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Prepared by  
Ralph N. Brown, Dennis L. Meinert, Donald C. Wade,  
and David H. Webb

Figures by  
Stephen D. Abston, Ralph D. Gillespie, Albert H. Price III,  
and Barry C. Sinor  
Field Operations, Central and Western Areas

Division of Water Resources  
Office of Natural Resources  
Tennessee Valley Authority

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**APPENDICES**

**APPENDIX A**

**WATER QUALITY ANALYTICAL METHODS FOR  
CHEMICAL PARAMETERS**

APPENDIX A  
ANALYTICAL METHODS FOR CHEMICAL PARAMETERS

Parameter	STORET Code number <sup>a</sup>	Method and reference <sup>b</sup>	Preservation techniques	Detection limits
Alkalinity, total mg/l as CaCO <sub>3</sub>	00410	Potentiometric Titration Standard Methods, pp. 52, 370	None (field determination)	1 mg/l
Alkalinity, phenolphthalein, mg/l as CaCO <sub>3</sub>	00415	Potentiometric Titration Standard Methods, pp. 52, 370	None (field determination)	1 mg/l
Aluminum, µg/l	01105	Atomic Absorption EPA, pp. 81, 92	1+1 HNO <sub>3</sub> 1 ml/8 oz.	200 µg/l
Arsenic, µg/l	01002	Atomic Absorption, Gaseous Hydride EPA, pp. 81, 95 (Prior to Nov. 1976; SDDC - Colorimetric, Standard Methods, pp. 62, 65)	1+1 HNO <sub>3</sub> 1 ml/8 oz.	2 µg/l
Barium, µg/l	01007	Atomic Absorption EPA, pp. 81, 95, 97	1+1 HNO <sub>3</sub> 1 ml/8 oz.	100 µg/l
Beryllium, µg/l	01012	Atomic Absorption EPA, pp. 81, 99	1+1 HNO <sub>3</sub> 1 ml/8 oz.	10 µg/l
Biochemical oxygen	00310	DO depletion at 20°C for 5 days measured with YSI Model 54 RC Standard Methods, p. 489 and EPA, p. 11	Water sealed bottled, 4°C	1 mg/l

Parameter	STORET Code number <sup>a</sup>	Method and reference <sup>b</sup>	Preservation techniques	Detection limits
Cadmium, $\mu\text{g/l}$	01027	Atomic Absorption EPA, pp. 81, 89, 101	1+1 $\text{HNO}_3$ 1 ml/8 oz.	1 $\mu\text{g/l}$
Calcium, $\text{mg/l}$	00916	Atomic Absorption EPA, pp. 81, 103	1+1 $\text{HNO}_3$ 1 ml/8 oz.	1 $\text{mg/l}$ 1 $\text{mg/l}$
Carbon, total Organic, $\text{mg/l}$	00680	Combustion - Infared EPA, p. 236	1+4 $\text{H}_2\text{SO}_4$ , $4^{\circ}\text{C}$ 1 ml/8 oz.	0.2 $\text{mg/l}$
Chemical Oxygen Demand, $\text{mg/l}$	00335	Titrimetric - $\text{K}_2\text{Cr}_2\text{O}_7$ reflux EPA, p. 20	1+4 $\text{H}_2\text{SO}_4$ , $4^{\circ}\text{C}$ 1 ml/4 oz.	1 $\text{mg/l}$
Chloride, $\text{mg/l}$	00940	Titrimetric EPA, p. 29	$4^{\circ}\text{C}$	1 $\text{mg/l}$
Chromium, $\mu\text{g/l}$	01034	Atomic Absorption EPA, pp. 81, 89, 105	1+1 $\text{HNO}_3$ 1 ml/8 oz.	5 $\mu\text{g/l}$
Cobalt, $\mu\text{g/l}$	01037	Atomic Absorption EPA, pp. 81, 89, 107	1+1 $\text{HNO}_3$ 1 ml/8 oz.	5 or 100 $\mu\text{g/l}$
Color, apparent, PCU	00081	Visual Comparison EPA, p. 36	$4^{\circ}\text{C}$	5 PCU
Color, true, PCU	00080	Visual Comparison EPA, p. 36	$4^{\circ}\text{C}$	5 PCU
Conductance, specific $\mu\text{hos/cm at } 25^{\circ}\text{C}$	00095	Wheatstone Bridge or EPA, p. 275	None ( <u>In Situ</u> )	0.5 $\mu\text{hos/cm}$
Copper, $\mu\text{g/l}$	01042	Atomic Absorption EPA, pp. 81, 108	1+1 $\text{HNO}_3$ 1 ml/8 oz.	10 $\mu\text{g/l}$

Parameter	STORET Code number <sup>a</sup>	Method and reference <sup>b</sup>	Preservation techniques	Detection limits
Fluoride, mg/l	00951	Specific Ion Electrode Standard Methods, pp. 171, 172, and EPA, p. 65	4°C	0.1 mg/l
Hardness, total, mg/l	00900	Calculated from Ca and Mg values	None	3 mg/l
Iron, total, µg/l	01045	Atomic Absorption EPA, pp. 81, 110	1+1 HNO <sub>3</sub> 1 ml/8 oz.	50 µg/l
Iron, dissolved, µg/l	01046	Atomic Absorption EPA, pp. 81, 110	1+1 HNO <sub>3</sub> 1 ml/8 oz.	50 µg/l
Iron, ferrous, µg/l	01047	Colorimetric Standard Methods, p. 189	Hydrochloric Acid 5 ml/8 oz.	10 µg/l
Lead, µg/l	01051	Atomic Absorption EPA, pp. 81, 89, 112	1+1 HNO <sub>3</sub> 1 ml/8 oz.	10 µg/l
Magnesium, mg/l	00927	Atomic Absorption EPA, pp. 81, 114	1+1 HNO <sub>3</sub> 1 ml/8 oz.	0.1 mg/l
Manganese, total, µg/l	01055	Atomic Absorption EPA, pp. 81, 116	1+1 HNO <sub>3</sub> 1 ml/8 oz.	10 µg/l
Manganese, filterable µg/l	01056	Atomic Absorption EPA, pp. 81, 116	1+1 HNO <sub>3</sub> 1 ml/8 oz.	10 µg/l
Mercury, µg/l	71900	Flameless Atomic Absorption EPA, p. 118	1+1 HNO <sub>3</sub> 1 ml/8 oz.	0.2 µg/l
Nickel, µg/l	01067	Atomic Absorption EPA, pp. 81, 89, 141	1+1 HNO <sub>3</sub> 1 ml/8 oz.	5 µg/l

Parameter	STORET Code number <sup>a</sup>	Method and reference <sup>b</sup>	Preservation techniques	Detection limits
Nitrogen, ammonia, mg/l	00610	Colorimetric EPA, p. 168	1+4 H <sub>2</sub> SO <sub>4</sub> , 4°C 1 ml/8 oz.	0.01 mg/l
Nitrogen, nitrate plus Nitrite, mg/l	00730	Colorimetric, EOA, p. 207 (Prior to July 1974: Auto- analyzer-Hydrazine Reduction - L. Kamphake, Water Research, p. 205)	1+4 H <sub>2</sub> SO <sub>4</sub> , 4°C 1 ml/8 oz.	0.01 mg/l
Nitrogen, organic, mg/l	00605	Calculated from kjeldahl nitrogen minus ammonia nitrogen, colorimetric- automated digestion and phenate, EPA, p. 168, 182 (Prior to March 1973: Distillation and Nesslerization, Standard Methods, p. 244)	1+4 H <sub>2</sub> SO <sub>4</sub> , 4°C 1 ml/8 oz.	0.01 mg/l
Odor, threshold units	00085	Olfactory perception Standard Methods, p. 248 and EPA, p. 287	4°C	1 unit
Oxygen, dissolved, mg/l	00300	Electrode and/or Titrimetric EPA, pp. 51, 56	In Situ Determine immediately	0.01 mg/l
pH, units	00400	Potentiometric EPA, p. 239	In Situ or determine immediately	Not applicable
Phenols, µg/l	32720	Colorimetric EPA, p. 256	1+8 H <sub>3</sub> PO <sub>4</sub> ; 10% CuSO <sub>4</sub> To pH 4; 1 ml/4 oz.	0.01 µg/l

Parameter	STORET Code number <sup>a</sup>	Method and reference <sup>b</sup>	Preservation techniques	Detection limits
Phosphorus, total, mg/l	00665	Colorimetric, EPA, pp. 249, 256 (with TVA modification) (Prior to March 1973: Manual Digestion - Stannous, Chloride Reduction, Standard Methods, p. 530 (with TVA modification)	1+4 H <sub>2</sub> SO <sub>4</sub> , 4°C 1 ml/8 oz.	0.01 mg/l
Phosphorus, soluble	00666	Colorimetric, EPA, p. 249 (with TVA modification) (Prior to March 1973: Manual Digestion - Stannous Chloride Reduction, Standard Methods, p. 530 (with TVA modification)	4°C	0.01 mg/l
Potassium, mg/l	00937	Atomic Absorption EPA, pp. 81, 143	1+1 HNO <sub>3</sub> 1 ml/8 oz.	0.1 mg/l
Residue, total filterable, mg/l	70300	Gravimetric EPA, p. 266	4°C	10 mg/l
Residue, total nonfilterable, mg/l	00530	Gravimetric EPA, p. 268	4°C	1 mg/l
Selenium, µg/l	01147	Atomic Absorption EPA, p. 145	1+1 HNO <sub>3</sub> 1 ml/8 oz.	2 µg/l
Silica, dissolved, mg/l	00956	Colorimetric EPA, p. 274	4°C	0.1 mg/l
Silver, µg/l	01077	Atomic Absorption EPA, pp. 81, 146	1+1 HNO <sub>3</sub> 1 ml/8 oz.	10 µg/l

Parameter	STORET Code number <sup>a</sup>	Method and reference <sup>b</sup>	Preservation techniques	Detection limits
Sodium, mg/l	00929	Atomic Absorption EPA, pp. 81, 147	4°C	0.1 mg/l
Strontium, µg/l	01082	Atomic Absorption USGS, p. 151	1+1 HNO <sub>3</sub> 1 ml/8 oz.	50 µg/l
Sulfate, mg/l	00945	Turbidimetric EPA, p. 277	4°C	1 mg/l
Temperature, °C	00010	Thermistor, Thermometer	In Situ	0.1°C
Titanium, µg/l	01152	Atomic Absorption EPA, pp. 81, 151	1+1 HNO <sub>3</sub> 1 ml/8 oz.	1000 µg/l
Turbidity, JTU	00076	Nephelometric, EPA, p. 295	4°C	1 JTU
Zinc, µg/l	01092	Atomic Absorption EPA, pp. 81, 155	1+1 HNO <sub>3</sub> 1 ml/8 oz.	10 µg/l

a. STORET is the acronym for EPA's data storage and retrieval system on which all TVA data is entered.

b. Reference abbreviations refer to the following: EPA--Methods for Chemical Analysis of Water and Wastes, 1974, Environmental Protection Agency, Water Quality Office, Cincinnati, Ohio; Standard Methods--Standard Methods for the Examination of Water and Wastewater, 14th ed., 1975, American Public Health Association, New York, NY.; USGS--Methods for Collection and Analysis of Water Samples for Dissolved Minerals and Gases, Book 5, Chapter A-1, 1970, U.S. Department of Interior, Geological Survey; Water Research--"Automated Analysis for Nitrate by Hydrazine Reduction," Water Research, 1, 205, 1967.

**APPENDIX B**

**TEMPORAL AND SPATIAL DISTRIBUTION OF  
PHYTOPLANKTON**

## APPENDIX B

Table B.1

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1974  
 TRM 388.0

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>									
<u>Achnanthes</u>									X
<u>Asterionella</u>	X	X	X	X	X				
<u>Attheya</u>						X			
<u>Chaetoceros</u>	X	X	X			X			
<u>Cocconeis</u>							X	X	X
<u>Cyclotella</u>			X	X	X			X	
<u>Cymbella</u>						X	X	X	
<u>Diatoma</u>			X						
<u>Dinobryon</u>	X	X							
<u>Eunotia</u>						X	X		
<u>Fragilaria</u>						X			
<u>Gyrosigma</u>						X			
<u>Melosira</u>	X	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X	X
<u>Nitzschia</u>							X		
<u>Rhizosolenia</u>					X	X	X	X	X
<u>Stephanodiscus</u>	X	X	X	X	X	X	X	X	X
<u>Surirella</u>					X				
<u>Synedra</u>	X	X	X	X	X	X	X	X	X
<u>Synura</u>	X								
Total	8	9	7	8	10	8	9	7	6
<b>Chlorophyta</b>									
<u>Acanthosphaera</u>							X	X	
<u>Actinastrum</u>					X		X	X	
<u>Ankistrodesmus</u>					X		X	X	
<u>Carteria</u>						X			
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X	X
<u>Chlorella</u>					X	X	X	X	X
<u>Chodatella</u>						X	X	X	X
<u>Closterium</u>	X				X		X		
<u>Crucigenia</u>								X	
<u>Dactylococcus</u>			X						
<u>Dictyosphaerium</u>		X	X		X	X	X		
<u>Eudorina</u>								X	
<u>Golenkinia</u>	X	X	X		X	X	X	X	
<u>Kirchneriella</u>						X		X	
<u>Micractinium</u>					X	X	X		X
<u>Oocystis</u>						X	X	X	

Table B.1 (continued)

Table B.2

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1974  
 TRM 391.2

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>									
<u>Achnanthes</u>									X X
<u>Asterionella</u>		X	X	X		X	X		
<u>Attheya</u>		X	X	X	X	X	X		
<u>Chaetoceros</u>					X				X
<u>Cocconeis</u>					X			X	
<u>Cyclotella</u>			X		X				
<u>Cymbella</u>				X	X	X	X		X
<u>Diatoma</u>					X			X	
<u>Dinobryon</u>		X			X	X			
<u>Eunotia</u>				X	X	X	X		
<u>Fragilaria</u>					X				
<u>Gomphonema</u>		X						X	
<u>Gyrosigma</u>				X			X		
<u>Melosira</u>	X	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X	X
<u>Nitzschia</u>			X	X	X	X			X
<u>Pleurosigma</u>					X		X		
<u>Rhizosolenia</u>					X		X		
<u>Stephanodiscus</u>	X	X	X	X	X	X	X		X
<u>Synedra</u>	X	X	X	X	X	X	X	X	X
<u>Synura</u>		X		X					
Total	5	10	10	9	16	14	9	4	8
<b>Chlorophyta</b>									
<u>Actinastrum</u>				X		X		X	
<u>Ankistrodesmus</u>				X			X		
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X	X
<u>Chlorella</u>				X		X	X	X	X
<u>Chodatella</u>					X	X	X	X	X
<u>Closterium</u>					X				X
<u>Coelastrum</u>								X	
<u>Crucigenia</u>							X	X	
<u>Dictyosphaerium</u>	X	X	X	X	X	X	X	X	X
<u>Eudorina</u>							X	X	
<u>Golenkinia</u>	X	X			X	X	X		
<u>Micractinium</u>	X	X			X		X		

Table B.2 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chlorophyta (continued)</b>									
<u>Palmelloccoccus</u>					X				
<u>Pandorina</u>			X		X	X	X		
<u>Pediastrum</u>					X	X			
<u>Planktosphaeria</u>	X	X	X	X					
<u>Scenedesmus</u>	X	X	X	X	X	X	X	X	X
<u>Schroederia</u>						X	X		
<u>Staurastrum</u>		X			X		X		
<u>Tetraedron</u>							X		
<u>Tetraspora</u>					X				
<u>Treubaria</u>						X	X		X
<b>Total</b>	3	7	9	5	14	13	17	4	7
<b>Cyanophyta</b>									
<u>Anabaena</u>	X								
<u>Dactylococcopsis</u>	X	X	X	X	X	X	X	X	X
<u>Merismopedia</u>			X		X	X	X	X	X
<u>Oscillatoria</u>						X	X	X	X
<u>Phormidium</u>	X	X	X						
<u>Raphidiopsis</u>						X	X		
<b>Total</b>	3	2	3	1	2	4	4	3	2
<b>Euglenophyta</b>									
<u>Euglena</u>	X	X	X	X	X	X	X	X	X
<u>Trachelomonas</u>	X	X	X	X	X	X	X	X	X
<b>Total</b>	2	2	2	2	2	2	2	2	1
<b>Pyrrhophyta</b>									
<u>Gymnodinium</u>				X					
<b>Total</b>				1					
<b>Total Number of Taxa</b>	13	21	25	17	34	33	32	13	18

Table B.3

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1974  
TRM 396.8

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>									
<u>Achnanthes</u>									X
<u>Asterionella</u>	X	X	X	X		X	X	X	
<u>Attheya</u>									
<u>Chaetoceros</u>	X		X		X	X			
<u>Coccconeis</u>									X
<u>Cyclotella</u>	X	X	X	X					
<u>Cymbella</u>	X				X				X
<u>Dinobryon</u>	X	X			X				X
<u>Eunotia</u>			X	X	X				
<u>Fragilaria</u>			X		X	X			
<u>Gomphonema</u>	X	X	X						
<u>Melosira</u>	X	X	X	X	X	X	X	X	X
<u>Navicula</u>	X		X	X	X	X	X	X	X
<u>Nitzschia</u>			X		X		X	X	X
<u>Rhizosolenia</u>					X	X	X		
<u>Stephanodiscus</u>	X	X	X	X	X	X	X		X
<u>Synedra</u>	X	X	X	X	X	X	X	X	X
<u>Tabellaria</u>	X								
Total	11	7	11	7	12	8	7	4	8
<b>Chlorophyta</b>									
<u>Acanthosphaera</u>								X	
<u>Actinastrum</u>			X		X	X			X
<u>Ankistrodesmus</u>								X	
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X	X
<u>Chlorella</u>				X	X	X	X	X	X
<u>Chodatella</u>					X	X	X		X
<u>Coelastrum</u>			X	X	X				
<u>Crucigenia</u>						X	X		X
<u>Dictyosphaerium</u>		X	X			X	X		
<u>Euastrum</u>							X		
<u>Golenkinia</u>	X	X			X	X			
<u>Micractinium</u>		X	X			X			

Table B.3 (continued)

Table B.4

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1974  
TCM 0.2

Table B.4 (continued)

Table B.5

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1975  
 TRM 388.0

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>									
<u>Achmanthes</u>				X					
<u>Asterionella</u>	X	X	X	X					
<u>Caloneis</u>				X					
<u>Chaetoceros</u>				X	X	X			
<u>Coccconeis</u>		X				X	X	X	X
<u>Cymbella</u>		X		X	X		X	X	X
<u>Dinobryon</u>				X					
<u>Fragilaria</u>					X				
<u>Gomphonema</u>							X		
<u>Melosira</u>	X	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X	X
<u>Nitzschia</u>		X	X	X		X		X	
<u>Ophiocytium</u>							X		
<u>Pinnularia</u>			X						
<u>Rhoicosphenia</u>									X
<u>Rhizosolenia</u>				X		X	X		X
<u>Stephanodiscus</u>	X	X	X	X	X	X	X		
<u>Surirella</u>				X	X				
<u>Synedra</u>	X	X	X	X	X	X	X	X	X
<u>Tabellaria</u>					X				
Total	6	8	7	13	8	9	10	7	7
<b>Chlorophyta</b>									
<u>Acanthosphaera</u>					X		X		
<u>Actinastrum</u>	X	X	X	X				X	
<u>Ankistrodesmus</u>				X	X			X	
<u>Arthrodesmus</u>					X				X
<u>Carteria</u>					X			X	
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X	X
<u>Chlorella</u>	X	X	X	X	X	X	X	X	X
<u>Chodatella</u>	X		X	X	X	X	X	X	X
<u>Coelastrum</u>	X			X	X				X
<u>Crucigenia</u>	X	X	X	X	X	X	X		X
<u>Dactylococcus</u>									X
<u>Dictyosphaerium</u>	X	X	X	X		X	X	X	
<u>Elakatothrix</u>				X				X	
<u>Euastrum</u>						X			
<u>Golenkinia</u>	X	X		X	X	X	X	X	X
<u>Kirchneriella</u>		X		X	X	X	X	X	X
<u>Micractinium</u>				X	X	X	X	X	

Table B.5 (continued)

Table B.5 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Chlorophyta (continued)									
<u>Oocystis</u>	X			X	X	X			
Palmelloccoccus	X			v	v	v	v	v	x

Table B.6

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1975  
 TRM 391.2

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>									
<u>Achnanthes</u>				X		X	X	X	X
<u>Asterionella</u>	X	X	X	X					
<u>Chaetoceros</u>					X	X			
<u>Coccconeis</u>		X	X	X		X	X	X	X
<u>Cymbella</u>	X	X				X	X	X	X
<u>Diatoma</u>	X								
<u>Dinobryon</u>			X	X		X			
<u>Fragilaria</u>							X		
<u>Gomphonema</u>							X		X
<u>Gyrosigma</u>					X				
<u>Melosira</u>	X	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X	X
<u>Nitzschia</u>	X		X	X		X		X	X
<u>Ophiocytium</u>						X	X		X
<u>Rhizosolenia</u>						X	X		X
<u>Stephanodiscus</u>	X	X	X	X	X	X	X	X	X
<u>Synedra</u>	X	X	X	X	X	X	X	X	X
<u>Synura</u>			X						
Total	6	8	10	10	5	11	11	8	9
<b>Chlorophyta</b>									
<u>Acanthosphaera</u>				X				X	
<u>Actinastrum</u>		X			X	X	X	X	
<u>Ankistrodesmus</u>					X	X	X	X	
<u>Arthrodesmus</u>				X					
<u>Carteria</u>							X		
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X	X
<u>Chlorella</u>	X	X	X	X	X	X	X	X	X
<u>Chodatella</u>			X	X	X	X	X	X	
<u>Coelastrum</u>				X		X			
<u>Crucigenia</u>	X		X	X	X	X	X	X	
<u>Dactylococcus</u>									X
<u>Dictyosphaerium</u>	X	X	X	X	X	X	X	X	
<u>Elakatothrix</u>					X			X	
<u>Euastrum</u>					X				
<u>Eudorina</u>						X			
<u>Gloeotactinium</u>							X		
<u>Golenkinia</u>	X		X	X	X	X	X	X	
<u>Kirchneriella</u>	X			X		X	X	X	
<u>Micractinium</u>				X	X	X	X		

Table B.6 (continued)

Table B.7

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1975  
 TRM 396.8

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>									
<u>Achnanthes</u>				X				X	X
<u>Asterionella</u>	X			X	X				
<u>Chaetoceros</u>			X						
<u>Coccconeis</u>	X	X	X						
<u>Cymbella</u>	X	X		X	X	X	X	X	X
<u>Dinobryon</u>	X			X	X				
<u>Fragilaria</u>		X	X	X	X	X	X	X	X
<u>Melosira</u>	X	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X	X
<u>Nitzschia</u>	X	X	X	X		X	X		X
<u>Rhizosolenia</u>						X	X		X
<u>Stephanodiscus</u>	X	X	X	X	X	X	X		X
<u>Synedra</u>	X	X	X	X	X	X	X		
<u>Synura</u>					X				
<u>Tabellaria</u>				X					
Total	9	7	9	9	8	8	9	7	8
<b>Chlorophyta</b>									
<u>Acanthosphaera</u>				X	X			X	
<u>Actinastrum</u>		X	X	X	X		X		
<u>Ankistrodesmus</u>	X			X	X		X		X
<u>Arthrodesmus</u>					X				
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X	X
<u>Chlorella</u>	X	X	X	X	X	X	X	X	X
<u>Chodatella</u>			X	X	X	X	X		
<u>Closteridium</u>					X				
<u>Coelastrum</u>					X	X	X		
<u>Cosmarium</u>					X				
<u>Crucigenia</u>		X		X	X	X	X		X
<u>Dactylococcus</u>									
<u>Dictyosphaerium</u>	X	X	X	X	X				
<u>Elakatothrix</u>					X		X		
<u>Euastrum</u>						X			
<u>Eudorina</u>					X				
<u>Golenkinia</u>	X				X	X	X	X	X
<u>Kirchneriella</u>					X	X	X		
<u>Micractinium</u>					X		X		

Table B.7 (continued)

Table B.8

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1975  
 TCM 0.2

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>									
<u>Achnanthes</u>	X	X	X	X	X	X	X	X	X
<u>Asterionella</u>	X	X	X						
<u>Caloneis</u>									X
<u>Centrales</u>						X			
<u>Chaetoceros</u>									X
<u>Coccconeis</u>				X	X	X	X	X	X
<u>Cymbella</u>			X	X	X	X	X	X	X
<u>Diatoma</u>			X						
<u>Dinobryon</u>	X	X	X	X	X	X	X		X
<u>Fragilaria</u>	X				X				
<u>Gomphonema</u>			X		X	X			X
<u>Gyrosigma</u>	X	X		X			X		
<u>Melosira</u>	X	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X	X
<u>Nitzschia</u>			X	X	X	X	X	X	X
<u>Ophiocytium</u>				X	X	X	X	X	X
<u>Pinnularia</u>				X					
<u>Pleurosigma</u>				X					
<u>Rhoicosphenia</u>							X		
<u>Rhizosolenia</u>					X		X		X
<u>Stephanodiscus</u>		X	X	X	X	X	X		X
<u>Synedra</u>	X	X	X	X	X	X	X	X	X
<u>Synura</u>					X				
<u>Tabellaria</u>				X					
<b>Total</b>	6	8	11	16	14	12	10	7	14
<b>Chlorophyta</b>									
<u>Acanthosphaera</u>			X	X	X	X	X		
<u>Actinastrum</u>	X	X	X	X	X	X	X		X
<u>Ankistrodesmus</u>			X	X	X	X	X		X
<u>Arthrodesmus</u>			X	X	X	X	X		X
<u>Carteria</u>	X								
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X	X
<u>Chlorella</u>	X	X	X	X	X	X	X	X	X
<u>Chlorococcum</u>		X							
<u>Chodatella</u>	X	X	X	X	X	X	X	X	X
<u>Closteridium</u>	X			X	X	X	X	X	
<u>Closteriopsis</u>					X	X			
<u>Coelastrum</u>					X	X	X	X	X
<u>Cosmarium</u>					X	X	X	X	X
<u>Crucigenia</u>					X	X	X	X	X

Table B.8 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chlorophyta (continued)</b>									
<u>Dactylococcus</u>									X
<u>Dictyosphaerium</u>	X	X	X	X	X	X	X	X	X
<u>Elakatothrix</u>		X		X		X			
<u>Euastrum</u>				X	X	X		X	
<u>Eudorina</u>	X			X		X			
<u>Golenkinia</u>	X	X	X	X	X	X	X		X
<u>Hyalotheca</u>							X		
<u>Kirchneriella</u>				X	X	X	X		X
<u>Micractinium</u>		X	X	X	X	X	X	X	X
<u>Oocystis</u>	X		X	X	X	X	X		X
<u>Pandorina</u>			X		X	X	X		X
<u>Pediastrum</u>				X	X	X	X	X	
<u>Polyedriopsis</u>				X		X		X	X
<u>Protococcus</u>				X		X			
<u>Pteromonas</u>					X		X		X
<u>Quadrigula</u>		X		X		X			
<u>Scenedesmus</u>	X	X	X	X	X	X	X	X	X
<u>Schroederia</u>	X		X	X	X	X	X		X
<u>Spirogyra</u>								X	
<u>Staurastrum</u>				X	X	X	X	X	
<u>Tetraedron</u>			X	X	X	X	X		X
<u>Tetrastrum</u>		X	X	X	X	X			X
<u>Treubaria</u>			X	X	X	X		X	X
<u>Trochiscia</u>								X	
<u>Ulothrix</u>				X			X		X
<b>Total</b>	12	13	17	31	28	31	26	7	24
<b>Cyanophyta</b>									
<u>Anabaena</u>								X	
<u>Anacystis</u>	X		X	X	X	X	X		X
<u>Aphanizomenon</u>				X	X	X	X		
<u>Croococcus</u>				X		X	X		X
<u>Dactylococcopsis</u>	X	X	X	X	X	X	X	X	X
<u>Merismopedia</u>	X	X	X	X	X	X	X		X
<u>Oscillatoria</u>	X	X	X	X	X	X	X	X	X
<u>Rhabdoderma</u>			X	X		X	X		
<u>Spirulina</u>						X	X	X	X
<b>Total</b>	4	3	5	7	6	7	8	3	5
<b>Euglenophyta</b>									
<u>Euglena</u>	X	X	X	X	X	X	X		X
<u>Phacus</u>				X		X	X		X
<u>Trachelomonas</u>	X	X	X	X	X	X			X
<b>Total</b>	2	2	2	3	2	2	3	1	

Table B.8 (continued)

Table B.9

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1976  
 TRM 388.0

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>									
<u>Achnanthes</u>	X	X	X	X	X	X	X		
<u>Asterionella</u>	X	X	X						
<u>Attheya</u>						X			
<u>Chaetoceros</u>	X		X	X	X		X	X	X
<u>Coccconeis</u>	X	X	X	X	X		X	X	X
<u>Cymbella</u>	X	X	X	X	X	X	X	X	X
<u>Dinobryon</u>	X	X	X	X	X	X	X	X	
<u>Fragilaria</u>	X				X				
<u>Comphonema</u>	X	X	X	X	X	X			X
<u>Gyrosigma</u>		X							
<u>Melosira</u>	X	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X	X
<u>Nitzschia</u>	X	X	X	X	X	X	X	X	X
<u>Rhizosolenia</u>					X	X	X		
<u>Rhoicosphenia</u>	X			X		X			
<u>Stephanodiscus</u>	X	X	X	X	X	X	X	X	X
<u>Surirella</u>		X			X				X
<u>Synedra</u>	X	X	X	X	X	X	X	X	
<u>Synura</u>	X	X							
Total	15	14	12	12	15	11	11	9	8
<b>Chlorophyta</b>									
<u>Acanthosphaera</u>						X			
<u>Actinastrum</u>			X	X				X	
<u>Ankistrodesmus</u>	X	X	X	X		X		X	
<u>Arthrodesmus</u>						X			
<u>Carteria</u>					X	X	X		
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X	X
<u>Chlorella</u>	X	X	X	X	X	X	X	X	X
<u>Chlorococcum</u>						X	X		
<u>Chodatella</u>	X	X	X	X	X	X	X	X	X
<u>Closteriopsis</u>						X	X		
<u>Coelastrum</u>						X	X	X	
<u>Cosmarium</u>						X			
<u>Crucigenia</u>	X	X			X	X	X		
<u>Dactylococcus</u>	X					X	X	X	
<u>Dictyosphaerium</u>	X	X	X	X	X	X	X	X	X
<u>Elakatothrix</u>			X						
<u>Euastrum</u>	X					X		X	X
<u>Franceia</u>	X	X							
<u>Gloeocystis</u>		X							
<u>Golenkinia</u>	X	X	X	X	X	X	X		X
<u>Gonium</u>					X				

Table B.9 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chlorophyta (continued)</b>									
<u>Kirchneriella</u>	X				X	X	X		
<u>Micractinium</u>	X	X	X			X	X		
<u>Oocystis</u>	X	X		X		X			
<u>Pandorina</u>			X	X	X	X		X	
<u>Pediastrum</u>					X	X	X		
<u>Polyedriopsis</u>					X	X			
<u>Protococcus</u>		X			X	X	X		X
<u>Pteromonas</u>			X		X	X			X
<u>Pyramimonas</u>			X						
<u>Quadrigula</u>		X				X			
<u>Scenedesmus</u>	X	X	X	X	X	X	X	X	X
<u>Schroederia</u>	X				X	X	X	X	
<u>Selenastrum</u>							X		
<u>Staurastrum</u>						X			
<u>Stigeoclonium</u>			X						X
<u>Tetraedron</u>	X		X		X	X	X		
<u>Tetrastrum</u>	X	X			X	X	X		
<u>Treubaria</u>			X		X	X	X		
<u>Trochiscia</u>	X	X	X	X	X	X			
<u>Ulothrix</u>	X								
Total	19	17	16	12	24	27	21	8	8
<b>Cyanophyta</b>									
<u>Anabaena</u>	X		X						
<u>Anacystis</u>	X	X	X	X	X	X	X	X	X
<u>Aphanothecce</u>						X	X		
<u>Dactylococcopsis</u>	X	X	X	X	X	X	X	X	X
<u>Lyngbya</u>						X			
<u>Merismopedia</u>	X	X	X	X	X	X	X	X	X
<u>Oscillatoria</u>	X	X	X	X	X	X	X		
<u>Rhabdoderma</u>						X			
<u>Spirulina</u>					X	X			
Total	5	4	5	4	5	8	5	3	3
<b>Euglenophyta</b>									
<u>Cryptoglena</u>	X	X	X	X		X			
<u>Euglena</u>	X	X	X	X	X	X		X	X
<u>Trachelomonas</u>	X	X	X	X	X	X		X	X
Total	3	3	3	3	2	3	1	2	

Table B.9 (continued)

Table B.10

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1976  
 TRM 391.2

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>									
<u>Achnanthes</u>	X	X	X	X	X	X	X		
<u>Asterionella</u>	X	X		X	X		X		X
<u>Attheya</u>						X		X	X
<u>Chaetoceros</u>	X		X	X		X	X	X	X
<u>Coccconeis</u>	X	X		X	X	X	X	X	
<u>Cymbella</u>	X	X	X	X	X	X	X	X	
<u>Diatoma</u>									
<u>Dinobryon</u>	X	X	X	X	X	X	X		
<u>Fragilaria</u>		X		X	X		X		
<u>Gomphonema</u>	X	X	X	X	X	X	X		
<u>Gyrosigma</u>	X			X			X		
<u>Melosira</u>	X	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X	X
<u>Nitzschia</u>	X	X	X	X	X	X	X	X	X
<u>Ophiocytium</u>	X					X			
<u>Rhizosolenia</u>			X		X	X	X		
<u>Roicosphenia</u>					X				
<u>Stephanodiscus</u>	X	X	X	X		X	X	X	X
<u>Surirella</u>	X	X	X	X	X	X	X	X	X
<u>Synedra</u>	X	X	X	X	X	X	X	X	X
<u>Synura</u>	X								
<u>Tabellaria</u>			X						
Total	15	14	10	16	13	14	13	10	7
<b>Chlorophyta</b>									
<u>Acanthosphaera</u>						X			X
<u>Actinastrum</u>		X	X	X	X	X	X	X	
<u>Ankistrodesmus</u>	X	X	X			X	X		
<u>Arthrodesmus</u>						X			
<u>Carteria</u>			X					X	
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X	X
<u>Chlorella</u>	X	X	X	X	X	X	X	X	X
<u>Chlorococcum</u>	X	X	X	X	X	X	X	X	X
<u>Chodatella</u>	X	X	X	X	X	X	X	X	X
<u>Cladophora</u>					X				
<u>Closteriopsis</u>	X							X	
<u>Crucigenia</u>	X				X		X		X
<u>Dactylococcus</u>	X					X	X		
<u>Dictyosphaerium</u>	X	X		X	X	X	X	X	
<u>Elakatothrix</u>	X	X		X	X		X		
<u>Eudorina</u>					X				
<u>Franceia</u>						X	X		

Table B.10 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chlorophyta (continued)</b>									
<u>Gloeoactinium</u>		X							
<u>Golenkinia</u>	X	X	X	X	X	X	X	X	X
<u>Gonium</u>							X		
<u>Kirchneriella</u>			X	X	X	X	X	X	X
<u>Micractinium</u>	X	X	X	X		X		X	X
<u>Oocystis</u>	X	X		X	X	X	X	X	X
<u>Pandorina</u>	X			X		X	X	X	X
<u>Pediastrum</u>	X	X			X	X	X		
<u>Protococcus</u>			X			X			
<u>Pteromonas</u>	X	X		X	X	X	X	X	
<u>Pyramimonas</u>				X					
<u>Quadrigula</u>		X							
<u>Scenedesmus</u>	X	X	X	X	X	X	X	X	X
<u>Schroederia</u>				X	X	X	X	X	X
<u>Staurastrum</u>								X	
<u>Stigeoclonium</u>			X					X	
<u>Tetraedron</u>			X	X	X	X	X	X	X
<u>Tetraspora</u>			X			X			
<u>Tetrastrum</u>	X	X			X				
<u>Treubaria</u>			X		X	X	X	X	X
<u>Trochiscia</u>	X	X		X	X	X			
<b>Total</b>	18	20	16	21	18	24	21	17	6
<b>Cyanophyta</b>									
<u>Anabaena</u>	X	X	X	X	X	X	X	X	X
<u>Aphanothece</u>				X		X			
<u>Arthrosphaera</u>								X	
<u>Dactylococcopsis</u>	X	X	X	X	X	X	X	X	X
<u>Lyngbya</u>						X			
<u>Merismopedia</u>	X	X	X	X	X	X	X	X	X
<u>Oscillatoria</u>	X	X	X	X	X	X	X	X	X
<u>Plectonema</u>			X						
<u>Spirulina</u>						X			
<b>Total</b>	4	5	4	5	5	7	5	4	4
<b>Euglenophyta</b>									
<u>Cryptoglena</u>	X		X						
<u>Euglena</u>	X	X	X	X		X			X
<u>Phacus</u>	X							X	
<u>Trachelomonas</u>	X	X	X	X	X	X			X
<b>Total</b>	4	2	3	2	1	2		1	2

Table B.10 (continued)

Table B.11

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1976  
 TRM 396.8

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>									
<u>Achnanthes</u>	X	X	X	X	X	X	X		X
<u>Asterionella</u>	X	X	X						
<u>Attheya</u>						X			
<u>Chaetoceros</u>			X	X			X	X	X
<u>Cocconeis</u>	X	X	X	X	X	X	X	X	X
<u>Cymbella</u>	X	X	X	X	X	X	X	X	X
<u>Diatoma</u>	X		X		X				
<u>Dinobryon</u>	X	X	X	X	X	X	X		
<u>Gomphonema</u>	X	X	X	X		X	X		
<u>Gyrosigma</u>	X		X						
<u>Melosira</u>	X	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X	X
<u>Nitzschia</u>	X	X	X	X		X		X	X
<u>Rhizosolenia</u>				X	X	X	X		
<u>Rhoicospenia</u>			X						
<u>Stephanodiscus</u>	X	X	X	X	X	X	X	X	X
<u>Surirella</u>				X					
<u>Synedra</u>	X	X	X	X	X	X	X	X	X
<u>Synura</u>								X	
<u>Tabellaria</u>	X	X							
Total	14	13	14	13	10	12	11	9	7
<b>Chlorophyta</b>									
<u>Actinastrum</u>	X		X	X		X			
<u>Ankistrodesmus</u>	X	X	X			X			
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X	X
<u>Chlorococcum</u>				X		X			
<u>Chlorella</u>	X	X	X	X	X	X	X	X	X
<u>Chodatella</u>	X	X	X	X	X	X	X		
<u>Closteriopsis</u>	X					X			
<u>Coelastrum</u>			X			X	X		
<u>Cosmarium</u>			X						
<u>Crucigenia</u>	X					X	X		
<u>Dactylococcus</u>	X	X							
<u>Dictyosphaerium</u>	X	X		X	X	X	X	X	X
<u>Elakatothrix</u>			X				X		
<u>Franceia</u>			X						
<u>Gloeactinium</u>			X			X			
<u>Gloeocystis</u>							X		
<u>Golenkinia</u>	X	X	X	X	X	X	X		
<u>Kirchneriella</u>	X				X	X	X		

Table B.11 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chlorophyta (continued)</b>									
<u>Micractinium</u>	X	X	X	X		X	X	X	
<u>Oocystis</u>	X	X	X	X	X	X	X		
<u>Pandorina</u>				X		X			
<u>Pediastrum</u>	X		X		X	X			
<u>Protococcus</u>	X	X		X	X	X		X	
<u>Pteromonas</u>		X		X	X	X			
<u>Pyramimonas</u>			X						
<u>Quadrigula</u>							X		
<u>Scenedesmus</u>	X	X	X	X	X	X	X	X	
<u>Schroederia</u>					X	X	X	X	X
<u>Staurastrum</u>					X				X
<u>Stigeoclonium</u>						X	X		X
<u>Tetraedon</u>						X	X		
<u>Tetrallantos</u>	X	X			X				X
<u>Tetrastrum</u>				X	X	X			
<u>Treubaria</u>	X	X	X	X	X	X			
<u>Trochiscia</u>									
Total	18	19	12	16	16	24	18	7	7
<b>Cyanophyta</b>								X	
<u>Anabaena</u>									
<u>Anacystis</u>	X	X	X	X	X	X	X		X
<u>Aphanothecce</u>				X					
<u>Arthrospira</u>								X	
<u>Chroococcus</u>		X							
<u>Dactylococcopsis</u>	X	X	X	X	X	X	X	X	X
<u>Lyngbya</u>	X	X	X	X	X	X	X	X	
<u>Merismopedia</u>	X	X	X	X	X	X	X		
<u>Oscillatoria</u>	X	X	X	X	X	X	X		X
<u>Spirulina</u>							X		
Total	4	5	4	5	4	7	5	3	3
<b>Euglenophyta</b>									
<u>Cryptoglena</u>	X	X	X	X		X			
<u>Euglena</u>	X	X	X			X	X		X
<u>Trachelomonas</u>	X	X			X			X	X
Total	3	3	2	1	1	2	1	1	2

Table B.11 (continued)

Table B.12

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1976  
 TCM 0.2

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>									
<u>Achnanthes</u>	X	X	X	X	X	X	X	X	X
<u>Asterionella</u>	X	X							
<u>Chaetoceros</u>			X					X	
<u>Coccconeis</u>	X	X	X	X	X	X	X	X	X
<u>Cymatopleura</u>				X					
<u>Cymbella</u>	X	X	X	X	X	X	X	X	X
<u>Diatoma</u>	X								
<u>Dinobryon</u>		X		X		X	X		
<u>Fragilaria</u>	X	X		X	X	X	X	X	
<u>Gomphonema</u>	X	X		X	X	X	X	X	
<u>Gyrosigma</u>	X	X	X						
<u>Melosira</u>	X	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X	X
<u>Nitzschia</u>	X	X		X	X	X	X	X	X
<u>Rhizosolenia</u>					X	X	X		
<u>Rhoicospenia</u>						X			
<u>Stephanodiscus</u>	X	X	X	X	X	X	X	X	X
<u>Surirella</u>						X			
<u>Synedra</u>	X	X	X	X	X	X	X	X	X
Total	13	12	9	11	10	14	10	11	7
<b>Chlorophyta</b>									
<u>Acanthosphaera</u>			X			X			
<u>Actinastrum</u>	X		X	X		X	X	X	
<u>Ankistrodesmus</u>	X	X		X		X		X	
<u>Arthrodesmus</u>						X			
<u>Botryococcus</u>						X			
<u>Carteria</u>						X			
<u>Characium</u>	X								
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X	X
<u>Chlorella</u>	X	X	X	X	X	X	X	X	X
<u>Chlorococcum</u>						X			
<u>Chodatella</u>		X	X	X	X	X	X	X	X
<u>Closteriopsis</u>				X		X	X	X	
<u>Coelastrum</u>					X	X	X	X	X
<u>Cosmarium</u>						X			
<u>Crucigenia</u>	X	X				X	X	X	

Table B.12 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chlorophyta (continued)</b>									
<u>Dactylococcus</u>	X			X			X		
<u>Dictyosphaerium</u>	X	X	X	X	X	X			X
<u>Elakatothrix</u>				X	X				
<u>Euastrum</u>						X			X
<u>Franceia</u>							X		
<u>Golenkinia</u>	X	X	X	X	X	X	X	X	X
<u>Kirchneriella</u>	X	X		X	X	X	X	X	X
<u>Micractinium</u>	X	X	X	X		X	X		
<u>Oocystis</u>	X			X	X	X	X		X
<u>Pandorina</u>	X	X		X	X	X	X		
<u>Pediastrum</u>					X		X		
<u>Polyedriopsis</u>					X		X		
<u>Protococcus</u>					X		X		
<u>Pteromonas</u>				X	X	X	X		
<u>Pyramimonas</u>				X					
<u>Quadrigula</u>		X				X			
<u>Scenedesmus</u>	X	X	X	X	X	X	X	X	X
<u>Schroederia</u>					X	X	X		
<u>Selenastrum</u>						X			
<u>Sphaerocystis</u>						X	X		
<u>Staurastrum</u>					X	X			
<u>Stigeoclonium</u>						X			
<u>Tetraedron</u>				X	X	X	X		
<u>Tetrastrum</u>				X		X			
<u>Treubaria</u>						X	X		
<u>Trochiscia</u>	X		X	X			X		
<u>Volvox</u>				X					
Total	15	15	12	23	16	33	20	21	3
<b>Cyanophyta</b>									
<u>Anabaena</u>								X	
<u>Anacystis</u>	X	X		X	X	X	X	X	X
<u>Aphanothecce</u>						X			
<u>Arthrosphaira</u>								X	
<u>Chroococcus</u>	X						X		
<u>Dactylococcopsis</u>	X	X	X	X	X	X	X	X	X
<u>Lynbya</u>							X		
<u>Merismopedia</u>	X	X	X	X	X	X	X	X	X
<u>Oscillatoria</u>	X	X	X	X	X	X	X	X	X
<u>Raphidiopsis</u>							X		
<u>Spirulina</u>							X		
Total	5	4	3	4	4	9	5	6	3

Table B.12 (continued)

Table B.13

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1977  
TRM 388.0

Table B.13 (continued)

Table B.14

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1977  
 TRM 391.2

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>									
<u>Achnanthes</u>	X	X			X	X	X		X
<u>Asterionella</u>	X	X	X						
<u>Chaetoceros</u>	X			X		X		X	X
<u>Coccconeis</u>		X	X			X			X
<u>Cyclotella</u>	X								
<u>Cymbella</u>		X	X			X			X
<u>Diatoma</u>		X	X						
<u>Dinobryon</u>	X	X	X	X	X			X	
<u>Fragilaria</u>	X	X		X					
<u>Gomphonema</u>	X	X	X	X					X
<u>Gyrosigma</u>	X	X							
<u>Melosira</u>	X	X	X	X	X	X	X	X	X
<u>Navicula</u>		X	X	X	X	X	X	X	X
<u>Nitzschia</u>	X	X			X				
<u>Rhizosolenia</u>					X		X		
<u>Stephanodiscus</u>	X	X	X	X	X	X		X	X
<u>Surirella</u>	X								
<u>Synedra</u>	X	X	X	X	X	X	X	X	X
<u>Tabellaria</u>	X	X							
Total	14	15	10	8	8	9	4	6	10
<b>Chlorophyta</b>									
<u>Acanthosphaera</u>				X	X	X			X
<u>Actinastrum</u>			X	X	X			X	X
<u>Ankistrodesmus</u>	X	X	X	X	X	X		X	X
<u>Arthrodesmus</u>						X			
<u>Botryococcus</u>							X		
<u>Carteria</u>					X		X		
<u>Characium</u>	X								
<u>Chlamydomonas</u>	X	X	X	X	X	X		X	X
<u>Chlorella</u>	X	X	X	X	X	X	X	X	X
<u>Chodatella</u>	X			X	X	X	X	X	X
<u>Closteriopsis</u>		X		X		X			X
<u>Coelastrum</u>						X		X	X
<u>Cosmarium</u>								X	X
<u>Crucigenia</u>					X	X	X	X	X
<u>Dictyosphaerium</u>	X			X	X	X			
<u>Franceia</u>					X	X	X		
<u>Golenkinia</u>	X	X	X	X	X	X	X	X	X
<u>Gonium</u>	X			X		X		X	

Table B.14 (continued)

Table B.15

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1977

TRM 396.8

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>									
<u>Achnanthes</u>			X	X	X	X		X	X
<u>Asterionella</u>	X	X	X						
<u>Chaetoceros</u>	X	X		X		X		X	X
<u>Cocconeis</u>		X	X			X	X		
<u>Cyclotella</u>	X	X							
<u>Cymbella</u>		X	X		X	X	X		
<u>Diatoma</u>		X	X			X			
<u>Dinobryon</u>	X	X	X	X		X		X	X
<u>Fragilaria</u>	X	X							
<u>Gomphonema</u>	X	X	X	X		X			X
<u>Gyrosigma</u>		X							
<u>Melosira</u>	X	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X	X
<u>Nitzschia</u>	X	X				X			X
<u>Rhizosolenia</u>					X	X	X		
<u>Stephanodiscus</u>	X	X	X		X	X		X	X
<u>Surirella</u>	X	X							
<u>Synedra</u>	X	X	X	X	X	X	X	X	X
Total	12	16	11	7	7	13	6	7	9
<b>Chlorophyta</b>									
<u>Acanthosphaera</u>				X	X	X	X		
<u>Actinastrum</u>	X					X		X	
<u>Ankistrodesmus</u>	X		X	X	X	X		X	X
<u>Arthrodesmus</u>		X			X				
<u>Carteria</u>				X			X		
<u>Characium</u>	X								
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X	X
<u>Chlorella</u>	X	X		X	X	X	X	X	X
<u>Chodatella</u>	X	X	X	X	X	X	X	X	X
<u>Closteriopsis</u>		X	X	X					
<u>Coelastrum</u>							X		X
<u>Crucigenia</u>								X	
<u>Dictyosphaerium</u>	X			X	X	X		X	X
<u>Elakatothrix</u>						X			
<u>Franceia</u>				X		X		X	
<u>Golenkinia</u>	X	X	X	X	X	X		X	X

Table B.15 (continued)

Table B.16

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1977  
 TCM 0.2

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>									
<u>Achnanthes</u>		X	X	X	X	X	X	X	X
<u>Asterionella</u>	X	X	X	X					
<u>Chaetoceros</u>		X		X				X	
<u>Coccconeis</u>	X	X	X	X	X	X	X		X
<u>Cyclotella</u>	X					X			
<u>Cymbella</u>		X	X	X	X	X	X	X	X
<u>Diatoma</u>	X								
<u>Dinobryon</u>	X	X	X	X				X	X
<u>Fragilaria</u>	X	X							
<u>Gomphonema</u>	X	X	X	X		X		X	X
<u>Gyrosigma</u>	X						X		X
<u>Melosira</u>	X	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X	X
<u>Nitzschia</u>	X	X		X	X	X			X
<u>Rhizosolenia</u>				X	X	X			
<u>Rhoicosphenia</u>								X	
<u>Stephanodiscus</u>	X	X	X	X	X	X	X	X	X
<u>Surirella</u>	X					X			
<u>Synedra</u>	X	X	X	X	X	X	X	X	X
Total	19	13	10	13	9	12	9	10	11
<b>Chlorophyta</b>									
<u>Acanthosphaera</u>		X	X	X	X	X	X	X	X
<u>Actinastrum</u>			X	X	X	X	X	X	X
<u>Ankistrodesmus</u>	X	X	X	X	X	X	X	X	X
<u>Arthrodesmus</u>					X	X			
<u>Botryococcus</u>							X		
<u>Carteria</u>					X				
<u>Characium</u>		X							
<u>Chlamydomonas</u>	X	X	X	X		X	X	X	X
<u>Chlorella</u>	X	X	X	X	X	X	X	X	X
<u>Chodatella</u>	X	X	X	X	X	X	X	X	X
<u>Closteriopsis</u>		X	X	X		X	X	X	X
<u>Coelastrum</u>		X	X	X	X		X	X	X
<u>Cosmarium</u>				X	X	X	X	X	
<u>Crucigenia</u>	X	X	X	X	X		X	X	X
<u>Dactylococcus</u>		X				X			
<u>Dictyosphaerium</u>	X		X	X	X	X	X	X	X
<u>Elakatothrix</u>				X	X		X		
<u>Euastrum</u>								X	
<u>Franceia</u>					X		X		X
<u>Golenkinia</u>	X	X	X	X	X	X	X	X	X
<u>Gonium</u>	X						X		

Table B.16 (continued)

Table B.17

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1978  
 TRM 388.0

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>								
<u>Achnanthes</u>			X	X	X	X	X	X
<u>Asterionella</u>	X			X	X			
<u>Attheya</u>					X			
<u>Chaetoceros</u>	X	X						
<u>Cocconeis</u>		X	X	X	X			
<u>Cyclotella</u>					X			
<u>Cymbella</u>	X				X			
<u>Diatoma</u>	X	X		X			X	
<u>Dichotomococcus</u>			X	X	X	X	X	X
<u>Dinobryon</u>	X		X	X	X	X	X	X
<u>Fragilaria</u>					X	X		
<u>Gomphonema</u>				X	X			
<u>Melosira</u>	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X
<u>Nitzschia</u>		X		X	X	X		
<u>Rhizosolenia</u>				X	X	X	X	X
<u>Stephanodiscus</u>	X	X	X	X	X		X	X
<u>Surirella</u>			X					
<u>Synedra</u>	X	X	X	X	X	X	X	X
Total	9	8	9	12	14	7	10	5
<b>Chlorophyta</b>								
<u>Acanthosphaera</u>				X	X	X		
<u>Actinastrum</u>	X	X	X	X	X	X		X
<u>Ankistrodesmus</u>	X		X	X	X	X		
<u>Carteria</u>			X		X			
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X
<u>Chlorella</u>	X	X	X	X	X	X	X	X
<u>Chlorococcum</u>				X				
<u>Chlorogonium</u>					X			
<u>Chodatella</u>	X			X	X	X	X	X
<u>Closteriopsis</u>							X	
<u>Coelastrum</u>					X	X	X	
<u>Cosmarium</u>					X			
<u>Crucigenia</u>						X	X	X
<u>Dictyosphaerium</u>	X		X	X	X	X	X	X
<u>Elakatothrix</u>	X							
<u>Eudorina</u>				X	X	X		
<u>Franceia</u>				X	X	X		
<u>Gloeactinium</u>					X	X	X	X
<u>Golenkinia</u>	X		X	X	X	X	X	X
<u>Kirchneriella</u>	X	X	X	X		X	X	X
<u>Micractinium</u>	X	X	X	X	X	X	X	X
<u>Oocystis</u>	X		X	X		X		

Table B.17 (continued)

Table B.18

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1978  
 TRM 391.2

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>								
<u>Achnanthes</u>	X		X	X	X	X	X	X
<u>Asterionella</u>	X		X		X			
<u>Attheya</u>						X		
<u>Chaetoceros</u>	X	X	X					
<u>Cocconeis</u>	X			X	X			X
<u>Cymbella</u>	X	X		X	X			X
<u>Diatoma</u>			X					
<u>Dinobryon</u>	X		X	X	X			
<u>Fragilaria</u>				X		X		
<u>Gomphonema</u>				X				
<u>Gyrosigma</u>	X				X			
<u>Melosira</u>	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X
<u>Nitzschia</u>	X	X						X
<u>Rhizosolenia</u>				X	X	X		
<u>Stauroneis</u>		X						
<u>Stephanodiscus</u>	X	X	X	X	X	X	X	X
<u>Surirella</u>		X						
<u>Synedra</u>	X	X	X	X	X	X	X	X
<b>Total</b>	12	10	9	10	12	6	7	5
<b>Chlorophyta</b>								
<u>Acanthosphaera</u>					X		X	
<u>Actinastrum</u>	X		X	X	X	X	X	X
<u>Ankistrodesmus</u>	X	X	X	X	X	X		
<u>Arthrodesmus</u>					X			
<u>Carteria</u>				X		X		
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X
<u>Chlorella</u>	X	X	X	X	X	X		
<u>Chlorogonium</u>			X					
<u>Chodatella</u>	X	X	X	X	X	X	X	X
<u>Closteridium</u>			X					
<u>Coelastrum</u>			X	X			X	
<u>Crucigenia</u>					X	X	X	X
<u>Dictyosphaerium</u>	X		X	X	X	X		X
<u>Elakatothrix</u>	X		X				X	
<u>Eudorina</u>						X	X	
<u>Euastrum</u>							X	
<u>Franceia</u>				X	X		X	X
<u>Gloeoactinium</u>							X	
<u>Golenkinia</u>	X	X	X	X	X	X	X	X
<u>Gonium</u>					X			

Table B.18 (continued)

Table B.19

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1978  
 TRM 396.8

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>								
<u>Achnanthes</u>		X	X	X	X	X	X	
<u>Asterionella</u>	X							
<u>Attheya</u>				X				
<u>Chaetoceros</u>	X	X	X					
<u>Coccconeis</u>	X		X				X	X
<u>Cymbella</u>	X	X		X	X			
<u>Dichotomococcus</u>					X			
<u>Dinobryon</u>	X		X	X	X		X	X
<u>Gomphonema</u>					X			
<u>Gyrosigma</u>					X			
<u>Melosira</u>	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X		X	X	X		
<u>Nitzschia</u>	X	X	X	X				
<u>Pleurosigma</u>	X							
<u>Rhizosolenia</u>					X			
<u>Stephanodiscus</u>	X	X	X	X	X	X	X	
<u>Surirella</u>	X	X	X					
<u>Synedra</u>	X	X	X	X	X	X	X	
<u>Synura</u>					X			
Total	12	9	9	12	9	5	6	5
<b>Chlorophyta</b>								
<u>Acanthosphaera</u>				X		X		
<u>Actinastrum</u>	X		X	X	X		X	X
<u>Ankistrodesmus</u>		X	X	X	X		X	
<u>Arthrodesmus</u>				X				
<u>Carteria</u>			X			X		
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X
<u>Chlorella</u>	X	X	X	X	X	X		
<u>Chlorococcum</u>							X	
<u>Chodatella</u>		X	X	X	X	X	X	X
<u>Closteriopsis</u>						X	X	X
<u>Coelastrum</u>	X		X	X				
<u>Crucigenia</u>	X		X	X			X	
<u>Dictyosphaerium</u>	X		X	X	X	X		X
<u>Elakatothrix</u>	X				X			
<u>Euastrum</u>						X		
<u>Eudorina</u>						X		
<u>Franceia</u>				X			X	
<u>Gloeactinium</u>					X	X	X	
<u>Golenkinia</u>	X	X	X	X		X	X	X

Table B.19 (continued)

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chlorophyta (continued)</b>								
<u>Kirchneriella</u>	X	X	X	X	X	X		X
<u>Micractinium</u>	X		X	X			X	
<u>Mougeotia</u>					X			
<u>Oocystis</u>				X			X	
<u>Pandorina</u>					X	X	X	X
<u>Pediastrum</u>				X			X	
<u>Polyedriopsis</u>				X				
<u>Protococcus</u>					X	X	X	
<u>Pteromonas</u>			X		X	X		X
<u>Quadrigula</u>					X			
<u>Scenedesmus</u>	X	X	X	X	X	X	X	X
<u>Schroederia</u>	X	X		X	X	X	X	
<u>Staurastrum</u>						X		
<u>Tetraedron</u>			X		X			X
<u>Tetrastrum</u>			X					
<u>Treubaria</u>	X			X	X	X		
<u>Trochiscia</u>			X		X			X
<b>Total</b>	13	8	18	22	22	17	12	8
<b>Cyanophyta</b>								
<u>Anaebena</u>					X		X	
<u>Anacystis</u>				X	X	X	X	X
<u>Aphanizomenon</u>					X			X
<u>Aphanocapsa</u>					X			
<u>Aphanothece</u>					X			
<u>Chroococcus</u>							X	
<u>Dactylococcopsis</u>	X	X	X	X	X	X	X	X
<u>Eucapsis</u>					X			
<u>Gloeothece</u>					X			
<u>Gomphosphaeria</u>					X			
<u>Lyngbya</u>					X		X	
<u>Merismopedia</u>		X	X	X	X	X	X	X
<u>Oscillatoria</u>	X	X	X	X	X	X	X	
<b>Total</b>	2	3	4	4	12	4	7	2
<b>Euglenophyta</b>								
<u>Euglena</u>	X	X	X	X	X	X	X	
<u>Trachelomonas</u>	X	X		X	X	X	X	X
<b>Total</b>	2	2	1	2	2	2	2	

Table B.19 (continued)

Table B.20

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1978  
TCM 0.2

Table B.20 (continued)

Table B.20 (continued)

Table B.21

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1978  
 TRM 386.4

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>								
<u>Achnanthes</u>	X	X	X	X	X	X	X	X
<u>Asterionella</u>	X		X					
<u>Chaetoceros</u>	X	X	X	X	X			
<u>Coccconeis</u>	X		X	X	X		X	X
<u>Cyclotella</u>	X		X		X			
<u>Cymbella</u>	X	X	X	X	X	X	X	X
<u>Diatoma</u>				X				
<u>Dichotomococcus</u>					X			X
<u>Dinobryon</u>	X	X	X	X	X			X
<u>Fragilaria</u>	X							
<u>Gomphonema</u>			X		X			
<u>Gyrosigma</u>	X	X						
<u>Melosira</u>	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X
<u>Nitzschia</u>	X		X		X	X	X	X
<u>Pleurosigma</u>	X							
<u>Rhizosolenia</u>				X	X			
<u>Stephanodiscus</u>	X	X		X	X	X	X	X
<u>Surirella</u>	X	X	X					
<u>Synedra</u>	X	X	X	X	X	X	X	X
Total	16	10	13	11	14	7	10	8
<b>Chlorophyta</b>								
<u>Acanthosphaera</u>		X		X	X	X	X	X
<u>Actinastrum</u>	X	X	X	X	X	X	X	X
<u>Ankistrodesmus</u>	X	X	X	X	X	X	X	X
<u>Arthrodesmus</u>				X				
<u>Botryococcus</u>						X		
<u>Carteria</u>		X	X					
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X
<u>Chlorella</u>	X	X	X	X	X	X	X	X
<u>Chlorococcum</u>			X	X				
<u>Chlorogonium</u>			X	X				
<u>Chodatella</u>	X	X	X	X	X	X	X	X
<u>Closteriopsis</u>				X				
<u>Coelastrum</u>					X	X	X	X
<u>Cosmarium</u>					X	X	X	X
<u>Crucigenia</u>			X	X	X	X	X	X
<u>Dictyosphaerium</u>	X	X	X	X	X	X		X
<u>Dimorphococcus</u>						X		
<u>Elakatothrix</u>		X	X			X		
<u>Eudorina</u>						X		

Table B.21 (continued)

Table B.21 (continued)

Table B.22

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1978  
 TRM 388.4

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>								
<u>Achnanthes</u>		X	X	X	X		X	X
<u>Asterionella</u>	X	X				X		
<u>Attheya</u>					X			
<u>Chaetoceros</u>	X	X	X					
<u>Coccconeis</u>	X	X	X	X	X	X	X	X
<u>Cyclotella</u>			X		X			
<u>Cymbella</u>	X	X	X	X	X	X	X	
<u>Diatoma</u>			X					X
<u>Dichotomococcus</u>					X		X	
<u>Dinobryon</u>	X	X	X	X	X	X	X	
<u>Gomphonema</u>			X		X		X	
<u>Gyrosigma</u>					X			
<u>Melosira</u>	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X
<u>Nitzschia</u>	X	X	X	X	X	X	X	
<u>Rhizosolenia</u>					X		X	
<u>Stephanodiscus</u>	X	X	X	X	X	X	X	X
<u>Surirella</u>		X	X	X				
<u>Synedra</u>	X	X	X	X	X	X	X	X
Total	10	13	13	10	15	9	11	6
<b>Chlorophyta</b>								
<u>Acanthosphaera</u>				X	X	X	X	
<u>Actinastrum</u>	X	X	X	X	X	X	X	X
<u>Ankistrodesmus</u>	X	X	X	X	X	X	X	
<u>Arthrodesmus</u>		X		X				X
<u>Botryococcus</u>					X			X
<u>Carteria</u>				X				
<u>Chlamydomonas</u>	X	X	X	X	X	X	X	X
<u>Chlorella</u>	X	X	X	X	X	X	X	X
<u>Chlorococcum</u>					X		X	
<u>Chodatella</u>	X	X	X	X	X	X	X	X
<u>Closteridium</u>				X				X
<u>Closteriopsis</u>					X			X
<u>Coelastrum</u>		X		X	X	X	X	X
<u>Cosmarium</u>					X			X
<u>Crucigenia</u>				X	X	X	X	X
<u>Cryptomonas</u>					X			
<u>Dictyosphaerium</u>	X	X	X	X	X	X		
<u>Dimorphococcus</u>						X	X	X
<u>Echinosphaerella</u>					X			X
<u>Elakatothrix</u>				X	X			X
<u>Eudorina</u>				X				

Table B.22 (continued)

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chlorophyta (continued)</b>								
<u>Franceia</u>			X	X	X	X	X	
<u>Gloeoactinium</u>					X	X	X	
<u>Golenkinia</u>	X	X	X	X	X	X	X	X
<u>Gonium</u>			X	X				
<u>Kirchneriella</u>	X	X	X	X	X	X	X	X
<u>Micractinium</u>	X	X		X	X	X	X	X
<u>Mougeotia</u>					X			
<u>Oocystis</u>			X		X	X	X	X
<u>Pandorina</u>					X	X	X	X
<u>Pediastrum</u>			X		X	X		X
<u>Platydorina</u>					X			
<u>Polyedriopsis</u>					X		X	
<u>Protococcus</u>					X	X		
<u>Pteromonas</u>		X	X	X	X	X	X	
<u>Quadrigula</u>					X	X	X	
<u>Scenedesmus</u>	X	X	X	X	X	X	X	X
<u>Schroederia</u>	X	X		X	X	X	X	X
<u>Staurastrum</u>						X	X	
<u>Tetraedron</u>			X		X	X	X	
<u>Tetrastrum</u>		X		X	X	X	X	
<u>Treubaria</u>		X		X	X	X	X	
<u>Trochiscia</u>			X		X		X	
Total	11	18	17	28	31	29	31	10
<b>Cyanophyta</b>								
<u>Anaebena</u>					X	X	X	
<u>Anacystis</u>			X	X	X	X	X	
<u>Aphanocapsa</u>					X			
<u>Aphanothece</u>					X			
<u>Chroococcus</u>					X		X	
<u>Dactylococcopsis</u>	X	X	X	X	X	X	X	X
<u>Eucapsis</u>					X		X	
<u>Lyngbya</u>					X		X	
<u>Merismopedia</u>					X	X	X	
<u>Oscillatoria</u>		X	X	X	X		X	
Total	1	2	3	4	10	4	8	1
<b>Euglenophyta</b>								
<u>Euglena</u>	X	X		X	X	X	X	X
<u>Trachelomonas</u>	X	X		X	X	X	X	X
Total	2	2		2	2	2	2	1

Table B.22 (continued)

Table B.23

TEMPORAL AND SPATIAL DISTRIBUTION OF PHYTOPLANKTON GENERA  
BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1978  
TRM 391.1 - (OVERBANK)

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chrysophyta</b>								
<u>Achnanthes</u>	X	X	X	X	X		X	X
<u>Asterionella</u>	X	X						
<u>Attheya</u>	X		X		X			
<u>Chaetoceros</u>	X	X	X		X			
<u>Coccconeis</u>	X	X	X				X	X
<u>Cyclotella</u>	X		X		X			
<u>Cymbella</u>	X	X	X	X	X	X	X	
<u>Diatoma</u>	X				X			
<u>Dichotomococcus</u>								X
<u>Dinobryon</u>		X	X		X	X	X	X
<u>Fragilaria</u>	X			X				X
<u>Gomphonema</u>			X					
<u>Gyrosigma</u>	X	X	X		X	X	X	
<u>Mallomonas</u>			X					
<u>Melosira</u>	X	X	X	X	X	X	X	X
<u>Navicula</u>	X	X	X	X	X	X	X	X
<u>Nitzschia</u>	X	X	X		X			X
<u>Pleurosigma</u>	X	X						
<u>Rhizosolenia</u>				X	X			
<u>Stauroneis</u>								X
<u>Stephanodiscus</u>	X	X		X	X	X	X	X
<u>Surirella</u>	X	X	X	X	X	X	X	X
<u>Synedra</u>	X	X	X	X	X	X	X	X
<b>Total</b>	17	14	15	7	16	8	13	7
<b>Chlorophyta</b>								
<u>Acanthosphaera</u>				X	X	X	X	X
<u>Actinastrum</u>	X	X	X	X	X	X	X	X
<u>Ankistrodesmus</u>	X	X	X	X	X	X	X	X
<u>Arthrodesmus</u>		X		X		X		X
<u>Botryococcus</u>						X	X	X
<u>Carteria</u>			X					
<u>Chlamydomonas</u>	X	X	X		X	X	X	X
<u>Chlorella</u>	X	X	X	X	X	X	X	X
<u>Chlorococcum</u>								X
<u>Chlorogonium</u>								X
<u>Chodatella</u>	X	X	X	X	X	X	X	X
<u>Closteridium</u>								X
<u>Closteriopsis</u>				X				X

Table B.23 (continued)

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Chlorophyta (continued)</b>								
<u>Coelastrum</u>		X			X	X		
<u>Cosmarium</u>				X	X	X	X	X
<u>Crucigenia</u>				X	X	X	X	X
<u>Dictyosphaerium</u>	X	X	X	X	X	X	X	X
<u>Dimorphococcus</u>							X	X
<u>Elakatothrix</u>		X			X	X	X	
<u>Euastrum</u>				X	X	X		X
<u>Eudorina</u>					X	X	X	
<u>Franceia</u>				X	X	X		
<u>Glöeoactinium</u>	X			X	X	X	X	
<u>Golenkinia</u>	X	X	X	X	X	X	X	X
<u>Gonium</u>	X				X			
<u>Kirchneriella</u>	X	X	X	X	X	X	X	X
<u>Micractinium</u>	X	X	X	X	X	X	X	X
<u>Mougeotia</u>							X	
<u>Oocystis</u>	X	X	X	X	X	X	X	X
<u>Pandorina</u>			X		X	X	X	
<u>Pediastrum</u>	X	X		X	X	X	X	
<u>Platydorina</u>					X	X	X	
<u>Polyedriopsis</u>				X			X	
<u>Protococcus</u>					X	X	X	X
<u>Pteromonas</u>		X	X		X	X	X	
<u>Quadrigula</u>		X			X	X		X
<u>Scenedesmus</u>	X	X	X	X	X	X	X	X
<u>Schroederia</u>	X	X		X	X	X	X	X
<u>Staurastrum</u>					X	X	X	X
<u>Tetraedron</u>			X		X	X	X	X
<u>Tetrastrum</u>					X	X	X	
<u>Treubaria</u>		X		X	X	X	X	X
<u>Trochiscia</u>			X		X	X	X	X
<b>Total</b>	<b>15</b>	<b>19</b>	<b>17</b>	<b>22</b>	<b>33</b>	<b>33</b>	<b>36</b>	<b>19</b>
<b>Cyanophyta</b>								
<u>Anaebena</u>					X	X	X	
<u>Anacystis</u>				X	X	X	X	X
<u>Anphanizomenon</u>						X	X	
<u>Aphanocapsa</u>			X		X	X		X
<u>Aphanothece</u>						X		
<u>Chroococcus</u>					X	X	X	
<u>Coelosphaerium</u>							X	
<u>Cylindrospermum</u>			X			X		
<u>Dactylococcopsis</u>			X	X	X	X	X	X

Table B.23 (continued)

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Cyanophyta (continued)								
<u>Eucapsis</u>					X	X		
<u>Gloeothecae</u>			X					
<u>Gomphosphaeria</u>							X	
<u>Lyngbya</u>					X		X	
<u>Merismopedia</u>		X	X	X	X	X	X	
<u>Oscillatoria</u>	X	X	X	X	X	X	X	X
Total	2	2	7	4	9	10	11	3
Euglenophyta								
<u>Euglena</u>	X	X	X	X	X	X	X	X
<u>Trachelomonas</u>	X	X	X	X	X	X	X	X
Total	2	2	2	2	2	2	2	2
Pyrrophyta								
<u>Glenodinium</u>					X		X	
<u>Gymnodinium</u>					X			
Total					2		1	
Total Number of Taxa	36	37	41	35	62	53	63	31

**APPENDIX C**

**PHYTOPLANKTON ENUMERATION**

## APPENDIX C

Table C.1

TOTAL PHYTOPLANKTON ENUMERATION - GUNTERSVILLE RESERVOIR  
IN VICINITY OF BELLEFONTE NUCLEAR PLANT  
FEBRUARY-OCTOBER 1974-1978

Month	Station	Phytoplankton/liter x 10 <sup>3</sup>				
		1974	1975	1976	1977	1978
February	TRM 388.0	159.9	268.7	5,141.6	5,549.5	a
	TRM 391.2	126.5	219.0	4,621.9	6,247.6	a
	TRM 396.8	170.1	267.1	4,522.3	5,540.0	a
	TCM 0.2	1,564.6	512.8	5,356.1	3,420.2	a
March	TRM 388.0	192.7	174.6	2,326.2	1,592.9	937.4
	TRM 391.2	226.0	178.3	1,960.9	1,751.4	1,301.3
	TRM 396.8	244.9	172.2	1,907.6	2,323.8	1,561.8
	TCM 0.2	2,190.8	456.9	1,250.7	1,811.4	1,120.8
April	TRM 388.0	441.7	436.5	2,436.1	122.7	105.3
	TRM 391.2	328.3	381.7	3,632.5	96.9	364.7
	TRM 396.8	377.6	383.3	2,446.0	130.4	296.9
	TCM 0.2	3,566.4	2,339.5	2,287.1	4,470.0	1,685.9
May	TRM 388.0	240.0	1,212.9	683.1	1,284.5	523.5
	TRM 391.2	336.5	1,214.4	817.3	950.9	535.8
	TRM 396.8	454.8	1,068.3	967.2	903.7	344.9
	TCM 0.2	1,790.6	15,481.8	1,238.1	28,717.9	8,050.3
June	TRM 388.0	737.5	519.0	620.4	1,867.4	4,009.6
	TRM 391.2	802.4	779.1	411.7	627.4	3,445.6
	TRM 396.8	558.4	986.0	280.2	251.0	1,377.6
	TCM 0.2	7,693.2	5,290.0	465.9	20,648.1	7,053.3
July	TRM 388.0	368.9	605.6	1,031.1	1,849.2	2,805.8
	TRM 391.2	350.9	408.4	559.6	8,423.9	1,640.7
	TRM 396.8	313.1	249.8	953.5	4,303.4	3,568.7
	TCM 0.2	3,769.1	4,459.1	4,121.2	4,597.7	9,390.9
August	TRM 388.0	396.1	537.9	1,328.9	232.6	1,004.6
	TRM 391.2	364.4	1,692.2	1,097.3	175.0	14,367.3
	TRM 396.8	246.9	1,181.8	1,071.6	60.7	951.6
	TCM 0.2	2,330.5	2,309.7	1,227.3	522.5	40,546.3
September	TRM 388.0	116.7	148.3	157.0	995.6	668.9
	TRM 391.2	90.0	55.8	192.3	650.6	348.6
	TRM 396.8	58.3	51.8	93.3	667.4	420.1
	TCM 0.2	135.6	91.2	1,444.6	373.8	1,383.8
October	TRM 388.0	105.2	147.2	172.2	717.5	319.9
	TRM 391.2	99.5	124.6	114.6	357.0	371.5
	TRM 396.8	83.4	145.2	86.8	421.0	253.2
	TCM 0.2	131.4	2,517.0	120.0	2,151.0	227.0

a. Samples not collected.

Table C.2

PHYTOPLANKTON ENUMÉRATION, GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
FEBRUARY-OCTOBER 1974

Year	Month	Division	Phytoplankton/liter x 10 <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1974	February	Chrysophyta	104.0	79.7	122.0	695.2
		Chlorophyta	48.9	22.6	25.9	389.5
		Cyanophyta	4.9	20.5	19.3	420.7
		Euglenophyta	2.1	3.7	2.9	59.2
		Pyrrhophyta	-	-	-	-
	March	Chrysophyta	110.5	143.8	152.4	1053.5
		Chlorophyta	45.6	46.0	52.2	680.4
		Cyanophyta	33.7	32.5	36.6	350.1
		Euglenophyta	2.9	3.7	3.7	106.8
		Pyrrhophyta	-	-	-	-
	April	Chrysophyta	339.8	241.2	303.6	2323.9
		Chlorophyta	81.8	65.7	52.6	796.3
		Cyanophyta	15.2	19.3	14.0	370.6
		Euglenophyta	4.9	2.1	7.0	75.6
		Pyrrhophyta	-	-	0.4	-
	May	Chrysophyta	116.7	191.9	301.6	793.0
		Chlorophyta	83.4	94.9	114.2	604.8
		Cyanophyta	39.1	48.5	37.4	373.9
		Euglenophyta	0.8	1.2	1.6	18.9
		Pyrrhophyta	-	-	-	-
	June	Chrysophyta	477.0	472.5	350.9	1629.5
		Chlorophyta	222.3	288.4	176.7	4643.7
		Cyanophyta	34.5	33.7	18.1	1182.5
		Euglenophyta	3.7	7.8	12.7	236.7
		Pyrrhophyta	-	-	-	0.8
	July	Chrysophyta	189.4	170.9	170.1	1102.2
		Chlorophyta	111.3	134.8	104.0	1576.7
		Cyanophyta	49.7	37.4	27.9	1041.7
		Euglenophyta	18.5	7.8	11.1	48.5
		Pyrrhophyta	-	-	-	-

Table C.2 (continued)

Year	Month	Division	Phytoplankton/liter $\times 10^3$			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1974	August	Chrysophyta	160.7	140.9	117.1	985.3
		Chlorophyta	174.2	147.1	99.8	558.8
		Cyanophyta	41.9	54.2	21.0	720.7
		Euglenophyta	19.3	22.2	9.0	64.9
		Pyrrhophyta	-	-	-	0.8
	September	Chrysophyta	40.7	37.4	21.8	58.3
		Chlorophyta	47.7	32.5	26.3	44.4
		Cyanophyta	26.7	16.4	9.0	25.5
		Euglenophyta	1.6	3.7	1.2	7.4
		Pyrrhophyta	-	-	-	-
	October	Chrysophyta	39.0	57.5	42.7	64.9
		Chlorophyta	37.8	32.5	36.2	43.6
		Cyanophyta	25.9	6.2	2.9	19.7
		Euglenophyta	2.5	3.3	1.6	3.2
		Pyrrhophyta	-	-	-	-

Table C.3

PHYTOPLANKTON ENUMERATION, GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
FEBRUARY-OCTOBER 1975

Year	Month	Division	Phytoplankton/liter x 10 <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1975	February	Chrysophyta	173.8	158.6	210.4	115.9
		Chlorophyta	59.6	40.3	30.4	208.7
		Cyanophyta	27.1	16.0	20.1	180.8
		Euglenophyta	8.2	4.1	5.8	7.4
		Pyrrhophyta	-	-	0.4	-
	March	Chrysophyta	119.6	126.1	120.0	91.2
		Chlorophyta	34.1	29.6	28.4	263.0
		Cyanophyta	16.0	16.0	20.5	92.0
		Euglenophyta	4.9	6.6	2.9	10.7
		Pyrrhophyta	-	-	0.4	-
	April	Chrysophyta	317.2	273.2	269.1	687.8
		Chlorophyta	71.1	62.9	50.9	784.8
		Cyanophyta	31.2	40.3	51.8	834.9
		Euglenophyta	9.0	5.3	10.7	32.0
		Pyrrhophyta	8.0	-	0.8	-
	May	Chrysophyta	460.2	447.9	417.9	2399.5
		Chlorophyta	396.5	453.6	396.5	6558.4
		Cyanophyta	343.5	246.9	233.4	6185.3
		Euglenophyta	12.3	64.9	20.5	334.5
		Pyrrhophyta	0.4	1.6	-	4.1
	June	Chrysophyta	84.5	110.6	129.7	383.9
		Chlorophyta	107.1	222.3	227.8	953.2
		Cyanophyta	321.2	439.2	621.1	3920.2
		Euglenophyta	6.2	6.6	7.4	32.7
		Pyrrhophyta	-	0.4	-	-
	July	Chrysophyta	112.6	108.1	71.1	1217.0
		Chlorophyta	214.1	159.8	114.6	1191.0
		Cyanophyta	276.9	140.1	64.1	2023.1
		Euglenophyta	1.6	0.4	-	25.5
		Pyrrhophyta	0.4	-	-	2.5

Table C.3 (Continued)

Year	Month	Division	Phytoplankton/liter x 10 <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1975	August	Chrysophyta	61.5	100.1	82.5	163.5
		Chlorophyta	91.9	287.0	141.0	337.2
		Cyanophyta	377.7	1295.8	950.9	1794.2
		Euglenophyta	6.4	9.3	7.0	14.8
		Pyrrhophyta	0.4	-	0.4	-
	September	Chrysophyta	30.8	15.6	24.7	32.0
		Chlorophyta	55.1	31.2	21.4	55.9
		Cyanophyta	62.0	8.2	4.1	3.3
		Euglenophyta	0.4	0.8	1.6	-
		Pyrrhophyta	-	-	-	-
	October	Chrysophyta	22.6	19.9	20.2	409.6
		Chlorophyta	27.6	33.1	40.9	724.3
		Cyanophyta	93.5	69.7	82.5	1342.6
		Euglenophyta	3.5	1.9	1.6	38.9
		Pyrrhophyta	-	-	-	1.6

Table C.4

PHYTOPLANKTON ENUMERATION, GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
FEBRUARY-OCTOBER 1976

Year	Month	Division	Phytoplankton/liter x 10 <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1976	February	Chrysophyta	4055.7	3807.3	3704.9	2974.0
		Chlorophyta	320.8	352.8	317.0	208.7
		Cyanophyta	741.8	442.7	485.2	2161.0
		Euglenophyta	21.0	18.7	14.4	10.1
		Pyrrhophyta	2.3	0.4	0.8	2.3
	March	Chrysophyta	1740.5	1642.8	1485.1	426.0
		Chlorophyta	87.6	105.1	97.0	426.8
		Cyanophyta	466.9	188.5	293.6	383.1
		Euglenophyta	8.2	7.8	7.8	7.0
		Pyrrhophyta	23.0	16.7	24.1	7.8
	April	Chrysophyta	3198.3	3411.3	2250.6	2122.1
		Chlorophyta	146.3	121.5	72.4	105.1
		Cyanophyta	77.9	93.5	117.6	53.7
		Euglenophyta	5.8	3.1	1.9	2.3
		Pyrrhophyta	7.8	3.1	3.5	3.9
	May	Chrysophyta	509.7	551.7	779.5	457.1
		Chlorophyta	110.6	152.2	121.1	398.7
		Cyanophyta	54.5	111.8	64.6	373.0
		Euglenophyta	8.2	1.6	1.6	9.3
		Pyrrhophyta	0.4	0.0	0.4	0.0
	June	Chrysophyta	99.8	64.5	53.0	112.6
		Chlorophyta	245.3	226.4	71.9	167.6
		Cyanophyta	272.0	119.2	154.5	181.6
		Euglenophyta	3.3	1.2	0.4	3.3
		Pyrrhophyta	0.0	0.4	0.4	0.8
	July	Chrysophyta	129.7	97.7	71.6	389.4
		Chlorophyta	301.0	205.2	192.0	1267.8
		Cyanophyta	593.0	254.7	687.2	2305.9
		Euglenophyta	6.2	1.2	2.3	155.0
		Pyrrhophyta	1.2	0.8	0.4	3.1

Table C.4 (continued)

Year	Month	Division	Phytoplankton/liter $\times 10^3$			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1976	August	Chrysophyta	112.5	110.2	125.4	162.0
		Chlorophyta	127.7	98.9	75.9	225.8
		Cyanophyta	1087.5	888.2	869.5	829.4
		Euglenophyta	0.0	0.0	0.4	2.3
		Pyrrhophyta	1.2	0.0	0.4	7.8
	September	Chrysophyta	62.5	50.1	52.6	322.1
		Chlorophyta	32.5	66.2	25.5	363.2
		Cyanophyta	58.3	75.2	14.4	701.0
		Euglenophyta	1.6	0.4	0.4	57.5
		Pyrrhophyta	2.1	0.4	0.4	0.8
	October	Chrysophyta	57.1	50.1	45.6	60.8
		Chlorophyta	32.5	15.2	13.6	9.9
		Cyanophyta	81.8	46.8	26.8	44.4
		Euglenophyta	0.8	2.5	0.8	4.9
		Pyrrhophyta	0.0	0.0	0.0	0.0

Table C.5

PHYTOPLANKTON ENUMERATION, GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
FEBRUARY-OCTOBER 1977

Year	Month	Division	Phytoplankton/liter x 10 <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1977	February	Chrysophyta	4,738.3	5,608.6	4,607.7	2,471.7
		Chlorophyta	310.8	318.4	466.3	377.8
		Cyanophyta	433.8	246.5	424.7	550.1
		Euglenophyta	63.1	77.0	41.3	20.6
		Pyrrhophyta	3.6	5.2	-	-
	March	Chrysophyta	1,542.3	1,712.1	2,278.2	1,305.2
		Chlorophyta	19.1	27.3	13.3	226.6
		Cyanophyta	30.4	11.3	29.6	264.0
		Euglenophyta	-	0.4	1.2	15.6
		Pyrrhophyta	1.7	0.4	1.6	-
	April	Chrysophyta	80.2	60.0	72.0	595.0
		Chlorophyta	23.4	26.1	36.2	1,875.2
		Cyanophyta	17.5	10.1	21.0	1,877.6
		Euglenophyta	0.4	0.4	1.2	121.5
		Pyrrhophyta	1.2	0.4	-	0.8
	May	Chrysophyta	1,017.0	646.4	772.9	586.4
		Chlorophyta	141.0	168.2	99.2	1,744.4
		Cyanophyta	120.0	130.1	30.0	10,707.8
		Euglenophyta	5.8	5.5	1.9	15,659.9
		Pyrrhophyta	0.4	0.8	-	19.5
	June	Chrysophyta	104.0	107.6	71.1	1,143.9
		Chlorophyta	423.2	183.3	117.9	2,575.4
		Cyanophyta	1,333.7	335.7	600.0	16,771.9
		Euglenophyta	6.6	0.8	2.1	143.8
		Pyrrhophyta	-	-	-	13.1
	July	Chrysophyta	154.9	253.1	206.2	325.9
		Chlorophyta	568.6	736.0	420.6	481.2
		Cyanophyta	1,095.9	7,403.3	3,646.7	3,759.0
		Euglenophyta	28.7	28.7	27.9	28.3
		Pyrrhophyta	1.2	2.8	2.0	2.4

Table C.5 (continued)

Year	Month	Division	Phytoplankton/liter $\times 10^3$			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1977	August	Chrysophyta	64.7	56.4	26.6	899.3
		Chlorophyta	48.4	19.4	9.1	1,841.5
		Cyanophyta	119.5	98.8	25.0	2,394.7
		Euglenophyta	-	0.4	-	86.6
		Pyrrhophyta	-	-	-	2.4
	September	Chrysophyta	43.2	48.3	42.4	87.2
		Chlorophyta	135.5	134.3	156.5	377.7
		Cyanophyta	816.1	466.1	465.3	2,108.9
		Euglenophyta	0.4	1.2	2.3	3.1
		Pyrrhophyta	0.4	0.8	0.8	-
	October	Chrysophyta	107.6	161.5	148.4	250.8
		Chlorophyta	396.9	40.9	329.4	279.4
		Cyanophyta	1038.6	154.3	239.3	1,605.0
		Euglenophyta	0.4	0.8	0.4	15.1
		Pyrrhophyta	-	0.4	-	0.8

Table C.6

PHYTOPLANKTON ENUMERATION, GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
MARCH-OCTOBER 1978

Year	Month	Division	Phytoplankton/liter x 10 <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1978	March	Chrysophyta	720.7	933.8	1110.5	814.4
		Chlorophyta	166.3	291.7	404.8	229.4
		Cyanophyta	38.5	58.3	40.9	60.3
		Euglenophyta	11.5	17.5	5.6	16.7
		Pyrrhophyta	0.4	-	-	-
	April	Chrysophyta	77.1	288.5	229.0	1053.3
		Chlorophyta	15.4	54.0	49.6	565.9
		Cyanophyta	8.7	14.3	14.3	48.4
		Euglenophyta	3.2	7.1	3.2	18.3
		Pyrrhophyta	0.9	0.8	0.8	-
	May	Chrysophyta	217.9	217.9	129.8	1235.9
		Chlorophyta	113.1	124.6	85.3	1588.3
		Cyanophyta	191.3	189.7	126.6	5193.5
		Euglenophyta	1.2	2.8	2.8	26.2
		Pyrrhophyta	-	0.8	0.4	6.4
	June	Chrysophyta	2172.1	2103.4	644.9	1258.1
		Chlorophyta	797.3	1308.1	327.4	2428.9
		Cyanophyta	1005.7	3109.1	388.5	3265.5
		Euglenophyta	34.1	32.1	17.1	100.8
		Pyrrhophyta	0.4	2.0	-	-
	July	Chrysophyta	1966.7	189.2	351.6	313.0
		Chlorophyta	257.4	317.7	712.6	577.8
		Cyanophyta	578.2	1129.2	2485.4	8494.6
		Euglenophyta	2.3	2.3	14.0	3.9
		Pyrrhophyta	1.2	2.3	5.1	1.6

Table C.6 (continued)

Year	Month	Division	Phytoplankton/liter x 10 <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1978	August	Chrysophyta	131.8	1,163.6	121.0	1,616.0
		Chlorophyta	195.7	1,834.0	264.7	7,661.3
		Cyanophyta	671.1	11,316.9	556.8	28,821.9
		Euglenophyta	6.0	52.8	9.1	2,357.4
		Pyrrhophyta	-	-	-	89.7
	September	Chrysophyta	79.4	80.2	56.8	93.4
		Chlorophyta	75.1	89.6	91.9	191.6
		Cyanophyta	514.4	177.6	270.2	1,098.8
		Euglenophyta	-	1.2	1.2	-
		Pyrrhophyta	-	-	-	-
	October	Chrysophyta	193.7	162.7	121.4	128.6
		Chlorophyta	107.2	113.9	92.5	73.0
		Cyanophyta	10.7	94.5	39.3	25.4
		Euglenophyta	8.3	0.4	-	-
		Pyrrhophyta	-	-	-	-

Table C.7

PHYTOPLANKTON ENUMERATION, GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
MARCH-OCTOBER 1978 (OVERBANKS)

Year	Month	Division	Phytoplankton/liter x 10 <sup>3</sup>		
			TRM 386.4	TRM 388.4	TRM 391.1
1978	March	Chrysophyta	931.1	843.0	3120.2
		Chlorophyta	209.6	139.7	300.0
		Cyanophyta	10.3	9.5	73.8
		Euglenophyta	16.7	12.7	32.5
		Pyrrhophyta	-	-	-
	April	Chrysophyta	2915.4	4117.2	2967.8
		Chlorophyta	1648.6	2066.9	3149.6
		Cyanophyta	350.0	218.3	34.9
		Euglenophyta	23.8	142.9	171.5
		Pyrrhophyta	2.4	1.6	-
	May	Chrysophyta	1759.0	662.0	1120.0
		Chlorophyta	1020.8	176.2	323.1
		Cyanophyta	449.3	28.6	96.0
		Euglenophyta	36.5	0.8	13.5
		Pyrrhophyta	6.4	-	-
	June	Chrysophyta	2845.6	3379.8	1043.8
		Chlorophyta	1714.5	1691.5	2573.3
		Cyanophyta	6215.9	1898.7	4685.5
		Euglenophyta	42.1	83.3	246.1
		Pyrrhophyta	-	-	-
	July	Chrysophyta	1207.8	1176.7	1605.8
		Chlorophyta	1555.9	1122.2	2071.5
		Cyanophyta	8672.2	4840.7	9714.9
		Euglenophyta	13.2	29.6	99.7
		Pyrrhophyta	14.0	2.3	18.7

Table C.7 (continued)

Year	Month	Division	Phytoplankton/liter x 10 <sup>3</sup>		
			TRM 386.4	TRM 388.4	TRM 391.1
1978	August	Chrysophyta	455.6	387.4	1473.2
		Chlorophyta	954.1	1326.4	4492.6
		Cyanophyta	2672.6	1442.2	5616.6
		Euglenophyta	71.4	84.9	669.1
		Pyrrhophyta	-	-	-
	September	Chrysophyta	74.8	221.9	973.4
		Chlorophyta	181.5	2041.1	4144.5
		Cyanophyta	369.9	3111.9	2737.3
		Euglenophyta	2.3	50.6	95.0
		Pyrrhophyta	-	-	1.6
	October	Chrysophyta	290.5	408.8	1982.8
		Chlorophyta	89.7	179.4	1060.5
		Cyanophyta	11.1	7.1	1050.9
		Euglenophyta	-	8.7	46.0
		Pyrrhophyta	-	-	-

Table C.8

TOTAL PHYTOPLANKTON ENUMERATION AT LEFT OVERBANK STATIONS - GUNTERSVILLE RESERVOIR  
IN VICINITY OF BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER - 1978-1979

Year	Station	Phytoplankton/liter x 10 <sup>3</sup>									
		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
1978	TRM 386.4	a	1,167.7	4,940.2	3,272.0	10,818.1	11,463.1	4,153.7	628.5	391.3	
	TRM 388.4	a	1,004.9	6,546.9	867.6	7,053.3	7,171.5	3,240.9	5,425.5	604.0	
	TRM 391.1	a	3,526.5	6,323.0	1,552.6	8,548.7	13,150.6	12,251.5	7,951.8	4,140.2	
1979	TRM 386.4	537.7	447.7	1,028.7	643.1	1,010.5	1,196.3	210.4	600.1	141.1	
	TRM 388.4	163.5	216.0	474.7	652.6	1,354.9	1,836.0	500.8	614.4	181.3	
	TRM 391.1	1,102.5	254.4	532.7	1,655.2	1,893.1	2,322.5	3,464.8	2,910.8	246.8	
	TRM 396.8 <sup>b</sup>	3,207.5	332.7	255.3	326.3	364.3	856.1	273.9	375.5	123.1	

a. Samples not collected

b. Channel station.

Table C.9

PHYTOPLANKTON ENUMERATION, GUNTERSVILLE RESERVOIR,  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
FEBRUARY-OCTOBER 1979

Year	Month	Division	Phytoplankton/liter x 10 <sup>3</sup>			
			TRM 386.4	TRM 388.4	TRM 391.1	TRM 396.8
1979	February	Chrysophyta	461.7	70.1	854.8	1184.9
		Chlorophyta	69.3	38.9	170.5	323.9
		Cyanophyta	5.1	54.5	58.4	1688.6
		Euglenophyta	1.6	-	12.5	5.8
		Pyrrhophyta	-	-	1.6	-
		Cryptophyta	-	-	4.7	4.3
	March	Chrysophyta	403.2	158.0	154.0	137.3
		Chlorophyta	26.2	32.5	69.9	108.7
		Cyanophyta	16.7	22.2	16.7	81.9
		Euglenophyta	1.6	1.7	4.8	4.8
		Pyrrhophyta	-	1.6	-	-
		Cryptophyta	-	-	-	-
	April	Chrysophyta	230.2	166.7	219.9	98.4
		Chlorophyta	304.8	151.6	138.1	66.3
		Cyanophyta	477.8	147.6	163.5	81.0
		Euglenophyta	11.9	5.6	6.4	3.6
		Pyrrhophyta	4.0	1.6	3.2	6.0
		Cryptophyta	-	1.6	1.6	-
	May	Chrysophyta	220.5	376.0	485.8	193.5
		Chlorophyta	255.3	182.2	1038.5	70.5
		Cyanophyta	147.9	81.0	59.2	57.6
		Euglenophyta	10.9	11.7	62.3	4.7
		Pyrrhophyta	3.9	1.6	7.8	-
		Cryptophyta	1.6	-	1.6	-
	June	Chrysophyta	183.4	125.4	145.3	109.1
		Chlorophyta	655.6	1030.3	1397.8	232.2
		Cyanophyta	144.5	73.8	123.0	19.8
		Euglenophyta	27.0	125.4	227.0	3.2
		Pyrrhophyta	-	-	-	-
		Cryptophyta	-	-	-	-
	July	Chrysophyta	206.4	372.3	228.6	125.4
		Chlorophyta	381.8	751.7	731.8	436.2
		Cyanophyta	585.8	666.8	1273.2	278.6
		Euglenophyta	6.4	23.0	47.6	7.9
		Pyrrhophyta	3.2	2.4	3.2	6.4
		Cryptophyta	12.7	19.8	38.1	1.6

Table C.9 (continued)

Year	Month	Division	Phytoplankton/liter x 10 <sup>3</sup>			
			TRM 386.4	TRM 388.4	TRM 391.1	TRM 396.8
1979	August	Chrysophyta	104.8	75.4	412.8	59.5
		Chlorophyta	28.6	305.6	1055.7	119.1
		Cyanophyta	75.4	112.7	1851.0	93.7
		Euglenophyta	1.6	7.1	145.3	1.6
		Pyrrhophyta	-	-	-	-
		Cryptophyta	-	-	-	-
	September	Chrysophyta	114.3	170.7	507.2	77.4
		Chlorophyta	114.3	250.8	871.6	102.8
		Cyanophyta	364.3	169.1	1366.9	190.5
		Euglenophyta	3.2	11.9	90.5	1.6
		Pyrrhophyta	4.0	9.5	47.6	1.6
		Cryptophyta	-	2.4	27.0	1.6
	October	Chrysophyta	92.6	53.7	28.8	43.6
		Chlorophyta	45.9	60.7	72.4	32.7
		Cyanophyta	5.4	64.6	144.0	45.2
		Euglenophyta	-	2.3	1.6	1.6
		Pyrrhophyta	1.6	-	-	-
		Cryptophyta	1.6	-	-	-

**APPENDIX D**

**PERCENTAGE COMPOSITION OF PHYTOPLANKTON**

## APPENDIX D

Table D.1

PERCENTAGE COMPOSITION OF MAJOR PHYTOPLANKTON GROUPS  
 (SURFACE TO 5-METER DEPTH), GUNTERSVILLE RESERVOIR  
 BELLEFONTE NUCLEAR PLANT - 1974

Year	Month	Division	TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1974	February	Chrysophyta	65.0	63.0	71.7	44.4
		Chlorophyta	30.6	17.9	15.2	24.9
		Cyanophyta	3.1	16.2	11.4	26.9
	March	Chrysophyta	57.4	63.6	62.2	48.1
		Chlorophyta	23.7	20.4	21.3	31.1
		Cyanophyta	17.5	14.4	14.9	16.0
	April	Chrysophyta	76.9	73.0	80.4	65.2
		Chlorophyta	18.5	19.0	13.9	22.3
		Cyanophyta	3.4	5.8	3.7	10.4
	May	Chrysophyta	48.5	57.0	66.3	44.3
		Chlorophyta	34.6	28.2	25.1	33.8
		Cyanophyta	16.6	14.4	8.2	20.9
	June	Chrysophyta	64.7	58.2	62.8	21.2
		Chlorophyta	30.1	35.5	31.6	60.4
		Cyanophyta	4.7	4.1	3.2	15.4
	July	Chrysophyta	51.3	48.7	54.3	29.2
		Chlorophyta	30.2	38.4	33.2	41.8
		Cyanophyta	13.5	10.7	8.9	27.6
	August	Chrysophyta	40.6	38.7	47.4	42.3
		Chlorophyta	44.0	40.4	40.4	24.0
		Cyanophyta	10.6	14.9	8.5	30.9
	September	Chrysophyta	34.9	41.6	37.3	43.0
		Chlorophyta	40.8	36.1	45.1	32.7
		Cyanophyta	22.9	18.3	15.5	18.8
	October	Chrysophyta	37.1	57.9	51.2	49.4
		Chlorophyta	35.9	32.6	43.3	33.1
		Cyanophyta	24.6	6.2	3.4	15.0

Table D.2  
 PERCENTAGE COMPOSITION OF MAJOR PHYTOPLANKTON GROUPS  
 (SURFACE TO 5-METER DEPTH), GUNTERSVILLE RESERVOIR  
 BELLEFONTE NUCLEAR PLANT - 1975

Year	Month	Division	TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1975	February	Chrysophyta	64.7	72.4	78.8	22.6
		Chlorophyta	22.2	18.4	11.4	40.7
		Cyanophyta	10.1	7.3	7.5	35.3
	March	Chrysophyta	68.5	70.7	69.7	20.0
		Chlorophyta	19.5	16.6	16.5	57.6
		Cyanophyta	9.2	9.0	11.9	20.1
	April	Chrysophyta	73.9	71.6	70.2	29.4
		Chlorophyta	16.6	16.5	13.3	33.5
		Cyanophyta	7.3	10.5	13.5	35.7
	May	Chrysophyta	37.9	36.9	39.1	15.5
		Chlorophyta	32.7	37.3	37.1	42.4
		Cyanophyta	28.3	20.3	21.8	40.0
	June	Chrysophyta	16.3	14.2	13.4	7.3
		Chlorophyta	20.6	28.5	23.6	18.0
		Cyanophyta	61.9	56.4	64.2	74.1
	July	Chrysophyta	18.6	26.5	28.4	27.3
		Chlorophyta	35.3	39.1	45.9	26.7
		Cyanophyta	45.7	34.3	25.7	45.4
	August	Chrysophyta	11.4	5.9	7.0	7.1
		Chlorophyta	17.1	17.0	11.9	14.6
		Cyanophyta	70.2	76.6	80.5	77.7
	September	Chrysophyta	20.8	27.9	47.6	35.1
		Chlorophyta	37.1	55.9	41.3	61.3
		Cyanophyta	41.8	14.7	7.9	3.6
	October	Chrysophyta	15.3	15.9	13.9	16.3
		Chlorophyta	18.8	26.6	28.2	28.8
		Cyanophyta	63.5	55.9	56.8	53.3

Table D.3

PERCENTAGE COMPOSITION OF MAJOR PHYTOPLANKTON GROUPS  
 (SURFACE TO 5-METER DEPTH), GUNTERSVILLE RESERVOIR  
 BELLEFONTE NUCLEAR PLANT - 1976

Year	Month	Division	TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1976	February	Chrysophyta	78.9	80.2	81.9	55.5
		Chlorophyta	6.2	7.6	7.0	3.9
		Cyanophyta	14.4	9.6	10.7	40.3
	March	Chrysophyta	74.8	83.3	77.9	34.1
		Chlorophyta	3.8	5.4	5.1	34.1
		Cyanophyta	20.1	9.6	15.4	30.6
	April	Chrysophyta	93.1	93.9	92.0	92.8
		Chlorophyta	4.3	3.3	3.0	4.6
		Cyanophyta	2.3	2.6	4.8	2.3
	May	Chrysophyta	74.6	67.5	80.6	36.9
		Chlorophyta	16.2	18.6	12.5	32.2
		Cyanophyta	8.0	13.7	6.7	30.1
	June	Chrysophyta	16.1	15.7	18.9	24.2
		Chlorophyta	39.5	55.0	25.7	36.0
		Cyanophyta	43.8	28.9	55.1	39.0
	July	Chrysophyta	12.6	17.5	7.5	9.4
		Chlorophyta	29.2	36.7	20.1	30.8
		Cyanophyta	57.5	45.5	72.1	56.0
	August	Chrysophyta	8.5	10.0	11.7	13.2
		Chlorophyta	9.6	9.0	7.1	18.4
		Cyanophyta	81.8	80.9	81.1	67.6
	September	Chrysophyta	39.8	26.1	47.6	22.3
		Chlorophyta	20.7	34.4	41.3	25.1
		Cyanophyta	37.2	39.1	7.9	48.5
	October	Chrysophyta	33.2	43.7	56.4	50.7
		Chlorophyta	18.9	13.3	27.3	8.2
		Cyanophyta	47.5	40.9	15.1	37.0

Table D.4

PERCENTAGE COMPOSITION OF MAJOR PHYTOPLANKTON GROUPS  
 (SURFACE TO 5-METER DEPTH), GUNTERSVILLE RESERVOIR  
 BELLEFONTE NUCLEAR PLANT - 1977

Year	Month	Division	TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1977	February	Chrysophyta	85.4	89.8	83.2	72.3
		Chlorophyta	5.6	5.0	8.4	11.0
		Cyanophyta	7.8	3.9	7.7	16.1
	March	Chrysophyta	96.8	97.8	98.0	72.1
		Chlorophyta	1.2	1.6	0.6	12.5
		Cyanophyta	1.9	0.6	1.3	14.6
	April	Chrysophyta	65.4	61.8	55.2	13.3
		Chlorophyta	19.0	26.9	27.8	42.0
		Cyanophyta	14.3	10.4	16.1	42.0
	May	Chrysophyta	79.2	68.0	85.5	2.0
		Chlorophyta	11.0	17.7	11.0	6.1
		Cyanophyta	9.4	13.7	3.3	37.3
	June	Chrysophyta	5.6	17.2	28.3	5.5
		Chlorophyta	22.7	29.2	47.0	12.5
		Cyanophyta	71.4	53.5	23.9	81.2
	July	Chrysophyta	8.4	3.0	4.8	7.1
		Chlorophyta	30.7	8.7	9.8	10.5
		Cyanophyta	59.3	87.9	84.7	81.8
	August	Chrysophyta	27.8	32.2	43.8	17.2
		Chlorophyta	20.8	11.1	15.0	35.2
		Cyanophyta	51.4	56.5	41.2	45.8
	September	Chrysophyta	4.3	7.4	6.4	3.4
		Chlorophyta	13.6	20.6	23.5	14.7
		Cyanophyta	82.0	71.6	69.7	81.8
	October	Chrysophyta	9.1	45.1	35.2	11.7
		Chlorophyta	3.3	11.4	7.8	13.0
		Cyanophyta	87.6	43.1	56.8	74.6

Table D.5

PERCENTAGE COMPOSITION OF MAJOR PHYTOPLANKTON GROUPS  
 (SURFACE TO 5-METER DEPTH), GUNTERSVILLE RESERVOIR  
 BELLEFONTE NUCLEAR PLANT - 1978

Year	Month	Division	TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1978	February	Chrysophyta	-	-	-	-
		Chlorophyta	-	-	-	-
		Cyanophyta	-	-	-	-
	March	Chrysophyta	76.9	71.8	71.1	42.7
		Chlorophyta	17.7	22.4	25.9	20.5
		Cyanophyta	4.1	4.5	2.6	5.4
	April	Chrysophyta	73.3	79.1	77.1	62.5
		Chlorophyta	14.7	14.8	16.7	33.6
		Cyanophyta	8.2	3.9	4.8	2.9
	May	Chrysophyta	41.6	40.7	37.6	15.4
		Chlorophyta	21.6	23.3	24.7	19.7
		Cyanophyta	36.5	35.4	36.7	64.5
	June	Chrysophyta	54.2	32.1	48.6	17.8
		Chlorophyta	19.9	20.0	24.7	34.4
		Cyanophyta	25.1	47.4	25.5	46.3
	July	Chrysophyta	70.1	11.5	9.9	3.3
		Chlorophyta	9.2	19.4	20.0	6.2
		Cyanophyta	20.6	68.8	69.6	90.5
	August	Chrysophyta	13.1	8.1	12.7	4.0
		Chlorophyta	19.5	12.8	27.8	18.9
		Cyanophyta	66.8	78.8	58.5	71.1
	September	Chrysophyta	11.9	23.0	13.5	6.8
		Chlorophyta	11.2	25.7	21.9	13.8
		Cyanophyta	76.9	50.9	64.3	79.4
	October	Chrysophyta	60.5	43.8	48.0	56.6
		Chlorophyta	33.5	30.7	36.5	32.2
		Cyanophyta	3.3	25.4	25.5	11.2

Table D.6

PERCENTAGE COMPOSITION OF MAJOR PHYTOPLANKTON GROUPS  
 (SURFACE TO 5-METER DEPTH) GUNTERSVILLE RESERVOIR  
 BELLEFONTE NUCLEAR PLANT - 1978

Year	Month	Division	TRM 386.4	TRM 388.4	TRM 391.1
1978	March	Chrysophyta	79.73	83.89	88.48
		Chlorophyta	17.95	13.90	8.51
		Cyanophyta	0.88	0.95	2.09
		Euglenophyta	1.43	1.26	0.92
	April	Chrysophyta	59.01	62.89	46.94
		Chlorophyta	33.37	31.57	49.81
		Cyanophyta	7.08	3.33	0.55
		Euglenophyta	0.48	2.18	2.71
		Pyrrhophyta	0.05	0.02	
	May	Chrysophyta	53.76	76.30	72.14
		Chlorophyta	31.20	20.31	20.81
		Cyanophyta	13.73	3.30	6.18
		Euglenophyta	1.12	0.09	0.87
		Pyrrhophyta	0.20		
	June	Chrysophyta	26.30	47.91	12.21
		Chlorophyta	15.85	23.98	30.10
		Cyanophyta	57.46	26.92	54.81
		Euglenophyta	0.39	1.18	2.88
	July	Chrysophyta	10.54	16.41	12.21
		Chlorophyta	13.57	15.65	15.75
		Cyanophyta	75.65	67.50	73.87
		Euglenophyta	0.12	0.41	0.76
		Pyrrhophyta	0.12	0.03	0.14
	August	Chrysophyta	10.97	11.95	12.02
		Chlorophyta	22.97	40.93	36.67
		Cyanophyta	64.34	44.50	45.84
		Euglenophyta	1.72	2.62	5.46
	September	Chrysophyta	11.00	4.90	12.24
		Chlorophyta	28.88	37.62	52.12
		Cyanophyta	58.85	57.36	34.42
		Euglenophyta	0.37	0.93	1.19
		Pyrrhophyta			0.02
	October	Chrysophyta	74.24	67.68	47.89
		Chlorophyta	22.92	29.70	25.61
		Cyanophyta	2.84	1.18	25.38
		Euglenophyta		1.44	1.11

Table D.7

PERCENTAGE COMPOSITION OF MAJOR PHYTOPLANKTON GROUPS  
 (SURFACE TO 5-METER DEPTH) GUNTERSVILLE RESERVOIR  
 BELLEFONTE NUCLEAR PLANT - 1979

Year	Month	Division	TRM 386.4	TRM 388.4	TRM 391.1	TRM 396.8
1979	February	Chrysophyta	85.9	42.9	77.5	36.9
		Chlorophyta	12.9	23.8	15.5	10.1
		Cyanophyta	0.9	33.3	5.3	52.6
		Euglenophyta	-	-	1.1	0.1
		Pyrrhophyta	-	-	0.1	-
		Cryptophyta	-	-	0.4	0.1
	March	Chrysophyta	90.1	73.1	62.8	41.3
		Chlorophyta	5.9	15.0	28.5	32.7
		Cyanophyta	3.7	10.3	6.8	24.6
		Euglenophyta	0.4	5.5	2.0	1.4
		Pyrrhophyta	-	0.7	-	-
		Cryptophyta	-	-	-	-
	April	Chrysophyta	22.4	35.1	41.3	38.5
		Chlorophyta	29.6	31.9	25.9	26.0
		Cyanophyta	46.4	31.1	30.7	31.7
		Euglenophyta	1.2	1.2	1.2	1.4
		Pyrrhophyta	0.4	0.3	0.3	-
		Cryptophyta	-	0.3	0.3	-
	May	Chrysophyta	34.3	57.6	29.3	59.3
		Chlorophyta	39.7	27.9	62.7	21.6
		Cyanophyta	23.0	12.4	3.6	17.7
		Euglenophyta	1.7	1.8	3.8	1.4
		Pyrrhophyta	0.6	0.2	0.5	-
		Cryptophyta	0.7	-	0.1	-
	June	Chrysophyta	18.1	9.3	7.7	29.9
		Chlorophyta	64.9	76.0	73.8	63.7
		Cyanophyta	14.3	5.4	6.5	5.4
		Euglenophyta	2.7	9.3	12.0	0.9
		Pyrrhophyta	-	-	-	-
		Cryptophyta	-	-	-	-
	July	Chrysophyta	17.3	20.3	9.8	14.6
		Chlorophyta	31.9	40.9	31.5	51.0
		Cyanophyta	49.0	36.3	54.8	32.5
		Euglenophyta	0.5	1.3	2.0	0.9
		Pyrrhophyta	0.3	0.1	0.1	0.7
		Cryptophyta	1.1	1.1	1.6	0.2

Table D.7.1 (Continued)

Year	Month	Division	TRM 386.4	TRM 388.4	TRM 391.1	TRM 396.8
1979	August	Chrysophyta	49.8	15.1	11.9	21.7
		Chlorophyta	13.6	61.0	30.5	4.3
		Cyanophyta	35.8	22.5	53.4	34.2
		Euglenophyta	0.8	1.4	4.2	0.6
		Pyrrhophyta	-	-	-	-
		Cryptophyta	-	-	-	-
	September	Chrysophyta	19.0	27.8	17.4	20.6
		Chlorophyta	19.0	40.8	29.9	27.4
		Cyanophyta	60.7	27.5	47.0	50.7
		Euglenophyta	0.5	1.9	3.1	0.4
		Pyrrhophyta	0.6	1.5	1.6	0.4
		Cryptophyta	-	-	0.9	0.4
	October	Chrysophyta	63.0	29.6	11.7	35.4
		Chlorophyta	31.2	33.5	29.3	26.6
		Cyanophyta	3.7	35.6	58.3	36.7
		Euglenophyta	-	1.3	0.6	1.3
		Pyrrhophyta	1.1	-	-	-
		Cryptophyta	1.1	-	-	-

**APPENDIX E**  
**DIVERSITY OF PHYTOPLANKTON**

## APPENDIX E

Table E.1

DIVERSITY OF PHYTOPLANKTON IN GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 FEBRUARY-OCTOBER 1974

Month	Depth (meters)	TRM 388.0		TRM 391.2		TRM 396.8		TCM 0.2	
		$\bar{d}$	Number of taxa						
February	0.3	2.310	10	2.964	11	2.265	8	3.585	26
	1.0	3.144	12	1.949	8	2.782	14		
	3.0	2.194	11	2.218	9	2.488	11		
	5.0	2.194	8	2.151	11	2.583	12		
March	0.3	3.010	13	3.202	18	2.362	11		
	1.0	2.677	12	2.228	12	2.646	16		
	3.0	2.414	9	2.651	14				
	5.0	2.862	14	2.938	14	2.845	13		
April	0.3	2.528	17	2.076	15	2.674	18	3.109	24
	1.0	2.328	14	2.646	13	3.090	18	3.328	24
	3.0	2.306	13	2.498	15	2.053	13		
	5.0	2.186	13	2.950	19	2.163	13		
May	0.3	1.948	8	2.870	10	2.484	12	3.460	24
	1.0	2.486	8	2.452	11	2.153	10	3.544	27
	3.0	1.596	9	2.430	10	2.378	11		
	5.0	2.681	11	2.945	12	2.492	13		
June	0.3	2.552	22	2.998	27	2.985	19	4.134	40
	1.0	2.384	20	2.658	20	2.965	20	4.181	38
	3.0	2.585	21	2.990	22	2.472	17		
	5.0	2.248	19	2.404	20	2.264	15		
July	0.3	3.299	20	3.461	22	3.158	16	3.924	32
	1.0	3.198	18	3.437	19	2.507	15	3.956	39
	3.0	3.161	19	2.947	21	2.949	15		
	5.0	2.972	17	2.864	18	2.852	17		

Table E.1 (continued)

Month	Depth (meters)	TRM 388.0		TRM 391.2		TRM 396.8		TCM 0.2	
		Number of taxa	$\bar{d}$						
August	0.3	3.421	22	3.820	25	3.388	19	3.588	27
	1.0	3.116	15	3.616	20	3.057	17	3.064	23
	3.0	3.696	22	3.179	13	2.802	12		
	5.0	3.519	19	3.325	15	2.953	14	2.522	10
September	0.3	2.959	13	2.801	10	2.779	11	3.355	14
	1.0	3.301	13	2.831	10	2.738	10	3.377	16
	3.0	3.370	15	2.723	10	2.368	9		
	5.0	3.038	13	2.387	8	2.458	8		
October	0.3	2.533	11	2.284	13	3.241	12	3.119	11
	1.0	2.931	9	2.341	11	2.526	12	3.656	17
	3.0	2.558	9	2.272	6	2.576	9		
	5.0	3.088	13	2.505	9	2.497	12		
	5.0	2.186	13	2.950	19	2.163	13		

Table E.2

DIVERSITY OF PHYTOPLANKTON IN GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 FEBRUARY-OCTOBER 1975

Month	Depth (meters)	TRM 388.0		TRM 391.2		TRM 396.8		TCM 0.2	
		$\bar{d}$	Number of taxa						
February	0.3	3.060	16	2.763	15	1.858	13	3.398	19
	1.0	1.910	13	1.644	10	2.238	16	3.007	13
	3.0	2.022	13	2.206	10	1.673	10		
	5.0	2.233	12	2.134	12	1.545	12		
March	0.3	2.332	11	1.733	9	2.107	12	3.551	21
	1.0	3.228	17	2.273	10	2.384	11	3.966	24
	3.0	2.673	16	2.822	11	1.497	7		
	5.0	0.881	2	2.060	10	2.529	12		
April	0.3	1.469	14	1.501	11	1.622	13	3.975	31
	1.0	1.660	16	2.360	12	2.053	13	3.917	31
	3.0	2.567	14	2.223	14	1.444	12		
	5.0	2.547	14	2.356	13	2.661	15		
May	0.3	3.360	30	3.420	25	3.369	24	3.901	48
	1.0	3.355	27	3.074	24	3.570	27	4.119	55
	3.0	3.188	19	3.618	29	3.500	28		
	5.0	3.155	22	3.524	30	3.404	21		
June	0.3	2.864	20	2.564	21	2.560	25	2.504	43
	1.0	3.022	29	1.917	10	2.821	28	2.960	45
	3.0	3.093	19	2.781	22	2.986	28		
	5.0	2.612	24	2.310	22	3.175	29		
July	0.3	2.782	24	3.647	22	2.997	13	3.451	51
	1.0	2.974	20	3.223	19	3.057	16	3.616	43
	3.0	3.149	22	3.237	17	3.223	14		
	5.0	3.627	21	2.930	16	2.987	15		

Table E.2 (continued)

Month	Depth (meters)	TRM 388.0		TRM 391.2		TRM 396.8		TCM 0.2	
		$\bar{d}$	Number of taxa						
<b>August</b>									
August	0.3	2.168	19	2.993	33	2.619	27	3.294	36
	1.0	3.156	25	2.937	35	2.825	28	3.050	37
	3.0	2.265	25	2.537	27	2.276	29		
	5.0	3.493	25	2.701	32	2.237	27		
<b>September</b>									
September	0.3	3.021	17	2.602	9	2.578	8	2.917	10
	1.0	3.527	14	2.881	10	2.929	13	2.918	15
	3.0	2.802	9	2.910	12	2.514	9		
	5.0	2.949	14	2.586	11	2.407	9		
<b>October</b>									
October	0.3	2.887	16	2.093	14	0.905	12	3.521	40
	1.0	2.288	16	2.149	11	2.382	9	3.810	40
	3.0	1.559	11	2.386	7	1.301	8		
	5.0	2.062	9	2.3303	14	2.677	10		

Table E.3

DIVERSITY OF PHYTOPLANKTON IN GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 FEBRUARY-OCTOBER 1976

Month	Depth (meters)	TRM 388.0		TRM 391.2		TRM 396.8		TCM 0.2	
		$\bar{d}$	Number of taxa						
February	0.3	1.403	27	1.635	30	1.686	34	1.861	28
	1.0	1.469	30	1.695	29	1.637	29	1.998	34
	3.0	1.938	31	1.981	30	1.724	33		
	5.0	2.196	33	2.030	33	2.013	32		
March	0.3	1.892	27	1.797	30	2.004	26	3.890	30
	1.0	1.620	24	1.827	31	1.733	24	3.619	31
	3.0	1.693	24	1.539	33	1.560	27		
	5.0	1.831	30	1.653	26	1.752	29		
April	0.3	0.812	26	0.570	17	0.641	17	0.882	26
	1.0	0.755	26	0.587	19	0.831	19	0.697	20
	3.0	0.609	22	0.663	23	0.702	19		
	5.0	0.738	22	0.477	18	1.092	20		
May	0.3	1.918	19	2.647	34	1.862	20	3.709	33
	1.0	1.913	22	2.283	21	1.773	24	3.708	36
	3.0	2.311	23	2.603	27	1.918	27		
	5.0	2.338	23	2.551	27	1.805	23		
June	0.3	3.391	28	2.589	30	2.730	19	3.938	30
	1.0	3.245	28	3.364	17	2.666	12	3.572	21
	3.0	3.427	33	3.660	25	3.504	18		
	5.0	2.704	26	3.147	13	3.201	21		
July	0.3	3.986	37	3.884	31	3.320	27	3.529	55
	1.0	2.922	32	3.016	32	3.184	30	3.783	51
	3.0	3.195	37	3.614	25	1.686	32		
	5.0	2.806	38	3.867	27	2.838	23		

Table E.3 (continued)

Month	Depth (meters)	TRM 388.0		TRM 391.2		TRM 396.8		TCM 0.2	
		$\bar{d}$	Number of taxa						
August	0.3	2.425	26	2.092	24	2.053	22	2.448	30
	1.0	2.574	26	2.636	19	1.832	22	3.228	35
	3.0	1.450	21	2.108	24	2.096	21		
	5.0	2.462	26	1.803	22	2.099	19		
September	0.3	2.689	15	3.432	15	2.083	10	4.055	36
	1.0	2.212	10	3.231	20	3.101	14	3.581	32
	3.0	2.947	12	2.256	15	2.131	8		
	5.0	2.439	11	3.027	16	2.813	8		
October	0.3	2.183	15	3.332	14	2.053	7	3.176	13
	1.0	2.283	9	2.280	7	2.459	10	2.618	9
	3.0	1.899	10	1.699	6	1.809	8		
	5.0	2.376	11	2.088	8	2.327	9		

Table E.4

DIVERSITY OF PHYTOPLANKTON IN GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 FEBRUARY-OCTOBER 1977

Month	Depth (meters)	TRM 388.0		TRM 391.2		TRM 396.8		TCM 0.2	
		$\bar{d}$	Number of taxa						
February	0.3	2.445	33	2.135	26	2.475	29	3.041	35
	1.0	2.367	23	2.208	27	2.519	27	2.645	25
	3.0	2.247	25	2.170	31	2.317	25		
	5.0	2.326	28	2.173	29	2.278	27		
March	0.3	0.667	16	1.806	21	0.565	21		
	1.0	1.105	21	0.694	16	0.940	24		
	3.0	1.026	16	0.796	19	0.578	20		
	5.0	0.807	18	0.573	18	0.577	17		
April	0.3	2.223	13	2.591	12	2.681	16	3.837	42
	1.0	3.039	15	2.065	11	2.597	12	4.099	45
	3.0	2.036	11	1.826	10	3.049	13		
	5.0	2.984	15	2.649	15	2.573	17		
May	0.3	1.450	22	1.754	19	1.053	18	1.554	53
	1.0	1.916	27	1.803	23	1.130	18	2.578	57
	3.0	1.592	27	2.358	32	1.098	18		
	5.0	1.600	24	2.459	29	1.137	15		
June	0.3	1.764	38	2.686	24	3.379	16	2.211	40
	1.0	2.804	27	2.651	20	2.989	17	2.490	39
	3.0	2.573	32	3.428	21	3.173	17		
	5.0	3.790	27	3.188	23	2.574	11		
July	0.3	3.393	42	1.911	43	1.745	36	2.245	46
	1.0	2.937	34	2.565	46	1.760	44	2.397	43
	3.0	2.345	35	2.585	41	1.898	39		
	5.0	2.797	36	2.490	40	2.137	43		

Table E.4 (continued)

Month	Depth (meters)	TRM 388.0		TRM 391.2		TRM 396.8		TCM 0.2	
		Number of taxa	$\bar{d}$						
August	0.3	1.814	10	2.146	10	2.806	9	3.770	37
	1.0	1.581	10	1.629	7	2.384	7	3.939	42
	3.0	2.222	13	2.030	10	2.401	12		
	5.0	2.024	12	2.833	10	0.831	3		
September	0.3	2.360	28	2.648	30	3.568	28	2.266	41
	1.0	3.059	28	3.279	28	3.560	24	2.808	35
	3.0	1.853	24	2.802	23	3.447	32		
	5.0	2.046	24	3.560	26	2.361	19		
October	0.3	3.126	20	2.750	19	2.645	15	2.446	31
	1.0	0.587	16	2.715	18	2.617	14	2.412	33
	3.0	2.478	19	3.318	21	2.689	16		
	5.0	2.211	12	3.065	17	2.694	17		

Table E.5  
 DIVERSITY OF PHYTOPLANKTON IN GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 MARCH-OCTOBER 1978

Month	Depth (meters)	TRM 388.0		TRM 391.2		TRM 396.8		TCM 0.2	
		$\bar{d}$	Number of taxa						
March	0.3	2.721	20	2.778	24	2.010	21	3.000	28
	1.0	2.624	21	2.573	23	2.609	21	2.394	25
	3.0	2.447	23	3.306	22	2.030	13		
	5.0	2.358	23	2.683	23	2.555	18		
April	0.3	2.394	10	2.362	16	2.030	12	3.157	28
	1.0	2.280	11	2.635	20	2.154	12	3.551	29
	3.0	2.150	9	2.393	17	1.699	14		
	5.0	1.920	9	2.250	18	2.290	17		
May	0.3	3.108	24	3.104	26	3.349	27	3.023	52
	1.0	2.892	22	3.378	24	2.791	23	2.868	47
	3.0	3.414	21	3.331	30	3.221	24		
	5.0	3.279	24	3.510	30	2.663	20		
June	0.3	2.597	25	3.218	37	3.163	29	3.632	34
	1.0	2.747	32	3.254	45	2.839	27	3.517	39
	3.0	2.904	35	3.088	32	2.690	25		
	5.0	3.157	33	3.295	32	2.893	26		
July	0.3	1.198	34	3.696	34	3.752	52	2.435	43
	1.0	3.724	30	2.852	34	3.693	44	2.349	52
	3.0	2.855	33	3.409	33	3.664	48		
	5.0	2.980	29	3.195	28	3.467	38		
August	0.3	2.822	30	2.390	41	3.312	27	2.833	52
	1.0	2.410	27	2.618	43	2.670	21	3.228	50
	3.0	3.616	29	2.604	40	3.690	23		
	5.0	2.556	10	2.628	34	3.166	16		
September	0.3	2.145	16	2.889	16	2.545	22	3.101	29
	1.0	2.167	17	2.964	17	2.658	19	2.380	27
	3.0	1.974	23	2.952	21	3.305	18		
	5.0	2.878	18	2.876	23	2.252	16		
October	0.3	2.305	13	2.666	16	1.859	8	2.645	13
	1.0	2.654	11	2.444	10	2.144	10	2.259	11
	3.0	2.505	13	2.266	13	2.284	8		
	5.0	2.250	11	2.598	13	2.102	12		

Table E.6

DIVERSITY OF PHYTOPLANKTON IN GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 MARCH-OCTOBER 1978

Month	Depth (meters) <sup>a</sup>	TRM 388.4		TRM 388.4		TRM 391.1	
		$\bar{d}$	Number of taxa	$\bar{d}$	Number of taxa	$\bar{d}$	Number of taxa
March	0.3	2.576	25	1.613	18	3.102	31
	1.0	1.973	28	2.789	22	2.253	30
April	0.3	3.360	29	3.026	29	3.181	35
	1.0	3.029	29	3.252	34	3.393	32
May	0.3	3.107	47	1.849	28	2.424	33
	1.0	3.068	37	2.252	30	3.104	38
June	0.3	2.741	37	3.033	37	3.314	35
	1.0	2.835	39	3.201	41	3.429	36
July	0.3	2.776	60	2.932	57	3.569	63
	1.0	2.851	59	3.257	54	3.036	62
August	0.3	3.297	35	3.837	39	4.301	55
	1.0	3.610	35	3.944	44	4.215	49
September	0.3	3.680	30	3.846	48	2.245	71
	1.0	2.968	30	3.716	52	-	-
October	0.3	2.451	13	2.214	16	2.899	29
	1.0	2.333	13	2.326	18	-	-

a. At overbank stations, samples were collected only at 1.3- and 1.0-m depths.

Table E.7

DIVERSITY OF PHYTOPLANKTON IN GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 FEBRUARY-OCTOBER 1979

Month	Depth (meters)	TRM 386.4 <sup>a</sup>		TRM 388.4 <sup>a</sup>		TRM 391.1 <sup>a</sup>		TRM 396.8	
		$\bar{d}$	Number of taxa	$\bar{d}$	Number of taxa	$\bar{d}$	Number of taxa	$\bar{d}$	Number of taxa
February	0.3	1.779	18	2.143	10	2.537	29	1.823	23
	1.0	1.653	16	2.225	10	2.423	18	2.152	21
	-	-	-	-	-	-	-	1.841	20
	-	-	-	-	-	-	-	2.449	24
March	0.3	2.721	12	3.440	17	3.698	19	3.496	17
	1.0	3.135	13	3.292	15	3.940	23	3.584	19
	-	-	-	-	-	-	-	3.254	18
	-	-	-	-	-	-	-	3.701	18
April	0.3	3.315	33	3.550	32	3.701	32	3.808	21
	1.0	3.609	35	4.006	33	3.788	34	3.562	32
	-	-	-	-	-	-	-	3.189	17
	-	-	-	-	-	-	-	3.420	22
May	0.3	3.874	37	2.950	28	2.960	31	2.361	14
	1.0	3.010	27	3.154	30	3.379	37	2.963	22
	-	-	-	-	-	-	-	2.114	13
	-	-	-	-	-	-	-	1.960	10
June	0.3	3.968	26	2.748	21	3.810	28	3.835	29
	1.0	4.157	25	3.528	21	4.100	30	3.513	20
	-	-	-	-	-	-	-	3.048	15
	-	-	-	-	-	-	-	2.858	16
July	0.3	3.429	41	3.779	46	3.725	43	2.727	31
	1.0	3.568	38	3.527	39	3.642	49	3.344	26
	-	-	-	-	-	-	-	3.210	24
	-	-	-	-	-	-	-	3.096	25

Table E.7 (continued)

Month	Depth (meters)	TRM 386.4 <sup>a</sup>		TRM 388.4 <sup>a</sup>		TRM 391.1 <sup>a</sup>		TRM 396.8	
		$\bar{d}$	Number of taxa	$\bar{d}$	Number of taxa	$\bar{d}$	Number of taxa	$\bar{d}$	Number of taxa
August	0.3	2.338	16	3.459	22	4.441	61	3.026	19
	1.0	2.708	12	3.489	23	4.372	33	2.419	12
	-	-	-	-	-	-	-	2.863	16
	-	-	-	-	-	-	-	2.913	10
September	0.3	3.094	23	4.218	36	4.352	50	3.226	24
	1.0	2.740	31	4.048	35	4.031	38	-	-
	-	-	-	-	-	-	-	3.510	22
	-	-	-	-	-	-	-	2,806	21
October	0.3	3.696	21	3.100	17	3.299	16	2.218	7
	1.0	2.862	13	3.651	22	2.368	18	2.767	11
	-	-	-	-	-	-	-	2.173	9
	-	-	-	-	-	-	-	1.621	12

a. At overbank stations samples were collected only at 0.3- and 1-m depths.

APPENDIX F

CHLOROPHYLL a DATA

## APPENDIX F

Table F.1

MEAN CONCENTRATION OF CHLOROPHYLL a PIGMENT IN CUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT - 1974

Year	Month	Depth	Mg of Chl <u>a/m</u> <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1974	February	Surface	3.29	0.86	1.45	4.74
		1.0	1.90	1.55	1.08	a
		3.0	1.36	2.46	2.01	
		5.0	1.83	3.22	1.11	
		Total/m <sup>2</sup>	9.03	6.83	7.79	
	March	Surface	1.16	1.72	1.10	10.24
		1.0	2.55	0.69	0.06	a
		3.0	0.96	0.09	0.96	
		5.0	1.49	1.54	1.86	
		Total/m <sup>2</sup>	7.82	3.55	4.40	
April	April	Surface	1.43	1.63	3.54	10.02
		1.0	1.32	0.79	1.17	9.65
		3.0	0.32	0.46	0.36	
		5.0	0.53	0.44	0.80	
		Total/m <sup>2</sup>	3.86	3.33	4.53	
	May	Surface	1.10	1.90	2.75	5.60
		1.0	2.17	2.42	1.74	4.00
		3.0	2.19	2.56	1.76	
		5.0	2.25	1.71	2.43	
		Total/m <sup>2</sup>	10.93	11.43	9.92	4.79
June	June	Surface	3.76	3.65	3.00	12.70
		1.0	4.85	2.93	3.23	13.71
		3.0	2.97	3.06	3.86	
		5.0	4.04	2.75	3.27	
		Total/m <sup>2</sup>	19.14	15.19	17.37	
	July	Surface	0.52	1.39	0.79	1.39
		1.0	0.65	1.08	4.68	0.22
		3.0	0.94	0.74	13.35	
		5.0	0.74	0.91	1.04	
		Total/m <sup>2</sup>	4.34	4.71	35.16	
August	August	Surface	1.21	1.16	3.30	2.09
		1.0	1.17	0.87	1.07	1.05
		3.0	0.55	0.90	3.46	
		5.0	1.04	1.46	5.40	
		Total/m <sup>2</sup>	4.50	5.12	15.58	

Table F.1 (continued)

Year	Month	Depth	Mg of Chl <u>a</u> /m <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1974	September	Surface	0.66	1.15	1.33	2.00
		1.0	0.79	1.15	1.02	1.93
		3.0	0.70	1.12	1.50	
		5.0	1.14	1.61	1.51	
		Total/m <sup>2</sup>	4.05	6.15	6.72	
	October	Surface	1.46	1.94	1.00	4.71
		1.0	2.65	2.76	1.40	1.85
		3.0	2.08	3.00	3.32	
		5.0	2.44	4.05	5.03	
		Total/m <sup>2</sup>	11.28	15.17	14.41	

a. No samples collected

Table F.2

MEAN CONCENTRATION OF CHLOROPHYLL a PIGMENT IN GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT - 1975

Year	Month	Depth	Mg of Chl <u>a/m</u> <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1975	February	Surface	2.35	2.50	1.17	5.14
		1.0	1.55	3.10	2.18	5.32
		3.0	2.70	2.52	2.22	
		5.0	2.52	2.48	2.22	
		Total/m <sup>2</sup>	19.89	13.42	10.48	
	March	Surface	1.16	0.90	1.43	4.65
		1.0	1.46	1.47	1.78	5.60
		3.0	0.91	1.32	2.00	
		5.0	1.46	0.60	2.12	
		Total/m <sup>2</sup>	6.11	6.89	8.52	
	April	Surface	1.87	2.15	2.30	4.57
		1.0	1.80	2.30	2.65	5.57
		3.0	2.02	2.00	2.65	
		5.0	2.28	2.02	1.82	
		Total/m <sup>2</sup>	9.96	10.53	12.25	
	May	Surface	1.67	1.19	1.04	4.29
		1.0	1.34	1.50	1.83	4.29
		3.0	1.34	1.34	1.51	
		5.0	1.49	1.34	1.69	
		Total/m <sup>2</sup>	7.03	6.90	7.98	
	June	Surface	1.16	1.59	1.16	2.23
		1.0	1.33	1.16	1.14	2.15
		3.0	1.15	1.30	1.34	
		5.0	1.42	1.09	1.33	
		Total/m <sup>2</sup>	6.30	6.23	6.27	
	July	Surface	1.40	1.12	1.29	4.44
		1.0	1.25	0.92	0.94	4.54
		3.0	1.07	0.92	0.96	
		5.0	1.07	1.23	1.26	
		Total/m <sup>2</sup>	5.78	4.98	5.24	
	August	Surface	1.79	1.75	1.77	2.11
		1.0	2.15	1.59	1.13	2.31
		3.0	1.42	1.59	1.31	
		5.0	1.11	1.46	1.59	
		Total/m <sup>2</sup>	8.08	7.90	6.79	

Table F.2 (continued)

Year	Month	Depth	Mg of Chl <u>a</u> /m <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1975	September	Surface	0.0	0.0	0.33	1.02
		1.0	0.17	0.23	0.16	0.68
		3.0	0.0	0.06	0.35	
		5.0	0.07	0.46	0.20	
		Total/m <sup>2</sup>	0.32	0.94	1.85	
	October	Surface	0.31	0.06	0.0	2.53
		1.0	0.08	0.14	0.08	2.55
		3.0	0.08	0.08	0.08	
		5.0	0.10	0.08	0.05	
		Total/m <sup>2</sup>	0.56	0.48	0.34	

Table F.3

MEAN CONCENTRATION OF CHLOROPHYLL a PIGMENT IN GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT - 1976

Year	Month	Depth	Mg of Chl <u>a</u> /m <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1976	February	Surface	6.31	6.00	5.97	6.14
		1.0	5.88	6.48	2.93	6.97
		3.0	5.72	6.16	6.01	
		5.0	5.49	5.86	5.68	
		Total/m <sup>2</sup>	28.92	31.04	25.57	
	March	Surface	1.80	0.17	0.82	0.04
		1.0	2.05	0.90	0.54	0.73
		3.0	1.57	1.51	1.60	
		5.0	1.23	0.86	0.30	
		Total/m <sup>2</sup>	8.35	5.33	4.70	
	April	Surface	5.40	5.93	4.88	4.09
		1.0	5.56	5.93	4.42	4.39
		3.0	5.22	5.76	4.25	
		5.0	5.41	5.58	4.08	
		Total/m <sup>2</sup>	26.88	29.29	21.65	
	May	Surface	2.08	2.69	2.74	3.42
		1.0	2.23	3.20	2.40	3.08
		3.0	2.41	2.89	2.38	
		5.0	2.23	3.04	3.08	
		Total/m <sup>2</sup>	11.94	14.71	12.83	
	June	Surface	0.04	0.17	0.0	0.56
		1.0	0.19	0.34	0.2	0.56
		3.0	0.23	0.0	0.06	
		5.0	0.34	0.21	0.21	
		Total/m <sup>2</sup>	1.10	0.82	0.35	
	July	Surface	2.34	2.30	1.55	5.59
		1.0	1.25	2.88	0.51	7.72
		3.0	2.81	2.71	0.75	
		5.0	2.81	1.87	1.18	
		Total/m <sup>2</sup>	11.48	13.52	4.23	
	August	Surface	2.74	3.10	2.95	4.45
		1.0	2.49	2.12	2.97	4.92
		3.0	2.42	2.12	3.14	
		5.0	2.73	2.79	2.80	
		Total/m <sup>2</sup>	13.19	11.77	15.01	

Table F.3 (continued)

Year	Month	Depth	Mg of Chl <u>a</u> /m <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1976	September	Surface	7.12	1.86	1.34	5.04
		1.0	2.39	2.66	1.32	5.00
		3.0	2.49	1.86	1.53	
		5.0	1.85	1.88	2.23	
		Total/m <sup>2</sup>	13.97	10.52	7.93	
	October	Surface	1.85	1.86	1.84	2.18
		1.0	1.88	2.14	1.51	2.21
		3.0	1.54	3.62	2.01	
		5.0	1.73	1.36	2.02	
		Total/m <sup>2</sup>	8.54	12.74	9.23	

Table F.4

MEAN CONCENTRATION OF CHLOROPHYLL a PIGMENT IN GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT - 1978

Year	Month	Depth	Mg of Chl <u>a/m</u> <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1978	February	Surface				
		1.0	a	a	a	a
		3.0				
		5.0				
		Total/m <sup>2</sup>				
	March	Surface	1.44	1.09	3.80	0.92
		1.0	0.52	4.47	4.40	1.07
		3.0	1.70	6.22	3.11	
		5.0	1.51	0.40	2.72	
		Total/m <sup>2</sup>	6.42	20.10	17.41	
	April	Surface	a	a	a	a
		1.0				
		3.0				
		5.0				
		Total/m <sup>2</sup>				
	May	Surface	2.51	2.37	5.24	12.51
		1.0	2.52	2.17	2.85	13.17
		3.0	2.36	2.39	2.39	
		5.0	2.52	2.34	3.11	
		Total/m <sup>2</sup>	12.29	11.56	14.78	
	June	Surface	a	a	a	a
		1.0				
		3.0				
		5.0				
		Total/m <sup>2</sup>				
	July	Surface	5.03	5.34	8.39	6.78
		1.0	4.42	5.07	8.24	7.09
		3.0	4.73	4.19	7.99	
		5.0	4.69	4.06	6.78	
		Total/m <sup>2</sup>	23.29	22.70	39.32	
	August	Surface	4.73	7.68	4.78	37.19
		1.0	5.23	7.38	5.37	37.92
		3.0	5.39	5.90	5.39	
		5.0	4.52	6.10	5.70	
		Total/m <sup>2</sup>	24.97	32.81	31.92	

Table F.4 (continued)

Year	Month	Depth	Mg of Chl a/m <sup>3</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1978	September	Surface	4.37	3.50	3.59	4.62
		1.0	3.50	3.94	1.95	4.17
		3.0	3.50	4.39	3.48	
		5.0	3.68	5.79	5.27	
		Total/m <sup>2</sup>	18.12	22.24	16.92	
	October	Surface	4.42	4.91	4.80	4.02
		1.0	4.37	4.66	4.66	4.35
		3.0	3.60	5.04	4.41	
		5.0	4.96	4.02	4.37	
		Total/m <sup>2</sup>	20.87	23.53	21.57	

a. No samples collected.

**APPENDIX G**  
**PRIMARY PRODUCTIVITY RESULTS**

## APPENDIX C

Table G.1

PRIMARY PRODUCTIVITY RESULTS ( $C^{14}$  METHOD) FROM GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT - 1974

Year	Month	Depth (meters)	$Mg\ C/m^3/hour$			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1974	February	Surface	5.22	4.28	3.63	a
		1.0	2.95	2.95	2.38	
		3.0	0.57	2.24	1.05	
		5.0	0.14	0.74	0.65	
		Total $Mg\ C/day/m^2$	55.1	77.94	53.78	
	March	Surface	4.71	4.23	4.84	a
		1.0	0.91	0.85	0.94	
		3.0	0.09	0.10	0.09	
		5.0	0.04	0.09	0.08	
		Total $Mg\ C/day/m^2$	44.0	41.25	45.81	
April	April	Surface	26.33	36.75	36.26	115.37
		1	17.91	18.99	20.77	102.46
		3.0	3.55	1.90	2.07	-
		5.0	1.00	0.74	1.10	-
		Total $Mg\ C/day/m^2$	371.9	397.0	421.31	841.41
	May	Surface	36.06	60.88	73.52	199.37
		1.0	33.14	60.95	68.36	187.95
		3.0	5.20	8.87	13.9	-
		5.0	0.85	2.51	5.58	-
		Total $Mg\ C/day/m^2$	693.4	1247.5	1515.71	1700.06

Table G.1 (continued)

Year	Month	Depth (meters)	Mg C/m <sup>3</sup> /hour			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1974	June	Surface	32.8	56.8	36.5	230.88
		1.0	33.9	36.9	19.5	209.87
		3.0	6.3	7.0	3.4	-
		5.0	2.9	3.5	2.0	-
		Total Mg C/day/m <sup>2</sup>	724.1	886.4	493.6	1929.44
	July	Surface	58.0	64.3	73.8	331.92
		1.0	31.3	41.4	48.6	314.65
		3.0	6.1	7.7	6.9	-
		5.0	2.2	2.6	1.7	-
		Total Mg C/day/m <sup>2</sup>	850.6	1056.3	2278.3	3040.75
	August	Surface	12.3	16.6	15.6	62.95
		1.0	9.1	12.1	12.4	50.52
		3.0	1.6	2.1	2.1	-
		5.0	0.3	0.5	0.5	-
		Total Mg C/day/m <sup>2</sup>	238.4	317.1	317.1	580.22
	September	Surface	9.4	9.7	10.2	23.24
		1.0	4.5	4.1	3.9	11.83
		3.0	0.7	0.8	0.6	-
		5.0	0.3	0.4	0.09	-
		Total Mg C/day/m <sup>2</sup>	121.3	120.1	113.2	161.80
	October	Surface	9.0	14.9	21.1	17.96
		1.0	7.2	12.2	12.7	15.14
		3.0	1.4	2.4	4.7	-
		5.0	0.3	0.6	0.3	-
		Total Mg C/day/m <sup>2</sup>	149.5	254.6	321.59	135.23

a. Samples not taken in February or March.

Table G.2

PRIMARY PRODUCTIVITY RESULTS ( $C^{14}$  METHOD) FROM GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT - 1975

Year	Month	Depth (meters)	$Mg C/m^3/hour$			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1975	February	Surface	9.3	10.9	9.9	20.5
		1.0	3.0	3.4	3.1	8.44
		3.0	0.5	0.7	0.6	-
		5.0	0.4	0.5	0.7	-
		Total $Mg C/day/m^2$	83.3	98.3	90.3	114.44
	March	Surface	9.2	8.2	5.9	58.01
		1.0	2.3	1.8	1.4	15.03
		3.0	0.4	0.4	0.3	-
		5.0	0.4	0.4	0.2	-
		Total $Mg C/day/m^2$	73.8	65.0	46.3	292.83
	April	Surface	19.7	20.7	23.3	26.12
		1.0	15.6	17.6	20.4	29.8
		3.0	2.4	2.8	3.2	-
		5.0	1.0	0.8	0.9	-
		Total $Mg C/day/m^2$	333.5	369.3	425.6	239.2
	May	Surface	34.9	47.8	47.3	101.7
		1.0	20.4	32.9	33.0	78.8
		3.0	4.4	4.5	6.5	-
		5.0	2.2	1.4	2.5	-
		Total $Mg C/day/m^2$	499.2	707.6	749.1	762.96
	June	Surface	34.2	28.0	31.3	25.02
		1.0	26.9	16.4	16.9	17.35
		3.0	2.6	2.3	2.4	-
		5.0	1.4	1.1	0.9	-
		Total $Mg C/day/m^2$	585.7	406.5	426.6	194.05

Table G.2 (continued)

Year	Month	Depth (meters)	Mg C/m <sup>3</sup> /hour			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1976	July	Surface	24.3	27.5	15.7	74.94
		1.0	23.4	20.8	13.4	66.58
		3.0	4.4	4.0	3.0	-
		5.0	0.7	1.0	0.9	-
	Total Mg C/day/m <sup>2</sup>		533.4	506.7	326.8	665.07
	August	Surface	20.4	21.8	23.1	46.73
		1.0	17.2	17.6	16.5	37.62
		3.0	4.2	4.2	4.2	-
		5.0	1.0	0.9	1.2	-
	Total Mg C/day/m <sup>2</sup>		382.0	392.2	386.2	354.29
	September	Surface	13.6	14.7	8.5	25.72
		1.0	11.6	12.7	6.3	23.22
		3.0	3.1	3.6	2.0	-
		5.0	0.6	0.8	0.5	-
	Total Mg C/day/m <sup>2</sup>		249.3	275.7	144.2	198.92
	October	Surface	4.2	4.3	3.5	4.48
		1.0	1.8	1.6	1.4	2.45
		3.0	0.3	0.3	0.3	-
		5.0	0.1	0.1	0.1	-
	Total Mg C/day/m <sup>2</sup>		40.8	39.0	33.7	25.59

Table G.3

PRIMARY PRODUCTIVITY RESULTS ( $C^{14}$  METHOD) FROM GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT - 1977<sup>2</sup>

Year	Month	Depth (meters)	$Mg\ C/m^3/hour$			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1977	February	Surface	49.1	36.1	31.4	22.86
		1.0	46.5	29.7	35.2	22.98
		3.0	10.7	11.4	12.6	-
		5.0	7.1	6.2	7.0	-
		Total $Mg\ C/day/m^2$	852.9	637.2	633.3	159.34
	March	Surface	76.0	61.8	a	a
		1.0	35.0	22.9		
		3.0	1.4	3.9		
		5.0	1.3	1.8		
		Total $Mg\ C/day/m^2$	942.9	745.2		
	April	Surface	6.8	5.5	5.4	58.73
		1.0	2.5	2.3	2.0	29.62
		3.0	0.4	0.3	0.2	-
		5.0	0.1	0.2	0.2	-
		Total $Mg\ C/day/m^2$	55.3	49.3	44.1	305.27
	May	Surface	a	a	a	a
		1.0				
		3.0				
		5.0				
		Total $Mg\ C/day/m^2$				
	June	Surface	55.1	73.0	74.5	262.14
		1.0	71.4	45.9	33.5	269.30
		3.0	10.3	6.3	14.6	-
		5.0	2.1	0.8	0.4	-
		Total $Mg\ C/day/m^2$	1364.3	1027.7	1014.2	2303.05

Table G.3 (continued)

Year	Month	Depth (meters)	Mg C/m <sup>3</sup> /hour			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1977	July	Surface	33.6	45.6	27.7	52.42
		1.0	9.9	19.5	8.4	13.47
		3.0	2.0	3.0	2.3	-
		5.0	0.4	2.6	1.8	-
	Total Mg C/day/m <sup>2</sup>		495.9	835.7	452.0	447.48
August	August	Surface	24.3	28.0	24.5	214.53
		1.0	24.4	22.8	22.6	208.06
		3.0	4.4	3.3	4.1	-
		5.0	0.5	0.3	1.0	-
	Total Mg C/day/m <sup>2</sup>		437.5	414.8	417.2	2593.38
September	September	Surface	28.6	35.8	45.4	37.71
		1.0	13.5	15.2	18.0	20.38
		3.0	1.4	1.4	1.4	-
		5.0	0.7	0.4	0.5	-
	Total Mg C/day/m <sup>2</sup>		625.2	719.4	868.4	476.52
October	October	Surface	13.6	8.3	11.6	34.88
		1.0	8.8	7.1	12.0	18.28
		3.0	2.8	1.5	2.3	-
		5.0	0.8	0.4	0.4	-
	Total Mg C/day/m <sup>2</sup>		200.3	138.4	218.0	201.54

a. No samples collected.

Table G.4

PRIMARY PRODUCTIVITY RESULTS ( $C^{14}$  METHOD) FROM GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT - 1976

Year	Month	Depth (meters)	$Mg\ C/m^3/hour$			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1976	February	Surface	21.8	16.7	17.3	19.64
		1.0	8.1	7.7	7.9	9.97
		3.0	2.0	1.7	2.5	-
		5.0	1.3	1.1	1.8	-
		Total $Mg\ C/day/m^2$	363.1	313.2	349.3	189.45
	March	Surface	25.7	24.4	21.0	11.71
		1.0	22.1	18.1	16.1	11.22
		3.0	4.2	3.7	3.5	-
		5.0	1.9	1.4	1.5	-
		Total $Mg\ C/day/m^2$	470.3	403.4	361.3	95.91
April	April	Surface	30.5	33.4	22.0	19.98
		1.0	19.4	18.1	14.5	12.34
		3.0	4.0	4.4	3.0	-
		5.0	2.1	2.4	1.8	-
		Total $Mg\ C/day/m^2$	510.9	517.7	382.0	151.94
	May	Surface	8.9	11.4	10.3	11.69
		1.0	1.8	2.0	2.2	3.15
		3.0	0.2	0.5	0.5	-
		5.0	0.2	0.2	0.4	-
		Total $Mg\ C/day/m^2$	90.9	116.0	117.3	87.75
June	June	Surface	10.3	8.6	7.9	11.86
		1.0	3.5	3.4	2.4	4.81
		3.0	0.4	0.4	0.4	-
		5.0	0.2	0.3	0.3	-
		Total $Mg\ C/day/m^2$	138.8	127.8	106.1	101.15

Table G.4 (continued)

Year	Month	Depth (meters)	Mg C/m <sup>3</sup> /hour			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1975	July	Surface	16.3	20.2	35.1	74.61
		1.0	16.1	12.0	15.7	66.56
		3.0	2.1	1.8	1.9	-
		5.0	0.4	0.4	0.5	-
	Total	Mg C/day/m <sup>2</sup>	300.9	263.5	371.3	577.31
	August	Surface	16.8	29.2	30.3	35.52
		1.0	19.0	21.4	1.0	28.43
		3.0	5.5	5.0	5.3	-
		5.0	1.3	1.1	1.1	-
	Total	Mg C/day/m <sup>2</sup>	391.8	461.8	467.2	255.56
	September	Surface	1.3	1.4	1.3	2.04
		1.0	0.4	0.3	0.4	0.71
		3.0	0.2	0.1	0.2	-
		5.0	0.1	0.1	0.1	-
	Total	Mg C/day/m <sup>2</sup>	12.3	10.4	13.7	10.52
	October	Surface	2.2	2.9	1.9	27.65
		1.0	1.3	1.7	1.0	17.32
		3.0	0.1	0.1	0.1	-
		5.0	0.04	0.1	0.1	-
	Total	Mg C/day/m <sup>2</sup>	26.4	34.0	2.7	179.12

Table G.5

PRIMARY PRODUCTIVITY RESULTS ( $C^{14}$  METHOD) FROM GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT - 1978.

Year	Month	Depth (meters)	Mg C/m <sup>3</sup> /hour			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1978	February <sup>a</sup>	Surface	-	-	-	-
		1.0	-	-	-	-
		3.0	-	-	-	-
		5.0	-	-	-	-
		Total Mg C/day/m <sup>2</sup>	-	-	-	-
	March	Surface	36.4	31.2	41.0	37.86
		1.0	38.4	28.0	31.1	37.94
		3.0	5.8	4.0	4.7	-
		5.0	1.5	2.7	0.9	-
		Total Mg C/day/m <sup>2</sup>	739.0	567.9	645.0	315.29
	April	Surface	2.9	3.9	3.3	19.52
		1.0	1.7	1.4	0.9	6.73
		3.0	0.2	0.2	0.1	-
		5.0	0.1	0.2	0.02	-
		Total Mg C/day/m <sup>2</sup>	103.7	111.0	73.9	311.20
	May	Surface	14.0	13.9	8.9	105.62
		1.0	15.5	11.8	9.5	108.47
		3.0	2.2	1.8	1.4	-
		5.0	0.7	1.0	0.4	-
		Total Mg C/day/m <sup>2</sup>	303.3	251.1	188.3	918.33
	June	Surface	25.3	96.5	62.3	58.73
		1.0	56.3	74.2	18.7	95.70
		3.0	7.0	6.0	4.3	-
		5.0	2.5	1.2	1.7	-
		Total Mg C/day/m <sup>2</sup>	1162.4	1765.9	710.9	789.39

Table G.5 (continued)

Year	Month	Depth (meters)	Mg C/m <sup>3</sup> /hour			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1978	July	Surface	2.8	17.4	23.1	11.11
		1.0	7.3	10.8	14.2	11.93
		3.0	3.6	2.8	3.2	-
		5.0	1.0	1.6	0.6	-
	Total Mg C/day/m <sup>2</sup>		216.8	335.9	416.6	120.63
August	August	Surface	5.4	40.8	19.3	271.66
		1.0	21.1	19.8	16.8	196.56
		3.0	3.1	9.3	7.7	-
		5.0	1.5	2.5	1.5	-
	Total Mg C/day/m <sup>2</sup>		397.4	674.9	490.3	2218.20
September	September	Surface	17.5	20.3	6.0	7.87
		1.0	14.0	10.9	4.0	9.05
		3.0	2.4	1.4	1.0	-
		5.0	0.8	0.6	0.3	-
	Total Mg C/day/m <sup>2</sup>		304.2	257.4	97.0	72.84
October	October	Surface	12.2	14.5	14.1	9.69
		1.0	7.5	8.3	7.7	5.25
		3.0	2.8	2.4	1.5	-
		5.0	1.2	0.8	0.7	-
	Total Mg C/day/m <sup>2</sup>		250.2	262.3	230.9	77.24

a. Samples not taken in February,

**APPENDIX H**  
**PERIPHYTON DISTRIBUTION**

## APPENDIX H

Table H.1

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1974  
 TRM 388.0

	Apr	May <sup>a</sup>	Jun	Jul	Aug	Sep	Total
<b>Chrysophyta</b>							
<u>Achnanthes</u>	X		X	X	X	X	5
<u>Coccconeis</u>	X		X	X	X	X	5
<u>Cymbella</u>	X		X	X	X	X	5
<u>Diatoma</u>					X	X	2
<u>Gomphonema</u>	X		X	X	X	X	5
<u>Melosira</u>	X		X	X	X	X	5
<u>Navicula</u>	X		X	X	X	X	5
<u>Nitzschia</u>						X	1
<u>Rhoicosphenia</u>				X	X		2
<u>Synedra</u>				X	X	X	3
<b>Total</b>	6	8	8	8	8		
<b>Chlorophyta</b>							
<u>Cosmarium</u>					X		1
<u>Scenedesmus</u>	X		X				2
<u>Stigeoclonium</u>			X				1
<b>Total</b>	1	2	1				
<b>Cyanophyta</b>							
<u>Dactylococcopsis</u>	X		X		X		3
<b>Total</b>	1	1	1				
<b>Total Number of Taxa</b>	8	11	9	9	8		
<b>Grand Total - 14</b>							

a. All substrates missing.

Table H.2

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1974  
 TRM 391.2

	Apr	May <sup>a</sup>	Jun	Jul	Aug	Sep	Total
<b>Chrysophyta</b>							
<u>Achnanthes</u>	X		X	X	X	X	5
<u>Cocconeis</u>	X		X	X	X	X	5
<u>Cymbella</u>	X		X	X	X	X	5
<u>Diatoma</u>					X	X	2
<u>Gomphonema</u>	X		X	X		X	4
<u>Melosira</u>	X		X	X	X	X	5
<u>Navicula</u>	X		X	X	X	X	5
<u>Nitzschia</u>	X						1
<u>Pinnularia</u>			X				1
<u>Pleurosigma</u>	X						1
<u>Rhoicosphenia</u>			X	X			2
<u>Synedra</u>		X	X	X		X	4
<b>Total</b>	9	9	8	6	8		
<b>Chlorophyta</b>							
<u>Cosmarium</u>			X	X			2
<u>Scenedesmus</u>	X		X				2
<u>Stigeoclonium</u>					X	X	2
<b>Total</b>	1	2	1	1	1		
<b>Cyanophyta</b>							
<u>Dactylococcus</u>				X	X		2
<b>Total</b>	10	11	10	8	9		
<b>Total Number of Taxa</b>	10	11	10	8	9		
<b>Grand Total - 16</b>							

a. All substrates missing.

Table H.3

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1974  
 TRM 396.8

	Apr	May	Jun	Jul <sup>a</sup>	Aug <sup>a</sup>	Sep	Total
<b>Chrysophyta</b>							
<u>Achnanthes</u>	X	X	X			X	4
<u>Cocconeis</u>	X	X	X			X	4
<u>Cymbella</u>	X	X	X			X	4
<u>Diatoma</u>				X			1
<u>Fragilaria</u>	X						1
<u>Gomphonema</u>	X	X	X			X	4
<u>Gyrosigma</u>		X					1
<u>Melosira</u>	X	X	X			X	4
<u>Navicula</u>	X	X	X			X	4
<u>Rhoicosphenia</u>				X			1
<u>Synedra</u>	X	X	X			X	4
<b>Total</b>	8	8	9			7	
<b>Chlorophyta</b>							
<u>Cosmarium</u>				X			1
<u>Scenedesmus</u>				X			1
<u>Stigeoclonium</u>		X	X			X	3
<b>Total</b>	1		3			1	
<b>Cyanophyta</b>							
<u>Merismopedia</u>			X	X			2
<b>Total</b>	1		1				
<b>Total Number of Taxa</b>	8	10	13			8	
<b>Grand Total - 15</b>							

a. All substrates missing.

Table H.4

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1974  
 TCM 0.2

	Apr	May	Jun	Jul	Aug <sup>a</sup>	Sep	Total
<b>Chrysophyta</b>							
<u>Achnanthes</u>	X	X	X	X		X	5
<u>Cocconeis</u>	X	X	X	X		X	5
<u>Cymbella</u>	X	X	X	X		X	5
<u>Diatoma</u>						X	1
<u>Gomphonema</u>	X	X				X	3
<u>Gyrosigma</u>	X	X				X	3
<u>Melosira</u>	X	X	X	X		X	5
<u>Navicula</u>	X	X	X	X			4
<u>Nitzschia</u>				X			1
<u>Pleurosigma</u>	X						1
<u>Rhoicosphenia</u>		X	X	X		X	1
<u>Synedra</u>		X	X	X		X	5
<b>Total</b>	9	8	8	6		8	
<b>Chlorophyta</b>							
<u>Chlamydomonas</u>			X				1
<u>Chodatella</u>	X						1
<u>Cosmarium</u>				X	X		3
<u>Oocystis</u>	X						1
<u>Scenedesmus</u>		X	X	X			3
<u>Stigeoclonium</u>			X			X	2
<b>Total</b>	2	2	3	2		2	
<b>Cyanophyta</b>							
<u>Dactylococcus</u>					X		1
<u>Lyngbya</u>			X				1
<u>Merismopedia</u>	X		X			X	3
<b>Total</b>	1		2	1		1	
<b>Euglenophyta</b>							
<u>Phacus</u>						X	1
<b>Total</b>						1	
<b>Total Number of Taxa</b>	12	10	13	9		12	
<b>Grand Total - 22</b>							

a. All substrates missing.

Table H.5

TEMPORAL AND SPATIAL DISTRIBUTION OF PERiphyton GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1975  
 TRM 388.0

	Apr	May	Jun <sup>a</sup>	Jul	Aug <sup>a</sup>	Sep	Total
<b>Chrysophyta</b>							
<u>Achnanthes</u>	X			X		X	3
<u>Cocconeis</u>	X	X		X		X	4
<u>Cymbella</u>	X	X		X		X	4
<u>Diatoma</u>	X					X	2
<u>Eunotia</u>					X		1
<u>Fragilaria</u>						X	1
<u>Gomphonema</u>	X	X				X	3
<u>Gyrosigma</u>						X	1
<u>Melosira</u>	X	X				X	3
<u>Navicula</u>	X	X		X		X	4
<u>Nitzschia</u>	X	X		X		X	4
<u>Pinnularia</u>						X	1
<u>Rhoicosphenia</u>						X	1
<u>Surirella</u>	X					X	2
<u>Synedra</u>	X			X		X	3
<u>Synura</u>		X					1
<u>Tabellaria</u>	X			X			2
<b>Total</b>	11	7	8		14		
<b>Chlorophyta</b>							
<u>Cosmarium</u>				X		X	2
<u>Dictyosphaerium</u>				X			1
<u>Mougeotia</u>						X	1
<u>Stigeoclonium</u>				X		X	2
<b>Total</b>				3		3	
<b>Cyanophyta</b>							
<u>Merismopedia</u>				X			1
<u>Oscillatoria</u>					X		1
<b>Total</b>				1		1	
<b>Total Number of Taxa</b>	11	7	12		18		
<b>Grand Total - 23</b>							

a. All substrates missing.

Table H.6

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1975  
 TRM 391.2

	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Chrysophyta</b>							
<u>Achnanthes</u>	X	X	X	X	X	X	6
<u>Cocconeis</u>	X	X	X	X	X	X	6
<u>Cymbella</u>	X	X	X	X	X	X	6
<u>Diatoma</u>	X	X			X	X	4
<u>Gomphonema</u>	X	X	X		X	X	5
<u>Gyrosigma</u>			X		X	X	3
<u>Melosira</u>	X	X	X	X	X	X	6
<u>Navicula</u>	X	X	X	X	X	X	6
<u>Nitzschia</u>	X	X	X	X	X	X	6
<u>Pinnularia</u>		X	X	X			3
<u>Rhoicosphenia</u>			X			X	2
<u>Stephanodiscus</u>	X						1
<u>Surirella</u>	X						1
<u>Synedra</u>	X	X	X	X	X	X	6
<u>Tabellaria</u>	X				X		2
<b>Total</b>	12	10	11	8	11	11	
<b>Chlorophyta</b>							
<u>Chodatella</u>		X					1
<u>Cosmarium</u>			X		X	X	3
<u>Dictyosphaerium</u>			X				1
<u>Mougeotia</u>					X	X	2
<u>Scenedesmus</u>			X		X	X	2
<u>Stigeoclonium</u>	X	X	X	X	X	X	5
<b>Total</b>	2	1	4	4	4	3	
<b>Cyanophyta</b>							
<u>Chroococcus</u>					X		1
<u>Merismopedia</u>					X		1
<u>Oscillatoria</u>	X	X	X	X	X	X	5
<b>Total</b>	1	1	1	3	1		
<b>Euglenophyta</b>							
<u>Euglena</u>	X						1
<u>Trachelomonas</u>			X				1
<b>Total</b>	1	1					
<b>Total Number of Taxa</b>	12	14	14	13	18	15	
<b>Grand Total - 26</b>							

Table H.7

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1975  
 TRM 396.8

	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Chrysophyta</b>							
<u>Achnanthes</u>	X	X	X	X	X	X	6
<u>Coccconeis</u>	X	X	X	X	X	X	6
<u>Cymbella</u>	X		X	X		X	4
<u>Diatoma</u>		X				X	2
<u>Eunotia</u>					X		1
<u>Fragilaria</u>						X	1
<u>Gomphonema</u>	X	X	X			X	4
<u>Gyrosigma</u>		X		X		X	3
<u>Melosira</u>	X	X	X	X		X	5
<u>Navicula</u>	X	X	X	X		X	5
<u>Nitzschia</u>	X	X	X	X		X	5
<u>Pinnularia</u>			X				1
<u>Pleurosigma</u>	X						1
<u>Rhizosolenia</u>	X						1
<u>Rhoicosphenia</u>				X		X	2
<u>Stephanodiscus</u>						X	1
<u>Surirella</u>	X						1
<u>Synedra</u>	X	X	X	X	X	X	6
<u>Tabellaria</u>	X				X		2
<b>Total</b>	13	9	9	8	5	13	
<b>Chlorophyta</b>							
<u>Chlamydomonas</u>		X					1
<u>Chodatella</u>		X					1
<u>Cosmarium</u>					X	X	2
<u>Mougeotia</u>					X	X	2
<u>Spirogyra</u>						X	1
<u>Stigeoclonium</u>		X	X		X	X	4
<b>Total</b>	3	1		3	4		
<b>Cyanophyta</b>							
<u>Chroococcus</u>		X				X	2
<u>Dactylococcopsis</u>	X	X					2
<u>Merismopedia</u>		X				X	2
<u>Oscillatoria</u>		X	X	X	X	X	5
<b>Total</b>	1	4	1	1	1	3	
<b>Euglenophyta</b>							
<u>Euglena</u>		X					1
<u>Trachelomonas</u>		X					1
<b>Total</b>		2					
<b>Total Number of Taxa</b>	14	18	11	9	9	20	
<b>Grand Total - 31</b>							

Table H.8

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1975  
 TCM 0.2

	Apr	May <sup>a</sup>	Jun	Jul	Aug	Sep <sup>a</sup>	Total
<b>Chrysophyta</b>							
<u>Achnanthes</u>	X		X	X	X		4
<u>Cocconeis</u>	X		X	X	X		4
<u>Cymbella</u>	X		X	X	X		4
<u>Diatoma</u>				X			1
<u>Eunotia</u>					X		1
<u>Fragilaria</u>			X				1
<u>Gomphonema</u>	X			X	X		3
<u>Gyrosigma</u>			X	X			2
<u>Melosira</u>	X		X	X	X		4
<u>Navicula</u>	X		X	X	X		4
<u>Nitzschia</u>			X		X		2
<u>Rhoicosphenia</u>			X				1
<u>Stephanodiscus</u>			X				1
<u>Surirella</u>	X			X	X		1
<u>Synedra</u>	X			X	X		4
<u>Tabellaria</u>			X		X		2
<b>Total</b>	8		11	11	9		
<b>Chlorophyta</b>							
<u>Cosmarium</u>			X	X			2
<u>Dictyosphaerium</u>				X			1
<u>Mougeotia</u>			X		X		2
<u>Scenedesmus</u>			X				1
<u>Stigeoclonium</u>			X	X	X		3
<b>Total</b>	2		5	2			
<b>Cyanophyta</b>							
<u>Chroococcus</u>					X		1
<u>Merismopedia</u>				X	X		2
<u>Oscillatoria</u>			X	X	X		3
<b>Total</b>	1		2	3			
<b>Total Number of Taxa</b>	8		14	18	14		
<b>Grand Total - 24</b>							

a. All substrates missing.

Table H.9

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1976  
 TRM 388.0

	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Chrysophyta</b>							
<u>Achnanthes</u>	X	X	X	X	X	X	6
<u>Cocconeis</u>	X	X	X	X	X	X	6
<u>Cymbella</u>	X	X	X	X	X	X	6
<u>Diatoma</u>	X	X					2
<u>Fragilaria</u>	X						1
<u>Gomphonema</u>	X	X	X	X	X	X	6
<u>Gyrosigma</u>				X	X		2
<u>Melosira</u>	X	X		X	X	X	5
<u>Navicula</u>	X	X	X	X	X	X	6
<u>Nitzschia</u>	X			X	X	X	4
<u>Stephanodiscus</u>	X	X					2
<u>Surirella</u>	X						1
<u>Synedra</u>	X	X		X	X		4
<u>Tabellaria</u>	X	X			X		3
Total	13	10	5	9	10	7	
<b>Chlorophyta</b>							
<u>Closterium</u>	X						1
<u>Cosmarium</u>	X	X		X	X		4
<u>Dictyosphaerium</u>	X	X			X		3
<u>Mougeotia</u>					X		2
<u>Oedogonium</u>	X	X			X		3
<u>Protococcus</u>	X	X	X	X			4
<u>Scenedesmus</u>	X						1
<u>Stigeoclonium</u>	X	X	X	X	X	X	6
<u>Ulothrix</u>	X						1
Total	8	5	2	3	5	2	
<b>Cyanophyta</b>							
<u>Anacystis</u>			X	X		X	3
<u>Dactylococcopsis</u>	X						1
<u>Merismopedia</u>	X					X	2
<u>Oscillatoria</u>		X	X	X			3
Total	2	1	2	2		2	
Total Number of Taxa	23	16	9	14	15	11	
Grand Total - 27							

Table H.10

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1976  
 TRM 391.2

	Apr	May	Jun	Jul	Aug	Sep	Total
<b>Chrysophyta</b>							
<u>Achnanthes</u>	X	X	X	X	X	X	6
<u>Cocconeis</u>	X	X	X	X	X	X	6
<u>Cymbella</u>	X	X	X	X	X	X	6
<u>Diatoma</u>	X	X					2
<u>Fragilaria</u>		X					1
<u>Gomphonema</u>	X	X	X	X	X	X	6
<u>Gyrosigma</u>			X		X		2
<u>Melosira</u>	X	X	X	X	X	X	6
<u>Navicula</u>	X	X	X	X	X	X	6
<u>Nitzschia</u>		X	X	X	X	X	5
<u>Stephanodiscus</u>		X	X				2
<u>Synedra</u>	X	X	X	X	X	X	6
<u>Tabellaria</u>		X		X	X	X	4
<b>Total</b>	8	12	10	9	10	9	
<b>Chlorophyta</b>							
<u>Chlamydomonas</u>	X				X		2
<u>Closterium</u>				X	X	X	1
<u>Cosmarium</u>	X			X	X	X	4
<u>Dictyosphaerium</u>		X			X		2
<u>Mougeotia</u>					X		1
<u>Oedogonium</u>	X	X					2
<u>Protococcus</u>	X	X	X	X			4
<u>Scenedesmus</u>				X			1
<u>Stigeoclonium</u>	X	X	X	X	X	X	6
<b>Total</b>	5	4	2	4	5	3	
<b>Cyanophyta</b>							
<u>Anacystis</u>			X	X	X	X	4
<u>Dactylococcopsis</u>	X						1
<u>Merismopedia</u>		X		X		X	3
<u>Oscillatoria</u>			X	X	X	X	4
<b>Total</b>	1	1	2	3	2	3	
<b>Total Number of Taxa</b>	14	17	14	16	17	15	
<b>Grand Total - 26</b>							

Table H.11

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1976  
TRM 396.8

	Apr <sup>a</sup>	May	Jun	Jul	Aug	Sep	Total
<b>Chrysophyta</b>							
<u>Achnanthes</u>	X	X	X	X	X	X	5
<u>Coccconeis</u>	X	X	X	X	X	X	5
<u>Cymbella</u>	X	X	X	X	X	X	5
<u>Gomphonema</u>	X	X	X	X	X		4
<u>Gyrosigma</u>		X	X	X	X	X	4
<u>Melosira</u>	X	X	X	X	X	X	5
<u>Navicula</u>	X	X	X	X	X	X	5
<u>Nitzschia</u>		X		X			2
<u>Synedra</u>			X		X	X	2
<u>Synura</u>				X	X		2
<u>Tabellaria</u>	X			X	X	X	3
<b>Total</b>	7	8	8	11	8		
<b>Chlorophyta</b>							
<u>Chlamydomonas</u>	X						1
<u>Cosmarium</u>		X	X	X			3
<u>Dictyosphaerium</u>				X	X		2
<u>Mougeotia</u>				X	X		2
<u>Oedogonium</u>	X						1
<u>Protococcus</u>	X	X	X				3
<u>Scenedesmus</u>	X						1
<u>Stigeoclonium</u>	X	X	X	X			4
<b>Total</b>	5	3	3	4	2		
<b>Cyanophyta</b>							
<u>Anacystis</u>		X		X	X		3
<u>Merismopedia</u>				X			1
<u>Oscillatoria</u>		X	X		X		3
<b>Total</b>		2	1	2	2		
<b>Euglenophyta</b>							
<u>Trachelomonas</u>					X		1
<b>Total</b>					1		
<b>Total Number of Taxa</b>	12	13	12	18	12		
<b>Grand Total - 23</b>							

a. All substrates missing.

Table H.12

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1976  
TCM 0.2

	Apr	May <sup>a</sup>	Jun	Jul	Aug	Sep	Total
<b>Chrysophyta</b>							
<u>Achnanthes</u>		X		X	X	X	5
<u>Chaetaceros</u>			X				1
<u>Cocconeis</u>		X		X	X	X	5
<u>Cymatopleura</u>			X				1
<u>Cymbella</u>		X		X	X	X	5
<u>Diatoma</u>		X					1
<u>Fragilaria</u>		X		X			3
<u>Comphonema</u>		X		X	X		4
<u>Gyrosigma</u>			X	X	X	X	4
<u>Melosira</u>		X		X	X	X	5
<u>Navicula</u>		X		X	X	X	5
<u>Nitzschia</u>		X		X	X	X	5
<u>Pleurosigma</u>		X				X	2
<u>Stephanodiscus</u>		X		X		X	2
<u>Synedra</u>		X		X	X	X	5
<u>Tabellaria</u>				X	X	X	3
<b>Total</b>		12	13	11	10	10	
<b>Chlorophyta</b>							
<u>Cosmarium</u>	X		X	X	X		4
<u>Crucigenia</u>				X			1
<u>Dictyosphaerium</u>	X						1
<u>Mougeotia</u>	X		X	X			3
<u>Oedogonium</u>	X			X	X	X	4
<u>Pediastrum</u>						X	1
<u>Protococcus</u>	X		X	X			3
<u>Scenedesmus</u>	X					X	2
<u>Stigeoclonium</u>	X		X	X	X	X	5
<b>Total</b>	7	4	6	3	4		
<b>Cyanophyta</b>							
<u>Anacystis</u>				X		X	3
<u>Lyngbya</u>						X	1
<u>Merismopedia</u>				X			1
<u>Oscillatoria</u>	X		X	X	X	X	5
<u>Spirulira</u>				X			1
<b>Total</b>	1	3	2	2	3		
<b>Pyrrhophyta</b>							
<u>Periodenium</u>					X		1
<b>Total</b>					1		
<b>Total Number of Taxa</b>	20	20	20	15	17		
<b>Grand Total - 31</b>							

a. All substrates missing.

Table H.13

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1977  
 TRM 388.0

	Apr <sup>a</sup>	May	Jun	Jul	Aug	Sep	Oct	Total
<b>Chrysophyta</b>								
<u>Achnanthes</u>	X	X	X	X	X	X	X	6
<u>Cocconeis</u>	X	X	X	X	X	X	X	6
<u>Cyclotella</u>			X					1
<u>Cymbella</u>	X		X	X	X	X	X	5
<u>Diatoma</u>					X		X	1
<u>Fragilaria</u>	X							1
<u>Gomphonema</u>	X	X	X	X	X	X	X	6
<u>Melosira</u>	X		X	X	X	X	X	5
<u>Navicula</u>	X	X	X	X	X	X	X	6
<u>Nitzschia</u>	X	X	X	X	X	X		5
<u>Stephanodiscus</u>	X			X				2
<u>Synedra</u>	X	X	X	X			X	5
<u>Tabellaria</u>			X					1
Total	10	6	10	9	8	7		
<b>Chlorophyta</b>								
<u>Closterium</u>	X			X				2
<u>Cosmarium</u>			X	X		X		3
<u>Mougeotia</u>	X			X		X		2
<u>Oedogonium</u>				X		X		2
<u>Protococcus</u>	X	X	X		X		X	4
<u>Scenedesmus</u>					X			1
<u>Spirogyra</u>					X	X		2
<u>Stigeoclonium</u>	X	X	X	X	X	X	X	6
<u>Ulothrix</u>					X			1
Total	4	2	3	8	5	1		
<b>Cyanophyta</b>								
<u>Anacystis</u>			X					1
<u>Lyngbya</u>	X	X	X	X				4
<u>Merismopedia</u>						X		1
<u>Oscillatoria</u>			X	X				2
Total	1	3	1	2	1			
Total Number of Taxa	15	11	14	19	14	8		
Grand Total - 26								

a. All substrates missing.

Table H.14

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1977  
 TRM 391.2

	Apr <sup>a</sup>	May	Jun	Jul	Aug	Sep <sup>a</sup>	Total
<b>Chrysophyta</b>							
<u>Achnanthes</u>		X	X	X	X		4
<u>Cocconeis</u>		X	X	X	X		4
<u>Cymbella</u>		X	X	X	X		4
<u>Diatoma</u>		X					1
<u>Fragilaria</u>		X			X		2
<u>Gomphonema</u>		X	X	X	X		4
<u>Melosira</u>		X	X	X	X		4
<u>Navicula</u>		X	X	X	X		4
<u>Nitzschia</u>		X	X	X	X		4
<u>Pinnularia</u>					X		1
<u>Rhoicosphenia</u>			X				1
<u>Stephanodiscus</u>		X					1
<u>Surirella</u>		X					1
<u>Synedra</u>		X	X	X	X		4
<u>Tabellaria</u>				X			1
Total		12	9	9	10		
<b>Chlorophyta</b>							
<u>Carteria</u>	X						1
<u>Chlamydomonas</u>			X				1
<u>Closterium</u>				X	X		1
<u>Cosmarium</u>				X	X		2
<u>Dictyosphaerium</u>			X				1
<u>Mougeotia</u>				X	X		2
<u>Pediastrum</u>				X			1
<u>Protococcus</u>			X				1
<u>Scenedesmus</u>	X			X			2
<u>Spirogyra</u>				X			1
<u>Stigeoclonium</u>	X	X	X		X		4
<u>Ulothrix</u>					X		1
Total		3	3	7	5		
<b>Cyanophyta</b>							
<u>Anacystis</u>			X				1
<u>Chroococcus</u>					X		1
<u>Dactylococcopsis</u>	X						1
<u>Lyngbya</u>	X	X		X	X		4
<u>Oscillatoria</u>			X		X		2
<u>Oscillatoria (spiral)</u>	X						1
Total		3	3	1	3		
Total Number of Taxa	18	15	17	18			
Grand Total - 33							

a. All substrates missing.

Table H.15

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1977  
 TRM 396.8

	Apr	May	Jun	Jul	Aug	Sep <sup>a</sup>	Oct	Total
<b>Chrysophyta</b>								
<u>Achnanthes</u>	X	X	X	X	X		X	6
<u>Cocconeis</u>	X	X	X	X	X		X	6
<u>Cymbella</u>	X	X	X	X	X		X	6
<u>Diatoma</u>	X	X						2
<u>Fragilaria</u>				X				1
<u>Gomphonema</u>	X	X	X	X	X		X	6
<u>Melosira</u>	X	X	X	X	X		X	6
<u>Navicula</u>	X	X	X	X	X		X	6
<u>Nitzschia</u>	X	X	X	X	X		X	6
<u>Pinnularia</u>					X			1
<u>Stephanodiscus</u>		X						1
<u>Surirella</u>	X							1
<u>Synedra</u>	X	X	X	X	X		X	6
<u>Tabellaria</u>	X							1
<b>Total</b>	11	10	8	9	9		8	
<b>Chlorophyta</b>								
<u>Cosmarium</u>		X			X			2
<u>Dictyosphaerium</u>			X					1
<u>Mougeotia</u>		X		X	X			3
<u>Protococcus</u>		X	X	X				3
<u>Scenedesmus</u>		X						1
<u>Spirogyra</u>				X	X			2
<u>Stigeoclonium</u>		X	X	X			X	4
<u>Ulothrix</u>							X	1
<b>Total</b>	5	3	4	3			2	
<b>Cyanophyta</b>								
<u>Lyngbya</u>			X	X	X		X	4
<u>Oscillatoria</u>		X	X					2
<b>Total</b>	1	2	1	1			1	
<b>Euglenophyta</b>								
<u>Trachelomonas</u>					X			1
<b>Total</b>					1			
<b>Total Number of Taxa</b>	11	16	13	15	13		11	
<b>Grand Total - 25</b>								

a. All substrates missing.

Table H.16

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1977  
TCM 0.2

	Apr	May	Jun	Jul	Aug	Sep <sup>a</sup>	Oct	Total
<b>Chrysophyta</b>								
<u>Achnanthes</u>	X	X	X	X	X		X	6
<u>Cocconeis</u>	X	X	X	X	X		X	6
<u>Cymbella</u>	X	X	X	X	X		X	6
<u>Diatoma</u>	X			X				2
<u>Fragilaria</u>	X		X	X	X			4
<u>Gomphonema</u>	X	X	X	X	X			5
<u>Gryosigma</u>					X			1
<u>Melosira</u>	X	X	X	X	X			5
<u>Navicula</u>	X	X	X	X	X		X	6
<u>Nitzschia</u>	X	X	X	X	X			5
<u>Stephanodiscus</u>		X						1
<u>Synedra</u>	X	X	X	X	X		X	6
<u>Tabellaria</u>	X							1
Total	11	9	9	10	10		5	
<b>Chlorophyta</b>								
<u>Boytryococcus</u>	X							1
<u>Closteriopsis</u>	X							1
<u>Closterium</u>	X							1
<u>Cosmarium</u>			X		X			2
<u>Mougeotia</u>	X			X	X			3
<u>Oedogonium</u>	X	X	X	X			X	5
<u>Protococcus</u>			X	X				2
<u>Scenedesmus</u>	X			X				2
<u>Spirogyra</u>	X				X			2
<u>Stigeoclonium</u>	X	X	X	X	X		X	6
<u>Ulothrix</u>							X	1
Total	8	2	4	5	4		3	
<b>Cyanophyta</b>								
<u>Dactylococcopsis</u>	X		X					2
<u>Lyngbya</u>	X		X	X	X			4
<u>Oscillatoria</u>			X		X			2
<u>Oscillatoria (spiral)</u>	X							1
Total	3		3	1	2			
Total Number of Taxa	22	11	16	16	16		8	
Grant Total - 28								

a. All substrates missing.

Table H.17

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1978  
 TRM 388.0

	Apr	May <sup>a</sup>	Jun	Jul	Aug	Sep	Oct	Total
<b>Chrysophyta</b>								
<u>Achnanthes</u>	X		X	X	X	X	X	6
<u>Coccconeis</u>	X		X	X	X	X	X	6
<u>Cymbella</u>	X		X	X	X	X	X	6
<u>Diatoma</u>	X				X	X	X	4
<u>Eunotia</u>						X		1
<u>Gomphonema</u>	X		X	X	X	X	X	6
<u>Melosira</u>	X		X	X	X	X	X	6
<u>Navicula</u>	X		X	X	X	X	X	6
<u>Nitzschia</u>	X		X	X	X	X	X	6
<u>Surirella</u>	X							1
<u>Synedra</u>	X		X	X	X	X	X	6
Total	10	8	8	9	10	9		
<b>Chlorophyta</b>								
<u>Ankistrodesmus</u>	X							1
<u>Chlamydomonas</u>		X						1
<u>Chlorella</u>	X							1
<u>Cosmarium</u>					X			1
<u>Gonium</u>	X							1
<u>Mougeotia</u>					X	X	X	3
<u>Oedogonium</u>	X				X	X		3
<u>Protococcus</u>	X		X				X	3
<u>Scenedesmus</u>	X							1
<u>Schizomeris</u>					X			1
<u>Spirogyra</u>					X			1
<u>Stigeoclonium</u>	X		X	X	X	X	X	6
<u>Trochiscia</u>	X							1
Total	8	3	1	5	5	2		
<b>Cyanophyta</b>								
<u>Anacystis</u>	X		X			X		3
<u>Lyngbya</u>		X	X	X	X	X	X	5
<u>Oscillatoria</u>		X	X					2
Total	1	3	2	1	2	1		
Total Number of Taxa	19	14	11	15	17	12		
Grand Total - 27								

a. All substrates missing.

Table H.18

TEMPORAL AND SPATIAL DISTRIBUTION OF PERiphyton GENERA  
BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1978  
TRM 391.2

Table H.19

TEMPORAL AND SPATIAL DISTRIBUTION OF PERiphyton GENERA  
BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1978  
TRM 396.8

Table H.20

TEMPORAL AND SPATIAL DISTRIBUTION OF PERIPHYTON GENERA  
 BELLEFONTE NUCLEAR PLANT, GUNTERSVILLE RESERVOIR - 1978  
 TCM 0.2

	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
<b>Chrysophyta</b>								
<u>Achnanthes</u>	X	X	X	X	X	X	X	7
<u>Coccconeis</u>	X	X	X	X	X	X	X	7
<u>Cymbella</u>	X	X	X	X	X	X	X	7
<u>Diatoma</u>	X	X			X	X		4
<u>Eunotia</u>						X		1
<u>Fragilaria</u>	X							1
<u>Gomphonema</u>	X	X	X	X	X	X	X	7
<u>Gryosigma</u>	X					X		2
<u>Melosira</u>	X	X	X	X	X	X	X	7
<u>Navicula</u>	X	X	X	X	X	X	X	7
<u>Nitzschia</u>	X	X	X		X	X	X	6
<u>Rhoicosphenia</u>						X		1
<u>Surirella</u>	X							1
<u>Synedra</u>	X	X	X		X	X	X	6
<b>Total</b>	12	9	8	6	9	12	8	
<b>Chlorophyta</b>								
<u>Ankistrodesmus</u>	X							1
<u>Chlamydomonas</u>	X	X	X					3
<u>Chlorella</u>	X							1
<u>Mougeotia</u>	X				X	X	X	4
<u>Oedogonium</u>	X	X	X	X	X			5
<u>Oocystis</u>	X						X	2
<u>Pandorina</u>	X							1
<u>Protococcus</u>	X	X						2
<u>Scenedesmus</u>	X	X	X			X		4
<u>Schroederia</u>	X							1
<u>Stigeoclonium</u>	X	X	X	X	X	X	X	7
<u>Unidentified</u>					X			1
<b>Total</b>	9	7	4	2	3	4	3	
<b>Cyanophyta</b>								
<u>Anacystis</u>				X				1
<u>Chroococcus</u>	X							1
<u>Dactylococcopsis</u>	X	X						2
<u>Lyngbya</u>	X		X	X	X	X	X	6
<u>Oscillatoria</u>	X	X		X				3
<b>Total</b>	4	2	2	2	1	1	1	

Table H.20 (continued)

**APPENDIX I**  
**PERIPHYTON ENUMERATION**

## APPENDIX I

Table I.1

PERIPHERYTON ENUMERATION OF MAJOR DIVISIONS, BELLEFONTE NUCLEAR PLANT  
APRIL THROUGH SEPTEMBER 1974

Year	Month	Division	Number/m <sup>2</sup> x 10 <sup>6</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1974	April	Chrysophyta	388.1	459.3	221.2	1815.2
		Chlorophyta	0.7	0.3	-	0.9
		Cyanophyta	0.3	-	-	0.7
		Station total	389.1	459.6	221.2	1816.8
	May	Chrysophyta	a	a	576.6	2203.2
		Chlorophyta			65.7	2.5
		Cyanophyta			1.0	-
	Station total		a	a	643.3	2205.7
	June	Chrysophyta	2782.2	3081.7	2622.8	324.1
		Chlorophyta	82.8	1.0	339.0	96.3
		Cyanophyta	0.7	-	4.6	17.7
		Station total	2865.7	3082.7	2966.4	438.1
	July	Chrysophyta	381.6	414.6	a	303.4
		Chlorophyta	7.2	7.6		2.3
		Cyanophyta	-	0.7		0.3
		Station total	388.9	422.9	a	306.0
	August	Chrysophyta	285.9	104.5	a	a
		Chlorophyta	462.4	82.2		
		Cyanophyta	4.4	2.8		
		Station total	752.7	189.5	a	a
	September	Chrysophyta	307.1	701.7	548.0	245.7
		Chlorophyta	-	102.7	205.4	33.2
		Cyanophyta	-	-	-	1.3
		Euglenophyta	-	-	-	0.2
		Station total	307.1	804.4	753.4	280.4

a. All substrates missing.

Table I.2

 PERIPHERYTON ENUMERATION OF MAJOR DIVISIONS, BELLEFONTE NUCLEAR PLANT  
 APRIL THROUGH SEPTEMBER 1975

Year	Month	Division	Number/m <sup>2</sup> x 10 <sup>6</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1975	April	Chrysophyta	331.1	552.0	494.5	6164.7
		Cyanophyta	-	-	0.7	-
	May	Station total	331.1	552.0	495.2	6164.7
		Chrysophyta	3387.1	4638.4	5300.9	a
	June	Chlorophyta	-	70.6	160.2	
		Cyanophyta	-	28.0	147.0	
		Euglenophyta	-	0.6	2.2	
		Station total	3387.1	4737.6	5610.3	a
	July	Chrysophyta	a	4412.7	3667.8	729.4
		Chlorophyta		32.9	46.0	62.4
		Cyanophyta		9.4	7.4	39.4
		Euglenophyta		0.3	-	-
	August	Station total	a	4455.3	3721.2	831.2
		Chrysophyta	925.8	1092.9	306.2	882.8
	September	Chlorophyta	63.5	28.2	-	53.2
		Cyanophyta	6.5	9.8	9.8	55.2
		Station total	995.8	1130.9	316.0	991.2
	August	Chrysophyta	a	726.4	670.8	333.9
		Chlorophyta		37.5	25.9	12.1
		Cyanophyta		17.7	16.4	20.1
		Station total	a	781.6	713.1	366.1
	September	Chrysophyta	348.6	453.1	322.8	a
		Chlorophyta	59.3	331.5	192.7	
		Cyanophyta	21.2	22.7	83.6	
		Station total	429.1	807.3	599.1	a

a. All substrates missing.

Table I.3

 PERIPHERYTON ENUMERATION OF MAJOR DIVISIONS, BELLEFONTE NUCLEAR PLANT  
 APRIL THROUGH SEPTEMBER 1976

Year	Month	Division	Number/m <sup>2</sup> x 10 <sup>6</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1976	April	Chrysophyta	677.9	1286.2	a	320.7
		Chlorophyta	70.1	60.3		47.6
		Cyanophyta	7.7	0.5		0.8
	May	Station total	755.7	1347.0	a	369.1
		Chrysophyta	1805.8	1600.7	1596.7	a
	June	Chlorophyta	94.7	92.8	204.3	
		Cyanophyta	0.9	2.5	-	
		Station total	1901.4	1696.0	1802.0	a
	July	Chrysophyta	3026.7	3732.4	4121.8	3180.1
		Chlorophyta	3262.5	916.4	3494.0	887.9
		Cyanophyta	57.1	68.8	77.4	31.5
	August	Station total	5296.3	4717.6	7693.2	4099.5
		Chrysophyta	2309.2	1697.3	3425.9	224.4
	September	Chlorophyta	859.0	1300.9	108.4	14.4
		Cyanophyta	61.4	3016.6	0.8	6.9
		Pyrrhophyta	-	-	-	0.2
	September	Station total	3229.6	6014.8	3535.1	245.9
		Chrysophyta	1796.0	1913.2	578.9	555.7
	September	Chlorophyta	844.8	698.1	178.8	170.6
		Cyanophyta	-	159.1	77.3	43.6
		Euglenophyta	-	-	0.2	-
	September	Station total	2640.8	2770.4	835.2	769.9
		Chrysophyta	1786.5	2853.1	639.4	736.8
	September	Chlorophyta	461.4	436.6	80.6	171.3
		Cyanophyta	276.9	328.1	22.9	58.6
	September	Station total	2524.8	3617.8	742.9	966.7

a. All substrates missing.

Table I.4

 PERIPHERYTON ENUMERATION OF MAJOR DIVISIONS, BELLEFONTE NUCLEAR PLANT  
 APRIL THROUGH OCTOBER 1977

Year	Month	Division	Number/m <sup>2</sup> x 10 <sup>6</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1977	April	Chrysophyta	a	a	774.4	1174.6
		Chlorophyta			-	146.8
		Cyanophyta			-	1035.5
		Station total	a	a	774.4	2356.9
	May	Chrysophyta	2234.7	1191.9	2025.9	3153.5
		Chlorophyta	24.2	1.4	3.0	108.2
		Cyanophyta	202.3	1650.4	27.2	-
		Station total	2461.2	2843.7	2056.1	3261.7
	June	Chrysophyta	627.8	676.0	1043.2	227.1
		Chlorophyta	1006.7	960.0	642.3	128.0
		Cyanophyta	492.5	768.7	908.2	0.2
		Station total	2127.0	2404.7	2593.7	3617.0
	July	Chrysophyta	103.6	56.5	91.2	58.3
		Chlorophyta	55.6	60.3	49.0	65.0
		Cyanophyta	34.9	4.7	15.5	1.0
		Station total	194.1	121.5	155.7	124.3
	August	Chrysophyta	153.9	181.7	82.1	110.0
		Chlorophyta	166.2	246.3	80.8	444.9
		Cyanophyta	800.8	1566.0	213.0	1474.6
		Station total	1120.9	1994.0	375.9	2029.5
	September	Chrysophyta	580.1	a	a	a
		Chlorophyta	253.0			
		Cyanophyta	1.3			
		Station total	834.4	a	a	a
	October	Chrysophyta	1028.9	a	346.2	339.5
		Chlorophyta	141.2		449.4	94.6
		Cyanophyta	-		61.4	-
		Station total	1170.1	a	857.0	434.1

a. All substrates missing.

Table I.5

PERIPHERYTON ENUMERATION OF MAJOR DIVISIONS, BELLEFONTE NUCLEAR PLANT  
APRIL THROUGH OCTOBER 1978

Year	Month	Division	Number/m <sup>2</sup> x 10 <sup>6</sup>			
			TRM 388.0	TRM 391.2	TRM 396.8	TCM 0.2
1978	April	Chrysophyta	553.3	421.2	159.1	911.3
		Chlorophyta	23.2	15.8	0.4	1402.5
		Cyanophyta	1.8	31.5	1.7	51.8
		Euglenophyta	-	-	-	0.2
	Station total		578.3	468.5	161.2	2365.5
May	May	Chrysophyta	a	737.1	823.6	2199.3
		Chlorophyta		142.1	206.9	191.1
		Cyanophyta		19.4	19.4	10.2
	Station total		a	898.6	1049.9	2400.6
	June	Chrysophyta	3450.0	1412.9	691.9	2504.8
		Chlorophyta	2348.0	734.0	1271.4	1402.4
		Cyanophyta	1848.0	432.6	324.2	1089.6
	Station total		7646.0	2579.5	2287.5	4996.8
July	July	Chrysophyta	88.0	48.0	77.5	49.6
		Chlorophyta	47.2	51.2	41.7	55.2
		Cyanophyta	15.1	3.9	13.2	0.8
	Station total		150.3	103.1	132.4	105.6
	August	Chrysophyta	217.1	233.0	282.3	381.4
		Chlorophyta	130.0	106.2	30.3	111.5
		Cyanophyta	206.5	0.3	-	1067.3
	Station total		553.6	339.5	312.6	1560.2
September	September	Chrysophyta	981.5	905.8	864.5	196.2
		Chlorophyta	546.0	300.7	438.8	24.8
		Cyanophyta	89.3	268.2	603.4	155.6
	Station total		1616.8	1474.7	1906.7	376.6
	October	Chrysophyta	247.3	243.2	243.1	101.0
		Chlorophyta	197.4	98.0	83.2	204.0
		Cyanophyta	115.4	117.8	121.5	102.4
	Station total		560.1	459.0	447.8	407.4

a. All substrates missing.

**APPENDIX J**  
**ZOOPLANKTON DISTRIBUTION**

## APPENDIX J

Table J.1

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 388.0 - FEBRUARY-OCTOBER 1974

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotatoria</b>									
<u>Asplanchna amphora</u>						X			
<u>Asplanchna priodonta</u>	X	X	X	X	X	X	X	X	X
<u>Brachionus angularis</u>				X	X	X	X	X	X
<u>Brachionus bidentata</u>				X				X	
<u>Brachionus budapestinensis</u>					X	X	X	X	X
<u>Brachionus caudatus</u>						X	X	X	X
<u>Brachionus calyciflorus</u>	X		X	X		X		X	
<u>Brachionus quadridentatus</u>				X	X	X		X	X
<u>Cephalodella</u> sp.		X	X	X					
<u>Colletheeca pelagica</u>	X	X	X	X					X
<u>Conochilooides</u> sp.		X	X	X		X		X	
<u>Conochilus unicornis</u>	X		X	X	X	X		X	X
<u>Ephiphantes macrourus</u>					X				
<u>Euchlanis</u> sp.	X	X	X	X	X				X
<u>Filinia</u> sp.					X				X
<u>Hexarthra mira</u>				X					X
<u>Keratella crassa</u>	X	X	X	X	X	X	X	X	X
<u>Keratella earlinae</u>				X	X				X
<u>Platyias patulus</u>					X	X			X
<u>Ploesoma truncata</u>	X		X	X	X	X	X		X
<u>Polyarthra</u> sp.	X		X	X	X	X		X	X
<u>Rotaria neptunia</u>		X							
<u>Synchaeta stylata</u>	X	X	X	X	X	X	X	X	
<u>Trichocerca</u> sp.						X	X		X
<u>Trichotria truncata</u>						X			
Total	9	9	12	17	12	16	9	14	14
<b>Cladocera</b>									
<u>Alona quadrangularis</u>					X				
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X	X	X
<u>Daphnia (immature)</u>	X	X	X	X	X				
<u>Daphnia parvula</u>	X			X	X	X	X		X
<u>Daphnia pulex</u>					X				
<u>Daphnia retrocurva</u>		X		X	X	X	X	X	X
<u>Diaphanosoma leuchtenbergianum</u>			X	X	X	X	X		X
<u>Ilyocryptus spinifer</u>				X					
<u>Leptodora kindtii</u>					X		X	X	X
<u>Scapholebris kingi</u>				X					
<u>Sida crystallina</u>				X	X		X		
<u>Simocephalus serrulatus</u>				X					
Total	3	3	3	10	8	4	6	5	5

Table J.1 (continued)

Table J.2

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 391.2 - FEBRUARY-OCTOBER 1974

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotatoria</b>									
<u>Asplanchna amphora</u>							X		
<u>Asplanchna priodonta</u>	X	X	X	X	X	X	X	X	X
<u>Brachionus angularis</u>	X	X		X	X	X	X	X	X
<u>Brachionus bidentata</u>				X				X	
<u>Brachionus budapestinensis</u>					X	X	X	X	X
<u>Brachionus caudatus</u>					X	X	X	X	X
<u>Brachionus calyciflorus</u>	X		X	X		X		X	X
<u>Brachionus quadridentatus</u>					X				
<u>Cephalodella</u> sp.	X	X							
<u>Colletheca pelagica</u>	X	X	X	X		X			X
<u>Conochiloides</u> sp.	X	X	X	X	X	X			
<u>Conochilus unicornis</u>	X		X	X	X	X			X
<u>Ephiphantes macrourus</u>	X	X							
<u>Euchlanis</u> sp.	X	X	X	X			X		
<u>Hexarthra mira</u>								X	
<u>Kellicottia bostoniensis</u>		X							
<u>Keratella cochlearis</u>				X	X	X			
<u>Keratella crassa</u>	X	X	X	X	X	X	X	X	X
<u>Keratella earlinae</u>					X	X			
<u>Platyias patulus</u>						X	X		X
<u>Ploesoma truncata</u>				X	X	X	X	X	X
<u>Polyarthra</u> sp.	X	X	X	X	X	X			X
<u>Rotaria neptunia</u>		X							
<u>Synchaeta stylata</u>	X	X	X	X	X	X	X	X	X
<u>Trichocerca</u> sp.				X	X	X	X		
Total	12	11	11	16	14	16	9	10	10
<b>Cladocera</b>									
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X	X	X
<u>Ceriodaphnia</u> (immature)					X				
<u>Ceriodaphnia lacustris</u>							X		
<u>Ceriodaphnia lauticaudata</u>						X			
<u>Daphnia</u> (immature)	X	X		X	X		X		
<u>Daphnia parvula</u>				X		X	X		X
<u>Daphnia pulex</u>				X					
<u>Daphnia retrocurva</u>				X	X	X	X	X	X
<u>Diaphanosoma leuchtenbergianum</u>				X	X	X	X	X	X
<u>Leptodora kindtii</u>				X	X			X	
<u>Leydigia quadrangularis</u>					X				

Table J.2 (continued)

Table J.3

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEVILLE NUCLEAR PLANT  
 TRM 396.8 - FEBRUARY-OCTOBER 1974

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotatoria</b>									
<u>Asplanchna priodonta</u>	X	X	X	X	X	X	X	X	
<u>Brachionus angularis</u>				X	X	X	X	X	X
<u>Brachionus bidentata</u>				X					
<u>Brachionus budapestinensis</u>					X	X	X	X	X
<u>Brachionus caudatus</u>						X	X	X	X
<u>Brachionus calyciflorus</u>	X		X	X					X
<u>Brachionus quadridentatus</u>				X	X				
<u>Cephalodella</u> sp.	X	X	X						
<u>Colletheeca pelagica</u>	X	X	X	X					
<u>Conochilooides</u> sp.	X	X	X	X	X	X			
<u>Conochilus unicornis</u>	X		X	X	X	X			
<u>Ephiphanes macrourus</u>	X	X	X	X					X
<u>Euchlanis</u> sp.	X	X	X	X					
<u>Filinia</u> sp.				X					
<u>Hexarthra mira</u>							X		
<u>Kellicottia bostoniensis</u>	X								
<u>Keratella cochlearis</u>	X	X	X	X	X				
<u>Keratella crassa</u>	X	X	X	X	X	X	X	X	X
<u>Keratella earlinae</u>				X	X	X			
<u>Keratella quadrata</u>			X						
<u>Lecane</u> sp.	X								
<u>Platyias patulus</u>						X			
<u>Ploesoma truncata</u>	X		X	X	X	X	X	X	
<u>Polyarthra</u> sp.	X		X	X	X	X			X
<u>Rotaria neptunia</u>			X						
<u>Synchaeta stylata</u>	X	X	X	X	X	X	X	X	
<u>Trichocerca</u> sp.					X			X	X
<u>Trichotria truncata</u>									X
Total	15	10	15	15	14	11	7	11	6
<b>Cladocera</b>									
<u>Alona</u> (immature)	X								
<u>Alona quadrangularis</u>	X								
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X	X	X
<u>Daphnia</u> (immature)	X		X	X	X				X
<u>Daphnia parvula</u>	X			X					X
<u>Daphnia retrocurva</u>				X	X	X	X	X	X
<u>Diaphanosoma leuchtenbergianum</u>				X	X	X	X	X	X
<u>Ilyocryptus spinifer</u>						X			

Table J.3 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Cladocera (continued)</b>									
<u>Leptodora kindtii</u>				X	X			X	
<u>Leydigia quadrangularis</u>				X					X
<u>Moina micrura</u>								X	
<u>Pleuroxus denticulatus</u>	X		X				X	X	
<u>Scapholebris kingi</u>					X	X			
<u>Simocephalus serrulatus</u>	X			X					
Total	7	1	5	7	7	4	4	5	4
<b>Copepoda</b>									
<u>Attheyella illinoiensis</u>	X								
<u>Cyclops bicuspidatus thomasi</u>	X	X	X	X	X				
<u>Cyclops vericans rubellus</u>	X		X	X					
<u>Cyclops vernalis</u>	X			X	X	X	X	X	X
<u>Diaptomus mississippiensis</u>				X	X	X	X	X	X
<u>Diaptomus pallidus</u>	X			X	X			X	X
<u>Diaptomus reighardi</u>				X	X				
<u>Diaptomus sanguineus</u>			X						
<u>Ergasilus</u> sp.					X			X	
<u>Eucyclops agilis</u>	X		X						
<u>Macrocylops albidus</u>				X	X			X	X
<u>Mesocyclops edax</u>	X	X	X	X	X	X		X	X
<u>Nitocra lacustris</u>					X	X			
<u>Tropocyclops prasinus</u>		X	X						
Calanoida copepodids	X	X	X	X	X	X	X	X	X
Cyclopoida copepodids	X	X	X	X	X	X	X	X	X
Harpacticoida copepodids					X				
Nauplii	X	X	X	X	X	X	X	X	X
Total	10	6	11	11	12	7	8	6	8
Total Number of Taxa	32	17	31	33	33	22	19	22	18

Table J.4

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 388.0 - FEBRUARY-OCTOBER 1975

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotatoria</b>									
<u>Asplanchna amphora</u>				X					
<u>Asplanchna priodonta</u>	X	X	X	X	X	X	X	X	X
<u>Brachionus angularis</u>	X		X	X	X	X	X	X	X
<u>Brachionus bidentata</u>						X			
<u>Brachionus budapestinensis</u>			X	X		X	X		
<u>Brachionus calyciflorus</u>		X				X	X	X	X
<u>Brachionus caudatus</u>	X		X		X	X	X	X	X
<u>Brachionus quadridentatus</u>			X	X	X				X
<u>Collotheaca pelagica</u>		X	X		X				X
<u>Conochilooides sp.</u>			X	X		X	X		
<u>Conochilus unicornis</u>			X			X		X	
<u>Euchlanis sp.</u>	X	X			X			X	X
<u>Filinia maior</u>						X			
<u>Hexarthra mira</u>				X				X	
<u>Kellicottia bostoniensis</u>	X								
<u>Keratella cochlearis</u>	X	X	X			X			
<u>Keratella crassa</u>	X	X	X	X	X	X	X	X	X
<u>Keratella earlinae</u>	X	X	X						
<u>Keratella quadrata</u>	X								
<u>Lecane sp.</u>						X	X	X	X
<u>Monostyla sp.</u>					X	X	X		
<u>Platyias patulus</u>				X	X	X			X
<u>Ploesoma hudsoni</u>	X			X			X		
<u>Ploesoma truncata</u>				X	X		X	X	X
<u>Polyarthra sp.</u>	X		X	X		X		X	X
<u>Rotaria neptunia</u>	X								X
<u>Synchaeta stylata</u>	X	X	X	X	X	X	X	X	X
<u>Trichocerca sp.</u>			X	X				X	
<u>Trichotria sp.</u>	X		X						X
Total	4	12	10	17	9	15	12	15	16
<b>Cladocera</b>									
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X	X	X
<u>Camptocercus rectirostris</u>						X		X	X
<u>Ceriodaphnia lacustris</u>						X			
<u>Chydorus sp.</u>			X	X			X	X	X
<u>Daphnia (immature)</u>					X		X		
<u>Daphnia galeata mendotae</u>							X		
<u>Daphnia parvula</u>					X		X		
<u>Daphnia retrocurva</u>					X		X	X	X
<u>Diaphanosoma leuchtenbergianum</u>	X	X	X	X	X	X	X	X	X
<u>Ilyocryptus spinifer</u>					X				

Table J.4 (continued)

Table J.5

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 391.2 - FEBRUARY-OCTOBER 1975.

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotatoria</b>									
<u>Asplanchna amphora</u>	X			X				X	
<u>Asplanchna priodonta</u>		X	X	X	X	X	X	X	X
<u>Brachionus angularis</u>	X			X	X	X	X	X	X
<u>Brachionus bidentata</u>				X		X	X		
<u>Brachionus budapestinensis</u>				X	X	X	X		X
<u>Brachionus calyciflorus</u>		X		X	X	X			
<u>Brachionus caudatus</u>	X			X	X	X	X	X	X
<u>Brachionus havanaensis</u>							X		
<u>Brachionus quadridentatus</u>					X				
<u>Brachionus urceolaris</u>									X
<u>Collotheca pelagica</u>		X	X			X			X
<u>Conochiloides</u> sp.					X		X		
<u>Conochilus unicornis</u>		X	X	X			X		
<u>Euchlanis</u> sp.	X	X	X				X	X	X
<u>Filinia maior</u>								X	
<u>Hexarthra mira</u>					X	X		X	X
<u>Kellicottia bostoniensis</u>									X
<u>Keratella cochlearis</u>	X	X	X				X		X
<u>Keratella crassa</u>	X	X	X	X	X	X	X	X	X
<u>Keratella earlinae</u>	X	X		X	X	X	X		X
<u>Lecane</u> sp.								X	
<u>Monostyla</u> sp.							X		
<u>Platyias patulus</u>					X	X		X	
<u>Ploesoma hudsoni</u>					X			X	
<u>Ploesoma truncata</u>					X	X	X	X	X
<u>Polyarthra</u> sp.		X	X	X	X	X	X	X	X
<u>Rotaria neptunia</u>		X							
<u>Synchaeta stylata</u>	X	X	X	X	X	X	X	X	X
<u>Trichocerca</u> sp.		X		X		X	X	X	X
Total	5	9	11	18	14	16	17	14	13
<b>Cladocera</b>									
<u>Alona quadrangularis</u>							X	X	X
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X	X	X
<u>Camptocercus rectirostris</u>							X		
<u>Ceriodaphnia lacustris</u>							X		
<u>Chydorus</u> sp.	X			X		X	X		X
<u>Daphnia</u> (immature)				X	X		X		
<u>Daphnia parvula</u>			X				X		X
<u>Daphnia retrocurva</u>				X	X	X	X		X
<u>Diaphanosoma leuchtenbergianum</u>	X				X	X	X	X	X
<u>Eury cercus</u> sp.				X					
<u>Ilyocryptus</u> (immature)							X		
<u>Ilyocryptus spinifer</u>							X		

Table J.6

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 396.8 - FEBRUARY-OCTOBER 1975

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotatoria</b>									
<u>Asplanchna amphora</u>				X	X	X	X	X	X
<u>Asplanchna priodonta</u>	X	X	X	X	X	X	X	X	X
<u>Brachionus angularis</u>		X	X	X	X	X	X	X	X
<u>Brachionus bidentata</u>				X	X		X		
<u>Brachionus budapestinensis</u>		X		X	X	X	X		X
<u>Brachionus calyciflorus</u>	X	X							
<u>Brachionus caudatus</u>		X	X	X	X	X	X		
<u>Brachionus quadridentatus</u>	X								
<u>Brachionus urceolaris</u>			X				X		X
<u>Collotheca pelagica</u>	X		X	X		X			
<u>Conochilooides</u> sp.				X		X		X	
<u>Conochilus unicornis</u>					X			X	
<u>Euchlanis</u> sp.	X	X	X		X		X	X	X
<u>Filinia maior</u>					X				
<u>Hexarthra mira</u>					X				
<u>Keratella cochlearis</u>	X	X	X	X		X		X	X
<u>Keratella crassa</u>	X	X	X	X	X	X	X	X	X
<u>Keratella earlinae</u>	X		X	X	X	X			X
<u>Monostyla</u> sp.			X				X		
<u>Platyias patulus</u>				X		X		X	
<u>Ploesoma hudsoni</u>					X	X	X	X	X
<u>Ploesoma truncata</u>					X	X	X	X	X
<u>Polyarthra</u> sp.			X	X	X	X	X	X	X
<u>Synchaeta stylata</u>		X	X	X	X	X	X	X	X
<u>Trichocerca</u> sp.				X					
Total	7	10	13	16	13	11	15	8	10
<b>Cladocera</b>									
<u>Alona quadrangularis</u>								X	
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X	X	X
<u>Ceriodaphnia lacustris</u>					X			X	
<u>Chydorus</u> sp.			X						
<u>Daphnia</u> (immature)					X	X	X	X	
<u>Daphnia parvula</u>						X	X	X	X
<u>Daphnia retrocurva</u>		X	X	X	X	X	X	X	X
<u>Diaphanosoma leuchtenbergianum</u>				X	X	X	X	X	X
<u>Eury cercus</u> sp.	X							X	
<u>Ilyocryptus spinifer</u>							X	X	

Table J.5 (continued)

Table J.6 (continued)

Table J.3

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 388.0 - FEBRUARY-OCTOBER 1976

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotatoria</b>									
<i>Asplanchna amphora</i>	X			X	X	X			X
<i>Asplanchna herricki</i>	X	X	X	X		X	X	X	X
<i>Asplanchna priodonta</i>	X		X	X	X				X
<i>Brachionus angularis</i>	X		X	X	X	X	X	X	X
<i>Brachionus bidentata</i>				X	X	X		X	
<i>Brachionus budapestinensis</i>	X			X	X	X	X	X	X
<i>Brachionus calyciflorus</i>	X	X		X	X		X		X
<i>Brachionus caudatus</i>			X		X	X	X	X	
<i>Brachionus havanaensis</i>				X		X	X	X	X
<i>Brachionus quadridentatus</i>		X	X	X		X			X
<i>Cephalodella</i> sp.				X		X		X	
<i>Conochilooides</i> sp.		X	X	X	X	X	X		
<i>Concochilus unicornis</i>	X	X	X	X		X		X	X
<i>Epiphanes macrourus</i>		X	X	X					X
<i>Euchlanis</i> sp.	X	X	X				X		
<i>Filinia</i> sp.		X							X
<i>Filinia longisetata</i>					X				X
<i>Gastropus</i> sp.						X			
<i>Hexarthra</i> sp.						X			
<i>Kellicottia bostoniensis</i>	X	X		X			X		X
<i>Keratella americana</i>					X		X		
<i>Keratella cochlearis</i>	X	X	X	X	X	X	X	X	X
<i>Keratella crassa</i>	X	X	X	X	X	X	X	X	X
<i>Keratella earlinae</i>	X	X	X	X	X	X	X	X	X
<i>Keratella quadrata</i>									X
<i>Lecane</i> sp.					X				
<i>Monostyla</i> sp.					X				
<i>Monostyla quadridentata</i>			X			X	X	X	
<i>Platyias patulus</i>						X			
<i>Platyias quadricornis</i>						X			
<i>Ploesoma hudsoni</i>				X	X	X			
<i>Ploesoma truncata</i>		X	X	X	X	X	X	X	X
<i>Polyarthra</i> sp.	X	X	X	X	X	X	X	X	X
<i>Synchaeta stylata</i>	X	X		X	X	X	X		X
<i>Testudinella</i> sp.		X	X	X	X	X	X		
<i>Trichocerca</i> sp.		X	X	X	X	X	X		X
Total	16	15	16	22	21	21	17	18	17

Table J.8 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Cladocera</b>									
<i>Alona guttata</i>				X					
<i>Alona quadrangularis</i>		X		X					
<i>Alona rectangula</i>		X							
<i>Bosmina longirostris</i>	X	X	X	X	X	X	X	X	X
<i>Camptocercus rectirostris</i>		X			X				X
<i>Ceriodaphnia lacustris</i>					X			X	X
<i>Chydorus sp.</i>	X	X	X	X				X	X
<i>Daphnia ambigua</i>						X			
<i>Daphnia galeata</i>		X		X					X
<i>Daphnia parvula</i>			X						
<i>Daphnia pulex</i>									X
<i>Daphnia retrocurva</i>	X		X	X	X	X	X	X	X
<i>Diaphanosoma leuchtenbergianum</i>		X	X	X	X	X	X	X	X
<i>Eury cercus sp.</i>		X		X					
<i>Leptodora kindtii</i>				X					
<i>Leydigia acanthocercoides</i>									
<i>Leydigia quadrangularis</i>	X			X					
<i>Pleuroxus denticulatus</i>	X			X					
<i>Pleuroxus hamulatus</i>		X			X				
<i>Scapholebris kingi</i>					X		X		
<i>Sida crystallina</i>			X						
<i>Simocephalus serrulatus</i>				X	X				
<i>Simocephalus vetulus</i>			X						
Total	4	10	8	13	10	6	3	5	7
<b>Copepoda</b>									
<i>Cyclops bicuspidatus thomasi</i>	X	X	X	X	X		X		X
<i>Cyclops vernalis</i>	X	X	X	X	X	X	X	X	X
<i>Diaptomus birgeri</i>			X						
<i>Diaptomus pallidus</i>	X	X	X	X	X	X		X	
<i>Diaptomus reighardi</i>				X	X		X	X	X
<i>Diaptomus sanguineus</i>		X						X	X
<i>Ergasilus sp.</i>					X		X		X
<i>Eucyclops agilis</i>		X			X			X	
<i>Eucyclops speratus</i>			X					X	
<i>Macro cyclops albidus</i>		X			X	X	X	X	X
<i>Mesocyclops edax</i>				X	X			X	
<i>Nitocra lacustris</i>					X	X		X	
<i>Osprhanticum labronectum</i>	X	X					X		
<i>Tropocyclops prasinus</i>	X	X	X	X	X	X	X	X	X
Nauplii									
Total	5	8	6	7	9	5	10	6	5
Total Number of Taxa	25	33	30	42	40	32	30	29	29

Grand Total - 79

Table J.9

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 391.2 - FEBRUARY-OCTOBER 1976

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotatoria</b>									
<u>Asplanchna amphora</u>	X		X						
<u>Asplanchna herricki</u>	X	X	X	X		X	X		X
<u>Asplanchna priodonta</u>	X			X					X
<u>Brachionus angularis</u>	X		X	X	X	X	X	X	X
<u>Brachionus bidentata</u>							X	X	
<u>Brachionus budapestinensis</u>	X		X	X	X	X	X	X	X
<u>Brachionus calyciflorus</u>	X	X	X	X	X	X	X	X	X
<u>Brachionus caudatus</u>				X	X	X	X	X	X
<u>Brachionus havanaensis</u>				X			X	X	
<u>Brachionus quadridentatus</u>				X	X				X
<u>Cephalodella</u> sp.			X		X		X		X
<u>Conochilooides</u> sp.			X		X	X		X	
<u>Concochilus unicornis</u>	X	X	X	X	X	X			X
<u>Epiphantes macrourus</u>			X						X
<u>Euchlanis</u> sp.	X	X	X					X	X
<u>Filinia longiseta</u>	X	X		X		X			
<u>Gastropus</u> sp.			X		X				
<u>Hexarthra</u> sp.									X
<u>Kellicottia bostoniensis</u>	X			X	X				
<u>Keratella americana</u>							X		
<u>Keratella cochlearis</u>	X	X	X	X	X	X	X	X	X
<u>Keratella crassa</u>	X	X	X	X	X	X	X	X	X
<u>Keratella earlinae</u>	X	X	X	X	X	X	X		
<u>Keratella quadrata</u>	X								X
<u>Lecane</u> sp.		X		X			X		
<u>Monostyla</u> sp.		X					X		X
<u>Platyias patulus</u>						X	X	X	X
<u>Ploesoma hudsoni</u>					X	X	X	X	X
<u>Ploesoma truncata</u>		X	X	X	X	X	X	X	X
<u>Polyarthra</u> sp.	X	X	X	X	X	X	X	X	X
<u>Rotaria neptunia</u>						X	X		
<u>Synchaeta stylata</u>	X	X		X		X	X		X
<u>Trichocerca</u> sp.		X	X		X	X	X	X	
<u>Trichotria</u> sp.	X	X		X					
Total	17	16	15	20	17	19	16	19	13
<b>Cladocera</b>									
<u>Alona rectangula</u>			X	X					
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X	X	X
<u>Camptocercus rectirostris</u>					X	X	X		

Table J.9 (continued)

Table J.10

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 396.8 - FEBRUARY-OCTOBER 1976

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotifera</b>									
<i>Asplanchna amphora</i>	X				X				
<i>Asplanchna herricki</i>	X	X	X	X	X				X
<i>Asplanchna priodonta</i>	X				X				
<i>Brachionus angularis</i>			X	X	X	X	X	X	X
<i>Brachionus bidentata</i>					X				X
<i>Brachionus budapestinensis</i>	X		X	X	X	X	X	X	
<i>Brachionus calyciflorus</i>	X	X	X	X		X	X		
<i>Brachionus caudatus</i>			X	X	X	X	X	X	X
<i>Brachionus quadridentatus</i>				X					
<i>Cephalodella</i> sp.			X	X		X		X	
<i>Conochilooides</i> sp.						X	X		X
<i>Concochilus unicornis</i>	X	X	X	X			X		
<i>Epiphantes macrourus</i>									X
<i>Euchlanis</i> sp.	X	X	X	X					
<i>Filinia</i> sp.							X		
<i>Filinia longiseta</i>	X	X		X		X			X
<i>Gastropus</i> sp.						X			
<i>Kellicottia bostoniensis</i>	X	X		X					X
<i>Keratella americana</i>						X	X		
<i>Keratella cochlearis</i>	X	X	X	X	X	X			X
<i>Keratella crassa</i>	X	X	X	X	X	X			X
<i>Keratella earlinae</i>	X	X	X	X	X	X	X		X
<i>Lecane</i> sp.							X		
<i>Notholca</i> sp.			X				X		
<i>Platyias patulus</i>	X								X
<i>Ploesoma hudsoni</i>					X	X	X		X
<i>Ploesoma truncata</i>					X	X	X		X
<i>Polyarthra</i> sp.	X	X	X	X	X	X	X		X
<i>Rotaria neptunia</i>						X			
<i>Synchaeta stylata</i>	X	X		X			X		X
<i>Trichocerca</i> sp.		X	X	X	X	X	X		X
<i>Trichotria</i> sp.	X	X							
Total	16	15	13	19	18	18	8	7	14
<b>Cladocera</b>									
<i>Alona quadrangularis</i>	X				X				
<i>Alona rectangula</i>	X	X							
<i>Bosmina longirostris</i>	X	X	X	X	X	X	X	X	X
<i>Ceriodaphnia lacustris</i>					X	X	X		X

Table J.10 (continued)

Grand Total - 64

Table J.11

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TCM 0.2 - FEBRUARY-OCTOBER 1976

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotatoria</b>									
<i>Asplanchna amphora</i>	X		X	X	X		X	X	X
<i>Asplanchna herricki</i>	X	X	X	X	X	X	X	X	X
<i>Asplanchna priodonta</i>	X				X			X	
<i>Beauchampiella</i> sp.								X	
<i>Brachionus angularis</i>			X	X	X	X	X	X	X
<i>Brachionus bidentata</i>					X		X	X	X
<i>Brachionus budapestinensis</i>	X			X	X	X	X	X	X
<i>Brachionus calyciflorus</i>	X	X	X	X		X	X	X	X
<i>Brachionus caudatus</i>			X	X	X	X	X	X	X
<i>Brachionus havanaensis</i>				X			X		
<i>Brachionus quadridentatus</i>				X	X		X	X	X
<i>Cephalodella</i> sp.	X	X	X	X	X	X	X	X	X
<i>Conochiloides</i> sp.				X	X	X			X
<i>Concochilus hippocrepis</i>									X
<i>Concochilus unicornis</i>	X	X	X	X	X	X		X	
<i>Dipleuchlanis</i> sp.								X	
<i>Epiphantes macrourus</i>	X	X	X	X	X	X	X	X	X
<i>Euchlanis</i> sp.					X	X			
<i>Filinia longiseta</i>					X	X			
<i>Gastropodus</i> sp.			X						
<i>Hexarthra intermedia</i>						X	X		
<i>Hexarthra mollis</i>						X			
<i>Kellicottia bostoniensis</i>	X				X				
<i>Keratella americana</i>	X								
<i>Keratella cochlearis</i>	X	X	X	X	X	X	X	X	X
<i>Keratella crassa</i>		X	X	X	X	X	X	X	X
<i>Keratella earlinae</i>	X	X	X	X	X	X	X	X	X
<i>Keratella quadrata</i>	X								
<i>Lecane</i> sp.			X	X	X	X	X	X	X
<i>Lecane leontina</i>						X	X	X	X
<i>Lecane luna</i>						X			X
<i>Lecane ohioensis</i>						X			
<i>Lecane stokesii</i>						X	X	X	X
<i>Macrochaetus</i> sp.						X	X	X	X
<i>Monostyla</i> sp.		X	X	X	X	X	X	X	X
<i>Monostyla quadridentata</i>			X		X		X		X
<i>Mytilinia</i> sp.	X							X	
<i>Notholca</i> sp.	X								
<i>Platyias patulus</i>			X	X	X	X	X	X	X
<i>Platyias quadricornis</i>				X	X	X	X	X	X
<i>Ploesoma hudsoni</i>				X					
<i>Ploesoma truncata</i>				X	X	X	X	X	X

Table J.11 (continued)

Table J.11 (continued)

Table J.12

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
TRM 388.0 - FEBRUARY-OCTOBER 1977

Table J.12 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Copepoda (continued)									
<u>Elaphoidella bidens coronata</u>								X	
<u>Ergasilus (immature)</u>				X			X	X	
<u>Ergasilus sp.</u>				X			X	X	
<u>Eucyclops agilis</u>	X	X	X	X	X				
<u>Eucyclops prionophorus</u>		X							
<u>Eucyclops speratus</u>		X							
<u>Harpacticoida (immature)</u>	X			X					X
<u>Macrocylops albidus</u>		X							
<u>Mesocyclops edax</u>	X	X	X	X	X	X	X	X	
<u>Mesocyclops leuckarti</u>		X	X	X	X	X	X	X	X
<u>Nauplii</u>	X	X	X	X	X	X	X	X	X
<u>Nitocra lacustris</u>					X			X	X
<u>Tropocyclops prasinus</u>	X					X	X	X	X
Total	9	15	8	12	10	9	11	13	8
Rotifera									
<u>Asplanchna amphora</u>						X	X		X
<u>Asplanchna herricki</u>	X	X	X	X	X	X	X	X	X
<u>Asplanchna priodonta</u>			X					X	
<u>Beuchampiella sp.</u>					X				
<u>Brachionus angularis</u>			X	X	X	X	X	X	X
<u>Brachionus bennini</u>								X	
<u>Brachionus bidentata</u>		X	X	X	X		X		X
<u>Brachionus budapestinensis</u>			X	X	X	X	X	X	X
<u>Brachionus calyciflorus</u>	X	X		X		X	X		
<u>Brachionus caudatus</u>						X	X	X	X
<u>Brachionus havanaensis</u>						X	X		
<u>Brachionus quadridentatus</u>					X		X	X	X
<u>Brachionus urceolaris</u>	X								X
<u>Cephalodella sp.</u>		X		X					
<u>Collotheca sp.</u>	X		X	X				X	
<u>Conochilooides sp.</u>					X	X	X	X	X
<u>Conochilus hippocrepis</u>						X	X	X	X
<u>Conochilus unicornis</u>	X	X	X	X	X	X	X	X	X
<u>Dissotrocha sp.</u>	X	X			X				
<u>Epiphanes macrourus</u>				X	X	X	X	X	X
<u>Euchlanis sp.</u>	X	X		X	X	X	X	X	X
<u>Filinia longiseta</u>		X			X	X	X		
<u>Hexarthra mira</u>			X					X	
<u>Hexarthra sp.</u>							X	X	
<u>Kellicottia bostoniensis</u>					X				X

Table J.12 (continued)

Table J.13 (continued)

Table J.14

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 396.8 - FEBRUARY-OCTOBER 1977

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Cladocera</b>									
<u>Alona guttata</u>					X				
<u>Alona (immature)</u>				X					
<u>Alona intermedia</u>							X	X	
<u>Alona quadrangularis</u>		X							
<u>Alona rectangula</u>		X			X				
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X	X	X
<u>Camptocercus rectirostris</u>	X								
<u>Ceriodaphnia (immature)</u>				X			X	X	
<u>Ceriodaphnia lacustris</u>							X		
<u>Chydorus sp.</u>	X	X						X	X
<u>Daphnia galeata</u>					X				
<u>Daphnia (immature)</u>				X	X	X	X	X	
<u>Daphnia parvula</u>				X				X	
<u>Daphnia retrocurva</u>				X	X	X	X		
<u>Daphnia sp.</u>	X	X				X			
<u>Diaphanosoma leuchtenbergianum</u>				X	X	X	X	X	
<u>Eury cercus lamellatus</u>		X							
<u>Holopedium gibberum</u>					X	X			
<u>Ilyocryptus (immature)</u>							X		
<u>Ilyocryptus spinifer</u>						X	X	X	
<u>Ilyocryptus kindtii</u>					X	X	X		
<u>Leydigia acanthocercoides</u>	X								
<u>Leydigia quadrangularis</u>	X							X	
<u>Moina (immature)</u>								X	
<u>Moina minuta</u>								X	
<u>Pleuroxus denticulatus</u>	X	X							
<u>Sida crystallina</u>				X				X	
<u>Simocephalus serrulatus</u>	X	X							
<u>Simocephalus sp.</u>	X	X							
<b>Total</b>	7	10	2	8	9	8	11	6	3
<b>Copepoda</b>									
<u>Calanoida (immature)</u>	X	X	X	X	X	X	X	X	X
<u>Canthocamptus robertcokeri</u>		X							
<u>Cyclopoida (immature)</u>	X	X	X	X	X	X	X	X	X
<u>Cyclops bicuspidatus thomasi</u>	X	X	X	X					
<u>Cyclops varicans rubellus</u>		X		X			X		
<u>Cyclops vernalis</u>	X	X	X	X	X	X	X	X	X
<u>Diaptomus pallidus</u>	X	X			X	X	X	X	X
<u>Diaptomus reighardi</u>	X	X		X	X	X	X	X	X

Table J.14 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Copepoda (continued)									
<u>Ergasilus</u> ( <i>immature</i> )							X	X	
<u>Ergasilus</u> sp.						X	X	X	X
<u>Eucyclops agilis</u>	X	X	X						
<u>Eucyclops prionophorus</u>		X							
<u>Eucyclops speratus</u>		X							
<u>Harpacticoida</u> ( <i>immature</i> )	X			X			X		
<u>Macrocylops albidus</u>	X								
<u>Mesocyclops edax</u>		X		X	X	X	X	X	X
<u>Nauplii</u>	X	X	X	X	X	X	X	X	X
<u>Nitocra lacustris</u>					X			X	
<u>Tropocyclops prasinus</u>	X	X					X	X	X
Total	9	16	6	8	9	9	11	11	10
Rotifera									
<u>Asplanchna amphora</u>					X	X			
<u>Asplanchna herricki</u>	X	X	X	X	X		X	X	
<u>Beuchampiella</u> sp.				X					
<u>Brachionus angularis</u>			X	X	X	X	X	X	X
<u>Brachionus bidentata</u>				X	X		X	X	X
<u>Brachionus budapestinensis</u>			X		X	X	X	X	X
<u>Brachionus calyciflorus</u>	X	X	X	X	X	X	X	X	X
<u>Brachionus caudatus</u>					X	X	X	X	X
<u>Brachionus havanaensis</u>					X	X	X	X	X
<u>Brachionus quadridentatus</u>		X	X	X	X	X			
<u>Brachionus urceolaris</u>									X
<u>Cephalodella</u> sp.		X		X					
<u>Collotheca</u> sp.						X		X	X
<u>Conochilooides</u> sp.					X		X	X	X
<u>Conochilus hippocrepis</u>						X	X	X	
<u>Conochilus unicornis</u>		X		X	X	X	X	X	X
<u>Dissotrocha</u> sp.				X					
<u>Epiphanes macrourus</u>					X	X	X		
<u>Euchlanis</u> sp.	X	X							X
<u>Filinia longiseta</u>	X	X				X			
<u>Hexarthra mira</u>						X			
<u>Hexarthra</u> sp.							X	X	
<u>Kellicottia bostoniensis</u>		X	X		X	X	X		X
<u>Keratella americana</u>					X	X	X		
<u>Keratella cochlearis</u>	X	X		X	X	X			X
<u>Keratella crassa</u>	X	X	X	X	X	X	X	X	X
<u>Keratella earlineae</u>	X	X	X	X	X	X	X	X	X
<u>Keratella quadrata</u>			X						
<u>Lecane leontina</u>					X				
<u>Lecane</u> sp.							X		

Table J.14 (continued)

Table J.15

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TCM 0.2 - FEBRUARY-OCTOBER 1977

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Branchiura</b>									
<u>Argulus</u> sp.					X				
<b>Cladocera</b>									
<u>Alona affinis</u>			X						
<u>Alona costata</u>			X						
<u>Alona guttata</u>			X						
<u>Alona karau</u>			X						
<u>Alona</u> (immature)				X			X		
<u>Alona intermedia</u>	X								
<u>Alona rectangula</u>	X	X				X	X	X	X
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X	X	X
<u>Ceriodaphnia</u> (immature)				X			X	X	
<u>Ceriodaphnia lacustris</u>				X	X		X	X	X
<u>Ceriodaphnia quadrangula</u>							X		
<u>Ceriodaphnia</u> sp.							X		
<u>Chydorus</u> sp.	X	X	X	X	X	X			X
<u>Cladocera</u> (immature)								X	
<u>Daphnia ambigua</u>			X						X
<u>Daphnia</u> (immature)			X	X	X			X	
<u>Daphnia parvula</u>			X	X	X			X	
<u>Daphnia retrocurva</u>	X		X	X	X	X	X		
<u>Daphnia</u> sp.	X				X		X		
<u>Diaphanosoma leuchtenbergianum</u>			X	X	X	X	X	X	
<u>Eury cercus lamellatus</u>			X						
<u>Holopedium gibberum</u>		X							
<u>Ilyocryptus</u> (immature)			X				X	X	
<u>Ilyocryptus</u> sp.	X	X			X	X	X	X	X
<u>Ilyocryptus spinifer</u>				X	X		X	X	X
<u>Leptodora kindtii</u>			X	X	X	X	X	X	X
<u>Leydigia quadrangularis</u>	X	X	X						
<u>Moina</u> (immature)						X	X		
<u>Moina micrura</u>				X					
<u>Moina minuta</u>							X		
<u>Pleuroxus denticulatus</u>	X	X	X				X		X
<u>Pleuroxus hamulatus</u>	X	X	X	X			X	X	X
<u>Pleuroxus</u> sp.		X							
<u>Scapholebris kingi</u>				X					
<u>Sida crystallina</u>			X						X
<u>Sida</u> (immature)								X	
<u>Simocephalus serrulatus</u>	X		X	X		X			X
<u>Simocephalus</u> sp.	X								
<b>Total</b>	12	15	15	14	10	8	16	13	9

Table J.15 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Copepoda</b>									
<i>Calanoida (immature)</i>	X	X	X	X	X	X	X	X	X
<i>Canthocamptus robertcokeri</i>	X	X							X
<i>Cyclopoida (immature)</i>	X	X	X	X	X	X	X	X	X
<i>Cyclops bicuspidatus thomasi</i>	X	X			X				
<i>Cyclops varicans rubellus</i>	X	X	X	X	X	X	X	X	X
<i>Cyclops vernalis</i>	X	X	X	X	X	X	X	X	X
<i>Diaptomus pallidus</i>	X		X	X	X	X	X	X	X
<i>Diaptomus reighardi</i>	X	X	X	X	X	X	X	X	X
<i>Ergasilus (immature)</i>				X		X	X	X	X
<i>Ergasilus sp.</i>				X		X	X	X	X
<i>Eucyclops agilis</i>	X	X	X		X	X	X	X	X
<i>Eucyclops prionophorus</i>				X					
<i>Eucyclops speratus</i>	X		X	X					
<i>Harpacticoida (immature)</i>			X				X		
<i>Macrocylops albidus</i>			X						
<i>Mesocyclops edax</i>	X	X	X	X	X	X	X	X	X
<i>Mesocyclops leuckarti</i>			X	X	X	X	X	X	X
<i>Nauplii</i>	X	X	X	X	X	X	X	X	X
<i>Tropocyclops prasinus</i>	X		X	X		X	X	X	X
Total	13	13	13	9	10	11	12	12	13
<b>Rotifera</b>									
<i>Asplanchna amphora</i>	X		X	X		X	X		X
<i>Asplanchna herricki</i>		X	X	X	X	X	X	X	X
<i>Asplanchna priodonta</i>			X	X	X	X			X
<i>Brachionus angularis</i>			X		X	X	X	X	X
<i>Brachionus bennini</i>				X					
<i>Brachionus bidentata</i>					X	X	X	X	X
<i>Brachionus budapestinensis</i>				X	X	X	X		X
<i>Brachionus calyciflorus</i>	X		X	X	X	X	X	X	X
<i>Brachionus caudatus</i>					X	X	X	X	X
<i>Brachionus havanaensis</i>						X			
<i>Brachionus quadridentatus</i>	X		X	X		X		X	X
<i>Brachionus urceolaris</i>	X			X					
<i>Cephalodella sp.</i>	X				X				
<i>Collotheca sp.</i>	X		X	X		X	X	X	X
<i>Conochilooides sp.</i>			X	X		X	X		
<i>Conochilus hippocrepis</i>						X	X		
<i>Conochilus unicornis</i>		X	X	X		X	X	X	X
<i>Dissotrocha sp.</i>			X						
<i>Epiphantes macrourus</i>						X		X	X
<i>Euchlanis sp.</i>	X			X	X	X	X	X	X
<i>Filinia longisetata</i>	X	X	X	X	X	X	X	X	X
<i>Hexarthra (immature)</i>				X					
<i>Hexarthra mira</i>					X		X		X
<i>Hexarthra sp.</i>						X	X	X	X
<i>Kellicottia bostoniensis</i>			X						

Table J.15 (continued)

Table J.16

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
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Table J.16 (continued)

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Copepoda (continued)									
<u>Daphnia sanguineus</u>		X							
<u>Ergasilus (immature)</u>				X	X				
<u>Ergasilus sp.</u>							X	X	
<u>Eucyclops agilis</u>			X		X	X	X	X	
<u>Harpacticoida (immature)</u>	X		X	X					X
<u>Mesocyclops edax</u>		X	X	X	X	X	X	X	X
<u>Nauplii</u>	X	X	X	X	X	X	X	X	X
<u>Nitocra lacustris</u>						X			
<u>Tropocyclops prasinus</u>	X		X		X			X	
Total	8	9	11	10	11	10	13	8	
Rotifera									
<u>Asplanchna amphora</u>				X	X	X			
<u>Asplanchna herricki</u>	X	X	X	X			X	X	X
<u>Asplanchna sp.</u>				X					
<u>Bdelloida</u>		X							
<u>Brachionus angularis</u>			X	X	X	X	X	X	X
<u>Brachionus bidentata</u>			X		X	X	X	X	
<u>Brachionus budapestinensis</u>			X	X	X	X	X	X	X
<u>Brachionus calyciflorus</u>	X	X	X	X	X	X	X	X	X
<u>Brachionus caudatus</u>				X	X	X	X	X	
<u>Brachionus havanaensis</u>				X					
<u>Brachionus quadridentatus</u>			X	X	X	X	X		
<u>Brachionus urceolaris</u>	X								
<u>Cephalodella sp.</u>	X					X	X		
<u>Collotheca sp.</u>		X	X	X	X	X	X		
<u>Conochiloides sp.</u>		X	X	X	X	X	X	X	
<u>Conochilus hippocrepis</u>				X	X				
<u>Conochilus unicornis</u>	X	X	X	X	X	X	X	X	X
Contracted rotifera			X	X	X	X			
<u>Diplechlanis sp.</u>							X		
<u>Euchlanis sp.</u>	X		X	X			X	X	X
<u>Filinia longiseta</u>	X		X	X					
<u>Gastropus sp.</u>			X						
<u>Hexarthra mira</u>				X	X	X	X		X
<u>Kellicottia bostoniensis</u>	X			X					X
<u>Kellicottia longispina</u>	X								
<u>Keratella cochlearis</u>	X	X	X	X	X	X	X		
<u>Keratella crassa</u>	X	X	X		X	X	X		
<u>Keratella earlinae</u>	X	X	X	X	X	X	X	X	X
<u>Keratella quadrata</u>	X								
<u>Keratella valga</u>								X	
<u>Lecane sp.</u>		X		X	X	X			
<u>Monostyla sp.</u>			X	X		X	X		

Table J.16 (continued)

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotifera (continued)</b>									
<u>Notholca</u> sp.	X								
<u>Platyias</u> <u>patulus</u>			X	X	X	X	X	X	X
<u>Ploesoma</u> <u>hudsoni</u>				X				X	X
<u>Ploesoma</u> <u>truncata</u>					X	X	X	X	X
<u>Polyarthra</u> sp.	X	X	X	X	X	X	X	X	X
<u>Rotaria</u> sp.					X				
<u>Rotifera</u>	X								X
<u>Synchaeta</u> sp.	X								
<u>Synchaeta</u> <u>stylata</u>	X	X	X	X	X	X	X	X	X
<u>Trichocerca</u> sp.		X	X	X	X	X	X		
Total	17	13	21	28	23	23	16	14	
Total Number of Taxa	35	31	41	44	43	39	36	29	
Grand Total - 87									

a. Samples were not collected in February.

Table J.17 (continued)

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotifera (continued)</b>									
<u>Lecane</u> sp.	X		X		X	X	X		
<u>Monostyla</u> sp.					X	X	X		
<u>Notholca</u> sp.		X							
<u>Platyias</u> <u>patulus</u>					X	X	X	X	X
<u>Ploesoma</u> <u>hudsoni</u>							X		X
<u>Ploesoma</u> <u>truncata</u>					X	X	X	X	X
<u>Polyarthra</u> sp.	X	X	X	X	X	X	X	X	X
<u>Rotaria</u> sp.					X				
<b>Rotifera</b>	X								
<u>Synchaeta</u> sp.	X				X				
<u>Synchaeta</u> <u>stylata</u>	X	X	X	X	X	X			X
<u>Testudinella</u> sp.	X								
<u>Trichocerca</u> sp.		X	X	X	X	X			X
<b>Total</b>	21	15	24	23	24	23	16	18	
<b>Total Number of Taxa</b>	41	33	38	33	44	48	38	38	
<b>Grand Total - 88</b>									

a. Samples were not collected in February.

Table J:18

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
TRM 396.8 - FEBRUARY-OCTOBER 1978

Table J.17

DISTRIBUTION OF ZOOPLANKTON - GIINTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 391.2 - FEBRUARY-OCTOBER 1978

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Cladocera</b>									
<u>Alona affinis</u>		X							
<u>Alona costata</u>		X						X	
<u>Alona rectangula</u>					X	X	X	X	X
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X	X	X
<u>Bosminopsis</u> sp.								X	
<u>Camptocercus rectirostris</u>									X
<u>Ceriodaphnia</u> (immature)	X								
<u>Ceriodaphnia lacustris</u>									X
<u>Ceriodaphnia reticulata</u>	X								
<u>Chydorus</u> sp.	X		X		X	X	X	X	X
<u>Daphnia</u> (immature)	X	X	X		X	X			X
<u>Daphnia parvula</u>	X	X							
<u>Daphnia retrocurva</u>	X	X	X	X	X		X	X	
<u>Daphnia rosea</u>	X								
<u>Diaphanosoma leuchtenbergianum</u>	X		X	X	X	X	X	X	X
<u>Ilyocryptus spinifer</u>					X	X	X	X	
<u>Leptodora kindtii</u>		X			X	X	X	X	X
<u>Macrothrix</u> (immature)						X			
<u>Macrothrix rosea</u>						X			
<u>Moina micrura</u>							X	X	
<u>Moina minuta</u>						X	X		
<u>Pleuroxus denticulatus</u>	X								X
<u>Scapholebris kingi</u>			X						
<u>Sida crystallina</u>						X	X		
<u>Simocephalus</u> (immature)	X					X			
<u>Simocephalus serrulatus</u>		X	X						
<b>Total</b>	11	8	6	3	9	12	11	11	
<b>Copepoda</b>									
<u>Calanoida</u> (immature)	X	X	X	X	X	X	X	X	X
<u>Cyclopoida</u> (immature)	X	X	X	X	X	X	X	X	X
<u>Cyclops bicuspidatus thomasi</u>	X	X	X			X			
<u>Cyclops vericans rubellus</u>						X			
<u>Cyclops vernalis</u>	X	X	X	X	X	X	X	X	X
<u>Diaptomus mississippiensis</u>						X			
<u>Diaptomus pallidus</u>	X	X	X	X	X	X	X	X	X
<u>Diaptomus reighardi</u>	X	X	X	X	X	X	X	X	X
<u>Diaptomus sanguineus</u>		X							

Table J.17 (continued)

Table J.13

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
TRM 391.2 - FEBRUARY-OCTOBER 1977

Table J.13 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Copepoda (continued)</b>									
<u>Ergasilus</u> ( <i>immature</i> )				X			X	X	
<u>Ergasilus</u> sp.				X			X	X	X
<u>Eucyclops</u> <i>agilis</i>	X	X							X
<u>Eucyclops</u> <i>prionophorus</i>	X								
<u>Eucyclops</u> <i>speratus</i>	X								
Harpacticoida ( <i>immature</i> )	X			X					X
<u>Macrocylops</u> <i>albidus</i>	X								X
<u>Mesocyclops</u> <i>edax</i>		X		X	X	X	X	X	X
Nauplii	X	X	X	X	X	X	X	X	X
<u>Nitocra</u> <i>lacustris</i>		X			X			X	
<u>Tropocyclops</u> <i>prasinus</i>	X				X	X	X	X	X
Total	7	14	7	10	12	8	11	13	12
<b>Rotifera</b>									
<u>Asplanchna</u> <i>amphora</i>				X		X	X		
<u>Asplanchna</u> <i>herricki</i>	X	X	X	X		X	X	X	X
<u>Asplanchna</u> <i>priodonta</i>				X	X	X	X	X	X
<u>Brachionus</u> <i>angularis</i>			X	X	X	X	X	X	X
<u>Brachionus</u> <i>bidentata</i>				X	X	X	X	X	X
<u>Brachionus</u> <i>budapestinensis</i>			X	X	X	X	X	X	X
<u>Brachionus</u> <i>calyciflorus</i>	X	X	X	X		X	X	X	X
<u>Brachionus</u> <i>caudatus</i>				X	X	X	X	X	X
<u>Brachionus</u> <i>havanaensis</i>					X				
<u>Brachionus</u> <i>quadridentatus</i>				X	X	X		X	X
<u>Brachionus</u> <i>urceolaris</i>	X				X				
<u>Cephalodella</u> sp.		X			X				
<u>Collotheca</u> sp.				X		X	X	X	
<u>Conochiloides</u> sp.				X	X	X	X	X	X
<u>Conochilus</u> <i>hippocrepis</i>						X	X	X	
<u>Conochilus</u> <i>unicornis</i>	X	X	X	X	X	X	X	X	
<u>Dissotrocha</u> sp.			X		X				
<u>Epiphanes</u> <i>macrourus</i>					X	X	X	X	
<u>Filinia</u> <i>longiseta</i>	X	X	X	X	X	X	X	X	X
<u>Hexarthra</u> <i>mira</i>			X	X		X			
<u>Hexarthra</u> sp.				X			X	X	
<u>Keratella</u> <i>americana</i>				X		X	X		
<u>Keratella</u> <i>cochlearis</i>	X	X	X	X	X	X		X	
<u>Keratella</u> <i>crassa</i>	X	X	X	X	X	X	X	X	X
<u>Keratella</u> <i>earlinae</i>	X	X	X	X	X	X	X	X	X
<u>Keratella</u> <i>quadrata</i>		X	X				X		
<u>Lecane</u> <i>leontina</i>							X		
<u>Lecane</u> <i>luna</i>								X	
<u>Lecane</u> sp.							X	X	X

Table J.7

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TCM 0.2 - FEBRUARY-OCTOBER 1975

	Feb <sup>a</sup>	Mar <sup>a</sup>	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotatoria</b>									
<i>Asplanchna amphora</i>	X	X	X	X	X		X		X
<i>Asplanchna herricki</i>	X								
<i>Asplanchna priodonta</i>	X	X	X	X	X	X	X	X	X
<i>Brachionus angularis</i>	X	X	X	X	X	X	X	X	X
<i>Brachionus bidentata</i>						X	X		
<i>Brachionus budapestinensis</i>	X	X	X	X	X	X			X
<i>Brachionus calyciflorus</i>	X	X			X	X	X	X	X
<i>Brachionus caudatus</i>		X	X	X	X	X			X
<i>Brachionus havanaensis</i>						X			
<i>Brachionus quadridentatus</i>	X	X	X	X			X	X	
<i>Brachionus urceolaris</i>	X								
<i>Collotheca pelagica</i>	X	X			X	X			X
<i>Cephalodella</i>							X		
<i>Conochilooides</i>	X	X	X	X	X	X			X
<i>Conochilus unicornis</i>	X	X			X				X
<i>Euchlanis</i> sp.	X	X	X			X	X	X	X
<i>Filinia maior</i>	X				X				X
<i>Hexarthra intermedia</i>					X	X	X		
<i>Hexarthra mira</i>					X	X			X
<i>Keratella cochlearis</i>	X	X			X	X	X	X	X
<i>Keratella crassa</i>	X	X			X	X	X	X	X
<i>Keratella earlineae</i>	X				X				
<i>Lecane</i> sp.			X	X	X	X	X		
<i>Monostyla</i> sp.		X				X	X		X
<i>Platyias patulus</i>			X	X	X	X	X	X	X
<i>Platyias quadricornis</i>		X							
<i>Ploesoma truncata</i>	X	X	X	X	X	X	X	X	X
<i>Polyarthra</i> sp.	X	X	X	X	X	X	X	X	X
<i>Rotaria neptunia</i>	X	X				X			
<i>Synchaeta stylata</i>	X	X	X	X	X	X	X	X	X
<i>Trichocerca</i> sp.	X	X			X				X
<i>Trichotria</i> sp.	X				X				
Total	22	22	14	22	20	12	21		
<b>Cladocera</b>									
<i>Alona quadrangularis</i>	X					X			X
<i>Bosmina longirostris</i>	X	X	X	X	X	X	X	X	X
<i>Camptocercus rectirostris</i>						X			
<i>Ceriodaphnia lacustris</i>			X	X			X		
<i>Chydorus</i> sp.	X	X	X	X	X	X			X

Table J.7. (continued)

	Feb <sup>a</sup>	Mar <sup>a</sup>	Apr	May	Jun	Jul	Aug	Sep	Oct
<u>Cladocera (continued)</u>								X	
<u>Daphnia (immature)</u>			X		X			X	
<u>Daphnia parvula</u>				X				X	
<u>Daphnia retrocurva</u>					X	X	X	X	X
<u>Diaphanosoma leuchtenbergianum</u>			X	X	X	X	X	X	
<u>Ilyocryptus (immature)</u>				X			X		
<u>Ilyocryptus spinifer</u>					X	X			X
<u>Leptodora kindtii</u>			X	X	X	X	X		
<u>Moina micrura</u>							X		
<u>Pleuroxus hamulatus</u>			X				X		
<u>Sida crystallina</u>				X			X		
<u>Simocephalus serrulatus</u>					X				
Total	4	6	9	9	9	5	3		
<u>Copepoda</u>								X	
<u>Canthocamptus robertcokeri</u>			X						
<u>Cyclops bicuspidatus thomasi</u>			X	X	X	X	X	X	X
<u>Cyclops vernalis</u>			X	X	X	X		X	X
<u>Diaptomus pallidus</u>			X	X	X			X	
<u>Diaptomus reighardi</u>				X	X		X	X	
<u>Ergasilus sp.</u>				X		X		X	X
<u>Eucyclops agilis</u>			X	X	X	X	X	X	X
<u>Mesocyclops edax</u>				X	X	X	X	X	X
<u>Tropocyclops prasinus</u>			X	X	X	X	X	X	X
Calanoida copepodids				X	X	X	X	X	X
Cyclopoida copepodids					X	X	X	X	X
Harpacticoida copepodids			X	X	X	X	X		X
Nauplii					X	X	X	X	X
Total	7	8	7	7	7	7	8	11	
Total Number of Taxa	33	36	30	38	36	25	35		
Grand Total - 61									

a. Samples not collected.

Table J.18 (continued)

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Copepoda (continued)									
<u>Diaptomus mississippiensis</u>							X		
<u>Diaptomus pallidus</u>	X	X	X	X	X	X	X	X	X
<u>Diaptomus reighardi</u>	X	X	X	X	X	X	X	X	X
<u>Diaptomus sanguineus</u>	X								
<u>Ergasilus</u> sp.					X	X	X	X	X
<u>Eucyclops agilis</u>	X						X		
Harpacticoida (immature)		X		X	X				
<u>Mesocyclops edax</u>		X		X	X	X	X	X	X
Nauplii	X	X	X	X	X	X	X	X	X
<u>Tropocyclops prasinus</u>	X					X			
Total	10	9	6	10	10	10	13	9	9
Rotifera									
<u>Asplanchna amphora</u>		X				X	X		
<u>Asplanchna herricki</u>	X	X	X	X		X			X
<u>Brachionus angularis</u>			X	X	X	X	X	X	X
<u>Brachionus bennini</u>					X				
<u>Brachionus bidentata</u>		X	X			X			X
<u>Brachionus budapestinensis</u>				X	X	X	X	X	X
<u>Brachionus calyciflorus</u>	X	X	X	X					X
<u>Brachionus caudatus</u>				X	X	X	X		X
<u>Brachionus havanaensis</u>					X	X			
<u>Brachionus quadridentatus</u>	X		X	X	X	X	X	X	
<u>Cephalodella</u> sp.		X							
<u>Collotheca</u> sp.				X	X	X	X		
<u>Conochiloides</u> sp.				X	X	X	X		X
<u>Conochilus hippocrepis</u>				X	X	X	X		X
<u>Conochilus unicornis</u>				X	X		X		X
Contracted rotifera				X		X			X
<u>Diplechlanis</u> sp.									X
<u>Ephiphantes macrourus</u>	X					X	X		
<u>Euchlanis</u> sp.	X	X	X					X	X
<u>Filinia limnetica</u>	X								
<u>Filinia longisetata</u>				X		X	X		
<u>Hexarthra mira</u>					X		X		X
<u>Hexarthra</u> sp.						X			
<u>Kellicottia bostoniensis</u>	X								
<u>Kellicottia longispina</u>	X		X						
<u>Keratella cochlearis</u>	X	X	X	X	X	X	X		X
<u>Keratella crassa</u>	X	X	X			X	X		
<u>Keratella earlineae</u>	X	X	X	X	X	X	X	X	X
<u>Keratella quadrata</u>	X								
<u>Keratella serrulata</u>				X					
<u>Keratella valga</u>						X			X
<u>Lecane</u> sp.			X			X	X	X	

Table J.18 (continued)

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotifera (continued)</b>							X	X	
<u>Monostyla</u> sp.									X
<u>Mytilina</u> sp.					X				
<u>Notholca</u> sp.	X			X					
<u>Platyias patulus</u>				X	X	X	X		
<u>Ploesoma hudsoni</u>				X	X	X	X		X
<u>Ploesoma truncata</u>		X	X	X	X	X	X	X	X
<u>Polyarthra</u> sp.	X	X	X	X	X	X	X	X	X
<b>Rotifera</b>	X								
<u>Synchaeta</u> sp.	X								
<u>Synchaeta stylata</u>	X	X	X	X	X	X	X	X	X
<u>Testudinella</u> sp.			X	X	X			X	
<u>Trichocerca</u> sp.									
Total	18	12	19	19	25	24	13	18	
Total Number of Taxa	37	28	34	36	43	46	30	36	
Grand Total - 91									

a. Samples were not collected in February.

Table J.19

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TCM 0.2 - FEBRUARY-OCTOBER 1978

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Cladocera</b>									
<i>Alona costata</i>	X								
<i>Alona (immature)</i>	X							X	
<i>Alona quadrangularis</i>									X
<i>Alona rectangula</i>	X	X				X	X		X
<i>Bosmina longirostris</i>	X	X	X	X	X	X	X	X	X
<i>Campnocercus rectirostris</i>						X			
<i>Ceriodaphnia (immature)</i>	X		X				X		
<i>Ceriodaphnia lacustris</i>							X		
<i>Ceriodaphnia quadrangularis</i>	X	X							
<i>Chydorus sp.</i>	X	X	X	X	X	X	X	X	X
<i>Daphnia (immature)</i>	X	X	X			X			
<i>Daphnia parvula</i>	X	X	X						
<i>Daphnia retrocurva</i>		X	X	X	X	X			X
<i>Diaphanosoma leuchtenbergianum</i>		X	X	X	X	X	X	X	X
<i>Eury cercus lamellatus</i>	X								
<i>Holopedium gibberum</i>						X			
<i>Ilyocryptus (immature)</i>					X		X	X	X
<i>Ilyocryptus sordidus</i>					X		X	X	
<i>Ilyocryptus spinifer</i>						X			X
<i>Leptodora kindtii</i>		X	X	X	X				
<i>Leydigia quadrangularis</i>	X					X			
<i>Macrothrix rosea</i>						X			
<i>Pleuroxus denticulatus</i>	X	X							X
<i>Pleuroxus hamulatus</i>	X						X		X
<i>Sida crystallina</i>				X	X				
<i>Simocephalus (immature)</i>	X								
Total	14	10	8	7	11	9	6	11	
<b>Copepoda</b>									
<i>Calanoida (immature)</i>	X	X	X	X	X	X	X	X	X
<i>Canthocamptus robertcokeri</i>		X							
<i>Cyclopoida (immature)</i>	X	X	X	X	X	X	X	X	X
<i>Cyclops bicuspis tatus thomasi</i>	X	X							
<i>Cyclops vericans rubellus</i>	X					X			
<i>Cyclops vernalis</i>		X	X	X	X	X	X	X	X
<i>Diaptomus pallidus</i>	X	X	X	X	X	X	X	X	X
<i>Diaptomus reighardi</i>	X	X	X	X	X	X	X	X	X
<i>Diaptomus sanguineus</i>	X					X	X		
<i>Ergasilus (immature)</i>						X	X		
<i>Ergasilus sp.</i>					X		X		X
<i>Eucyclops agilis</i>	X	X		X	X	X			

Table J.19 (continued)

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Copepoda									
<u>Harpacticoida</u> (immature)	X								
<u>Macrocylops albidus</u>	X				X				X
<u>Mesocyclops edax</u>		X	X	X	X	X	X	X	
Nauplii	X	X	X	X	X	X	X	X	X
<u>Nitocra lacustris</u>					X				
<u>Tropocyclops prasinus</u>	X	X	X		X	X			X
Total	12	11	8	9	12	11	7	10	
Rotifera									
<u>Asplanchna amphora</u>			X		X	X			
<u>Asplanchna herricki</u>	X	X	X	X	X	X			X
<u>Bdelloida</u>					X				X
<u>Brachionus angularis</u>		X	X	X	X	X	X	X	X
<u>Brachionus bennini</u>									X
<u>Brachionus bidentata</u>				X					X
<u>Brachionus budapestinensis</u>	X		X	X	X	X			X
<u>Brachionus calyciflorus</u>		X			X		X		X
<u>Brachionus caudatus</u>					X	X	X		
<u>Brachionus havanaensis</u>					X	X	X		
<u>Brachionus quadridentatus</u>	X	X	X	X	X	X	X	X	
<u>Cephalodella</u> sp.		X	X						X
<u>Collotheca</u> sp.		X	X	X	X	X	X		X
<u>Conochiloides</u> sp.	X	X	X	X	X				
<u>Conochilus hippocrepis</u>		X	X	X	X	X			
<u>Conochilus unicornis</u>	X	X	X	X	X	X			X
Contracted rotifera				X	X	X			
<u>Dipleuchlanis</u> sp.									X
<u>Ephiphanes macrourus</u>					X		X	X	
<u>Euchlanis</u> sp.	X	X			X	X	X	X	X
<u>Filinia longiseta</u>	X	X	X	X	X	X			
<u>Gastropus</u> sp.		X	X						
<u>Hexarthra mira</u>					X	X	X		X
<u>Kellicottia bostoniensis</u>					X				X
<u>Kellicottia longispina</u>					X				
<u>Keratella americana</u>					X				
<u>Keratella cochlearis</u>	X	X	X	X	X	X			X
<u>Keratella crassa</u>	X	X	X		X				X
<u>Keratella earlineae</u>	X	X	X	X	X	X	X	X	X
<u>Keratella valga</u>					X				X
<u>Lecane</u> sp.	X	X	X	X	X	X	X	X	X
<u>Monostyla</u> sp.		X	X	X	X	X	X	X	X
<u>Notholca</u> sp.	X	X							

Table J.19 (continued)

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotifera (continued)</b>									
<u>Platyias patulus</u>				X	X	X		X	
<u>Ploesoma hudsoni</u>				X					X
<u>Ploesoma truncata</u>						X	X	X	X
<u>Polyarthra</u> sp.	X	X	X	X	X	X	X	X	X
<u>Rotaria</u> sp.					X				X
<u>Rotifera</u>	X	X							
<u>Synchaeta</u> sp.	X				X				
<u>Synchaeta stylata</u>	X	X	X			X	X	X	X
<u>Trichocerca</u> sp.		X	X	X	X	X			X
<u>Trichotria</u> sp.	X								
Total	17	22	25	25	27	20	16	21	
Total Number of Taxa	43	43	41	41	51	40	29	42	
Grand Total - 87									

a. Samples were not collected in February.

Table J.20

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 386.4 - FEBRUARY-OCTOBER 1978

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Cladocera</b>									
<u>Alona affinis</u>			X						
<u>Alona costata</u>									X
<u>Alona (immature)</u>									X
<u>Alona quadrangularis</u>			X	X					X
<u>Alona rectangula</u>						X	X		
<u>Alonella sp.</u>									X
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X	X	X
<u>Camptocercus rectirostris</u>						X	X	X	X
<u>Ceriodaphnia (immature)</u>			X		X	X			
<u>Ceriodaphnia lacustris</u>					X				
<u>Ceriodaphnia quadrangularis</u>							X		
<u>Ceriodaphnia reticulata</u>		X							
<u>Chydorus sp.</u>	X	X	X		X	X	X	X	X
<u>Daphnia ambigua</u>		X							
<u>Daphnia (immature)</u>	X	X	X		X	X			
<u>Daphnia parvula</u>		X			X				
<u>Daphnia retrocurva</u>		X	X	X					
<u>Daphnia rosea</u>	X								
<u>Diaphanosoma leuchtenbergianum</u>		X	X		X	X	X	X	X
<u>Eury cercus sp.</u>		X					X	X	
<u>Ilyocryptus spinifer</u>							X	X	
<u>Latona setifera</u>			X						
<u>Leptodora kindtii</u>				X	X	X			
<u>Leydigia acanthocercoides</u>									X
<u>Leydigia quadrangularis</u>					X				
<u>Macrothrix rosea</u>							X		
<u>Moina (immature)</u>							X	X	
<u>Moina micrura</u>							X	X	
<u>Pleuroxus denticulatus</u>	X	X					X		X
<u>Pleuroxus hamulatus</u>	X						X	X	X
<u>Scapholebris kingi</u>						X	X		
<u>Sida crystallina</u>					X	X		X	X
<u>Simocephalus (immature)</u>			X				X		
<b>Total</b>	7	13	9	4	9	15	10	11	
<b>Copepoda</b>									
<u>Attheyella illinoiensis</u>			X						
<u>Calanoida (immature)</u>	X	X	X	X	X	X	X	X	X
<u>Canthocamptus robertcokeri</u>	X								
<u>Cyclopoida (immature)</u>	X	X	X	X	X		X	X	

Table J.20 (continued)

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Copepoda (continued)</b>									
<u><i>Cyclops bicuspidatus thomasi</i></u>	X	X	X				X	X	
<u><i>Cyclops vericans rubellus</i></u>		X			X		X	X	
<u><i>Cyclops vernalis</i></u>	X	X	X	X	X	X	X	X	X
<u><i>Diaptomus pallidus</i></u>	X	X	X	X	X	X	X	X	X
<u><i>Diaptomus reighardi</i></u>	X	X	X	X	X	X	X	X	X
<u><i>Diaptomus sanguineus</i></u>		X				X	X		
<u><i>Ergasilus (immature)</i></u>						X	X		
<u><i>Ergasilus sp.</i></u>					X		X	X	X
<u><i>Eucyclops agilis</i></u>	X	X	X	X			X	X	X
<u><i>Eucyclops prionophorus</i></u>									X
<u><i>Eucyclops speratus</i></u>	X	X							
<u><i>Harpacticoida (immature)</i></u>	X	X	X						
<u><i>Macrocylops albidus</i></u>	X	X	X	X	X	X	X	X	X
<u><i>Mesocyclops edax</i></u>		X	X	X	X	X	X	X	X
<u><i>Nauplii</i></u>	X	X	X	X			X	X	X
<u><i>Nitocra lacustris</i></u>								X	
<u><i>Paracyclops fimbriatus poppei</i></u>		X							
<u><i>Tropocyclops prasinus</i></u>	X	X		X			X		X
Total	13	17	10	10	7	12	11	11	
<b>Rotifera</b>									
<u><i>Asplanchna amphora</i></u>		X	X	X	X	X	X		
<u><i>Asplanchna herricki</i></u>	X	X	X	X	X	X	X	X	X
<u><i>Bdelloida</i></u>									X
<u><i>Brachionus angularis</i></u>		X	X	X	X	X	X	X	X
<u><i>Brachionus bennini</i></u>									X
<u><i>Brachionus bidentata</i></u>		X	X	X			X	X	
<u><i>Brachionus budapestinensis</i></u>		X	X	X		X			
<u><i>Brachionus calyciflorus</i></u>	X	X	X	X	X	X	X	X	
<u><i>Brachionus caudatus</i></u>					X		X		X
<u><i>Brachionus havanaensis</i></u>						X	X		
<u><i>Brachionus pteriodinoides</i></u>	X		X	X	X	X	X		
<u><i>Brachionus quadridentatus</i></u>		X	X	X	X	X	X		X
<u><i>Brachionus urceolaris</i></u>	X								X
<u><i>Cephalodella sp.</i></u>					X				
<u><i>Collotheca sp.</i></u>				X	X	X	X		
<u><i>Conochilooides sp.</i></u>					X	X	X		X
<u><i>Conochilus hippocrepis</i></u>					X	X			
<u><i>Conochilus unicornis</i></u>			X	X	X	X	X	X	X
Contracted rotifera						X	X		
<u><i>Diploleuchlanis sp.</i></u>									X
<u><i>Ephiphanes macrourus</i></u>	X			X				X	X
<u><i>Euchlanis sp.</i></u>	X	X	X	X	X	X	X	X	X
<u><i>Filinia limnetica</i></u>		X		X	X	X			
<u><i>Filinia longiseta</i></u>	X		X	X	X				X

Table J.20 (continued)

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotifera (continued)</b>									
<u>Gastropus</u> sp.				X					
<u>Hexarthra</u> <u>mira</u>				X	X	X	X		
<u>Kellicottia</u> <u>bostoniensis</u>	X			X					
<u>Kellicottia</u> <u>longispina</u>				X					
<u>Keratella</u> <u>cochlearis</u>	X	X	X	X	X				
<u>Keratella</u> <u>crassa</u>	X			X	X				X
<u>Keratella</u> <u>earlinae</u>	X	X	X	X	X	X	X	X	X
<u>Keratella</u> <u>quadrata</u>					X				
<u>Keratella</u> sp.									X
<u>Lecane</u> sp.	X	X	X			X	X		X
<u>Monostyla</u> sp.				X		X	X		X
<u>Mytilina</u> sp.						X	X		X
<u>Notholca</u> sp.	X								
<u>Platyias</u> <u>patulus</u>				X	X	X	X		X
<u>Platyias</u> <u>quadricornis</u>									X
<u>Ploesoma</u> <u>hudsoni</u>									X
<u>Ploesoma</u> <u>truncata</u>				X	X	X	X	X	X
<u>Polyarthra</u> sp.	X	X	X	X	X	X	X	X	X
<u>Rotaria</u> sp.						X			
<u>Rotifera</u>	X	X							
<u>Synchaeta</u> sp.	X		X				X		
<u>Synchaeta</u> <u>stylata</u>	X	X		X	X			X	X
<u>Testudinella</u> sp.				X					
<u>Trichocerca</u> sp.					X	X	X	X	X
<u>Trichotria</u> sp.	X		X						
Total	18	16	25	24	28	23	17	21	
Total Number of Taxa	38	46	44	38	44	50	38	43	
Grand Total - 104									

a. Samples were not collected in February.

Table J.21

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
TRM 388.4 - FEBRUARY-OCTOBER 1978

Table J.21 (continued)

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Copepoda (continued)									
<u>Cyclops bicuspidatus thomasi</u>	X	X							
<u>Cyclops vericans rubellus</u>		X							
<u>Cyclops vernalis</u>		X	X	X	X			X	X
<u>Diaptomus mississippiensis</u>				X					
<u>Diaptomus pallidus</u>		X		X	X	X	X	X	X
<u>Diaptomus reighardi</u>		X		X	X	X			X
<u>Ergasilus</u> (immature)					X				
<u>Ergasilus</u> sp.									X
<u>Eucyclops agilis</u>	X	X			X	X	X	X	X
<u>Eucyclops speratus</u>		X			X			X	
Harpacticoida (immature)	X								
Harpacticoida	X								
<u>Macrocylops albidus</u>					X	X			
<u>Mesocyclops edax</u>		X	X					X	X
Nauplii	X	X	X	X	X	X	X	X	X
<u>Paracyclops fimbriatus poppei</u>			X						
<u>Tropocyclops prasinus</u>	X						X		
Total	9	11	6	7	10	8	7	9	
Rotifera									
<u>Asplanchna amphora</u>	X				X	X			
<u>Asplanchna herricki</u>	X	X	X			X	X	X	X
<u>Asplanchna</u> sp.					X		X	X	X
Bdelloidea							X		
<u>Brachionus angularis</u>	X	X	X		X	X	X	X	X
<u>Brachionus bennini</u>				X					X
<u>Brachionus bidentata</u>			X	X					
<u>Brachionus budapestinensis</u>				X	X	X	X	X	X
<u>Brachionus calyciflorus</u>	X	X	X	X					
<u>Brachionus caudatus</u>				X	X	X	X	X	
<u>Brachionus havanaensis</u>					X	X			
<u>Brachionus nilsoni</u>						X			
<u>Brachionus quadridentatus</u>			X	X	X	X	X	X	X
<u>Brachionus urceolaris</u>	X	X	X	X	X	X	X		X
<u>Cephalodella</u> sp.	X	X	X	X	X	X	X		X
<u>Collotheca</u> sp.		X	X	X	X	X	X	X	X
<u>Colurella</u> sp.									X
<u>Conochiloides</u> sp.				X	X	X	X	X	X
<u>Conochilus hippocrepis</u>					X	X	X	X	X
<u>Conochilus unicornis</u>		X	X	X	X	X	X	X	X
Contracted rotifera		X			X	X			X
<u>Dipleuchlanis</u> sp.									X
<u>Ephiphanes macrourus</u>	X			X		X	X	X	
<u>Euchlanis</u> sp.		X							X

Table J.21 (continued)

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Rotifera (continued)</b>									
<u>Filinia longiseta</u>	X		X		X	X			
<u>Gastropus</u> sp.			X			X	X	X	X
<u>Hexarthra mira</u>						X	X	X	X
<u>Kellicottia bostoniensis</u>		X						X	
<u>Kellicottia longispina</u>	X		X						
<u>Keratella cochlearis</u>	X	X	X	X	X	X			
<u>Keratella crassa</u>	X	X	X		X	X			
<u>Keratella earlinae</u>	X	X	X	X	X	X	X	X	X
<u>Keratella lelanderri</u>	X								
<u>Keratella quadrata</u>	X						X		X
<u>Lecane</u> sp.	X						X	X	X
<u>Monostyla</u> sp.			X		X	X	X	X	X
<u>Mytilina</u> sp.						X	X	X	X
<u>Notholca</u> sp.	X								
<u>Platyias patulus</u>				X	X	X	X	X	X
<u>Ploesoma hudsoni</u>									X
<u>Ploesoma truncata</u>		X	X	X	X	X	X	X	X
<u>Polyarthra</u> sp.	X	X	X	X	X	X	X	X	X
<u>Rotaria</u> sp.						X			
<u>Rotifera</u>	X	X							
<u>Synchaeta</u> sp.	X								
<u>Synchaeta stylata</u>	X	X	X	X	X	X	X	X	X
<u>Trichocerca</u> sp.		X	X	X	X	X	X	X	
<u>Trichotria</u> sp.		X							
Total		18	16	20	21	25	30	23	25
Total Number of Taxa		36	35	35	33	41	55	46	43
Grand Total - 100									

a. Samples were not collected in February.

Table J.22

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 391.1 - FEBRUARY-OCTOBER 1978

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Cladocera</b>									
<u>Alona affinis</u>	X								
<u>Alona costata</u>	X						X		
<u>Alona quadrangularis</u>					X				
<u>Alona rectangula</u>							X	X	X
<u>Alonella sp.</u>									X
<u>Bosmina longirostris</u>	X	X	X	X			X	X	X
<u>Camptocercus rectirostris</u>									X
<u>Ceriodaphnia (immature)</u>	X	X				X	X	X	X
<u>Ceriodaphnia lacustris</u>						X	X	X	X
<u>Ceriodaphnia quadrangularis</u>	X				X				
<u>Chydorus sp.</u>	X	X		X				X	X
<u>Daphnia (immature)</u>	X	X	X						
<u>Daphnia parvula</u>	X	X							X
<u>Daphnia retrocurva</u>				X					X
<u>Diaphanosoma leuchtenbergianum</u>		X	X	X		X	X	X	X
<u>Holopedium gibberum</u>					X				
<u>Ilyocryptus (immature)</u>						X			
<u>Ilyocryptus spinifer</u>							X	X	
<u>Latona setifera</u>						X			
<u>Leptodora kindtii</u>			X	X	X				X
<u>Leydigia quadrangularis</u>	X						X	X	
<u>Moina (immature)</u>							X	X	
<u>Moina micrura</u>								X	
<u>Pleuroxus denticulatus</u>	X					X	X		
<u>Pleuroxus hamulatus</u>	X							X	
<u>Scapholebris kingi</u>								X	
<u>Sida crystallina</u>						X		X	X
<u>Simocephalus (immature)</u>	X								
Total	12	7	4	7	6	8	10	10	
<b>Copepoda</b>									
<u>Calanoida (immature)</u>	X	X	X	X	X	X			X
<u>Canthocamptus robertcokeri</u>	X								
<u>Cyclopoida (immature)</u>	X	X	X	X	X	X	X	X	X
<u>Cyclops bicuspidatus thomasi</u>	X		X						
<u>Cyclops vericans rubellus</u>		X		X			X		X
<u>Cyclops vernalis</u>		X	X	X	X				

Table J.22 (continued)

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Copepoda (continued)									
<u>Diaptomus bogalusensis</u>			X					X	X
<u>Diaptomus pallidus</u>	X	X		X	X			X	X
<u>Diaptomus reighardi</u>		X		X	X			X	X
<u>Ergasilus (immature)</u>					X	X			
<u>Ergasilus sp.</u>					X	X			X
<u>Eucyclops agilis</u>	X	X					X		X
<u>Eucyclops speratus</u>	X								
<u>Harpacticoida (immature)</u>	X				X				
<u>Macrocylops albidus</u>	X								
<u>Mesocyclops edax</u>		X	X	X	X	X	X	X	X
<u>Nauplii</u>	X	X	X	X			X	X	X
<u>Nitocra lacustris</u>									X
<u>Tropocyclops prasinus</u>	X			X					
Total	11	9	7	10	8	8	4		10
Rotifera									
<u>Asplanchna amphora</u>				X	X	X			
<u>Asplanchna herricki</u>	X	X	X	X		X	X	X	X
<u>Asplanchna sp.</u>					X				
<u>Bdelloida</u>									X
<u>Brachionus angularis</u>		X	X	X	X	X	X	X	X
<u>Brachionus bennini</u>									X
<u>Brachionus budapestinensis</u>	X	X		X	X	X	X	X	X
<u>Brachionus calyciflorus</u>		X	X	X	X	X	X	X	X
<u>Brachionus caudatus</u>		X		X	X	X	X	X	X
<u>Brachionus quadridentatus</u>		X	X	X	X	X	X	X	X
<u>Brachionus urceolaris</u>	X	X							
<u>Ceghalodella sp.</u>	X		X					X	X
<u>Collotheca sp.</u>		X	X	X	X	X	X	X	X
<u>Conochiloides sp.</u>				X	X	X	X	X	X
<u>Conochilus hippocrepis</u>					X				X
<u>Conochilus unicornis</u>	X	X	X				X	X	X
<u>Contracted rotifera</u>			X		X				
<u>Ephiphantes macrourus</u>				X	X		X	X	X
<u>Euchlanis sp.</u>				X	X			X	X
<u>Filinia longiseta</u>	X	X	X	X	X	X	X	X	X
<u>Gastropus sp.</u>			X						
<u>Hexarthra mira</u>					X		X	X	X
<u>Kellicottia bostoniensis</u>				X					
<u>Kellicottia longispina</u>				X					

Table J.22 (continued)

	Feb <sup>a</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<u>Rotifera (continued)</u>									
<u>Keratella cochlearis</u>	X	X	X	X					
<u>Keratella crassa</u>	X	X	X			X		X	
<u>Keratella earlinae</u>	X		X	X	X	X		X	X
<u>Keratella quadrata</u>	X							X	X
<u>Lecane</u> sp.	X						X	X	
<u>Lophocharis salpina</u>							X		
<u>Monostyla</u> sp.				X	X	X	X		
<u>Notholca</u> sp.	X								
<u>Platyias patulus</u>			X	X	X	X	X	X	X
<u>Ploesoma hudsoni</u>									X
<u>Ploesoma truncata</u>		X		X	X	X			X
<u>Polyarthra</u> sp.	X	X	X	X	X	X	X	X	X
<u>Rotaria</u> sp.	X	X							
<u>Rotifera</u>	X	X							
<u>Synchaeta</u> sp.	X	X							
<u>Synchaeta stylata</u>	X	X	X	X	X	X	X	X	X
<u>Trichocerca</u> sp.	X	X	X	X	X	X	X	X	X
<u>Trichotria</u> sp.	X	X							
Total		17	20	20	22	20	19	24	26
Total Number of Taxa		40	36	31	39	34	35	38	46
Grand Total - 89									

a. Samples were not collected in February.

Table J.23

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 386.4 - FEBRUARY-OCTOBER 1979

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Cladocera</b>									
<u>Alona guttata</u>				X					
<u>Alona intermedia</u>							X		X
<u>Alona quadrangularis</u>	X					X			
<u>Alona rectangula</u>				X	X	X			
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X	X	X
<u>Campocercus rectirostris</u>								X	X
<u>Ceriodaphnia (immature)</u>							X		
<u>Ceriodaphnia lacustris</u>					X	X			
<u>Chydorus sp.</u>	X	X	X	X			X	X	X
<u>Daphnia galeata</u>	X								
<u>Daphnia (immature)</u>	X			X			X		
<u>Daphnia parvula</u>			X						
<u>Daphnia retrocurva</u>				X	X	X	X		
<u>Diaphanosoma leuchtenbergianum</u>				X	X	X	X	X	X
<u>Ilyocryptus (immature)</u>							X		
<u>Ilyocryptus spinifer</u>									X
<u>Leptodora kindtii</u>						X	X	X	X
<u>Leydigia acanthaceroides</u>							X		
<u>Leydigia quadrangularis</u>							X		
<u>Macrothrix rosea</u>									X
<u>Moina (immature)</u>					X			X	
<u>Moina minuta</u>						X		X	
<u>Pleuroxus denticulatus</u>	X	X	X				X	X	
<u>Pleuroxus hamulatus</u>					X				
<u>Scapholebris kingi</u>					X	X			
<u>Sida crystallina</u>					X	X	X		
<u>Simocephalus (immature)</u>	X							X	
<u>Simocephalus serrulatus</u>	X				X				
Total	8	3	6	10	11	6	14	5	7
<b>Copepoda</b>									
<u>Calanoida (immature)</u>	X	X	X	X	X	X	X	X	X
<u>Canthocamptus robertcokeri</u>	X								
<u>Cyclopoida (immature)</u>	X	X	X	X	X	X	X	X	X
<u>Cyclops bicuspidatus thomasi</u>	X	X		X					
<u>Cyclops varicans rubellus</u>					X		X		
<u>Cyclops vernalis</u>		X	X	X	X	X	X		
<u>Diaptomus pallidus</u>	X	X			X	X	X		
<u>Diaptomus reighardi</u>	X				X	X	X		X
<u>Ergasilus (immature)</u>							X		
<u>Ergasilus sp.</u>					X	X	X	X	X
<u>Eucyclops agilis</u>	X	X	X	X	X	X	X		
<u>Eucyclops prionophorus</u>					X				

Table J.23 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Copepoda (continued)</b>									
<i>Harpacticoida (immature)</i>	X		X						
<i>Mesocyclops edax</i>				X	X		X	X	
<i>Nauplii</i>	X	X	X	X	X	X	X	X	X
<i>Tropocyclops prasinus</i>	X				X	X	X		
<b>Total</b>	10	7	6	10	10	11	10	5	5
<b>Rotifera</b>									
<i>Asplanchna amphora</i>	X								
<i>Asplanchna herricki</i>		X	X	X	X	X	X	X	X
<i>Asplanchna priodonta</i>				X					
<i>Beuchampiella</i> sp.						X			
<i>Brachionus angularis</i>			X	X	X	X	X	X	X
<i>Brachionus bennini</i>				X				X	
<i>Brachionus bidentata</i>				X	X	X		X	X
<i>Brachionus budapestinensis</i>				X	X	X	X	X	
<i>Brachionus calyciflorus</i>	X	X	X	X				X	
<i>Brachionus caudatus</i>				X	X	X	X	X	X
<i>Brachionus quadridentatus</i>			X	X	X	X	X		X
<i>Brachionus urceolaris</i>				X	X				
<i>Cephalodella</i> sp.	X	X	X	X					X
<i>Collotheca</i> sp.			X	X	X	X	X	X	
<i>Conochiloides</i> sp.	X			X	X	X	X		
<i>Conochilus hippocrepis</i>				X	X	X			
<i>Conochilus unicornis</i>				X	X	X	X		X
<i>Contracted rotifera</i>			X			X	X		
<i>Ephiphanes macrourus</i>	X			X	X				
<i>Euchlanis</i> sp.	X	X		X	X	X	X	X	X
<i>Filinia longiseta</i>			X			X		X	
<i>Hexarthra mira</i>							X		
<i>Hexarthra</i> sp.						X	X	X	
<i>Kellicottia bostoniensis</i>	X			X	X				X
<i>Keratella cochlearis</i>	X			X			X		
<i>Keratella crassa</i>	X	X	X	X			X	X	
<i>Keratella earlinae</i>	X	X	X	X	X	X			X
<i>Keratella</i> sp.		X							
<i>Keratella valga</i>	X		X						
<i>Lecane leontina</i>				X					
<i>Lecane</i> sp.					X	X	X	X	X
<i>Machrochaetus subquadratus</i>									X
<i>Monostyla bulla</i>								X	
<i>Monostyla quadridentata</i>								X	
<i>Monostyla</i> sp.				X			X		X
<i>Notholca</i> sp.	X	X							

Table J.23 (continued)

Table J.24

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 388.4 - FEBRUARY-OCTOBER 1979

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Branchiura</b>									
<u>Argulus</u> sp.						X			
<b>Cladocera</b>									
<u>Alona affinis</u>		X							X
<u>Alona costata</u>			X					X	
<u>Alona guttata</u>	X		X						
<u>Alona</u> (immature)							X		
<u>Alona intermediata</u>		X					X	X	X
<u>Alona quadrangularis</u>								X	
<u>Alona rectangula</u>	X	X		X	X				X
<u>Alonella</u> sp.								X	
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X	X	X
<u>Camptocercus rectirostris</u>	X							X	X
<u>Ceriodaphnia</u> (immature)					X	X	X	X	
<u>Ceriodaphnia lacustris</u>					X	X		X	X
<u>Ceriodaphnia quadrangularis</u>							X		
<u>Chydorus</u> sp.	X	X	X		X			X	X
<u>Daphnia</u> (immature)	X	X	X	X	X	X			
<u>Daphnia parvula</u>			X						
<u>Daphnia retrocurva</u>				X	X	X			X
<u>Diaphanosoma leuchtenbergianum</u>					X	X	X	X	X
<u>Eury cercus lamellatus</u>	X								
<u>Ilyocryptus</u> (immature)		X	X				X	X	
<u>Ilyocryptus sordidus</u>							X		
<u>Ilyocryptus spinifer</u>									X
<u>Leptodora kindtii</u>					X				
<u>Macrothrix</u> (immature)								X	
<u>Macrothrix laticornis</u>								X	
<u>Macrothrix rosea</u>								X	X
<u>Moina</u> (immature)								X	
<u>Moina micrura</u>							X		
<u>Moina minuta</u>					X	X		X	
<u>Pleuroxus denticulatus</u>	X	X			X	X	X	X	X
<u>Pleuroxus hamulatus</u>									X
<u>Scapholebris kingi</u>								X	
<u>Sida crystallina</u>					X	X	X	X	X
<u>Simocephalus</u> (immature)	X								
<u>Simocephalus serrulatus</u>	X	X			X				X
Total	11	8	8	9	12	10	16	12	13

Table J.24 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Copepoda</b>									
Calanoida (immature)	X	X		X	X	X <sup>a</sup>	X		X
<u>Canthocamptus robertcokeri</u>	X	X	X						X
Cyclopoida (immature)	X	X	X	X	X	X	X	X	X
<u>Cyclops bicuspidatus thomasi</u>	X	X							
<u>Cyclops varicans rubellus</u>						X			
<u>Cyclops vernalis</u>	X	X		X	X		X	X	X
<u>Diaptomus pallidus</u>	X			X	X	X			X
<u>Diaptomus reighardi</u>	X			X	X	X		X	
Ergasilus (immature)						X			
Ergasilus sp.				X	X	X			
<u>Eucylops agilis</u>	X	X	X	X	X	X	X	X	
Harpacticoida (immature)	X	X	X						
<u>Macrocylops albidus</u>	X								
<u>Mesocyclops edax</u>				X	X				
Nauplii	X	X	X	X	X	X	X	X	X
<u>Tropocyclops prasinus</u>	X				X	X			X
Total	12	8	5	9	9	10	8	4	7
<b>Rotifera</b>									
<u>Asplanchna herricki</u>	X	X	X	X	X	X	X	X	X
<u>Asplanchna priodonta</u>				X					
<u>Beuchampiella</u> sp.						X			
<u>Brachionus angularis</u>	X	X	X	X	X	X	X	X	X
<u>Brachionus bennini</u>						X			
<u>Brachionus bidentata</u>				X	X		X		X
<u>Brachionus budapestinensis</u>				X		X	X	X	X
<u>Brachionus calyciflorus</u>	X	X	X	X	X	X	X	X	X
<u>Brachionus caudatus</u>				X		X	X		
<u>Brachionus havanaensis</u>				X	X				
<u>Brachionus quadridentatus</u>			X	X	X	X	X		X
<u>Brachionus urceolaris</u>			X	X					
<u>Cephalodella</u> sp.	X	X	X	X	X	X		X	X
<u>Collothea</u> sp.			X	X	X	X		X	
<u>Conochilooides</u> sp.				X	X	X	X	X	
<u>Conochilus hippocrepis</u>					X	X	X	X	
<u>Conochilus unicornis</u>			X	X	X	X	X		X
Contracted rotifera	X	X	X			X		X	
<u>Dipleuchlanis</u> sp.						X			
<u>Ephiphantes macrourus</u>	X			X	X			X	
<u>Euchlanis</u> sp.	X	X	X	X	X	X	X	X	X
<u>Filinia longiseta</u>	X		X		X	X	X		
<u>Hexarthra mira</u>				X		X	X		
<u>Hexarthra</u> sp.						X			X

Table J.24 (continued)

Table J.25

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 391.1 - FEBRUARY-OCTOBER 1979

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Branchiura</b>									
<u>Argulus</u> sp.						X			
<b>Cladocera</b>									
<u>Alona costata</u>		X							
<u>Alona</u> (immature)							X	X	X
<u>Alona intermedia</u>							X	X	X
<u>Alona karau</u>							X		
<u>Alona rectangula</u>			X		X		X	X	X
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X	X	X
<u>Camptocercus rectirostris</u>	X	X				X			X
<u>Ceriodaphnia</u> (immature)						X	X	X	
<u>Ceriodaphnia lacustris</u>				X	X		X	X	X
<u>Ceriodaphnia quadrangula</u>						X			
<u>Chydorus</u> sp.	X	X	X	X	X		X	X	X
<u>Daphnia</u> (immature)	X	X	X	X					
<u>Daphnia parvula</u>			X						
<u>Daphnia retrocurva</u>				X	X				
<u>Diaphanosoma leuchtenbergianum</u>		X		X	X	X	X	X	X
<u>Eury cercus lamellatus</u>	X								
<u>Ilyocryptus</u> (immature)	X				X	X			
<u>Ilyocryptus sordidus</u>	X					X		X	
<u>Ilyocryptus spinifer</u>				X	X	X		X	
<u>Latona setifera</u>					X				X
<u>Leptodora kindtii</u>					X				
<u>Macrothrix rosea</u>							X		
<u>Moina</u> (immature)					X				
<u>Moina micrura</u>					X				
<u>Moina minuta</u>							X	X	
<u>Pleuroxus denticulatus</u>	X	X					X	X	
<u>Pleuroxus hamulatus</u>									X
<u>Scapholebris kingi</u>				X	X				
<u>Sida crystallina</u>				X	X	X		X	X
<u>Simocephalus</u> (immature)	X	X			X	X	X		
<u>Simocephalus serrulatus</u>					X			X	
Total	8	9	5	10	15	10	15	12	9
<b>Copepoda</b>									
<u>Calanoida</u> (immature)	X	X	X	X	X	X	X		
<u>Canthocamptus robertcokeri</u>	X	X	X						X
<u>Cyclopoida</u> (immature)	X	X	X	X	X	X	X	X	X
<u>Cyclops bicuspidatus thomasi</u>	X	X	X						

Table J.25 (continued)

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Copepoda (continued)									
<u>Cyclops varicans rubellus</u>	X			X	X			X	
<u>Cyclops vernalis</u>	X	X		X	X			X	X
<u>Diaptomus pallidus</u>		X		X	X				
<u>Diaptomus reighardi</u>	X			X	X				
<u>Ergasilus (immature)</u>	X					X	X	X	
<u>Ergasilus sp.</u>					X	X	X		X
<u>Eucylops agilis</u>	X	X		X	X			X	X
Harpacticoida									
Harpacticoida (immature)	X	X							
<u>Mesocyclops edax</u>				X	X	X	X		
Nauplii	X	X	X		X	X	X	X	X
<u>Tropocyclops prasinus</u>	X	X			X	X		X	X
Total	12	10	5	7	10	6	6	7	8
Rotifera									
<u>Asplanchna amphora</u>	X					X			
<u>Asplanchna herricki</u>	X	X	X	X	X	X	X	X	X
<u>Asplanchna priodonta</u>			X						
<u>Beuchampiella sp.</u>			X	X	X	X	X	X	X
<u>Brachionus angularis</u>			X	X	X	X	X		X
<u>Brachionus bennini</u>			X	X					X
<u>Brachionus bidentata</u>					X				X
<u>Brachionus budapestinensis</u>					X	X		X	X
<u>Brachionus calyciflorus</u>			X	X	X	X	X		X
<u>Brachionus caudatus</u>					X	X	X	X	X
<u>Brachionus quadridentatus</u>			X	X	X	X	X		X
<u>Brachionus urceolaris</u>			X						
<u>Cephalodella sp.</u>	X	X	X	X		X			X
<u>Collotheca sp.</u>					X	X	X		X
<u>Conochiloides sp.</u>				X	X	X	X	X	X
<u>Conochilus hippocrepis</u>	X	X	X	X					
<u>Conochilus unicornis</u>	X		X			X	X	X	
Contracted rotifera			X						
<u>Ephiphantes macrourus</u>				X	X			X	X
<u>Euchlanis sp.</u>			X	X			X		X
<u>Filinia limnetica</u>					X	X			
<u>Filinia longiseta</u>	X	X			X		X	X	
<u>Hexarthra mira</u>					X		X		X
<u>Hexarthra sp.</u>						X			
<u>Kellicottia bostoniensis</u>				X					
<u>Kellicottia longispina</u>			X						
<u>Keratella cochlearis</u>	X						X	X	X
<u>Keratella crassa</u>	X	X	X	X	X	X			
<u>Keratella earlinae</u>	X	X	X	X		X			X
<u>Keratella sp.</u>			X		X				
<u>Keratella valga</u>				X	X				

Table J.25 (continued)

Table J.26

DISTRIBUTION OF ZOOPLANKTON - GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 TRM 396.8 - FEBRUARY-OCTOBER 1979

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Cladocera</b>									
<u>Alona guttata</u>			X						
<u>Alona intermedia</u>				X	X			X	X
<u>Alona rectangula</u>		X	X	X	X	X	X	X	X
<u>Bosmina longirostris</u>	X	X	X	X	X	X	X		
<u>Camptocercus rectirostris</u>				X					X
<u>Ceriodaphnia (immature)</u>						X		X	
<u>Ceriodaphnia lacustris</u>		X	X	X	X	X		X	X
<u>Chydorus sp.</u>			X						
<u>Daphnia ambigua</u>			X						
<u>Daphnia galeata</u>	X					X	X	X	
<u>Daphnia (immature)</u>	X	X					X		
<u>Daphnia parvula</u>								X	
<u>Daphnia pulex</u>				X	X	X	X	X	X
<u>Daphnia retrocurva</u>	X			X	X	X	X	X	X
<u>Diaphanosoma leuchtenbergianum</u>	X			X	X	X	X	X	
<u>Ilyocryptus (immature)</u>						X			X
<u>Ilyocryptus spinifer</u>					X	X		X	
<u>Leptodora kindtii</u>				X			X		X
<u>Moina (immature)</u>				X			X		
<u>Moina minuta</u>							X		
<u>Pleuroxus denticulatus</u>	X				X		X	X	X
<u>Scapholebris kingi</u>				X	X	X	X	X	X
<u>Sida crystallina</u>					X				
<u>Simocephalus (immature)</u>	X					X			X
<u>Simocephalus serrulatus</u>	X								
Total	9	6	3	9	8	6	11	12	8
<b>Copepoda</b>									
<u>Calanoida (immature)</u>	X	X	X	X	X	X	X	X	X
<u>Canthocamptus robertcokeri</u>		X	X		X			X	X
<u>Cyclopoida (immature)</u>	X	X	X	X	X	X	X	X	X
<u>Cyclops bicuspidatus thomasi</u>	X	X	X	X	X	X	X	X	X
<u>Cyclops vernalis</u>			X	X	X	X	X	X	X
<u>Diaptomus bogalusensis</u>					X		X	X	X
<u>Diaptomus pallidus</u>	X			X	X	X	X	X	X
<u>Diaptomus reighardi</u>	X				X	X	X	X	X
<u>Ergasilus (immature)</u>							X	X	X
<u>Ergasilus sp.</u>			X		X	X			
<u>Eucylops agilis</u>	X				X				
<u>Eucyclops prionophorus</u>		X							
Harpacticoida	X		X	X	X	X			
Harpacticoida (immature)							X		

Table J.26 (continued)

	Feb	Mar	Apr	May	Jun	Jül	Aug	Sep	Oct
Copepoda (continued)									
<i>Macrocyclops albidus</i>							X		
<i>Mesocyclops edax</i>		X	X	X	X	X	X	X	X
<i>Nauplii</i>	X	X	X	X	X	X	X	X	X
<i>Nitocra lacustris</i>						X			
<i>Tropocyclops prasinus</i>	X	X					X		X
Total	8	10	10	10	11	10	11	9	10
Rotifera									
<i>Asplanchna amphora</i>			X						
<i>Asplanchna herricki</i>		X	X	X	X	X	X	X	X
<i>Brachionus angularis</i>	X	X	X	X	X	X	X	X	X
<i>Brachionus bidentata</i>				X	X				X
<i>Brachionus budapestinensis</i>					X	X	X		
<i>Brachionus calyciflorus</i>			X	X	X	X	X		X
<i>Brachionus caudatus</i>					X	X	X	X	X
<i>Brachionus havanaensis</i>					X				
<i>Brachionus quadridentatus</i>					X		X	X	
<i>Brachionus urceolaris</i>			X						
<i>Cephalodella sp.</i>	X	X							
<i>Collotheca sp.</i>	X			X	X	X			
<i>Colurella sp.</i>				X					
<i>Conochiloides sp.</i>				X	X	X	X		
<i>Cyclops unicornis</i>	X		X	X	X	X	X	X	
Contracted rotifera		X	X						
<i>Ephiphanes macrourus</i>	X	X			X		X		
<i>Euchlanis sp.</i>	X	X	X	X		X	X	X	X
<i>Filinia longiseta</i>	X	X			X		X		
<i>Gastropus sp.</i>						X			
<i>Hexarthra sp.</i>						X			
<i>Kellicottia bostoniensis</i>	X	X	X						
<i>Kellicottia longispina</i>	X			X					
<i>Keratella cochlearis</i>	X	X	X	X	X	X	X	X	
<i>Keratella crassa</i>	X	X	X	X		X	X	X	X
<i>Keratella earlinae</i>	X	X	X	X	X	X	X		X
<i>Keratella sp.</i>		X							
<i>Keratella valga</i>	X							X	X
<i>Lecane sp.</i>									
<i>Machrochaetus subquadratus</i>									X
<i>Notholca sp.</i>		X							
<i>Platyias patulus</i>					X	X	X	X	X
<i>Ploesoma hudsoni</i>					X		X	X	X
<i>Ploesoma truncata</i>		X		X	X	X	X	X	X
<i>Polyarthra sp.</i>	X	X	X		X	X	X	X	

Table J.26 (continued)

**APPENDIX K**  
**ZOOPLANKTON ENUMERATION**

## APPENDIX K

Table K.1

ZOOPLANKTON ENUMERATION BY GROUPS, GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 FEBRUARY-OCTOBER 1974

Station	Zooplankton	(Number/m <sup>3</sup> x 10 <sup>3</sup> )									
		February	March	April	May	June	July	August	September	October	$\bar{x}$
TRM 388.0	Rotatoria	1.5	0.4	0.5	21.4	1.1	2.9	0.5	1.8	1.2	
	Cladocera	0.2	0.4	0.1	39.6	1.4	1.4	2.4	4.0	3.6	
	Copepoda	1.3	0.5	0.6	2.0	0.4	0.9	0.7	0.6	0.5	
	Total	3.0	1.3	1.2	63.0	2.9	5.2	3.6	6.4	5.3	10.2
TRM 391.2	Rotatoria	1.9	0.4	1.0	47.0	2.2	3.7	0.4	0.9	0.6	
	Cladocera	0.1	0.1	0.2	71.8	2.0	0.7	3.3	4.4	2.3	
	Copepoda	1.5	0.4	0.8	3.2	0.6	0.8	1.2	0.6	0.3	
	Total	3.5	0.9	2.0	122.0	4.8	5.2	4.9	5.9	3.2	16.9
TRM 396.8	Rotatoria	1.1	0.2	0.8	45.5	1.0	0.6	0.3	0.4	0.2	
	Cladocera	0.1	0.0	0.2	50.2	1.2	0.5	5.3	7.5	2.9	
	Copepoda	1.0	0.3	0.8	3.2	0.6	1.0	1.8	0.8	0.3	
	Total	2.2	0.5	1.8	98.9	2.8	2.1	7.4	8.7	3.4	14.2
Monthly mean		2.9	0.9	1.6	94.7	3.5	4.2	3.3	7.0	3.9	14.2

Table K.2

ZOOPLANKTON ENUMERATION BY GROUPS, GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 FEBRUARY-OCTOBER 1975

Station	Zooplankton	(Number/m <sup>3</sup> x 10 <sup>3</sup> )									
		February	March	April	May	June	July	August	September	October	$\bar{x}$
TRM 388.0	Rotatoria	0.1	1.0	0.9	4.9	0.3	0.8	0.2	0.4	0.5	
	Cladocera	0.1	0.1	0.1	2.4	0.5	3.3	1.7	0.3	1.7	
	Copepoda	1.0	0.8	0.8	0.6	0.2	1.0	0.2	0.3	0.1	
	Total	1.2	1.9	1.8	7.9	1.0	5.1	2.1	1.0	2.3	2.7
TRM 391.2	Rotatoria	0.2	1.0	0.8	5.7	1.2	1.4	1.2	0.6	0.5	
	Cladocera	0.1	0.1	0.1	1.7	0.3	2.6	0.8	1.0	1.3	
	Copepoda	0.6	1.2	0.6	0.8	0.3	0.7	0.4	0.6	0.4	
	Total	0.9	2.3	1.5	8.4	1.8	4.7	2.4	2.2	2.2	2.9
TRM 396.8	Rotatoria	0.1	0.6	0.2	3.9	2.9	0.5	0.6	0.2	0.6	
	Cladocera	0.1	0.2	0.1	2.4	0.7	3.9	2.0	0.6	1.5	
	Copepoda	0.4	1.0	0.3	0.7	0.4	1.0	0.3	0.4	0.7	
	Total	0.6	1.8	0.6	7.0	4.0	5.4	2.9	1.2	2.8	2.9
Monthly mean (TRM stations)		0.9	2.0	1.3	7.7	2.3	5.0	2.4	1.4	2.4	
TCM 0.2 <sup>a</sup>	Rotatoria			64.6	133.6	24.7	32.7	5.0	0.8	115.2	
	Cladocera			0.8	31.9	11.5	4.3	4.0	0.6	3.4	
	Copepoda			9.0	14.7	2.3	20.1	1.3	0.7	35.1	
	Total			74.4	180.2	38.5	57.1	10.3	2.1	153.7	73.8

a. Sampling was not initiated at this station until April 1975.

Table K.3

ZOOPLANKTON ENUMERATION BY GROUPS, GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 FEBRUARY-OCTOBER 1976

Station	Zooplankton	(Number/m <sup>3</sup> x 10 <sup>3</sup> )									
		February	March	April	May	June	July	August	September	October	$\bar{x}$
TRM 388.0	Rotatoria	47.8	4.8	8.5	6.1	3.0	8.7	0.4	0.2	0.4	
	Cladocera	0.5	0.6	12.8	1.0	2.5	4.7	0.5	3.3	0.4	
	Copepoda	4.8	1.8	2.7	1.3	2.0	3.8	0.2	0.2	0.3	
	Total	53.1	7.2	24.0	8.4	7.5	17.2	1.1	3.7	1.1	13.7
TRM 391.2	Rotatoria	49.8	3.8	6.3	5.6	3.7	4.7	0.2	1.5	0.7	
	Cladocera	0.1	0.9	12.3	0.8	3.1	6.2	0.4	2.7	0.7	
	Copepoda	5.0	1.3	2.6	1.4	2.6	3.4	0.1	0.3	0.5	
	Total	54.9	6.0	21.2	7.8	9.4	14.3	0.7	4.5	1.9	13.5
TRM 396.8	Rotatoria	48.4	4.6	14.7	6.4	2.5	1.3	0.2	0.1	0.8	
	Cladocera	0.7	1.0	37.8	0.7	1.8	5.9	0.4	2.5	0.8	
	Copepoda	4.4	3.4	5.7	2.0	1.9	3.1	0.2	0.2	0.2	
	Total	53.5	9.0	58.2	9.1	6.2	10.3	0.8	2.8	1.8	16.9
Monthly mean (TRM stations)		53.9	7.5	34.4	8.4	7.7	14.0	0.9	3.7	1.6	
TCM 0.2	Rotatoria	34.7	49.5	71.6	16.3	33.0	29.3	3.1	3.9	9.0	
	Cladocera	2.7	8.1	21.4	1.2	2.7	2.5	0.6	7.2	1.4	
	Copepoda	6.3	88.0	8.7	5.6	19.7	71.0	0.5	0.7	5.8	
	Total	43.7	145.6	101.7	23.1	55.4	102.8	4.2	11.8	16.2	56.0

Table K.4

ZOOPLANKTON ENUMERATION BY GROUPS, GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 FEBRUARY-OCTOBER 1977

Station	Zooplankton	(Number/m <sup>3</sup> × 10 <sup>3</sup> )									
		February	March	April	May	June	July	August	September	October	$\bar{x}$
TRM 388.0	Rotatoria	80.2	24.4	1.7	1.2	10.5	1.3	7.3	9.6	0.2	
	Cladocera	0.4	0.4	0.6	2.8	2.2	3.9	13.2	0.6	0.2	
	Copepoda	6.0	7.8	0.6	0.6	5.2	2.5	2.4	3.8	0.1	
	Total	86.6	32.6	2.9	4.6	17.9	7.7	22.9	14.0	0.5	21.1
TRM 391.2	Rotatoria	52.4	44.9	2.3	2.9	2.5	1.5	3.2	3.4	0.1	
	Cladocera	0.5	1.0	0.6	1.8	1.0	1.6	12.3	1.2	0.1	
	Copepoda	6.5	7.1	0.8	0.7	3.8	2.0	2.2	2.2	0.1	
	Total	59.4	53.0	3.7	5.4	7.3	5.1	17.7	6.8	0.3	17.6
TRM 396.8	Rotatoria	57.2	0.5	0.6	0.3	3.4	4.9	1.4	1.5	0.1	
	Cladocera	0.4	8.3	0.3	0.9	2.3	3.6	7.4	0.8	0.2	
	Copepoda	5.2	46.7	0.2	0.1	2.2	3.6	1.5	0.7	0.1	
	Total	62.8	55.5	1.1	1.3	7.9	12.1	10.3	3.0	0.4	17.2
Monthly mean (TRM stations)		69.6	47.0	2.6	3.8	11.0	8.3	17.0	7.9	0.4	
TCM 0.2	Rotatoria	85.0	160.7	215.1	38.4	10.4	24.0	16.5	5.3	0.4	
	Cladocera	1.0	5.2	11.1	4.4	4.3	4.7	10.3	1.6	26.5	
	Copepoda	37.6	38.0	15.5	51.8	4.0	6.0	4.1	18.9	33.5	
	Total	93.6	203.9	241.8	94.6	18.7	34.7	30.9	25.8	60.4	89.4

Table K.5

ZOOPLANKTON ENUMERATION BY GROUPS, GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 MARCH<sup>a</sup>-OCTOBER 1978

Station	Zooplankton	(Number/m <sup>3</sup> x 10 <sup>3</sup> )									
		March	April	May	June	July	August	September	October		$\bar{x}$
TRM 388.0 (Channel)	Rotatoria	13.0	2.9	6.7	13.1	17.0	2.1	0.4	1.0		
	Cladocera	0.3	23.7	0.9	6.1	3.0	5.0	2.0	2.7		
	Copepoda	6.7	4.3	3.1	5.6	5.3	1.0	0.3	1.5		
	Total	20.0	30.9	10.7	24.8	25.3	8.1	2.7	5.2	16.0	
TRM 391.2 (Channel)	Rotatoria	14.5	2.0	5.0	285.4	10.6	6.5	0.4	1.1		
	Cladocera	0.7	21.0	0.5	1.1	4.1	2.6	0.6	3.1		
	Copepoda	11.2	6.3	1.5	3.0	4.4	1.4	0.3	1.0		
	Total	26.4	29.3	7.0	289.5	19.1	10.5	1.3	5.2	48.5	
TRM 396.8 (Channel)	Rotatoria	10.0	1.5	1.4	10.3	29.8	6.6	0.2	0.6		
	Cladocera	0.4	15.7	0.5	8.9	3.1	4.8	1.5	1.8		
	Copepoda	7.2	6.3	0.6	4.7	3.2	3.2	0.2	1.0		
	Total	17.6	13.5	2.5	23.9	36.1	14.6	1.9	3.4	14.2	
Monthly mean (TRM stations)		21.3	24.6	6.7	112.7	26.8	11.1	2.0	4.6		
Monthly mean (All stations)		25.4	36.3	17.2	103.9	36.5	43.6	1.8	4.5		
TCM 0.2	Rotatoria	2.8	34.3	0.3	54.8	50.7	107.6	1.0	1.8		
	Cladocera	13.2	17.1	10.9	3.3	5.1	0.8	-0.2	-1.5		
	Copepoda	21.5	20.2	37.5	19.3	0.5	32.9	0.2	0.9	55.9	
	Total	37.5	71.6	48.7	77.4	65.3	141.3	1.4	4.2		

a. Samples not collected in February.

Table K.6

ZOOPLANKTON ENUMERATION BY GROUPS, GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 MARCH<sup>a</sup>-OCTOBER 1978

Station	Zooplankton	(Number/m <sup>3</sup> x 10 <sup>3</sup> )								
		March	April	May	June	July	August	September	October	$\bar{x}$
TRM 386.4	Rotatoria	14.2	52.0	13.8	125.5	134.8	140.7	0.5	0.9	
	Cladocera	0.9	21.4	0.8	1.5	1.7	3.7	1.7	2.8	
	Copepoda	8.9	7.1	8.5	6.5	11.2	11.4	0.2	2.1	
	Total	24.0	80.5	23.1	133.5	147.7	155.8	2.4	5.8	71.6
TRM 388.4	Rotatoria	10.7	123.3	2.7	25.2	126.8	16.1	9.7	4.5	
	Cladocera	0.6	12.8	0.8	1.8	2.2	4.4	7.1	6.7	
	Copepoda	6.9	26.0	3.8	3.0	14.0	3.2	5.4	14.1	
	Total	18.1	162.1	7.3	30.0	143.0	23.7	22.2	25.3	54.0
TRM 391.1	Rotatoria	15.6	52.9	3.3	39.2	197.2	241.8	81.0	48.0	
	Cladocera	8.8	4.5	0.8	11.4	1.2	2.0	6.4	2.4	
	Copepoda	23.1	18.7	5.0	14.4	4.1	102.9	9.5	4.5	
	Total	47.5	76.1	9.1	65.0	202.5	346.7	96.9	54.9	112.3
Monthly mean (All TRM left overbank stations)		29.9	106.2	13.2	76.2	164.4	175.4	40.3	28.7	

a. Samples not collected in February.

Table K.7

ZOOPLANKTON ENUMERATION BY GROUPS, GUNTERSVILLE RESERVOIR  
 IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 FEBRUARY-OCTOBER 1979

Station	Zooplankton	(Number/m <sup>3</sup> x 10 <sup>3</sup> )									
		February	March	April	May	June	July	August	September	October	x
TRM 386.4 (left overbank)	Rotatoria	17.2	2.8	5.2	10.8	17.8	34.8	3.2	0.4	0.8	
	Cladocera	0.4	0.2	0.3	3.8	3.8	0.1	4.0	1.8	0.8	
	Copepoda	5.4	1.4	1.1	1.6	3.2	2.8	0.9	0.2	0.4	
	Total	23.0	4.4	6.6	16.2	24.8	37.7	8.1	2.4	2.0	13.9
TRM 388.4 (left overbank)	Rotatoria	19.4	1.9	3.6	3.6	14.0	17.4	6.3	1.5	0.9	
	Cladocera	6.4	0.1	0.2	3.3	14.2	0.1	4.5	4.5	1.3	
	Copepoda	13.3	2.7	1.1	1.2	2.9	2.2	3.1	3.2	3.3	
	Total	39.1	4.7	4.9	8.1	31.1	19.7	13.9	9.2	5.5	15.1
TRM 391.1 (left overbank)	Rotatoria	7.4	4.0	2.3	8.1	92.3	107.4	153.1	2.9	6.9	
	Cladocera	3.4	0.2	0.1	0.1	17.8	1.2	4.7	4.7	0.4	
	Copepoda	12.7	4.1	0.8	6.0	13.3	15.7	9.8	16.1	8.1	
	Total	23.5	8.3	3.2	22.2	123.4	124.3	167.6	23.7	13.4	56.6
Monthly mean (all TRM left overbank stations)		31.4	4.8	4.0	13.0	46.4	45.8	48.7	9.3	5.3	
TRM 396.8 (channel)	Rotatoria	32.2	0.7	0.7	1.6	2.3	0.8	1.9	0.2	0.1	
	Cladocera	0.6	0.03	0.04	3.3	3.5	0.2	2.4	1.1	0.4	
	Copepoda	7.3	0.9	0.5	0.5	0.5	0.4	0.7	0.4	0.3	
	Total	40.1	1.63	1.24	5.4	6.3	1.4	5.0	1.7	0.4	7.0

**APPENDIX L**  
**BENTHIC MACROINVERTEBRATE DISTRIBUTION**

## APPENDIX L

Table L.1

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 388.0  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1974

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Branchiura sowerbyi</u>		1				6		5	2	2
<u>Bryozoa</u>			4			16		4		3
<u>Chironomus</u>					2					<1
<u>Corbicula manilensis</u>	11	27	25	9	14	236	60	52	78	57
<u>Hirudinea</u>			2							<1
<u>Hydropsychidae</u>			2			10				<1
<u>Limnodrilus</u>				4				5	3	3
Total Taxa										7
Total Number of Taxa Per Month	1	2	3	2	2	4	1	4	3	
Total Number of Individuals	11	28	33	13	16	268	60	66	83	

Table L.2

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 391.2  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1974

organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Branchiura sowerbyi</u>	1						3		1	<1
<u>Bryozoa</u>						34		18		6
<u>Caenis simulans</u>				2					2	<1
<u>Chironomus</u>	2		2					2		<1
<u>Corbicula manilensis</u>	11	31	40	13	2	29		42	34	22
<u>Limnodrilus</u>			21		4	4			3	4
Total Taxa										6
Total Number of Taxa Per Month	3	1	3	2	2	3	1	3	3	
Total Number of Individuals	14	31	63	15	6	67	3	62	38	

Table L.3

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 396.8  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1974

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Bezzia varicolor</u>									7	1
<u>Branchiura sowerbyi</u>		1						33		<1
<u>Bryozoa</u>							2		33	4
<u>Chironomus</u>									2	<1
<u>Coelotanypus</u>	2									<1
<u>Corbicula manilensis</u>		7	4	4	9	38	13	33	14	17
<u>Limnodrilus</u>					4	4	4			<1
<u>Stenonema</u>							2			<1
Total Taxa										8
Total Number of Taxa Per Month	2	2	1	1	2	2	4	2	1	
Total Number of Individuals	4	8	4	4	13	42	21	66	21	

Table L.4

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TCM 0.2  
BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1974

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{X}$
<u>Argia</u>							4			<1
<u>Bezzia</u>				4		2				<1
<u>Branchiura sowerbyi</u>	2	1	12	13	7	9	9		2	5
<u>Bryozoa</u>		45	4		4				13	7
<u>Caenis simulans</u>			2							<1
<u>Chaoborus</u>			2		2		7	2	9	2
<u>Chironomus</u>	8	27		2	8	14	2	2	9	72
<u>Coelotanypus</u>	31	4					4			4
<u>Corbicula manilensis</u>	20	22	5	9	2	7	4	2		8
<u>Cryptochironomus</u>	4	4	7		4	4				3
<u>Hexagenia bilineata</u>	89	4	2	2	2					11
<u>Hirudinea</u>	2	4	4	2	4		2	4		2
<u>Hydropsychidae</u>								2		<1
<u>Limnodrilus</u>	18	35	11	38	13	31	36		41	25
<u>Pentaneura</u>	16		2			4	2		5	3
<u>Procladius</u>	9	4	2	13				2		3
<u>Smittia</u>	7							14		<1
<u>Trichoptera</u>							5	4	7	2
<u>Xenochironomus</u>	2		4							2
Total Taxa										19
Total Number of Taxa Per Month	12	10	13	7	9	7	10	6	7	
Total Number of Individuals	208	150	61	79	46	71	78	16	86	

Table L.5

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 388.0  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1975

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Branchiura sowerbyi</u>	19	5				2	8	1	8	5
<u>Bryozoa</u>	4									<1
<u>Chironomus</u>										2
<u>Coelotanypus</u>							2			<1
<u>Corbicula manilensis</u>	131	56	34	29	25	73	156	96	95	76
<u>Enallagma</u>									4	<1
<u>Hexagenia bilineata</u>								40		4
<u>Hirudinea</u>										4
<u>Hyalella azteca</u>								7		<1
<u>Limnodrilus</u>	20	7		22	13	10	19		6	11
<u>Pentaneura</u>							4			<1
<u>Procladius</u>	2							2		<1
<u>Stenonema</u>									2	<1
Total Taxa										13
Total Number of Taxa Per Month	5	3	1	2	2	3	6	4	7	
Total Number of Individuals	176	68	34	51	38	85	191	144	121	

Table L.6

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 391.2  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1975

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{X}$
<u>Branchiura sowerbyi</u>	1						2			1
<u>Bryozoa</u>	20	40								7
<u>Chironomus</u>		7	2							1
<u>Coelotanypus</u>									2	<1
<u>Corbicula manilensis</u>	36	15	4	42	36	102	36	31	85	43
<u>Enallagma</u>									2	1
<u>Limnodrilus</u>			11			5	9	5	11	5
<u>Stenonema</u>							4		2	<1
Total Taxa										8
Total Number of Taxa Per Month	3	3	3	1	1	2	4	2	5	
Total Number of Individuals	57	62	17	42	36	107	51	36	102	

Table L.7

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 396.8  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1975

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Argia</u>					2	2				<1
<u>Branchiura sowerbyi</u>	2				2				6	1
<u>Bryozoa</u>	13	9								2
<u>Chironomus</u>		2			2					<1
<u>Coelotanypus</u>					4					<1
<u>Corbicula manilensis</u>	20	11	36	47	60	58	103	78	27	49
<u>Cyrnellus fraternus</u>			2		2					<1
<u>Gammarus</u>			2				4			<1
<u>Hirudinea</u>							5	10		2
<u>Limnodrilus</u>	4				2					<1
<u>Orconectes</u>	2						2			<1
<u>Pentaneura</u>							2			<1
<u>Stenonema</u>							2			<1
Total Taxa										13
Total Number of Taxa Per Month	5	4	1	1	7	5	3	1	2	
Total Number of Individuals	41	24	36	47	74	69	117	78	33	

Table L.8

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TCM 0.2  
BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1975

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Bezzia</u>	5	4			2				2	<1
<u>Branchiura sowerbyi</u>	28	19	1	15	6	13	9	10	13	13
<u>Bryozoa</u>	7	5	20							4
<u>Caenis</u>	2									<1
<u>Chaoborus</u>		4		16	22	49		4	2	11
<u>Chironomus</u>	64	15	2	7	15		5	4	11	14
<u>Coelotanypus</u>				5	5	2	9		2	3
<u>Corbicula manilensis</u>	4	5	5	2	4	4	5	18	2	5
<u>Cryptochironomus</u>	2									<1
<u>Cyrnellus fraternus</u>					2		2	5	5	<1
<u>Hexagenia bilineata</u>	16	2	2			2	2		5	4
<u>Hirudinea</u>	1	4	2		2	2				1
<u>Limnodrilus</u>	75	49	15	67	49	39	32	5	40	41
<u>Neurocordulia</u>	2									<1
<u>Pentaneura</u>	5				2	4			2	1
<u>Pleurocera</u>									2	<1
<u>Procladius</u>	36	2	4	5	11	5	2			7
<u>Sialis</u>										<1
<u>Xenochironomus</u>	33		2			2	2		2	5
Total Taxa										19
Total Number of Taxa Per Month	14	10	9	7	11	10	9	6	11	
Total Number of individuals	280	109	53	117	120	122	68	46	83	

Table L.9

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 388.0  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1976

Organism	Feb	Mar	Apr.	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Branchiura sowerbyi</u>	4	1	1	1	8	7				2
<u>Chironomus</u>				2						<1
<u>Coelotanypus</u>						4				<1
<u>Corbicula manilensis</u>	18	29		74	25	288	27	11	82	62
<u>Cryptochironomus</u>						2				<1
<u>Gomphus</u>							2	2		<1
<u>Hexagenia bilineata</u>						15				2
<u>Hirudinea</u>	2			2						<1
<u>Limnodrilus</u>		1	4	6	2	5	1	5		3
<u>Pentaneura</u>						2				<1
<u>Physa</u>	2					2				<1
<u>Procladius</u>										<1
Total Taxa										12
Total Number of Taxa Per Month	4	3	2	5	3	9	3	2	1	
Total Number of Individuals	26	31	5	85	29	327	30	16	82	

Table L.10

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 391.2  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1976

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	X
<u>Branchiura sowerbyi</u>		1	1		3	2	1	1	1	1
<u>Chironomus</u>	7					2		2		1
<u>Coelotanypus</u>	24				2	4				3
<u>Corbicula manilensis</u>	2	34	38	118	9	80	2	25	45	39
<u>Cyrnellus fraternus</u>		4								<1
<u>Hexagenia bilineata</u>					2					<1
<u>Limnodrilus</u>		1	1			4			4	1
<u>Pentaneura</u>					4					<1
<u>Sialis</u>					2					<1
Total Taxa										9
Total Number of Taxa Per Month	3	4	3	1	6	5	2	3	3	
Total Number of Individuals	3	40	40	118	22	92	3	28	50	

Table L.11

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 396.8  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1976

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Branchiura sowerbyi</u>		1	2	1		1				<1
<u>Chironomus</u>	2				2					<1
<u>Coelotanypus</u>						2				<1
<u>Corbicula manilensis</u>	2	58	33	214	2	40	20	24	47	49
<u>Hexagenia bilineata</u>						4			2	<1
<u>Limnodrilus</u>			5	1		3			3	1
<u>Pentaneura</u>				2						<1
<u>Procladius</u>										<1
Total Taxa										8
Total Number of Taxa Per Month	2	2	4	3	3	5	1	1	3	
Total Number of Individuals	4	59	42	216	6	50	20	24	52	

Table L.12

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TCM 0.2  
BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1976

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Argia</u>		2		2						<1
<u>Bezzia</u>				4						<1
<u>Branchiura sowerbyi</u>	3	1	3	8	1	3	5	4	2	3
<u>Caenis</u>	2						2			<1
<u>Campeloma</u>						2				<1
<u>Chaoborus</u>						2	7	27		4
<u>Chironomus</u>	9		7	13	9	36				6
<u>Coelotanypus</u>	2		2	24	5	9		5		5
<u>Corbicula manilensis</u>					25			2		3
<u>Cricotopus</u>		7								1
<u>Cryptochironomus</u>	4									<1
<u>Hexagenia bilineata</u>	2		4			4		2		1
<u>Hirudinea</u>	2						2	2		<1
<u>Hyalella azteca</u>		2							4	<1
<u>Limnodrilus</u>	3	10	6	106	4	36	23	33	46	29
<u>Macromia</u>					2					<1
<u>Parachironomus</u>				4						<1
<u>Pentaneura</u>	2	2	4	16	2	7				4
<u>Pleurocera</u>									7	<1
<u>Procladius</u>	9		18	24	18	13	2			9
<u>Sialis</u>					4	11		2	4	2
<u>Xenochironomus</u>							2	4		1
Total Taxa										22
Total Number of Taxa Per Month	10	6	7	9	9	10	7	8	5	
Total Number of Individuals	38	24	44	201	66	123	43	79	63	

Table L.13.

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 388.0  
BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1977

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{X}$
<u>Ablabesmyia</u>			18	126	54			18		24
<u>Bezzia</u>			36		18					6
<u>Branchiura sowerbyi</u>	109	36	507	144		18		217	90	123
<u>Bryozoa</u>		54								6
<u>Caenis</u>						18				2
<u>Chaoborus</u>	18						18	72	18	1
<u>Chironomus</u>		36	36	72	54			18		24
<u>Coelotanypus</u>	72		54	18	108			218	344	90
<u>Corbicula manilensis</u>	1512	2158	1232	18	2810	1578	90	3681	980	1562
<u>Cricotopus</u>				90						10
<u>Cryptochironomus</u>				108				36		16
<u>Dicrotendipes</u>			18	272		54				38
<u>Gomphus</u>								343		2
<u>Hexagenia bilineata</u>	90		36		36					56
<u>Hyalella azteca</u>	18									2
<u>Limnodrilus claparedianus</u>				16						18
<u>Limnodrilus</u>	54	54	235	217	2106	272		1034	362	482
<u>Neureclipsis</u>		18								2
<u>Pleurocera</u>			18	18						4
<u>Procladius</u>	109		18	109	54	18		181		54
<u>Stenacron</u>						18				2
Total Taxa										21
Total Number of Taxa Per Month	8	6	11	12	8	6	2	10	6	
Total Number of Individuals	1982	2356	2208	1355	5240	1958	108	5818	1812	

Table L.14

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 391.2  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1977

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Ablabesmyia</u>								18		2
<u>Branchiura sowerbyi</u>						18	90	54	18	20
<u>Bryozoa</u>		18								2
<u>Ceratopogonidae</u>									18	2
<u>Chaoborus</u>						18	145	36		22
<u>Coelotanypus</u>	18						72			10
<u>Corbicula manilensis</u>	72	162	200	54	181	308	1431	707	507	402
<u>Crangonyx</u>						18				2
<u>Cryptochironomus</u>								36		4
<u>Culicoides</u>								18		2
<u>Cyrnellus fraternus</u>									18	2
<u>Gomphus</u>									18	2
<u>Hexagenia bilineata</u>							18			2
<u>Hyalella azteca</u>	36									4
<u>Limnodrilus</u>	18	18					36	690	54	95
<u>Procladius</u>							36			4
Total Taxa										16
Total Number of Taxa Per Month	4	3	1	1	1	5	9	4	7	
Total Number of Individuals	144	198	200	54	181	398	2536	851	633	

Table L.15

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 396.8  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1977

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Ablabesmyia</u>							54			6
<u>Branchiura sowerbyi</u>	180	127	72	36			54	108	18	66
<u>Caenis</u>			18							2
<u>Chaoborus</u>	36	36	36				18			10
<u>Cheumatopsyche</u>				18						2
<u>Chironomus</u>	36	18	18							6
<u>Coelotanypus</u>		18								2
<u>Corbicula manilensis</u>	525	852	907	581	1251	834	943	743	782	824
<u>Dicrotendipes</u>		36								4
<u>Hexagenia bilineata</u>		54		18			18			6
<u>Hirudinea</u>			18				18			4
<u>Limnodrilus</u>	18	90	164				163		36	18
<u>Neureclipsis</u>				18						2
<u>Pleurocera</u>				127	18					16
<u>Procladius</u>		18	18				18			4
<u>Stenacron</u>									18	4
Total Taxa										16
Total Number of Taxa Per Month	3	9	8	5	2	4	3	4	4	
Total Number of Individuals	723	1267	1251	780	1269	1033	1015	941	836	

Table L.16

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TCM 0.2  
BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1977

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Ablabesmyia</u>			54	199	720	144		18		126
<u>Argia</u>	18	18								4
<u>Bezzia</u>		163	18	254						48
<u>Branchiura</u>						36				4
<u>Branchiura sowerbyi</u>	290	781	181	727	435	234	36	126	108	324
<u>Bryozoa</u>	36	18	18							8
<u>Caenis</u>		36		18				18		8
<u>Campeloma</u>				36	18					6
<u>Chaoborus</u>	18	253		36	144	888	2792	1704	91	658
<u>Chironomidae</u>						399				44
<u>Chironomus tentans</u>			18	54						8
<u>Chironomus</u>		507		108	18	18		18		74
<u>Coelotanypus</u>	18	72	72	289	180	108	108		18	94
<u>Corbicula manilensis</u>	91	54	362		36	36		36	18	70
<u>Cricotopus</u>							18			2
<u>Cryptochironomus</u>				180		36	272	90	18	66
<u>Culicoides</u>					36		18			6
<u>Cyrnelloides fraternus</u>						18				2
<u>Dicrotendipes</u>	381	325		1487	54	18	36		18	258
<u>Dubiraphia</u>						72	72	36		20
<u>Epoicocladius</u>				18	36					6
<u>Hexagenia bilineata</u>	18	90	36	363	145	18	18	36		80

Table L.16 (continued)

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
Hirudinea		54		18	18	36	108	18		28
<u>Limnodrilus</u> <u>claparedianus</u>				54						6
<u>Limnodrilus</u>	324		290	945	308	834	217	270	162	372
Nemata					18					2
<u>Neureclipsis</u>					18					2
<u>Oecetis</u>						18	54		18	10
<u>Parachironomus</u>	36		28		18					8
<u>Pentaneura</u>				18						2
<u>Pleurocera</u>	18		162	217	162	36				66
<u>Polypedilum</u>							72			8
<u>Procladius</u>	18	452	36	1542	163	90	90	18	18	270
<u>Sialis</u>		18			54	18	18			12
<u>Truncilla</u> <u>donaciformis</u>								18		2
<u>Xenochironomus</u>									18	2
Total Taxa										37
Total Number of Taxa Per Month	11	15	12	19	18	20	15	13	10	
Total Number of Individuals	942	3165	1265	6563	2563	3075	3929	2406	487	

Table L.17

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 388.0  
BELLEFONTE NUCLEAR PLANT - MARCH<sup>a</sup>-OCTOBER 1978

Organism	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Ablabesmyia</u>	144			72		108			41
<u>Branchiura sowerbyi</u>	288	288	126	363	163	253	18	163	208
<u>Caenis</u>		18				18			2
<u>Campeloma</u>									2
<u>Chaoborus</u>	54			54	90	18	18	90	41
<u>Coelotanypus</u>	326	453	397	144	126	180	54	72	219
<u>Corbicula manilensis</u>	3934	1614	1667	2359	2049	4116	1884	1941	2446
<u>Crangonyx</u>	18								2
<u>Cryptochironomus</u>	36	90		18		18			20
<u>Dicrotendipes</u>		18		72		162			19
<u>Dromogomphus</u>						36			5
<u>Gomphus</u>		36	18	18	18			18	14
<u>Hexagenia bilineata</u>	1232		381	127	90	180	90	126	235
<u>Hirudinea</u>			18		18	18			7
<u>Limodrilus</u>	1105	1796	2140	3118	1596	1052	90	489	1423
<u>Megalonaia gigantea</u>				18				18	2
<u>Parachironomus</u>									2
<u>Planariidae</u>		18							2
<u>Polypedilum</u>			18		18				2
<u>Procladius</u>			18		18	54			11
<u>Smittia</u>		18		18					5
Total Taxa									21
Total Number of Taxa Per Month	10	10	8	13	9	12	6	9	
Total Number of Individuals	7155	4349	4765	6399	4204	6159	2154	2935	

a. Samples not collected in February.

Table L.18

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 391.2  
 BELLEFONTE NUCLEAR PLANT - MARCH<sup>a</sup>-OCTOBER 1978

Organism	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Branchiura sowerbyi</u>		72	72	72			18		29
<u>Chaoborus</u>					18	18			5
<u>Chironomidae</u>		18							2
<u>Coelotanypus</u>					18	18			5
<u>Corbicula manilensis</u>	72	290	399	978	72	345	1469	36	458
<u>Crangonyx</u>		18							2
<u>Cura foremanii</u>				36					5
<u>Cyrnellus fraternus</u>					18			18	5
<u>Hexagenia bilineata</u>							18		2
<u>Hirudinea</u>						18			2
<u>Limnodrilus</u>				36		72		18	16
<u>Lirceus</u>		18							2
<u>Planariidae</u>			18						2
<u>Polypedilum</u>		18							2
<u>Procladius</u>			18		18				5
<u>Stenacron</u>					18				2
Total Taxa									16
Total Number of Taxa Per Month	2	5	4	4	6	5	3	3	
Total Number of Individuals	90	416	507	1122	162	471	1505	72	

a. Samples not collected in February.

Table L.19

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 396.8  
 BELLEFONTE NUCLEAR PLANT - MARCH<sup>a</sup>-OCTOBER 1978

Organism	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Ablabesmyia</u>					54				7
<u>Bezzia</u>			18						2
<u>Branchiura sowerbyi</u>	18	54	54			36		18	14
<u>Bryozoa</u>			18						2
<u>Chaoborus</u>			18						2
<u>Chironomus</u>					36				5
<u>Corbicula manilensis</u>	109	560	887	616	399	1016	1722	1450	845
<u>Cricotopus</u>			18						2
<u>Cura foremanii</u>					18				2
<u>Dicrotendipes</u>	18				18				5
<u>Glyptotendipes</u>			54			18			9
<u>Hexagenia bilineata</u>					73				9
<u>Hirudinea</u>		18	18					36	9
<u>Limnodrilus</u>	18		126	72	90	18	18	18	45
<u>Neureclipsis</u>			18					36	5
<u>Planariidae</u>					18				2
<u>Procladius</u>			18		18				5
<u>Sialis</u>					18				2
<u>Sphaerium</u>					36				5
<u>Stenacron</u>		36							5
Total Taxa									20
Total Number of Taxa Per Month	4	5	10	2	10	4	2	5	
Total Number of Individuals	407	686	1229	688	760	1088	1740	1558	

a. Samples were not collected in February.

Table L.20

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TCM 0.2  
 BELLEFONTE NUCLEAR PLANT - MARCH<sup>a</sup>-OCTOBER 1978

Organism	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Ablabesmyia</u>	54	18		36		54		36	25
<u>Bezzia</u>		18	18						5
<u>Branchiura sowerbyi</u>	761	434	453	416	162	199		216	330
<u>Bryozoa</u>		36							5
<u>Caenis</u>			18						2
<u>Campeloma</u>				54	18				11
<u>Chaoborus</u>	489	36	126	18	108	816	1088	163	356
<u>Chironomus</u>	162	72	36			18			36
<u>Coelotanypus</u>	72	18	18	72	36	54	18	18	38
<u>Corbicula manilensis</u>	18	162	36			54	18		36
<u>Cryptochironomus</u>	126	126				36		18	38
<u>Dicrotendipes</u>	72		18	36					16
<u>Dromogomphus</u>			18			18			5
<u>Dubiraphia</u>			18	18		18		18	9
<u>Glyptotendipes</u>	36								5
<u>Hexagenia bilineata</u>	18	36	198	72		36	18	54	54
<u>Hirudinea</u>			18	18	18				7
<u>Limnodrilus</u>	144	397	418	343	378	289	108	144	278
<u>Parachironomus</u>	144								18
<u>Pleurocera</u>		144			36	36	54	18	36
<u>Polypedilum</u>	18	216	36						34
<u>Procladius</u>	397	36	54	18		18	36	54	63
<u>Sialis</u>				36	18		18		7
<u>Sphaerium</u>									2
<u>Tanytarsus</u>					18				2
<u>Tubificidae</u>				108	18				16
<u>Xenochironomus</u>	18								2
Total Taxa									27
Total Number of Taxa Per Month	15	15	16	12	9	13	8	11	
Total Number of individuals	2529	1767	1519	1209	792	1664	1340	757	

a. Samples not collected in February.

Table L.21

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 386.4  
 BELLEFONTE NUCLEAR PLANT - MARCH<sup>a</sup>-OCTOBER 1978

Organism	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{X}$
<u>Ablabesmyia</u>	1922	708	144	690	416	90	36	144	519
<u>Agraylea</u>			18						2
<u>Bezzia</u>		36	18						7
<u>Branchiura</u>	199								25
<u>Branchiura sowerbyi</u>	108			72					23
<u>Caenis</u>	90	90	1052	36	18	18			163
<u>Campeloma</u>			18		18	72	18	72	25
<u>Ceratopogonidae</u>	72								9
<u>Chaoborus</u>	36	36				18		54	18
<u>Chironomus</u>	925	36	1938	36	36		72	108	394
<u>Coelotanypus</u>	418	380	453	144	235	126	54	144	244
<u>Corbicula manilensis</u>	36	235	253	216	36	18	217	291	163
<u>Cordulidae</u>	54								7
<u>Crangonyx</u>		18	36			54	18		7
<u>Cricotopus</u>								18	11
<u>Cryptochironomus</u>	181	126	271			18			75
<u>Culicidae</u>	18								2
<u>Cyrnellus fraternus</u>				36					5
<u>Dicrotenidipes</u>	399	36	127	18	90				73
<u>Dubiraphia</u>				18					2
<u>Dugesia tigrina</u>	18								2
<u>Enallagma</u>	18					18			5
<u>Glyptotendipes</u>						18			2
<u>Gomphus</u>								18	2
<u>Hexagenia bilineata</u>	5639	6182	2920	3191	689	362	398	3699	2885
<u>Hirudinea</u>	271	108		126	126	382	54		133
<u>Hyalella azteca</u>	198								25
<u>Limnodrilus</u>	1722	2048	1615	1887	2501	1342	162	90	1421

Table L.21 (continued)

Organism	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
Lumbriculidae	54								7
Nemata	36								5
<u>Parachironomus</u>			488						61
<u>Paragordius</u>						54			7
<u>Pectinatella magnifica</u>		18		36					7
<u>Pleurocera</u>			72	36				36	18
<u>Polypedilum</u>	145	526		18	54				93
<u>Procladius</u>	1,015	144	198	163	126	308	72	18	226
<u>Psidium</u>		18		36					7
<u>Sialis</u>			36		18	54		36	14
<u>Smittia</u>									5
<u>Sphaerium</u>		36		73	18		18		18
<u>Tribelos</u>	18								2
<u>Tubificidae</u>	145				91				18
<u>Xenochironomus</u>									11
Total Taxa									43
Total Number of Taxa Per Month	25	18	18	17	19	13	10	13	
Total Number of Individuals	13,727	10,781	9,675	6,814	4,580	2,862	1,101	4,728	

a. Samples not collected in February.

Table L.22

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 388.4  
 BELLEFONTE NUCLEAR PLANT - MARCH<sup>a</sup>-OCTOBER 1978

Organism	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Ablabesmyia</u>	18	18		127	198	36	54	272	90
<u>Agraylea</u>					18				2
<u>Amnicola</u>		126	18	18					8
<u>Bezzia</u>		36	54		18	18			16
<u>Branchiura</u>		181							23
<u>Branchiura sowerbyi</u>	634	652	399	199	182	182	72		290
<u>Bryozoa</u>		18							2
<u>Caenis</u>		435			73	36			68
<u>Campeloma</u>					18				2
<u>Ceratopogonidae</u>	18							18	5
<u>Chaoborus</u>	36					180		272	61
<u>Chironomidae</u>	18								2
<u>Chironomus</u>	871	216	270	18	382	90	36		235
<u>Coelotanypus</u>	5511	6381	5585	2103	1704	2140	2466	1052	3368
<u>Corbicula manilensis</u>			36	54	18	36			18
<u>Cricotopus</u>				36	344				48
<u>Cryptochironomus</u>	36		18	471					66
<u>Dicrotendipes</u>	1142	1306	634	108	108	180	289		471
<u>Dugesia tigrina</u>	18								2
<u>Enallagma</u>	54				18				9
<u>Glyptotendipes</u>				73	199			54	41
<u>Gomphus</u>		36							5
<u>Hexagenia bilineata</u>	54	54	90	108	36		72	3573	498
<u>Hirudinea</u>					18				2
<u>Hyalella azteca</u>				18	91		18		16
<u>Limnodrilus</u>	1324	1126	417	834	471	688	18	90	621

Table L.22 (continued)

Organism	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{X}$
Nemata			18	18					5
Oecetis	36		36						5
Parachironmus		36	36						9
Pectinatella magnifica		72	18		18				14
Polypedilum		108			36				18
Procladius	435	144	18	90	145		18	36	111
Sialis				18					2
Sphaerium		72	90	90	73	18	36	435	102
Tanytarsus	36					54			11
Tribelos	18								2
Tubificidae	18	18				36			9
Total Taxa									37
Total Number of Taxa Per Month	18	19	15	17	21	13	10	9	
Total Number of Individuals	10,277	11,035	7,701	4,383	4,158	3,694	3,079	5,802	

a. Samples not collected in February.

Table L.23

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 389.9  
 BELLEFONTE NUCLEAR PLANT - MARCH<sup>a</sup>-OCTOBER 1978

Organism	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Ablabesmyia</u>	181	36	36	36	18			36	42
<u>Agraylea</u>	18				36				7
<u>Bezzia</u>		18	18						4
<u>Branchiura sowerbyi</u>	54	73	73				18	54	34
<u>Caenis</u>		18							
<u>Campeloma</u>		18		36	18		18	36	14
<u>Ceratopogonidae</u>								145	17
<u>Chaoborus</u>	36				18	36	18		12
<u>Chironomus</u>	18					18		36	9
<u>Coelotanypus</u>	91	54	91	18		36	54	127	58
<u>Corbicula manilensis</u>	73	73	73	91	73	36	163	36	77
<u>Crangonyx</u>			18						2
<u>Cryptochironomus</u>	18	18	18				18		9
<u>Dicrotendipes</u>						18			2
<u>Enallagma</u>	36								4
<u>Gomphus</u>		18	18	36	18				11
<u>Hexagenia bilineata</u>	453	254	526	272	54	36	272	798	332
<u>Hirudinea</u>		18		18				36	9
<u>Hyalella azteca</u>	18								2
<u>Limnodrilus claparedianus</u>	199	163	181	54	163	73	54	36	14
<u>Neureclipsis</u>	18								2
<u>Planariidae</u>					18				2
<u>Polypedilum</u>		18							2
<u>Procladius</u>			18	18	18		73		14
<u>Sialis</u>	18				18			18	7
<u>Smittia</u>			18						2
<u>Sphaerium</u>	18	18							4
<u>Tubificidae</u>		18		18					4
<u>Xenochironomus</u>				18					2
Total Taxa									29
Total Number of Taxa Per Month	15	15	12	11	9	9	8	11	
Total Number of Individuals	1245	805	1078	587	398	362	613	1358	

a. Samples not collected in February.

Table L.24

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 391.1  
 BELLEFONTE NUCLEAR PLANT - MARCH<sup>a</sup>-OCTOBER 1978

Organism	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Ablabesmyia</u>			18	36	18	18		18	13
<u>Anodonta sorbiculata</u>					18				2
<u>Amnicola</u>		18							2
<u>Bezzia</u>		54	73			18	18		20
<u>Branchiura sowerbyi</u>	73	54	91	145	199	91	18	54	91
<u>Caenis</u>		18					18		5
<u>Ceratopogonidae</u>	109								14
<u>Chaoborus</u>	109			18	73	127	91	363	98
<u>Chironomus</u>	109	91	54	145	163			36	75
<u>Coelotanypus</u>	526	671	834	399	181	616	1106	635	621
<u>Corbicula manilensis</u>	18								2
<u>Cryptochironomus</u>		435							54
<u>Dicrotendipes</u>	218	73	145	36	127	109	18	36	91
<u>Glyptotendipes</u>								36	4
<u>Hexagenia bilineata</u>		18	18	36					9
<u>Limnodrilus</u>	145		163	91	109	109	36	54	47
<u>Nemata</u>	54					18	18	18	7
<u>Pectinatella magnifica</u>		18	18						11
<u>Polypedilum</u>		18	54	18					11
<u>Procladius</u>	108	163	73		18		18	36	52
<u>Sialis</u>	73			18	54	73	54	54	41
<u>Sphaerium</u>					18	18			5
<u>Stenacron</u>			127						16
<u>Tanytarsus</u>	236					127			45
Total Taxa									24
Total Number of Taxa Per Month	12	14	12	10	11	11	11	11	
Total Number of Individuals	1778	1631	1668	942	978	1324	1359	1340	

a. Samples not collected in February.

Table L.25

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 386.4  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1979

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Ablabesmyia</u>	543	344	199	451	252	540	108	90	54	286
<u>Anodonta suborbiculata</u>			18							2
<u>Berosus</u>	18		54	18						10
<u>Bezzia</u>		36	36	18			36			14
<u>Branchiura sowerbyi</u>		18			36					6
<u>Bryozoa</u>	18						72			2
<u>Caenis</u>	18		36					72		14
<u>Campeloma</u>			90	18			36			16
<u>Chaoborus</u>	36	90		18	18			90	18	30
<u>Chironomidae</u>						18				2
<u>Chironomus</u>	762	2283	1415		18		36			502
<u>Coelotanypus</u>	90	488	379	180	36	36	252	180	450	232
<u>Corbicula manilensis</u>	235	162	198	180	90	126	306	108	144	172
<u>Crangonyx</u>			18						36	6
<u>Cricotopus</u>					18		18	18	36	10
<u>Cryptochironomus</u>		54	18	36	18		18	18		18
<u>Culicoides</u>							18	18	18	6
<u>Dicrotendipes</u>	199		18	54	72		18	18		42
<u>Enallagma</u>		18								2
<u>Epoicocladius</u>			36	18		36	18	18		14
<u>Glyptotendipes</u>		380	18							44
<u>Gomphus</u>				18						2
<u>Hexagenia bilineata</u>	4116	4839	4677	4780	3239	972	487	126	162	2600
<u>Hirudinea</u>	145	145	18	90	54	54	36	72	36	22
<u>Hyalella azteca</u>	290	453	36				470	776	3747	641
<u>Limnodrilus</u>	162	471	471	667	1139	993	630	378	360	586

Table L.25 (continued)

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
Nemata			18			18				4
<u>Paratendipes</u>							558	90		72
<u>Pectinatella magnifica</u>				18						2
<u>Perithemic tenera</u>	18				18				18	20
<u>Pleurocera</u>		54	18			18	72		18	20
<u>Polypedilum</u>		18	217	126	72	54	90			64
<u>Procladius</u>	781	669	234	505	54	18	180	108	18	285
<u>Proptera</u>						18				2
<u>Proptera alata</u>				18						2
<u>Pseudochironomus</u>	36		18		18		54	54		6
<u>Rheotanytarsus</u>							54	72	18	14
<u>Sialis</u>							36	72	18	14
<u>Sphaerium</u>			18							2
Total Taxa										39
Total Number of Taxa Per Month	16	17	24	19	15	13	22	17	15	
Total Number of Individuals	7,467	10,522	8,350	7,231	5,134	2,891	3,549	2,234	5,123	

Table L.26

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 388.0  
BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1979

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{X}$
<u>Ablabesmyia</u>	73	36	73	54	18	18	18		18	34
<u>Bezzia</u>	18			18						4
<u>Branchiura sowerbyi</u>	54	73	73		72		126	108	72	64
<u>Chaoborus</u>	18	18	18		18		18	18		12
<u>Chironomus</u>	36									4
<u>Coelotanypus</u>	181	73	145	90	36	36			36	66
<u>Corbicula manilensis</u>	363	417	490	126	362	344	235	362	253	328
<u>Crangonyx</u>				18	18					4
<u>Cryptochironomus</u>		18								2
<u>Dicrotendipes</u>	18			199		36				28
<u>Epoicocladius</u>	18		18	18						6
<u>Glyptotendipes</u>		36								4
<u>Gomphus</u>			18	18	18					6
<u>Hexagenia bilineata</u>	181	163	163	108	36			18	18	80
<u>Hirudinea</u>									18	2
<u>Limnodrilus</u>	36	91	73	217	217	217	199	145	90	142
<u>Parachironomus</u>						18	36			6
<u>Polypedilum</u>			36	18	18	18				10
<u>Procladius</u>	109	18		36	18					20
<u>Pseudochironomus</u>				18						2
Total Taxa										20
Total Number of Taxa Per Month	12	10	12	12	11	8	6	5	7	
Total Number of Individuals	1105	907	1133	910	831	713	632	651	505	

Table L.27

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 388.4  
BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1979

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Ablabesmyia</u>	18	18		72	18	72	108	18	126	50
<u>Amnicola</u>			18				36			6
<u>Argia</u>					18					2
<u>Bezzia</u>		18			18					4
<u>Branchiura sowerbyi</u>	199	216	108	378	198	253	108	108	36	178
<u>Bryozoa</u>	54						18		36	12
<u>Caenis</u>	18		344	632	36					114
<u>Chaoborus</u>	18		18			36			18	8
<u>Chironomus</u>	3028	1578	563	108	216	108	252	234	72	684
<u>Cloeon</u>							18			2
<u>Coelotanypus</u>	2611	1540	2883	2678	1628	1247	883	811	1318	1733
<u>Corbicula manilensis</u>	18		18	36		18	54	54	18	24
<u>Corduliidae</u>			36	18						6
<u>Cricotopus</u>	271	54		54	597		18	36	54	108
<u>Cryptochironomus</u>		18	36	18				36	18	24
<u>Culicidae</u>										4
<u>Dicrotendipes</u>	2375	706	344	198	36	144	994			535
<u>Enallagma</u>	72	36	126	217	72					58
<u>Glyptotendipes</u>	581	108			18		162	2551	7700	1236
<u>Hexagenia bilineata</u>	54	126	108	72	36	54	72	270	486	348
<u>Hyalella azteca</u>	18	199	54	36	72			36		46
<u>Limnodrilus</u>	217	343	671	1154	1119	396	558	324	432	579
<u>Micropsectra</u>							18			12
<u>Nemata</u>			18							4
<u>Oecetis</u>			18				18			2
<u>Parachironomus</u>				18						6
<u>Pectinatella magnifica</u>			18	18						24
<u>Polypedilum</u>	127		18		18			36	18	
<u>Procladius</u>	1287	216	363	1429	90	90	162	108	54	422
<u>Pseudochironomus</u>				18	18					4

Table L.27 (continued)

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Rheotanytarsus</u>	216	36	18	54			36	18		42
<u>Somatogyrus</u>								18		2
<u>Sphaerium</u>	54							54	18	14
<u>Stenacron</u>								18		2
<u>Xenochironomus</u>			18							2
Total Taxa										35
Total Number of Taxa Per Month	19	15	21	18	17	11	18	18	16	
Total Number of Individuals	11,236	5,212	5,798	7,190	4,208	2,436	3,569	4,712	10,512	

Table L.28

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 391.1  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1979

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Ablabesmyia</u>				18	18	18	36	18	18	14
<u>Bezzia</u>				18	18					4
<u>Branchiura sowerbyi</u>	36	36	145	72	54	72	36	90	54	66
<u>Bryozoa</u>	18									2
<u>Caenis</u>				18						2
<u>Chaoborus</u>	91	54	36		36	18	72	18	36	40
<u>Chironomus</u>	199	109	127		54	72	72	108	36	36
<u>Coelotanypus</u>	508	653	798	725	707	308	271	240	471	526
<u>Corbicula manilensis</u>			18							2
<u>Cricotopus</u>	145									18
<u>Cryptochironomus</u>	18	18	199							28
<u>Dicrotendipes</u>	36	145		108	54	18	108			52
<u>Enallagma</u>								181	543	88
<u>Glyptotendipes</u>	54	18						18	36	26
<u>Hexagenia bilineata</u>		54		18	36	36	36	18		2
<u>Hirudinea</u>								18		98
<u>Limnodrilus</u>	72	73	109	90	90	108	72	181	90	36
<u>Micropsectra</u>							18		18	4
<u>Nemata</u>	18							18	18	6
<u>Pectinatella magnifica</u>		18	18	18	18			18	18	12
<u>Fleurocera</u>				18						2
<u>Polypedilum</u>										2
<u>Procladius</u>	326	236	236	18	90	54	54	18	18	117

Table L.28 (continued)

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Proptera</u>						18				2
<u>Proptera alata</u>					18					2
<u>Rheotanytarsus</u>	145	54	18	54	18	18		18		34
<u>Sialis</u>	18	18	18		36	36	18	36	54	26
<u>Sphaerium</u>				18				18		4
<u>Tanypus</u>						18				2
Total Taxa										29
Total Number of Taxa Per Month	14	15	13	12	14	14	12	14	15	
Total Number of Individuals	1685	1522	1758	1211	1247	812	847	958	1464	

Table L.29

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 389.9  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1979

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{X}$
<u>Ablabesmyia</u>		5	7							1.33
<u>Bezzia</u>		7								0.78
<u>Branchiura sowerbyi</u>		6	20		36	18	18	36		14.89
<u>Caenis</u>							18			2.0
<u>Campeloma</u>			9							1.0
<u>Chaoborus</u>				2			72			8.22
<u>Cheumatopsyche</u>					18		18		18	6.0
<u>Coelotanypus</u>	14	12	11	54	18	18	54	36	18	26.11
<u>Corbicula manilensis</u>	31	28	41	126	90	72	54	54	54	61.11
<u>Crangonyx</u>			9							1.0
<u>Cricotopus</u>								18		2.0
<u>Cryptochironomus</u>			6	18	18		18			6.67
<u>Cyrnellus fraternus</u>							18			2.0
<u>Dicrotendipes</u>				18			36			6.0
<u>Didymops</u>			4							0.44
<u>Dromogomphus</u>								18		2.0
<u>Ephemerella</u>							18			2.0
<u>Glyptotendipes</u>							18			2.0
<u>Gomphus</u>	3		8		18					3.22
<u>Hexagenia bilineata</u>	11	18	33	18	18		18	18		14.89
<u>Hirudinea</u>							36	18	18	8.0
<u>Hyalella azteca</u>		3	9							1.33
<u>Limnodrilus</u>		8	44	72	72	54	145	90	36	57.89
<u>Neureclipsis</u>			3							0.33
<u>Oecetis</u>							18			2.0
<u>Parachironomus</u>					18					2.0

Table L.29 (continued)

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Paratendipes</u>								18		2.0
<u>Pectinatella magnifica</u>							18			2.0
<u>Polypedilum</u>	5	6			72		36			13.22
<u>Procladius</u>		5				72	18	18		12.56
<u>Sialis</u>			10							1.11
<u>Stenacron</u>			9				18			3.0
<u>Stenochironomus</u>							18			2.0
<u>Stenonema</u>			4							0.44
<u>Strictochironomus</u>							18			2.0
<u>Tricorythodes</u>							36			4.0
<u>Vivaparus</u>							18			2.0
Total Taxa										37
Total Number of Taxa Per Month	4	9	19	7	9	5	23	10	5	
Total Number of Individuals	59	92	240	324	360	234	739	324	144	

Table L.30

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 391.2  
BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1979

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Ablabesmyia</u>						18				2
<u>Agraylea</u>					18					2
<u>Argia</u>			18							2
<u>Bezzia</u>							18			2
<u>Branchiura sowerbyi</u>			36			54	18			12
<u>Coelotanypus</u>	36									4
<u>Corbicula manilensis</u>	108	416		579	1301	631	940	1555	36	18
<u>Crangonyx</u>					18	18				4
<u>Cryptochironomus</u>				18						2
<u>Cyrnellus fraternus</u>					18				36	6
<u>Comphus</u>					18					2
<u>Hexagenia bilineata</u>									18	2
<u>Hirudinea</u>					18					2
<u>Limnodrilus</u>	36			18	72	54	162	54		44
<u>Megalonaia gigantea</u>									18	2
<u>Neureclipsis</u>									36	4
<u>Planariidae</u>							18			2
<u>Pseudochironomus</u>			36						18	2
<u>Quadrula quadrula</u>									18	2
<u>Sialis</u>					18					2
<u>Stenacron</u>									18	2
<u>Stenonema</u>								18		2
<u>Tricorythodes</u>									36	4
Total Taxa										23
Total Number of Taxa Per Month	3	1	5	3	8	5	5	3	7	
Total Number of Individuals	180	416	687	1391	793	1192	1663	72	180	

Table L.31

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TRM 396.8  
 BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1979

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Ablabesmyia</u>							18			2
<u>Anodonta suborbiculata</u>	18									2
<u>Branchiura sowerbyi</u>	18	18	36	18		90	36			24
<u>Caenis</u>							18			2
<u>Campeloma</u>					36				18	2
<u>Cheumatopsyche</u>										4
<u>Coelotanypus</u>									18	2
<u>Corbicula manilensis</u>	217	779	687	541	360	576	1246	198	234	538
<u>Crangonyx</u>			54		54	54	36			22
<u>Cryptochironomus</u>						18				2
<u>Cura foremanii</u>						72				8
<u>Cyrnellus fraternus</u>	18						36	18		4
<u>Dugesia tigrina</u>						18				6
<u>Enallagma</u>					36					2
<u>Glyptotendipes</u>				18		18		18		4
<u>Hirudinea</u>						18	126		18	8
<u>Limnodrilus</u>					18			18		4
<u>Neureclipsis</u>						18				2
<u>Psectrocladius</u>						18				2
<u>Rheotanytarsus</u>					18					2
<u>Stenacron</u>						18	18			4
<u>Stenonema</u>						18				2
<u>Tricorythodes</u>						18				23
Total Taxa										
Total Number of Taxa Per Month	4	2	3	3	6	11	8	5	5	
Total Number of Individuals	271	797	777	577	522	918	1534	270	306	

Table L.32

BENTHIC MACROINVERTEBRATE DISTRIBUTION AND ENUMERATION AT TCM 0.2  
BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1979

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	X
<u>Ablabesmyia</u>	54	18	54	90	126	54			90	44
<u>Bezzia</u>		36		108	18					23
<u>Branchiura sowerbyi</u>	362	234	199	180	180	72	126	72	324	194
<u>Caenis</u>				126						14
<u>Campeloma</u>			18					54	18	10
<u>Chaoborus</u>	90	90		36	90		54	198	578	126
<u>Chironomidae</u>							18			2
<u>Chironomus</u>	72	198	217	216	108	18		126	72	114
<u>Coelotanypus</u>			36	216	144	72	126	36	216	94
<u>Corbicula manilensis</u>	90	36	237	54	18	36			18	54
<u>Cricotopus</u>	36			72						12
<u>Cryptochironomus</u>	36		72	36	18				18	20
<u>Culicidae</u>				18					18	4
<u>Dicrotendipes</u>	18			252				18		32
<u>Didymops</u>					18					2
<u>Dubiraphia</u>			18		18		54			10
<u>Elmidae</u>							18			2
<u>Enallagma</u>	18		36	36		18	18			14
<u>Epoicocladius</u>	18				18				36	4
<u>Glyptotendipes</u>								36	18	6
<u>Hexagenia bilineata</u>	108	36	18	324	289	36	18	36	559	158
<u>Hirudinea</u>				18	36				36	10
<u>Hyalella azteca</u>		18		216	36					30
<u>Limnodrilus</u>		162	181	559	552	450	756	595	450	412
<u>Nemata</u>							36			4
<u>Oecetis</u>		18	18				18			6
<u>Paratendipes</u>								72		8

Natle L.32 (continued)

Organism	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	$\bar{x}$
<u>Perithemis</u>								18		2
<u>Pleurocera</u>			18	18	18			18	18	18
<u>Polypedilum</u>			127		180					34
<u>Procladius</u>		90	54	651	216	72	162	18		104
<u>Proptera alata</u>					18					2
<u>Psectrocladius</u>		18								2
<u>Pseudochironomus</u>	127									14
<u>Rheotanytarsus</u>	164		18	361			18			60
<u>Sialis</u>		54		18	252	144	144	72	126	90
<u>Tubificidae</u>	36				18					4
<u>Xenochironomus</u>										2
Total Taxa										38
Total Number of Taxa Per Month	14	13	16	21	21	12	14	12	14	
Total Number of Individuals	1229	1008	1321	3415	2371	1008	1656	1243	2541	

Table L.33

DIVERSITY OF MACROINVERTEBRATES - CHANNEL AND OVERBANK STATIONS  
BELLEFONTE NUCLEAR PLANT - FEBRUARY-OCTOBER 1974-1979

Year	Location	Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct	
		No.	$\bar{d}$																
1974	TRM 388.0	0.619	2	0.000	1	1.320	5	0.890	2	0.462	2	0.704	4	0.000	1	1.069	4	0.773	3
	TRM 391.2	1.337	3	0.000	1	1.090	3	0.566	2	0.722	2	1.262	3	0.000	1	1.058	3	0.571	3
	TRM 396.8	1.000	2	0.544	2	0.000	1	0.000	1	0.890	2	0.454	2	1.530	4	0.993	2	0.480	2
	TCM 0.2	2.731	13	2.675	11	3.496	14	2.124	7	3.051	10	2.421	8	2.506	10	2.875	7	2.262	7
1975	TRM 388.0	1.525	6	0.845	3	0.000	1	0.986	2	0.927	3	1.180	3	1.016	6	1.165	4	1.349	7
	TRM 391.2	1.043	3	1.258	3	1.261	3	0.267	2	0.268	2	0.272	2	1.452	5	0.581	2	0.899	5
	TRM 396.8	1.855	5	1.644	4	0.000	1	0.000	1	1.227	7	0.929	5	0.632	3	0.000	1	0.684	2
	TCM 0.2	3.038	14	2.611	11	2.470	9	1.956	7	2.703	12	2.430	11	2.436	9	2.317	6	2.464	11
1976	TRM 388.0	1.476	4	0.410	3	0.722	2	0.690	5	0.717	3	0.914	8	0.516	3	1.300	3	0.000	1
	TRM 391.2	2.996	3	6.450	4	0.336	3	0.000	1	2.310	6	0.809	5	0.000	2	0.590	3	0.541	3
	TRM 396.8	1.000	2	0.124	2	0.965	4	0.085	3	1.585	3	1.091	5	0.000	1	0.000	1	1.308	3
	TCM 0.2	2.644	11	1.964	6	2.437	7	2.241	9	2.638	10	2.978	11	2.094	7	2.116	8	1.346	5
1977	TRM 388.0	1.399	8	0.604	8	1.949	11	3.235	12	1.408	8	0.976	6	0.650	2	1.787	10	1.746	6
	TRM 391.2	1.750	4	0.866	3	a	1	a	1	a	1	1.206	5	1.805	9	0.920	4	1.222	7
	TRM 396.8	0.408	3	1.795	9	1.457	8	1.199	5	0.107	2	0.873	4	0.427	3	1.044	4	0.448	4
	TCM 0.2	2.531	12	3.179	15	3.179	13	3.019	19	3.505	18	3.025	20	1.820	15	1.859	14	2.693	10
1978	TRM 388.0	b	b	1.966	10	1.961	10	1.869	8	1.829	13	1.755	9	1.693	12	0.800	6	1.672	9
	TRM 391.2	b	b	0.722	2	1.389	5	1.014	4	0.745	4	2.281	6	1.283	5	0.187	3	1.500	3
	TRM 396.8	b	b	1.441	4	1.026	5	1.608	10	0.484	2	2.377	10	0.451	4	0.083	2	0.496	5
	TCM 0.2	b	b	3.041	15	3.228	16	2.928	16	2.705	12	2.271	9	2.481	13	1.141	8	2.842	11
	TRM 386.4	b	b	2.973	25	2.142	18	2.939	18	2.295	17	2.412	19	2.513	13	2.696	10	1.429	13
	TRM 388.4	b	b	2.248	18	2.270	19	1.626	15	2.550	17	3.098	21	2.102	13	1.213	10	1.799	9
	TRM 389.9	b	b	2.475	15	2.473	15	2.008	12	2.163	11	2.000	9	2.788	9	2.074	8	1.322	11
	TRM 391.1	b	b	2.846	12	2.463	14	1.886	12	1.822	10	2.678	11	2.458	12	0.815	11	1.665	10

Table L.33 (continued)

Year	Location	Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct	
		No.	Taxa																
1979	TRM 388.0	2.261	12	2.059	10	2.146	12	2.788	12	1.892	12	1.526	7	1.590	6	1.334	5	1.605	7
	TRM 391.2	1.371	3	a	1	0.929	5	0.392	3	1.270	8	1.046	5	0.463	5	1.500	3	2.722	7
	TRM 396.8	1.036	4	0.156	2	0.630	3	0.399	3	1.575	6	2.057	11	1.146	8	1.370	5	1.258	5
	TCM 0.2	3.458	16	3.153	13	3.398	16	3.731	21	3.619	21	2.721	12	2.800	14	2.590	12	2.961	14
	TRM 386.4	2.369	16	2.572	17	2.330	24	1.960	19	1.771	15	2.305	13	3.573	22	3.202	17	1.602	15
	TRM 388.4	2.810	19	2.749	15	2.643	21	2.738	18	2.563	17	2.343	11	3.038	18	2.353	18	1.505	16
	TRM 389.9	1.784	4	2.063	9	2.825	19	1.809	7	2.434	9	1.766	5	3.349	23	2.595	10	1.726	5
	TRM 391.1	2.780	14	2.312	15	2.213	13	1.317	12	2.103	14	2.353	14	2.510	12	2.377	14	2.062	15

1. Only one species found.

2. No data collected.

**APPENDIX M**  
**BENTHIC MACROINVERTEBRATE STATISTICAL SUMMARY**

## APPENDIX M

Table M.1

STATISTICAL SUMMARY OF BENTHIC MACROINVERTEBRATE FAUNA - BELLEFONTE NUCLEAR PLANT  
GUNTERSVILLE RESERVOIR - FEBRUARY THROUGH OCTOBER 1974

Month	Taxa	Station TRM 388.0			Station TRM 391.2			Station TRM 396.8		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
February	<u>Branchiura</u>				0.7	0-7	2.214			
	<u>Coelotanypus</u>							1.8	0-18	5.692
	<u>Corbicula</u>	10.9	0-109	34.469	10.8	0-36	15.179			
	<u>Dicrotendipes</u>				1.8	0-18	5.692			
	<u>Helicopsyche</u>							1.8	1-18	5.692
	<u>Hyalella</u>	1.8	0-18	5.692						
March	<u>Bezzia</u>							1.5	0-15	4.743
	<u>Corbicula</u>	27.2	0-109	40.425	30.8	0-181	57.949	7.2	0-36	12.586
April	<u>Branchiura</u>	0.8	0-8	2.530						
	<u>Bryozoa</u>	3.6	0-36	11.384						
	<u>Corbicula</u>	25.3	0-145	46.140	39.9	0-181	59.694	3.6	0-36	11.384
	<u>Dicrotendipes</u>				1.8	0-18	5.692			
	<u>Hirudinea</u>	3.8	0-18	5.692						
	<u>Hydropsyche</u>	1.8	0-18	5.692						
	<u>Limnodrilus</u>				20.8	0-83	33.954			
May	<u>Caenis</u>				1.8	0-18	5.692			
	<u>Corbicula</u>	9.0	0-36	15.297	12.6	0-54	19.068	3.6	0-18	7.590
	<u>Limnodrilus</u>	4.1	0-41	12.965						

Table M.1 (continued)

Month	Taxa	Station TRM 388.0			Station TRM 391.2			Station TRM 396.8		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
June	<u>Coelotanypus</u>	1.8	0-18	5.692						
	<u>Corbicula</u>	14.4	0-54	22.127	1.8	0-18	5.692	9.0	0-36	12.728
	<u>Cryptochironomus</u>	29.0	0-91	33.433						
	<u>Dicrotendipes</u>	1.8	0-18	5.692						
	<u>Hexagenia</u>	7.2	0-36	12.586						
	<u>Hirudinea</u>	1.8	0-18	5.692						
	<u>Hyalella</u>	1.8	0-18	5.692						
	<u>Limnodrilus</u>	98.0	47-145	36.225	4.1	0-41	12.965	4.1	0-41	12.965
	<u>Procladius</u>	3.6	0-18	7.586						
	<u>Smittia</u>	1.8	0-18	5.692						
July	<u>Branchiura</u>	13.3	0-77	22.818						
	<u>Bryozoa</u>	16.2	0-54	21.550	34.4	0-181	72.646			
	<u>Corbicula</u>	235.6	73-508	123.292	28.9	0-127	41.135	38.2	0-109	47.319
	<u>Limnodrilus</u>	10.3	0-67	22.911	4.1	0-41	12.965	4.1	0.41	12.965
August	<u>Branchiura</u>				3.3	0-33	10.436			
	<u>Corbicula</u>							12.6	0-54	22.530
	<u>Dicrotendipes</u>							1.8	0-18	5.692
	<u>Limnodrilus</u>							3.6	0-36	11.384
	<u>Smittia</u>							1.8	0-18	5.692
September	<u>Branchiura</u>	10.9	0-66	22.002						
	<u>Bryozoa</u>	3.6	0-36	11.384	18.1	0-91	32.002	32.5	0-145	45.809
	<u>Corbicula</u>	52.3	18-127	30.214	36.1	0-73	24.168	32.5	0-109	31.788
	<u>Dicrotendipes</u>				1.8	0-18	5.692			
	<u>Limnodrilus</u>	4.7	0-47	14.863						
October	<u>Branchiura</u>	2.1	0-10	2.998	1.2	0-3	1.317	3.3	0-11	3.020
	<u>Corbicula</u>	77.9	0-272	82.982	34.4	0-163	53.678	47.1	0-326	101.112
	<u>Limnodrilus</u>	3.1	0-31	9.803	2.6	0-26	8.222			

Table M.2

STATISTICAL SUMMARY OF BENTHIC MACROINVERTEBRATE FAUNA - BELLEFONTE NUCLEAR PLANT  
GUNTERSVILLE RESERVOIR - FEBRUARY THROUGH OCTOBER 1974

Station	Taxa	February			March			April		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Ablabesmyia</u>	5.4	0-36	12.149				1.8	0-18	5.692
	<u>Bezzia</u>							3.6	0-18	7.590
	<u>Branchiura</u>	2.0	0-20	6.325	0.7	0-7	2.214	11.7	0-33	10.802
	Bryozoa							3.6	0-36	11.384
	<u>Caenid</u>							1.8	0-18	5.692
	<u>Chaoborus</u>							1.8	0-18	5.692
	<u>Chironomus</u>	3.6	0-36	11.384	3.6	0-18	7.590			
	<u>Coelotanypus</u>	30.9	0-127	47.743						
	<u>Corbicula</u>	19.9	0-73	7.875	19.9	0-109	35.722	5.4	0-36	12.149
	<u>Cryptochironomus</u>	9.1	0-73	23.154	3.6	0-36	11.384	7.2	0-36	15.179
	<u>Dicrotendipes</u>	3.6	0-18	7.589	27.6	0-181	58.704			
	<u>Hexagenia</u>	88.8	0-308	113.223	3.6	0-36	11.384	1.8	0-18	5.692
	<u>Hirudinea</u>	1.8	0-18	5.692	3.6	0-36	11.384	3.6	0-18	7.590
	<u>Limnodrilus</u>	17.6	0-52	23.076	41.2	0-91	29.131	11.4	0-47	19.051
	<u>Procladius</u>	19.9	0-73	24.902	3.6	0-18	7.590	1.8	0-18	5.692
	<u>Xenochironomus</u>	1.8	0-18	5.692				3.6	0-18	7.590

Table M.2 (continued)

Station	Taxa	May			June			July		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Ablabesmyia</u>							3.6	0-18	7.590
	<u>Bezzia</u>							1.8	0-18	5.692
	<u>Branchiura</u>	12.8	0-41	16.199	7.4	0-28	9.606	8.9	0-20	7.233
	<u>Bryozoa</u>				3.6	0-36	14.819			
	<u>Chironomus</u>	1.8	0-18	5.692	3.6	0-18	7.590			
	<u>Corbicula</u>	9.0	0-54	19.442	1.8	0-18	5.692	7.2	0-36	12.586
	<u>Cryptochironomus</u>				3.6	0-36	11.384	3.6	0-18	7.586
	<u>Dicrotendipes</u>				3.6	0-18	7.590	14.4	0-36	16.541
	<u>Hexagenia</u>	1.8	0-18	316.228	1.8	0-18	5.692			
	<u>Hirudinea</u>	1.8	0-18	316.228	3.6	0-36	11.384			
	<u>Limnodrilus</u>	38.4	0-78	31.813	13.4	0-41	17.538	30.5	0-83	30.504
	<u>Procladius</u>	12.6	0-36	14.819						

Table M.2 (continued)

Station	Taxa	August			September			October		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Ablabesmyia</u>	1.8	0-18	5.692	3.6	0-18	7.589	5.4	0-54	17.076
	<u>Argia</u>	5.4	0-54	17.076				7.2	0-18	9.295
	<u>Branchiura</u>							2.3	0-13	4.900
	<u>Bryozoa</u>	14.5	0-73	22.416				12.7	0-73	27.146
	<u>Chaoborus</u>	7.2	0-36	15.179				9.0	0-36	15.297
	<u>Chironomus</u>	1.8	0-18	5.692						
	<u>Corbicula</u>	3.6	0-36	11.384						
	<u>Dicrotendipes</u>							9.0	0-36	12.728
	<u>Hirudinea</u>	1.8	0-18	5.692						
	<u>Limnodrilus</u>	36.3	0-135	46.793				41.5	0-104	35.896
	<u>Procladius</u>	1.8	0-18	5.692						
	<u>Xenochironomus</u>	5.4	0-54	17.076				7.2	0-18	9.295

Table M.3

STATISTICAL SUMMARY OF BENTHIC MACROINVERTEBRATE FAUNA - BELLEFONTE NUCLEAR PLANT  
GUNTERSVILLE RESERVOIR - FEBRUARY THROUGH OCTOBER 1975

Month	Taxa	Station TRM 388.0			Station TRM 391.2			Station TRM 396.8		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
February	<u>Branchiura</u>	18.9	0-46	14.294	1.0	0-10	3.162	1.6	0-16	5.060
	Bryozoa	1.8	0-18	5.692	12.7	0-73	22.823	9.0	0-54	17.493
	<u>Corbicula</u>	130.5	0-308	108.328	36.1	0-109	32.002	19.8	0-54	21.550
	<u>Limnodrilus</u>	20.1	0-67	26.905				4.1	0-41	12.965
	<u>Orconectes</u>							1.8	0-18	5.692
	<u>Procladius</u>	1.8	0-18	5.692						
March	<u>Branchiura</u>	4.6	0-20	7.775						
	Bryozoa				39.9	0-145	50.472	9.0	0-54	19.442
	<u>Corbicula</u>	56.1	0-127	37.834	14.4	0-54	18.590	10.8	0-54	17.399
	<u>Dicrotendipes</u>				7.2	0-18	9.295	1.8	0-18	5.692
	<u>Limnodrilus</u>	7.2	0-41	15.361						
April	<u>Corbicula</u>	34.4	0-73	25.008	3.6	0-18	7.590	36.2	0-218	65.241
	<u>Dicrotendipes</u>				1.8	0-18	5.692			
	<u>Limnodrilus</u>				10.9	0-109	34.469			
May	<u>Coelotanypus</u>				1.8	0-18	5.692			
	<u>Corbicula</u>	28.8	0.54	17.390	41.7	0-163	62.259	47.2	18-91	27.587
	<u>Limnodrilus</u>	22.3	0.109	38.667						

Table M.3 (continued)

Month	Taxa	Station TRM 388.0			Station TRM 391.2			Station TRM 396.8		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
June	<u>Argia</u>							1.8	0-18	5.0
	<u>Bivalvia</u>				1.8	0-18	5.692	1.6	0-16	5.060
	<u>Branchiura</u>							3.6	0-18	7.590
	<u>Coelotanypus</u>							59.7	0-163	59.264
	<u>Corbicula</u>	25.3	0-73	24.513	36.1	0-73	22.630	1.8	0-18	5.692
	<u>Cyrenellus</u>							1.8	0-18	5.692
	<u>Dicrotendipes</u>							2.6	0-26	8.222
	<u>Limnodrilus</u>	13.5	0-47	16.345						
July	<u>Ablabesmyia</u>							1.8	0-18	5.692
	<u>Argia</u>							1.8	0-18	5.692
	<u>Branchiura</u>	2.1	0-21	6.641						
	<u>Corbicula</u>	72.5	0-254	82.489	101.6	18-236	77.226	57.9	0-272	86.693
	<u>Limnodrilus</u>	9.9	0-52	20.904	5.2	0-52	16.444	4.6	0-31	10.405
August	<u>Ablabesmyia</u>	3.6	0-36	11.384						
	<u>Bivalvia</u>				1.8	0-18	5.692			
	<u>Branchiura</u>	7.5	0-31	10.794	2.0	0-20	6.325			
	<u>Coelotanypus</u>	1.8	0-18	5.692						
	<u>Corbicula</u>	156.1	73.326	97.650	36.2	0-145	52.002	103.4	0-290	82.423
	<u>Hirudinea</u>							3.6	0-26	11.384
	<u>Limnodrilus</u>	19.1	0-62	25.313	9.3	0-36	15.159	10.3	0-67 <sup>a</sup>	22.911
	<u>Stenonema</u>	1.8	0-18	5.692	3.6	0-18	7.590			

Table M.3 (continued)

Month	Taxa	Station TRM 388.0			Station TRM 391.2			Station TRM 396.8		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
September	<u>Branchiura</u>	1.3	0-13	4.111						
	<u>Corbicula</u>	96.1	0-236	79.370	30.8	0-181	47.950	78.0	0-417	125.656
	<u>Hexagenia</u>	39.9	0-218	84.568						
	<u>Hyalella</u>	7.3	0-73	23.085						
	<u>Limnodrilus</u>				4.7	0-47	14.863			
October	<u>Branchiura</u>	7.7	0-20	7.410				5.6	0-30	10.233
	<u>Chironomus</u>	1.8	0-18	5.6921						
	<u>Coelotanypus</u>				1.8	1-18	5.692			
	<u>Corbicula</u>	85.2	0-218	74.130	76.2	0-181	68.243	27.2	0-127	43.843
	<u>Enallagma</u>	3.6	0-36	11.384	1.8	0-18	5.692			
	<u>Hirudinea</u>	3.6	0-36	11.384						
	<u>Limnodrilus</u>	6.2	0-62	19.606	10.9	0-83	26.618			
	<u>Stenonema</u>	1.8	0-18	5.692	1.8	0-18	5.692			

Table M.4

STATISTICAL SUMMARY OF BENTHIC MACROINVERTEBRATE FAUNA - BELLEFONTE NUCLEAR PLANT  
GUNTERSVILLE RESERVOIR - FEBRUARY THROUGH OCTOBER 1975

Station	Taxa	February			March			April		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Ablabesmyia</u>	5.4	0-18	8.695						
	<u>Bezzia</u>	5.4	0-18	8.695	3.6	0-18	7.590			
	<u>Branchiura</u>	27.9	0-66	21.926	18.5	0-49	16.966	1.3	0-13	4.111
	<u>Bryozoa</u>	3.6	0-18	7.589	5.4	0-54	17.076	20.0	0-109	42.377
	<u>Caenis</u>	1.8	0-18	5.692						
	<u>Chaoborus</u>				3.6	0-18	7.590			
	<u>Chironomus</u>	19.8	0-54	21.550	10.8	0-36	12.586			
	<u>Corbicula</u>	3.6	0-36	11.384	5.4	0-18	8.695	5.4	0-36	12.149
	<u>Cryptochironomus</u>	1.8	0-18	5.592						
	<u>Dicrotendipes</u>	43.5	0-91	31.206	3.6	0-18	7.590	1.8	0-18	5.692
	<u>Hexagenia</u>	16.2	0-36	15.761	1.8	0-18	5.692	1.8	0-18	5.692
	<u>Hirudinea</u>				3.6	0-18	7.590	1.8	0-18	5.692
	<u>Limnodrilus</u>	75.1	31-135	31.264	49.2	0-93	25.328	14.5	0-62	24.510
	<u>Procladius</u>	36.7	0-109	35.386	1.8	0-18	5.692	3.6	0-18	7.590
	<u>Xenochironomus</u>	32.6	0-308	96.931				1.8	0-18	5.692

Table M.4 (continued)

Station	Taxa	May			June			July		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Ablabesmyia</u>				1.8	0-18	5.692	3.6	0-18	7.590
	<u>Bezzia</u>				1.8	0-18	5.692			
	<u>Branchiura</u>	14.6	0-41	14.222	5.7	0-21	8.193	13.1	0-23	7.608
	<u>Chaoborus</u>	16.3	0-91	28.998	21.8	0-109	38.159	48.9	0-181	69.422
	<u>Chironomus</u>				1.8	0-18	5.692			
	<u>Coelotanypus</u>	5.4	0-18	8.695	5.4	0-36	12.149	1.8	0-18	5.692
	<u>Corbicula</u>	1.8	0-18	5.692	3.6	0-36	11.384	3.6	0-36	11.384
	<u>Cyprinellus</u>				1.8	0-18	5.692			
	<u>Dicrotendipes</u>	7.2	0-36	12.586	12.6	0-54	19.068			
	<u>Hexagenia</u>							1.8	0-18	5.692
	<u>Hirudinea</u>				1.8	0-18	5.692	1.8	0-18	5.692
	<u>Limnodrilus</u>	67.4	0-155	46.215	48.6	0-104	49.440	39.4	0-78	31.070
	<u>Procladius</u>	5.4	0-18	8.695	10.8	0-54	22.768	5.4	0-54	17.076
	<u>Sialis</u>				5.4	0-18	8.695			
	<u>Xenochironomus</u>							1.8	0-18	5.692

Table M.4 (continued)

Station	Taxa	August			September			October		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Ablabesmyia</u>							1.8	0-18	5.692
	<u>Bezzia</u>							1.8	0-18	5.692
	<u>Branchiura</u>	8.5	0-21	8.423	10.2	0-25	9.942	13.3	0-35	10.781
	<u>Chaoborus</u>				3.6	0-18	7.590			
	<u>Chironomus</u>	5.4	0-18	8.695	3.6	0-36	11.384	10.8	0-54	19.349
	<u>Coelotanypus</u>	16.4	0-73	30.354				1.8	0-18	5.692
	<u>Corbicula</u>	5.4	0-36	12.149	18.1	0-163	51.226	1.8	0-18	5.692
	<u>Hexagenia</u>	1.8	0-18	5.692	5.4	0-54	17.076	5.4	0-18	8.694
	<u>Limnodrilus</u>	32.1	0-93	32.963	5.2	0-52	16.444	40.4	0-145	50.116
	<u>Procladius</u>	1.8	0-18	5.692						
	<u>Sialis</u>	1.8	0-18	5.692						
	<u>Xenochironomus</u>	1.8	0-18	5.692				1.8	0-18	5.692

Table M.5

STATISTICAL SUMMARY OF BENTHIC MACROINVERTEBRATE FAUNA - BELLEFONTE NUCLEAR PLANT  
GUNTERSVILLE RESERVOIR - FEBRUARY THROUGH OCTOBER 1976

Month	Taxa	Station TRM 388.0			Station TRM 391.2			Station TRM 396.8		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
February	<u>Branchiura</u>	4.3	0-20	7.334						
	<u>Chironomus</u>				7.2	0-54	17.390			
	<u>Coelotanypus</u>				1.8	0-18	5.692			
	<u>Corbicula</u>	9.0	0-36	14.889	1.8	0-18	5.692	1.8	0-18	5.692
	<u>Dicrotendipes</u>							1.8	0-18	5.692
	<u>Hirudinea</u>	1.8	0-18	5.692						
	<u>Physa</u>	1.8	0-18	5.692						
March	<u>Branchiura</u>	0.7	0-5	1.636	0.2	0-2	0.632	0.8	0-8	2.530
	<u>Corbicula</u>	29.0	0-91	35.578	34.5	0-127	48.019	58.0	0-290	89.571
	<u>Cyrnellus</u>				3.6	0-18	7.590			
	<u>Limnodrilus</u>	1.0	0-10	3.162	1.5	0-15	4.744			
April	<u>Branchiura</u>	0.7	0-5	1.636	4.1	0-36	11.318	1.5	0-8	3.171
	<u>Corbicula</u>				24.8	0-91	34.711	22.7	0-109	33.447
	<u>Limnodrilus</u>	14.4	0-54	20.435	1.5	0-10	3.375	4.7	0-26	9.978
May	<u>Branchiura</u>							1.1	0-5	1.853
	<u>Chironomus</u>	1.8	0-18	5.692						
	<u>Corbicula</u>	74.4	0-163	59.517	117.8	18-254	71.711	213.9	36-381	131.981
	<u>Hirudinea</u>	1.8	0-18	5.692						
	<u>Limnodrilus</u>	6.2	0-21	8.804				1.5	0-15	4.743

Table M.5 (continued)

Month	Taxa	Station TRM 388.0			Station TRM 391.2			Station TRM 396.8		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
June	<u>Ablabesmyia</u>				3.6	0-36	11.384	1.8	0-18	5.692
	<u>Branchiura</u>	1.9	0-5	1.969	3.0	0-15	4.899	1.8	0-18	5.692
	<u>Chironomus</u>				1.8	0-18	5.692			
	<u>Coelotanypus</u>				9.0	0-36	12.728	1.8	0-18	5.692
	<u>Corbicula</u>	25.2	0-54	17.390	1.8	0-18	5.692			
	<u>Hexagenia</u>				1.8	0-18	5.692			
	<u>Limnodrilus</u>	2.0	0-10	3.496	1.8	0-18	5.692			
July	<u>Sialis</u>									
	<u>Ablabesmyia</u>	1.8	0-18	5.692	1.7	0-10	3.653	1.5	0-5	2.121
	<u>Branchiura</u>	4.7	0-10	4.547	3.6	0-18	7.590	1.8	0-18	5.692
	<u>Coelotanypus</u>	3.6	0-18	7.589	79.8	0-218	79.883	39.8	0-145	54.591
	<u>Corbicula</u>	288.3	91-743	182.653	1.8	0-18	5.692			
	<u>Dicrotendipes</u>									
	<u>Hexagenia</u>	14.4	0-54	20.435				3.6	0-18	7.590
	<u>Limnodrilus</u>	14.5	0-41	16.440	3.6	0-21	7.720	2.6	0-21	6.653
August	<u>Procladius</u>	1.8	0-18	5.692						
	<u>Branchiura</u>				0.3	0-3	0.949			
	<u>Corbicula</u>	27.0	0-54	22.847	1.8	0-18	5.692	19.8	0-54	21.550
	<u>Gomphus</u>	1.8	0-18	5.692						
	<u>Limnodrilus</u>	0.5	0-5	1.581						

Table M.5 (continued)

Month	Taxa	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
September	<u>Branchiura</u>				0.8	0-5	1.751			
	<u>Corbicula</u>	10.8	0-54	22.768	25.4	0-73	28.764	23.5	0-91	28.469
	<u>Dicrotendipes</u>				1.8	0-18	5.692			
	<u>Gomphus</u>	1.8	0-18	5.692						
	<u>Limnodrilus</u>	4.6	0-31	10.405	3.6	0-21	7.720			
October	<u>Branchiura</u>				1.0	0-10	3.162			
	<u>Corbicula</u>	81.7	18-163	45.478	45.2	0-91	31.212	38.1	0-91	34.863
	<u>Hexagenia</u>							1.8	0-18	5.692
	<u>Limnodrilus</u>				3.6	0-21	7.720	2.6	0-26	8.222

Table M.6

STATISTICAL SUMMARY OF BENTHIC MACROINVERTEBRATE FAUNA - BELLEFONTE NUCLEAR PLANT  
GUNTERSVILLE RESERVOIR - FEBRUARY THROUGH OCTOBER 1976

Station	Taxa	February			March			April		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Ablabesmyia</u>	1.8	0-18	5.692	1.8	0-18	5.692	3.6	0-18	7.590
	<u>Argia</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Branchiura</u>	3.6	0-9	3.169	0.4	0-2	0.843	2.7	0-8	3.020
	<u>Caenis</u>	1.8	0-18	5.692						
	<u>Chironomus</u>	1.8	0-18	5.692						
	<u>Cryptochironomus</u>	3.6	0-18	7.590						
	<u>Dicrotendipes</u>	5.4	0-39	12.149				7.2	0-18	9.295
	<u>Hexagenia</u>	1.8	0-18	5.692				3.6	0-18	7.090
	<u>Hirudinea</u>	1.8	0-18	5.692						
	<u>Limnodrilus</u>	2.5	0-10	4.249	9.7	0-31	10.520	5.6	0-21	7.090
	<u>Procladius</u>	9.0	0-54	17.493				18.1	0-73	24.251

Table M.6 (continued)

Station	Taxa	May			June			July		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Ablabesmyia</u>	16.2	0-54	21.550	1.8	0-18	5.692	7.2	0-18	9.295
	<u>Bezzia</u>	3.6	0-18	7.590						
	<u>Branchiura</u>	8.3	0-20	9.007	1.4	0-7	2.547	3.3	0-28	8.744
	<u>Chaoborus</u>							1.8	0-18	5.692
	<u>Chironomus</u>				1.8	0-18	5.692	19.9	0-73	24.902
	<u>Coelotanypus</u>	23.5	0-73	24.300	5.4	0-36	12.149	9.0	0-54	19.442
	<u>Corbicula</u>				25.4	0-254	80.322			
	<u>Dicrotendipes</u>	12.6	0-36	14.819	7.2	0-18	9.295	16.2	0-36	17.899
	<u>Hexagenia</u>							3.6	0-36	11.384
	<u>Limnodrilus</u>	105.6	15-176	54.273	3.6	0-21	6.963	36.2	0-104	28.986
	<u>Procladius</u>	23.4	0-54	17.076	18.0	0-54	22.449	12.7	0-73	24.349
	<u>Sialis</u>							7.2	0-18	9.295
	<u>Xenochironomus</u>				3.6	0-36	11.384			

Table M.6 (continued)

Station	Taxa	August			September			October		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Branchiura</u>	5.0	0-18	5.831	3.4	0-10	4.033	1.8	0-13	4.237
	<u>Caenis</u>	1.8	0-18	5.692						
	<u>Chaoborus</u>	7.2	0-36	12.586	27.1	0-73	29.868			
	<u>Coelotanypus</u>				5.4	0-54	17.076			
	<u>Corbicula</u>				1.8	0-18	5.692			
	<u>Hirudinea</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Limnodrilus</u>	23.2	0-36	11.783	32.5	0-98	34.888	46.3	0-109	38.845
	<u>Pleurocera</u>							7.2	0-36	15.179
	<u>Procladius</u>	1.8	0-18	5.692	3.6	0-18	7.590			
	<u>Sialis</u>				1.8	0-18	5.692	3.6	0-18	7.590
	<u>Xenochironomus</u>	1.8	0-18	5.692						

Table M.7

 STATISTICAL SUMMARY OF BENTHIC MACROINVERTEBRATE FAUNA - BELLEFONTE NUCLEAR PLANT  
 GUNTERSVILLE RESERVOIR - FEBRUARY THROUGH OCTOBER 1977

Month	Taxa	Station TRM 388.0			Station TRM 391.2			Station TRM 396.8		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
February	<u>Branchiura</u>	10.9	0-73	23.067				1.8	0-18	5.692
	<u>Chaoborus</u>	1.8	0-18	5.692						
	<u>Coelotanypus</u>	7.2	0-36	12.586	1.8	0-18	5.692			
	<u>Corbicula</u>	151.2	0-407	145.950	7.2	0-36	12.585	52.5	0-145	57.670
	<u>Hexagenia</u>	9.0	0-54	17.493						
	<u>Limnodrilus</u>	5.4	0-36	12.149	1.8	0-18	5.692	1.8	0-18	5.692
	<u>Procladius</u>	10.9	0-91	28.707						
March	<u>Branchiura</u>	3.6	0-18	7.589				12.7	0-73	27.146
	<u>Bryozoa</u>	5.4	0-18	8.695	1.8	0-18	5.692			
	<u>Chironomus</u>	3.6	0-18	7.589				3.6	0-36	11.384
	<u>Corbicula</u>	215.8	0-798	242.120	16.2	0-54	26.084	85.2	0-254	89.662
	<u>Dicrotendipes</u>							3.6	0-36	11.384
	<u>Hexagenia</u>							5.4	0-54	17.076
	<u>Limnodrilus</u>				1.8	0-18	5.692	9.0	0-54	17.493
	<u>Procladius</u>							1.8	0-18	5.692
April	<u>Ablabesmyia</u>	1.8	0-18	5.692						
	<u>Bezzia</u>	3.6	0-36	11.384						
	<u>Branchiura</u>	50.7	0-453	141.862				7.2	0-36	11.384
	<u>Caenis</u>							1.8	0-18	5.692
	<u>Chaoborus</u>							3.6	0-36	11.384
	<u>Chironomus</u>	3.6	0-18	7.589				1.8	0-18	5.692
	<u>Coelotanypus</u>	5.4	0-36	12.149						
	<u>Corbicula</u>	123.2	0-453	148.678	20.0	0-91	37.839	90.7	0-381	134.941
	<u>Dicrotendipes</u>	1.8	0-18	5.692						
	<u>Hexagenia</u>	3.6	0-36	11.384				1.8	0-18	5.692
	<u>Hirudinea</u>									
	<u>Limnodrilus</u>	23.5	0-181	56.626				16.4	0-91	34.834
	<u>Pleurocera</u>	1.8	0-18	5.692						
	<u>Procladius</u>	1.8	0-18	5.692						

Table M.7 (continued)

Month	Taxa	Station TRM 388.0			Station TRM 391.2			Station TRM 396.8		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
May	<u>Ablabesmyia</u>	12.6	0-54	19.068						
	<u>Branchiura</u>	14.4	0-54	20.435				3.6	0-18	7.590
	<u>Cheumatopsyche</u>							1.8	0-18	5.692
	<u>Chironomus</u>	7.2	0-36	12.586						
	<u>Coelotanypus</u>	1.8	0-18	5.692						
	<u>Corbicula</u>				5.4	0-36	12.149	58.1	0-272	81.499
	<u>Cryptochironomus</u>	10.8	0-54	19.349						
	<u>Dicrotendipes</u>	27.2	0-91	32.406						
	<u>Limnodrilus</u>	81.6	0-254	78.502						
	<u>Pleurocera</u>	1.8	0-18	5.692				12.7	0-127	40.161
June	<u>Procladius</u>	10.9	0-73	23.007						
	<u>Ablabesmyia</u>	5.4	0-18	8.695						
	<u>Bezzia</u>	1.8	0-18	5.692						
	<u>Chironomus</u>	5.4	0-36	12.149						
	<u>Coelotanypus</u>	10.8	0-36	12.586						
	<u>Corbicula</u>	281.0	91-435	115.632	18.1	0-91	29.666	125.1	0-435	141.806
	<u>Hexagenia</u>	3.6	0-18	7.589						
	<u>Limnodrilus</u>	210.6	18-436	142.367						
	<u>Pleurocera</u>	5.4	0-36	12.149				1.8	0-18	5.692
July	<u>Procladius</u>									
	<u>Branchiura</u>				1.8	0-18	5.692			
	<u>Caenis</u>	1.8	0-18	5.692						
	<u>Chaoborus</u>				1.8	0-18	5.692			
	<u>Corbicula</u>	157.8	0-508	172.777	30.8	0-163	57.360	83.4	18-163	52.194
	<u>Dicrotendipes</u>	5.4	0-36	12.149						
	<u>Hirudinea</u>							1.8	0-18	5.692
	<u>Limnodrilus</u>	27.2	0-109	37.606	3.6	0-18	7.590	16.3	0-145	45.573
	<u>Procladius</u>	1.8	0-18	5.692				1.8	0-18	5.692
	<u>Stenacron</u>	1.8	0-18	5.692						

Table M.7 (continued)

Month	Taxa	Station TRM 388.0			Station TRM 391.2			Station TRM 396.8		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
August	<u>Branchiura</u>				9.0	0-18	9.487	5.4	0-18	8.695
	<u>Chaoborus</u>	1.8	0-18	5.692	14.5	0-73	22.417	1.8	0-18	5.692
	<u>Coelotanypus</u>				7.2	0-36	12.586			
	<u>Corbicula</u>	9.0	0-36	12.728	143.1	0-290	109.857	94.3	0-453	138.726
	<u>Cryptochironomus</u>				3.6	0-18	7.589			
	<u>Hexagenia</u>				1.8	0-18	5.692			
	<u>Limnodrilus</u>				69.0	0-218	64.613			
	<u>Procladius</u>				3.6	0-18	7.589			
	<u>Stenacron</u>	1.8	0-18	5.692				1.8	0-18	5.692
September	<u>Ablabesmyia</u>	1.8	0-18	5.692				5.4	0-36	12.149
	<u>Branchiura</u>	21.7	0-91	28.158	5.4	0-18	8.695	10.8	0-36	12.586
	<u>Chaoborus</u>	7.2	0-18	9.295	3.6	0-18	7.590			
	<u>Chironomus</u>	1.8	0-18	5.692						
	<u>Coelotanypus</u>	21.8	0-109	39.092						
	<u>Corbicula</u>	368.1	0-544	213.349	70.7	0-163	55.088	74.3	0-399	123.755
	<u>Cryptochironomus</u>	3.6	0-18	7.599						
	<u>Hexagenia</u>	34.3	0-91	30.148						
	<u>Limnodrilus</u>	103.4	36-236	65.189	5.4	0-54	17.076	3.6	0-18	7.589
October	<u>Procladius</u>	18.1	0-109	33.168						
	<u>Argia</u>				1.8	0-18	5.692			
	<u>Branchiura</u>	9.0	0-36	12.720	1.8	0-18	5.692	1.8	0-18	5.692
	<u>Chaoborus</u>	1.8	0-18	5.692						
	<u>Coelotanypus</u>	34.4	0-163	54.345						
	<u>Corbicula</u>	98.0	0-344	112.081	50.7	0-218	81.930	78.2	0-236	68.516
	<u>Gomphus</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Limnodrilus</u>	36.2	0-181	55.355	3.6	0-18	7.590	1.8	0-18	5.692
	<u>Stenacron</u>							1.8	0-18	5.692

Table M.8

STATISTICAL SUMMARY OF BENTHIC MACROINVERTEBRATE FAUNA - BELLEFONTE NUCLEAR PLANT  
GUNTERSVILLE RESERVOIR - FEBRUARY THROUGH OCTOBER 1977

Station	Taxa	February			March			April		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Ablabesmyia</u>				1.8	0-18	5.692	5.4	0-18	8.695
	<u>Argia</u>	1.8	0-18	5.692						
	<u>Bezzia</u>				16.3	0-73	26.328	1.8	0-18	5.692
	<u>Branchiura</u>	29.0	0-73	31.141	78.1	0-181	56.031	18.1	0-73	22.718
	<u>Bryozoa</u>	3.6	0-18	7.590	1.8	0-18	5.692	1.8	0-18	5.692
	<u>Caenis</u>				3.6	0-18	7.590			
	<u>Chaoborus</u>	1.8	0-18	5.692	25.3	0-109	33.360			
	<u>Chironomus</u>	3.6	0-18	7.5850	50.7	0-109	31.941	9.0	0-36	12.728
	<u>Coelotanypus</u>	1.8	0-18	5.692	7.2	0-18	9.295	7.2	0-54	17.390
	<u>Corbicula</u>	9.1	0-73	23.1534	5.4	0-36	12.149	36.2	0-362	102.452
	<u>Dicrotendipes</u>	38.1	0-109	43.214	32.5	0-109	35.021			
	<u>Hexagenia</u>	1.8	0-18	5.692	9.0	0-18	9.487	3.6	0-36	11.384
	<u>Hirudinea</u>				5.4	0-36	12.149			
	<u>Limnodrilus</u>				32.5	0-54	18.590	29.0	0-91	36.576
	<u>Pleurocera</u>	1.8	0-18	5.692				16.2	0-54	19.809
	<u>Procladius</u>	1.8	0-18	5.692	45.2	0-145	49.297	3.6	0-18	7.589
	<u>Sialis</u>				1.8	0-18	5.692			

Table M.8 (continued)

Station	Taxa	May			June			July		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Ablabesmyia</u>	19.9	0-73	26.308	7.2	0-36	12.586	14.4	0-54	18.590
	<u>Bezzia</u>	25.4	0-73	33.397						
	<u>Branchiura</u>	72.7	18-145	37.366	43.5	0-127	43.010	23.4	0-54	19.068
	<u>Caenis</u>	1.8	0-18	5.692						
	<u>Chaoborus</u>	3.6	0-18	7.589	14.4	0-54	16.541	88.8	0-272	96.972
	<u>Chironomus</u>	10.8	0-36	15.179	1.8	0-18	5.692	1.8	0-18	5.692
	<u>Coelotanypus</u>	28.9	0-73	24.497	18.0	0-36	14.697	10.8	0-36	15.179
	<u>Corbicula</u>				3.6	0-18	7.589	3.6	0-36	11.384
	<u>Cryptochironomus</u>	18.0	0-54	18.974				3.6	0-18	7.590
	<u>Cyrnellus</u>							1.8	0-18	5.692
	<u>Dicrotendipes</u>	148.7	18-363	106.403	5.4	0-18	8.695	1.8	0-18	5.692
	<u>Hexagenia</u>				14.5	0-73	23.969	1.8	0-18	5.692
	<u>Hirudinea</u>				1.8	0-18	5.692	3.6	0-18	7.590
	<u>Limnodrilus</u>	94.5	0-163	43.342	30.8	0-73	30.954	83.4	0-308	92.911
	<u>Pleurocera</u>	21.7	0-73	22.381	16.2	0-54	17.900	3.6	0-36	11.384
	<u>Procladius</u>	154.2	36-344	96.429	16.3	0-73	23.429	9.0	0-36	12.728
	<u>Sialis</u>				5.4	0-54	17.076	1.8	0-18	5.692

Table M.8 (continued)

Table M.9

STATISTICAL SUMMARY OF BENTHIC MACROINVERTEBRATE FAUNA - BELLEFONTE NUCLEAR PLANT  
GUNTERSVILLE RESERVOIR - MARCH THROUGH OCTOBER 1978

Month	Taxa	Station TRM 388.0			Station TRM 391.2			Station TRM 396.8		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
March	<u>Ablabesmyia</u>	14.4	0-36	14.199						
	<u>Branchiura</u>	28.8	0-54	19.349				1.8	0-18	5.692
	<u>Chaoborus</u>	5.4	0-18	8.695						
	<u>Coelotanypus</u>	32.6	0-91	30.714						
	<u>Corbicula</u>	393.4	73-671	157.552	7.2	0-54	17.390	10.9	0-73	24.578
	<u>Crangonyx</u>	1.8	0-18	5.692						
	<u>Cryptochironomus</u>	3.6	0-18	7.589						
	<u>Dicrotendipes</u>							1.8	0-18	5.692
	<u>Hexagenia</u>	123.2	0-199	68.148						
	<u>Limnodrilus</u>	110.5	18-218	79.032				1.8	0-18	5.692
April	<u>Branchiura</u>	28.8	0-54	27.100	7.2	0-54	17.390	5.4	0-18	8.695
	<u>Caenis</u>	1.8	0-18	5.692						
	<u>Coelotanypus</u>	45.3	0-109	40.450						
	<u>Corbicula</u>	16.14	54-254	66.525	29.0	0-91	33.433	56.0	0-180	61.675
	<u>Crangonyx</u>				1.8	0-18	5.692			
	<u>Cryptochironomus</u>	9.0	0-36	12.728						
	<u>Dicrotendipes</u>	1.8	0-18	5.692						
	<u>Gomphus</u>	3.6	0-36	11.384						
	<u>Hirudinea</u>							1.8	0-18	5.692
	<u>Limnodrilus</u>	179.6	91-308	63.042						
	<u>Polypedilum</u>				1.8	0-18	5.692			
	<u>Procladius</u>	1.8	0-18	5.692						
	<u>Stenacron</u>							3.6	0-36	11.384

Table M.9 (continued)

Month	Taxa	Station TRM 388.0			Station TRM 391.2			Station TRM 396.8		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
May	<u>Bezzia</u>							1.8	0-18	5.692
	<u>Branchiura</u>	12.6	0-54	17.076	7.2	0-36	12.586	5.4	0-36	12.149
	<u>Chaoborus</u>							1.8	0-18	5.692
	<u>Coelotanypus</u>	39.7	0-127	36.068						
	<u>Corbicula</u>	166.7	0-399	130.972	39.9	0-109	36.214	88.7	18-236	73.368
	<u>Gomphus</u>	1.8	0-18	5.692						
	<u>Hexagenia</u>	38.1	0-109	45.688						
	<u>Hirudinea</u>	1.8	0-18	5.692				1.8	0-18	5.692
	<u>Limnodrilus</u>	214.0	91-471	117.860				12.6	0-36	14.819
	<u>Polypedilum</u>	1.8	0-18	5.692						
June	<u>Procladius</u>				1.8	0-18	5.692	1.8	0-18	5.692
	<u>Ablabesmyia</u>	7.2	0-18	9.295						
	<u>Branchiura</u>	36.3	0-91	40.202	7.2	0-54	17.390			
	<u>Chaoborus</u>	5.4	0-36	12.149						
	<u>Coelotanypus</u>	14.4	0-36	14.199						
	<u>Corbicula</u>	235.9	73-300	102.179	97.8	0-199	72.561	61.6	0-326	98.206
	<u>Cryptochironomus</u>	1.8	0-18	5.692						
	<u>Dicrotendipes</u>	7.2	0-54	17.390						
	<u>Gomphus</u>	1.8	0-18	5.692						
	<u>Hexagenia</u>	12.7	0-73	22.823						
	<u>Limnodrilus</u>	311.8	91.671	212.778	3.6	0-36	11.384	7.2	0-18	9.295
	<u>Procladius</u>	1.8	0-18	5.692						

Table M.9 (continued)

Month	Taxa	Station TRM 388.0			Station TRM 391.2			Station TRM 396.8		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
July	<u>Ablabesmyia</u>							5.4	0-54	17.076
	<u>Branchiura</u>	16.3	0-73	27.657						
	<u>Chaoborus</u>	9.0	0-36	4.025	1.8	0-18	5.692			
	<u>Coelotanypus</u>	12.6	0-54	19.068	1.8	0-18	5.692			
	<u>Corbicula</u>	204.9	36-363	114.010	7.2	0-36	12.586	39.9	0-236	75.496
	<u>Cyrenellus</u>				1.8	0-18	5.692			
	<u>Dicrotendipes</u>							1.8	0-18	5.692
	<u>Gomphus</u>	1.8	0-18	5.692						
	<u>Hexagenia</u>	9.0	0-18	9.487				7.3	0-73	23.085
	<u>Hirudinea</u>	1.8	0-18	5.692						
	<u>Limnodrilus</u>	159.6	73-290	71.214				9.3	0-36	15.297
	<u>Procladius</u>	5.4	0-36	12.149	1.8	0-18	5.692	1.8	0-18	5.692
	<u>Stenacron</u>				1.8	0-18	5.692			
August	<u>Ablabesmyia</u>	10.8	0-36	15.179				3.6	0-18	7.590
	<u>Branchiura</u>	25.3	0-145	47.675						
	<u>Chaoborus</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Coelotanypus</u>	18.0	0-54	22.450	1.8	0-18	5.692			
	<u>Corbicula</u>	411.6	254-598	117.561	24.5	0-73	31.525	101.6	18-236	73.645
	<u>Dicrotendipes</u>	16.2	0-54	17.900						
	<u>Hexagenia</u>	18.0	0-36	14.697						
	<u>Hirudinea</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Limnodrilus</u>	105.2	18-218	76.083	1.8	0-18	5.692	1.8	0-18	5.692

Table M.9 (continued)

Month	Taxa	Station TRM 388.0			Station TRM 391.2			Station TRM 396.8		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
September	<u>Branchiura</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Chaoborus</u>	1.8	0-18	5.692						
	<u>Coelotanypus</u>	5.4	0-36	12.149						
	<u>Corbicula</u>	188.4	0-344	121.836	146.9	18-218	58.960	172.2	0-417	144.551
	<u>Hexagenia</u>	9.0	0-36	15.297	1.8	0-18	5.692			
	<u>Limnodrilus</u>	9.0	0-36	15.297				1.8	0-18	5.692
October	<u>Branchiura</u>	16.3	0-91	28.998						
	<u>Chaoborus</u>	9.0	0-36	12.728						
	<u>Coelotanypus</u>	7.2	0-18	9.295						
	<u>Corbicula</u>	194.1	54-363	79.990	3.6	0-18	7.590	145.0	18-363	134.615
	<u>Cyrnellus</u>				1.8	0-18	5.692			
	<u>Gomphus</u>	1.8	0-18	5.692						
	<u>Hexagenia</u>	12.6	0-36	12.149						
	<u>Limnodrilus</u>	48.9	18-91	24.483	1.8	0-18	5.692	1.8	0-18	5.692

Table M.10

 STATISTICAL SUMMARY OF BENTHIC MACROINVERTEBRATE FAUNA - BELLEFONTE NUCLEAR PLANT  
 GUNTERSVILLE RESERVOIR - MARCH THROUGH OCTOBER 1978

Station	Taxa	March			April			May		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 386.4	<u>Ablabesmyia</u>	192.2	54-453	121.744	70.8	18-145	37.829	14.4	0-54	18.590
	<u>Agraylea</u>							1.8	0-18	5.692
	<u>Bezzia</u>				3.6	0-18	7.589			
	<u>Branchiura sowerbyi</u>	10.8	0-36	17.390				1.8	0-18	5.692
	<u>Branchiura</u>	19.9	0-199	62.929						
	<u>Caenis</u>	9.0	0-54	17.493	9.0	0-18	9.487	105.2	0-290	109.328
	<u>Ceratopogonidae</u>	7.2	0-18	9.295				1.8	0-18	5.692
	<u>Chaoborus</u>	3.6	0-36	11.384	3.6	0-18	7.589			
	<u>Chironomus</u>	92.5	0-272	94.879	3.6	0-18	7.589	193.8	36-798	256.971
	<u>Coelotanypus</u>	41.8	0-109	42.084	38.0	0-73	21.904	45.3	0-109	35.668
	<u>Corbicula</u>	3.6	0-36	11.384	23.5	0-109	34.271	25.3	0-91	28.651
	<u>Crangonyx</u>				1.8	0-18	5.692	3.6	0-36	11.384
	<u>Cryptochironomus</u>	18.1	0-91	29.666	12.6	0-36	14.810	27.1	0-127	42.049
	<u>Culicidae</u>	1.8	0-18	5.692						
	<u>Dicrotendipes</u>	39.9	0-91	33.037	3.6	0-36	11.384	12.7	0-73	22.823
	<u>Enallagma</u>	1.8	0-18	5.692						
	<u>Hexagenia</u>	663.9	54-1124	400.720	618.2	417-925	141.450	292.0	0-526	181.376
	<u>Hirudinea</u>	27.1	0-91	32.251	10.8	0-54	17.390			
	<u>Hyalella</u>	19.8	0-54	24.666						
	<u>Limnodrilus</u>	172.2	18-399	131.951	204.8	127-308	57.403	161.5	0-290	94.138
	<u>Nemata</u>	3.6	0-18	7.589				48.8	0-199	72.431
	<u>Parachironomus</u>				1.8	0-18	5.692			
	<u>Pectinatella</u>							7.2	0-36	12.586
	<u>Pleurocera</u>									
	<u>Polypedilum</u>	14.5	0-91	29.436	52.6	0-163	50.222			
	<u>Procladius</u>				14.4	0-54	23.698	19.8	0-54	19.809
	<u>Psidium</u>				1.8	0-18	5.692			
	<u>Sphaerium</u>				3.6	0-36	11.384			
	<u>Tubificidae</u>	14.5	0-91	28.187						

Table M.10 (continued)

Station	Taxa	June			July			August		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 386.4	<u>Ablabesmyia</u>	69.0	18-127	38.192	41.6	0-109	31.006	9.0	0-36	12.728
	<u>Branchiura</u>	7.2	0-36	15.179						
	<u>Caenis</u>	3.6	0-36	11.384	1.8	0-18	5.629	1.8	0-18	5.692
	<u>Campeloma</u>				1.8	0-18	5.692	7.2	0-54	17.390
	<u>Chaoborus</u>							1.8	0-18	5.692
	<u>Chironomus</u>	3.6	0-18	7.590						
	<u>Coelotanypus</u>	14.4	0-36	11.384	23.5	0-73	25.739	12.6	0-36	14.819
	<u>Corbicula</u>	21.6	0-54	18.590				1.8	0-18	5.692
	<u>Cricotopus</u>				5.4	0-54	17.076	1.8	0-18	5.692
	<u>Cryptochironomus</u>				1.8	0-18	5.692			
	<u>Cyrenellus</u>	3.6	0-36	11.384						
	<u>Dicrotendipes</u>	1.8	0-18	5.692	9.0	0-36	15.297			
	<u>Enallagma</u>				1.8	0-18	5.692			
	<u>Glyptotendipes</u>				1.8	0-18	5.692			
	<u>Hexagenia</u>	319.1	254-417	59.358	68.9	36-109	27.016	36.2	0-218	65.241
	<u>Hirudinea</u>	12.6	0-36	14.819	12.6	0-36	12.149	38.2	0-109	46.552
	<u>Limnodrilus</u>	188.7	73-381	93.289	250.1	145-399	95.204	134.2	0-381	112.904
	<u>Pectinatella</u>	3.6	0-18	7.590						
	<u>Pleurocera</u>	3.6	0-18	7.590						
	<u>Polydentalium</u>	1.8	0-18	5.692	5.4	0-36	12.149			
	<u>Procladius</u>	16.3	0-73	23.429	12.6	0-54	20.871	30.8	0-145	46.685
	<u>Psidium</u>	3.6	0-18	7.590						
	<u>Sialis</u>				1.8	0-18	5.692	5.4	0-18	8.695
	<u>Sphaerium</u>	7.3	0-73	23.085	1.8	0-18	5.692			
	<u>Xenochironomus</u>				9.1	0-91	28.777			

Table M.10 (continued)

Station	Taxa	September			October		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 386.4	<u>Ablabesmyia</u>	3.6	0-36	11.384	14.4	0-36	14.199
	<u>Campeloma</u>	1.8	0-18	5.692	7.2	0-36	12.586
	<u>Chaoborus</u>				5.4	0-18	8.695
	<u>Chironomus</u>	7.2	0-18	9.295	10.8	0-36	12.586
	<u>Coelotanypus</u>	5.4	0-18	8.695	14.4	0-54	18.590
	<u>Corbicula</u>	21.7	0-109	36.068	29.1	0-109	40.440
	<u>Cricotopus</u>				1.8	0-18	5.692
	<u>Gomphus</u>				1.8	0-18	5.692
	<u>Hexagenia</u>	39.8	0-91	34.061	369.9	91-616	168.986
	<u>Hirudinea</u>	5.4	0-18	8.695			
	<u>Limnodrilus</u>	16.2	0-36	13.282	9.0	0-36	12.728
	<u>Pleurocera</u>				3.6	0-18	7.589
	<u>Procladius</u>	7.2	0-36	15.179	1.8	0-18	5.692
	<u>Sialis</u>				3.6	0-18	7.589
	<u>Sphaerium</u>	1.8	0-18	5.692			

Table M.10 (continued)

Station	Taxa	March			April			May		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 388.4	<u>Ablabesmyia</u>	1.8	0-18	5.692	1.8	0-18	5.692	1.8	0-18	5.692
	<u>Amnicola</u>				12.6	0-54	19.068			
	<u>Bezzia</u>				3.6	0-18	7.589			
	<u>Branchiura sowerbyi</u>	63.4	18-109	27.609	65.2	0-163	60.540	5.4	0-18	8.695
	<u>Branchiura</u>				18.1	0-181	57.237	39.9	0-145	47.491
	<u>Caenis</u>				43.5	0-109	35.579			
	<u>Ceratopogonidae</u>	1.8	0-18	5.692						
	<u>Chaoborus</u>	3.6	0-18	7.582						
	<u>Chironomidae</u>	1.8	0-18	5.692						
	<u>Chironomus</u>	87.1	0-145	45.160	21.6	0-54	18.590	27.0	0-36	12.728
	<u>Coelotanypus</u>	555.1	290-780	186.971	638.1	199-888	185.417	558.5	381-834	121.668
	<u>Corbicula</u>							3.6	0-36	11.384
	<u>Cryptochironomus</u>	3.6	0-18	7.589				1.8	0-18	5.692
	<u>Dicrotendipes</u>	114.2	36-218	63.465	130.6	36-290	70.270	63.4	0-181	58.773
	<u>Enallagma</u>	5.4	0-36	12.149						
	<u>Gomphus</u>				3.6	0-36	11.384			
	<u>Hexagenia</u>	5.4	0-18	8.695	5.4	0-36	12.149	9.0	0-36	12.728
	<u>Limnodrilus</u>	132.4	36-290	66.180	112.6	36-218	62.849	41.7	0-91	33.350
	<u>Nemata</u>							1.8	0-18	5.692
	<u>Parachironomus</u>				3.6	0-36	11.384	3.6	0-18	7.589
	<u>Pectinatella</u>				7.2	0-36	12.586	1.8	0-18	5.692
	<u>Polypedilum</u>				10.8	0-54	19.349			
	<u>Procladius</u>				14.4	0-54	18.590	1.8	0-18	5.692
	<u>Sphaerium</u>				7.2	0-36	12.586	9.0	0-36	12.728
	<u>Tubificidae</u>	1.8	0-18	5.692	1.8	0-18	5.692			

Table M.10 (continued)

Station	Taxa	June			July			August		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 388.4	<u>Ablabesmyia</u>	12.7	0-73	24.350	19.8	0-54	23.160	3.6	0-18	7.590
	<u>Agraylea</u>				1.8	0-18	5.692			
	<u>Amnicola</u>	1.8	0-18	5.692						
	<u>Bezzia</u>									
	<u>Branchiura</u>	19.9	0-73	23.412	18.2	0-73	30.987	18.2	0-91	34.354
	<u>Caenis</u>				7.3	0-73	23.035	3.6	0-18	7.590
	<u>Campeloma</u>				1.8	0-18	5.692			
	<u>Chaoborus</u>							18.0	0-54	22.450
	<u>Chironomus</u>	1.8	0-18	5.692	38.2	0-109	43.302	9.0	0-18	9.487
	<u>Coelotanypus</u>	210.3	18-290	80.789	170.4	36-290	82.071	214.0	54-326	72.518
	<u>Corbicula</u>	5.4	0-18	8.695	1.8	0-18	5.692	3.6	0-18	5.692
	<u>Cricotopus</u>	3.6	0-18	7.589	34.4	0-344	108.782			
	<u>Cryptochironomus</u>	47.1	0-471	148.943						
	<u>Dicrotendipes</u>	10.8	0-36	12.586	10.5	0-36	12.586	18.0	0-36	12.000
	<u>Enallagma</u>				1.8	0-18	5.692			
	<u>Glyptotendipes</u>	7.3	0-73	23.085	19.9	0-199	62.929			
	<u>Hexagenia</u>	10.8	0-18	9.295	3.6	0-18	7.589			
	<u>Hirudinea</u>				1.8	0-18	5.692			
	<u>Hyalella</u>	1.8	0-18	5.692	9.1	0-91	28.777			
	<u>Limnodrilus</u>	83.4	36-145	33.800	47.1	0-91	31.232	68.8	0-163	44.329
	<u>Nemata</u>	1.8	0-18	5.692						
	<u>Pectinatella</u>				1.8	0-18	5.692			
	<u>Polypedilum</u>				3.6	0-36	11.384			
	<u>Procladius</u>	9.0	0-36	15.297	14.5	0-91	29.486			
	<u>Sialis</u>	1.8	0-18	5.692						
	<u>Sphaerium</u>	9.0	0-54	19.442	7.3	0-73	23.086	1.8	0-18	5.692
	<u>Tubificidae</u>							3.6	0-36	11.384

Table M.10 (continued)

Station	Taxa	September			October		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 388.4	<u>Ablabesmyia</u>	5.4	0-18	8.690	27.2	0-91	32.406
	<u>Branchiura</u>	7.2	0-36	15.179			
	<u>Certopogonidae</u>				1.8	0-18	5.692
	<u>Chaoborus</u>				27.2	0-109	39.474
	<u>Chironomus</u>	3.6	0-18	7.589			
	<u>Coelotanypus</u>	246.6	54-435	108.278	105.2	0-290	99.642
	<u>Dicrotendipes</u>	28.9	0-91	24.578			
	<u>Glyptotendipes</u>				5.4	0-54	17.076
	<u>Hexagenia</u>	7.2	0-36	12.586	357.3	0-780	222.151
	<u>Hyalella</u>	1.8	0-18	5.692			
	<u>Limnodrilus</u>	1.8	0-18	5.692	9.0	0-36	12.728
	<u>Procladius</u>	1.8	0-18	5.692	3.6	0-36	11.384
	<u>Sphaerium</u>	3.6	0-18	7.589			

Table M.10 (continued)

Station	Taxa	March			April			May		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 389.9	<u>Ablabesmyia</u>	70.6	18-181	48.644	10.8	0-36	12.585	14.4	0-36	16.541
	<u>Bezzia</u>				1.8	0-18	5.692			
	<u>Branchiura sowerbyi</u>	27.0	0-54	15.297	23.5	0-73	28.399	1.8	0-18	5.692
	<u>Branchiura</u>							12.7	0-73	24.350
	<u>Caenis</u>				1.8	0-18	5.692			
	<u>Campeloma</u>				1.8	0-18	5.692			
	<u>Chaoborus</u>	7.2	0-36	12.586						
	<u>Chironomus</u>	3.5	0-18	7.589						
	<u>Coelotanypus</u>	38.1	0-91	30.388	23.4	0-54	14.819	23.5	0-91	284.900
	<u>Corbicula</u>	34.5	0-73	32.647	39.7	0-73	25.316	25.3	0-73	25.940
	<u>Crangonyx</u>							1.8	0-18	5.692
	<u>Cryptochironomus</u>	3.6	0-18	7.589	1.8	0-18	5.692	1.8	0-18	5.692
	<u>Enallagma</u>	3.6	0-36	11.384						
	<u>Gomphus</u>				1.8	0-18	5.6921	1.8	0-18	5.692
	<u>Hexagenia</u>	253.7	0-453	165.896	115.9	0-254	96.670	224.9	0-526	183.241
	<u>Hirudinea</u>				1.8	0-18	5.692			
	<u>Hyalella</u>	7.2	0-18	9.295						
	<u>Limnodrilus</u>	92.6	54-199	43.004	108.7	54-163	42.851	103.3	0-181	71.974
	<u>Polypedilum</u>				1.8	0-18	5.692			
	<u>Procladius</u>							1.8	0-18	5.692
	<u>Sialis</u>	1.8	0-18	5.692						
	<u>Sphaerium</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Tubificidae</u>				1.8	0-18	5.692			

Table M.10 (continued)

Station	Taxa	June			July			August		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 389.9	<u>Ablabesmyia</u>	12.6	0-36	14.819	1.8	0-18	5.692			
	<u>Campeloma</u>	7.2	0-36	12.586	1.8	0-18	5.692			
	<u>Chaoborus</u>				3.6	0-18	7.590			
	<u>Chironomus</u>							12.6	0-36	14.819
	<u>Coelotanypus</u>	1.8	0-18	5.692				1.8	0-18	5.692
	<u>Corbicula</u>	39.0	0-91	31.205	30.8	0-73	28.534	18.0	0-36	14.697
	<u>Dicrotendipes</u>							1.8	0-18	5.692
	<u>Gomphus</u>	3.6	0-36	11.384	1.8	0-18	5.692			
	<u>Hexagenia</u>	105.0	0-272	104.322	18.0	0-54	18.974	5.4	0-36	12.149
	<u>Hirudinea</u>	1.8	0-18	5.692						
	<u>Limnodrilus</u>	23.4	0-54	22.580	61.7	0-163	43.803	18.1	0-73	25.692
	<u>Procladius</u>	1.8	0-18	5.692				14.6	0-73	23.969
	<u>Sialis</u>				1.8	0-18	5.692			
	<u>Tubificidae</u>	1.8	0-18	5.692						
	<u>Xenochironomus</u>	3.6	0-18	7.589						

Table M.10 (continued)

Station	Taxa	September			October		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 389.9	<u>Ablabesmyia</u>				10.8	0-36	15.179
	<u>Branchiura</u>	7.2	0-18	9.295	25.2	0-54	21.128
	<u>Campeloma</u>	1.8	0-18	5.692	5.4	0-36	12.149
	<u>Chaoborus</u>	3.6	0-18	7.589	48.9	0-145	41.127
	<u>Chironomus</u>				5.4	0-36	12.149
	<u>Coelotanypus</u>	18.0	0-54	24.000	23.6	0-127	42.865
	<u>Corbicula</u>	50.6	0-163	50.432	25.2	0-36	15.179
	<u>Cryptochironomus</u>	1.8	0-18	5.692			
	<u>Hexagenia</u>	81.6	0-272	111.995	638.1	435-798	124.718
	<u>Hirudinea</u>				3.6	0-36	11.384
	<u>Limnodrilus</u>	12.6	0-54	17.076	16.2	0-36	15.761
	<u>Sialis</u>				1.8	0-18	5.692

Table M.10 (continued)

Station	Taxa	March			April			May		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 391.1	<u>Ablabesmyia</u>							1.8	0-18	5.692
	<u>Amnicola</u>							16.2	0-54	21.550
	<u>Bezzia</u>									
	<u>Branchiura sowerbyi</u>	45.3	18-73	23.243	23.4	0-54	19.068	23.5	0-73	24.300
	<u>Branchiura</u>							52.7	0-91	31.539
	<u>Caenis</u>							1.8	0-18	5.692
	<u>Ceratopogonidae</u>	28.9	0-109	34.411						
	<u>Chaoborus</u>	29.0	0-109	35.578						
	<u>Chironomus</u>	56.4	0-109	38.862	41.8	0-91	37.511	23.4	0-54	14.819
	<u>Coelotanypus</u>	310.0	127-526	136.473	328.4	0-671	209.847	545.7	290-834	167.614
	<u>Corbicula</u>	1.8	0-18	5.692						
	<u>Cryptochironomus</u>				43.5	0-435	137.559			
	<u>Dicrotendipes</u>	86.9	0-218	75.007	36.1	0-73	22.630	57.9	18-145	39.134
	<u>Hexagenia</u>				3.6	0-18	7.590	1.8	0-18	5.692
	<u>Limnodrilus</u>	74.5	18-145	34.783				59.6	36-163	38.332
	<u>Nemata</u>	5.4	0-54	17.076						
	<u>Pectinatella</u>							5.4	0-18	8.695
	<u>Polypedilum</u>	52.5	0-108	33.613	5.4	0-18	8.695	7.2	0-54	17.390
	<u>Procladius</u>				83.4	18-163	50.757	27.1	0-73	21.450
	<u>Sialis</u>	23.5	0-73	25.789						
	<u>Sphaerium</u>							12.7	0-127	40.161

Table M.10 (continued)

Station	Taxa	June			July			August		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 391.1	<u>Ablabesmyia</u>	7.2	0-36	12.586	1.8	0-18	5.692	5.4	0-18	8.695
	<u>Anodonta</u>				1.8	0-18	5.692			
	<u>Bezzia</u>							3.6	0-18	7.589
	<u>Branchiura</u>	52.5	0-145	41.495	52.3	0-199	54.926	43.5	0-91	31.206
	<u>Chaoborus</u>	1.8	0-18	5.692	30.9	0-73	33.338	39.8	0-127	45.124
	<u>Chironomus</u>	39.8	0-145	56.570	70.6	18-163	47.268	48.9	0-109	34.401
	<u>Coelotanypus</u>	277.5	127-399	99.092	106.8	36-181	53.095	284.5	54-616	211.784
	<u>Dicrotendipes</u>	7.2	0-36	12.586	18.1	0-127	40.101	18.1	0-109	34.236
	<u>Hexagenia</u>	5.4	0-36	12.149						
	<u>Limnodrilus</u>	38.0	0-91	30.262	41.6	0-109	31.006	39.7	0-109	30.609
	<u>Pectinatella</u>							7.2	0-18	9.295
	<u>Polypedilum</u>	1.8	0-18	5.692						
	<u>Procladius</u>				1.8	0-18	5.692			
	<u>Sialis</u>	5.4	0-18	8.695	16.2	0-54	19.809	27.1	0-73	24.578
	<u>Sphaerium</u>							1.8	0-18	5.692

Table M.10 (continued)

Station	Taxa	September			October		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 391.1	<u>Ablabesmyia</u>			1.8	0-18	5.692	
	<u>Bezzia</u>	1.8	0-18	5.692			
	<u>Branchiura</u>	7.2	0-18	9.295	5.4	0-36	12.149
	<u>Caenis</u>	1.8	0-18	5.692			
	<u>Chaoborus</u>	18.1	0-91	28.427			
	<u>Chironomidae</u>			150.4	0-363	128.205	
	<u>Chironomus</u>	7.2	0-18	9.295	5.4	0-36	12.149
	<u>Coelotanypus</u>	600.0	163-1106	337.671	297.4	0-635	177.170
	<u>Dicrotendipes</u>	3.6	0-18	7.589	12.6	0-36	14.819
	<u>Glyptotendipes</u>				3.6	0-36	11.384
	<u>Limnodrilus</u>	16.2	0-36	15.761	5.4	0-54	17.076
	<u>Pectinatella</u>	3.6	0-18	7.589	3.6	0-18	7.589
	<u>Procladius</u>	1.8	0-18	5.692			
	<u>Sialis</u>			18.0	0-54	16.971	

Table M.11

STATISTICAL SUMMARY OF BENTHIC MACROINVERTEBRATE FAUNA - BELLEFONTE NUCLEAR PLANT  
GUNTERSVILLE RESERVOIR - MARCH THROUGH OCTOBER 1978

Station	Taxa	March			April			May		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Ablabesmyia</u>	5.4	0-36	12.149	1.8	0-18	5.692			
	<u>Bezzia</u>				1.8	0-18	5.692	1.8	0-18	5.692
	<u>Branchiura</u>	76.1	36-254	65.131	43.3	18-73	19.682	45.3	0-73	26.158
	<u>Bryozoa</u>				3.6	0-36	11.384			
	<u>Caenis</u>							1.8	0-18	5.692
	<u>Chaoborus</u>	48.9	0-109	36.488	3.6	0-18	7.590	12.6	0-18	8.695
	<u>Chironomus</u>	16.2	0-54	23.160	7.2	0-36	15.179	3.6	0-18	7.590
	<u>Coelotanypus</u>	7.2	0-54	17.390	1.8	0-18	5.692	1.8	0-18	5.692
	<u>Corbicula</u>	1.8	0-18	5.692	16.2	0-54	26.084	3.6	0-18	7.590
	<u>Cryptochironomus</u>	12.6	0-54	19.068	12.6	0-36	17.076			
	<u>Dicrotendipes</u>	7.2	0-36	12.586				1.8	0-18	5.692
	<u>Hexagenia</u>	1.8	0-18	5.692	3.6	0-18	7.590	19.8	0-54	19.809
	<u>Hirudinea</u>				1.8	0-18	5.692	1.8	0-18	5.692
	<u>Limnodrilus</u>	14.4	0-54	18.590	39.7	0-91	28.087	41.8	0-109	43.807
	<u>Pleurocera</u>				14.4	0-36	14.199			
	<u>Procladius</u>							5.4	0-36	12.149
	<u>Xenochironomus</u>	1.8	0-18	5.692						

Table M.11 (continued)

Table M.11 (continued)

Station	Taxa	September			October		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
ICM 0.2	<u>Ablabesmyia</u>				3.6	0-18	7.590
	<u>Branchiura</u>				21.6	0-54	18.590
	<u>Chaoborus</u>	108.8	0-218	76.944	16.3	0-73	26.323
	<u>Coelotanypus</u>	1.8	0-18	5.692	1.8	0-18	5.692
	<u>Corbicula</u>	1.8	0-18	5.692			
	<u>Cryptochironomus</u>				1.8	0-18	5.692
	<u>Hexagenia</u>	1.8	0-18	5.692	5.4	0-18	8.695
	<u>Limnodrilus</u>	10.8	0-36	12.586	14.4	0-54	20.435
	<u>Pleurocera</u>	5.4	0-36	12.149	1.8	0-18	5.692
	<u>Sialis</u>	1.8	0-18	5.692	5.4	0-18	8.695

Table M.12

 STATISTICAL SUMMARY OF BENTHIC MACROINVERTEBRATE FAUNA - BELLEFONTE NUCLEAR PLANT  
 GUNTERSVILLE RESERVOIR - FEBRUARY THROUGH OCTOBER 1979

Station	Taxa	February			March			April		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 386.4	<u>Ablabesmyia</u>	54.3	0-181	66.695	34.4	0-145	54.382	19.9	0-73	24.902
	<u>Berosus</u>	1.8	0-18	5.692						
	<u>Bezzia</u>				36.0	0-36	11.384	3.6	0-18	7.589
	<u>Branchiura</u>				1.8	0-18	5.692			
	<u>Bryozoa</u>	1.8	0-18	5.692						
	<u>Caenis</u>	1.8	0-18	5.692				3.6	0-18	7.589
	<u>Campeloma</u>							9.0	0-54	17.493
	<u>Chaoborus</u>	3.6	0-18	7.589	9.0	0-18	9.487			
	<u>Chironomus</u>	76.2	0-163	53.973	228.3	36-725	234.380	141.5	36-326	85.269
	<u>Coelotanypus</u>	9.0	0-36	12.728	48.8	0-344	104.911	37.9	0-145	43.082
	<u>Corbicula</u>	23.5	0-73	22.771	16.2	0-54	19.809	19.8	0-36	13.282
	<u>Crangonyx</u>							1.8	0-18	5.692
	<u>Cryptochironomus</u>							1.8	0-18	5.692
	<u>Dicrotendipes</u>	19.9	0-73	21.820						
	<u>Epoicocadius</u>							3.6	0-18	7.589
	<u>Glyptotendipes</u>				38.0	0-344	107.778	1.8	0-18	5.692
	<u>Hexagenia</u>	411.6	36-979	335.407	483.9	54-707	231.496	467.7	127-671	177.869
	<u>Hirudinea</u>	14.5	0-73	22.417	14.5	0-127	39.931	1.8	0-18	5.692
	<u>Hyalella</u>	29.0	0-145	51.437	45.3	0-181	62.930	3.6	0-18	7.589
	<u>Limnodrilus</u>	16.2	0-54	19.809	47.1	0-254	77.561	47.1	0-91	27.485
	<u>Nemata</u>							1.8	0-18	5.692
	<u>Physa</u>	1.8	0-18	5.692						
	<u>Pleurocera</u>				5.4	0-36	12.149	1.8	0-18	5.692
	<u>Polypedilum</u>				1.8	0-18	5.692	21.7	0-145	45.043
	<u>Procladius</u>	78.1	0-218	63.021	66.9	0-381	112.553	23.4	0-54	17.076
	<u>Pseudochironomus</u>				3.6	0-18	7.589	1.8	0-18	5.692
	<u>Rheotanytarsus</u>									
	<u>Sphaerium</u>							1.8	0-18	5.692

Table M.12 (continued)

Station	Taxa	May			June			July		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 386.4	<u>Ablabesmyia</u>	45.1	0-181	52.760	25.2	0-90	30.830	54.0	0-126	53.670
	<u>Berosus</u>	1.8	0-18	5.692						
	<u>Bezzia</u>	1.8	0-18	5.692						
	<u>Branchiura</u>				3.6	0-36	11.384			
	<u>Campeloma</u>	1.8	0-18	5.692						
	<u>Chaoborus</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Cheumatopsyche</u>	1.8	0-18	5.692						
	<u>Chironomus</u>				1.8	0-18	5.692	1.8	0-18	5.692
	<u>Coelotanypus</u>	18.0	0-90	30.590	3.6	0-18	7.589	3.6	0-18	7.589
	<u>Corbicula</u>	18.0	0-30	16.970	9.0	0-54	17.493	12.6	0-54	17.076
	<u>Cricotopus</u>				1.8	0-18	5.692			
	<u>Cryptochironomus</u>	3.6	0-18	7.590	1.8	0-18	5.692			
	<u>Dicrotendipes</u>	5.4	0-18	8.695	7.2	0-36	12.586			
	<u>Epoicocadius</u>	1.8	0-18	5.692				3.6	0-18	7.589
	<u>Gomphus</u>	1.8	0-18	5.692						
	<u>Hexagenia</u>	478.0	326-616	90.870	323.9	199-507	88.970	97.2	54-126	29.638
	<u>Hirudinea</u>	9.0	0-18	5.692	5.4	0-36	12.149	5.4	0-36	12.149
	<u>Limnodrilus</u>	66.7	18-145	37.270	113.9	0-344	126.410	99.3	18-362	107.035
	Nemata							1.8	0-18	5.692
	<u>Pectinatella</u>				1.8	0-18	5.692			
	<u>Perithemis</u>	1.8	0-18	5.692						
	<u>Pleurocera</u>							1.8	0-18	5.692
	<u>Polypedilum</u>	12.6	0-54	19.070	7.2	0-36	15.179	5.4	0-18	8.695
	<u>Procladius</u>	50.5	0-217	72.650	5.4	0-36	12.149	1.8	0-18	5.692
	<u>Proptera</u>	1.8	0-18	5.692						
	<u>Rheotanytarsus</u>	1.8	0-18	5.692						

Table M.12 (continued)

Station	Taxa	August			September			October		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 386.4	<u>Ablabesmyia</u>	10.8	0-36	12.586	9.0	0-36	12.728	5.4	0-18	8.695
	<u>Bezzia</u>	3.6	0-18	7.589						
	<u>Caenis</u>	7.2	0-36	12.586						
	<u>Campeloma</u>	3.6	0-18	7.589						
	<u>Chaoborus</u>					0-36	12.728			
	<u>Chironomidae</u>								0-18	5.692
	<u>Chironomus</u>	3.6	0-36	11.384						
	<u>Coelotanypus</u>	25.2	0-126	39.980		18.0	0-72	22.450	45.0	0-126
	<u>Corbicula</u>	30.6	0-90	32.918		10.8	0-36	12.586	14.4	0-54
	<u>Crangonyx</u>							3.6	0-18	
	<u>Cricotopus</u>	1.8	0-18	5.692		1.8	0-18	5.692	3.6	0-18
	<u>Cryptochironomus</u>	1.8	0-18	5.692		1.8	0-18	5.692	1.8	0-18
	<u>Culicidae</u>	1.8	0-18	5.692		1.8	0-18	5.692	1.8	0-18
	<u>Dicrotendipes</u>	1.8	0-18	5.692		1.8	0-18	5.692		
	<u>Epoicocladius</u>	1.8	0-18	5.692		1.8	0-18	5.692		
	<u>Hexagenia</u>	48.7	0-181	52.620		12.6	0-72	22.530	16.2	0-36
	<u>Hirudinea</u>	3.6	0-18	7.589		7.2	0-36	12.586	3.6	0-36
	<u>Hyalella</u>	47.0	0-416	130.759		77.6	0-416	126.466	374.7	180-670
	<u>Limnodrilus</u>	63.0	0-126	42.638		37.8	0-72	27.430	36.0	0-72
	<u>Paratendipes</u>	55.8	0-126	59.669		9.0	0-54	17.493		
	<u>Perithemis</u>							1.8	0-18	5.692
	<u>Pleurocera</u>	7.2	0-18	9.295				1.8	0-18	5.692
	<u>Polypedilum</u>	9.0	0-36	15.297						
	<u>Procladius</u>	18.0	0-90	28.142	10.8	0-36	12.586	1.8	0-18	5.692
	<u>Rheotanytarsus</u>	3.6	0-18	7.589	5.4	0-36	12.149			
	<u>Sialis</u>	3.6	0-18	7.589	7.2	0-18	9.295	1.8	0-18	5.692

Table M.12 (continued)

Station	Taxa	February			March			April		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 388.4	<u>Ablabesmyia</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Bezzia</u>				1.8	0-18	5.692			
	<u>Branchiura</u>	19.9	0-91	31.370	21.6	0-54	23.698	10.8	0-54	17.390
	<u>Caenis</u>	1.8	0-18	5.692				34.4	0-163	53.678
	<u>Chaoborus</u>	1.8	0-18	5.692				1.8	0-18	5.692
	<u>Chironomus</u>	302.8	0-1324	441.371	157.8	18-326	92.749	56.3	0-218	68.256
	<u>Coelotanypus</u>	261.1	109-544	116.605	154.0	36-363	101.365	288.3	54-580	187.325
	<u>Corbicula</u>	1.8	0-18	5.692				1.8	0-18	5.692
	<u>Cricotopus</u>	27.1	0-91	26.079	5.4	0-36	12.149			
	<u>Cryptochironomus</u>				1.8	0-18	5.692	3.6	0-18	7.589
	<u>Dicrotendipes</u>	273.5	91-363	95.427	70.6	0-162	51.675	34.4	0-109	34.776
	<u>Enallagma</u>	7.2	0-18	9.295	3.6	0-18	7.589	12.6	0-36	14.819
	<u>Glyptotendipes</u>	58.1	0-109	37.227	10.8	0-54	19.349			
	<u>Hexagenia</u>	5.4	0-18	8.695	12.6	0-36	12.149	10.8	0-18	9.295
	<u>Hyalella</u>	1.8	0-18	5.692	19.9	0-127	39.599	5.4	0-36	12.149
	<u>Limnodrilus</u>	21.7	0-73	20.710	34.3	18-91	24.918	67.1	0-127	40.273
	<u>Nemata</u>							1.8	0-18	5.692
	<u>Oecetis</u>							1.8	0-18	5.692
	<u>Pectinatella</u>							1.8	0-18	5.692
	<u>Polypedilum</u>	12.7	0-73	24.350				1.8	0-18	5.692
	<u>Procladius</u>	128.7	36-417	113.849	21.6	0-54	20.435	36.3	0-109	38.370
	<u>Rheotanytarsus</u>							1.8	0-18	5.692
	<u>Sphaerium</u>	5.4	0-36	12.149						
	<u>Xenochironomus</u>							1.8	0-18	5.692

Table M.12 (continued)

Station	Taxa	May			June			July		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 388.4	<u>Ablabesmyia</u>	7.2	0-18	9.295	1.8	0-18	5.692	7.2	0-72	22.768
	<u>Bezzia</u>				1.8	0-18	5.692			
	<u>Branchiura</u>	37.8	0-126	42.810	19.8	0-126	41.090	25.3	0-145	45.353
	<u>Caenis</u>	63.2	0-398	119.790	3.6	0-36	11.384			
	<u>Chaoborus</u>							3.6	0-18	7.590
	<u>Chironomus</u>	10.8	0-54	19.349	21.6	0-90	30.358	10.8	0-18	9.295
	<u>Coelotanypus</u>	267.8	90-471	106.700	162.8	0-344	110.728	124.7	54-199	58.946
	<u>Corbicula</u>	3.6	0-18	7.589				1.8	0-18	5.692
	<u>Corduliidae</u>	1.8	0-18	5.692						
	<u>Cricotopus</u>	5.4	0-36	12.149						
	<u>Cryptochironomus</u>	1.8	0-18	5.692				1.8	0-18	5.692
	<u>Dicrotendipes</u>	19.8	0-72	23.160	3.6	0-18	7.589			
	<u>Enallagma</u>	21.7	0-181	57.104	7.2	0-54	17.390			
	<u>Glyptotendipes</u>				1.8	0-18	5.692	14.4	0-54	20.435
	<u>Hexagenia</u>	7.2	0-36	12.586	3.6	0-18	7.589	5.4	0-18	8.695
	<u>Hyalella</u>	3.6	0-36	11.384	7.2	0-54	17.390			
	<u>Limnodrilus</u>	115.4	54-235	53.511	111.9	36-181	42.608	39.6	0-108	43.100
	<u>Pectinatella</u>	1.8	0-18	5.692						
	<u>Polypedilum</u>				1.8	0-18	5.692			
	<u>Procladius</u>	142.9	0-435	156.896	9.0	0-36	12.728	9.0	0-18	9.487
	<u>Pseudochironomus</u>	1.8	0-18	5.692						
	<u>Rheotanytarsus</u>	5.4	0-36	12.150						

Table M.12 (continued)

Station	Taxa	August			September			October		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 388.4	<u>Ablabesmyia</u>	10.8	0-54	17.390	1.8	0-18	5.692	12.6	0-90	28.206
	<u>Bezzia</u>							3.6	0-18	7.589
	<u>Branchiura</u>	10.8	0-90	28.397	10.8	0-54	19.349	3.6	0-18	7.589
	<u>Bryozoa</u>							1.8	0-18	5.692
	<u>Chironomidae</u>							1.8	0-18	12.586
	<u>Chironomus</u>	25.2	0-108	35.191	23.4	0-54	19.068	7.2	0-36	54.139
	<u>Coelotanypus</u>	88.3	36-253	61.749	81.1	18-145	42.803	131.8	54-217	54.139
	<u>Corbicula</u>	5.4	0-18	8.695	5.4	0-36	12.149	1.8	0-18	5.692
	<u>Cryptochironomus</u>	3.6	0-36	11.384	3.6	0-18	7.589	5.4	0-36	12.140
	<u>Culicidae</u>				1.8	0-18	5.692	1.8	0-18	5.692
	<u>Dicrotendipes</u>	99.4	0-326	113.289				1.8	0-18	5.692
	<u>Glyptotendipes</u>	16.2	0-90	28.712	255.1	108-471	121.918	770.0	290-1214	269.104
	<u>Hexagenia</u>	7.2	0-18	9.295	27.0	0-36	12.728	48.6	0-108	26.050
	<u>Hyalella</u>				3.6	0-36	11.384			
	<u>Limnodrilus</u>	55.8	18-108	29.940	32.4	0-72	29.148	43.2	0-72	21.128
	<u>Nemata</u>	1.8	0-18	5.692						
	<u>Pectinatella</u>				1.8	0-18	5.692			
	<u>Polypedilum</u>	3.6	0-36	11.384	1.8	0-18	5.692			
	<u>Procladius</u>	16.2	0-54	17.900	10.8	0-18	9.295	5.4	0-18	8.695
	<u>Rheotanytarsus</u>	3.6	0-18	7.589	1.8	0-18	5.692			
	<u>Sphaerium</u>				5.4	0-36	12.149	1.8	0-18	5.692
	<u>Stenacron</u>				1.8	0-18	5.692			

Table M.12 (continued)

Station	Taxa	February			March			April		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 389.9	<u>Ablabesmyia</u>				1.8	0-18	5.691	5.4	0-18	8.695
	<u>Bezzia</u>				1.8	0-18	5.692			
	<u>Branchiura</u>				1.8	0-18	5.692	7.2	0-18	9.295
	<u>Campeloma</u>							5.4	0-54	17.076
	<u>Chaoborus</u>							1.8	0-18	5.692
	<u>Coelotanypus</u>	7.2	0-36	12.586	9.1	0-73	23.154	9.0	0-54	17.493
	<u>Corbicula</u>	9.0	0-36	15.279	16.2	0-36	15.761	59.8	0-236	82.941
	<u>Crangonyx</u>							7.3	0-73	23.085
	<u>Cryptochironomus</u>							1.8	0-18	5.692
	<u>Gomphus</u>							1.8	0-18	5.692
	<u>Hexagenia</u>	1.8	0-18	5.692	54.3	0-290	100.342	81.5	0-308	108.446
	<u>Hyalella</u>				1.8	0-18	5.692	3.6	0-36	11.384
	<u>Limnodrilus</u>				5.4	0-36	12.149	39.8	0-109	39.092
	<u>Polypedilum</u>				3.6	0-36	11.384	1.8	0-18	5.692
	<u>Procladius</u>							1.8	0-18	5.692
	<u>Sialis</u>							1.8	0-18	5.692
	<u>Stenacron</u>							1.8	0-18	5.692

Table M.12 (continued)

Station	Taxa	May			June			July		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 389.9	<u>Branchiura</u>				7.2	0-36	12.586	3.6	0-18	7.590
	<u>Coelotanypus</u>	12.6	0-54	22.530	3.6	0-18	7.590	1.8	0-18	5.692
	<u>Corbicula</u>	48.6	0-126	41.610	16.2	0-90	27.430	30.6	0-72	25.526
	<u>Cryptochironomus</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Dicrotendipes</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Hexagenia</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Limnodrilus</u>	18.0	0-72	25.460	32.4	18-72	16.541	14.4	0-54	18.590
	<u>Polypedilum</u>				16.2	0-72	23.160			
	<u>Procladius</u>							7.2	0-72	22.768

Table M.12 (continued)

Station	Taxa	August			September			October		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 389.9	<u>Branchiura</u>	1.8	0-18	5.692	5.4	0-36	12.149			
	<u>Caenis</u>	1.8	0-18	5.692				1.8	0-18	5.692
	<u>Cheumatopsyche</u>	1.8	0-18	5.692				1.8	0-18	5.692
	<u>Coelotanypus</u>	12.6	0-54	17.076	5.4	0-36	12.149	1.8	0-18	5.692
	<u>Corbicula</u>	21.6	0-54	20.453	18.0	0-54	20.785	16.2	0-54	21.549
	<u>Cricotopus</u>				1.8	0-18	5.692			
	<u>Cryptochironomus</u>	1.8	0-18	5.692						
	<u>Cyrnellus</u>	1.8	0-18	5.692						
	<u>Dicrotendipes</u>	3.6	0-36	11.384						
	<u>Glyptotendipes</u>	1.8	0-18	5.692						
	<u>Hexagenia</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Hirudinea</u>	3.6	0-36	11.384	1.8	0-18	5.692	1.8	0-18	5.692
	<u>Limnodrilus</u>	54.1	0-145	48.950	25.2	0-90	25.737	9.0	0-36	15.297
	<u>Oecetis</u>	1.8	0-18	5.692						
	<u>Paratendipes</u>				1.8	0-18	5.692			
	<u>Pectinatella</u>	1.8	0-18	5.692						
	<u>Polypedilum</u>	5.4	0-36	11.384						
	<u>Procladius</u>	3.6	0-18	7.590	5.4	0-18	8.695			

Table M.12 (continued)

Station	Taxa	February			March			April		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
IRM 391.1	<u>Berosus</u>	12.6	0-18	8.695						
	<u>Bezzia</u>									
	<u>Branchiura</u>	7.2	0-36	12.586	12.6	0-26	14.819	1.8	0-18	5.692
	<u>Bryozoa</u>	58.0	0-145	47.260				52.5	0-18	44.066
	<u>Caenis</u>									
	<u>Chaoborus</u>	47.2	0-91	32.389	18.0	0-54	20.785	9.0	0-36	12.728
	<u>Chironomus</u>	81.6	18-199	54.902	52.6	0-109	38.811	76.2	0-127	40.952
	<u>Coelotanypus</u>	244.7	36-508	134.183	361.0	109-653	166.809	478.7	109-798	212.699
	<u>Corbicula</u>				1.8	0-18	5.692			
	<u>Cricotopus</u>	16.3	0-145	45.573						
	<u>Cryptochironomus</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Dicrotendipes</u>	10.8	0-36	15.179	52.6	0-145	44.071	114.2	39-199	52.670
	<u>Glyptotendipes</u>	16.2	0-54	17.900	1.8	0-18	5.692			
	<u>Hexagenia</u>				9.0	0-54	17.493			
	<u>Limnodrilus</u>	23.5	0-73	24.300	27.1	0-73	19.700	54.4	18-109	31.053
	<u>Nemata</u>	1.8	0-18	5.692						
	<u>Pectinatella</u>				10.8	0-18	9.295	10.8	0-18	9.295
	<u>Polypedilum</u>	101.4	18-326	94.470	83.4	0-236	83.167	3.6	0-18	7.590
	<u>Procladius</u>							77.9	0-236	74.687
	<u>Rheotanytarsus</u>	58.0	0-145	57.260	12.6	0-54	19.068	1.8	0-18	5.692
	<u>Sialis</u>	5.4	0-18	8.695	3.6	0-18	7.590	1.8	0-18	5.692

Table M.12 (continued)

Station	Taxa	May			June			July		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 391.1	<u>Ablabesmyia</u>	1.8	0-18	5.692	3.6	0-18	7.590	7.2	0-18	9.295
	<u>Bezzia</u>	1.8	0-18	5.692						
	<u>Branchiura</u>	14.4	0-72	23.698	19.8	0-54	15.761	27.0	0-72	25.807
	<u>Chaoborus</u>				9.0	0-36	12.728	1.8	0-18	5.692
	<u>Chironomus</u>	16.2	0-54	17.900	28.8	0-72	22.768	27.0	0-72	25.807
	<u>Coelotanypus</u>	447.4	108-725	214.997	307.7	36-707	202.875	184.4	90-308	80.273
	<u>Cryptochironomus</u>							1.8	0-18	5.692
	<u>Dicrotendipes</u>	39.6	0-108	35.799	25.2	0-54	19.349	7.2	0-18	9.295
	<u>Hexagenia</u>	5.4	0-18	8.695	3.6	0-36	11.384	7.2	0-36	11.586
	<u>Limnodrilus</u>	28.8	0-90	24.298	39.6	0-90	31.521			
	<u>Paragordius</u>				1.8	0-18	5.692			
	<u>Pectinatella</u>	3.6	0-18	7.590	5.4	0-18	8.695			
	<u>Polypedilum</u>	1.8	0-18	5.692						
	<u>Procladius</u>	1.8	0-18	5.692	27.0	0-90	37.229	16.2	0-54	19.809
	<u>Proptera</u>				1.8	0-18	5.692	1.8	0-18	5.692
	<u>Rheotanytarsus</u>	5.4	0-54	17.076	1.8	0-18	5.692	1.8	0-18	5.692
	<u>Sialis</u>				12.6	0-36	14.819	10.8	0-36	15.179
	<u>Sphaerium</u>	1.8	0-18	5.792				10.8	0-36	15.179

Table M.12 (continued)

Station	Taxa	August			September			October		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TRM 391.1	<u>Ablabesmyia</u>	9.0	0-36	15.297	5.4	0.18	8.694	3.6	0-18	7.589
	<u>Branchiura</u>	19.8	0-36	10.218	32.4	0-90	31.521	21.6	0-54	20.435
	<u>Chaoborus</u>				3.6	0-18	7.589			
	<u>Chironomidae</u>							3.6	0-36	11.384
	<u>Chironomus</u>	14.4	0-108	33.728	7.2	0-36	12.585	9.0	0-36	12.728
	<u>Coelotanypus</u>	157.4	54-271	65.524	178.9	108-290	70.282	244.3	0-471	135.679
	<u>Cricotopus</u>							1.8	0-18	5.692
	<u>Dicrotendipes</u>	52.2	0-108	26.447				1.8	0-18	5.692
	<u>Enallagma</u>				45.1	0-181	60.399	238.8	0-543	160.265
	<u>Glyptotendipes</u>	7.2	0-36	12.586	7.2	0-18	9.295	5.4	0-36	12.149
	<u>Hexagenia</u>				1.8	0-18	5.692			
	<u>Hirudinea</u>									
	<u>Limnodrilus</u>	27.0	18-72	17.493	39.7	0-181	57.696	28.8	0-90	28.397
	<u>Nemata</u>	1.8	0-18	5.692				1.8	0-18	5.692
	<u>Pectinatella</u>				5.4	0-18	8.694	7.2	0-18	9.295
	<u>Pleurocera</u>	1.8	0-18	5.692						
	<u>Polypedilum</u>	5.4	0-36	12.149						
	<u>Procladius</u>	7.2	0-54	17.390	1.8	0-18	5.692	1.8	0-18	5.692
	<u>Rheotanytarsus</u>				1.8	0-18	5.692			
	<u>Sialis</u>	5.4	0-18	8.645	12.6	0-36	17.076	12.6	0-54	17.076
	<u>Sphaerium</u>				1.8	0-18	5.692			

Table M.13

STATISTICAL SUMMARY OF BENTHIC MACROINVERTEBRATE FAUNA - BELLEFONTE NUCLEAR PLANT  
GUNTERSVILLE RESERVOIR - FEBRUARY THROUGH OCTOBER 1979

Station	Taxa	February			March			April		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Ablabesmyia</u>	5.4	0-18	8.695	1.8	0-18	5.692	5.4	0-36	12.149
	<u>Bezzia</u>				3.6	0-18	7.590			
	<u>Branchiura</u>	36.2	0-91	30.922	23.4	0-36	17.076	19.9	0-91	30.201
	<u>Chaoborus</u>	9.0	0-36	15.297	9.0	0-36	12.728			
	<u>Chironomus</u>	7.2	0-18	9.295	19.8	0-54	19.809	21.7	0-91	28.158
	<u>Coelotanypus</u>							3.6	0-18	7.590
	<u>Corbicula</u>	9.0	0-36	12.728	3.6	0-18	7.590	23.7	0-73	34.471
	<u>Cryptochironomus</u>	3.6	0-18	7.590				7.2	0-36	12.586
	<u>Dicrotendipes</u>	1.8	0-18	5.692						
	<u>Hexagenia</u>	10.8	0-36	15.179	3.6	0-36	11.384	1.8	0-18	5.692
	<u>Hirudinea</u>	1.8	0-18	5.692						
	<u>Limnodrilus</u>	10.8	0-54	19.349	16.2	0-36	15.761	18.1	0-91	27.131
	<u>Pleurocera</u>							1.8	0-18	5.692
	<u>Procladius</u>				9.0	0-36	12.728	5.4	0-36	12.149
	<u>Sialis</u>				5.4	0-36	12.149			

Table M.13 (continued)

Station	Taxa	May			June			July		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Ablabesmyia</u>	9.0	0-36	15.297	12.6	0-54	19.068	5.4	0-36	12.149
	<u>Bezzia</u>	10.8	0-36	15.179	1.8	0-18	5.692			
	<u>Branchiura</u>	18.0	0-54	22.450	18.0	0-54	19.068	7.2	0-36	12.586
	<u>Caenis</u>	12.6	0-72	24.075						
	<u>Chaoborus</u>	3.6	0-18	7.589	9.0	0-54	17.493			
	<u>Chironomus</u>	21.6	0-90	26.563	10.8	0-36	15.179	1.8	0-18	5.692
	<u>Coelotanypus</u>	21.6	0-90	32.644	14.4	0-54	18.590	7.2	0-54	17.390
	<u>Corbicula</u>	5.4	0-36	12.149	1.8	0-18	5.692	3.6	0-18	7.590
	<u>Cryptochironomus</u>	3.6	0-18	7.589	1.8	0-18	5.692			
	<u>Dicrotendipes</u>	25.2	0-72	27.100						
	<u>Hexagenia</u>	32.4	0-72	26.563	28.9	0-145	49.154	3.6	0-18	7.590
	<u>Hirudinea</u>	1.8	0-18	5.692	3.6	0-18	7.590			
	<u>Limnodrilus</u>	55.9	18-145	43.865	52.2	18-108	33.353	45.0	0-108	37.229
	<u>Pleurocera</u>	1.8	0-18	5.692	1.8	0-18	5.692			
	<u>Procladius</u>	65.0	0-290	109.707	21.6	0-54	25.171	7.2	0-36	12.586
	<u>Sialis</u>	1.8	0-18	5.692	25.2	0-90	29.638	14.4	0-36	14.199
	<u>Xenochironomus</u>				1.8	0-18	5.692			

Table M.13 (continued)

Station	Taxa	August			September			October		
		$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation	$\bar{x}$	Range	Standard deviation
TCM 0.2	<u>Ablabesmyia</u>							9.0	0-36	12.728
	<u>Branchiura</u>	12.6	0-54	19.068	7.2	0-18	9.295	32.4	0-72	23.698
	<u>Chaoborus</u>	5.4	0-18	8.695	19.8	0-54	17.900	57.8	0-145	55.859
	<u>Chironomus</u>				12.6	0-54	19.068	7.2	0-36	12.586
	<u>Coelotanypus</u>	12.6	0-54	17.076	3.6	0-18	7.590	21.6	0-72	27.886
	<u>Corbicula</u>							1.8	0-18	5.692
	<u>Cryptochironomus</u>							1.8	0-18	5.692
	<u>Dicrotendipes</u>				1.8	0-18	5.692			
	<u>Hexagenia</u>	1.8	0-18	5.692	3.6	0-18	7.590	55.9	0-145	41.329
	<u>Hirudinea</u>							3.6	0-18	7.590
	<u>Limnodrilus</u>	75.6	18-108	31.521	59.5	18-145	42.691	45.0	0-72	24.372
	<u>Pleurocera</u>							1.8	0-18	5.692
	<u>Procladius</u>	16.2	0-54	17.900	1.8	0-18	5.692			
	<u>Sialis</u>	14.4	0-36	15.179	7.2	0-36	12.586	12.6	0-54	22.530

**APPENDIX N**

**BENTHIC MACROINVERTEBRATE TAXA  
THAT COLONIZED ARTIFICIAL SUBSTRATES**

## APPENDIX N

Table N.1

BENTHIC MARCOINVERTEBRATE TAXA THAT COLONIZED ARTIFICIAL SUBSTRATES AT TRM 388.0  
 FROM MARCH TO OCTOBER IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 1974-1979

	1974							
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>AMPHIPODA</b>								
<u>Gammarus</u>								X    X
<u>Hyalella azteca</u>		X		X	X			
<b>DECAPODA</b>								
<u>Orconectes</u>				X			X	
<b>DIPTERA</b>								
<u>Chironomus</u>	X							X
<u>Procladius</u>	X							
<b>EPHEMEROPTERA</b>								
<u>Caenis simulans</u>				X			X	X
<u>Hexagenia bilineata</u>				X				X
<u>Stenonema</u>	X		X	X			X	X
<b>HETERODONTA</b>								
<u>Corbicula manilensis</u>				X	X			
<b>ODONATA</b>								
<u>Argia</u>						X	X	
<b>OLIGOCHAETA</b>								
<u>Branchiura sowerbyi</u>					X		X	X
<u>Limnodrilus</u>	X				X	X		X
<b>RHYNCHOBDELLIDA</b>								
<u>Hirudinea</u>						X		X
<b>TRICHOPTERA</b>								
<u>Cheumatopsyche</u>	X		X	X	X	X		
<u>Psychomziidae Genus A</u>	X		X	X	X	X	X	X

Table N.1 (continued)

	1975							
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>AMPHIPODA</b>								
<u>Hyalella azteca</u>								X
<b>DIPTERA</b>								
<u>Chironomus</u>					X			X
<b>EPHEMEROPTERA</b>								
<u>Caenis simulans</u>								X
<u>Stenonema</u>							X	X
<b>ODONATA</b>								
<u>Enallagma</u>								X
<u>Gomphus</u>								X
<b>OLIGOCHAETA</b>								
<u>Branchiura sowerbyi</u>							X	
<u>Limnodrilus</u>		X					X	
<b>TRICHOPTERA</b>								
<u>Cyrnellus</u>							X	X
<b>TURBELLARIA</b>								
<u>Cura foremanii</u>						X		X

Table N.1 (continued)

Table N.1 (continued)

	1977							
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct <sup>a</sup>
<b>AMPHIPODA</b>								
<u>Hyalella azteca</u>	X	X	X	X	X	X		
<b>DIPTERA</b>								
<u>Ablabesmyia</u>	X					X		X
<u>Chironomus</u>	X		X					
<u>Coelotanypus</u>		X						
<u>Cricotopus</u>			X					
<u>Parachironomus</u>				X		X		
<u>Polypedilum</u>			X					X
<u>Procladius</u>			X	X				
<u>Rheotanytarsus</u>					X		X	
<b>EPHEMEROPTERA</b>								
<u>Caenis simulans</u>				X		X		
<u>Stenacron</u>		X						
<b>ISOPODA</b>								
<u>Lirceus</u>		X	X					X
<b>ODONATA</b>								
<u>Enallagma</u>	X	X	X					
<b>OLIGOCHAETA</b>								
<u>Branchiura sowerbyi</u>	X							
<u>Limnodrilus</u>	X		X	X				
<b>TRICHOPTERA</b>								
<u>Agraylea</u>						X		
<u>Cyrnellus</u>						X		X
<u>Neureclipsis</u>	X	X	X	X	X			
<u>Polycentropus</u>			X					
<b>TURBELLARIA</b>								
<u>Cura foremanii</u>						X		

a. Artificial substrates were not recovered due to vandalism.

Table N.1 (continued)

	1978									
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AMPHIPODA										
<u>Hyalella azteca</u>				X		X	X			
DECAPODA										
<u>Orconectes</u>								X		
DIPTERA										
<u>Chironomus</u>			X							
<u>Coelotanypus</u>			X							
<u>Cricotopus</u>							X	X	X	
<u>Glyptotendipes</u>			X			X	X	X	X	
<u>Polypedilus</u>			X				X			
EPHEMEROPTERA										
<u>Stenacron</u>			X				X			X
<u>Tricorythodes</u>										X
HETERODONTA										
<u>Corbicula manilensis</u>			X				X			X
MESOGASTROPODA										
<u>Pleurocera</u>								X	X	
ODONATA										
<u>Argia</u>										X
OLIGOCHAETA										
<u>Limnodrilus</u>			X				X			X
RHYNCHOBDELLIDA										
<u>Hirudinea</u>			X				X			
TRICHOPTERA										
<u>Agraylea</u>			X				X			
<u>Cheumatopsyche</u>										X
<u>Cyrnellus</u>			X				X	X	X	
<u>Neureclipsis</u>								X		

Table N.1 (continued)

	1979							
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>AMPHIPODA</b>								
<u>Hyalella azteca</u>	X	X	X	X	X	X	X	X
<b>DECAPODA</b>							X	X
<u>Orconectes</u>							X	X
<b>DIPTERA</b>								
<u>Ablabesmyia</u>	X	X	X	X				
<u>Chironomus</u>							X	
<u>Coelotanypus</u>	X							
<u>Cricotopus</u>	X	X	X	X	X			
<u>Cryptochironomus</u>			X					
<u>Glyptotendipes</u>	X	X		X				X
<u>Parachironomus</u>	X	X						
<u>Polypedilum</u>		X	X	X	X			
<u>Procladius</u>							X	
<u>Pseudochironomus</u>			X	X	X			
<u>Rheotanytarsus</u>								
<b>EPHEMEROPTERA</b>								
<u>Caenis simulans</u>	X	X	X	X	X		X	
<u>Cloeon</u>				X	X		X	
<u>Hexagenia bilineata</u>							X	X
<u>Stenacron</u>		X	X	X	X	X	X	X
<u>Stenonema</u>			X		X	X	X	
<u>Tricorythodes</u>			X		X	X		X
<b>HETERODONTA</b>								
<u>Corbicula manilensis</u>							X	X
<b>MESOGASTROPODA</b>								
<u>Pleurocera</u>				X	X	X		
<b>ODONATA</b>								
<u>Argia</u>	X	X			X	X	X	
<u>Enallagma</u>					X			X
<u>Gomphus</u>								X
<b>OLIGOCHAETA</b>								
<u>Branchiura sowerbyi</u>	X			X	X	X		X
<u>Limnodrilus</u>	X	X	X	X	X	X		X
<b>RHYNCHOBDELLIDA</b>								
<u>Hirudinea</u>						X	X	

Table N.1 (continued)

	1979							
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>TRICHOPTERA</b>								
<u>Agraylea</u>		X	X	X	X	X		
<u>Cheumatopsyche</u>		X		X		X		
<u>Cyrnellus</u>		X	X	X				
<u>Neureclipsis</u>				X	X	X	X	X
<u>Oecetis</u>							X	
<u>Polycentropus</u>						X	X	
<b>TURBELLARIA</b>								
<u>Cura foremanii</u>			X		X	X		
<u>Dugesia tigrina</u>					X	X		

Table N.2

BENTHIC MARCOINVERTEBRATE TAXA THAT COLONIZED ARTIFICIAL SUBSTRATES AT TRM 391.2  
 FROM MARCH TO OCTOBER IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
 1974-1979

	1974							
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>DIPTERA</b>								
<u>Chironomus</u>			X	X	X		X	X
<u>Coelotanypus</u>	X							
<u>Cricotopus</u>	X							
<u>Procladius</u>	X							
<b>EPHEMEROPTERA</b>								
<u>Caenis simulans</u>	X			X	X	X	X	X
<u>Hexagenia bilineata</u>		X	X			X		X
<u>Stenonema</u>								X
<b>HETERODONTA</b>								
<u>Corbicula manilensis</u>	X		X	X				X
<b>ISOPODA</b>								
<u>Lirceus</u>				X				
<b>ODONATA</b>								
<u>Argia</u>				X			X	X
<b>OLIGOCHAETA</b>								
<u>Branchiura sowerbyi</u>			X	X	X	X		X
<u>Limnodrilus</u>			X	X	X	X		X
<b>RHYNCHOBDELLIDA</b>								
<u>Hirudinea</u>		X						X
<b>TRICHOPTERA</b>								
<u>Cheumatopsyche</u>			X		X	X	X	X
<u>Psychomziidae Genus A</u>	X		X	X	X	X	X	X

Table N.2 (continued)

	1975							
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
AMPHIPODA								
<u>Hyalella azteca</u>			X					X
DECAPODA								
<u>Orconectes</u>						X		X
DIPTERA								
<u>Chironomus</u>	X	X	X	X				
<u>Coelotanypus</u>								X
EPHEMEROPTERA								
<u>Caenis simulans</u>		X						X
<u>Hexagenia bilineata</u>	X	X			X			X
<u>Stenonema</u>		X	X					X
HETERODONTA								
<u>Corbicula manilensis</u>		X	X	X	X		X	X
ISOPODA								
<u>Lirceus</u>	X	X						
ODONATA								
<u>Argia</u>		X						X
<u>Enallagma</u>								X
OLIGOCHAETA								
<u>Branchiura sowerbyi</u>		X				X		X
<u>Limnodrilus</u>	X	X	X	X			X	X
TRICHOPTERA								
<u>Cheumatopsyche</u>			X					
<u>Cyrnellus</u>			X	X	X	X		X
<u>Psychomziidae Genus A</u>			X					X

Table N.2 (continued)

1976

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>AMPHIPODA</b>								
<u>Hyalella azteca</u>				X	X	X	X	
<b>DIPTERA</b>								
<u>Chironomus</u>			X			X	X	X
<u>Coelotanypus</u>					X			
<u>Cryptochironomus</u>					X		X	
<u>Parachironomus</u>					X		X	
<b>EPHEMEROPTERA</b>								
<u>Caenis simulans</u>						X	X	
<u>Hexagenia bilineata</u>		X						
<u>Stenonema</u>	X			X			X	
<b>HETERODONTA</b>								
<u>Corbicula manilensis</u>			X			X		
<b>ODONATA</b>								
<u>Argia</u>	X							
<u>Enallagma</u>	X						X	
<u>Gomphus</u>	X							
<b>OLIGOCHAETA</b>								
<u>Branchiura sowerbyi</u>	X		X	X	X	X	X	X
<u>Limnodrilus</u>	X		X	X	X	X	X	X
<b>TRICHOPTERA</b>								
<u>Cyrnellus</u>		X				X		X
<u>Neureclipsis</u>						X		X
<b>TURBELLARIA</b>								
<u>Cura foremanii</u>						X	X	

Table N.2 (continued)

1977

Mar	Apr	May	Jun	Jul	Aug	Sep	Oct <sup>a</sup>
-----	-----	-----	-----	-----	-----	-----	------------------

## AMPHIPODA

GammarusHyalella aztecaX  
X X X

## DECAPODA

Orconectes

X

## DIPTERA

Ablabesmyia

X

Chironomus

X

X

Coelotanypus

X

Parachironomus

X X

Polypedilum

X

Procladius

X

Rheotanytarsus

X

X

## EPHEMEROPTERA

Caenis simulans

X

Hexagenia bilineata

X X

## HETERODONTA

Corbicula manilensis

X

## ISOPODA

Lirceus

X

## ODONATA

Enallagma

X

Gomphus

X

## OLIGOCHAETA

Branchiura sowerbyi

X X

Limnodrilus

X X X X X X

## TRICHOPTERA

Agraylea

X

Cyrnellus

X

Neureclipsis

X X

## TURBELLARIA

Cura foremanii

X X

a. Artificial substrates were not recovered due to vandalism.

Table N.2 (continued)

	1978							
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct <sup>a</sup>
<b>AMPHIPODA</b>								
<u>Hyalella azteca</u>			X				X	
<b>DECAPODA</b>							X	X
<u>Orconectes</u>							X	X
<b>DIPTERA</b>								
<u>Ablabesmyia</u>							X	
<u>Chironomus</u>			X					
<u>Coelotanypus</u>			X					
<u>Cricotopus</u>						X		
<u>Cryptochironomus</u>			X				X	
<u>Glyptotendipes</u>			X				X	
<u>Parachironomus</u>			X					
<u>Procladius</u>						X		
<b>EPHEMEROPTERA</b>								
<u>Hexagenia bilineata</u>			X				X	
<u>Stenacron</u>			X				X	
<b>HETERODONTA</b>							X	X
<u>Corbicula manilensis</u>							X	X
<b>ISOPODA</b>						X		
<u>Lirceus</u>						X		
<b>MESOGASTROPODA</b>							X	X
<u>Pleurocera</u>							X	X
<b>ODONATA</b>								
<u>Argia</u>							X	
<u>Enallagma</u>							X	
<u>Gomphus</u>					X		X	
<b>OLIGOCHAETA</b>								
<u>Branchiura sowerbyi</u>							X	
<u>Limnodrilus</u>				X			X	
<b>TRICHOPTERA</b>								
<u>Agraylea</u>					X			
<u>Cheumatopsyche</u>					X			
<u>Cyrnellus</u>					X		X	
<u>Neureclipsis</u>					X		X	

a. Artificial substrates were not recovered due to vandalism.

Table N.3 (continued)

1978

Mar Apr May Jun Jul Aug Sep Oct

## AMPHIPODA

Hyalella azteca

X

## DIPTERA

Ablabesmyia

X

Chironomus

X

Coelotanypus

X

Glyptotendipes

X

Polypedilum

X

## EPHEMEROPTERA

Hexagenia bilineata

X X

Stenacron

X

X X X

## HETERODONTA

Corbicula manilensis

X

X

## ODONATA

Argia

X

Enallagma

X X

## OLIGOCHAETA

Branchiura sowerbyi

X

Limnodrilus

X

X

## TRICHOPTERA

Agraylea

X

X

Cyrnellus

X

X

Neureclipsis

X X X

Table N.3 (continued)

	1979							
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>AMPHIPODA</b>								
<u>Hyalella azteca</u>	X	X	X	X	X	X		X
<b>DIPTERA</b>								
<u>Ablabesmyia</u>	X	X	X	X	X	X		
<u>Chironomus</u>		X			X	X	X	
<u>Coelotanypus</u>								X
<u>Cricotopus</u>	X	X	X	X	X			X
<u>Cryptochironomus</u>	X							
<u>Glyptotendipes</u>	X	X					X	
<u>Parachironomus</u>	X							
<u>Polypedilum</u>	X		X	X	X	X	X	
<u>Procladius</u>						X		
<u>Pseudochironomus</u>	X	X	X	X	X	X	X	
<u>Rheotanytarsus</u>		X	X	X	X	X	X	
<b>EPHEMEROPTERA</b>								
<u>Caenis simulans</u>				X	X	X		X
<u>Cloeon</u>					X			
<u>Hexagenia bilineata</u>								X
<u>Stenacron</u>	X	X	X	X	X			X
<u>Stenonema</u>					X			
<u>Tricorythodes</u>					X	X		X
<b>HETERODONTA</b>								
<u>Corbicula manilensis</u>				X	X	X		
<b>MESOGASTROPODA</b>								
<u>Pleurocera</u>					X	X		
<b>ODONATA</b>								
<u>Argia</u>				X	X	X		X
<u>Enallagma</u>					X	X		X
<u>Gomphus</u>					X			
<b>OLIGOCHAETA</b>								
<u>Limnodrilus</u>		X	X	X	X	X		X
<b>RHYNCHOBDELLIDA</b>								
<u>Hirudinea</u>						X		X

Table N.2 (continued)

Table N.2 (continued)

	1979							
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>TRICHOPTERA</b>								
<u>Agraylea</u>			X	X		X		
<u>Cheumatopsyche</u>		X			X		X	
<u>Neureclipsis</u>					X	X	X	X
<u>Oecetis</u>				X				
<u>Polycentropus</u>						X		
<b>TURBELLARIA</b>								
<u>Dugesia tigrina</u>					X	X	X	X

Table N.3 (continued)

	1979							
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>TRICHOPTERA</b>								
<u>Agraylea</u>			X	X	X			
<u>Cheumatopsyche</u>					X	X		X
<u>Cyrnellus</u>	X		X	X	X			X
<u>Neureclipsis</u>			X	X	X			
<b>TURBELLARIA</b>								
<u>Cura foremanii</u>	X			X	X			
<u>Dugesia tigrina</u>			X	X	X			X

Table N.3

BENTHIC MARCOINVERTEBRATE TAXA THAT COLONIZED ARTIFICIAL SUBSTRATES AT TRM 396.8  
FROM MARCH TO OCTOBER IN THE VICINITY OF THE BELLEFONTE NUCLEAR PLANT  
1974-1979

Table N.3 (continued)

Table N.3 (continued)

Table N.3 (continued)

	1977							
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct <sup>a</sup>
<b>AMPHIPODA</b>								
<u>Gammarus</u>	X		X					
<u>Hyalella azteca</u>	X		X	X				
<b>DECAPODA</b>								
<u>Orconectes</u>						X		X
<b>DIPTERA</b>								
<u>Ablabesmyia</u>							X	
<u>Chironomus</u>	X		X	X				
<u>Coelotanypus</u>		X						
<u>Cricotopus</u>			X	X				
<u>Cryptochironomus</u>				X				
<u>Glyptotendipes</u>								X
<u>Parachironomus</u>	X		X	X				
<u>Procladius</u>			X	X			X	
<u>Rheotanytarsus</u>								X
<b>EPHEMEROPTERA</b>								
<u>Caenis simulans</u>	X					X		
<u>Stenacron</u>	X							
<b>HETERODONTA</b>								
<u>Corbicula manilensis</u>			X	X				
<b>ISOPODA</b>								
<u>Lirceus</u>		X	X					
<b>ODONATA</b>								
<u>Argia</u>					X			
<u>Enallagma</u>				X				
<b>OLIGOCHAETA</b>								
<u>Limnodrilus</u>	X	X	X	X				
<b>TRICHOPTERA</b>								
<u>Agraylea</u>						X		
<u>Cyrnellus</u>						X		
<u>Néureclipsis</u>	X	X		X				
<b>TURBELLARIA</b>								
<u>Cura foremanii</u>							X	

a. Artificial substrates were not recovered due to vandalism.