mean *Mysis*/m^2 = 368.0											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-61m	B-50m	A-34m	B-30m	C-31 m	D-38m	A-15m	B-18m	C-12m	D-12m	
1	1197	479	256	127	307	48	177	249	355	74	3269
2	409	450	151	317	513	37	106	257	187	81	2508
Sum	1606	929	407	444	820	85	283	506	542	155	**5777**
Mean	803	464.5	203.5	222	410	42.5	141.5	253	271	77.5	**288.9**

Dillon Reservoir - 2 September 1992 - 10 stations – mean *Mysis*/m^2 = 352.3											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-64m	B-52m	A-33m	B-34m	C-37 m	D-34m	A-13m	B-15m	C-14m	D-16m	
1	249	957	299	404	244	133	75	126	145	81	2713
2	381	719	279	534	282	225	108	147	101	43	2819
Sum	630	1676	578	938	526	358	183	273	246	124	**5532**
Mean	315	838	289	469	263	179	91.5	136.5	123	62	**276.6**

Dillon Reservoir - 17 August 1993 - 10 stations – mean *Mysis*/m^2 = 340.8											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-52m	B-44m	A-30m	B-25m	C-35m	D-32m	A-12m	B-19m	C-14m	D-11m	
1	195	215	299	766	271	40	89	200	78	34	2187
2	174	112	586	1512	202	38	116	288	103	33	3164
Sum	369	327	885	2278	473	78	205	488	181	67	**5351**
Mean	184.5	163.5	442.5	1139	236.5	39	102.5	244	90.5	33.5	**267.6**

Dillon Reservoir - 29 August 1994 - 10 stations – mean *Mysis*/m^2 = 269.6											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-50m	B-50m	A-32m	B-35m	C-33m	D-35m	A-8m	B-12m	C-11m	D-12m	
1	44	159	346	705	527	126	20	49	13	3	1992
2	24	311	382	938	379	86	5	70	43	2	2240
Sum	68	470	728	1643	906	212	25	119	56	5	**4232**
Mean	34	235	364	821.5	453	106	12.5	59.5	28	2.5	**211.6**

Table A4-3. *Continued.* Summary of nighttime *Mysis diluviana* sampling in Dillon Reservoir on 1 October 1991, 2 September 1992, 17 August 1993, 29 August 1994, 26 August 1995, 10 July 1996, 12 August 1998, 2 September 1999, 26 July 2000, 16 July 2002, 21 July 2003, 10 August 2005, 14 August 2006, 17 July 2007, 27 August 2008, and 21 July 2009. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Dillon Reservoir - 26 August 1995 - 10 stations – mean *Mysis*/m^2 = 371.8											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-52m	B-54m	A-32m	B-38m	C-34m	D-36m	A-9m	B-11m	C-12m	D-14m	
1	115	159	370	1247	625	119	17	168	152	67	3039
2	90	85	347	1212	435	122	30	239	140	98	2798
Sum	205	244	717	2459	1060	241	47	407	292	165	**5837**
Mean	102.5	122	358.5	1229.5	530	120.5	23.5	203.5	146	82.5	**291.9**

Dillon Reservoir - 10 July 1996 - 10 stations – mean *Mysis*/m^2 = 235.0											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-54m	B-54m	A-34m	B-39m	C-33m	D-34m	A-10m	B-11m	C-12m	D-15m	
1	240	153	123	226	586	104	26	188	98	78	1822
2	287	142	140	233	618	116	48	108	90	85	1867
Sum	527	295	263	459	1204	220	74	296	188	163	**3689**
Mean	263.5	147.5	131.5	229.5	602	110	37	148	94	81.5	**184.5**

Dillon Reservoir - 12 August 1998 - 10 stations – mean *Mysis*/m^2 = 246.4											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 47m	B-53m	A-34m	B-38m	C-32 m	D-34m	A-10m	B-12m	C-14m	D-14m	
1	31	148	536	815	248	63	35	83	6	38	2003
2	18	55	636	650	305	72	4	68	22	47	1877
Sum	49	203	1172	1465	553	135	39	151	28	85	3880
Mean	24.5	101.5	586	732.5	276.5	67.5	19.5	75.5	14	42.5	**193.4**

Dillon Reservoir - 2 September 1999 - 10 stations – mean *Mysis*/m^2 =236.2											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-51m	B-54m	A-30m	B-38m	C-34m	D-36m	A-8m	B-11m	C-11m	D-13m	
1	69	200	184	512	111	177	315	121	77	65	1831
2	60	363	332	447	107	142	181	117	58	71	1878
Sum	129	563	516	959	218	319	496	238	135	136	**3709**
Mean	64.5	281.5	258	479.5	109	159.5	248	119	67.5	68	**185.5**

Table A4-3. *Continued.* Summary of nighttime *Mysis diluviana* sampling in Dillon Reservoir on 1 October 1991, 2 September 1992, 17 August 1993, 29 August 1994, 26 August 1995, 10 July 1996, 12 August 1998, 2 September 1999, 26 July 2000, 16 July 2002, 21 July 2003, 10 August 2005, 14 August 2006, 17 July 2007, 27 August 2008, and 21 July 2009. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Dillon Reservoir - 26 July 2000 - 10 stations - mean *Mysis*/m^2 = 222.8											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 52 m	B- 53m	A- 33 m	B- 39 m	C- 35 m	D- 36 m	A- 10 m	B- 10 m	C- 13 m	D- 16 m	
1	47	145	358	372	400	70	87	62	169	102	1812
2	50	54	397	408	388	74	49	82	114	69	1685
Sum	97	199	755	780	788	144	136	144	283	171	**3497**
Mean	48.5	99.5	377.5	390	394	72	68	72	141.5	85.5	**174.9**
Dillon Reservoir - 16 July 2002 - 10 stations - mean *Mysis*/m^2 = 336.3											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 45m	B- 45m	A- 26m	B- 30m	C- 27m	D- 28m	A- 11m	B- 10m	C- 13m	D- 28m	
1	253	249	512	449	157	257	184	124	141	111	2437
2	310	303	607	540	168	310	365	80	76	83	2842
Sum	563	552	1119	989	325	567	549	204	217	194	**5279**
Mean	281.5	276.0	559.5	494.5	162.5	283.5	274.5	102.0	108.5	97.0	**264.0**
Dillon Reservoir - 21 July 2003 - 10 stations - mean *Mysis*/m^2 = 25.3											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 52m	B- 55m	A- 34m	B- 39m	C- 35m	D- 37m	A- 11m	B- 12m	C- 16m	D- 14m	
1	8	10	16	66	25	15	0	21	8	10	179
2	7	8	30	47	38	5	0	40	22	5	202
Sum	15	18	46	113	63	20	0	61	30	15	**381**
Mean	7.5	9.0	23.0	56.5	31.5	10.0	0.0	30.5	15.0	7.5	**19.1**
Dillon Reservoir - 10 August 2005 - 10 Stations - mean *Mysis*/m^2= 451.0											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A - 53.9m	B-53.0m	A-33.7m	B-38.6m	C-35.2m	D-36.5m	A-9.3m	B-11.3m	C-13.5m	D-13.3m	
1	36	82	582	1072	798	153	109	266	128	104	3330
2	48	84	603	1318	899	121	143	373	84	77	3750
Sum	84	166	1185	2390	1697	274	252	639	212	181	**7080**
Mean	42	83	592.5	1195	848.5	137	126	319.5	106	90.5	**354.0**

Table A4-3. *Continued.* Summary of nighttime *Mysis diluviana* sampling in Dillon Reservoir on 1 October 1991, 2 September 1992, 17 August 1993, 29 August 1994, 26 August 1995, 10 July 1996, 12 August 1998, 2 September 1999, 26 July 2000, 16 July 2002, 21 July 2003, 10 August 2005, 14 August 2006, 17 July 2007, 27 August 2008, and 21 July 2009. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Dillon Reservoir - 14 August 2006 - 10 Stations - mean *Mysis*/m^2 = 88.5											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	1A- 52.8m	1B- 55.0m	2A- 34.7m	2B- 38.3m	2C- 33.9m	2D- 38.0m	3A- 9.5m	3B- 10.8m	3C- 11.5m	3D- 14.2m	
1	15	24	156	196	158	18	16	113	22	11	729
2	13	26	152	147	119	22	60	93	23	6	661
Sum	28	50	308	343	277	40	76	206	45	17	**1390**
Mean	14	25	154	171.5	138.5	20	38	103	22.5	8.5	**69.5**

Dillon Reservoir - 17 July 2007 - 10 Stations - mean *Mysis*/m^2 = 228.7											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	1A - 51.8m	1B- 52.9m	2A- 33.5m	2B- 38.5m	2C- 35.1m	2D- 36.6m	3A- 9.4m	3B- 11.2m	3C- 17.6m	3D- 12.8m	
1	135	156	528	192	321	155	5	135	202	122	1951
2	132	128	351	226	232	168	19	84	182	117	1639
Sum	267	284	879	418	553	323	24	219	384	239	**3590**
Mean	133.5	142	439.5	209	276.5	161.5	12	109.5	192	119.5	**179.5**

Dillon Reservoir - 27 August 2008 - 10 Stations - mean *Mysis*/m^2 = 204.7											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	1A - 51.2m	1B- 53.3m	2A- 33.7m	2B- 38.4m	2C- 35.1m	2D- 36.7m	3A- 9.2m	3B- 11.5m	3C- 18.3m	3D- 12.4m	
1	55	291	141	197	360	93	74	127	256	94	1688
2	42	262	122	262	216	55	119	197	171	80	1526
Sum	97	553	263	459	576	148	193	324	427	174	**3214**
Mean	48.5	276.5	131.5	229.5	288	74	96.5	162	213.5	87	**160.7**

Dillon Reservoir - 21 July 2009 - 10 Stations - mean *Mysis*/m^2 = 206.9											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	1A - 52.0	1B- 55.0	2A- 32.0	2B- 39.0	2C- 35	2D- 37.0	3A- 9.3	3B- 12.0	3C- 15.0	3D- 13.0	
1	53	85	354	234	320	133	50	123	395	56	1803
2	56	118	290	117	492	67	43	76	137	50	1446
Sum	109	203	644	351	812	200	93	199	532	106	**3249**
Mean	54.5	101.5	322	175.5	406	100	46.5	99.5	266	53	**162.5**

Table A4-4. Summary of nighttime *Mysis diluviana* sampling in Granby Reservoir, 5 October 1991, 28 August 1992, 16 August 1993, 6 July 1994, 25 August 1995, 14 September 1996, 26 September 1997, 18 September 1998, 9 September 1999, 6 September 2000, 10 October 2001, 10 June 2002, 18 September 2003, 16 August 2004, 9 August 2005, 23 August 2006, 12 July 2007, 28 August 2008, and 22 July 2009. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Granby Reservoir - 5 October 1991 - 10 stations – mean *Mysis*/m^2 =202.6											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A– 49m	B-41m	A-31m	B-34m	C-28m	D-24m	A-14m	B-11m	C-17m	D-15m	
1	1099	56	125	134	82	39	11	6	77	23	1652
2	645	66	216	139	137	61	4	9	175	66	1529
Sum	1744	122	341	273	219	111	15	15	252	89	**3181**
Mean	872	61	170.5	136.5	109.5	55.5	7.5	7.5	126	44.5	**159.1**
Granby Reservoir - 28 August 1992 - 10 stations – mean *Mysis*/m^2 =178.2											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-49m	B-44m	A-24m	B-36m	C-24m	D-24m	A-14m	B-12m	C-16m	D-16m	
1	176	44	193	41	39	291	0	9	2	500	1295
2	188	64	176	64	49	406	5	19	1	531	1503
Sum	364	108	369	105	88	697	5	28	3	1031	**2798**
Mean	182	54	184.5	52.5	44	348.5	2.5	14	1.5	515.5	**139.9**
Granby Reservoir - 16 August 1993 - 10 stations – mean *Mysis*/m^2 =230.6											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-48m	B-46m	A-24m	B-26m	C-36m	D-29m	A-10m	B-13m	C-17m	D-18m	
1	267	219	300	48	151	162	46	216	168	78	1655
2	343	198	294	83	152	142	65	380	302	5	1964
Sum	610	417	594	131	303	304	111	596	470	83	**3619**
Mean	305	208.5	297	65.5	151.5	152	55.5	298	235	41.5	**181.0**
Granby Reservoir - 6 July 1994 - 10 stations – mean *Mysis*/m^2 =541.1											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-47m	B-49m	A-35m	B-33m	C-32m	D-24m	A-17m	B-11m	C-18m	D-20m	
1	1056	50	1839	31	101	87	378	53	264	199	4058
2	762	28	2240	38	259	93	506	34	251	226	4437
Sum	1818	78	4079	69	360	180	884	87	515	425	**8495**
Mean	909	39	2039.5	34.5	180	90	442	43.5	257.5	212.5	**424.8**

Table A4-4. *Continued.* Summary of nighttime *Mysis diluviana* sampling in Granby Reservoir, 5 October 1991, 28 August 1992, 16 August 1993, 6 July 1994, 25 August 1995, 14 September 1996, 26 September 1997, 18 September 1998, 9 September 1999, 6 September 2000, 10 October 2001, 10 June 2002, 18 September 2003, 16 August 2004, 09 August 2005, 23 August 2006, 12 July 2007, 28 August 2008, and 22 July 2009. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Granby Reservoir - 25 August 1995 - 10 stations – mean *Mysis*/m^2 =674.1											
Sample Number	**Sampling stations (water depth in meters)**										**Data Summary**
	Stratum I		**Stratum II**				**Stratum III**				
	A-48m	**B-51m**	**A-31m**	**B-24m**	**C-35m**	**D-27m**	**A-20m**	**B-16m**	**C-18m**	**D-21m**	
1	1603	377	883	140	207	245	658	110	678	409	5310
2	1686	500	644	126	225	252	727	107	591	416	5274
Sum	3289	877	1527	266	432	497	1385	217	1269	825	**10584**
Mean	1644.5	438.5	763.5	133	216	248.5	692.5	108.5	634.5	412.5	**529.2**
Granby Reservoir - 14 September 1996 - 10 stations – mean *Mysis*/m^2 =1365.3											
Sample Number	**Sampling stations (water depth in meters)**										**Data Summary**
	Stratum I		**Stratum II**				**Stratum III**				
	A-48m	**B-50m**	**A-30m**	**B-34m**	**C-34m**	**D-26m**	**A-21m**	**B-14m**	**C-18m**	**D-20m**	
1	2585	599	1063	387	629	1013	862	694	216	626	8674
2	3701	985	1858	513	684	1536	1318	734	323	1109	12761
Sum	6286	1584	2921	900	1313	2549	2180	1428	539	1735	**21435**
Mean	3143	792	1460.5	450	656.5	1274.5	1090	714	269.5	867.5	**1071.8**
Granby Reservoir - 26 September 1997 - 10 stations – mean *Mysis*/m^2 =381.7											
Sample Number	**Sampling stations (water depth in meters)**										**Data Summary**
	Stratum I		**Stratum II**				**Stratum III**				
	A-50m	**B-44m**	**A-31m**	**B-26m**	**C-36m**	**D-22m**	**A-18m**	**B-11m**	**C-19m**	**D-10m**	
1	982	298	466	315	227	214	118	109	224	66	3019
2	938	356	373	250	316	289	131	76	217	30	2976
Sum	1920	654	839	565	543	503	249	185	441	96	**5995**
Mean	960	327	419.5	282.5	271.5	251.5	124.5	92.5	220.5	48	**299.8**
Granby Reservoir - 18 September 1998 - 10 stations – mean *Mysis*/m^2 =294.2											
Sample Number	**Sampling stations (water depth in meters)**										**Data Summary**
	Stratum I		**Stratum II**				**Stratum III**				
	A– 49m	**B-53m**	**A-31m**	**B-19m**	**C-34 m**	**D-25m**	**A-21m**	**B-15m**	**C-18m**	**D-21m**	
1	1104	295	140	11	319	64	3	104	106	87	2233
2	1053	380	171	1	202	54	29	386	62	48	2386
Sum	2157	675	311	12	521	118	32	490	168	135	**4619**
Mean	1078.5	337.5	155.5	6	260.5	59	16	245	84	67.5	**231.0**

Table A4-4. ***Continued.*** Summary of nighttime *Mysis diluviana* sampling in Granby Reservoir, 5 October 1991, 28 August 1992, 16 August 1993, 6 July 1994, 25 August 1995, 14 September 1996, 26 September 1997, 18 September 1998, 9 September 1999, 6 September 2000, 10 October 2001, 10 June 2002, 18 September 2003, 16 August 2004, 09 August 2005, 23 August 2006, 12 July 2007, 28 August 2008, and 22 July 2009. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Granby Reservoir - 9 September 1999 - 10 stations – mean *Mysis*/m^2 =566.0											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A–50m	B-53m	A-33m	B-26m	C-35m	D-26m	A-23m	B-17m	C-18m	D-23m	
1	1389	359	364	341	451	415	286	73	271	462	4411
2	1450	308	433	325	357	388	296	91	380	448	4476
Sum	2839	667	797	666	808	803	582	164	651	910	**8887**
Mean	1419.5	333.5	398.5	333	404	401.5	291	82	325.5	455	**444.4**
Granby Reservoir - 6 September 2000 - 10 Stations - mean *Mysis*/m^2 = 843.4											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 48 m	B- 51 m	A- 31 m	B- 27 m	C- 37 m	D- 24 m	A- 16 m	B- 13 m	C- 17 m	D- 19 m	
1	2818	453	425	154	491	221	898	184	367	308	6319
2	3213	423	480	162	581	177	1057	186	331	312	6922
Sum	6031	876	905	316	1072	398	1955	370	698	620	**13241**
Mean	3015.5	438	452.5	158	536	199	977.5	185	349	310	**662.1**
Granby Reservoir - 10 October 2001 - 10 Stations - mean *Mysis*/m^2 = 378.2											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 36 m	B- 42 m	A- 25 m	B- 25 m	C- 28 m	D- 19 m	A- 17 m	B- 10 m	C- 12 m	D- 16 m	
1	468	465	372	243	338	282	226	86	170	145	2795
2	458	599	274	252	289	316	214	62	343	336	3143
Sum	926	1064	646	495	627	598	440	148	513	481	**5938**
Mean	463	532	323	247.5	313.5	299	220	74	256.5	240.5	**296.9**
Granby Reservoir - 10 June 2002 - 10 stations - mean *Mysis*/m^2 = 460.1											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 42 m	B- 39 m	A- 18 m	B- 23 m	C- 20 m	D- 11 m	A- 11 m	B- 11 m	C- 21 m	D- 11 m	
1	1405	328	467	170	264	44	154	216	376	142	3566
2	1230	395	545	234	275	84	149	245	341	159	3657
Sum	2635	723	1012	404	539	128	303	461	717	301	**7223**
Mean	1317.5	361.5	506.0	202.0	269.5	64.0	151.5	230.5	358.5	150.5	**361.2**

Table A4-4. ***Continued.*** Summary of nighttime *Mysis diluviana* sampling in Granby Reservoir, 5 October 1991, 28 August 1992, 16 August 1993, 6 July 1994, 25 August 1995, 14 September 1996, 26 September 1997, 18 September 1998, 9 September 1999, 6 September 2000, 10 October 2001, 10 June 2002, 18 September 2003, 16 August 2004, 09 August 2005, 23 August 2006, 12 July 2007, 28 August 2008, and 22 July 2009. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Granby Reservoir - 18 September 2003 - 10 stations - mean *Mysis*/m^2 = 29.9											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 45m	B- 48m	A- 26m	B- 10m	C- 21m	D- 20m	A- 17m	B- 10m	C- 13m	D- 14m	
1	111	44	12	0	14	33	0	0	1	1	216
2	150	51	9	0	13	29	1	0	0	0	253
Sum	261	95	21	0	27	62	1	0	1	1	**469**
Mean	130.5	47.5	10.5	0.0	13.5	31.0	0.5	0.0	0.5	0.5	**23.5**

Granby Reservoir – 16 August 2004 – 10 stations – mean *Mysis* /m^2 = 237.5											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-43m	B-41m	A-21m	B-18m	C-23m	D-15m	A-6m	B-4m	C-7m	D-10m	
1	608	208	6	84	242	418	0	0	0	51	1617
2	766	200	2	121	259	612	0	1	0	149	2110
Sum	1374	408	8	205	501	1030	0	1	0	200	**3727**
Mean	687	204	4	102.5	250.5	515	0.0	0.5	0.0	100	**186.4**

Granby Reservoir- 09 August 2005 - 10 Stations - mean *Mysis*/m^2 = 215.0											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A - 49.6m	B-48.5m	A-28.6m	B-25.7m	C-31.0m	D-22.0m	A-15.9m	B-11.3m	C-15.4m	D-18.0m	
1	590	376	115	47	143	108	171	27	23	90	1690
2	600	412	102	76	158	109	64	29	26	109	1685
Sum	1190	788	217	123	301	217	235	56	49	199	**3375**
Mean	595	394	108.5	61.5	150.5	108.5	117.5	28	24.5	99.5	**168.8**

Granby Reservoir- 23 August 2006 - 10 Stations - mean *Mysis*/m^2 = 515.8											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-50.5m	B-47.5m	A-26.0m	B-23.5m	C-28.5m	D-20.0m	A-13.3m	B-10.0m	C-13.0m	D-16.0m	
1	1110	439	601	314	244	513	387	13	47	179	3847
2	1468	469	585	318	194	587	296	10	36	287	4250
Sum	2578	908	1186	632	438	1100	683	23	83	466	**8097**
Mean	1289	454	593	316	219	550	341.5	11.5	41.5	233	**404.9**

Table A4-4. *Continued.* Summary of nighttime *Mysis diluviana* sampling in Granby Reservoir, 5 October 1991, 28 August 1992, 16 August 1993, 6 July 1994, 25 August 1995, 14 September 1996, 26 September 1997, 18 September 1998, 9 September 1999, 6 September 2000, 10 October 2001, 10 June 2002, 18 September 2003, 16 August 2004, 09 August 2005, 23 August 2006, 12 July 2007, 28 August 2008, and 22 July 2009. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Granby Reservoir- 12 July 2007 - 10 Stations - mean *Mysis*/m^2 = 1185.9											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	1A- 52.6m	1B- 49.6m	2A- 28.8m	2B- 22.7m	2C- 30.8m	2D- 22.7m	3A- 17.1m	3B- 11.7m	3C- 15.5m	3D-18.1m	
1	3048	555	2029	225	581	519	800	410	483	605	9255
2	2665	505	1603	829	359	336	816	328	679	1243	9363
Sum	5713	1060	3632	1054	940	855	1616	738	1162	1848	**18618**
Mean	2856.5	530	1816	527	470	427.5	808	369	581	924	**930.9**
Granby Reservoir - 28 August 2008 - 10 Stations - mean *Mysis*/m^2 = 891.8											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	1A- 53.8m	1B- 48.2m	2A- 28m	2B- 24.8m	2C- 31.0m	2D- 22.5m	3A- 16.3m	3B- 12.1m	3C- 15.2m	3D-18.0m	
1	2792	154	1213	152	321	1083	225	45	110	594	6689
2	3780	125	1078	131	390	1076	214	50	44	424	7312
Sum	6572	279	2291	283	711	2159	439	95	154	1018	**14001**
Mean	3286	139.5	1145.5	141.5	355.5	1079.5	219.5	47.5	77	509	**700.1**
Granby Reservoir - 22 July 2009 - 10 Stations - mean *Mysis*/m^2 = 314.0											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	1A- 49.5m	1B- 53m	2A- 31.5m	2B- 28.0m	2C- 33.0m	2D- 26.0m	3A- 19.0m	3B- 15.0m	3C- 19.0m	3D-21.5m	
1	171	78	491	219	52	106	783	216	250	172	2538
2	278	60	346	165	33	92	757	184	254	222	2391
Sum	449	138	837	384	85	198	1540	400	504	394	**4929**
Mean	224.5	69	418.5	192	42.5	99	770	200	252	197	**246.5**

Table A4-5. Summary of nighttime *Mysis diluviana* sampling in Gross Reservoir on 16 September 1992. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Gross Reservoir – 16 September 1992 - 5 Stations – mean *Mysis*/m^2 = 82.2						
Sample Number	Sampling stations (water depth in meters)					Data Summary
	Stratum I					
	A-60m	B-30m	C-14m	D-20m	E-12m	
1	181	143	8	113	1	89.2
2	0	95	9	94	1	39.8
Sum	181	238	17	207	2	**645**
Mean	90.5	119	8.5	103.5	1	**64.5**

Table A4-6. Summary of nighttime *Mysis diluviana* sampling in Horsetooth Reservoir on 30 June 2003, 27 September 2005, 16 August 2006. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Sample Number	Horsetooth Reservoir - 30 June 2003 - One adult *mysis* collected mean *Mysis*/m^2 = 1.3								Data Summary
	Sampling stations (water depth in meters)								
	#1- 14m	#2- 30m	#3- 32m	#4- 13m	#5- 28m	#6- 13m	#7- 10m	#8- 14m	
1	0	1	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0
Sum	0	1	0	0	0	0	0	0	**1**
Mean	0	1	0	0	0	0	0	0	**1.0**

Horsetooth Reservoir – 27 September 2005 – 7 Stations – mean *Mysis*/m^2 = 1.3								
Sample Number	Sampling stations (water depth in meters)							Data Summary
	Stratum I							
	HTMY1- 31.7m	HTMY2- 37.0m	HTMY3- 15.2m	HTMY4- 37.9m	HTMY5- 35.5m	HTMY6- 33.5m	HTMY7- 33.3m	
1	0	0	0	2	0	3	2	7
2	0	0	0	4	1	3	1	9
Sum	0	0	0	6	1	6	3	**16**
Mean	0	0	0	3	0.5	3	1.5	**1.0**

Horsetooth Reservoir- 16 August 2006- mean *Mysis*/m^2 = 2.7								
Sample Number	Sampling stations (water depth in meters)							Data Summary
	Stratum I							
	HTMY1 - 31.2m	HTMY2 - 36.4m	HTMY3 - 22.2m	HTMY4 - 37.0m	HTMY5 - 35.0m	HTMY6 - 32.0m	HTMY7 - 32.5m	
1	0	0	2	0	1	5	5	13
2	0	0	3	6	3	5	3	20
Sum	0	0	5	6	4	10	8	**33**
Mean	0	0	2.5	3	2	5	4	**2.1**

Table A4-7. Summary of nighttime *Mysis diluviana* sampling in Jefferson Lake on 8 August 2005. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Jefferson Lake - 08 August 2005 - 6 Stations - mean *Mysis*/m^2 = 383.2							
Sample Number	Sampling stations (water depth in meters)						Data Summary
	Stratum I						
	JFM1- 7.2m	JFM2- 29.7m	JFM3- 25.5m	JFM4- 40.5m	JFM5- 49.2m	JFM6- 23.4m	
1	1	475	134	349	329	268	1556
2	6	596	478	337	312	324	2053
Sum	7	1071	612	686	641	592	**3609**
Mean	3.5	535.5	306	343	320.5	296	**300.8**

Table A4-8. Summary of nighttime *Mysis diluviana* sampling in Ruedi Reservoir on 5 August 1992, 30 August 1994, and 17 July 2003. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Ruedi Reservoir - 5 August 1992 - 10 stations - Mean *Mysis*/m^2 = 121.0											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 70m	B- 55m	C- 46m	D- 28m	E- 37m	F- 36m	G- 25m	H- 13m	I- 74m	J- 20m	
1	43	30	46	10	30	176	22	61	73	638	112.9
2	21	45	54	13	30	96	27	31	75	378	77
Sum	64	75	100	23	60	272	49	92	148	1016	**189.9**
Mean	32.0	37.5	50.0	11.5	30.0	136.0	24.5	46.0	74.0	508.0	**94.9**

Ruedi Reservoir - 30 August 1994 - 10 stations - mean *Mysis*/m^2 = 518.5											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 62m	B- 48m	A- 25m	B- 39m	C- 21m	D- 28m	A- 15m	B- 20m	C- 16m	D- 20m	
1	34	98	19	1386	3	1282	16	18	303	1204	4363
2	39	23	11	660	9	1603	23	22	317	1069	3776
Sum	73	121	30	2046	12	2885	39	40	620	2273	**8139**
Mean	36.5	60.5	15.0	1023.0	6.0	1442.5	19.5	20.0	310.0	1136.5	**407.0**

Ruedi Reservoir - 17 July 2003 - 10 stations - mean *Mysis*/m^2 = 213.5											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 67m	B- 53m	A- 29m	B- 39m	C- 69m	D- 25m	A- 48m	B- 46m	C- 21m	D- 26m	
1	110	52	92	137	100	159	72	44	342	616	1724
2	100	53	135	91	101		139	70	260	519	1468
Sum	210	105	227	228	201	159	211	114	602	1135	**3192**
Mean	105.0	52.5	113.5	114.0	100.5	159.0	105.5	57.0	301.0	567.5	**167.6**

Table A4-9. Summary of nighttime *Mysis diluviana* sampling in Shadow Mountain Reservoir on 6 September 2005. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Shadow Mountain Reservior- 06 September 2005 - 3 Stations - mean *Mysis*/m^2 = 10.2				
Sample Number	Sampling stations (water depth in meters)			Data Summary
	Stratum I			
	SM1A - 9.0m	SMZP2 - 8.8m	SM3A - 5.8m	
1	4	12	0	16
2	1	30	1	32
Sum	5	42	1	**48**
Mean	2.5	21	0.5	**8.0**

Table A4-10. Summary of nighttime *Mysis diluviana* sampling in Taylor Park Reservoir on 1 October 1991, 27 August 1992, 24 August 1993, 9 August 1994, 20 August 1995, 9 August 1996, 13 August 1998, 23 August 1999, 2 August 2000, 24 September 2001, 9 July 2002, 23 July 2003, 14 July 2004, 03 August 2005, 17 July 2006, 16 July 2007, 02 July 2008, and 15 July 2009. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Taylor Park Reservoir - 1 October 1991 - 10 stations – mean *Mysis*/m^2 =125.8											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 40m	B-34m	A-27m	B-26m	C-21m	D-19m	A-14m	B-14m	C-14m	D-13m	
1	1	49	211	218	187	179	47	59	36	105	1092
2	6	48	252	200	151	102	46	27	29	23	884
Sum	7	97	463	418	338	281	93	86	65	128	**1976**
Mean	3.5	48.5	231.5	209	169	140.5	46.5	43	32.5	64	**98.8**
Taylor Park Reservoir - 27 August 1992 - 10 stations – mean *Mysis*/m^2 =456.0											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-40m	B-34m	A-27m	B-26m	C-21m	D-19m	A-14m	B-14m	C-14m	D-13m	
1	1470	390	449	377	193	422	92	77	330	90	3890
2	632	250	764	411	297	342	113	68	313	79	3269
Sum	2102	640	1213	788	490	764	205	145	643	169	**7159**
Mean	1051	320	606.5	394	245	382	102.5	72.5	321.5	84.5	**358.0**
Taylor Park Reservoir - 24 August 1993 - 10 stations – mean *Mysis*/m^2 =165.3											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-33m	B-39m	A-28m	B-30m	C-23m	D-18m	A-11m	B-15m	C-12m	D-10m	
1	246	153	155	300	124	104	52	84	21	24	1263
2	215	186	366	143	101	181	49	67	15	9	1334
Sum	461	339	521	443	225	285	101	151	36	33	**2597**
Mean	230.5	169.5	260.5	221.5	112.5	142.5	50.5	75.5	18	16.5	**129.8**
Taylor Park Reservoir - 9 August 1994 - 10 stations – mean *Mysis*/m^2 =170.2											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-40m	B-38m	A-26m	B-28m	C-29m	D-26m	A-11m	B-14m	C-14m	D-14m	
1	221	136	115	117	234	113	8	34	162	99	1239
2	190	165	55	102	409	224	5	56	167	60	1433
Sum	103	301	170	219	643	337	13	90	329	159	**2672**
Mean	205.5	150.5	85	109.5	321.5	168.5	6.5	45	164.5	79.5	**133.6**

Table A4-10. ***Continued.*** Summary of nighttime *Mysis diluviana* sampling in Taylor Park Reservoir on 1 October 1991, 27 August 1992, 24 August 1993, 9 August 1994, 20 August 1995, 9 August 1996, 13 August 1998, 23 August 1999, 2 August 2000, 24 September 2001, 9 July 2002, 23 July 2003, 14 July 2004, 03 August 2005, 17 July 200(16 July 2007, 02 July 2008, and 15 July 2009. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Taylor Park Reservoir - 20 August 1995 - 10 stations – mean *Mysis*/m^2 =92.7											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-36m	B-40m	A-27m	B-28m	C-18m	D-22m	A-8m	B-8m	C-12m	D-10m	
1	28	54	20	154	168	97	66	9	108	18	722
2	28	26	14	226	188	65	70	20	85	12	734
Sum	56	80	34	380	356	162	136	29	193	30	**1456**
Mean	28	40	17	190	178	81	68	14.5	96.5	15	**72.8**

Taylor Park Reservoir - 9 August 1996 - 10 stations – mean *Mysis*/m^2 =182.4											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-39m	B-36m	A-20m	B-27m	C-16m	D-20m	A-11m	B-7m	C-10m	D-12m	
1	280	153	36	231	220	262	27	4	110	108	1431
2	198	157	30	237	153	506	22	8	41	80	1432
Sum	478	310	66	468	373	768	49	12	151	188	**2863**
Mean	239	155	33	234	186.5	384	24.5	6	75.5	94	**143.2**

Taylor Park Reservoir - 13 August 1998 - 10 stations – mean *Mysis*/m^2 =196.4											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 36m	B-38m	A-27m	B-27m	C-15m	D-22m	A-8m	B-6m	C-11m	D-8m	
1	266	275	402	126	220	119	0	1	3	2	1414
2	315	309	732	154	261	110	3	0	2	3	1889
Sum	581	584	1134	280	481	229	3	1	5	5	**3303**
Mean	295	292	567	140	241	115	1.5	0.5	2.5	2.5	**154.5**

Taylor Park Reservoir - 23 August 1999 - 10 stations – mean *Mysis*/m^2 =196.5											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-41m	B-39m	A-33m	B-28m	C-18m	D-25m	A-10m	B-10m	C-14m	D-11m	
1	224	143	68	308	270	343	36	1	362	13	1768
2	156	133	37	195	283	270	37	4	186	16	1317
Sum	380	276	105	503	553	613	73	5	548	29	**3085**
Mean	190	138	52.5	251.5	276.5	306.5	36.5	2.5	274	14.5	**154.3**

Table A4-10. ***Continued.*** Summary of nighttime *Mysis diluviana* sampling in Taylor Park Reservoir on 1 October 1991, 27 August 1992, 24 August 1993, 9 August 1994, 20 August 1995, 9 August 1996, 13 August 1998, 23 August 1999, 2 August 2000, 24 September 2001, 9 July 2002, 23 July 2003, 14 July 2004, 03 August 2005, 17 July 200(16 July 2007, 02 July 2008, and 15 July 2009. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Taylor Park Reservoir - 24 September 2001 - 10 stations - mean *Mysis*/m^2 = 261.5											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 37 m	B- 35 m	A- 28 m	B- 24 m	C- 15 m	D- 18 m	A- 7 m	B- 6 m	C- 9m	D- 7 m	
1	358	497	288	203	220	181	87	51	123	76	2084
2	565	465	144	179	132	155	85	47	141	109	2022
Sum	923	962	432	382	352	336	172	98	264	185	**4106**
Mean	461.5	481	216	191	176	168	86	49	132	92.5	**205.3**
Taylor Park Reservoir - 9 July 2002 - 10 stations - mean *Mysis*/m^2 = 503.7											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 19m	B- 34m	A- 17m	B- 23m	C- 12m	D- 16m	A- 9m	B- 9m	C- 9m	D- 9m	
1	971	697	575	391	450	287	155	132	339	115	4112
2	1160	548	569	218	544	265	79	91	162	159	3795
Sum	2131	1245	1144	609	994	552	234	223	501	274	**7907**
Mean	1065.5	622.5	572.0	304.5	497.0	276.0	117.0	111.5	250.5	137.0	**395.4**
Taylor Park Reservoir - 23 July 2003 - 10 stations - mean *Mysis*/m^2 = 240.8											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 37m	B- 37m	A- 26m	B- 25m	C- 17m	D- 20m	A- 12m	B- 10m	C- 16m	D- 10m	
1	290	152	122	244	233	310	24	2	488	19	1884
2	347	187	158	259	214	281	17	22	384	31	1900
Sum	637	339	280	503	447	591	41	24	872	50	**3784**
Mean	318.5	169.5	140.0	251.5	223.5	295.5	20.5	12.0	436.0	25.0	**189.2**
Taylor Park Reservoir - 14 July 2004 - 9 stations – mean *Mysis* /m^2 = 398.9											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A-40.5m	B-38.7m	A-28.2m	B-28.7m	C-18.2m	D-22.6m	A-7.8m	B-shallow	C-11.8m	D-10m	
1	604	312	367	137	460	416	101	**Too Shallow; No Sample**	250	284	2931
2	478	288	367	184	487	397	35		228	220	2704
Sum	1082	600	754	321	947	813	136		478	502	**5635**
Mean	541	300	377	160.5	473.5	406.5	68		239	252	**313.1**

Table A4-10. ***Continued.*** Summary of nighttime *Mysis diluviana* sampling in Taylor Park Reservoir on 1 October 1991, 27 August 1992, 24 August 1993, 9 August 1994, 20 August 1995, 9 August 1996, 13 August 1998, 23 August 1999, 2 August 2000, 24 September 2001, 9 July 2002, 23 July 2003, 14 July 2004, 03 August 2005, 17 July 200(16 July 2007, 02 July 2008, and 15 July 2009. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Taylor Park- 03 August 2005 - 10 Stations - mean *Mysis*/m^2 = 447.1											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	1A-36.7m	1B-39.2m	2A-24.4m	2B-27.2m	2C-16.8m	2D-21.9m	3A-6.2m	3B-7.3m	3C-11.1m	3D-9.2m	
1	36	53	582	1072	798	153	109	266	128	104	3301
2	48	53	603	1318	899	121	143	373	84	77	3719
Sum	84	106	1185	2390	1697	274	252	639	212	181	**7020**
Mean	42	53	592.5	1195	848.5	137	126	319.5	106	90.5	**351.0**

Taylor Park - 17 July 2006 - 9 Stations - mean Mysis/m^2 = 387.5											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	1A-38m	1B-39m	2A-27m	2B-28m	2C-18m	2D-22m	3A-9m	3B	3C-11m	3D-7m	
1	214	186	213	462	345	508	214	N/A	243	156	2541
2	156	186	391	445	314	532	375	N/A	282	253	2934
Sum	370	372	604	907	659	1040	589	N/A	525	409	**5475**
Mean	185	186	302	453.5	329.5	520	294.5	N/A	262.5	204.5	**304.2**

Taylor Park - 16 July 2007 - 8 Stations - mean *Mysis*/m^2 = 469.5											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	1A- 38.3m	1B- 40.2m	2A- 26.7m	2B- 28.7m	2C- 18.4m	2D- 22.4m	3A-	3B-	3C- 11.9m	3D- 9.9m	
1	430	331	440	245	536	278	N/A	N/A	539	502	3301
2	564	303	280	375	242	203	N/A	N/A	283	346	2596
Sum	994	634	720	620	778	481	N/A	N/A	822	848	**5897**
Mean	497	317	360	310	389	240.5	N/A	N/A	411	424	**368.6**

Taylor Park Reservoir - 02 July 2008 - 10 Stations - mean *Mysis*/m^2 = 159.7											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	1A- 40.1m	1B- 40.5m	2A- 27.9m	2B- 30.4m	2C- 18.8m	2D- 23.5m	3A- 7.0m	3B-9.15m	3C- 12.9m	3D- 10.4m	
1	184	95	118	174	180	228	29	11	85	136	1240
2	194	103	177	127	157	149	65	44	104	147	1267
Sum	378	198	295	301	337	377	94	55	189	283	**2507**
Mean	189	99	147.5	150.5	169	189	47	28	94.5	141.5	**125.4**

Table A4-10. ***Continued.*** Summary of nighttime *Mysis diluviana* sampling in Taylor Park Reservoir on 1 October 1991, 27 August 1992, 24 August 1993, 9 August 1994, 20 August 1995, 9 August 1996, 13 August 1998, 23 August 1999, 2 August 2000, 24 September 2001, 9 July 2002, 23 July 2003, 14 July 2004, 03 August 2005, 17 July 2006, 16 July 2007, 02 July 2008, and 15 July 2009. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Taylor Park - 15 July 2009 - 10 Stations - mean *Mysis*/m^2 = 433.3											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	1A - 38.5m	1B- 41.5m	2A- 25.0m	2B- 29.5m	2C- 19m	2D- 24.0m	3A- 7.4m	3B- 9.6m	3C- 13.0m	3D- 11.0m	
1	137	73	126	405	578	425	169	460	538	341	3252
2	159	50	154	185	546	479	192	744	661	381	3551
Sum	296	123	280	590	1124	904	361	1204	1199	722	**6803**
Mean	148	61.5	140	295	562	452	180.5	602	599.5	361	**340.2**

Table A4-11. Summary of nighttime *Mysis diluviana* sampling in Turquoise Lake on 29 July 1992. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Turquoise Lake- 29 July 1992 - 10 Stations - mean *Mysis*/m^2 = 17.3											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I		Stratum II				Stratum III				
	A- 18m	B- 33m	C- 21m	D- 32m	E- 32m	F- 17m	G- 12m	H- 17m	I- 12m	J- 17m	
1	6	19	12	23	32	8	1	8	3	15	12.7
2	7	20	12	39	32	10	0	9	2	9	14
Sum	13	39	24	62	64	18	1	17	5	24	**26.7**
Mean	6.5	19.5	12	31	32	9	1	9	2.5	12	**13.5**

Table A4-12. Summary of nighttime *Mysis diluviana* sampling in Twin Lakes on 3 October 1991, 26 August 1992, 18 August 1993, 20 July 1994, 8 July 1996. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Twin Lakes- 3 October 1991 - 10 stations – mean *Mysis*/m^2 = 58.2											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I				Stratum II						
	Upper Lake		Lower Lake		Upper Lake		Lower Lake				
	A-25m	B-23m	C-19m	D-25m	A-12m	B-14m	C-14m	D-13m	E-13m	F-14m	
1	98	138	87	19	6	43	50	4	8	4	457
2	91	167	78	9	0	7	73	21	6	4	456
Sum	189	305	165	28	6	50	123	25	14	8	**913**
Mean	94.5	152.5	82.5	14	3	25	61.5	12.5	7	4	**45.7**

Table A4-12. *Continued.* Summary of nighttime *Mysis diluviana* sampling in Twin Lakes on 3 October 1991, 26 August 1992, 18 August 1993, 20 July 1994, 8 July 1996. Mean mysid density derived from duplicate vertical tows of meter net (0.785 mouth opening) converted to lakewide mean mysid density (mean mysis/*Mysis*/m^2).

Twin Lakes- 26 August 1992 - 10 stations – mean *Mysis*/m^2 = 100.4											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I				Stratum II						
	Upper Lake		Lower Lake		Upper Lake		Lower Lake				
	A-25m	B-23m	C-19m	D-23m	A-13m	B-14m	C-16m	D-13m	E-13m	F-14m	
1	114	22	46	121	28	36	70	41	168	69	715
2	114	40	53	124	12	24	56	195	144	92	854
Sum	228	62	99	245	40	60	126	236	312	161	**1569**
Mean	114	31	49.5	122.5	20	30	63	118	156	80.5	**78.5**
Twin Lakes- 18 August 1993 - 10 stations – mean *Mysis*/m^2 = 71.7											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I				Stratum II						
	Upper Lake		Lower Lake		Upper Lake		Lower Lake				
	A-21m	B-27m	C-23m	D-25m	A-19m	B-16m	C-14m	D-11m	E-16m	F-18m	
1	93	57	17	13	59	60	145	35	71	89	639
2	101	60	30	15	59	57	43	13	45	94	517
Sum	194	117	47	28	118	117	188	48	116	183	**1156**
Mean	97	58.5	23.5	14	59	58.5	94	24	58	91.5	**56.3**
Twin Lakes- 20 July 1994 - 10 stations – mean *Mysis*/m^2 = 118.8											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I				Stratum II						
	Upper Lake		Lower Lake		Upper Lake		Lower Lake				
	A-28m	B-22m	C-23m	D-27m	A-11m	B-15m	C-15m	D-13m	E-14m	F-13m	
1	127	102	36	19	42	63	140	137	47	133	846
2	313	89	51	28	44	96	109	72	104	113	1019
Sum	440	191	87	47	86	159	249	203	151	246	**1865**
Mean	220	95.5	43.5	23.5	43	79.5	124.5	104.5	75.5	123	**93.3**
Twin Lakes- 8 July 1996 - 10 stations – mean *Mysis*/m^2 = 156.4											
Sample Number	Sampling stations (water depth in meters)										Data Summary
	Stratum I				Stratum II						
	Upper Lake		Lower Lake		Upper Lake		Lower Lake				
	A	B-27m	C-24m	D-30m	A-14m	B-11m	C-18m	D-15m	E-15m	F-14m	
1	No data, equipment failure	81	124	68	54	66	138	137	197	65	930
2		149	142	60	65	49	336	78	303	98	1280
Sum		230	266	128	119	115	474	215	500	163	**2210**
Mean		115	133	64	59.5	57.5	237	107.5	250	81.5	**122.8**

PREVIOUSLY MISIDENTIFIED AND CHANGED NOMENCLATURE:

This list explains changes in the scientific names of several species that were formerly identified according to older nomenclature, or misidentified as another species.

** Previously observed *Ceriodaphnia megalops* (numerous reservoirs) were actually *Ceriodaphnia quadrangula* (misidentified due to the close similarity of the species) (Ward and Whipple, 1959).

** Previously observed *Daphnia pulex* (numerous reservoirs) were actually *Daphnia pulicaria* (due to head reticulations observed with new high resolution microscopy equipment). (Brandalova et al. 1972)

** Previously observed *Daphnia schodleri* (Elevenmile 2006, McPhee 1993, 1994, 2005, Williams Fork 2006, Wolford 2006) were actually a morphological variant of *Daphnia pulicaria* (Dodson, 1981; Grogg, 1977; Evans, 1985).

** Previously observed *Biaptura affinis* (Cheeseman 1992) is not a valid name. Accepted name is *Alona affinis* (McLaughlin et al. 2005).

** *Diaphanosoma leuchtenbergianum* (Granby Reservoir 1993) is a European form of *Diaphanosoma birgei* not occurring in North America (Korinek 1981)

** *Diacyclops bicuspidatus thomasi* (numerous reservoirs) is now *Diacyclops thomasi* (McLaughlin et al. 2005).

** *Mysis relicta* (numerous reservoirs) is now *Mysis diluviana* (Whall and Lasenby 2009).

UNABLE TO VALIDATE FROM ARCHIVED SAMPLES:

This list contains species that were originally identified in samples whose identities in specific waters could not be reconfirmed or their distinguishing features photographed because: 1) the species were rare and difficult to detect; 2) the quality of individual specimens in preserved samples had deteriorated; or 3) the sample containing the species had been lost.

** Unable to find *Diacyclops connexus* (Twin Lakes 1992) due to the age and poor quality of preserved samples and loss of samples in 1997 flood in Fort Collins.

** Unable to find *Skistodiaptomus oregonensis* (Gross Reservoir 1992) due to loss of samples in 1997 flood.

** Unable to find *Simocephalus espinosus* (Ruedi 1992) due to loss of samples in 1997 flood.

** Previously observed *Dunhevedia crassa* (Highline 1999, 2000) was not found.

** *Daphnia rosea* was not found.

** *Daphnia longiremis* was not found.

** *Alona guttata* was not found.

FORMERLY UNREPORTED OCCURENCES:

This list contains species in specific waters where a reexamination of samples to verify species identifications or to photograph distinguishing features of individual species revealed the presence of a species that was not previously identified in the original examination of the samples from particular waters.

** *Alona affinis* identified in McPhee 2005 and Williams Fork 2006 samples.

** *Chydorus sphaericus* identified in Elevenmile 2005, Dillon 2005, and McPhee 2004,2005, 2006 samples.

** *Leydigia acanthocercoides* identified in Highline 2005 samples.

** *Pleuroxus denticulatus* identified in McPhee 2006 samples.

** *Mesocyclops edax* identified in Elevenmile 2005, Highline 2001, 2003, 2004 and Rifle Gap 2008 samples.

** *Daphnia galeata mendotae* identified in Dillon 2000 samples.

** *Diaphanosoma brachyurum* identified in Granby 2000, 2002 and McPhee 2006 samples.

** *Eurycercus lamellatus* identified in Elevenmile 2005 samples.

** *Leptodora kindtii* identified in Granby 2000 samples.

** *Camptocercus macrurus* identified in Elevenmile 2005 samples.

NOMENCLATURE CHANGES IN RECORDS OF SPECIFIC RESERVOIRS:

This list supersedes and identifies changes in the scientific names of crustacean zooplankters contained in annual reports. These changes are a result of the verification of species identifications, corrections of species misidentifications, or updates in species nomenclature.

** *Ceriodaphnia megalops* was changed to *Ceriodaphnia quadrangula* for Lake Avery 2001, 2002.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Lake Avery 2001, 2002, 2005.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Blue Mesa 1993, 1994, 1998, 1999, 2000, 2003, 2004, 2005, 2006, 2007.

** *Ceriodaphnia megalops* was changed to *Ceriodaphnia quadrangula* for Blue Mesa 2000, 2004, 2006.

** *Daphnia schodleri* was included with *Daphnia pulicaria* for Blue Mesa 18 July 2006 and mean total density (number/L) and mean lengths were recalculated.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Cheesman 1992.

** *Biaptura affinis* was changed to *Alona affinis* for Cheesman 1992.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Dillon 1993, 1996, 2003, 2005, 2007.

** *Ceriodaphnia megalops* was changed to *Ceriodaphnia quadrangula* for Dillon 2000, 2002.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Elevenmile 1993, 1994, 2005, 2006.

** *Ceriodaphnia megalops* was changed to *Ceriodaphnia quadrangula* for Elevenmile 2006.

** *Daphnia schoedleri* was included with *Daphnia pulicaria* for Elevenmile - 22 August 2006 and mean total density (number/L) and mean lengths were recalculated.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Granby 1991-2007.

** *Diaphanosoma leuchtenbergianum* was changed to *Diaphanosoma birgei* for Granby 1993.

** Previously undetected *Diaphanosoma brachyurum* was found in Granby 2000 and 2002 samples.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Gross 1992.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Highline 1999, 2000.

** *Ceriodaphnia megalops* was changed to *Ceriodaphnia quadrangula* for Highline 1999, 2000, 2001, 2002, 2003, 2005, 2006.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for McPhee 1992, 1993, 1994, 1998, 2003, 2004, 2005, 2006.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Jefferson 2005.

** *Ceriodaphnia megalops* was changed to *Ceriodaphnia quadrangula* for McPhee 2003, 2005, 2006.

** *Daphnia schoedleri* was included with *Daphnia pulicaria* for McPhee 1993, 1994, 2005 and mean total density (number/L) and mean lengths were recalculated.

** Previously undetected *Diaphanosoma brachyurum* was found in McPhee 2006 samples.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Ridgway 2005.

** *Ceriodaphnia megalops* was changed to *Ceriodaphnia quadrangula* for Ridgway 2005.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Rifle Gap 2008.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Ruedi 2003.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Shadow Mountain 2005.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Stagecoach 2002.

** *Ceriodaphnia megalops was changed to Ceriodaphnia quadrangula* for Stagecoach 2002.

** *Daphnia pulex was changed to Daphnia pulicaria for Taylor Park 1991-2007.*

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Twin Lakes 1991, 1992, 1993, 1994, and 1996.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Vallecito 1992, 1993, 1994, 1998, 2004, 2005, 2006.

** *Ceriodaphnia megalops* was changed to *Ceriodaphnia quadrangula* for Vallecito 2006.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Vega 1999, 2006, 2007.

** *Ceriodaphnia megalops* was changed to *Ceriodaphnia quadrangula* for Vega 2006.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Williams Fork 1995, 1996, 2005, 2006.

** *Ceriodaphnia megalops* was changed to *Ceriodaphnia quadrangula* for Williams Fork 2006.

** *Daphnia schoedleri* was included with *Daphnia pulicaria* for Williams Fork 2006 and mean total no./L and mean lengths were recalculated.

** *Daphnia pulex* was changed to *Daphnia pulicaria* for Wolford 2001, 2006.

** *Daphnia schoedleri* was included with *Daphnia pulicaria* for Wolford 2006 and mean total no./L and mean lengths were recalculated.

** *Diacyclops bicuspidatus thomasi* was changed to *Diacyclops thomasi* in nearly all reservoirs reported in this document.