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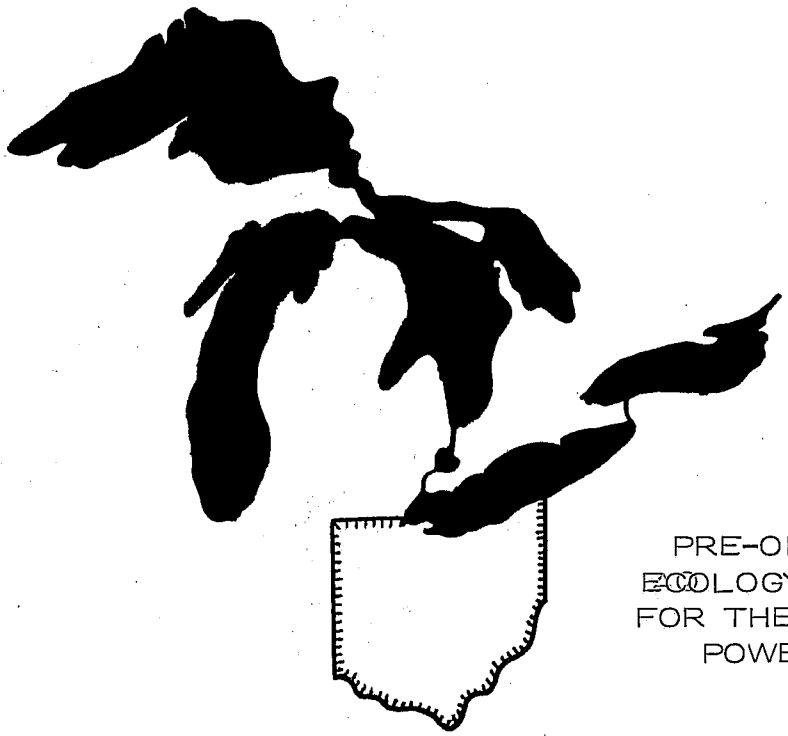

PRE-OPERATIONAL AQUATIC ECOLOGY MONITORING PROGRAM FOR THE DAVIS-BESSE NUCLEAR POWER STATION, UNIT 1

PROGRESS REPORT
JULY 1 - DECEMBER 31
1974

Prepared for
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Toledo, Ohio

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CENTER FOR LAKE ERIE AREA RESEARCH
THE OHIO STATE UNIVERSITY
COLUMBUS, OHIO

February 1975

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OBJECTIVE

The purpose of this investigation is to ascertain the existing character of the aquatic ecosystem at Locust Point, Lake Erie prior to operation of the Davis-Besse Nuclear Power Station, Unit 1. Included in the assessment are studies of existing plankton, benthos, and fish populations and water quality and recent trends in these parameters. The report contained herein is for the period July 1, 1974 to December 31, 1974.

PROCEDURES

Sampling Station Location

Twenty-five stations, 18 along 4 transects in the open lake, 2 stations in the intake canal, 2 stations in the marshes, and 3 stations along the shoreline, were designated as sampling stations (Fig. 1). Of the 4 transects, one followed the intake conduit, one the discharge conduit, while control transects were set up on the east and west sides of the entire intake and discharge complex. Control west ran due north from the shore-end of the intake conduit with sampling stations located at 500 ft (Station 1), 1000 ft (Station 2), 2000 ft (Station 3), and 3000 ft (Station 4) from the shore line, sampling stations on the intake were located at 500 ft (Station 5), 1000 ft (Station 6), 2000 ft (Station 7), 3000 ft (Station 8, proposed intake), and 4000 ft (Station 9) from shore. Along the discharge transect sampling stations were at distances of 500 ft (Station 10), 1000 ft (Station 11), 1500 ft (Station 12, proposed discharge), 2000 ft (Station 13), and 3000 ft (Station 14) from shore. Additional stations were placed 500 ft due north of Station 12 (Station 15) and 500 ft south of Station 12 (Station 16). Control east ran perpendicular to the shore line, parallel to the intake, and approximately 2500 ft east of the intake. Stations were located 500 ft (Station 17) and 1000 ft (Station 18) from shore. Station 19 was located in the center of the intake canal, 1000 ft from the lake shore. Station 20 was located in the center of the forebay, 2500 ft from shore. Stations 21 and 22 were located in the northwest and southeast marshes, respectively. Stations 23 - 25 were on the shoreline at the intersection of the intake conduit and 1500 ft to either side.

Plankton

Plankton was sampled monthly, July through November, from 12 stations, 10 in the open lake and 2 in the intake canal and forebay (Table 1). Duplicate vertical tows, bottom to surface, were taken at each of the 12 stations with a Wisconsin plankton net (12 cm mouth;

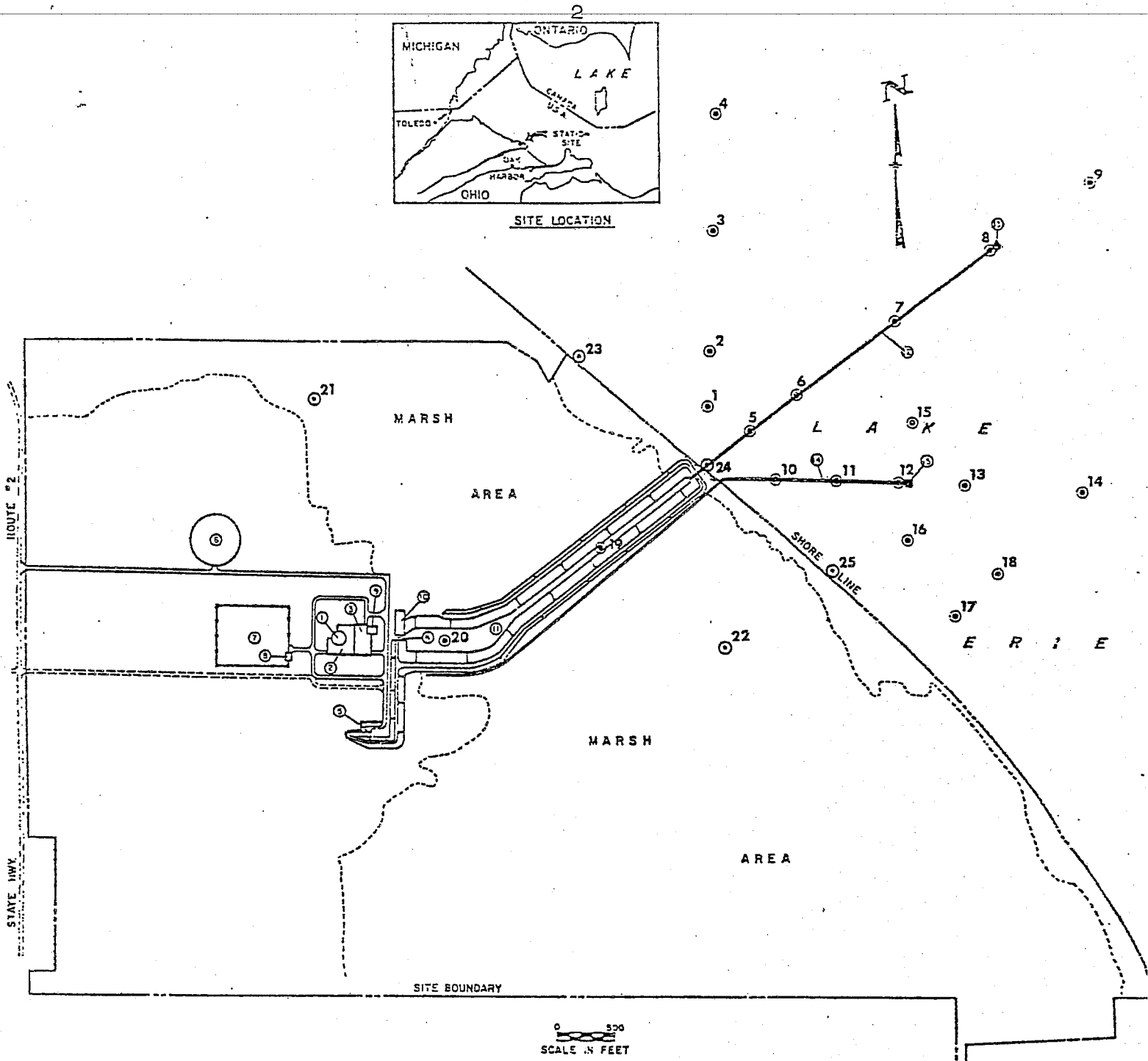


FIGURE 1

LOCATION MAP OF SAMPLING STATIONS AT THE DAVIS-BESSE NUCLEAR POWER STATION

LEGEND

EXISTING BUILDING & STATION AREA

1. CONTAINMENT BUILDING
2. AUXILIARY BUILDING
3. TURBINE BUILDING
4. INTAKE STRUCTURE
5. SEWAGE TREATMENT PLANT
6. COOLING TOWER
7. SWITCH YARD
8. RELAY HOUSE
9. CIRCULATION WATER SYSTEM PUMP HOUSE
10. WATER TREATMENT BUILDING
11. FOREBAY & INTAKE CANAL

PROPOSED WATER INTAKE AND DISCHARGE

12. 96" INTAKE CONDUIT
13. INTAKE CRIB
14. 72" DISCHARGE CONDUIT
15. DISCHARGE STRUCTURE

⊙ Monitoring Stations

WATER INTAKE AND DISCHARGE
DAVIS - BESSE NUCLEAR POWER STATIC

no. 25, 0.064 mm mesh). Each sample was concentrated to 50 ml and preserved in 5% formalin. The volume of each sample was computed by multiplying the length of the tow by the area of the net mouth. The works of Chengalath, Fornando, and George (1971), Collins and Kalinsky (1972), Eddy and Hodson (1964), Jahoda (1948), Pennak (1953), Taft and Taft (1971), and Ward and Whipple (1959) were used in plankton identification.

TABLE 1

AQUATIC MONITORING PROGRAM SAMPLING DATES-1974

Sample	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
PLANKTON	18	22	19	17	22	10	9	7	
BENTHOS	17-18	22-23	19-20	17	14	6	10	7	
FISH									
Gill Net	25-26	21-22	13-14	10-11	19-20	12-13	16-17	25-26	
Shore Seine	12	21	13	9	27	12	16	14	
Otter Trawl									
Lake	25	21	21	19	16	13	10	8	
Intake Canal			18		27	24	23		
Hoop Net	24-25	21-22	13-14	9-10	19-20	17-18	16-17	25-26	
Fry Net									
Lake		21	14	10	19	12	16	25	
Intake Canal					27				
WATER QUALITY	18	22	19	17	22	10	9	7	17
CURRENTS		24	21	18	16	12	17		
SOLAR RADIATION	25		1 & 29	26		7	31		

Phytoplankton. Three 1-ml aliquots were withdrawn from each sample and placed in Sedgewick-Rafter cells. Twenty-five random Wipple Disk fields from each cell were counted for phytoplankton with a microscope at 100x. Identification was generally to the genus level. Results were reported as number per liter.

Zooplankton. Again, three 1-ml aliquots were withdrawn from each sample and placed in Sedgewick-Rafter cells. The entire cell was scanned under a microscope at 60x while counting and identifying all zooplankters. Individuals were identified as far as possible (generally to the genus or species level) and reported as number per liter.

Benthos

Benthos was sampled monthly, July through November, from Stations 1 to 20 (Table 1). Three replicate samples were taken at each station with a Ponar grab (A = 0.055 m^2). Samples were sieved through a U.S. #40 sieve, preserved in 10% formalin and returned to the laboratory. Individuals were identified as far as possible (usually to genus; to species where possible) and reported as numbers of individuals per square meter. The works of Brinkhurst (1963), (1964), (1965), Brinkhurst, Hamilton, and Herrington (1968), Klemm (1972), Mason (1968), Pennak (1953), Stein (1962), Usinger (1956), Walter and Burch (1957), and Ward and Whipple (1959) were used for the benthos identification.

Fish

Fish were sampled by 5 methods, gill nets, shore seine, otter trawl, hoop nets, and fry net, July through November (Table 1). All fish captured were weighed, measured, and identified to species (Trautman, 1957).

Gill nets. Two experimental gill nets were set parallel to and near the end of the intake and discharge pipelines (Stations 8 and 12, respectively). Each net (125 ft x 6 ft) consisted of five 25 ft x 6 ft contiguous panels (1/2", 3/4", 1", 1 1/2", and 2" bar mesh). The nets were fished for approximately 24 hours monthly.

Shore Seine. Shore seining was accomplished monthly with a 100 ft bag seine at Stations 23, 24, and 25. The seine was stretched perpendicular to the shoreline until the shore brail was at the water's edge. The far brail was then dragged through a 90^{o} arc back to shore. Two hauls were made at each station.

Otter Trawl. Both a 16-ft and an 8-ft otter trawl were used to collect fish for estimates of relative abundance and to obtain live fish for stomach analysis. The 16-ft trawl was used in the open lake. Four 5-minute tows between the intake (Station 8) and the discharge (Station 12) were completed monthly. A representative number of stomachs were taken from these for stomach analysis. Stomachs were preserved in 5-10% formalin.

The 8-ft trawl was used within the intake canal. Two tows of the entire canal length were conducted quarterly.

Hoop nets. Hoop nets (2.5 ft diameter, 1" bar mesh) were set at Stations 21 and 22 in the northwest and southeast marshes. The nets were fished for approximately 24 hours monthly. These fish were

identified, weighed, measured and released.

Fry Net. A 0.75-meter diameter oceanographic plankton net (no. 00, 0.75 mm mesh) was used to capture fry, larvae, and eggs (ichthyoplankton). Five-minute circular tows, surface and near bottom, around the intake (Station 8) and discharge (Station 12), were completed monthly. Additional tows, surface and bottom, were made within the intake canal in August. Ichthyoplankton was preserved in 5% formalin and analyzed under a dissecting microscope. Individuals were identified as far as possible (generally species) using the works of Fish (1932) and Norden (unpublished key to larval fishes).

Water Quality

Twenty water quality parameters were measured monthly during the entire period July - December at three stations in Lake Erie. These parameters and the analytical method employed are listed in Table 2.

Field Measurements. Water quality measurements were made monthly in the field at Station 1, 8, and 12 (Figure 1). Temperature, dissolved oxygen and conductivity were measured from a small survey boat with submerged sensors and shipboard readout meters. Dissolved oxygen was determined with a YSI model 54 meter and conductivity with a Beckman RB3-3341 solubridge temperature-compensated meter; each meter was equipped with a thermistor for temperature readings. Sensor readings were taken at the surface and approximately 50 cm above the bottom. Transparency was determined with a 30 cm diameter Secchi disk lowered on a marked line until it was no longer visible. Solar radiation was measured at Station 8 with a GM Mfg. and Instr. Corp. model 268WA-300 submarine photometer at the surface and at one-meter depth intervals until the illumination equalled 1.0% of the surface value. Current velocity and direction were measured at Stations 8 and 12 with a HydroProducts model 65-A meter and surface drogues.

Laboratory Determinations. Surface and bottom (50 cm above) water samples were taken at Stations 1, 8, and 12 with a 3-liter Kemmerer sampler at the same time that field measurements were being made. These samples were placed in polyethylene containers and taken to the laboratory for analysis; in most cases, analyses were completed within 24 hours of the sampling time. Fifteen water quality parameters (Table 2) were determined in the laboratory using the procedures prescribed in "Standard Methods for the Examination of Water, 13th Edition" (American Public Health Association, 1971) and in "ASTM Standards, Part 23, Water" (American Society for Testing and Materials, 1973).

TABLE 2

ANALYTICAL METHODS FOR WATER QUALITY DETERMINATIONS

	Parameter	Units	Analytical Method
1.	Temperature	^{o}C	Std. Methods, 13th Ed., 162 (1971)
2.	Dissolved oxygen	ppm	Std. Methods, 13th Ed., 218B (1971)
3.	Conductivity	umhos/cm (25^{o}C)	ASTM D1135-64 (1973)
4.	Transparency	meters	Secchi disk (Welch, 1948)
5.	Solar radiation	u amps	G.M. Mfg. & Instr. Corp., submarine photometer
6.	Current	knots	HydroProducts, A-65 current meter
7.	Calcium (Ca)	mg/l	Std. Methods, 13th Ed., 110C (1971)
8.	Magnesium (Mg)	mg/l	Std. Methods, 13th Ed., 122B (1971)
9.	Sodium (Na)	mg/l	ASTM D1428-64 (1973)
10.	Chloride (Cl)	mg/l	Std. Methods, 13th Ed., 112B (1971)
11.	Nitrate (NO_3)	mg/l	ASTM D992-71 (1973)
12.	Sulfate (SO_4)	mg/l	ASTM D516-68C (1973)
13.	Phosphorous (Total as P)	mg/l	Std. Methods, 13th Ed., 223F (1971)
14.	Silica (SiO_2)	mg/l	ASTM D 859-68B (1973)
15.	Alkalinity (total as $CaCO_3$)	mg/l	Std. Methods, 13th Ed., 102 (1971)
16.	Biochemical oxygen demand	mg/l	Std. Methods, 13th Ed., 219 (1971)
17.	Suspended solids	mg/l	Std. Methods, 13th Ed., 224C (1971)
18.	Dissolved solids	mg/l	USEPA, Chem. Analysis, Water (1971)
19.	Turbidity	F.T.U.	Std. Methods, 13th Ed., 163A (1971)
20.	Hydrogen-ion conc.	pH units	ASTM D1293-65 (1973)

RESULTS

Plankton

Phytoplankton. Phytoplankters collected July through November 1974 were divided into 54 taxa, generally to the genus level (Table 3). Thirteen taxa were in the class Bacillariophyceae, 27 in the class Chlorophyceae, 1 in the class Chrysophyceae, 3 in the class Dinophyceae, 2 in the class Euglenophyceae, 6 in the class Myxophyceae, 1 consisted of unidentified bacteria, and 1 consisted of unidentified phytoplankter.

The range of the total phytoplankton population per liter per station was 56 - 6,855 in July, 410 - 2,274 in August, 1,385 - 9,543 in September, 11,757 - 38,151 in October, and 13,955 - 48,815 in November (Table 4). Additional data are contained in Appendix A.

Zooplankton. Zooplankters collected July through November 1974 were divided into 51 taxa, 27 under Rotifera, 8 under Copepoda, 9 under Cladocera, and 7 under Protozoa (Table 5). Twenty-four taxa were identified to the species level, 22 to the genus level, 2 consisted of unidentified rotifers, and 3 contained immature copepods.

The total zooplankton population per liter per station ranged from 246.7 - 2,202.2 in July, 224.8 - 431.3 in August, 213.1 - 1,018.3 in September, 92.3 - 394.0 in October, and 208.0 - 372.4 in November (Table 6). Additional data are contained in Appendix B.

Benthos

Benthic macroinvertebrates collected at Locust Point July through November 1974 were divided into 40 taxa (Table 7). The population was dominated by Oligochaetes. The total benthic macroinvertebrate population per square meter per station ranged from 51 - 3,185 in July, 89 - 7,659 in August, 83 - 7,175 in September, 38 - 3,737 in October, and 0 - 4,291 in November (Table 8). Additional data are contained in Appendix C.

Fish

The five fishing methods employed yielded 25,315 fish of 28 species during the period July through November 1974. A summary of these results is contained in Table 9.

Gill Net. Gill netting from July through November yielded 1,025 fish representing 19 species. The catch at Station 8 (intake)

TABLE 3

PHYTOPLANKTON POPULATIONS AT LOCUST POINT
1974 MONTHLY MEANS

TAXA	April 18	May 22	June 19	July 17	Aug 22	Sept 10	Oct 9	Nov 7
BACILLARIOPHYCEAE (Diatoms)								
Asterionella sp.	1735	1600	551	11	2	2	65	105
Centric diatom				10		0	49	63
Cyclotella sp.	4			2		43	0	0
Cymatopleura sp.	14	25	3		6	0	6	9
Fragilaria sp.	435	4556	63		21	38	368	2160
Gyrosigma sp.	1			2	6	6	5	10
Melosira sp.	3990	85597	350	238	719	754	3600	3398
Naviculoid	12		21	9	16	43	58	120
Stephanodiscus sp.				1		0	1710	4780
Surirella sp.		12	19	4		0	1	7
Synedra sp.	5	23		2		20	23	39
Tabellaria sp.	1335	6259	81	6	2	1	18	66
Unidentified Diatom							55	
CHLOROPHYCEAE (Green Algae)								
Actinastrum sp.						9	68	34
Ankistrodesmus sp.							36	17
Binuclearia sp.						22	384	628
Chlamydomonas sp.						38		
Closteriopsis sp.	43	11		2	25	0	185	832
Closterium sp.						245	10	23
Coelastrum sp.		3		62		56	32	21
Cosmarium sp.				4		4	5	11
Crucigenia sp.							24	
Cruciniginia sp.						4		
Dictyosphaerium sp.						6	111	124
Dimorphococcus sp.							9	8
Eudorina sp.				61	107	19	3	0
Lagerheimia sp.							3	
Micractinium sp.	2					0	55	36
Mougeotia sp.	6				2	935	4140	17776
Oocystis sp.							47	
Pandorina sp.	2	12	27	26		64	47	39
Pediastrum sp.	37	392	841	774	557	1400	1982	1351
Platydorina sp.						6		
Rhizoclonium sp.				3			2	0
Scenedesmus sp.	1	9	10	7	9	29	113	162
Selenastrum sp.							3	
Spirogyra sp.	4		3			0	0	0
Staurastrum sp.			5	82	90	83	74	129
Ulothrix sp.								3
Volvox sp.	7	5	18	3	3	1	33	4
CHRYSOPHYCEAE								
Dinobryon sp.							3	
DINOPHYCEAE (Dinoflagellates)								
Ceratium hirundinella	3	14	6	1757	17	23	11	3
Glenodinium sp.				41		0	0	0
Peridinium sp.						14		
EUGLENOPHYCEAE								
Euglena sp.						8	23	26
Trachelomonas sp.				4		0	4	0
MYXOPHYCEAE (Blue-green algae)								
Anabeana sp.				7	8	23	96	29
Aphanizomenon sp.				204		1547	5444	1322
Chroococcus sp.				61	14	46	22	23
Merismopedia sp.				2		0	0	0
Microcystis sp.			99	39	13	265	307	124
Spirulina sp.								
Unidentified Bacteria	182					0		6
Unidentified Phytoplankter				26		0		0
TOTAL	7860	98517	2092	3460	1603	5751	19232	33499

Data presented as number/liter.

TABLE 4

TOTAL PHYTOPLANKTON POPULATION PER LITER - 1974

Station	April 18	May 22	June 19	July 17	August 22	September 10	October 9	November 7
1	13282	12628	4205	6178	1393	7755	38151	35848
3	5929	78687	2047	2737	1329	3891	12016	33484
6	5510	84172	2276	3198	1680	5917	19424	27413
8	8250	100329	1593	2313	1562	5528	14883	43947
9	6227	57674	1657	1980	1727	4917	13456	48815
10	11758	240929	3357	6650	1977	9543	29853	35775
12	8097	118453	2335	6855	2274	6985	14540	32662
13	6657	103316	1892	2139	1679	6444	17977	26408
14	5904	76162	1314	3440	1353	4258	16030	33901
18	8510	91900	1976	2513	2252	6638	23463	36280
19	6333	5753	361	56	410	1385	11757	13955
20*								

* This station had been drained of all water for further construction.

TABLE 5

ZOOPLANKTON POPULATIONS AT LOCUST POINT
1974 MONTHLY MEANS

TAXA	April 18	May 22	June 19	July 17	Aug 22	Sept 10	Oct 9	Nov 7
ROTIFERA								
Asplanchna giroidi	0.3							
A. priodonta	0.0	2.2	1.8	2.6	57.3	29.8	3.1	2.2
Brachionus angularis	9.0	3.7	8.8	25.4	46.4	3.1	2.2	1.1
B. calyciflorus	3.7	5.2		0.3	0.1	1.6	9.5	27.4
B. havanaensis			0.1	0.2	1.3	1.0	0.1	
B. (Platyias) patulus						0.2		
B. urceolaris	1.2	0.1					0.0	
Chromogaster ovalis	1.0					2.3		0.0
Conochiloides sp.			34.9	7.3	0.3	0.2	5.8	2.5
Euchlanis sp.						0.1	0.0	0.0
Filinia terminalis	1.8	12.7	0.4	5.4	0.7	0.3	0.3	0.1
Hexarthra mira						0.4	0.1	
Kellicottia longispina	0.6	4.6	3.2					0.1
Keratella cochlearis	3.1	155.0	26.1	16.8	11.6	21.6	12.4	90.2
K. quadrata	3.9	35.4	8.1	1.1	2.0	0.5	1.0	9.3
Lecane (Monostyla) bulla							0.0	
L. (Monostyla) lunaris				0.0		0.1		
Notholca squamula	6.5	13.1						
Pleosoma sp.							0.3	
Polyarthra sp.	5.8	73.1	128.5	512.8	106.5	215.0	37.1	33.1
Pompholyx sulcata						1.1		
Synchaeta sp.	1.8						0.1	0.1
Testudinella sp.	0.1							
Trichocerca cylindrica		0.0		0.4		0.7	0.2	
T. multicrinis		1.1	7.1	0.2	11.8	8.2	0.1	
Unidentified Rotifer A	0.1	1.8			2.7	39.1	0.3	27.5
Unidentified Rotifer B						7.9		
COPEPODA								
Calanoid copepods								
Diaptomus sp.	0.5	15.5	13.1	5.1	1.0	0.9	1.0	0.6
Eurytemora sp.								0.0
Immatures	0.1	5.2	1.3	2.4	0.7	1.3	4.2	1.0
Cyclopoid copepods								
Cyclops sp.	1.2	12.4	115.1	55.0	18.4	3.2	1.4	1.5
Mesocyclops sp.	0.1	0.4	0.1	0.0	0.4	0.1	0.1	0.0
Tropocyclops prasinus								0.1
Immatures	1.3	18.4	13.8	27.9	9.3	8.1	6.5	5.3
Nauplius	28.5	180.7	268.1	128.6	48.1	78.8	59.3	15.0
CLADOCERA								
Bosmina sp.	0.0	3.3	155.7	49.1	17.0	19.0	54.3	7.4
Ceriodaphnia sp.					0.0	0.2		
Chydorus sp.	0.1	0.1	0.1		0.0	4.8	12.8	15.1
Daphnia galeata			0.1	0.4	0.0	0.0		
D. pulex	0.0	10.5	0.1	0.3				
D. retrocurva			74.5	137.8	2.8	2.2	0.1	
Diaphanosoma sp.				0.0	0.0	1.4	0.2	
Holopedium sp.			0.0	0.2	0.1	1.2		
Leptodora kindtii			0.1	0.2	0.1	0.2		
PROTOZOA								
Acineta sp.	0.1							
Amphileptus sp.	0.1							
Difflugia sp.				69.6	26.9	99.3	42.2	15.8
Orphryodendron sp.	0.1							
Staurophyra sp.	5.6							
Vorticella sp.							0.6	0.5
Zoothamnium sp.						0.4	0.8	0.4
TOTAL	75.1	522.8	787.8	1131.8	364.5	556.3	259.2	256.0

Data presented as number/liter.

TABLE 6

TOTAL ZOOPLANKTON POPULATION PER LITER - 1974

Station	April 18	May 22	June 19	July 17	August 22	September 10	October 9	November 7
1	152.0	598.8	83.6	1746.3	235.9	1018.3	394.0	265.7
3	53.5	414.5	639.7	1211.2	416.7	487.7	213.5	253.3
6	51.7	38.4	722.3	984.0	383.2	494.3	285.1	246.1
8	55.6	265.0	732.5	917.6	424.2	261.1	256.2	256.2
9	44.7	269.5	721.8	992.3	431.0	343.7	228.3	372.4
10	144.8	1270.1	1495.9	2202.2	224.8	962.3	375.3	286.4
12	79.9	566.6	634.5	1027.6	387.5	694.4	209.9	234.2
13	62.5	453.9	829.0	1243.3	431.3	532.6	282.0	237.0
14	40.5	331.8	751.2	923.2	398.0	462.7	244.6	244.6
18	71.6	529.7	1067.7	954.9	319.8	549.5	270.1	208.0
19	69.4	1012.1	987.2	246.7	356.6	213.1	92.3	211.9
20*								

* This station had been drained of all water.

TABLE 7

BENTHIC MACROINVERTEBRATE POPULATIONS AT LOCUST POINT - 1974 MONTHLY MEANS

TAXA	April 17-18	May 22-23	June 19-20	July 17	Aug 14	Sept 6	Oct 10	Nov 7
COELENTERATA								
Hydra sp. (budding polyp)	2	7	54		1	0	4	6
Hydra sp. (single polyp)		5	68		1	1	11	11
NEMATODEA						3	4	
ANNELIDA								
Hirudinea								
Helobdella elongata						2	2	
H. stagnalis		1			1		2	0
Oligochaeta (unidentified)				21				
Immatures (hair setae)	3			5	1		4	1
Immatures (no hair setae)	1168	1109	634	688	1071	941	870	750
Branchyura sowerbyi	13	14	6	2	7	12	14	15
Limnodrilus cervix		4	3	7	39	21	3	10
L. claparedeanus	1	10	33	15	22	11	4	6
L. claparedeanus-cervix		1		1	1	13	5	11
L. hoffmeisteri	0	3						
L. maumeensis		1		0	1	1		1
L. udekemianus	2	10						
Nais sp.							1	5
Potamothrix moldaviensis	9	0	21	24	31	11	11	
P. vejdovskyi	2	1						
Stylaria sp.						0	7	
ARTHROPODA								
Cladocera								
Leptodora kindtii			16	136	40	186	14	0
Amphipoda								
Gammarus fasciatus	3	0	9	13	6	10	22	36
Hyalella azteca				1				
Decopoda								
Orconectes sp.			0					
Chironomidae								
Chironomus (chironomus) sp.	111	40	69	29	199	67	45	23
Chironomus pupa		0						
Coelotanypus sp.					20	2	3	1
Cricotopus sp.								1
Cryptochironomus sp.	4	6	3	3	8	2	13	17
Polypedilum sp.		1	1	1			1	
Procladius sp.	23	18	32	6	57	8	12	31
Procladius pupa		2	0	1	0			
Pseudochironomus sp.	0	1	0			1		
Tanypodinae pupa		1						
Tanytarsus sp.	8		568	52	17	202	160	62
Tanytarsus pupa			2					
Ephemeroptera								
Caenis sp.		2		1		0		
Trichoptera								
Hydropsychidae	0							
MOLLUSCA								
Gastropoda								
Bulimus sp.	0	0	0					
Pelecypoda								
Amblema plicata		1			2		1	
Sphaerium sp.		3	1	3	2	2	1	3
Station Total	1355	1216	1528	954	1527	1543	1209	992

Data presented as number/m^2.

TABLE 8

TOTAL BENTHOS POPULATION PER SQUARE METER - 1974

Station	April 17-18	May 22-23	June 19-20	July 17	August 14	September 6	October 10	November 7
1	19	44	1700	127	592	83	579	210
2	96	516	147	76	102	274	528	210
3	1541	1662	4170	3185	2776	1191	2903	3247
4	3228	2375	2693	1910	2782	1738	3737	1745
5	312	140	115	127	127	115	1904	32
6	166	2941	191	204	7659	478	1413	548
7	3763	2413	433	267	624	834	471	255
8	3361	255	1585	458	535	1394	1445	751
9	898	1414	936	1770	1343	4564	1643	2095
10	57	57	191	51	185	127	185	38
11	382	382	3361	471	3152	439	102	586
12	1178	2808	802	458	102	643	560	1159
13	1293	465	337	987	89	1827	337	1490
14	5857	3998	3769	3018	3890	5004	3444	4291
15	357	89	1452	1464	1388	840	1700	745
16	401	134	1101	1292	1127	1821	802	255
17	57	3082	2840	337	102	210	331	83
18	3635	204	3056	1770	2184	7175	840	1108
19	325	618	146	153	261	567	38	0
20	178	*	*	*	*	*	*	*

* This station had been drained of all water for further construction.

TABLE 9

SUMMARY OF FISHING RESULTS AT LOCUST POINT - JULY - NOVEMBER 1974

METHOD OF CAPTURE	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		TOTAL	
	No. of Fish	No. of Species	No. of Fish	No. of Species	No. of Fish	No. of Species	No. of Fish	No. of Species	No. of Fish	No. of Species	No. of Fish	No. of Species
Gill Net	179	13	260	11	408	10	168	9	10	5	1025	19
Shore Seine	13150	9	458	7	697	7	1555	4	2084	4	17944	13
Otter Trawl												
Lake	18	8	88	9	64	10	67	3	1038	6	1275	14
Intake Canal			33	4	411*	18	1	1			445	18
Hoop Net	17	3	5	2	17	4	1	1	24	2	64	6
Fry Net												
Lake	4481	3	6	2	4	2	9	1	56	1	4556	5
Intake Canal			6	2							6	2
TOTAL	17845	19	856	19	1601	24	1801	12	3212	11	25315	28

* This was the total of more than 22 trawls made in an effort to remove as many fish (alive) as possible before poisoning the canal.

totaled 397 fish of 16 species, while at Station 12 (discharge) 628 fish of 17 species were captured (Tables 10 and 11).

Shore Seine. The yield from shore seines during the period July through November was 17,944 fish of 13 species. The monthly catches ranged from 458 - 13,150 fish (Tables 12 - 16).

Otter Trawl. Trawling in the lake during the period July through November yielded 1,275 fish of 14 species (Table 17). Scheduled trawling within the intake canal yielded 34 fish of 4 species during the summer and autumn quarters (Table 18). Twenty-two plus trawls, yielding 411 fish of 18 species, were made in September to remove as many fish as possible prior to poisoning[1] the canal (Table 19).

Hoop Net. Hoop nets set in the northwest marsh (Station 21) July through November yielded 28 fish of 5 species and 5 painted turtles (Table 20). Nets set in the southeast marsh (Station 2) during the same period caught 36 fish of 4 species, 1 painted turtle, and 2 snapping turtles (Table 21).

Fry Net. The catch during July through November from the lake totaled 4,556 fish of 5 species (Table 22). Fry netting within the intake canal on 27 August 1974, yielded 4 Notropis a. atherinoides (emerald shiner - mean length 77 mm) and 2 Morone chrysops (white bass - mean length 15 mm). These shiners are probably too large to be called fry. No sampling was done in the fall due to the poisoning of the canal in September.

Food Habits

The results of the food habits study for the period July through November will be presented in a supplementary report.

Water Quality

The results of the monthly water quality determinations at Stations 1, 8 and 12 are shown in Tables 23 - 28. Solar Radiation measurements for Station 8 are given in Table 29 and current measurements for Stations 8 and 12 are listed in Table 30. Water quality measurements for the ice-free period of the first half of 1974 and the second half (July - December) of 1974 showed moderate ranges for the parameters tested (Table 31).

1. Poisoning of the intake canal took place on 25 September 1974 in order to remove fish from this area prior to plant operation. Continued monitoring of the canal will permit an assessment of fish movements, if any, through the intake crib.

TABLE 10

ANALYSIS OF GILL NET CATCH AT LOCUST POINT
STATION 8 - JULY - NOVEMBER, 1974

Date / Taxa	No.	Length (mm)		Weight (g)	
		Mean	Range	Mean	Total
July 10-11, 1974					
Alosa pseudoharengus	4	184	173	58	232
Ambloplites rupestris	1	196		166	166
Aplodinotus grunniens	8	169	107-307	138	1104
Catostomus c. commersoni	1	320		410	410
Cyprinus carpio	5	327	238-377	497	2485
Ictalurus punctatus	4	301	213-374	322	1288
Morone chrysops	1	333		588	588
Notropis a. atherinoides	3	111	110-112	7	21
N. hudsonius	7	114	93-126	10	70
Perca flavescens	51	160	105-207	54	2754
Subtotal	85				9118
August 19-20, 1974					
Aplodinotus grunniens	1	250		170	170
Carassius auratus	2	243	240-245	215	430
Cyprinus carpio	5	287	230-333	373	1863
Dorosoma cepedianum	25	195	111-320	145	3624
Ictalurus nebulosus	2	151	137-165	55	110
Morone chrysops	1	223		175	175
Notropis hudsonius	2	103	102-105	10	21
Perca flavescens	56	174	95-207	75	4193
Pomoxis annularis	4	144	118-165	44	176
Subtotal	98				10762
September 12-13, 1974					
Alosa pseudoharengus	72	103	93-184	12	864
Dorosoma cepedianum	14	153	91-341	81	1140
Ictalurus nebulosus	2	146	141-150	42	84
Morone chrysops	1	90		10	10
Notropis hudsonius	11	108	100-112	14	152
Perca flavescens	40	190	137-213	85	3414
Pomoxis annularis	5	177	155-215	85	426
Stizostedion v. vitreum	1	199		70	70
Subtotal	146				6160

TABLE 10 CONT.

ANALYSIS OF GILL NET CATCH AT LOCUST POINT
STATION 8 - JULY - NOVEMBER 1974

Date / Taxa	No.	Length (mm)		Weight (g)	
		Mean	Range	Mean	Total
October 16-17, 1974					
Alosa pseudoharengus	27	99	93-111	9	247
Dorosoma cepedianum	2	146	135-156	34	67
Notropis hudsonius	19	113	104-128	15	287
Osmerus eperlanus mordax	1	159		21	21
Perca flavescens	14	181	147-211	75	1046
Stizostedion v. vitreum	1	220		107	107
Subtotal	64				1775
November 25-26, 1974					
Notropis hudsonius	3	108	101-112	14	43
Perca flavescens	1	180		79	79
Subtotal	4				122
TOTAL	397				27937

TABLE 11

ANALYSIS OF GILL NET CATCH AT LOCUST POINT
STATION 12 - JULY - NOVEMBER, 1974

Date / Taxa	No.	Length (mm)		Weight (g)	
		Mean	Range	Mean	Total
July 10-11, 1974					
Alosa pseudoharengus	72	172	142-207	47	3638
Aplodinotus grunniens	3	209	144-338	186	558
Dorosoma cepedianum	7	282	137-365	349	2443
Hybopsis storeriana	1	181		62	62
Ictalurus punctatus	2	241	196-285	148	296
Notropis a. atherinoides	1	110		10	10
N. hudsonius	1	125		22	22
Perca flavescens	5	160	115-197	46	230
Pomoxis annularis	2	136	121-151	36	72
Subtotal	94				7331
August 19-20, 1974					
Carassius auratus	3	308	292-321	436	1307
Cyprinus carpio	18	292	123-398	454	8181
Dorosoma cepedianum	63	116	82-302	30	1886
Ictalurus nebulosus	4	146	136-167	48	190
I. punctatus	1	162		30	30
Morone chrysops	4	104	94-130	16	63
Notropis hudsonius	7	111	102-120	13	94
Perca flavescens	56	180	115-230	86	4847
Pomoxis annularis	5	149	130-165	48	241
P. nigromaculatus	1	150		52	52
Subtotal	162				16891
September 12-13, 1974					
Alosa pseudoharengus	146	103	90-200	14	2044
Cyprinus carpio	2	323	320-326	489	977
Dorosoma cepedianum	67	135	81-335	54	3641
Morone chrysops	6	226	130-257	202	1212
Notropis hudsonius	6	116	105-130	18	107
Perca flavescens	32	187	150-217	81	2590
Pomoxis annularis	2	147	139-154	42	83
P. nigromaculatus	1	174		90	90
Subtotal	262				10744

TABLE 11 CONT.

ANALYSIS OF GILL NET CATCH AT LOCUST POINT
STATION 12 - JULY - NOVEMBER, 1974

Date Taxa	No.	Length (mm)		Weight (g)	
		Mean	Range	Mean	Total
October 16-17, 1974					
Alosa pseudoharengus	25	104	94-189	10	246
Carassius auratus	2	267	229-304	314	629
Dorosoma cepedianum	24	128	84-320	40	952
Morone chrysops	1	136		187	187
Notropis hudsonius	31	110	100-130	15	452
Oncorhynchus kisutch	1	642		2321	2321
Osmerus eperlanus mordax	1	176		37	37
Perca flavescens	18	182	143-210	77	1387
Stizostedion v. vitreum	1	234		115	115
Subtotal	104				6326
November 25-26, 1974					
Cyprinus carpio	1	540		2973	2973
Dorosoma cepedianum	1	325		390	390
Osmerus eperlanus mordax	3	146	138-156	22	65
Perca flavescens	1	190		90	90
Subtotal	6				3518
TOTAL	628				44810

TABLE 12

ANALYSIS OF SHORE SEINE CATCH FROM LOCUST POINT
JULY 9, 1974

Station	Taxa	No.	Length (mm) Mean	Length (mm) Range	Weight (g) Mean	Weight (g) Total
23						
	Dorosoma cepedianum (AD)	2	226	224-228	146	292
	Dorosoma cepedianum (YOY)	390	27	23-42		
	Morone chrysops (YOY)	112	25	17-37		
	Notropis a. atherinoides	2	96	91-101		
	N. hudsonius	3	58	29-108		
	Perca flavescens (YOY)	1	30			
	Percina caprodes	2	30	30-31		
	Subtotal	512				292
24						
	Aplodinotus grunniens	1	97			
	Dorosoma cepedianum (AD)	57	236	208-261	201	11443
	D. cepedianum (YOY)	10838		24-43		
	Morone chrysops (YOY)	809		20-37		
	Notropis a. atherinoides	3	66	52-80		
	N. hudsonius	8	43	25-112		
	Perca flavescens (YOY)	23		26-35		
	Percina caprodes	1	28			
	Stizostedion v. vitreum (YOY)	1	65		2.5	2.5
	Subtotal	11741				11446
25						
	Cyprinus carpio	1	285		339	339
	Dorosoma cepedianum (YOY)	632	31	25-54		
	Morone chrysops (YOY)	230	28	19-47		
	Notropis a. atherinoides	3	75	72-78	5	16
	N. hudsonius	15	33	25-40		
	Perca flavescens (YOY)	12	30	26-31		
	Percina caprodes	4	28	24-30		
	Subtotal	897				355
TOTAL		13150				12093

TABLE 13

ANALYSIS OF SHORE SEINE CATCH FROM LOCUST POINT
AUGUST 27, 1974

Station	Taxa	No.	Length (mm)		Weight (g)	
			Mean	Range	Mean	Total
23						
	Alosa pseudoharengus	22	62	30–81	4	81
	Dorosoma cepedianum	1	87		10	10
	Notropis a. atherinoides	182	75	40–105	4	740
	Subtotal	205				831
24						
	Alosa pseudoharengus	55	76	38–90	4	208
	Dorosoma cepedianum	1	120		20	20
	Notropis a. atherinoides	95	66	40–105	3	284
	Pomoxis annularis	1	40		1	1
	Subtotal	152				513
25						
	Alosa pseudoharengus	4	61	30–75	3	13
	Labidesthes sicculus	3	58	55–65	1	3
	Notropis a. atherinoides	92	73	40–111	3	301
	Osmerus eperlanus mordax	1	65		1	1
	Percina caprodes	1	65		4	1
	Subtotal	101				319
TOTAL		458				1663

TABLE 14

ANALYSIS OF SHORE SEINE CATCH FROM LOCUST POINT
September 12, 1974

Station	Taxa	No.	Length (mm)		Weight (g)	
			Mean	Range	Mean	Total
23						
	Dorosoma cepedianum	15	68	57-88	4	59
	Labidesthes sicculus	4	66	57-72	1	6
	Notropis a. atherinoides	216	75	50-90	4	864
	Subtotal	235				929
24						
	Dorosoma cepedianum	124	96	44-290	14	1736
	Morone chrysops	1	112		20	20
	Notropis a. atherinoides	169	71	50-107	3	570
	Subtotal	294				2326
25						
	Dorosoma cepedianum	56	95	50-135	11	638
	Labidesthes sicculus	5	65	53-70	2	8
	Morone chrysops	1	70		4	4
	Notropis a. atherinoides	103	64	50-97	2	206
	N. hudsonius	1	65		3	3
	Osmerus eperlanus mordax	1	70		2	2
	Percina caprodes	1	53		1	1
	Subtotal	168				862
TOTAL		697				4117

TABLE 15

ANALYSIS OF SHORE SEINE CATCH FROM LOCUST POINT
October 16, 1974

Station	Taxa	No.	Length (mm)		Weight (g	
			Mean	Range	Mean	Total
23						
	Alosa pseudoharengus	2	45	35-55	1	2
	Dorosoma cepedianum	15	83	57-110	7	98
	Notropis a. atherinoides	577	60	45-96	1	821
	Subtotal	594				921
24						
	Dorosoma cepedianum	42	84	57-162	7	312
	Notropis a. atherinoides	655	55	21-110	2	1048
	Subtotal	697				1360
25						
	Dorosoma cepedianum	21	71	50-102	5	103
	Notropis a. atherinoides	242	56	36-105	2	284
	Osmerus eperlanus mordax	1	140		16	16
	Subtotal	264				403
TOTAL		1555				2684

TABLE 16

ANALYSIS OF SHORE SEINE CATCH FROM LOCUST POINT
November 14, 1974

Station	Taxa	No.	Length (mm)		Weight (g)	
			Mean	Range	Mean	Total
23						
	Dorosoma cepedianum	1	91		9	9
	Labidesthes sicculus	1	68		2	2
	Notropis a. atherinoides	437	54	45–75	1	437
	Subtotal	439				448
24						
	Notropis a. atherinoides	174	53	45–80	1	174
	Subtotal	174	53	45–80	1	174
25						
	Dorosoma cepedianum	3	84	58–110	9	28
	Labidesthes sicculus	1	58		1	1
	Notropis a. atherinoides	1466	56	43–79	1	1764
	Pomoxis annularis	1	31			
	Subtotal	1471				1793
TOTAL		2084				2415

TABLE 17

ANALYSIS OF TRAWL CATCH FROM LOCUST POINT
JULY - NOVEMBER, 1974

Date / Taxa	No.	Length (mm)		Weight (g)	
		Mean	Range	Mean	Total
July 19, 1974					
Cyprinus carpio	3	320	232-434	534	1601
Ictalurus nebulosus	2	248	247-250	235	470
I. punctatus	5	125	97-145	20	101
Morone chrysops	2	171	150-192	80	160
Notropis a. atherinoides	2	98	95-101	10	21
N. hudsonius	2	106	94-117	15	30
Perca flavescens	1	166		64	64
Pomoxis nigromaculatus	1	134		37	37
Subtotal	18				2484
August 16, 1974					
Alosa pseudoharengus	31	63	30-81	3	97
Aplodinotus grunniens	1	136		30	30
Cyprinus carpio	1	337		570	570
Dorosoma cepedianum	40	52	30-66	3	102
Ictalurus punctatus	1	192		66	66
Morone chrysops	8	45	34-71	2	14
Notropis a. atherinoides	3	98	81-116	8	23
N. hudsonius	2	30	27-33	1	2
Stizostedion v. vitreum	1	145		27	27
Subtotal	88				931
September 13, 1974					
Alosa pseudoharengus	15	84	33-93	6	87
Aplodinotus grunniens	1	85		8	8
Cyprinus carpio	1	280		315	315
Dorosoma cepedianum	3	66	47-97	5	16
Morone chrysops	21	48	23-78	2	44
Notropis a. atherinoides	3	50	30-90	2	7
N. hudsonius	12	101	70-121	12	143
Osmerus eperlanus mordax	3	49	44-57	1	3
Perca flavescens	4	124	63-180	37	146
Pomoxis nigromaculatus	1	171		101	101
Subtotal	64				870

TABLE 17 CONT.

ANALYSIS OF TRAWL CATCH FROM LOCUST POINT
JULY - NOVEMBER, 1974

Date / Taxa	No.	Length (mm)		Weight (g)	
		Mean	Range	Mean	Total
October 10, 1974					
Alosa pseudoharengus	25	87	65-95	8	193
Dorosoma cepedianum	38	92	70-117	12	445
Notropis a. atherinoides	4	63	32-85	3	14
Subtotal	67				652
November 8, 1974					
Dorosoma cepedianum	56	83	61-135	7	381
Morone chrysops	5	114	91-138	23	113
Notropis a. atherinoides	917	56	43-123	1	1192
N. hudsonius	50	90	55-127	9	436
Perca flavescens	8	182	138-204	85	684
Percina caprodes	2	55	48-62	2	4
Subtotal	1038				2810
TOTAL	1275				7747

TABLE 18

ANALYSIS OF TRAWL CATCH FROM THE INTAKE CANAL AT THE DAVIS-BESSE NUCLEAR POWER STATION - 1974

Date / Taxa	No.	Length (mm)		Weight (g)	
		Mean	Range	Mean	Total
June 18, 1974					
Carassius auratus	2	130	99-160	57	113
Ictalurus nebulosus	6	142	105-169	54	326
I. punctatus	1	90		9	9
Pomoxis annularis	21	89	76-126	11	224
P. nigromaculatus	1	142		43	43
Subtotal	31				715
August 27, 1974					
Cyprinus carpio (YOY)	1	35			
Ictalurus melas	25	75	55-225	19	482
Lepomis gibbosus	3	116	110-120	37	110
Pomoxis annularis	4	86	50-120	13	52
Subtotal	33				644
October 23, 1974*					
Cyprinus carpio	1	555		2066	2066
Subtotal	1				2066
TOTAL	65				3425

YOY - Designates young-of-the-year.

* The canal was poisoned on September 25, 1974

TABLE 19

RESULTS OF TRAWLING EFFORT TO REMOVE FISH
PRIOR TO POISONING THE INTAKE CANAL
SEPTEMBER 24, 1974

Scientific Name	Common Name	No. Captured
Aplodinotus grunniens	freshwater drum	2
Carassius auratus	goldfish	9
Cyprinus carpio	carp	1
Dorosoma cepedianum	gizzard shad	51
Ictalurus melas	black bullhead	56
I. natalis	yellow bullhead	7
I. nebulosus	brown bullhead	118
I. punctatus	channel catfish	1
Lepomis cyanellus	green sunfish	1
L. gibbosus	pumpkinseed sunfish	36
L. macrochirus	bluegill sunfish	12
Morone chrysops	white bass	2
Notropis a. atherinoides	emerald shiner	6
Perca flavescens	yellow perch	6
Percina caprodes	logperch darter	2
Percopsis omiscomaycus	troutperch	3
Pomoxis annularis	white crappie	96
P. nigromaculatus	black crappie	2
	crayfish	3
TOTAL		414

TABLE 20

ANALYSIS OF HOOP NET CATCH IN NORTHWEST MARSH
(STATION 21) - JULY - NOVEMBER, 1974

Date Taxa	No.	Length (mm)		Weight (g)	
		Mean	Range	Mean	Total
July 9-10, 1974					
Carassius auratus	1	201		148	148
Cyprinus carpio	7	377	210-690	941	6589
Midland Painted Turtle	5			367	1834
August 19-20, 1974					
Cyprinus carpio	3	407	280-610	964	2983
September 17-18, 1974					
Amia calva	1	415		679	679
Cyprinus carpio	11	440	270-620	1303	14337
Dorosoma cepedianum	3	269	258-290	190	570
Pomoxis nigromaculatus	1	225		170	170
October 16-17, 1974					
Pomoxis nigromaculatus	1	242		210	210
November 25-26, 1974					
No fish					
TOTAL	33				27430

TABLE 21

ANALYSIS OF HOOP NET CATCH IN SOUTHEAST MARSH (STATION 22) - JULY - NOVEMBER, 1974

Date / Taxa	No.	Length (mm)		Weight (g)	
		Mean	Range	Mean	Total
July 9-10, 1974					
Amia calva	3	473	362-560	934	2802
Cyprinus carpio	6	406	326-444	769	4612
Midland Painted Turtle	1			227	227
August 19-20, 1974					
Carassius auratus	1	230		190	190
Cyprinus carpio	1	270		224	224
September 17-18, 1974					
Cyprinus carpio	1	462		883	883
Snapping Turtle	2			7380	14760
October 16-17, 1974					
No fish					
November 25-26, 1974					
Amia calva	23	459	345-525	1007	23162
Pomoxis annularis	1	222		453	453
TOTAL	39				47313

TABLE 22

ANALYSIS OF ICHTHYOPLANKTON COLLECTED AT LOCUST POINT
JULY - NOVEMBER, 1974

Date / Taxa	Length (mm) Range	Nos. of Individuals Collected			
		Sta. 8 (Intake)		Sta. 12 (Discharge)	
		Surface	Bottom	Surface	Bottom
July 10, 1974					
Carassius auratus	6.5			1	
Dorosoma cepedianum	7-18	6	8	45	39
Notropis a. atherinoides	8-18	3815	8	549	10
Subtotal		3821	16	595	49
August 19, 1974					
Alosa pseudoharengus	18			1	
Notropis a. atherinoides	9-17	3		1	1
Subtotal		3	0	2	1
September 12, 1974					
Labidesthes sicculus	57			1	
Notropis a. atherinoides	52-53			3	
Subtotal		0	0	4	0
October 16, 1974					
Notropis a. atherinoides	28-57			8	1
Subtotal		0	0	8	1
November 25, 1974					
Notropis a. atherinoides	46-85				56
Subtotal		0	0	0	56
TOTAL		3824	16	609	107

TABLE 23

LAKE ERIE WATER QUALITY ANALYSES FOR JULY 1974

Dates:
Field 7-17-74
Laboratory 7-18-74

Parameters	Station No. 1		Station No. 8		Station No. 12		Range	Mean	Standard Deviation
	Surface	Bottom	Surface	Bottom	Surface	Bottom			
Field Measurements:	1005 hrs	1005 hrs	1105 hrs	1105 hrs	1150 hrs	1150 hrs			
Temperature (°C)	24.5	23.8	25.3	24.0	25.4	24.1	23.8-25.4	24.5	0.7
Dissolved Oxygen (ppm)	8.6	7.4	8.1	6.3	N.A.	6.7	6.3-8.6	7.4	1.0
Conductivity (umhos/cm)	259	255	255	N.A.	230	220	220-259	244	18
Transparency (m)	0.35		0.55		0.35		0.35-0.55	0.42	0.12
Depth (m)		2.4		5.0		3.8	2.4-5.0	3.7	1.3
Laboratory Determinations:									
Calcium (mg/l)	36.0	36.0	34.0	34.4	32.8	36.4	32.8-36.4	34.9	1.4
Magnesium (mg/l)	8.2	8.6	8.4	8.2	8.9	8.9	8.2-8.9	8.5	0.3
Sodium (mg/l)	10.8	10.8	9.8	9.8	10.8	10.3	9.8-10.8	10.4	0.5
Chloride (mg/l)	17.0	17.0	16.3	16.0	17.0	16.8	16.0-17.0	16.7	0.4
Nitrate (mg/l)	0.84	0.84	3.10	2.40	3.10	1.60	0.84-3.10	1.98	1.04
Sulfate (mg/l)	27.0	28.5	24.5	24.0	25.5	24.5	24.0-28.5	25.7	1.8
Phosphorus (mg/l)	0.04	0.05	0.05	0.028	0.06	0.07	0.028-0.07	0.05	0.01
Silica (mg/l)	0.79	0.99	0.81	0.93	0.88	0.91	0.79-0.99	0.89	0.08
Total Alkalinity (mg/l)	96	96	86	86	94	96	86-96	92	5
B.O.D. (mg/l)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	-	-	-
Suspended Solids (mg/l)	37	38	20	27	36	37	20-38	33	7
Dissolved Solids (mg/l)	180	182	174	180	176	190	176-190	180	6
Turbidity (F.T.U.)	8	9	9	8	9	21	8-21	11	5
pH	8.4	8.3	8.5	8.2	8.5	8.1	8.1-8.5	8.3	0.2
Conductivity (umhos/cm)									

N.A. - Not Analyzed

TABLE 24

LAKE ERIE WATER QUALITY ANALYSES FOR AUGUST 1974

Dates:
Field 8-22-74
Laboratory 8-22-74

Parameters	Station No. 1		Station No. 8		Station No. 12		Range	Mean	Standard Deviation
	Surface	Bottom	Surface	Bottom	Surface	Bottom			
	1115 hrs	1115 hrs	1145 hrs	1145 hrs	1250 hrs	1250 hrs			
Field Measurements:									
Temperature (°C)	24.9	24.2	25.2	24.2	25.4	24.5	24.2-25.4	24.7	0.5
Dissolved Oxygen (ppm)	6.9	5.7	8.1	7.3	8.4	6.6	5.7-8.4	7.2	1.0
Conductivity (umhos/cm)									
Transparency (m)	0.50		0.45		0.50		0.45-0.50	0.48	0.03
Depth (m)		1.9		5.0		2.8	1.9-5.0	3.2	1.6
Laboratory Determinations:									
Calcium (mg/l)	38.8	40.4	40.0	39.2	38.4	40.4	38.4-40.4	39.5	0.9
Magnesium (mg/l)	6.2	7.2	5.8	5.5	7.0	5.3	5.3-7.2	6.2	0.8
Sodium (mg/l)	12.8	12.8	10.3	10.3	10.3	10.3	10.3-12.8	11.1	1.3
Chloride (mg/l)	18.3	21.0	18.3	18.3	18.3	18.3	18.3-21.0	18.8	1.0
Nitrate (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Sulfate (mg/l)	26.5	32.0	25.0	23.0	25.5	23.5	23.0-32.0	25.9	3.3
Phosphorus (mg/l)	0.03	0.03	0.03	0.06	0.03	0.04	0.03-0.06	0.04	0.01
Silica (mg/l)	0.37	0.38	0.38	0.38	0.33	0.41	0.33-0.41	0.38	0.03
Total Alkalinity (mg/l)	96	94	94	92	96	94	92-96	94	1.5
B.O.D. (mg/l)	4	4	2	3	3	3	2-4	3	0.8
Suspended Solids (mg/l)	16	19	18	15	14	22	14-22	17	3
Dissolved Solids (mg/l)	258	252	228	226	222	228	222-258	236	15
Turbidity (F.T.U.)	8	10	10	10	8	15	8-15	10	2.5
pH	8.5	8.0	8.6	8.5	8.3	8.3	8.0-8.5	8.4	0.2
Conductivity (umhos/cm)	300	325	295	285	285	280	280-325	295	16

TABLE 25

LAKE ERIE WATER QUALITY ANALYSES FOR SEPTEMBER 1974

Dates:
Field 9-10-74
Laboratory 9-10-74

Parameters	Station No. 1		Station No. 8		Station No. 12		Range	Mean	Standard Deviation
	Surface	Bottom	Surface	Bottom	Surface	Bottom			
	915 hrs	915 hrs	950 hrs	950 hrs	1030 hrs	1030 hrs			
Field Measurements:									
Temperature (°C)	19.5	19.5	19.5	19.5	19.0	19.0	19.0-19.5	19.3	0.3
Dissolved Oxygen (ppm)	7.9	7.8	9.2	8.9	8.5	8.2	7.8-9.2	8.4	0.6
Conductivity (umhos/cm)									
Transparency (m)	0.50		0.60		0.60		0.50-0.60	0.57	0.06
Depth (m)		1.7		4.1		3.2	1.7-4.1	3.0	1.2
Laboratory Determinations:									
Calcium (mg/l)	36.0	36.4	35.2	36.0	36.0	36.0	35.2-36.4	35.9	0.4
Magnesium (mg/l)	7.4	6.7	7.2	6.5	6.7	6.7	6.5-7.4	6.9	0.4
Sodium (mg/l)	9.6	9.6	9.3	9.6	9.6	9.6	9.3-9.6	9.6	0.1
Chloride (mg/l)	18.7	18.7	17.2	17.2	17.2	17.2	17.2-18.7	17.7	0.8
Nitrate (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Sulfate (mg/l)	24.0	22.5	24.5	22.5	21.0	22.0	21.0-24.5	22.8	1.3
Phosphorus (mg/l)	0.05	0.06	0.06	0.05	0.05	0.07	0.05-0.07	0.06	0.01
Silica (mg/l)	0.09	0.11	0.17	0.19	0.12	0.19	0.09-0.19	0.15	0.04
Total Alkalinity (mg/l)	94	93	96	94	96	94	93-96	95	1
B.O.D. (mg/l)	3	3	2	2	3	2	2-3	2.5	0.6
Suspended Solids (mg/l)	15	17	15	9	11	14	9-17	14	3
Dissolved Solids (mg/l)	150	146	148	156	150	150	146-150	150	3
Turbidity (F.T.U.)	5	8	5	5	5	4	4-8	5	1
pH	8.2	8.3	8.4	7.8	7.9	8.4	7.8-8.4	8.2	0.3
Conductivity (umhos/cm)	264	265	265	267	264	264	264-267	265	1

TABLE 26

LAKE ERIE WATER QUALITY ANALYSES FOR OCTOBER 1974

Dates:
Field 10-9-74
Laboratory 10-10-74

Parameters	Station No. 1		Station No. 8		Station No. 12		Range	Mean	Standard Deviation
	Surface	Bottom	Surface	Bottom	Surface	Bottom			
	1100 hrs	1100 hrs	1130 hrs	1130 hrs	1210 hrs	1210 hrs			
Field Measurements:									
Temperature (°C)	12.0	11.0	12.0	11.5	12.0	11.5	11.0-12.0	11.7	0.4
Dissolved Oxygen (ppm)	11.2	11.1	10.4	10.2	12.1	11.8	10.2-12.1	11.1	0.8
Conductivity (umhos/cm)									
Transparency (m)	0.45		0.50		0.50		0.45-0.50	0.50	0.03
Depth (m)		1.5		4.0		2.8	1.5-4.0	2.8	1.3
Laboratory Determinations:									
Calcium (mg/l)	34.4	34.4	34.4	32.8	32.8	32.8	32.8-34.4	33.6	0.9
Magnesium (mg/l)	6.7	6.7	6.7	7.2	7.9	7.9	6.7-7.9	7.2	0.6
Sodium (mg/l)	12.0	13.3	15.3	15.3	14.4	15.3	12.0-15.3	14.3	1.4
Chloride (mg/l)	16.8	16.8	18.3	17.5	16.8	17.5	16.8-18.3	17.3	0.6
Nitrate (mg/l)	1.2	1.2	2.0	1.6	1.6	1.2	1.2-2.0	1.5	0.3
Sulfate (mg/l)	24.5	28.0	29.0	28.0	30.5	27.0	24.5-30.5	27.8	2.0
Phosphorus (mg/l)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Silica (mg/l)	0.04	0.06	0.05	0.06	0.05	0.09	0.04-0.09	0.06	0.02
Total Alkalinity (mg/l)	89	90	91	94	91	92	89-94	91	1.7
B.O.D. (mg/l)	2	3	3	3	3	2	2-3	2.7	0.5
Suspended Solids (mg/l)	9	14	10	14	9	10	9-14	11	2
Dissolved Solids (mg/l)	174	188	182	186	194	194	174-194	186	8
Turbidity (F.T.U.)	9	10	10	10	10	10	9-10	10	0.4
pH	9.0	8.6	9.0	8.9	8.9	8.8	8.6-9.0	8.9	0.2
Conductivity (umhos/cm)	275	285	285	285	285	280	275-285	283	4

TABLE 27

LAKE ERIE WATER QUALITY ANALYSES FOR NOVEMBER 1974

Dates:
Field 11-7-74
Laboratory 11-8-74

Parameters	Station No. 1		Station No. 8		Station No. 12		Range	Mean	Standard Deviation
	Surface	Bottom	Surface	Bottom	Surface	Bottom			
	1000 hrs	1000 hrs	1030 hrs	1030 hrs	1100 hrs	1100 hrs			
Field Measurements:									
Temperature (°C)	8.2	8.2	9.3	9.5	8.5	8.3	8.2-9.5	8.7	0.6
Dissolved Oxygen (ppm)	11.4	11.2	11.1	11.0	11.5	11.3	11.0-11.5	11.3	0.2
Conductivity (umhos/cm)									
Transparency (m)	0.30		0.30		0.30		-	0.30	0.0
Depth (m)		2.3		4.0		3.0	2.3-4.0	3.1	0.9
Laboratory Determinations:									
Calcium (mg/l)	36.8	36.8	36.8	36.0	36.8	34.8	34.8-36.8	36.3	0.8
Magnesium (mg/l)	7.0	6.2	4.8	7.4	7.4	8.6	4.8-8.6	6.9	1.3
Sodium (mg/l)	7.8	7.8	7.5	7.5	7.7	7.7	7.5-7.8	7.7	0.1
Chloride (mg/l)	14.3	12.4	15.0	14.5	14.5	15.0	12.4-15.0	14.3	1.0
Nitrate (mg/l)	3.84	3.52	2.9	2.6	1.7	5.1	1.7-5.1	3.3	1.2
Sulfate (mg/l)	24.0	24.0	24.0	24.0	25.0	25.5	24.0-25.5	24.4	0.7
Phosphorus (mg/l)	0.02	0.02	0.02	0.02	0.03	0.03	0.02-0.03	0.02	0.01
Silica (mg/l)	0.16	0.15	0.15	0.12	0.14	0.16	0.12-0.16	0.15	0.02
Total Alkalinity (mg/l)	94	95	88	87	90	90	87-95	91	3
B.O.D. (mg/l)	2	3	3	2	2	3	2-3	3	1
Suspended Solids (mg/l)	42	23	25	28	30	34	23-42	30	7
Dissolved Solids (mg/l)	140	152	150	154	138	148	138-152	147	7
Turbidity (F.T.U.)	11	7	9	16	11	13	7-16	11	3
pH	8.3	8.3	8.5	8.4	8.3	7.9	7.9-8.5	8.3	0.2
Conductivity (umhos/cm)	265	265	260	258	265	268	258-268	264	4

TABLE 28

LAKE ERIE WATER QUALITY ANALYSES FOR DECEMBER 1974

Dates:
Field 12-17-74
Laboratory 12-17-74

Parameters	Station No. 1		Station No. 8		Station No. 12		Range	Mean	Standard Deviation
	Surface	Bottom	Surface	Bottom	Surface	Bottom			
	1115 hrs	1115 hrs	1115 hrs	1115 hrs	1130 hrs	1130 hrs			
Field Measurements:									
Temperature (°C)	0.5	0.5	0.5	0.5	0.3	0.3	0.3-0.5	0.4	0.1
Dissolved Oxygen (ppm)	14.1	14.0	13.9	14.1	13.8	14.1	13.8-14.1	14.0	0.1
Conductivity (umhos/cm)									
Transparency (m)	0.4		0.4		0.45		0.4-0.45	0.42	0.03
Depth (m)		1.5		3.9		2.7	1.5-3.9	2.7	1.2
Laboratory Determinations:									
Calcium (mg/l)	34.4	33.6	34.4	31.2	32.0	31.2	31.2-34.4	32.8	1.5
Magnesium (mg/l)	6.2	7.0	6.7	5.3	7.9	7.4	5.3-7.9	6.8	0.9
Sodium (mg/l)	10.0	10.0	8.5	8.5	8.5	10.0	8.5-10.0	9.3	0.8
Chloride (mg/l)	16.5	15.8	15.5	15.0	15.5	15.0	15.0-16.5	15.6	0.6
Nitrate (mg/l)	2.6	2.6	3.2	3.6	2.0	2.0	2.0-3.6	2.7	0.6
Sulfate (mg/l)	22.0	23.0	21.0	21.0	21.5	21.5	21.0-23.0	21.7	0.8
Phosphorus (mg/l)	0.066	0.062	0.070	0.070	0.059	0.066	0.059-0.070	0.07	0.0
Silica (mg/l)	0.34	0.12	0.19	0.24	0.17	0.26	0.12-0.34	0.22	0.08
Total Alkalinity (mg/l)	92	91	88	87	91	90	87-92	90	2
B.O.D. (mg/l)	2	2	1	1	2	2	1-2	2	0.5
Suspended Solids (mg/l)	32	33	17	17	21	23	17-33	24	7
Dissolved Solids (mg/l)	176	156	164	160	160	164	156-176	163	7
Turbidity (F.T.U.)	24	25	16	16	19	21	16-25	20	4
pH	8.3	8.3	8.4	8.3	8.4	8.4	8.3-8.4	8.4	0.1
Conductivity (umhos/cm)	310	298	280	283	285	285	280-310	290	12

TABLE 29

SOLAR RADIATION IN LAKE ERIE AT LOCUST POINT FOR JULY - OCTOBER 1974[1]

Date: 26 July 1974 (1025 - 1055 hrs)

Depth	Photometer Reading	Percent of Surface Illumination
0.0 m	1825 u amp	100.0%
0.1	1325	76.2
1.0	275	15.1
2.0	52.5	2.88
3.0	13.0	0.71
4.0	3.25	0.18

Date: 7 September 1974 (1140 - 1155 hrs)

0.0 m	6100 u amp	100.0%
0.1	4400	72.1
1.0	350	5.74
2.0	32.5	0.53
3.0	4.0	0.06
4.0	0.5	0.01

Date: 31 October 1974 (1206 - 1216 hrs)

0.0 m	4100 u amp	100.0%
1.0	1300	31.7
2.0	700	17.1
3.0	375	9.15
4.0	155	3.78

[1] Photometer readings taken at Station No. 8, 3000 feet offshore at intake structure

TABLE 30

CURRENT MEASUREMENTS IN LAKE ERIE AT LOCUST POINT
FOR JULY - OCTOBER 1974

Date/Time	Station No.	Velocity (knots)	Direction (compass °)
7-18-74/1200	8	0.24	58°
7-18-74/1200	12	0.21	80°
8-16-74/1200	8	0.19	350°
8-16-74/1200	12	0.18	355°
9-12-74/1200	8	0.12	55°
9-12-74/1200	12	0.14	25°
10-17-74/1200	8	0.29	130°
10-17-74/1200	12	*	

* rough conditions

TABLE 31

MEAN VALUES AND RANGES FOR WATER QUALITY PARAMETERS TESTED IN 1974

Parameter	April – June 1974		July – December 1974	
	Mean	Range	Mean	Range
1) Temperature	14.0	7.7 – 20.0	14.9	0.3–25.4°C
2) Dissolved Oxygen	10.5	8.0 – 13.2	9.9	5.7 – 14.1 ppm
3) Conductivity	309	275 – 360	274	220 – 325 umhos/cm
4) Transparency	0.26	0.1 – 0.6	0.45	0.30 – 0.60 m
5) Calcium	40.0	34.0 – 50.8	35.5	31.2 – 40.4 mg/l
6) Magnesium	7.4	5.0 – 11.0	7.1	4.8 – 8.9 mg/l
7) Sodium	11.1	7.0 – 15.0	10.4	8.5 – 15.3 mg/l
8) Chloride	19.7	17.6 – 26.0	16.7	12.4 – 21.0 mg/l
9) Nitrate	0.69	0.0 – 2.4	0.45	0.0 – 5.1 mg/l
10) Sulfate	34.1	28.0 – 45.5	24.7	21.0 – 32.0 mg/l
11) Phosphorus	0.16	0.04 – 0.44	0.04	0.00 – 0.07 mg/l
12) Silica	1.26	0.11 – 3.83	0.31	0.04 – 0.99 mg/l
13) Total Alkalinity	94	90 – 100	92	86 – 96 mg/l
14) BOD	2.0	0.5 – 4.72	2.6	1 – 4 mg/l
15) Suspended Solids	39.3	8 – 109	21.5	9 – 42 mg/l
16) Dissolved Solids	180	86 – 396	177	138 – 258 mg/l
17) Turbidity	47	9 – 120	11	4 – 25 F.T.U.
18) Hydrogen-ions	8.0	7.3 – 8.6	8.4	7.8 – 9.0 pH
19) Solar Radiation (1m)	332	70 – 600	642	275 – 1300 u amps
20) Currents (speed)	0.37	0.20 – 0.80	2.0	0.12 – 0.29knots

DISCUSSION

Plankton

Phytoplankton. Phytoplankton populations were highest in the fall and spring and lowest during the summer (Fig. 2). This correlated well with zooplankton populations which peaked during the summer and were lowest in the spring and fall. This type correlation was to be expected since zooplankters graze on phytoplankton.

No comparison could be made with results of previous years since this was the first year phytoplankton was analyzed quantitatively. However, a qualitative comparison with the results from this project during 1973 showed the same cycle of dominance by the three major groups, Bacillariophyceae (diatoms), Chlorophyceae (green algae), and Myxophyceae (blue-green algae). The Bacillariophyceans (cold water forms) dominated in the spring, Chlorophyceans (intermediate temperature forms) in the summer, Chlorophyceans and Myxophyceans (warm water forms) in the early fall, and Chlorophyceans and Bacillariophyceans in the late fall (Fig. 3). The large late summer or early fall bloom of Aphanizomenon sp. (Myxophyceae) was not as evident as in the past.

It should be noted that although specimens from 54 taxa were collected, the blooms in May and November were each due to a pulse of one taxa, Melosira sp. and Mougeotia sp., respectively (Table 3). In May, Melosira sp. made up approximately 87 percent of the total phytoplankton population, while Mougeotia sp. made up approximately 53 percent of the November population. Moreover, the summer dominance by Chlorophyceans was mainly due to a decrease in the Melosira sp. population, as the water warmed, rather than an increase in the Chlorophycean population (Fig. 3).

There was some disagreement over the identification of what we have called Closteriopsis sp. in that some algalogists feel that it is Closterium gracile while others identify it as Closterium aciculare var. subpronum. It was often difficult to distinguish Binuclearia sp. from Mougeotia sp. and Melosira sp. from Stephanodiscus sp. When using this data, one must also realize that some of the very small forms such as Chlorella sp. may have passed through the sampling equipment.

FIGURE 2. MEAN MONTHLY PHYTOPLANKTON POPULATIONS FOR LAKE ERIE AT LOCUST POINT - 1974.

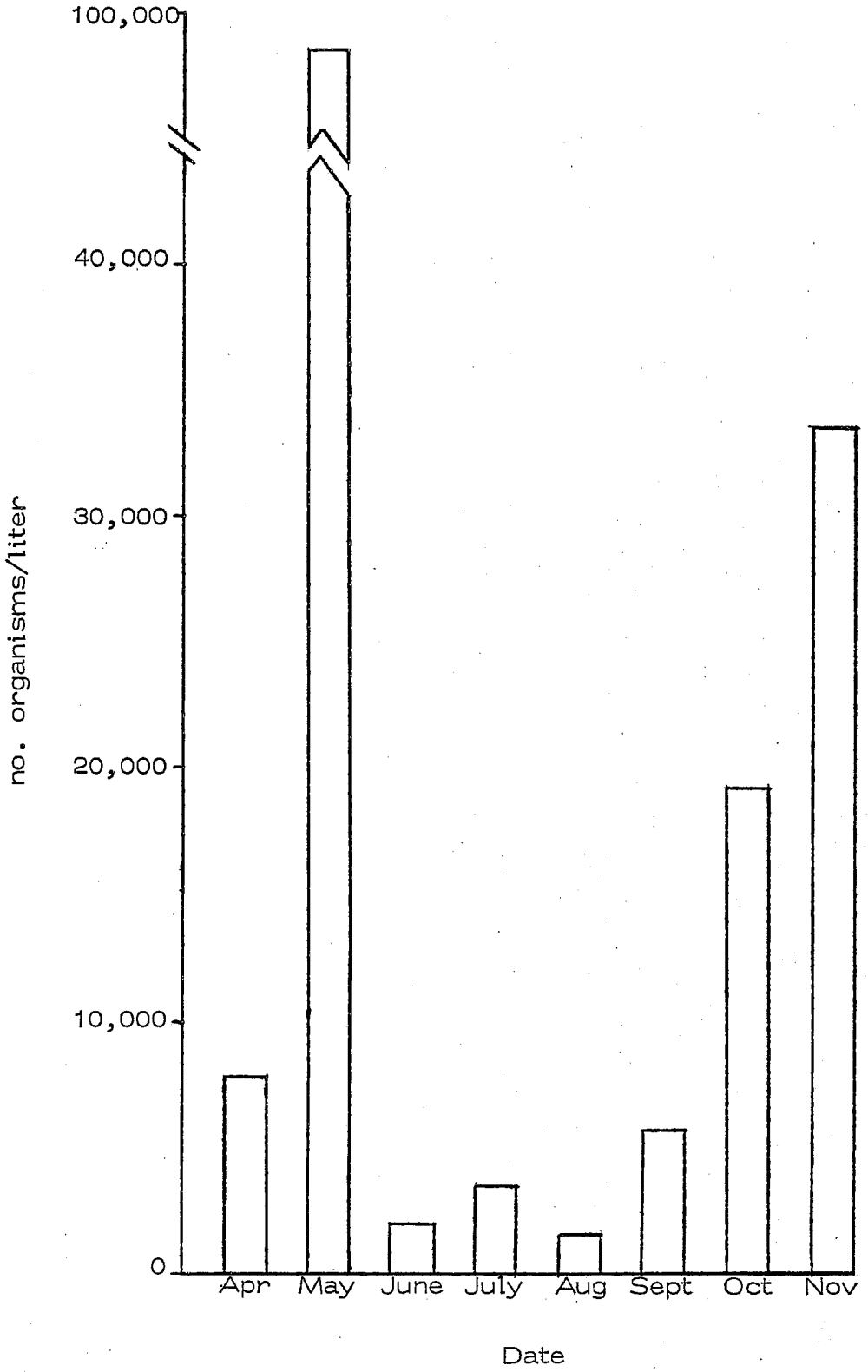
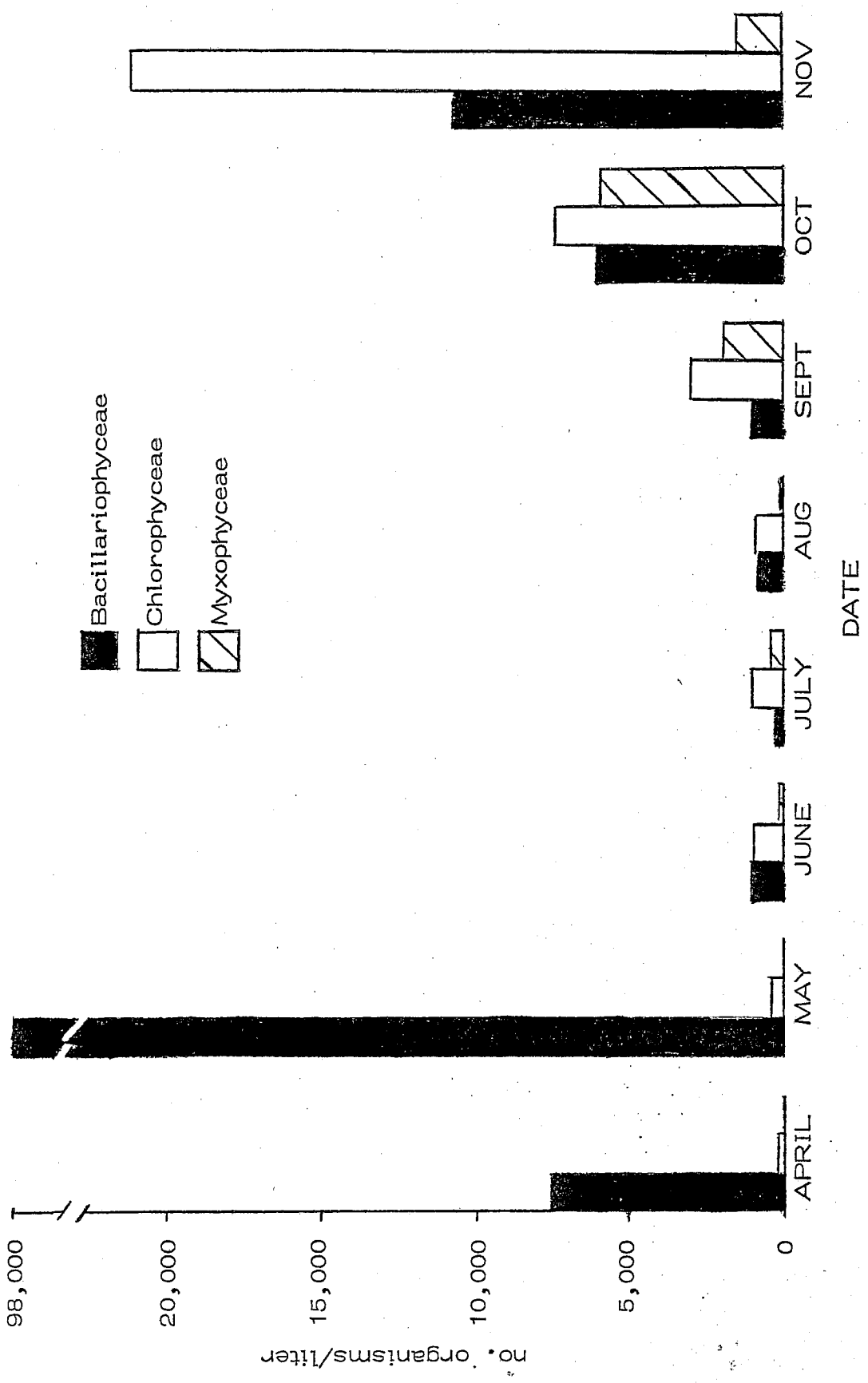


FIGURE 3. MEAN MONTHLY BACILLARIOPHYCEAE, CHLOROPHYCEAE, AND MYXOPHYCEAE POPULATIONS FOR LAKE ERIE AT LOCUST POINT - 1974.



Zooplankton. The zooplankton populations continued the rise, which was evident during the first half of the year, through July and then, with the exception of a very low August value, decreased steadily through November (Fig. 4). The populations from 1972 also peaked during the summer, August, but at a level 300 organisms per liter below that observed in 1974 (Hair and Herdendorf, 1973). Populations computed during 1973 on this project peaked in June, but at half the 1974 maximum and 360 organisms per liter below the 1972 maximum. The 1974 values approached a bell-shaped curve more than 1972 or 1973 populations.

The rotifer populations were the largest of the major groups and showed the greatest variation over the 3 year period (Fig. 5). In 1972 and 1974 the peaks occurred in the same month as the total zooplankton peaks occurred. In 1973 the rotifer peak occurred one month earlier, in May, than the total zooplankton peak.

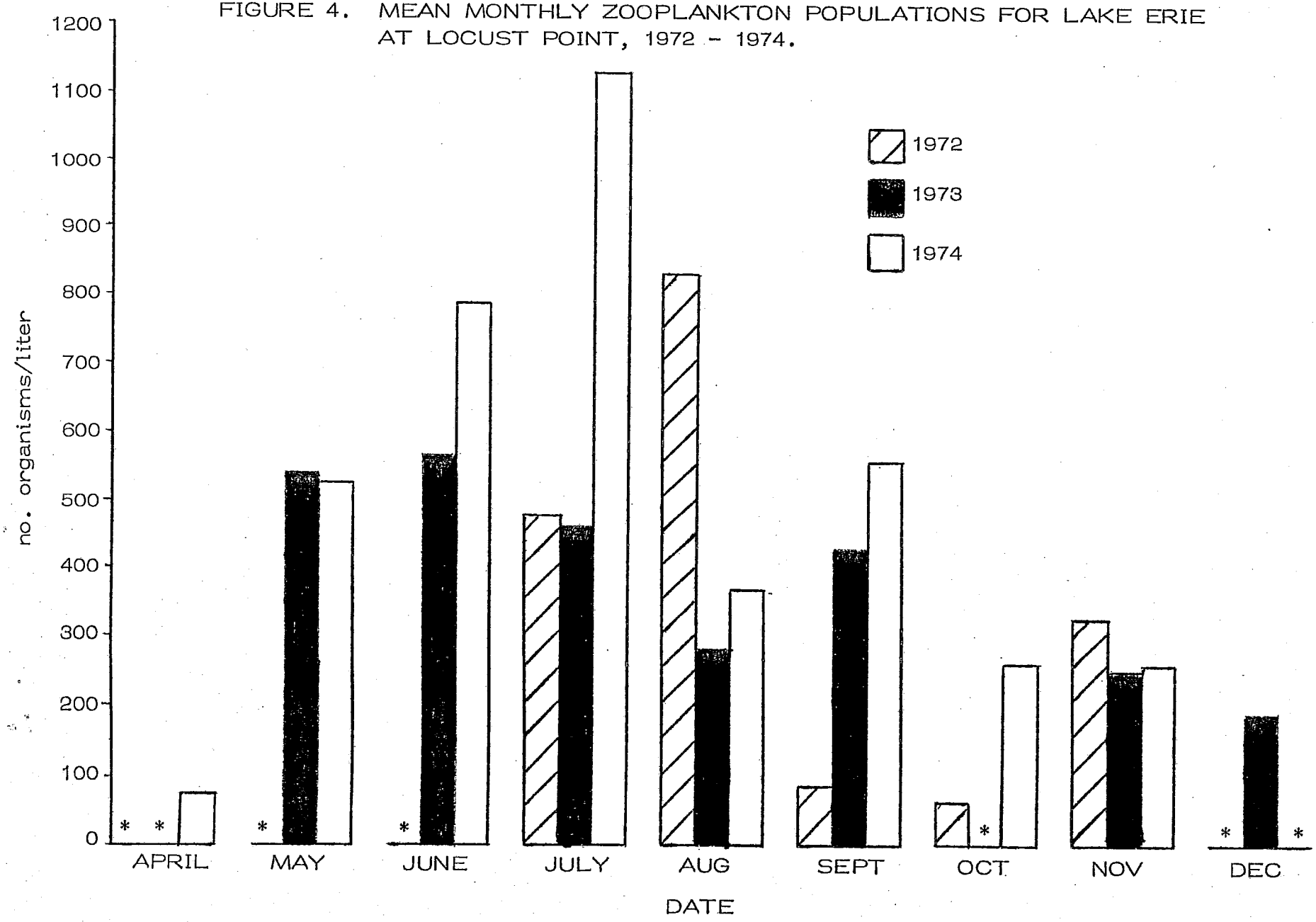
The copepod populations from the 3 years were very similar (Fig. 6). In 1973 and 1974 the peaks were in June. In 1972 the highest population occurred in July. However, no sampling had been done in June 1972, so the peak may have been missed.

Generally the cladocerans had the lowest populations of the 3 groups (Fig. 7). The 1973 populations were the lowest of the 3 years. The 1972 and 1974 populations were very similar.

There are several plausible explanations for the differences described above. Samples in 1972 were collected with a 3-liter Kemmerer water bottle at the surface. In 1973 and 1974 samples were collected by a vertical tow bottom to surface with a Wisconsin plankton net. A brief comparison study in 1973 showed that the vertical tow captured approximately 50 percent more taxa. The stations sampled over the 3 years were similar but not the same. In 1973 the intake and discharge pipelines were being dredged, and in 1972 tropical storm Agnes affected the weather. Also, due to the weather, samples were not collected on the same day of the month each year and were not spaced exactly one month apart. Finally, these samples were collected monthly, and Hubschman (1960) pointed out the tremendous differences which occurred when samples collected every Monday were compared to samples collected every Tuesday. However, monthly samples give an overview and, when done repetitively over a series of years, provide a relatively strong base for predicting trends.

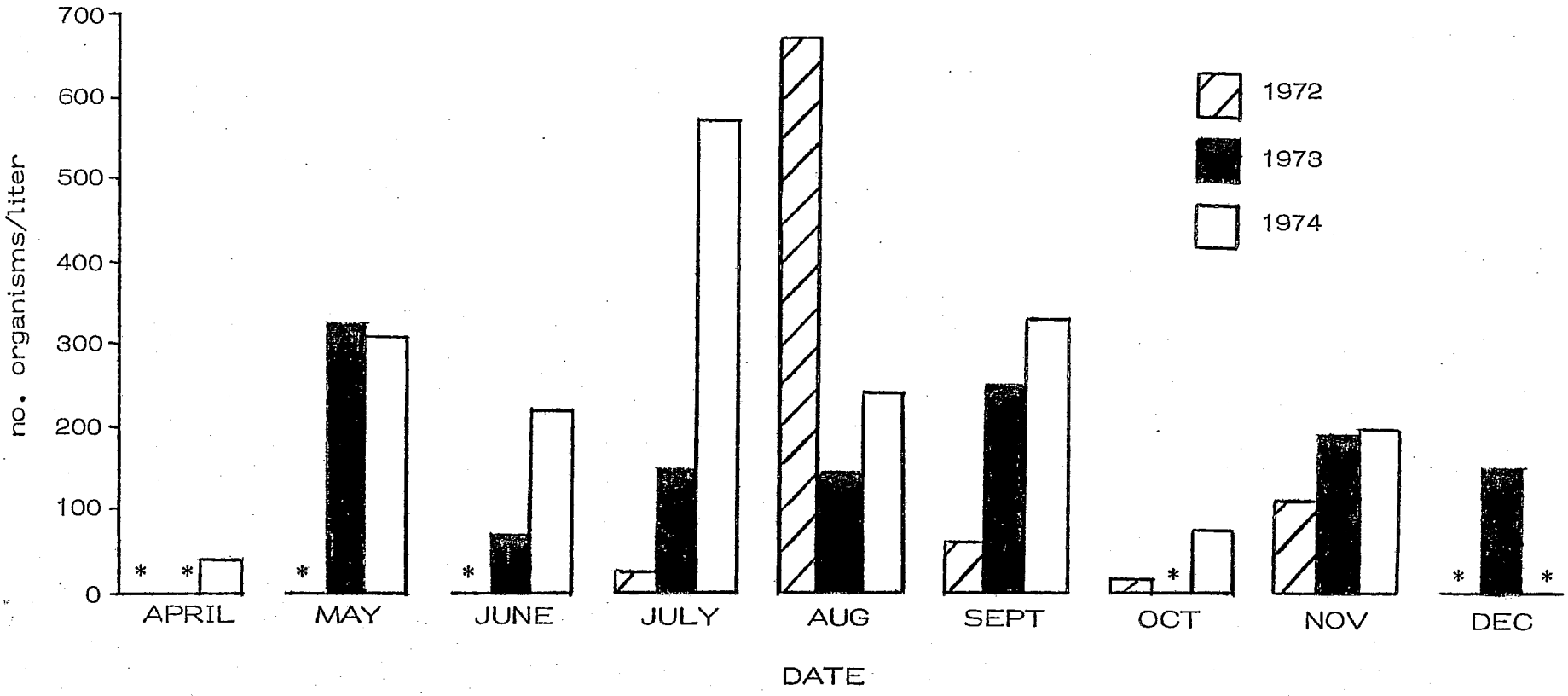
During 6 of the 8 months that were sampled in 1974, the highest populations were found at stations closest to shore. This indicates that the zooplankton populations were probably concentrating at the

FIGURE 4. MEAN MONTHLY ZOOPLANKTON POPULATIONS FOR LAKE ERIE AT LOCUST POINT, 1972 - 1974.



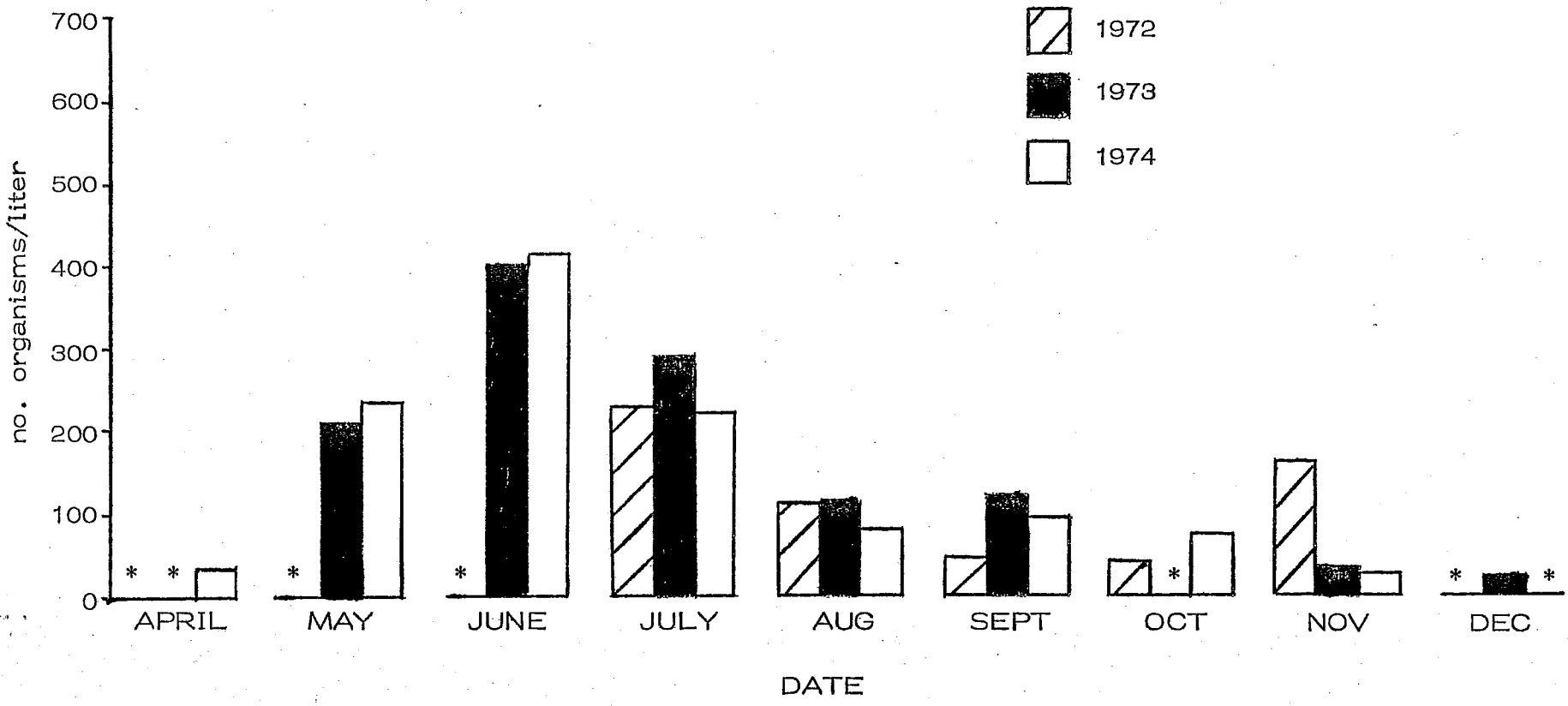
* No samples were collected.

FIGURE 5. MEAN MONTHLY ROTIFER POPULATIONS FOR LAKE ERIE AT LOCUST POINT, 1972 - 1974.



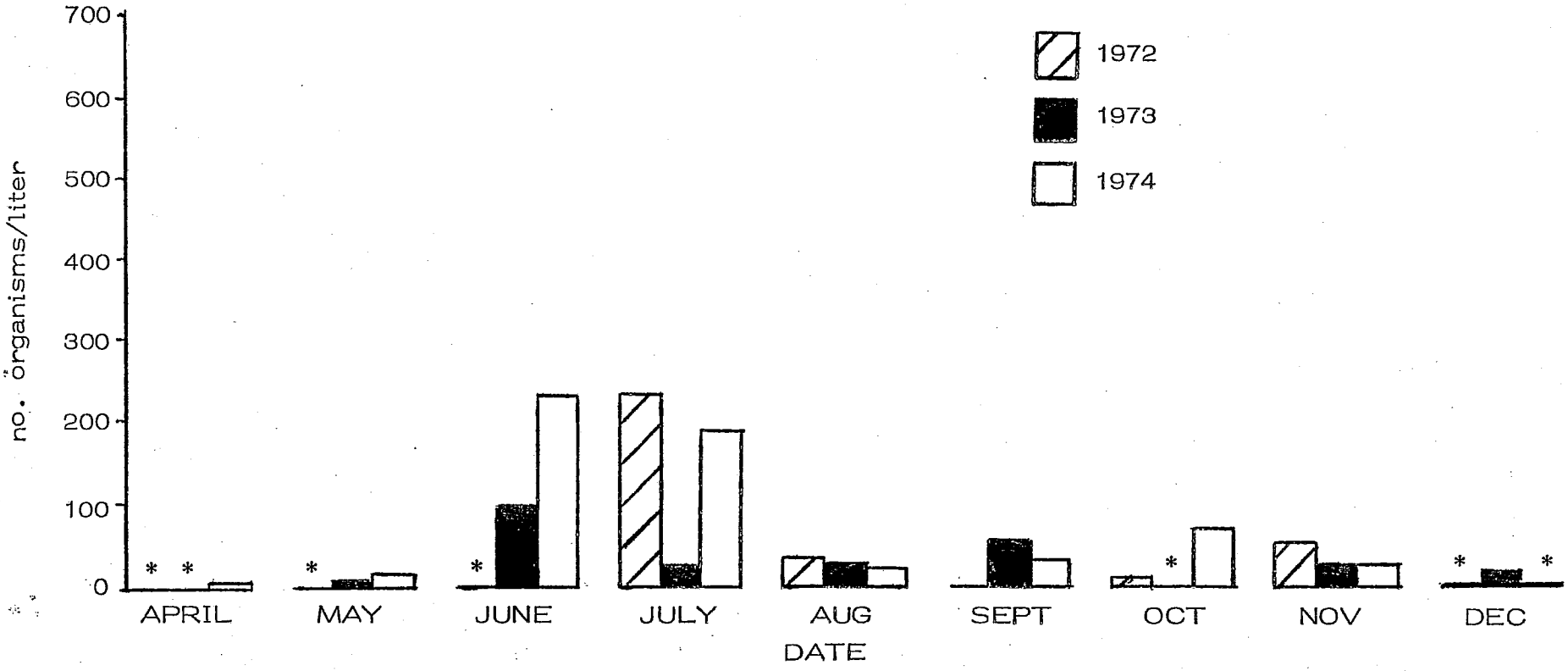
* No samples were collected.

FIGURE 6. MEAN MONTHLY COPEPOD POPULATIONS FOR LAKE ERIE AT LOCUST POINT, 1972 - 1974.



* No samples were collected.

FIGURE 7. MEAN MONTHLY CLADOCERAN POPULATIONS FOR LAKE ERIE AT LOCUST POINT, 1972 - 1974.



* No samples were collected.

surface. Thus, at the deeper stations this surface sample would be diluted by the bottom waters of the vertical tow.

Overall, no populations which could be considered unusual have occurred from 1972 - 1974. The populations of 1974 are probably more representative of a "typical" year, since dredging and storms undoubtedly affected the 1972 and 1973 populations. The data from these years show the magnitude of natural variability in zooplankton populations prior to operation of the power station.

There are always many difficulties involved in the identification of zooplankton. These are compounded when the organisms are preserved. It was especially difficult to identify the soft bodied rotifers. It was often difficult to distinguish between Pompholyx sp., Chromogaster ovalis, and rotifer eggs.

Benthos

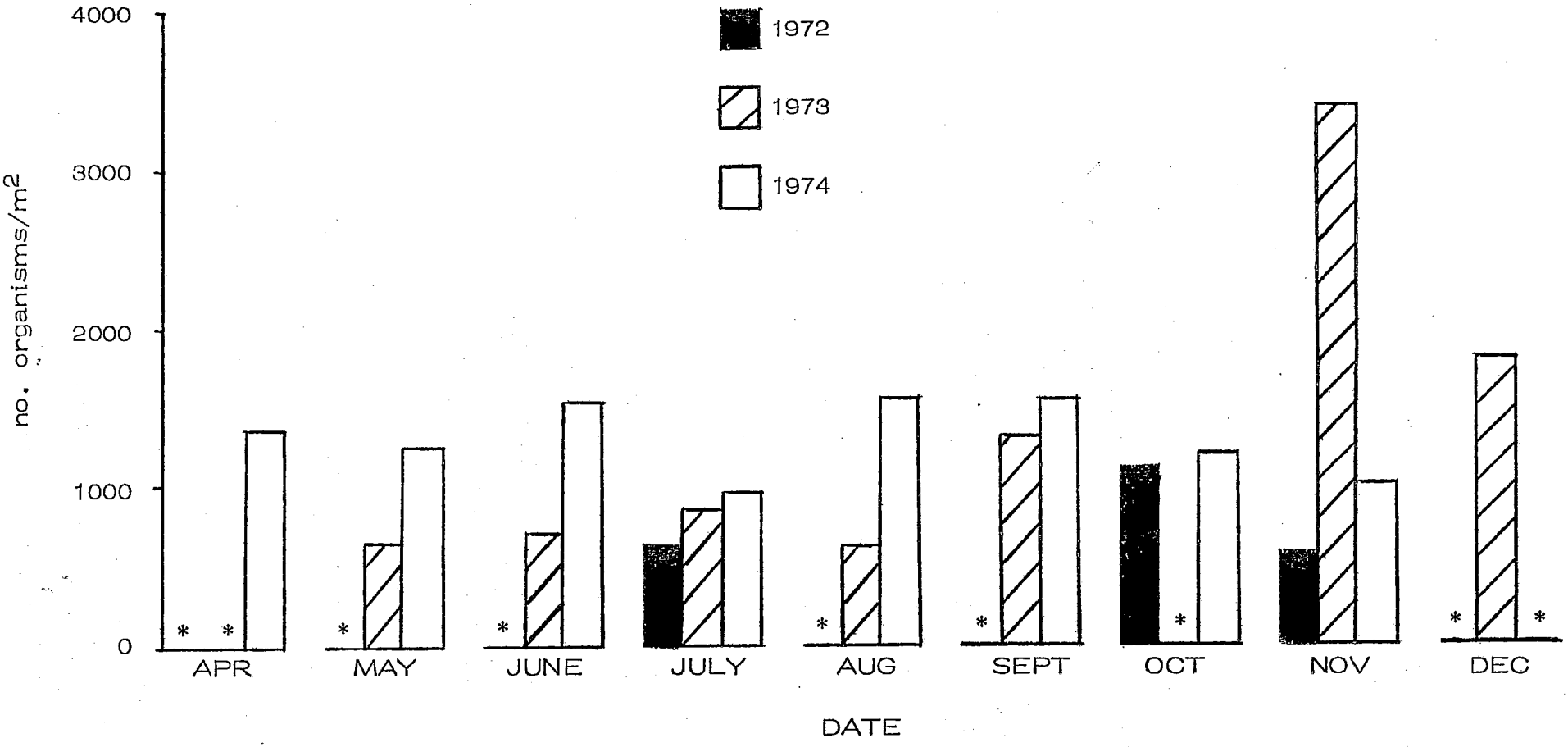
Mean monthly benthic macroinvertebrate populations were relatively stable in 1974 (Fig. 8). With the exception of July, they were slightly higher during the summer months, and, with the exception of November and possibly December, they were higher than those observed in 1972 and 1973. This in itself was a good indication that recolonization after dredging was successful.

The monthly populations were dominated by immature oligochaetes (no hair setae) (Table 7). The only other taxa to occur in large numbers were Leptodora kindtii, Chironomus (chironomus) sp., and Tanytarsus sp. Although the populations were dominated by these four taxa, the other taxa may be more important as indicators of community change since species at the fringe of their tolerance will reflect changes in the environment first.

Oligochaetes (sludge worms) are often used as pollution indicators. However, in this case, they probably indicate an unstable environment rather than polluted (sewage) water. Dredging the intake and discharge pipelines only added to the turbidity and shifting bottom material. To survive in this environment an organism must be able to burrow out when it becomes buried. Hence, a population dominated by oligochaetes and chironomids prevailed.

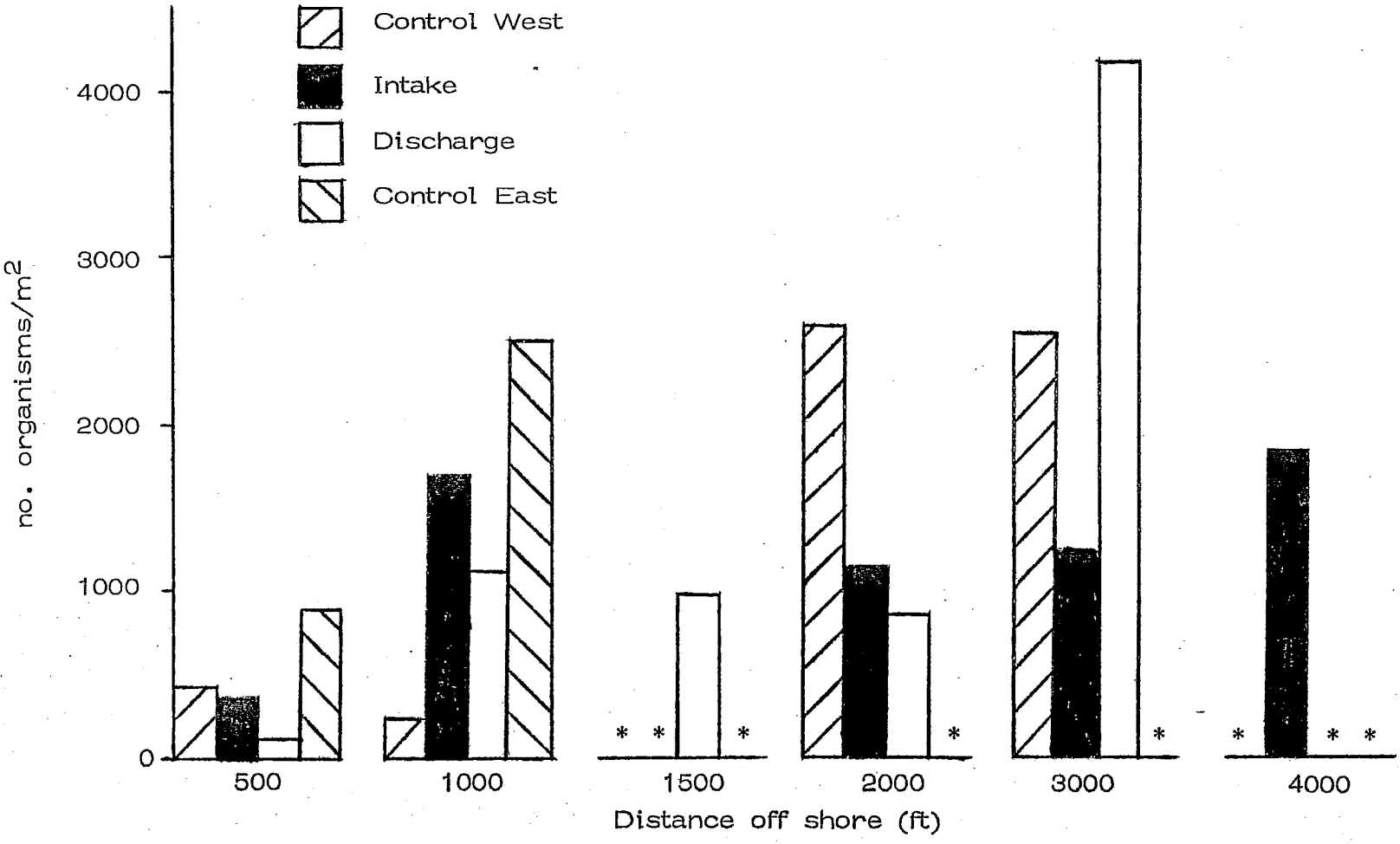
Again, as in 1972 and 1973, a tendency of increasing populations with distance off shore was noted (Fig. 9). The greatest increase occurred when going from 500 to 1000 ft. Once 1000 ft off shore, there was little change in populations along the control west and intake transects as one progressed to the end. However, a tremendous

FIGURE 8. MEAN MONTHLY BENTHIC MACROINVERTEBRATE POPULATIONS FOR LAKE ERIE AT LOCUST POINT, 1972 - 1974.



* No samples were collected.

FIGURE 9. MEAN BENTHIC MACROINVERTEBRATE POPULATIONS AT VARIOUS DISTANCES OFF SHORE ALONG THE FOUR SAMPLING TRANSECTS - 1974.



* No sampling station at this distance off shore on this transect.

increase was noted on the discharge transect at Station 14, 3000 ft off shore. Populations at Stations 12 and 13, 1500 and 2000 ft off shore, respectively, were probably inhibited due to dredging activities. The same thing, although to a lesser degree, was noted at Stations 7 and 8, 2000 ft and 3000 ft off shore, respectively, along the intake transect.

As with the plankton, nothing out of the ordinary for western Lake Erie was observed in the benthos results.

Fish

In 1973, 5300 fish were captured for the monitoring program. During the first half of 1974, 6,098 fish were captured. From July through November an additional 25,315 fish were captured for a total of 31,413 during 1974. The major reasons for this tremendous increase are increased sampling effort and ideal sampling conditions. In 1973, no fry netting was done, gill netting was accomplished on 5 dates instead of 8 as in 1974, trawling was done on 5 dates, fishing in the marsh was done only once, and shore seining was done 4 times and only once from Station 24 where the catch in 1974 was greatest. In 1973, foul weather conditions often forced us off the lake, while 1974 we were fortunate in to have had no serious setbacks due to weather conditions.

Although the total number of fish captured increased, the number of predators (sport fish) decreased (fry excluded). Yellow perch (Perca flavescens) shows this trend quite well. In 1973, 812 perch were captured using gill nets. In 1974, with 3 more sampling dates, only 345 perch were captured. In 1973, trawling yielded 170 perch. In 1974, again with 3 more sampling dates, 82 perch were captured and 60 of these were young-of-the-year.

Meanwhile, the numbers of the forage species have increased. It is possible that this increase in the forage fish population was brought about by the decrease in the predator population. However, the cause of the low predator populations is not known at this time. It is extremely important to note natural fluctuations of this type prior to discharge so that any fluctuations which may occur after the plant goes into operation are not blamed solely on the power plant.

The gill netting results showed that approximately 50 percent more fish were captured at Station 12 than at Station 8 (Tables 10 and 11). In 1973, the populations were quite similar with 1334 from Station 12 and 1262 from Station 8.

Shore seining revealed Station 24 to be the most populous station (Tables 12 - 16). This was undoubtedly due to the outlet of the marsh control pump being in the vicinity. This should be a warm, nutrient-rich flow. Bits of fish have also been observed in this outflow.

Trawls after the intake was poisoned indicated a complete kill had occurred (Table 18). The commercial toxicant "Noxfish" was used. The entire benthic macroinvertebrate population was also destroyed in the process (Table 8).

July was the last month in which significant numbers of fry were captured (Table 22). However, even the largest value was less than one third of that observed commonly at Sandusky Bay.

Water Quality

Seasonal Variations. The water quality in the vicinity of the Davis-Besse Nuclear Power Station during the period of July through December 1974 was typical for western Lake Erie and showed normal seasonal trends. Water temperature fell 20°C during the 6-month period while the dissolved oxygen level rose 7 ppm (Fig. 10). The high turbulence and sediment load of the lake in early spring improved during the summer as indicated by a 6-fold increase in transparency, a 6-fold decrease in suspended solids, a 6-fold decrease in turbidity and an 8-fold increase in the amount of solar radiation at 1-meter below the surface (Fig. 11). Some decrease in water clarity was noted in the fall and early winter. Biochemical oxygen demand, which is related to the suspended organic material in the water, also showed a marked improvement in the bottom water from April to December.

In a like manner the dissolved substances in the water were highest in the April samples; both conductivity and total dissolved solids showed a significant decrease between April and May but remained fairly stable through the rest of the year (Fig. 12). Specific ions such as calcium and sulfate were also highest in April, whereas other ions such as magnesium, sodium and chloride were fairly stable throughout the year (Fig. 13). The important nutrients, such as nitrate, phosphate and silica, for primary productivity by green algae and diatoms had a peak in the spring and decreased markedly during the summer (Fig. 14). Silica, for example, had a 30-fold decrease in concentration between April and May. Because diatoms utilize silica for their rigid cell walls, the decrease of this substance in the water appears to be related to the spring pulse of the organisms which is also shown on Figure 14. Nitrate showed a build-up in the fall which may have resulted in the increased algal population during that season (Fig. 14).

FIGURE 10. MEAN MONTHLY HYDROGEN ION, TEMPERATURE AND DISSOLVED OXYGEN MEASUREMENTS FOR LAKE ERIE AT LOCUST POINT DURING 1974.

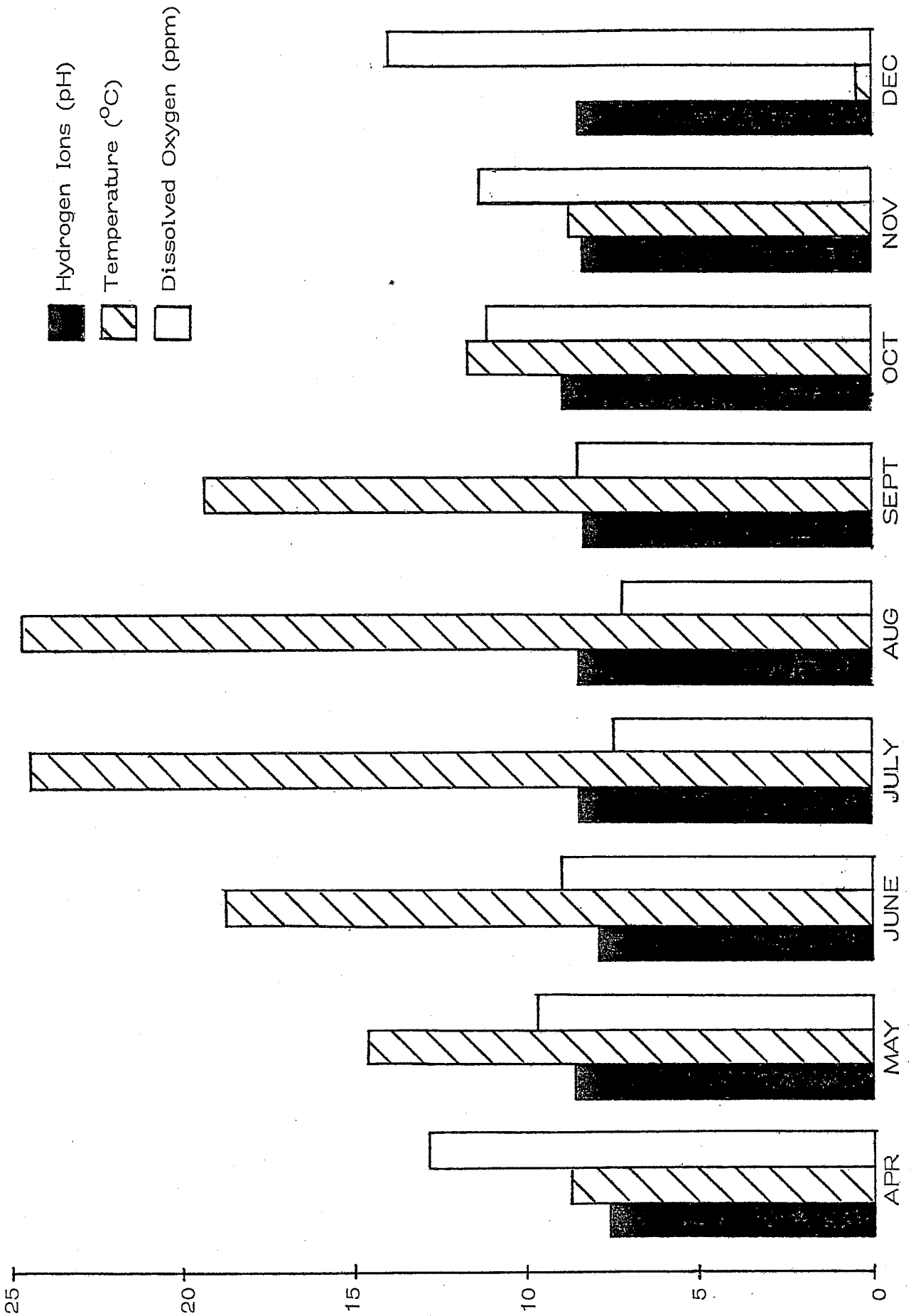


FIGURE 11. MEAN MONTHLY TURBIDITY, SUSPENDED SOLIDS AND TRANSPARENCY MEASUREMENTS FOR LAKE ERIE AT LOCUST POINT DURING 1974.

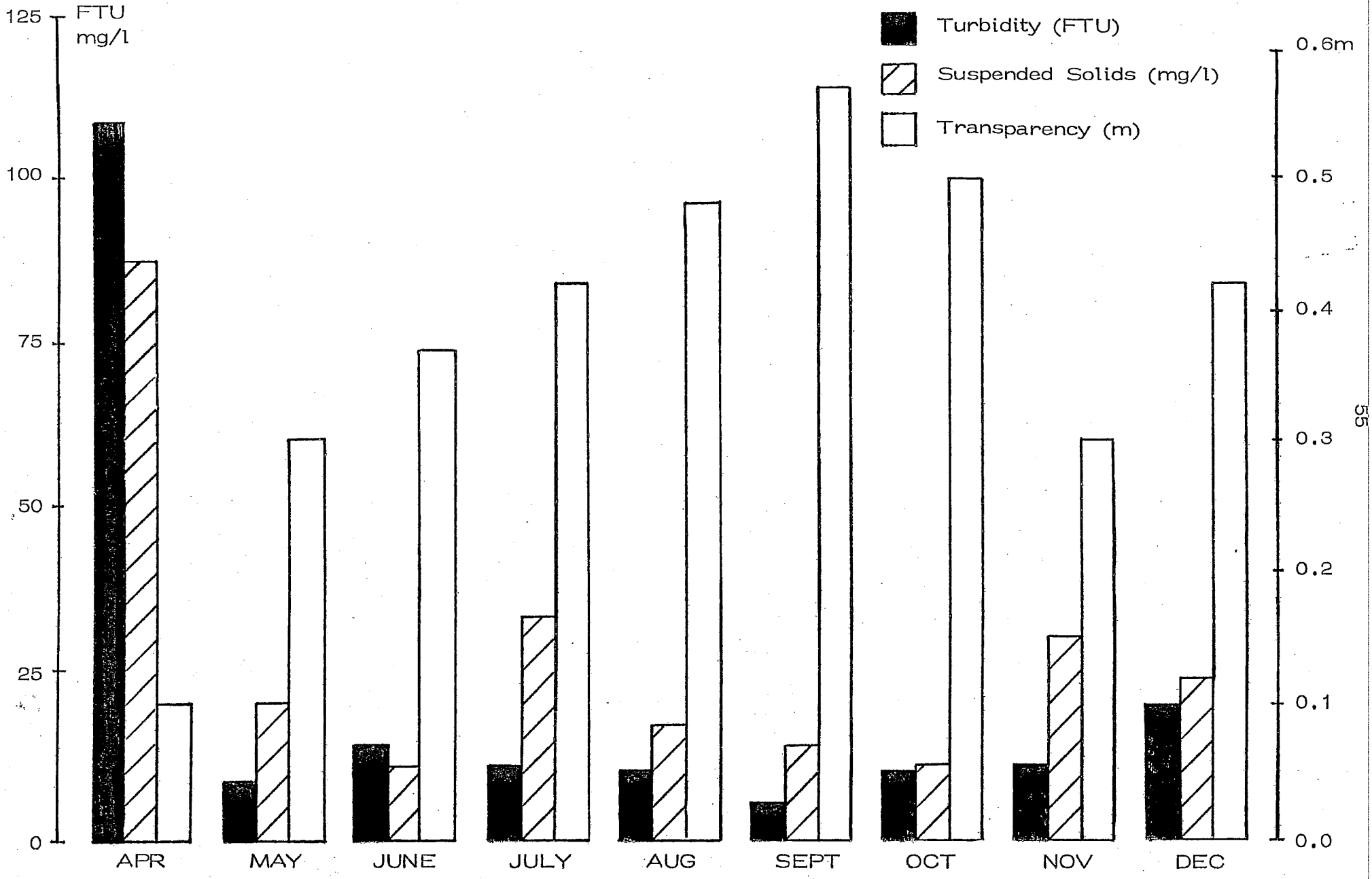
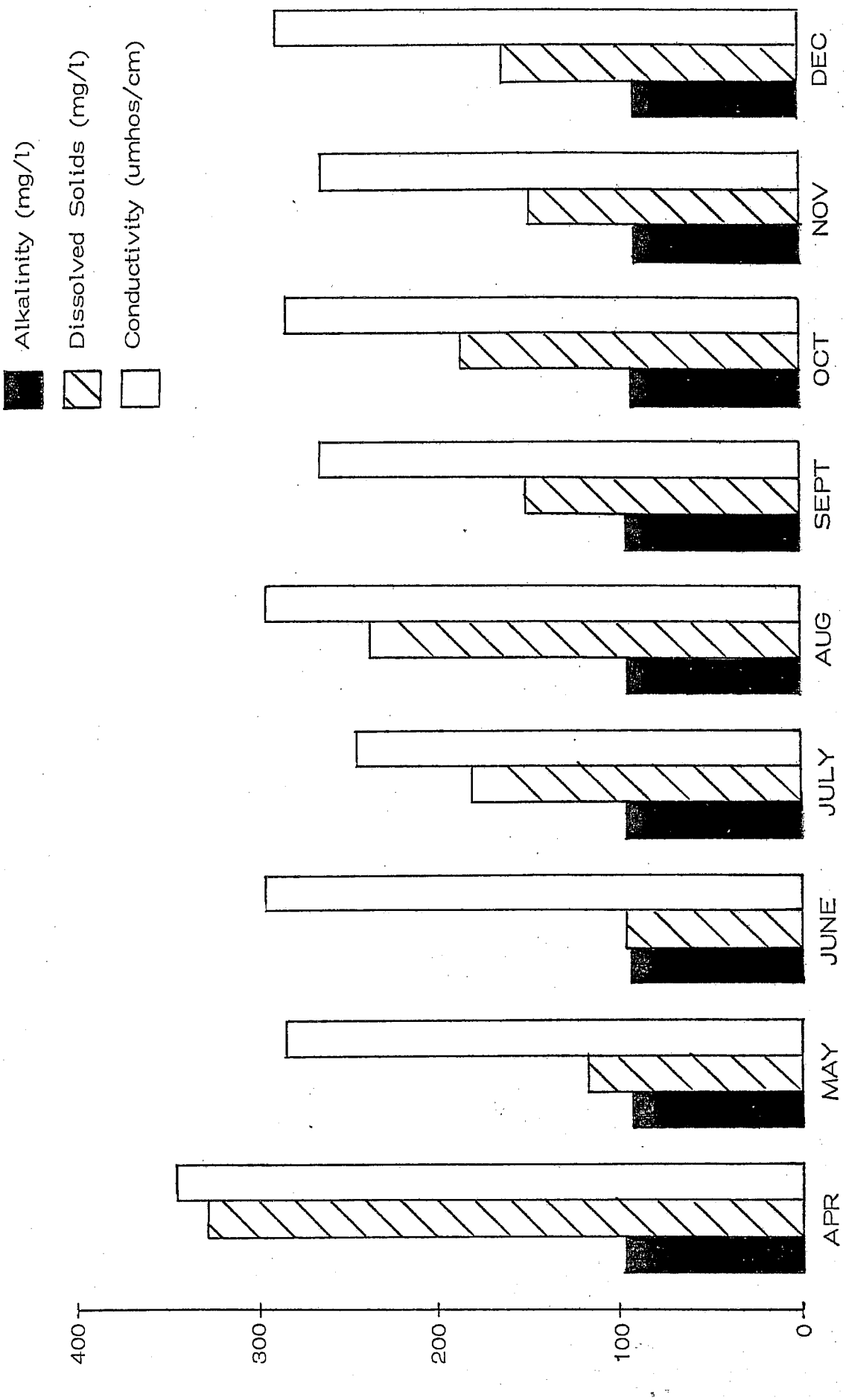


FIGURE 12. MEAN MONTHLY ALKALINITY, DISSOLVED SOLIDS AND CONDUCTIVITY MEASUREMENTS FOR LAKE ERIE AT LOCUST POINT DURING 1974.



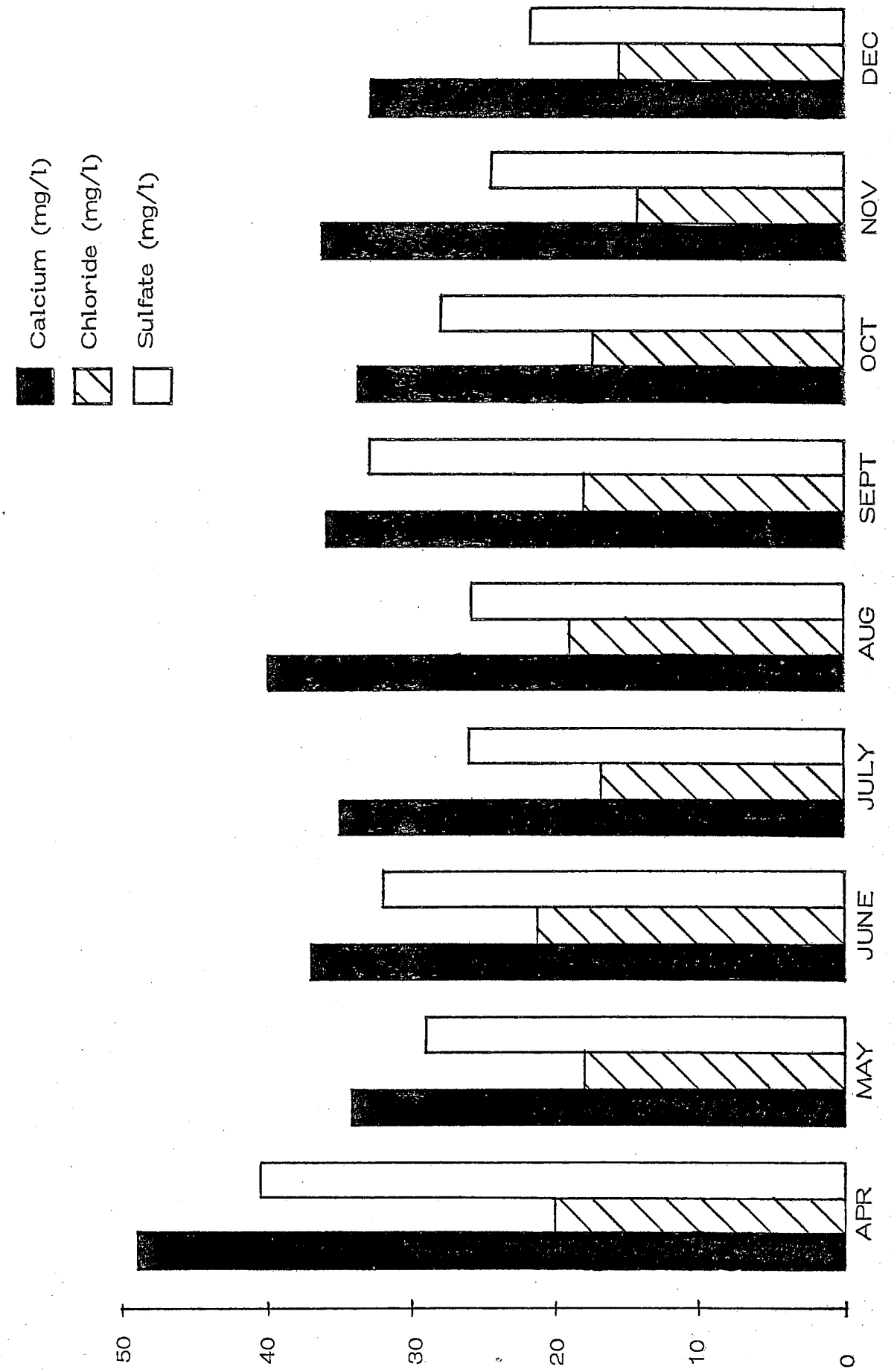
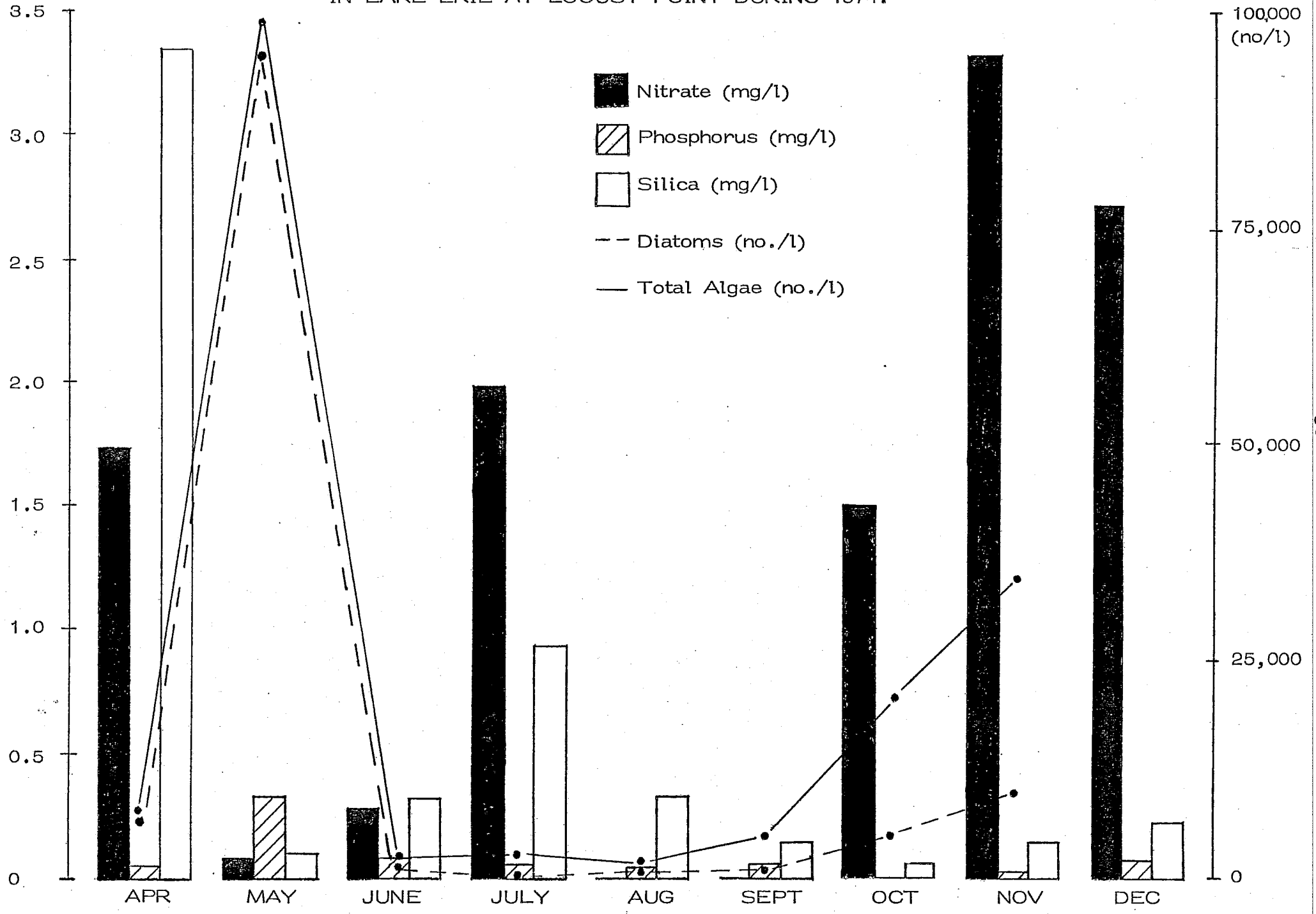


FIGURE 13. MEAN MONTHLY CALCIUM, CHLORIDE AND SULFATE CONCENTRATIONS IN LAKE ERIE AT LOCUST POINT DURING 1974.

FIGURE 14. MEAN MONTHLY NITRATE, PHOSPHORUS AND SILICA CONCENTRATIONS IN LAKE ERIE AT LOCUST POINT DURING 1974.



The alkalinity and pH of the water remained fairly constant throughout the period (Figs. 10 and 12). Lake Erie is primarily a bicarbonate solution with a corresponding moderately alkaline pH of approximately 8. The bicarbonate in the water provides an abundant source of carbon for algae production. The pH showed a slight rise in May and October which may correspond with the algae pulses.

Station Variations. Stations 1, 8 and 12 are located approximately 500, 3,000 and 1,500 feet offshore respectively. Generally a slight temperature decrease was noted in an offshore direction in the spring. More noticeable decreases were found for such parameters as conductivity, most of the specific ions, alkalinity, B.O.D., suspended and dissolved solids, and turbidity in the early part of the year. Conversely, transparency increases away from the shore. Although Station 8 (the farthest offshore) had the best water quality, Station 12 (intermediate offshore) had the poorest quality for some parameters. This may be related to the condition of the lake bottom. Station 1 (nearshore) has a clean sand bottom whereas Station 12 has a recently disturbed mud bottom and is down current from the disturbed bottom along the intake pipeline. The differential in water quality values was greatest in the spring which may have been related to rough weather and leveling attempts along the pipelines. During the summer and fall no significant difference was found between the inshore and offshore stations.

Differences between the surface and bottom water quality were slight because of the shallowness of this portion of Lake Erie. Some depression in the level of dissolved oxygen and small increases in the concentrations of dissolved and suspended solids were noted near the bottom.

Water Quality Trends. The Ohio State University, Center for Lake Erie Area Research initiated water quality studies at Locust Point in July 1972. Trends for eight water quality parameters from that date through December 1974 are shown on Figures 15 - 17. Temperature and dissolved oxygen show typical seasonal trends for each year with only minor variations from one year to the next. Dissolved oxygen appears to have undergone more depletion in 1974 than the two previous years. Hydrogen-ion concentration and alkalinity remained fairly stable over the three-year period. Transparency, turbidity, phosphorus and conductivity values have shown radical variations which are probably due to storms and dredging activities that have disturbed the bottom sediments. In general, no significant deviations from the normal quality of the water in this part of western Lake Erie have been observed in the past three years.

FIGURE 15. TRENDS IN MEAN MONTHLY TEMPERATURE, DISSOLVED OXYGEN, AND HYDROGEN IONS MEASUREMENTS FOR LAKE ERIE AT LOCUST POINT FOR THE PERIOD 1972 - 1974.

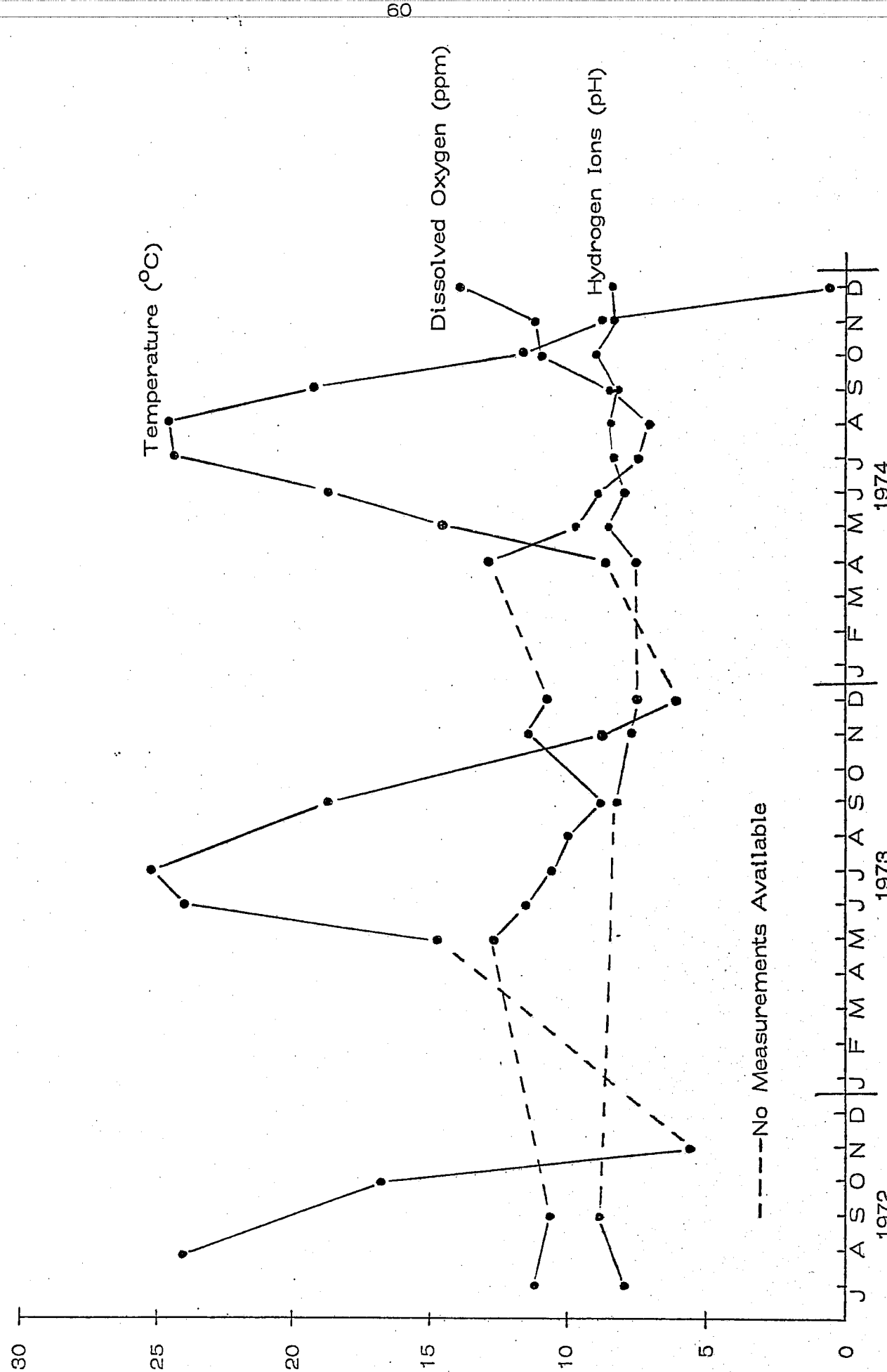


FIGURE 16. TRENDS IN MEAN MONTHLY TRANSPARENCY AND PHOSPHORUS MEASUREMENTS FOR LAKE ERIE AT LOCUST POINT FOR THE PERIOD 1972 - 1974.

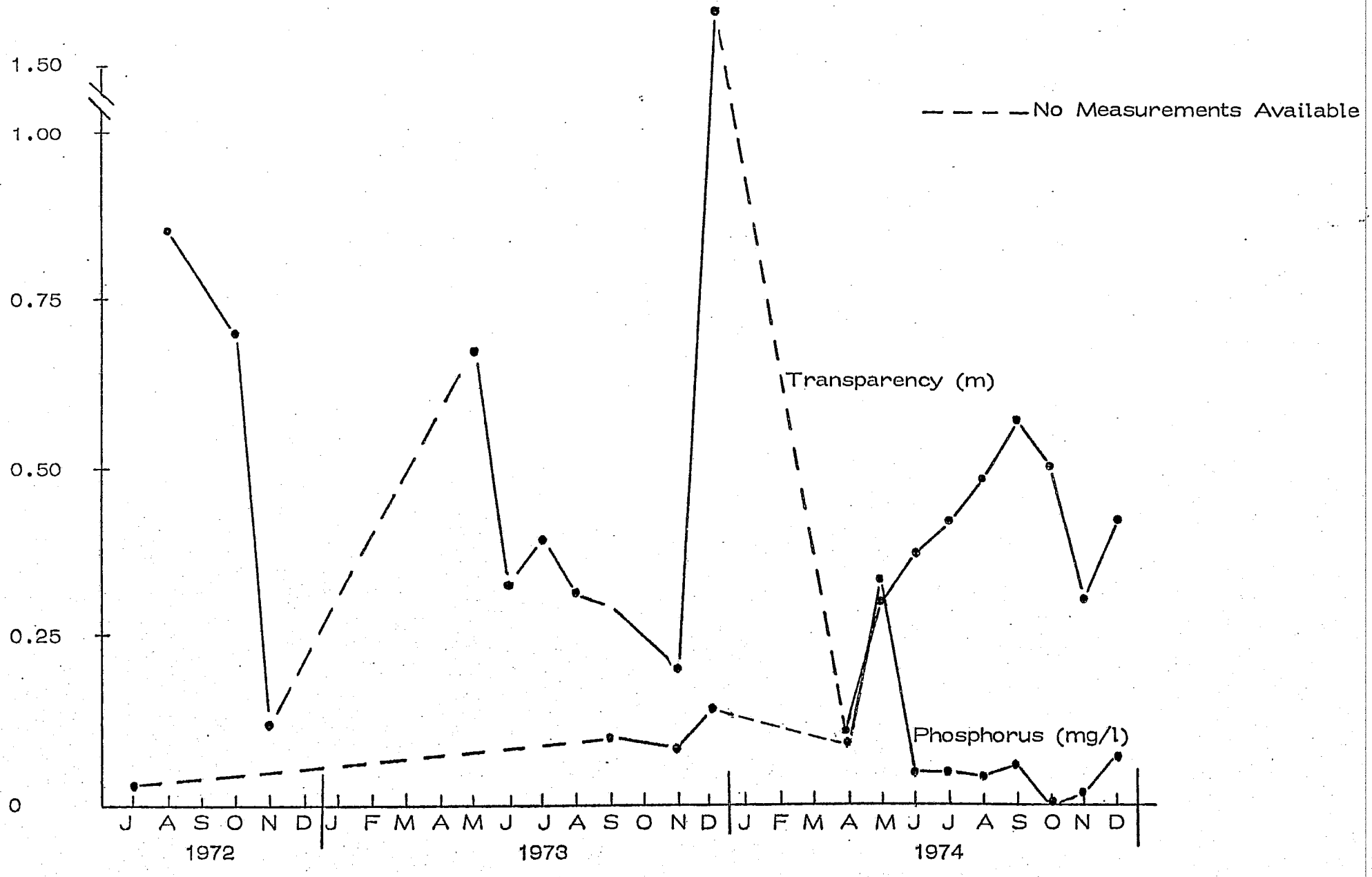
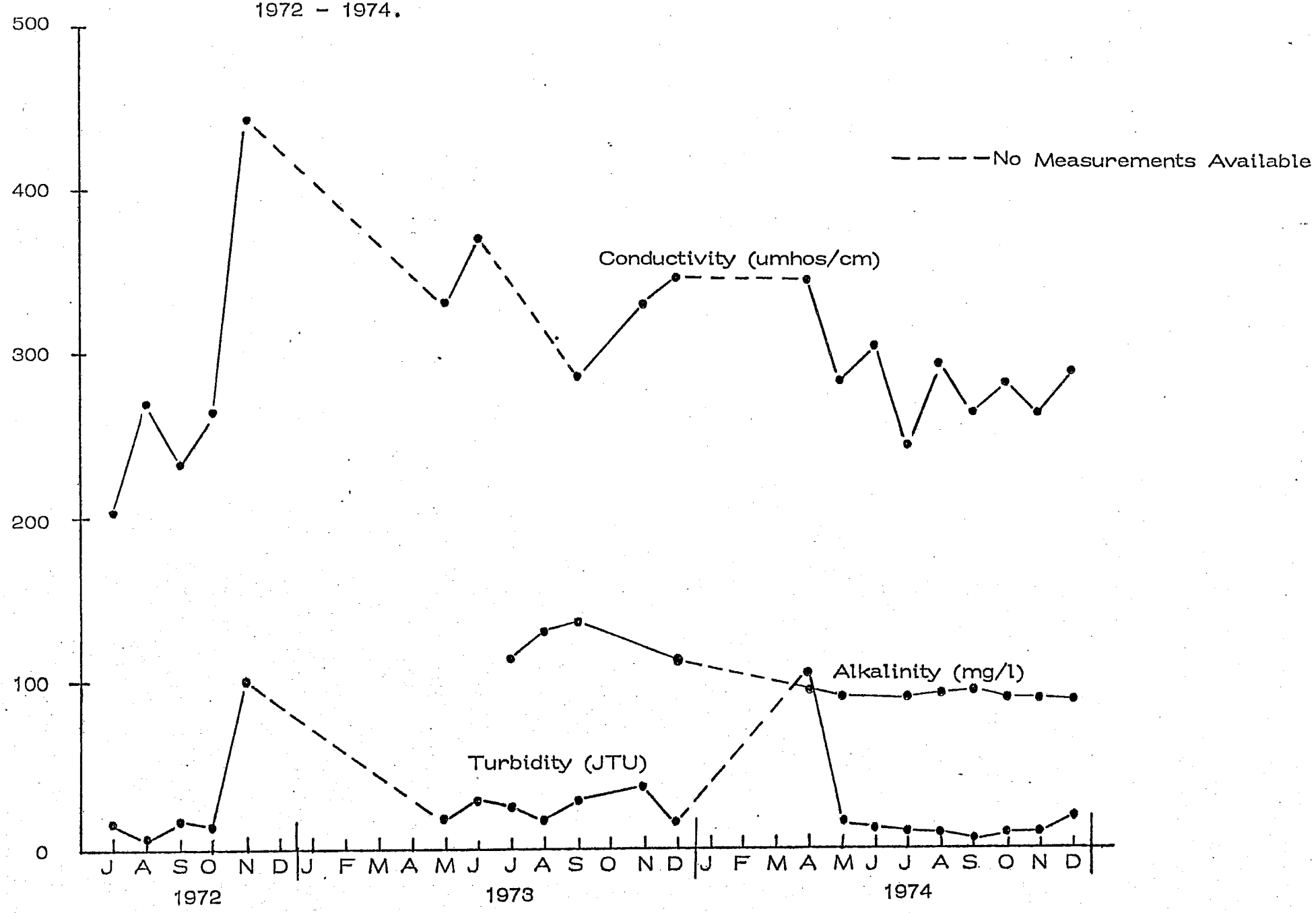


FIGURE 17. TRENDS IN MEAN MONTHLY CONDUCTIVITY, ALKALINITY AND TURBIDITY MEASUREMENTS FOR LAKE ERIE AT LOCUST POINT FOR THE PERIOD 1972 - 1974.



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APPENDIX A

PHYTOPLANKTON POPULATIONS AT LOCUST POINT JULY - NOVEMBER, 1974

TABLE A-1

ANALYSIS OF PHYTOPLANKTON POPULATIONS
AT LOCUST POINT - JULY 17, 1974

TAXA	Station 1		Station 3		Station 6		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
BACILLARIOPHYCEAE (Diatoms)								
Asterionella sp.	37	37			20	20		
Centric diatom								
Cyclotella sp.								
Cymatopleura sp.								
Fragilaria sp.								
Gyrosigma sp.								
Melosira sp.	293	220	126	20				
Naviculoid	37	37	18	18				
Stephanodiscus sp.								
Surirella sp.								
Synedra sp.					20	20		
Tabellaria sp.								
CHLOROPHYCEAE (Green Algae)								
Closteriopsis sp.			19	19				
Coelastrum sp.	147	147	19	19	20	20	140	55
Cosmarium sp.								
Eudorina sp.								
Micractinium sp.								
Mougeotia sp.								
Pandorina sp.	110	110	36		128	89		
Pediastrum sp.	987	37	736	187	1131	39	711	98
Rhizoclonium sp.	37	37						
Scenedesmus sp.								
Spirogyra sp.								
Staurastrum sp.	329	36	54	19	85	46	28	28
Volvox sp.	37	37			20	20		
DINOPHYCEAE (Dinoflagellates)								
Ceratium hirundinella	4168	878	1732	207	1606	865	1435	1435
Glenodinium sp.								
EUGLENOPHYCEAE								
Euglena sp.								
Trachelomonas sp.								
MYXOPHYCEAE (Blue-green algae)								
Anabaena sp.					44	44		
Aphanizomenon sp.								
Chroococcus sp.								
Merismopedia sp.								
Microcystis sp.					20	20		
Unidentified Bacteria								
Unidentified Phytoplankter								
TOTAL	6178	548	2737	43	3198	1092	2313	446

S.D. = Standard Deviation
Data presented as number/liter.

TABLE A-1 CONT.

ANALYSIS OF PHYTOPLANKTON POPULATIONS
AT LOCUST POINT - JULY 17, 1974

TAXA	Station 9		Station 10		Station 12		Station 13	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
BACILLARIOPHYCEAE (Diatoms)								
Asterionella sp.	14	14	53	53				
Centric diatom			107	107				
Cyclotella sp.					20	20		
Cymatopleura sp.								
Fragilaria sp.								
Gyrosigma sp.								
Melosira sp.	28	28	958	107	642	369	176	59
Naviculoid	42	14						
Stephanodiscus sp.								
Surirella sp.								
Synedra sp.								
Tabellaria sp.			53	53				
CHLOROPHYCEAE (Green Algae)								
Closterioopsis sp.								
Coelastrum sp.	28	0	213	213			20	20
Cosmarium sp.								
Eudorina sp.	14	14	266	266	233	194	98	98
Micractinium sp.								
Mougeotia sp.								
Pandorina sp.	14	14						
Pediastrum sp.	919	139	639	107	1053	117	871	169
Rhizoclonium sp.								
Scenedesmus sp.							39	0
Spirogyra sp.								
Staurastrum sp.	56	28	53	53	153	114	78	0
Volvox sp.								
DINOPHYCEAE (Dinoflagellates)								
Ceratium hirundinella	809	167	2022	319	3441	867	800	176
Glenodinium sp.					431	314	20	20
EUGLENOPHYCEAE								
Euglena sp.								
Trachelomonas sp.								
MYXOPHYCEAE (Blue-green algae)								
Anabaena sp.					20	20		
Aphanizomenon sp.			1863	905	305	227		
Chroococcus sp.					413	94	20	20
Merismopedia sp.					27	27		
Microcystis sp.	42	14	160	24	119	41	20	20
Unidentified Bacteria								
Unidentified Phytoplankter			266	266				
TOTAL	1980	28	6650	374	6855	2136	2139	501

S.D. = Standard Deviation
Data presented as number/liter.

TABLE A-1 CONT.

ANALYSIS OF PHYTOPLANKTON POPULATIONS
AT LOCUST POINT - JULY 17, 1974

TAXA	Station 14		Station 18		Station 19		Mean # per
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Sta. Sampled
BACILLARIOPHYCEAE (Diatoms)							
Asterionella sp.							11
Centric diatom							10
Cyclotella sp.							2
Cymatopleura sp.							
Fragilaria sp.							
Gyrosigma sp.			22	22			2
Melosira sp.	137	49	260	130			238
Naviculoid							9
Stephanodiscus sp.	16	16					1
Surirella sp.			44	44			4
Synedra sp.							2
Tabellaria sp.	16	16					6
CHLOROPHYCEAE (Green Algae)							
Closterioosis sp.							2
Coelastrum sp.	59	59	22	22			62
Cosmarium sp.	44	15					4
Eudorina sp.	15	15	44	44			61
Micractinium sp.							
Mougeotia sp.							
Pandorina sp.							26
Pediastrum sp.	864	248	585	65	14	14	774
Rhizoclonium sp.							3
Scenedesmus sp.	15	15	22	22			7
Spirogyra sp.							
Staurastrum sp.	45	14	22	22			82
Volvox sp.							3
DINOPHYCEAE (Dinoflagellates)							
Ceratium hirundinella	2145	1190	1127	174	42	14	1757
Glenodinium sp.							41
EUGLENOPHYCEAE							
Euglena sp.							
Trachelomonas sp.			44	44			4
MYXOPHYCEAE (Blue-green algae)							
Anabaena sp.	15	15					7
Aphanizomenon sp.	29	29	44	44			204
Chroococcus sp.	44	44	195	195			61
Merismopedia sp.							2
Microcystis sp.			65	22			39
Unidentified Bacteria							
Unidentified Phytoplankter			22	22			26
TOTAL	3440	1532	2513	432	56	0	3460

S.D. = Standard Deviation
Data presented as number/liter.

TABLE A-2

ANALYSIS OF PHYTOPLANKTON POPULATIONS AT LOCUST POINT - AUGUST 22, 1974

TAXA	Station 1		Station 3		Station 6		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
BACILLARIOPHYCEAE (Diatoms)								
Asterionella sp.			18	18				
Centric diatom								
Cyclotella sp.								
Cymatopleura sp.					22	22	14	14
Fragilaria sp.			53	53			27	0
Gyrosigma sp.			18	18				
Melosira sp.	531	0	461	36	894	17	780	9
Naviculoid	53	53			22	22	14	14
Stephanodiscus sp.								
Surirella sp.								
Synedra sp.								
Tabellaria sp.					22	22		
CHLOROPHYCEAE (Green Algae)								
Closteriopsis sp.								
Coelastrum sp.			18	18	22	22	27	0
Cosmarium sp.								
Eudorina sp.	160	54			44	44	40	40
Micractinium sp.								
Mougeotia sp.					22	22		
Pandorina sp.								
Pediastrum sp.	319	213	586	231	525	178	538	21
Rhizoclonium sp.								
Scenedesmus sp.								
Spirogyra sp.								
Staurastrum sp.	213	0	106	71	59	59	109	109
Volvox sp.								
DINOPHYCEAE (Dinoflagellates)								
Ceratium hirundinella			53	18	22	22	14	14
Glenodinium sp.								
EUGLENOPHYCEAE								
Euglena sp.								
Trachelomonas sp.								
MYXOPHYCEAE (Blue-green algae)								
Anabaena sp.	53	53						
Aphanizomenon sp.								
Chroococcus sp.	107	107			29	29		
Merismopedia sp.								
Microcystis sp.	53	53	18	18	22	22		
Unidentified Bacteria								
Unidentified Phytoplankter								
TOTAL	1393	12	1329	408	1680	75	1562	71

S.D. = Standard Deviation

Data presented as number/liter.

TABLE A-2 CONT.

ANALYSIS OF PHYTOPLANKTON POPULATIONS
AT LOCUST POINT - AUGUST 22, 1974

TAXA	Station 9		Station 10		Station 12		Station 13	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
BACILLARIOPHYCEAE (Diatoms)								
Asterionella sp.								
Centric diatom								
Cyclotella sp.								
Cymatopleura sp.					31	31		
Fragilaria sp.					28	28	57	57[a]
Gyrosigma sp.			53	53				
Melosira sp.	997	87	404	85	1109	62	755	113
Naviculoid	13	13			31	31	38	38
Stephanodiscus sp.								
Surirella sp.								
Synedra sp.								
Tabellaria sp.								
CHLOROPHYCEAE (Green Algae)								
Closteriopsis sp.								
Coelastrum sp.	42	16	53	53	31	31	57	57
Cosmarium sp.								
Eudorina sp.	41	12	514	124	112	112	94	19
Micractinium sp.								
Mougeotia sp.								
Pandorina sp.								
Pediastrum sp.	487	59	603	178	871	132	623	132
Rhizoclonium sp.								
Scenedesmus sp.			102	4				
Spirogyra sp.								
Staurastrum sp.	67	38	147	147	31	31	57	19
Volvox sp.	13	13						
DINOPHYCEAE (Dinoflagellates)								
Ceratium hirundinella	54	25	49	49				
Glenodinium sp.								
EUGLENOPHYCEAE								
Euglena sp.								
Trachelomonas sp.								
MYXOPHYCEAE (Blue-green algae)								
Anabaena sp.					31	31		
Aphanizomenon sp.								
Chroococcus sp.	15	15						
Merismopedia sp.								
Microcystis sp.			53	53				
Unidentified Bacteria								
Unidentified Phytoplankter								
TOTAL	1727	42	1977	171	2274	178	1679	18

S.D. = Standard Deviation
Data presented as number/liter.

TABLE A-2 CONT.

ANALYSIS OF PHYTOPLANKTON POPULATIONS
AT LOCUST POINT - AUGUST 22, 1974

TAXA	Station 14		Station 18		Station 19		Mean # per Sta. Sampled
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
BACILLARIOPHYCEAE (Diatoms)							
Asterionella sp.							2
Centric diatom							
Cyclotella sp.							
Cymatopleura sp.							6
Fragilaria sp.	61	1					21
Gyrosigma sp.							6
Melosira sp.	791	71	1124	130	59	20	719
Naviculoid							16
Stephanodiscus sp.							
Surirella sp.							
Synedra sp.							
Tabellaria sp.							2
CHLOROPHYCEAE (Green Algae)							
Closteriopsis sp.							25
Coelastrum sp.			21	21			
Cosmarium sp.							
Eudorina sp.	46	15	105	63	20	20	107
Micractinium sp.							
Mougeotia sp.							2
Pandorina sp.							
Pediastrum sp.	364	87	919	209	293	20	557
Rhizoclonium sp.							
Scenedesmus sp.							9
Spirogyra sp.							
Staurastrum sp.	77	47	84	42	39	0	90
Volvox sp.	15	15					3
DINOPHYCEAE (Dinoflagellates)							
Ceratium hirundinella							17
Glenodinium sp.							
EUGLENOPHYCEAE							
Euglena sp.							
Trachelomonas sp.							
MYXOPHYCEAE (Blue-green algae)							
Anabaena sp.							8
Aphanizomenon sp.							
Chroococcus sp.							14
Merismopedia sp.							
Microcystis sp.							13
Unidentified Bacteria							
Unidentified Phytoplankter							
TOTAL	1353	3	2252	79	410	20	1603

S.D. = Standard Deviation
Data presented as number/liter.

TABLE A-3

ANALYSIS OF PHYTOPLANKTON POPULATIONS AT LOCUST POINT - SEPTEMBER 10, 1974

TAXA	Station 1		Station 3		Station 6		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
BACILLARIOPHYCEAE (Diatoms)								
Asterionella sp.								
Centric diatom								
Cyclotella sp.	81	81	29	29	44	44		
Cymatopleura sp.								
Fragilaria sp.	93	13	40	2	67	22	12	12
Gyrosigma sp.								
Melosira sp.	1097	352	477	137	807	42	512	187
Naviculoid	53	53			63	28	33	33
Stephanodiscus sp.								
Surirella sp.								
Synedra sp.	40	40			18	18		
Tabellaria sp.								
Unidentified Diatom								
CHLOROPHYCEAE (Green Algae)								
Actinastrum sp.	20	20			9	9	19	19
Ankistrodesmus sp.								
Binuclearia sp.			23	6	33	2		
Chlamydomonas sp.								
Closteriopsis sp.								
Closterium sp.	241	241	50	50	265	265	190	190
Coelastrum sp.	107	107	52	24	36	36	69	4
Cosmarium sp.								
Crucigenia sp.								
Cruciniginia sp.								
Dictyosphaerium sp.					9	9		
Dimorphococcus sp.								
Eudorina sp.					9	9	39	27
Lagerheimia sp.								
Micractinium sp.								
Mougeotia sp.	1137	392	491	151	851	86	1296	516
Oocystis sp.								
Pandorina sp.	242	242	41	3	62	62	43	43
Pediastrum sp.	1876	147	1148	135	1568	188	1204	424
Platydorina sp.								
Rhizoclonium sp.								
Scenedesmus sp.	73	33	7	7	27	27	37	37
Selenastrum sp.								
Spirogyra sp.								
Staurastrum sp.	133	27	15	15	112	24	75	10
Ulothrix sp.								
Volvox sp.								
CHRYSOPHYCEAE								
Dinobryon sp.								
DINOPHYCEAE (Dinoflagellates)								
Ceratium hirundinella	93	13	21	21	18	18		
Glenodinium sp.								
Peridinium sp.	60	60			9	9	6	6
EUGLENOPHYCEAE								
Euglena sp.			7	7				
Trachelomonas sp.								
MYXOPHYCEAE (Blue-green algae)								
Anabaena sp.	40	40	26	12	9	9	43	43
Aphanizomenon sp.	1609	443	1255	28	1515	165	1708	80
Chroococcus sp.	181	181	21	21	44	44	25	25
Merismopedia sp.								
Microcystis sp.	583	583	190	152	346	256	220	220
Spirulina sp.								
Unidentified Bacteria								
Unidentified Phytoplankter								
TOTAL	7755	2334	3891	401	5917	891	5528	1755

S.D. = Standard Deviation

Data presented as number/liter.

TABLE A-3 CONT.

ANALYSIS OF PHYTOPLANKTON POPULATIONS AT LOCUST POINT - SEPTEMBER 10, 1974

TAXA	Station 9		Station 10		Station 12		Station 13	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
BACILLARIOPHYCEAE (Diatoms)								
Asterionella sp.			22	22				
Centric diatom								
Cyclotella sp.	6	6	44	44	77	77	71	71
Cymatopleura sp.								
Fragilaria sp.	26	4			10	10	94	31
Gyrosigma sp.			22	22			21	21
Melosira sp.	401	116	1747	243	915	355	837	127
Naviculoid	11	11	125	8	29	29	69	27
Stephanodiscus sp.								
Surirella sp.								
Synedra sp.	11	11			48	48	48	48
Tabellaria sp.	11	11						
Unidentified Diatom								
CHLOROPHYCEAE (Green Algae)								
Actinastrum sp.	11	11					8	8
Ankistrodesmus sp.								
Binuclearia sp.	11	0	48	40	74	4	24	24
Chlamydomonas sp.			398	398			24	24
Closteriopsis sp.								
Closterium sp.	167	167	376	376	337	337	221	221
Coelastrum sp.	59	27	81	37	55	4	61	19
Cosmarium sp.			22	22				
Crucigenia sp.								
Cruciniginia sp.								
Dictyosphaerium sp.					19	19	24	24
Dimorphococcus sp.								
Eudorina sp.			117	117				
Lagerheimia sp.								
Micractinium sp.								
Mougeotia sp.	1163	131	656	539	1527	127	1129	166
Oocystis sp.								
Pandorina sp.	56	2			39	39	63	63
Pediastrum sp.	1305	237	2312	498	1542	138	1723	33
Platydorina sp.			67	67				
Rhizoclonium sp.								
Scenedesmus sp.			44	44	19	19	61	19
Selenastrum sp.								
Spirogyra sp.								
Staurastrum sp.	61	4	103	15	195	60	56	56
Ulothrix sp.								
Volvox sp.								
CHRYSOPHYCEAE								
Dinobryon sp.								
DINOPHYCEAE (Dinoflagellates)								
Ceratium hirundinella	6	6	22	22	10	10	36	4
Glenodinium sp.								
Peridinium sp.	6	6	44	44			16	16
EUGLENOPHYCEAE								
Euglena sp.	15	15			35	16		
Trachelomonas sp.								
MYXOPHYCEAE (Blue-green algae)								
Anabaena sp.	60	60			19	19	8	8
Aphanizomenon sp.	1341	309	2789	797	1787	347	1666	371
Chroococcus sp.			44	44	19	19	40	40
Merismopedia sp.								
Microcystis sp.	194	194	465	465	234	132	150	150
Spirulina sp.								
Unidentified Bacteria								
Unidentified Phytoplankter								
TOTAL	4917	759	9543	2044	6985	1418	6444	1389

S.D. = Standard Deviation

Data presented as number/liter.

TABLE A-3 CONT.

ANALYSIS OF PHYTOPLANKTON POPULATIONS AT LOCUST POINT - SEPTEMBER 10, 1974

TAXA	Station 14		Station 18		Station 19		Mean # per Sta. Sampled
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
BACILLARIOPHYCEAE (Diatoms)							2
Asterionella sp.							0
Centric diatom							
Cyclotella sp.	31	31	89	89			43
Cymatopleura sp.							0
Fragilaria sp.	63	2	11	11			38
Gyrosigma sp.			27	27			6
Melosira sp.	512	9	738	8	246	102	754
Naviculoid	49	49	44	44			43
Stephanodiscus sp.							0
Surirella sp.							0
Synedra sp.			56	56			20
Tabellaria sp.							1
Unidentified Diatom							
CHLOROPHYCEAE (Green Algae)							
Actinastrum sp.	13	13	22	22			9
Ankistrodesmus sp.							
Binuclearia sp.			21	1	9	3	22
Chlamydomonas sp.							38
Closteriopsis sp.							0
Closterium sp.	252	252	498	498	97	97	245
Coelastrum sp.	51	14	49	5			56
Cosmarium sp.			27	27			4
Crucigenia sp.	13	13	33	33			
Cruciniginia sp.							4
Dictyosphaerium sp.	13	13					6
Dimorphococcus sp.							
Eudorina sp.	17	17	27	27			19
Lagerheimia sp.							
Micractinium sp.							0
Mougeotia sp.	727	207	1151	155	160	46	935
Oocystis sp.							
Pandorina sp.	37	37	122	122			64
Pediastrum sp.	1236	66	1426	11	65	22	1400
Platydorina sp.							6
Rhizoclonium sp.							
Scenedesmus sp.	25	25	22	22			29
Selenastrum sp.							
Spirogyra sp.							0
Staurastrum sp.	106	57	60	7			83
Ulothrix sp.							
Volvox sp.					15	15	1
CHRYSOPHYCEAE							
Dinobryon sp.							
DINOPHYCEAE (Dinoflagellates)							
Ceratium hirundinella	23	11	27	27			23
Glenodinium sp.							0
Peridinium sp.			11	11			14
EUGLENOPHYCEAE							
Euglena sp.			27	27			8
Trachelomonas sp.							0
MYXOPHYCEAE (Blue-green algae)							
Anabaena sp.	43	43					23
Aphanizomenon sp.	929	104	1726	730	693	9	1547
Chroococcus sp.			133	133			46
Merismopedia sp.							0
Microcystis sp.	123	123	310	310	103	103	265
Spirulina sp.							
Unidentified Bacteria							0
Unidentified Phytoplankter							0
TOTAL	4258	864	6638	2074	1385	352	5751

S.D. = Standard Deviation

Data presented as number/liter.

TABLE A-4

ANALYSIS OF PHYTOPLANKTON POPULATIONS AT LOCUST POINT ST OCTOBER 9, 1974

TAXA	Station 1		Station 3		Station 6		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
BACILLARIOPHYCEAE (Diatoms)								
Asterionella sp.	117	0	71	0	26	26	83	65
Centric diatom	29	29	36	36	64	64	45	45
Cyclotella sp.								
Cymatopleura sp.			9	9	13	13		
Fragilaria sp.	530	179	241	170	298	242	497	94
Gyrosigma sp.								
Melosira sp.	7636	441	3775	229	3332	491	2705	221
Naviculoid	177	60	18	18	67	11	9	9
Stephanodiscus sp.	2273	150	1086	58	1472	222	1564	134
Surirella sp.					13	13		
Synedra sp.			18	18	13	13	9	9
Tabellaria sp.			54	18	26	26	46	9
Unidentified Diatom			18	18			125	125
CHLOROPHYCEAE (Green Algae)								
Actinastrum sp.	59	59	45	45	64	64	45	45
Ankistrodesmus sp.	29	29	81	81	39	39	18	18
Binuclearia sp.	793	93	194	57	224	33	187	11
Chlamydomonas sp.								
Closteriopsis sp.	295	295	54	54	282	282	125	125
Closterium sp.			9	9	26	26	18	18
Coelastrum sp.	117	0			41	15	27	27
Cosmarium sp.	59	59						
Crucigenia sp.	59	59	9	9	26	26	9	9
Cruciniginia sp.								
Dictyosphaerium sp.	236	236	72	72	141	141	63	63
Dimorphococcus sp.			9	9	13	13	27	27
Eudorina sp.					28	28		
Lagerheimia sp.								
Micractinium sp.	59	59	27	27	26	26	18	18
Mougeotia sp.	6201	817	2210	685	4681	859	3233	307
Oocystis sp.	29	29	27	27	90	90	9	9
Pandorina sp.	59	59	36	36	28	28	74	74
Pediastrum sp.	3115	423	1594	69	2399	449	1759	296
Platydorina sp.								
Rhizoclonium sp.								
Scenedesmus sp.	118	118	36	0	77	77	82	28
Selenastrum sp.								
Spirogyra sp.								
Staurastrum sp.	148	148	54	54	80	24	72	1
Ulothrix sp.								
Volvox sp.			72	72	141	141	81	44
CHRYSOPHYCEAE								
Dinobryon sp.							9	9
DINOPHYCEAE (Dinoflagellates)								
Ceratium hirundinella					13	13	9	9
Glenodinium sp.								
Peridinium sp.								
EUGLENOPHYCEAE								
Euglena sp.								
Trachelomonas sp.								
MYXOPHYCEAE (Blue-green algae)								
Anabaena sp.	382	87	45	45	118	62	45	45
Aphanizomenon sp.	15045	2353	2148	623	5041	3091	3697	771
Chroococcus sp.	59	59	27	27			9	9
Merismopedia sp.								
Microcystis sp.	531	414	21	21	439	383	252	142
Spirulina sp.								
Unidentified Bacteria								
Unidentified Phytoplankter								
TOTAL	38151	4663	12016	2376	19424	6972	14883	1705

S.D. = Standard Deviation

Data presented as number/liter.

TABLE A-4 CONT.

ANALYSIS OF PHYTOPLANKTON POPULATIONS AT LOCUST POINT - OCTOBER 9, 1974

TAXA	Station 9		Station 10		Station 12		Station 13	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
BACILLARIOPHYCEAE (Diatoms)								
Asterionella sp.	43	43	135	12	65	30	22	22
Centric diatom	36	36	74	70	48	48	66	66
Cyclotella sp.							11	11
Cymatopleura sp.								
Fragilaria sp.	211	24	590	221	308	131	397	63
Gyrosigma sp.			37	37				
Melosira sp.	2838	321	6015	473	2689	7	3529	274
Naviculoid	22	22	37	37	19	19	54	12
Stephanodiscus sp.	1930	218	1919	146	1529	7	1487	111
Surirella sp.								
Synedra sp.	7	7			48	48	55	55
Tabellaria sp.	7	7			18	18	11	11
Unidentified Diatom			74	74				
CHLOROPHYCEAE (Green Algae)								
Actinastrum sp.	15	15	221	221	67	67	66	66
Ankistrodesmus sp.	7	7			19	19	66	66
Binuclearia sp.	362	17	794	18	427	50	319	53
Chlamydomonas sp.								
Closteriopsis sp.	180	180	185	185	48	48	131	131
Closterium sp.	7	7	37	37				
Coelastrum sp.	29	0	37	37	18	18	11	11
Cosmarium sp.								
Crucigenia sp.	29	29	37	37	38	38		
Cruciniginia sp.								
Dictyosphaerium sp.	36	36	258	258	105	105	99	99
Dimorphococcus sp.	22	22			10	10		
Eudorina sp.								
Lagerheimia sp.			37	37				
Micractinium sp.	15	15	74	74	38	38	66	66
Mougeotia sp.	2395	122	5573	31	3060	365	4468	665
Oocystis sp.	29	29	148	148	57	57	66	66
Pandorina sp.	30	30	123	123	36	36	84	84
Pediastrum sp.	1399	83	3260	58	1514	12	2239	186
Platydorina sp.								
Rhizoclonium sp.								
Scenedesmus sp.	66	23	332	37			98	56
Selenastrum sp.					10	10	22	22
Spirogyra sp.								
Staurastrum sp.	51	22	135	12	65	30	87	45
Ulothrix sp.								
Volvox sp.	36	36						
CHRYSOPHYCEAE								
Dinobryon sp.					10	10		
DINOPHYCEAE (Dinoflagellates)								
Ceratium hirundinella	15	15	62	62				
Glenodinium sp.								
Peridinium sp.								
EUGLENOPHYCEAE								
Euglena sp.			62	62	124	124	63	63
Trachelomonas sp.	7	7	37	37				
MYXOPHYCEAE (Blue-green algae)								
Anabaena sp.	15	15	74	74	48	48	77	77
Aphanizomenon sp.	3349	190	8706	3164	3897	1202	4074	1650
Chroococcus sp.	22	22	74	74			22	22
Merismopedia sp.								
Microcystis sp.	288	288	713	467	234	128	295	295
Spirulina sp.								
Unidentified Bacteria								
Unidentified Phytoplankter								
TOTAL	13456	311	29853	5754	14540	2275	17977	2908

S.D. = Standard Deviation

Data presented as number/liter.

TABLE A-4 CONT.

ANALYSIS OF PHYTOPLANKTON POPULATIONS AT LOCUST POINT - OCTOBER 9, 1974

TAXA	Station 14		Station 18		Station 19		Mean # per
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Sta. Sampled
BACILLARIOPHYCEAE (Diatoms)							
Asterionella sp.	34	0	62	62	58	3	65
Centric diatom	17	17	93	93	28	28	49
Cyclotella sp.							0
Cymatopleura sp.			16	16	14	14	6
Fragilaria sp.	336	68	449	45	189	39	368
Gyrosigma sp.			16	16			5
Melosira sp.	1610	262	3262	60	2212	368	3600
Naviculoid	9	9	109	109	112	82	58
Stephanodiscus sp.	2066	7	1859	24	1629	33	1710
Surirella sp.							1
Synedra sp.	26	26	31	31	42	42	23
Tabellaria sp.	9	9			28	28	18
Unidentified Diatom	202	202	155	155	28	28	55
CHLOROPHYCEAE (Green Algae)							
Actinastrum sp.	110	110	45	45	14	14	68
Ankistrodesmus sp.	42	42	81	81	14	14	36
Binuclearia sp.	264	39	401	35	264	114	384
Chlamydomonas sp.							
Closteriopsis sp.	177	177	93	93	468	468	185
Closterium sp.			9	9			10
Coelastrum sp.	42	9	16	16	14	14	32
Cosmarium sp.							5
Crucigenia sp.	34	34	9	9	14	14	24
Cruciniginia sp.							
Dictyosphaerium sp.	85	85	72	72	55	55	111
Dimorphococcus sp.	9	9	9	9			9
Eudorina sp.							3
Lagerheimia sp.							3
Micractinium sp.	110	110	155	155	14	14	55
Mougeotia sp.	4408	664	5146	565	4163	419	4140
Oocystis sp.	17	17	27	27	14	14	47
Pandorina sp.	17	17			30	30	47
Pediastrum sp.	1955	253	2135	349	435	105	1982
Platydorina sp.							
Rhizoclonium sp.	17	17					2
Scenedesmus sp.	101	34	109	47	224	134	113
Selenastrum sp.							3
Spirogyra sp.							0
Staurastrum sp.	17	17	62	62	39	39	74
Ulothrix sp.							
Volvox sp.	34	34					33
CHRYSOPHYCEAE							
Dinobryon sp.	9	9					3
DINOPHYCEAE (Dinoflagellates)							
Ceratium hirundinella	9	9	16	16			11
Glenodinium sp.							0
Peridinium sp.							
EUGLENOPHYCEAE							
Euglena sp.							23
Trachelomonas sp.							4
MYXOPHYCEAE (Blue-green algae)							
Anabaena sp.	84	51	124	124	44	16	96
Aphanizomenon sp.	3851	1778	8461	5259	1616	185	5444
Chroococcus sp.	17	17	16	16			22
Merismopedia sp.							0
Microcystis sp.	345	278	264	264			307
Spirulina sp.							
Unidentified Bacteria							
Unidentified Phytoplankter							
TOTAL	16030	3226	23463	7946	11757	831	19227

S.D. = Standard Deviation

Data presented as number/liter.

TABLE A-5

ANALYSIS OF PHYTOPLANKTON POPULATIONS AT LOCUST POINT - NOVEMBER 7, 1974

TAXA	Station 1		Station 3		Station 6		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
BACILLARIOPHYCEAE (Diatoms)								
Asterionella sp.	70	70	127	68	154	3	97	10
Centric diatom	35	35	40	40	69	69	90	90
Cyclotella sp.								
Cymatopleura sp.			20	20	10	10	18	18
Fragilaria sp.	1715	935	2346	506	1910	174	3000	33
Gyrosigma sp.			20	20	67	47		
Melosira sp.	2746	38	4295	1129	2137	84	4083	1314
Naviculoid	191	191	49	49	40	40	137	7
Stephanodiscus sp.	4263	286	4747	676	4139	994	8099	1130
Surirella sp.							22	22
Synedra sp.	74	5	10	10	49	49	57	14
Tabellaria sp.	91	13	98	20	10	10	83	47
Unidentified Diatom								
CHLOROPHYCEAE (Green Algae)								
Actinastrum sp.	18	18	40	40	30	30	72	72
Ankistrodesmus sp.	18	18	10	10	10	10		
Binuclearia sp.	1017	198	837	246	609	236	851	293
Chlamydomonas sp.								
Closteriopsis sp.	1246	1012	462	266	715	602	752	535
Closterium sp.	35	35	30	30				
Coelastrum sp.					10	10	62	26
Cosmarium sp.							44	44
Crucigenia sp.								
Cruciniginia sp.								
Dictyosphaerium sp.	139	139	138	138	69	69	179	179
Dimorphococcus sp.	18	18	10	10				
Eudorina sp.								
Lagerheimia sp.								
Micractinium sp.	35	35	84	84	40	40	54	54
Mougeotia sp.	21192	4815	16913	5094	14511	5187	20863	6909
Oocystis sp.							18	18
Pandorina sp.							130	130
Pediastrum sp.	1228	370	1283	4	1346	127	2087	94
Platydorina sp.								
Rhizoclonium sp.								
Scenedesmus sp.	187	48	235	78	96	17	176	3
Selenastrum sp.								
Spirogyra sp.								
Staurastrum sp.	87	87	148	109	213	62	115	28
Ulothrix sp.							36	36
Volvox sp.							22	22
CHRYSOPHYCEAE								
Dinobryon sp.								
DINOPHYCEAE (Dinoflagellates)								
Ceratium hirundinella							32	32
Glenodinium sp.								
Peridinium sp.								
EUGLENOPHYCEAE								
Euglena sp.			10	10	10	10	18	18
Trachelomonas sp.								
MYXOPHYCEAE (Blue-green algae)								
Anabaena sp.	52	52	40	40	10	10	18	18
Aphanizomenon sp.	1141	283	1332	45	1007	252	2605	602
Chroococcus sp.	52	52			10	10	18	18
Merismopedia sp.								
Microcystis sp.	204	30	147	9	145	32	129	86
Spirulina sp.								
Unidentified Bacteria			20	20				
Unidentified Phytoplankter								
TOTAL	35848	8537	33484	4682	27413	5813	43947	8988

S.D. = Standard Deviation

Data presented as number/liter.

TABLE A-5 CONT.

ANALYSIS OF PHYTOPLANKTON POPULATIONS AT LOCUST POINT - NOVEMBER 7, 1974

TAXA	Station 9		Station 10		Station 12		Station 13	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
BACILLARIOPHYCEAE (Diatoms)								
Asterionella sp.	177	89	75	16	107	0	115	75
Centric diatom	89	89	90	90	80	80	21	21
Cyclotella sp.								
Cymatopleura sp.	22	22					31	10
Fragilaria sp.	3572	852	1800	90	2084	62	1478	187
Gyrosigma sp.	22	22						
Melosira sp.	8306	409	2304	469	2871	512	1954	195
Naviculoid	44	44	295	295	134	134	137	137
Stephanodiscus sp.	6807	489	3021	636	4116	282	2737	275
Surirella sp.					54	54		
Synedra sp.	81	52			14	14	74	74
Tabellaria sp.	154	21	104	14	14	14	51	30
Unidentified Diatom								
CHLOROPHYCEAE (Green Algae)								
Actinastrum sp.	22	22	30	30	54	54	53	53
Ankistrodesmus sp.	67	67	59	59	14	14		
Binuclearia sp.	977	571	260	94	559	111	478	155
Chlamydomonas sp.								
Closteriopsis sp.	988	871	786	336	1070	432	1001	517
Closterium sp.			59	59	27	27	21	21
Coelastrum sp.	15	15			40	13	31	10
Cosmarium sp.	15	15						
Crucigenia sp.								
Cruciniginia sp.								
Dictyosphaerium sp.	155	155	207	207	121	121	158	158
Dimorphococcus sp.			30	30	14	14	11	11
Eudorina sp.								
Lagerheimia sp.								
Micractinium sp.	67	67	30	30	27	27	42	42
Mougeotia sp.	22422	12301	23185	654	18075	3131	15417	4658
Oocystis sp.								
Pandorina sp.	88	88			54	54	20	20
Pediastrum sp.	2036	486	1398	42	1216	152	1157	108
Platydorina sp.								
Rhizoclonium sp.								
Scenedesmus sp.	96	37	179	2	226	65	94	54
Selenastrum sp.								
Spirogyra sp.								
Staurastrum sp.	90	90	193	103	241	81	83	2
Ulothrix sp.								
Volvox sp.					27	27		
CHRYSOPHYCEAE								
Dinobryon sp.								
DINOPHYCEAE (Dinoflagellates)								
Ceratium hirundinella								
Glenodinium sp.								
Peridinium sp.								
EUGLENOPHYCEAE								
Euglena sp.			120	61	54	54	11	11
Trachelomonas sp.								
MYXOPHYCEAE (Blue-green algae)								
Anabaena sp.	67	67	30	30	40	40	21	21
Aphanizomenon sp.	2191	641	1154	704	1216	152	1125	76
Chroococcus sp.	44	44	89	89	27	27	11	11
Merismopedia sp.								
Microcystis sp.	207	148	148	148	94	41	85	85
Spirulina sp.								
Unidentified Bacteria			45	45				
Unidentified Phytoplankter								
TOTAL	48815	17493	35775	9613	32662	3664	26408	6871

S.D. = Standard Deviation

Data presented as number/liter.

TABLE A-5 CONT.

ANALYSIS OF PHYTOPLANKTON POPULATIONS AT LOCUST POINT - NOVEMBER 7, 1974

TAXA	Station 14		Station 18		Station 19		Mean # per
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Sta. Sampled
BACILLARIOPHYCEAE (Diatoms)							
Asterionella sp.	111	48	127	16			105
Centric diatom	80	80	95	95			63
Cyclotella sp.							0
Cymatopleura sp.							9
Fragilaria sp.	2879	600	2085	33	886		2160
Gyrosigma sp.							10
Melosira sp.	2881	547	2797	435	3004		3398
Naviculoid	160	160	130	130			120
Stephanodiscus sp.	6090	1691	5253	653	3304		4780
Surirella sp.							7
Synedra sp.	8	8	59	59			39
Tabellaria sp.	88	40	36	36			66
Unidentified Diatom							
CHLOROPHYCEAE (Green Algae)							
Actinastrum sp.	24	24	36	36			34
Ankistrodesmus sp.			12	12			17
Binuclearia sp.	475	116	660	190	182		628
Chlamydomonas sp.							
Closteriopsis sp.	1043	695	992	491	95		832
Closterium sp.	40	40	36	36			23
Coelastrum sp.	16	16	28	28	32		21
Cosmarium sp.					63		11
Crucigenia sp.							
Cruciniginia sp.							
Dictyosphaerium sp.	152	152	47	47			124
Dimorphococcus sp.							8
Eudorina sp.							0
Lagerheimia sp.							
Micractinium sp.			12	12			36
Mougeotia sp.	16641	4648	20249	4593	6072		17776
Oocystis sp.			47	47			
Pandorina sp.	48	48	56	56	32		39
Pediastrum sp.	1604	181	1352	182	158		1351
Platydorina sp.							
Rhizoclonium sp.							0
Scenedesmus sp.	159	0	210	68	127		162
Selenastrum sp.							
Spirogyra sp.							0
Staurastrum sp.	64	64	190	23			129
Ulothrix sp.							3
Volvox sp.							4
CHRYSOPHYCEAE							
Dinobryon sp.							
DINOPHYCEAE (Dinoflagellates)							
Ceratium hirundinella							3
Glenodinium sp.							0
Peridinium sp.							
EUGLENOPHYCEAE							
Euglena sp.			68	44			26
Trachelomonas sp.							0
MYXOPHYCEAE (Blue-green algae)							
Anabaena sp.			36	36			29
Aphanizomenon sp.	1216	172	1552	382			1322
Chroococcus sp.							23
Merismopedia sp.							0
Microcystis sp.	104	72	99	43			124
Spirulina sp.							
Unidentified Bacteria							6
Unidentified Phytoplankter							0
TOTAL	33901	4672	36280	6038	13955		33499

S.D. = Standard Deviation

Data presented as number/liter.

APPENDIX B

ZOOPLANKTON POPULATIONS AT LOCUST POINT JULY - NOVEMBER, 1974

TABLE B-1

ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT - JULY 17, 1974

TAXA	Station 1		Station 3		Station 6		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
ROTIFERA								
Asplanchna giroidi								
A. priodonta	7.9	4.2	3.2	0.0	2.4	0.2	0.9	0.2
Brachionus angularis	75.7	20.3	33.1	9.1	11.8	2.5	8.4	0.0
B. calyciflorus	2.8	0.0						
B. havanaensis	0.9	0.9	0.5	0.0	0.3	0.3		
B. (Platyias) patulus								
B. urceolaris								
Chromogaster ovalis								
Conochiloides sp.	28.6	4.6	17.8	0.3	3.5	1.0	0.7	0.0
Filinia terminalis	30.9	6.0	8.6	1.7	5.9	3.9	1.3	0.2
Kellicottia longispina								
Keratella cochlearis	37.0	1.8	16.6	0.5	13.5	0.7	7.8	0.4
K. quadrata								
Notholca squamula								
Polyarthra sp.	892.2	13.4	469.1	9.5	509.1	60.4	349.7	2.3
Synchaeta sp.								
Testudinella sp.								
Trichocerca cylindrica	0.9	0.0	1.2	0.2	0.3	0.3		
T. multicrinis					0.3	0.3		
Unidentified Rotifer								
Lecane lunaris								
COPEPODA								
Calanoid copepods								
Diaptomus sp.	3.7	0.9	2.2	0.0	3.5	3.5	9.4	0.5
Immatures	2.8	0.0	0.5	0.5	1.5	1.5	2.3	0.2
Cyclopoid copepods								
Cyclops sp.	37.9	4.7	50.1	2.6	94.8	63.1	43.0	1.0
Mesocyclops sp.					0.3	0.3		
Immatures	48.0	3.7	25.5	0.4	28.9	12.5	16.7	0.5
Nauplius	321.2	3.7	241.6	2.7	166.4	25.2	143.1	1.2
CLADOCERA								
Bosmina sp.	59.1	6.5	64.4	3.5	31.8	12.1	39.8	2.8
Chydorus sp.								
Daphnia galeata							0.2	0.2
D. pulex	0.9	0.9	0.7	0.2	0.3	0.3	0.2	0.2
D. retrocurva	172.6	22.2	213.6	12.9	96.4	19.6	153.3	1.2
Diaphanosoma sp.					0.3	0.3		
Holopedium sp.	1.4	0.4			0.3	0.3		
Leptodora kindtii	0.5	0.5			0.3	0.3	0.2	0.2
Ceriodaphnia sp.								
PROTOZOA								
Acineta sp.								
Amphileptus sp.								
Difflugia sp.	21.7	4.2	62.8	2.3	12.9	12.9	140.8	0.4
Orphryodendron sp.								
Staurophrya sp.								
TOTAL	1746.3	50.9	1211.2	18.8	984.0	32.8	917.6	3.3

S.D. = Standard Deviation

Data presented as number/liter.

TABLE B-1 CONT.

ANALYSIS OF ZOOPLANKTON POPULATIONS
AT LOGUST POINT - JULY 17, 1974

TAXA	Station 9		Station 10		Station 12		Station 13	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
ROTIFERA								
Asplanchna giroidi								
A. priodonta	1.3	0.2	2.7	0.0	1.7	0.3	3.4	0.0
Brachionus angularis	9.4	0.2	45.0	10.1	12.8	5.4	35.9	10.3
B. calyciflorus								
B. havanaensis							0.3	0.3
B. (Platyias) patulus								
B. urceolaris								
Chromogaster ovalis								
Conochiloides sp.	0.4	0.0	2.7	0.0	2.7	0.2	19.2	0.0
Filinia terminalis	0.2	0.2	2.0	0.7	3.4	2.3	3.0	0.0
Kellicottia longispina								
Keratella cochlearis	2.8	0.0	45.1	6.1	16.7	0.6	18.2	0.0
K. quadrata								
Notholca squamula								
Polyarthra sp.	321.4	1.4	1104.1	11.4	555.9	101.8	492.5	4.9
Synchaeta sp.								
Testudinella sp.								
Trichocerca cylindrica			0.7	0.7	0.4	0.4	0.8	0.8
T. multicrinis								
Unidentified Rotifer								
Lecane lunaris								
COPEPODA								
Calanoid copepods								
Diaptomus sp.	5.3	0.3	8.8	2.1	4.0	2.0	3.0	0.0
Immatures	5.5	0.9	5.4	2.7	1.5	0.5	1.5	0.5
Cyclopoid copepods								
Cyclops sp.	51.4	3.5	50.4	3.4	48.4	17.5	50.5	0.3
Mesocyclops sp.								
Immatures	23.1	0.6	57.8	2.7	27.6	8.8	26.1	0.5
Nauplius	140.8	1.1						
CLADOCERA								
Bosmina sp.	51.4	1.8	114.3	6.8	34.4	14.3	62.0	0.5
Chydorus sp.								
Daphnia galeata	0.7	0.0	2.0	0.7	0.4	0.4		
D. pulex	0.2	0.2					0.3	0.3
D. retrocurva	144.9	2.0	233.2	15.5	89.7	25.7	207.4	24.9
Diaphanosoma sp.	0.2	0.2						
Holopedium sp.			0.7	0.7				
Leptodora kindtii			0.7	0.7	0.3	0.3	0.3	0.3
Ceriodaphnia sp.								
PROTOZOA								
Acineta sp.								
Amphileptus sp.								
Difflugia sp.	233.6	4.1	61.8	6.7	40.2	0.6	66.5	3.5
Orphryodendron sp.								
Staurophrya sp.								
TOTAL	992.3	8.3	2202.2	21.1	1027.6	130.1	1243.3	12.0

S.D. = Standard Deviation
Data presented as number/liter.

TABLE B-1 CONT.

ANALYSIS OF ZOOPLANKTON POPULATIONS
AT LOCUST POINT - JULY 17, 1974

TAXA	Station 14		Station 18		Station 19		Mean # per Station Sampled
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
ROTIFERA							
Asplanchna giroidi							
A. priodonta	0.6	0.6	2.5	0.3	1.6	0.2	2.6
Brachionus angularis	6.4	1.0	12.3	1.9	29.1	0.6	25.4
B. calyciflorus							0.3
B. havanaensis							0.2
B. (Platyias) patulus							
B. urceolaris							
Chromogaster ovalis							
Conochiloides sp.	1.4	0.2	3.6	0.9			7.3
Filinia terminalis	0.2	0.2	4.4	2.8			5.4
Kellicottia longispina							
Keratella cochlearis	7.6	0.6	14.2	0.0	5.7	0.4	16.8
K. quadrata					12.2	0.6	1.1
Notholca squamula							
Polyarthra sp.	408.9	2.3	522.1	28.2	16.0	0.2	512.8
Synchaeta sp.							
Testudinella sp.							
Trichocerca cylindrica			0.3	0.3			0.4
T. multicrinis					1.3	0.2	0.2
Unidentified Rotifer							
Lecane lunaris					0.2	0.2	0.0
COPEPODA							
Calanoid copepods							
Diaptomus sp.	10.6	0.9	4.1	1.4	1.1	0.0	5.1
Immatures	2.1	0.1	1.9	1.4	1.5	0.3	2.4
Cyclopoid copepods							
Cyclops sp.	59.6	0.9	31.5	0.9	87.9	1.3	55.0
Mesocyclops sp.							0.0
Immatures	16.5	0.6	18.3	0.8	18.7	0.7	27.9
Nauplius	177.3	2.8	177.0	12.4	46.7	0.6	128.6
CLADOCERA							
Bosmina sp.	45.0	3.7	31.8	9.9	6.5	0.2	49.1
Chydorus sp.							
Daphnia galeata	0.2	0.2			0.9	0.2	0.4
D. pulex					0.9	0.2	0.3
D. retrocurva	90.4	7.0	105.6	7.1	8.1	0.4	137.8
Diaphanosoma sp.							0.0
Holopedium sp.			0.3	0.3			0.2
Leptodora kindtii			0.3	0.3			0.2
Ceriodaphnia sp.							
PROTOZOA							
Acineta sp.							
Amphileptus sp.							
Difflugia sp.	96.7	46.1	25.2	3.9	3.7	0.5	69.6
Orphryodendron sp.							
Staurophrya sp.							
TOTAL	923.2	51.6	954.9	46.2	246.7	1.8	1131.8

S.D. = Standard Deviation
Data presented as number/liter.

TABLE B-2

ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT - AUGUST 22, 1974

TAXA	Station 1		Station 3		Station 6		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
ROTIFERA								
Asplanchna giroidi								
A. priodonta	40.4	1.4	62.1	6.1	78.0	18.9	92.0	6.7
Brachionus angularis	14.8	0.0	50.9	6.5	29.0	8.8	58.5	12.1
B. calyciflorus			1.4	1.4				
B. havanaensis			2.5	0.3	3.7	1.5	2.2	0.5
B. (Platyias) patulus								
B. urceolaris								
Chromogaster ovalis								
Conochiloides sp.					0.3	0.3		
Filinia terminalis			1.1	0.2	0.6	0.1	1.0	0.3
Kellicottia longispina								
Keratella cochlearis	14.1	0.7	12.4	5.2	9.1	2.0	8.0	0.6
K. quadrata	6.7	0.0	0.4	0.0	0.6	0.6	1.5	0.2
Notholca squamula								
Polyarthra sp.	59.2	1.4	155.2	18.6	132.2	32.4	100.8	38.6
Synchaeta sp.								
Testudinella sp.								
Trichocerca cylindrica								
T. multicrinis	10.1	0.7	13.2	5.6	20.1	5.9	9.4	0.0
Unidentified Rotifer			3.8	1.1	6.9	2.0	2.3	0.2
Lecane lunaris								
COPEPODA								
Calanoid copepods								
Diaptomus sp.	1.3	0.0	0.9	0.0	0.3	0.3	0.4	0.4
Immatures	2.0	0.7	0.4	0.0	0.3	0.3	0.4	0.4
Cyclopoid copepods								
Cyclops sp.	31.6	2.0	15.0	2.5	9.7	0.1	26.7	1.2
Mesocyclops sp.			1.3	0.0	0.8	0.8	0.2	0.2
Immatures	6.1	0.7	6.3	0.0	10.8	3.4	11.7	0.3
Nauplius	27.6	2.1	50.4	1.1	63.9	2.6	52.9	5.9
CLADOCERA								
Bosmina sp.	7.4	0.7	17.7	0.2	12.6	0.0	37.0	5.4
Chydorus sp.								
Daphnia galeata								
D. pulex								
D. retrocurva			2.5	0.3	2.0	1.3	4.2	1.8
Diaphanosoma sp.							0.2	0.2
Holopedium sp.							0.2	0.2
Leptodora kindtii								
Ceriodaphnia sp.							0.4	0.4
PROTOZOA								
Acineta sp.								
Amphileptus sp.								
Difflugia sp.	14.8	1.4	19.5	1.1	9.7	2.3	14.8	0.7
Orphryodendron sp.								
Staurophrya sp.								
TOTAL	235.9	4.8	416.7	42.3	383.2	7.2	424.2	67.8

S.D. = Standard Deviation

Data presented as number/liter.

TABLE B-2 CONT.

ANALYSIS OF ZOOPLANKTON POPULATIONS
AT LOCUST POINT - AUGUST 22, 1974

TAXA	Station 9		Station 10		Station 12		Station 13	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
ROTIFERA								
Asplanchna giroidi								
A. priodonta	92.3	9.3	36.6	1.7	100.2	3.9	58.7	1.5
Brachionus angularis	60.8	7.0	13.6	1.3	39.0	3.8	51.8	8.4
B. calyciflorus								
B. havanaensis	1.6	0.3			1.1	1.1	2.7	0.3
B. (Platyias) patulus								
B. urceolaris								
Chromogaster ovalis								
Conochiloides sp.	3.0	3.0						
Filinia terminalis	0.5	0.2			1.1	0.3	1.9	0.0
Kellicottia longispina								
Keratella cochlearis	10.7	2.8	13.6	1.3	12.6	0.6	12.4	4.3
K. quadrata	1.4	0.0	6.5	0.3			0.3	0.3
Notholca squamula								
Polyarthra sp.	115.5	25.6	57.4	4.4	101.0	2.3	177.5	3.4
Synchaeta sp.								
Testudinella sp.								
Trichocerca cylindrica								
T. multicrinis	7.1	1.2	9.0	0.9	19.2	0.6	12.8	4.7
Unidentified Rotifer	1.6	0.5	1.3	1.3	2.6	0.3	2.9	0.0
Lecane lunaris								
COPEPODA								
Calanoid copepods								
Diaptomus sp.	0.2	0.2	1.3	0.0			1.0	0.0
Immatures	0.4	0.4	1.9	0.6			0.3	0.3
Cyclopoid copepods								
Cyclops sp.	23.4	1.4	27.1	2.5	10.9	1.6	13.1	3.1
Mesocyclops sp.	0.3	0.3					1.0	0.5
Immatures	12.2	0.3	5.2	1.5	8.2	1.2	6.5	0.3
Nauplius	54.5	7.9	28.4	3.8	67.4	4.1	48.2	1.0
CLADOCERA								
Bosmina sp.	37.3	3.5	9.8	2.4	16.3	0.8	16.8	0.6
Chydorus sp.							0.3	0.3
Daphnia galeata								
D. pulex								
D. retrocurva	3.4	0.9	0.6	0.6	1.1	0.3	2.7	0.3
Diaphanosoma sp.								
Holopedium sp.								
Leptodora kindtii								
Ceriodaphnia sp.								
PROTOZOA								
Acineta sp.								
Amphileptus sp.								
Difflugia sp.	5.8	5.8	12.8	2.0	7.1	0.8	21.0	3.8
Orphryodendron sp.								
Staurophrya sp.								
TOTAL	431.0	55.1	224.8	10.4	387.5	11.9	431.3	23.2

S.D. = Standard Deviation
Data presented as number/liter.

TABLE B-2 CONT.

ANALYSIS OF ZOOPLANKTON POPULATIONS
AT LOCUST POINT - AUGUST 22, 1974

TAXA	Station 14		Station 18		Station 19		Mean # per
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Sta. Sampled
ROTIFERA							
Asplanchna giroidi							
A. priodonta	49.1	0.5	19.3	0.3	1.8	0.3	57.3
Brachionus angularis	48.8	0.3	54.9	0.0	88.1	2.0	46.4
B. calyciflorus							0.1
B. havanaensis			0.8	0.8			1.3
B. (Platyias) patulus							
B. urceolaris							
Chromogaster ovalis							
Conochiloides sp.							0.3
Filinia terminalis	0.8	0.4	0.8	0.3			0.7
Kellicottia longispina							
Keratella cochlearis	11.6	0.2	5.6	0.3	17.0	0.8	11.6
K. quadrata	0.6	0.2	1.1	0.0	2.7	0.7	2.0
Notholca squamula							
Polyarthra sp.	154.9	0.9	107.2	1.6	10.3	0.0	106.5
Synchaeta sp.							
Testudinella sp.							
Trichocerca cylindrica							
T. multicrinis	16.9	0.6	11.6	0.0			11.8
Unidentified Rotifer	2.5	0.2	3.2	0.0	2.3	0.8	2.7
Lecane lunaris							
COPEPODA							
Calanoid copepods							
Diaptomus sp.	1.2	0.0	1.1	0.6	3.0	0.0	1.0
Immatures	0.8	0.0	1.1	0.6	0.3	0.3	0.7
Cyclopoid copepods							
Cyclops sp.	12.5	0.0	9.8	0.3	22.7	3.5	18.4
Mesocyclops sp.	0.6	0.2	0.6	0.6			0.4
Immatures	5.2	0.1	13.5	0.3	17.0	2.2	9.3
Nauplius	48.3	0.2	59.2	1.1	28.0	0.0	48.1
CLADOCERA							
Bosmina sp.	17.1	0.0	12.4	1.3	3.0	0.0	17.0
Chydorus sp.							0.0
Daphnia galeata					0.5	0.0	0.0
D. pulex							
D. retrocurva	2.3	0.0	4.0	0.8	7.4	1.0	2.8
Diaphanosoma sp.					0.3	0.3	0.0
Holopedium sp.					0.8	0.3	0.1
Leptodora kindtii	0.2	0.2	0.3	0.3	0.3	0.3	0.1
Ceriodaphnia sp.							0.0
PROTOZOA							
Acineta sp.							
Amphileptus sp.							
Difflugia sp.	25.0	0.5	13.7	2.1	151.6	3.0	26.9
Orphryodendron sp.							
Staurophrya sp.							
TOTAL	398.0	1.9	319.8	7.2	356.6	5.2	364.5

S.D. = Standard Deviation
Data presented as number/liter.

TABLE B-3

ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT - SEPTEMBER 10, 1974

TAXA	Station 1		Station 3		Station 6		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
ROTIFERA								
Asplanchna giroidi								
A. priodonta	87.3	27.0	19.8	2.2	13.6	1.1	4.5	0.4
Brachionus angularis	3.4	2.1	1.7	0.7	1.5	0.4	3.1	0.2
B. calyciflorus	2.7	1.4	1.0	1.0	0.9	0.3	1.6	1.6
B. havanaensis	2.0	0.7	0.5	0.5	0.3	0.3	0.2	0.2
B. (Platyias) patulus					0.3	0.3	0.6	0.2
B. urceolaris								
Chromogaster ovalis								
Conochiloides sp.					0.9	0.9	0.2	0.2
Euchlanis sp.							0.4	0.4
Filinia terminalis	0.7	0.7			0.6	0.6	0.4	0.4
Hexarthra mira	0.7	0.7	0.3	0.3			0.2	0.2
Kellicottia longispina								
Keratella cochlearis	38.5	9.7	7.7	4.4	12.2	2.0	10.9	2.7
K. quadrata			1.0	0.5			0.2	0.2
Lecane (Monostyla) bulla								
L. (Monostyla) lunaris	0.7	0.7						
Notholca squamula								
Pleosoma sp.								
Polyarthra sp.	411.2	122.2	198.3	27.3	230.1	2.3	102.4	5.4
Pompholyx sulcata								
Synchaeta sp.								
Testudinella sp.								
Trichocerca cylindrica	0.7	0.7	0.5	0.0	1.2	0.6		
T. multicrinis	17.5	9.4	1.7	0.3	5.2	0.1	3.9	0.2
Unidentified Rotifer A	67.1	20.1	31.0	9.1	21.9	4.2	23.6	9.2
Unidentified Rotifer B	22.8	22.8	12.6	12.6	3.0	3.0	1.4	1.4
COPEPODA								
Calanoid copepods								
Diaptomus sp.	0.7	0.7	0.5	0.0			0.4	0.4
Eurytemora sp.								
Immatures	2.0	2.0	1.2	0.7	1.5	0.9	1.0	0.2
Cyclopoid copepods								
Cyclops sp.	4.0	3.7	1.7	1.7	0.9	0.3	1.5	1.5
Mesocyclops sp.			0.3	0.3				
Tropocyclops prasinus								
Immatures	16.8	4.7	7.2	0.0	4.9	1.4	5.5	0.6
Nauplius	161.0	42.7	64.1	10.7	63.1	16.0	41.3	2.8
CLADOCERA								
Bosmina sp.	33.5	14.7	20.0	6.2	22.9	4.2	17.0	3.5
Ceriodaphnia sp.			0.3	0.3				
Chydorus sp.	2.7	1.4	4.5	0.7	2.9	1.2	6.4	1.1
Daphnia galeata								
D. pulex								
D. retrocurva	0.7	0.7	2.2	1.2	2.6	0.2	1.6	0.4
Diaphanosoma sp.	2.0	2.0	1.0	1.0	0.6	0.6	0.4	0.0
Holopedium sp.			1.7	1.7	1.2	1.2		
Leptodora kindtii	0.7	0.7	0.3	0.3				
PROTOZOA								
Acineta sp.								
Amphileptus sp.								
Difflugia sp.	104.7	20.0	111.7	22.0	102.1	29.4	132.1	37.4
Orphryodendron sp.								
Staurophrya sp.								
Vorticella sp.								
Zoothamnium sp.			0.7	0.7	0.3	0.3	0.6	0.6
TOTAL	1018.3	206.1	487.7	101.3	494.3	52.0	361.1	58.7

S.D. = Standard Deviation

Data presented as number/liter.

TABLE B-3 CONT.

ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT - SEPTEMBER 10, 1974

TAXA	Station 9		Station 10		Station 12		Station 13	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
ROTIFERA								
Asplanchna giroidi								
A. priodonta	12.1	0.9	85.7	10.3	24.7	9.3	24.0	3.9
Brachionus angularis	6.7	0.9	2.3	0.8	1.9	0.0	2.1	0.5
B. calyciflorus	0.7	0.7	3.7	0.7	1.3	1.3	0.6	0.6
B. havanaensis	1.4	0.0	0.8	0.8	1.3	0.0	1.9	1.9
B. (Platyias) patulus	0.6	0.6	0.8	0.8				
B. urceolaris								
Chromogaster ovalis			19.9	19.9	3.2	3.2	2.7	2.7
Conochiloides sp.	0.2	0.2						
Euchlanis sp.					0.3	0.3	0.6	0.6
Filinia terminalis							0.3	0.3
Hexarthra mira	0.2	0.2			0.3	0.3	0.3	0.3
Kellicottia longispina								
Keratella cochlearis	11.5	0.7	73.1	18.4	23.5	7.4	17.1	8.7
K. quadrata			1.5	1.5	1.3	1.3		
Lecane (Monostyla) bulla								
L. (Monostyla) lunaris								
Notholca squamula								
Pleosoma sp.								
Polyarthra sp.	88.8	13.2	330.0	55.1	365.3	102.7	206.7	19.8
Pompholyx sulcata					4.8	4.8	4.2	4.2
Synchaeta sp.								
Testudinella sp.								
Trichocerca cylindrica	0.6	0.6	3.0	1.5			1.1	1.1
T. multicrinis	2.0	1.3	36.9	4.4	6.5	0.7	3.2	0.6
Unidentified Rotifer A	23.6	8.5	76.8	23.6	45.6	12.2	29.5	4.7
Unidentified Rotifer B	6.7	6.7	8.1	8.1	6.4	6.4		
COPEPODA								
Calanoid copepods								
Diaptomus sp.	0.8	0.4	1.5	1.5	1.6	1.6	1.9	1.4
Eurytemora sp.	1.3	0.6			1.0	1.0	1.1	0.0
Immatures								
Cyclopoid copepods								
Cyclops sp.	1.6	0.9	6.7	5.2	5.5	4.2	4.0	1.9
Mesocyclops sp.					0.3	0.3		
Tropocyclops prasinus								
Immatures	6.8	1.1	7.4	4.4	10.3	1.3	9.8	3.5
Nauplius	58.3	3.6	127.0	29.5	70.6	17.3	82.8	11.5
CLADOCERA								
Bosmina sp.	11.4	3.1	10.4	4.5	11.9	8.0	29.0	7.4
Ceriodaphnia sp.			1.5	1.5				
Chydorus sp.	8.0	2.2	4.4	0.0	4.5	1.9	6.9	0.0
Daphnia galeata					0.3	0.3		
D. pulex								
D. retrocurva	1.2	0.2			4.2	0.3	4.8	1.6
Diaphanosoma sp.	0.7	0.3	1.5	0.0	1.3	1.3	0.3	0.3
Holopedium sp.	1.3	1.3	0.8	0.8			0.3	0.3
Leptodora kindtii	0.4	0.4					0.6	0.6
PROTOZOA								
Acineta sp.								
Amphileptus sp.								
Difflugia sp.	96.7	6.3	158.7	33.1	106.8	18.8	93.3	22.5
Orphryodendron sp.								
Staurophrya sp.								
Vorticella sp.								
Zoothamnium sp.	0.7	0.7	0.3	0.3			0.8	0.8
TOTAL	343.7	30.5	962.3	206.9	694.4	178.0	532.6	95.0

S.D. = Standard Deviation

Data presented as number/liter.

TABLE B-3 CONT.

ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT - SEPTEMBER 10, 1974

TAXA	Station 14		Station 18		Station 19		Mean # per
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Sta. Sampled
ROTIFERA							
Asplanchna giroidi							
A. priodonta	32.8	1.3	20.6	4.5	3.1	1.3	29.8
Brachionus angularis	5.6	1.5	2.1	1.4	3.4	0.2	3.1
B. calyciflorus	3.3	3.3	1.1	1.1	0.4	0.4	1.6
B. havanaensis	1.2	0.4	1.1	0.4	0.4	0.4	1.0
B. (Platyias) patulus	0.4	0.4					0.2
B. urceolaris							
Chromogaster ovalis							2.3
Conochiloides sp.	0.4	0.4					0.2
Euchlanis sp.	0.2	0.2					0.1
Filinia terminalis			0.4	0.4	0.6	0.6	0.3
Hexarthra mira	0.2	0.2			2.7	2.7	0.4
Kellicottia longispina							
Keratella cochlearis	10.7	4.5	21.0	4.2	11.2	0.8	21.6
K. quadrata			0.4	0.4	0.9	0.5	0.5
Lecane (Monostyla) bulla							
L. (Monostyla) lunaris							0.1
Notholca squamula							
Pleosoma sp.							
Polyarthra sp.	145.3	0.5	235.7	38.1	55.8	5.4	215.0
Pompholyx sulcata					3.0	3.0	1.1
Synchaeta sp.							
Testudinella sp.							
Trichocerca cylindrica					1.1	1.1	0.7
T. multicrinis	3.1	0.6	9.3	3.3	0.9	0.5	8.2
Unidentified Rotifer A	37.5	19.9	36.6	1.7	36.9	7.0	39.1
Unidentified Rotifer B	6.2	6.2	15.5	15.5	4.2	4.2	7.9
COPEPODA							
Calanoid copepods							
Diaptomus sp.	0.6	0.6	0.4	0.4	1.1	0.7	0.9
Eurytemora sp.							
Immatures	1.7	0.5	2.1	0.8	1.3	0.9	1.3
Cyclopoid copepods							
Cyclops sp.	2.1	1.7	6.3	0.3	1.1	0.0	3.2
Mesocyclops sp.	0.2	0.2					0.1
Tropocyclops prasinus							
Immatures	5.5	0.2	7.3	2.9	7.2	0.7	8.1
Nauplius	96.3	13.9	61.4	3.7	40.7	0.7	78.8
CLADOCERA							
Bosmina sp.	19.1	2.7	23.7	2.2	10.1	0.7	19.0
Ceriodaphnia sp.							0.2
Chydorus sp.	6.2	1.7	3.0	3.0	2.9	1.1	4.8
Daphnia galeata					0.2	0.2	0.0
D. pulex							
D. retrocurva	3.5	0.6	2.0	2.0	1.8	1.8	2.2
Diaphanosoma sp.	1.2	1.2	0.8	0.8	5.6	5.6	1.4
Holopedium sp.			0.7	0.7	7.6	7.6	1.2
Leptodora kindtii	0.2	0.2			0.4	0.4	0.2
PROTOZOA							
Acineta sp.							
Amphileptus sp.							
Difflugia sp.	79.3	6.3	98.2	4.3	8.8	3.4	99.3
Orphryodendron sp.							
Staurophrya sp.							
Vorticella sp.							
Zoothamnium sp.	0.4	0.4	0.4	0.4	0.4	0.4	0.4
TOTAL	462.7	58.5	549.5	4.8	213.1	26.0	556.3

S.D. = Standard Deviation

Data presented as number/liter.

TABLE B-4

ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT - OCTOBER 9, 1974

TAXA	Station 1		Station 3		Station 6		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
ROTIFERA								
Asplanchna giroidi								
A. priodonta	1.5	1.5	3.6	0.9	3.8	1.9	2.3	0.9
Brachionus angularis	2.2	2.2	0.9	0.0	1.7	0.5	1.8	0.9
B. calyciflorus	11.1	6.7	7.6	1.8	9.4	0.3	9.7	2.8
B. havanaensis					0.3	0.3		
B. (Platyias) patulus								
B. urceolaris					0.4	0.4		
Chromogaster ovalis								
Conochiloides sp.	4.5	3.0	4.7	4.7	6.0	1.1	6.8	4.5
Euchlanis sp.								
Filinia terminalis			0.2	0.2	0.7	0.7		
Hexarthra mira							0.2	0.2
Kellicottia longispina								
Keratella cochlearis	16.3	3.0	10.7	3.1	10.8	6.6	7.7	1.2
K. quadrata	0.8	0.8	1.4	0.5	0.7	0.7	1.1	0.2
Lecane (Monostyla) bulla								
L. (Monostyla) lunaris								
Notholca squamula								
Pleosoma sp.	2.2	2.2					0.5	0.5
Polyarthra sp.	76.8	3.1	19.5	3.0	44.6	14.4	41.2	1.4
Pompholyx sulcata								
Synchaeta sp.			0.7	0.7				
Testudinella sp.								
Trichocerca cylindrica			0.2	0.2				
T. multicrinis	0.8	0.8						
Unidentified Rotifer A	2.2	2.2						
Unidentified Rotifer B								
COPEPODA								
Calanoid copepods								
Diaptomus sp.	3.7	0.8	0.5	0.5	0.7	0.7	0.9	0.9
Eurytemora sp.								
Immatures	4.5	4.5	6.0	3.3	2.6	1.2	5.0	0.8
Cyclopoid copepods								
Cyclops sp.	3.7	0.8	0.9	0.9	0.7	0.0	1.2	0.3
Mesocyclops sp.							0.3	0.3
Tropocyclops prasinus								
Immatures	5.2	2.2	3.6	2.7	12.5	0.3	5.6	5.1
Nauplius	113.7	6.1	53.5	2.9	57.7	6.4	64.1	8.7
CLADOCERA								
Bosmina sp.	70.8	7.5	56.7	0.3	62.4	28.0	54.4	4.4
Ceriodaphnia sp.	0.8	0.8						
Chydorus sp.	11.1	0.8	9.9	2.3	20.5	0.8	13.4	0.9
Daphnia galeata								
D. pulex								
D. retrocurva					0.3	0.3		
Diaphanosoma sp.					0.3	0.3	0.2	0.2
Holopedium sp.	0.8	0.8						
Leptodora kindtii								
PROTOZOA								
Acineta sp.								
Amphileptus sp.								
Difflugia sp.	57.6	4.5	32.9	13.2	48.4	12.5	39.1	10.9
Orphryodendron sp.								
Staurophrya sp.								
Vorticella sp.	0.8	0.8	0.2	0.2	0.3	0.3		
Zoothamnium sp.	3.7	3.7			0.7	0.7	1.1	1.1
TOTAL	394.0	5.0	213.5	30.0	285.1	72.2	256.2	33.4

S.D. = Standard Deviation

Data presented as number/liter.

TABLE B-4 CONT.

ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT - OCTOBER 9, 1974

TAXA	Station 9		Station 10		Station 12		Station 13	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
ROTIFERA								
Asplanchna giroidi								
A. priodonta	2.2	1.1	1.6	1.6	2.3	1.3	2.1	0.6
Brachionus angularis	1.5	0.0	4.2	0.5	1.2	0.8	2.4	1.4
B. calyciflorus	13.4	5.7	7.4	1.9	4.2	0.2	11.5	4.9
B. havanaensis			0.9	0.9				
B. (Platyias) patulus								
B. urceolaris								
Chromogaster ovalis								
Conochiloides sp.	4.7	2.5	7.9	3.2	8.3	8.3	6.8	5.3
Euchlanis sp.	0.2	0.2						
Filinia terminalis	0.2	0.2			0.5	0.0	1.1	1.1
Hexarthra mira					0.3	0.3	0.3	0.3
Kellicottia longispina								
Keratella cochlearis	9.1	1.7	13.1	5.3	8.6	0.5	9.6	3.0
K. quadrata	0.9	0.2			0.5	0.5	2.5	2.0
Lecane (Monostyla) bulla								
L. (Monostyla) lunaris								
Notholca squamula								
Pleosoma sp.	0.4	0.4						
Polyarthra sp.	34.0	2.3	44.7	9.7	23.5	0.7	45.7	8.5
Pompholyx sulcata								
Synchaeta sp.								
Testudinella sp.								
Trichocerca cylindrica	0.2	0.2	0.9	0.9	1.2	1.2		
T. multicrinis								
Unidentified Rotifer A	0.2	0.2			0.3	0.3		
Unidentified Rotifer B								
COPEPODA								
Calanoid copepods								
Diaptomus sp.	1.0	0.6			1.2	0.3	0.8	0.8
Eurytemora sp.								
Immatures	6.6	0.0	3.3	1.5	7.1	4.4	5.7	2.6
Cyclopoid copepods								
Cyclops sp.	1.1	0.0	1.6	1.6	1.8	0.4	1.6	0.6
Mesocyclops sp.							0.3	0.3
Tropocyclops prasinus								
Immatures	7.8	0.8	1.9	1.9	7.8	6.9	7.7	7.7
Nauplius	52.4	4.8	72.5	0.6	46.5	3.2	61.9	12.5
CLADOCERA								
Bosmina sp.	42.8	10.0	77.2	5.7	55.7	1.9	62.0	2.4
Ceriodaphnia sp.								
Chydorus sp.	14.6	0.6	16.7	2.0	10.5	2.4	13.9	3.7
Daphnia galeata								
D. pulex								
D. retrocurva	0.2	0.2			0.3	0.3	0.3	0.3
Diaphanosoma sp.					1.0	1.0	0.6	0.6
Holopedium sp.								
Leptodora kindtii								
PROTOZOA								
Acineta sp.								
Amphileptus sp.								
Difflugia sp.	34.4	4.5	83.8	43.4	26.8	8.4	44.1	17.1
Orphryodendron sp.								
Staurophrya sp.								
Vorticella sp.	0.4	0.4	1.9	1.9	0.7	0.7	0.8	0.8
Zoothamnium sp.	0.4	0.4	0.9	0.9	0.3	0.3	0.8	0.8
TOTAL	228.3	33.6	375.3	9.6	209.9	31.6	282.0	76.3

S.D. = Standard Deviation

Data presented as number/liter.

TABLE B-4 CONT.

ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT - OCTOBER 9, 1974

TAXA	Station 14		Station 18		Station 19		Mean # per
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Sta. Sampled
ROTIFERA							
Asplanchna giroidi							
A. priodonta	5.7	1.9	5.5	0.8	3.8	1.2	3.1
Brachionus angularis	2.1	0.0	3.2	1.6	3.2	0.2	2.2
B. calyciflorus	9.7	4.6	6.2	0.8	14.6	0.2	9.5
B. havanaensis							0.1
B. (Platyias) patulus							
B. urceolaris							0.0
Chromogaster ovalis							
Conochiloides sp.	8.4	7.6	5.1	5.1	0.4	0.4	5.8
Euchlanis sp.							0.0
Filinia terminalis			0.4	0.4	0.2	0.2	0.3
Hexarthra mira	0.4	0.4					0.1
Kellicottia longispina							
Keratella cochlearis	13.1	3.8	12.5	8.6	24.5	7.4	12.4
K. quadrata	0.4	0.4	0.4	0.4	2.3	1.2	1.0
Lecane (Monostyla) bulla			0.4	0.4			0.0
L. (Monostyla) lunaris							
Notholca squamula							
Pleosoma sp.					0.4	0.4	0.3
Polyarthra sp.	31.8	4.8	35.3	6.6	10.5	0.6	37.1
Pompholyx sulcata							
Synchaeta sp.							0.1
Testudinella sp.							
Trichocerca cylindrica	0.2	0.2					0.2
T. multicrinis							0.1
Unidentified Rotifer A			0.4	0.4			0.3
Unidentified Rotifer B							
COPEPODA							
Calanoid copepods							
Diaptomus sp.	0.9	0.5	1.2	0.4			1.0
Eurytemora sp.							
Immatures	2.8	0.7	2.8	1.2			4.2
Cyclopoid copepods							
Cyclops sp.	1.7	0.9	0.4	0.4	0.2	0.2	1.4
Mesocyclops sp.							0.1
Tropocyclops prasinus							
Immatures	6.4	5.1	12.8	3.5	0.6	0.6	6.5
Nauplius	63.1	9.5	63.7	14.7	3.0	0.0	59.3
CLADOCERA							
Bosmina sp.	60.3	4.2	50.1	5.8	5.0	1.6	54.3
Ceriodaphnia sp.							
Chydorus sp.	10.4	0.7	12.1	5.1	7.8	2.1	12.8
Daphnia galeata							
D. pulex							
D. retrocurva							0.1
Diaphanosoma sp.			0.4	0.4	0.2	0.2	0.2
Holopedium sp.							
Leptodora kindtii							
PROTOZOA							
Acineta sp.							
Amphileptus sp.							
Difflugia sp.	27.0	3.4	55.1	26.4	15.4	2.1	42.2
Orphryodendron sp.							
Staurophrya sp.							
Vorticella sp.	0.4	0.4	1.1	1.1			0.6
Zoothamnium sp.	0.2	0.2	0.8	0.8	0.4	0.4	0.8
TOTAL	244.6	43.3	270.1	71.1	92.3	13.4	259.2

S.D. = Standard Deviation

Data presented as number/liter.

TABLE B-5

ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT - NOVEMBER 7, 1974

TAXA	Station 1		Station 3		Station 6		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
ROTIFERA								
Asplanchna giroidi								
A. priodonta	0.5	0.5	3.2	0.7	3.4	0.5	1.5	0.2
Brachionus angularis	1.0	1.0	3.0	3.0				
B. calyciflorus	22.2	7.4	26.8	1.2	22.3	0.8	35.9	4.6
B. havanaensis								
B. (Platyias) patulus								
B. urceolaris								
Chromogaster ovalis	2.0	2.0						
Conochiloides sp.	5.9	2.0	2.2	1.7	2.7	0.8	3.0	2.5
Euchlanis sp.			0.3	0.3				
Filinia terminalis								
Hexarthra mira								
Kellicottia longispina					0.3	0.3		
Keratella cochlearis	93.2	29.2	92.2	20.9	92.1	23.4	103.1	17.2
K. quadrata	10.3	1.6	10.4	5.0	12.4	0.5	4.0	0.4
Lecane (Monostyla) bulla								
L. (Monostyla) lunaris								
Notholca squamula								
Pleosoma sp.								
Polyarthra sp.	36.6	1.9	30.5	2.0	23.2	1.6	29.4	3.7
Pompholyx sulcata								
Synchaeta sp.			0.5	0.5				
Testudinella sp.								
Trichocerca cylindrica								
T. multicrinis								
Unidentified Rotifer A	38.3	0.9	28.5	4.4	49.0	19.9	14.5	0.3
Unidentified Rotifer B								
COPEPODA								
Calanoid copepods								
Diaptomus sp.	1.0	1.0	0.3	0.3	0.3	0.3	0.8	0.3
Eurytemora sp.								
Immatures	1.3	1.3			0.3	0.3	0.7	0.2
Cyclopoid copepods								
Cyclops sp.	0.5	0.5	0.3	0.3	1.0	0.5	1.8	0.9
Mesocyclops sp.					0.3	0.3		
Tropocyclops prasinus			0.3	0.3			0.5	0.5
Immatures	5.9	1.0	3.0	2.0	3.4	1.4	6.8	1.3
Nauplius	8.2	1.3	15.3	3.5	17.3	1.6	13.5	3.1
CLADOCERA								
Bosmina sp.	7.7	1.8	8.6	1.7	4.6	1.3	6.4	0.4
Ceriodaphnia sp.								
Chydorus sp.	14.0	6.1	8.6	1.2	4.6	0.8	19.8	6.7
Daphnia galeata								
D. pulex								
D. retrocurva								
Diaphanosoma sp.								
Holopedium sp.								
Leptodora kindtii								
PROTOZOA								
Acineta sp.								
Amphileptus sp.								
Difflugia sp.	23.6	13.7	19.2	4.4	8.7	0.1	13.6	4.8
Orphryodendron sp.								
Staurophrya sp.								
Vorticella sp.	0.9	0.9	0.5	0.5	0.5	0.5	0.3	0.3
Zoothamnium sp.	0.5	0.5			0.3	0.3	1.1	1.1
TOTAL	265.7	65.8	253.3	27.9	246.1	45.8	256.2	35.3

S.D. = Standard Deviation

Data presented as number/liter.

TABLE B-5 CONT.

ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT - NOVEMBER 7, 1974

TAXA	Station 9		Station 10		Station 12		Station 13	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
ROTIFERA								
Asplanchna giroidi								
A. priodonta	2.6	0.8	1.7	1.7	1.7	1.0	2.4	0.8
Brachionus angularis							0.8	0.8
B. calyciflorus	37.9	6.2	33.4	9.5	24.8	3.4	24.6	1.7
B. havanaensis								
B. (Platyias) patulus								
B. urceolaris								
Chromogaster ovalis								
Conochiloides sp.	2.4	1.3	0.8	0.8	1.4	0.7	1.8	0.3
Euchlanis sp.								
Filinia terminalis	1.0	0.6					0.3	0.3
Hexarthra mira								
Kellicottia longispina			0.6	0.6				
Keratella cochlearis	138.8	39.2	70.6	4.7	83.9	29.5	81.0	9.7
K. quadrata	8.5	2.7	14.9	5.3	3.1	0.4	11.6	1.1
Lecane (Monostyla) bulla								
L. (Monostyla) lunaris								
Notholca squamula								
Pleosoma sp.								
Polyarthra sp.	44.5	1.4	36.8	11.8	36.6	4.4	31.5	4.1
Pompholyx sulcata								
Synchaeta sp.								
Testudinella sp.								
Trichocerca cylindrica								
T. multicrinis								
Unidentified Rotifer A	29.0	10.5	43.6	9.5	17.1	5.0	42.4	24.1
Unidentified Rotifer B								
COPEPODA								
Calanoid copepods								
Diaptomus sp.	0.6	0.6			1.4	1.4	0.3	0.3
Eurytemora sp.	0.4	0.4						
Immatures	3.2	2.1	0.8	0.8	0.7	0.0	0.3	0.3
Cyclopoid copepods								
Cyclops sp.	2.2	1.1	1.2	1.2	3.4	2.1	0.8	0.8
Mesocyclops sp.								
Tropocyclops prasinus					0.4	0.4		
Immatures	8.7	4.3	4.1	1.8	4.4	1.7	2.4	1.4
Nauplius	15.3	5.7	10.4	5.9	16.8	1.4	13.8	4.1
CLADOCERA								
Bosmina sp.	19.2	5.2	3.7	0.8	6.1	0.7	4.6	2.5
Ceriodaphnia sp.								
Chydorus sp.	35.4	16.9	17.0	2.2	14.4	1.7	6.7	0.1
Daphnia galeata								
D. pulex								
D. retrocurva								
Diaphanosoma sp.								
Holopedium sp.								
Leptodora kindtii								
PROTOZOA								
Acineta sp.								
Amphileptus sp.								
Difflugia sp.	21.4	4.4	23.4	7.5	18.1	5.4	11.4	3.0
Orphryodendron sp.								
Staurophrya sp.								
Vorticella sp.	0.4	0.4	0.8	0.8	0.4	0.4	0.8	0.8
Zoothamnium sp.	1.5	1.5						
TOTAL	372.4	94.1	286.4	33.6	234.2	32.2	237.0	29.4

S.D. = Standard Deviation

Data presented as number/liter.

TABLE B-5 CONT.

ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT - NOVEMBER 7, 1974

TAXA	Station 14		Station 18		Station 19		Mean # per
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Sta. Sampled
ROTIFERA							
Asplanchna giroidi							
A. priodonta	1.6	0.8	2.0	0.8	3.6	*	2.2
Brachionus angularis					6.8		1.1
B. calyciflorus	27.9	4.4	31.2	3.1	14.8		27.4
B. havanaensis							
B. (Platyias) patulus							
B. urceolaris							
Chromogaster ovalis							0.0
Conochiloides sp.	1.8	0.6	3.5	0.7	1.6		2.5
Euchlanis sp.							0.0
Filinia terminalis							0.1
Hexarthra mira							
Kellicottia longispina							0.1
Keratella cochlearis	93.1	10.2	58.1	3.3	86.2		90.2
K. quadrata	9.8	0.6	6.1	3.3	10.8		9.3
Lecane (Monostyla) bulla							
L. (Monostyla) lunaris							
Notholca squamula							
Pleosoma sp.							
Polyarthra sp.	36.9	9.0	36.1	5.5	22.3		33.1
Pompholyx sulcata							
Synchaeta sp.					0.4		0.1
Testudinella sp.							
Trichocerca cylindrica							
T. multicrinis							
Unidentified Rotifer A	20.4	0.4	17.1	5.9	2.8		27.5
Unidentified Rotifer B							
COPEPODA							
Calanoid copepods							
Diaptomus sp.	0.6	0.6	1.7	1.1			0.6
Eurytemora sp.							0.0
Immatures	0.6	0.6	3.0	2.3			1.0
Cyclopoid copepods							
Cyclops sp.	0.8	0.4	3.0	1.2	1.2		1.5
Mesocyclops sp.	0.2	0.2					0.0
Tropocyclops prasinus	0.2	0.2					0.1
Immatures	2.2	1.0	8.5	5.7	8.8		5.3
Nauplius	9.8	0.6	17.4	3.3	27.5		15.0
CLADOCERA							
Bosmina sp.	10.6	4.6	9.1	2.1	1.2		7.4
Ceriodaphnia sp.							
Chydorus sp.	11.8	9.4	11.5	2.7	22.7		15.1
Daphnia galeata							
D. pulex							
D. retrocurva							
Diaphanosoma sp.							
Holopedium sp.							
Leptodora kindtii							
PROTOZOA							
Acineta sp.							
Amphileptus sp.							
Difflugia sp.	17.0	2.3	16.6	1.8	1.2		15.8
Orphryodendron sp.							
Staurophrya sp.							
Vorticella sp.	0.2	0.2	0.3	0.3			0.5
Zoothamnium sp.	1.2	1.2					0.4
TOTAL	244.6	43.7	208.0	18.3	211.9		256.0

S.D. = Standard Deviation

Data presented as number/liter.

* One sample was destroyed

APPENDIX C

BENTHOS POPULATIONS AT LOCUST POINT
JULY - NOVEMBER, 1974

TABLE C-1 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - JULY 17, 1974

TAXA	Station 1		Station 2		Station 3		Station 4	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)								
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)					261.0	105.2	63.7	55.1
Immatures (hair setae)	6.4	11.0			6.4	11.0	6.4	11.0
Immatures (no hair setae)	31.8	29.2	31.8	22.1	3476.2	1051.5	1642.6	656.9
Branchyura sowerbyi					101.9	86.1	25.5	29.2
Limnodrilus cervix							31.8	55.1
L. claparedeanus					12.7	11.0	50.9	58.4
L. claparedeanus-cervix								
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis								
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii	82.8	73.3	38.2	50.5	12.7	22.0	63.7	77.2
Amphipoda								
Gammarus fasciatus			6.4	11.0			12.7	11.0
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.					108.2	127.2	25.5	29.2
Chironomus pupa								
Coelotanypus sp.								
Cryptochironomus sp.					44.6	22.1		
Polypedilum sp.					12.7	22.0		
Procladius sp.					25.5	11.0	12.7	22.0
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.					337.4	173.3	25.5	22.0
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.	6.4	11.0						
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.					6.4	11.0	12.7	11.0
Station Total	127.3	79.5	76.4	33.1	3184.7	2585.8	1910.0	607.3

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-1 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - JULY 17, 1974

TAXA	Station 5		Station 6		Station 7		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)								
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)			6.4	11.0				
Immatures (hair setae)							44.6	77.2
Immatures (no hair setae)	114.6	166.5	108.3	29.2	101.9	96.1	108.2	187.5
Branchyura sowerbyi			6.4	11.0				
Limnodrilus cervix								
L. claparedeanus					12.7	22.0		
L. claparedeanus-cervix								
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis					12.7	22.0		
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii	6.4	11.0	25.5	11.0	127.3	127.2	171.9	297.8
Amphipoda								
Gammarus fasciatus			12.7	22.0			38.2	38.2
Hyalella azteca			12.7	22.0				
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.			6.4	11.0	6.4	11.0	38.2	66.2
Chironomus pupa								
Coelotanypus sp.								
Cryptochironomus sp.								
Polypedilum sp.								
Procladius sp.							19.1	19.1
Procladius pupa					6.4	11.0		
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	6.4	11.0	6.4	11.0			38.2	38.2
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.			25.5	11.0				
Station Total	127.3	159.0	204.0	39.8	267.4	262.6	458.4	681.5

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-1 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - JULY 17, 1974

TAXA	Station 9		Station 10		Station 11		Station 12	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)								
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)	25.5	29.2						
Immatures (hair setae)	19.1	33.1						
Immatures (no hair setae)	742.6	460.1	6.4	11.0	305.6	418.9	407.5	350.3
Branchyura sowerbyi								
Limnodrilus cervix								
L. claparedeanus					38.2	66.1	25.5	44.1
L. claparedeanus-cervix	6.4	11.0						
L. hoffmeisteri								
L. maumeensis							6.4	11.0
L. udekemianus								
Potamothrix moldaviensis	12.7	11.0						
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii	617.6	177.5	44.6	39.8	25.5	44.1		
Amphipoda								
Gammarus fasciatus					70.0	29.2	114.6	95.5
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	6.4	11.0			19.1	33.1		
Chironomus pupa								
Coelotanypus sp.								
Cryptochironomus sp.								
Polypedilum sp.								
Procladius sp.	25.5	11.0						
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	6.4	11.0			12.7	22.1	12.7	22.1
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.							12.7	22.1
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.								
Station Total	1769.9	354.9	50.9	44.1	471.1	539.0	458.0	496.9

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-1 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - JULY 17, 1974

TAXA	Station 13		Station 14		Station 15		Station 16	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)								
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)	12.7	22.1	31.8	55.1				
Immatures (hair setae)			6.4	11.0				
Immatures (no hair setae)	789.5	278.3	2355.7	1218.4	872.2	1081.4	700.3	359.0
Branchyura sowerbyi			12.7	11.0	12.7	22.0		
Limnodrilus cervix	12.7	11.0	57.3	83.3	25.8	43.8		
L. claparedeanus			95.5	57.3	44.6	77.2		
L. claparedeanus-cervix					6.4	11.0		
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis	6.4	11.0	12.7	11.0	6.4	11.0	229.2	76.4
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii	146.4	29.2	152.8	50.5	241.9	61.4	191.0	19.1
Amphipoda								
Gammarus fasciatus								
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.			25.5	22.0	12.7	22.1	159.1	77.1
Chironomus pupa								
Coelotanypus sp.								
Cryptochironomus sp.					6.4	11.0		
Polypedilum sp.								
Procladius sp.			12.7	11.0	12.7	22.1		
Procladius pupa							6.37	11.0
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	31.8	22.0	286.5	166.5	216.5	242.4		
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.							6.37	11.0
Station Total	986.8	267.6	3017.8	1522.3	1464.3	1569.7	1292.4	496.0

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-1 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - JULY 17, 1974

TAXA	Station 17		Station 18		Station 19		Station 20	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)								
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	63.6	61.4	1216.0	800.9	6.3	11.0		
Branchyura sowerbyi								
Limnodrilus cervix								
L. claparedeanus								
L. claparedeanus-cervix								
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis	44.5	61.4	140.0	39.7				
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii	95.5	38.2	401.1	206.6	133.7	114.6		
Amphipoda								
Gammarus fasciatus								
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	133.7	199.4	12.7	22.0				
Chironomus pupa								
Coelotanypus sp.								
Cryptochironomus sp.								
Polypedilum sp.								
Procladius sp.								
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.					12.7	22.0		
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.								
Station Total	337.4	286.7	1769.9	903.2	152.8	133.7		

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-2

ANALYSIS OF BENTHOS POPULATIONS
AT ATOLOCUST POINT ON AUGUST 14, 1974

TAXA	Station 1		Station 2		Station 3		Station 4	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)					12.8	11.0	10.8	18.5
Hydra sp. (single polyp)					10.8	18.5		
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis							6.3	11.0
Oligochaeta (unidentified)								
Immatures (hair setae)			6.3	11.0				
Immatures (no hair setae)	445.7	606.6	0.0	0.0	2323.9	634.8	2202.9	1462.2
Branchyura sowerbyi					10.8	18.6	12.8	11.0
Limnodrilus cervix	10.8	18.6			31.9	39.8	44.6	22.0
L. claparedeanus	44.6	77.1			31.9	55.1	95.5	76.4
L. claparedeanus-cervix							19.1	33.0
L. hoffmeisteri								
L. maumeensis	10.8	18.6						
L. udekemianus								
Potamothrix moldaviensis	38.2	66.1			25.4	44.1	57.3	33.0
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii			89.1	61.4	70.0	77.1		
Amphipoda								
Gammarus fasciatus	6.3	11.0					6.3	11.0
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	25.4	11.0			6.3	11.0	178.2	159.0
Chironomus pupa								
Coelotanypus sp.					44.5	44.1	6.3	11.0
Cryptochironomus sp.			6.3	11.0	6.3	11.0		
Polypedilum sp.								
Procladius sp.					159.1	48.0	121.0	127.1
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	6.3	11.0			38.2	19.1	12.8	11.0
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata							6.3	11.0
Sphaerium sp.								
Station Total	592.1	794.2	101.7	72.3	2775.9	574.7	2782.2	1819.7

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-2 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - AUGUST 14, 1974

TAXA	Station 5		Station 6		Station 7		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)								
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis							6.3	11.0
Oligochaeta (unidentified)								
Immatures (hair setae)			12.8	22.0				
Immatures (no hair setae)	6.3	11.0	6073.8	5575.0	222.8	105.1	127.3	105.1
Branchyura sowerbyi			51.0	22.0	6.3	11.0		
Limnodrilus cervix			203.8	185.6	57.3	57.3	6.3	11.0
L. claparedeanus			82.8	86.1				
L. claparedeanus-cervix								
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis	12.7	11.0	6.3	11.0			6.3	11.0
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii	31.8	55.1	38.2	50.6	171.9	234.7	31.8	55.1
Amphipoda								
Gammarus fasciatus	6.3	11.0			12.8	22.0	31.9	29.1
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	63.7	11.0	624.0	496.8	57.3	51.0	178.2	276.3
Chironomus pupa								
Coelotanypus sp.			108.2	105.1	17.1	21.4	44.6	61.4
Cryptochironomus sp.							19.1	33.0
Polypedilum sp.								
Procladius sp.			267.4	258.3	31.9	11.0	82.8	61.4
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	63.7	94.2	146.4	221.0				
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata					25.4	29.1		
Sphaerium sp.			44.6	77.1				
Station Total	127.3	138.1	7659.1	6318.1	624.0	39.8	534.8	532.4

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-2 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - AUGUST 14, 1974

TAXA	Station 9		Station 10		Station 11		Station 12	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)								
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	961.3	635.9	57.3	33.0	2234.7	1556.0	31.9	22.0
Branchyura sowerbyi					6.3	11.0		
Limnodrilus cervix	6.3	11.0			140.0	105.1		
L. claparedeanus	44.6	29.1	6.3	11.0	38.2	38.2		
L. claparedeanus-cervix	6.3	11.0						
L. hoffmeisteri								
L. maumeensis					6.3	11.0		
L. udekemianus								
Potamothrix moldaviensis	31.9	11.0	12.8	11.0	12.8	22.0		
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii	44.6	61.4					38.2	50.6
Amphipoda								
Gammarus fasciatus			31.9	55.1	6.3	11.0		
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	152.9	137.8	51.0	55.1	579.4	365.7	31.9	22.0
Chironomus pupa								
Coelotanypus sp.	31.9	29.1			6.3	11.0		
Cryptochironomus sp.								
Polypedilum sp.								
Procladius sp.	63.7	44.1	25.4	29.1	89.1	61.4		
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.					31.9	39.8		
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.								
Station Total	1348.3	658.8	184.9	88.6	3151.6	2088.2	101.9	67.0

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-2 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - AUGUST 14, 1974

TAXA	Station 13		Station 14		Station 15		Station 16	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)								
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis					6.3	11.0	6.3	11.0
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	31.9	55.1	3266.1	1744.4	916.9	398.9	611.2	83.2
Branchyura sowerbyi			6.3	11.0	31.9	29.1		
Limnodrilus cervix			101.9	130.0	76.4	57.3	19.1	19.1
L. claparedeanus								
L. claparedeanus-cervix								
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis			12.8	22.0	12.8	11.0	165.6	79.6
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii	31.9	39.8	140.0	67.0	44.6	44.1	25.4	22.0
Amphipoda								
Gammarus fasciatus	6.3	11.0	6.3	11.0				
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	12.8	11.0	127.3	138.1	140.0	58.3	242.0	252.1
Chironomus pupa								
Coelotanypus sp.			57.3	33.0	63.7	48.0	6.3	11.0
Cryptochironomus sp.			25.4	44.1			38.2	19.1
Polypedilum sp.								
Procladius sp.	6.3	11.0	127.3	22.0	95.6	68.9		
Procladius pupa							6.3	11.0
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.			19.1	33.0			6.3	11.0
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.								
Station Total	89.1	105.1	3890.0	2075.3	1388.0	289.2	1127.0	303.2

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-2 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - AUGUST 14, 1974

TAXA	Station 17		Station 18		Station 19		Station 20	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)								
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	19.1	33.0	770.3	177.4	51.0	39.8		
Branchyura sowerbyi								
Limnodrilus cervix	6.3	11.0	25.4	29.1	12.8	22.0		
L. claparedeanus			19.1	19.1	51.0	88.2		
L. claparedeanus-cervix								
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis	31.9	29.1	165.6	155.6				
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii			6.3	11.0				
Amphipoda								
Gammarus fasciatus								
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	25.4	29.1	1152.3	466.4	133.8	101.0		
Chironomus pupa								
Coelotanypus sp.								
Cryptochironomus sp.	19.1	19.1	38.2	19.1				
Polypedilum sp.								
Procladius sp.			6.3	11.0	12.8	11.0		
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.								
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.								
Station Total	101.9	86.1	2183.8	747.0	261.0	110.2		

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-3

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - SEPTEMBER 6, 1974

TAXA	Station 1		Station 2		Station 3		Station 4	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)								
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	31.9	29.1	101.9	67.0	534.9	220.2	1165.1	978.2
Branchyura sowerbyi							44.6	48.0
Limnodrilus cervix							31.9	39.8
L. claparedeanus					6.3	11.0	6.3	11.0
L. claparedeanus-cervix							19.1	19.1
L. hoffmeisteri								
L. maumeensis					6.3	11.0	6.3	11.0
L. udekemianus								
Potamothrix moldaviensis							12.8	11.0
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii			114.7	58.9	292.9	241.9	127.3	171.9
Amphipoda								
Gammarus fasciatus			6.3	11.0				
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	31.9	39.8	19.1	19.1			38.2	66.1
Chironomus pupa								
Coelotanypus sp.								
Cryptochironomus sp.	6.3	11.0					6.3	11.0
Polypedilum sp.								
Procladius sp.					6.3	11.0	19.1	19.1
Procladius pupa								
Pseudochironomus sp.			12.7	22.0				
Tanypodinae pupa								
Tanytarsus sp.	12.8	22.0	12.7	22.0	343.9	156.3	261.0	187.4
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.			6.3	11.0				
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.								
Station Total	82.8	48.0	273.8	112.0	1190.6	393.4	1738.1	1506.8

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-3 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - SEPTEMBER 6, 1974

TAXA	Station 5		Station 6		Station 7		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)					6.3	11.0		
NEMATODEA			31.9	29.1	25.4	22.0		
ANNELIDA								
Hirudinea								
Helobdella elongata							44.6	48.0
H. stagnalis								
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	51.0	44.1	146.4	155.6	490.2	466.4	573.0	193.9
Branchyura sowerbyi					63.7	58.3	31.9	11.0
Limnodrilus cervix					6.3	11.0	6.3	11.0
L. claparedeanus							31.9	39.8
L. claparedeanus-cervix	6.3	11.0					12.8	11.0
L. hoffmeisteri								
L. maumeensis							6.3	11.0
L. udekemianus								
Potamothrix moldaviensis								
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii	38.2	19.1			25.4	29.1	6.3	11.0
Amphipoda								
Gammarus fasciatus			12.8	11.0	82.8	29.1	44.5	48.0
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	12.8	11.0	197.3	193.2	101.9	88.2	57.3	33.0
Chironomus pupa								
Coelotanypus sp.			12.8	22.0	6.3	11.0		
Cryptochironomus sp.								
Polypedilum sp.								
Procladius sp.			6.3	11.0	6.3	11.0	12.8	11.0
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	6.3	11.0	38.2	19.1	19.1	19.1	528.4	423.0
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.							31.9	22.0
Station Total	114.7	68.9	477.6	381.6	834.0	568.0	1394.3	445.0

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-3 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - SEPTEMBER 6, 1974

TAXA	Station 9		Station 10		Station 11		Station 12	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)	6.3	11.0						
Hydra sp. (single polyp)	6.3	11.0						
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	694.0	316.3	44.6	11.0	269.2	127.1	458.4	325.9
Branchyura sowerbyi			6.3	11.0				
Limnodrilus cervix							6.3	11.0
L. claparedeanus	12.8	11.0			6.3	11.0		
L. claparedeanus-cervix	6.3	11.0					6.3	11.0
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis	6.3	11.0			44.6	29.1	6.3	11.0
P. vejdovskyi								
Stylaria sp.	6.3	11.0						
ARTHROPODA								
Cladocera								
Leptodora kindtii	1324.2	363.5	25.4	11.0	19.1	19.1	31.9	29.1
Amphipoda								
Gammarus fasciatus							25.4	29.1
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	140.0	55.1	25.4	29.1			44.6	22.0
Chironomus pupa								
Coelotanypus sp.								
Cryptochironomus sp.							6.3	11.0
Polypedilum sp.								
Procladius sp.	51.1	29.1	6.3	11.0				
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	1910.0	607.3	19.1	33.0			57.3	57.3
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.								
Station Total	4563.9	1500.3	127.3	55.1	439.3	172.0	643.0	408.4

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-3 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - SEPTEMBER 6, 1974

TAXA	Station 13		Station 14		Station 15		Station 16	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)					6.3	11.0		
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	942.2	535.2	4004.7	912.0	222.9	124.2	1407.0	303.4
Branchyura sowerbyi	6.3	11.0	19.1	33.0				
Limnodrilus cervix	12.8	22.0	127.3	105.1				
L. claparedeanus	6.3	11.0	19.1	19.1				
L. claparedeanus-cervix	12.8	22.0	6.3	11.0				
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis			6.3	11.0			63.7	11.0
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii	522.0	258.0	471.1	293.7	477.6	281.3	6.3	11.0
Amphipoda								
Gammarus fasciatus			6.3	11.0	12.8	22.0		
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	299.2	238.9	172.0	144.2			38.2	38.2
Chironomus pupa								
Coelotanypus sp.			6.3	11.0			12.8	11.0
Cryptochironomus sp.			12.8	11.0	6.3	11.0		
Polypedilum sp.								
Procladius sp.	6.3	11.0	6.3	11.0			19.1	19.1
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	19.1	33.0	146.4	105.1	114.7	33.0	51.0	44.1
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.							6.3	11.0
Station Total	1827.2	474.6	5004.2	813.2	840.4	319.0	1820.9	358.6

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-3 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - SEPTEMBER 6, 1974

TAXA	Station 17		Station 18		Station 19		Station 20	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)								
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	121.0	39.8	6570.4	1032.0	57.3	50.5		
Branchyura sowerbyi			51.0	11.0				
Limnodrilus cervix			146.4	67.0	63.7	61.4		
L. claparedeanus			121.0	72.8				
L. claparedeanus-cervix			184.7	29.1				
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis	38.2	33.0	31.9	55.1				
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii	25.4	29.1			19.1	33.0		
Amphipoda								
Gammarus fasciatus								
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	25.4	11.0	51.0	11.0	25.4	29.1		
Chironomus pupa								
Coelotanypus sp.								
Cryptochironomus sp.			6.3	11.0				
Polypedilum sp.								
Procladius sp.			6.3	11.0	6.3	11.0		
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.			6.3	11.0	294.8	124.2		
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.								
Station Total	210.1	19.1	7175.2	948.3	566.7	67.0		

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-4

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - OCTOBER 10, 1974

TAXA	Station 1		Station 2		Station 3		Station 4	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)					6.4	11.0	12.7	22.0
NEMATODEA					38.2	33.0	19.1	19.1
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis							6.4	11.0
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	95.6	57.3	210.1	252.7	1808.2	487.9	2546.7	704.3
Branchyura sowerbyi							19.1	19.1
Limnodrilus cervix					6.4	11.0		
L. claparedeanus							25.4	22.0
L. claparedeanus-cervix								
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis								
Nais sp.					12.8	11.0		
Stylaria sp.					6.4	11.0		
ARTHROPODA								
Cladocera								
Leptodora kindtii					44.6	39.8	51.0	39.8
Amphipoda								
Gammarus fasciatus	19.1	19.1	19.1	0.0			6.4	11.0
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.			12.7	22.0	82.8	143.3	280.1	242.6
Chironomus pupa								
Coelotanypus sp.					31.9	29.1		
Cryptochironomus sp.					19.1	33.0		
Polypedilum sp.								
Procladius sp.					76.4	50.6	25.4	11.0
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	467.8	58.3	280.1	485.2	764.0	202.1	560.2	435.7
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.							6.4	11.0
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.			6.4	11.0				
Station Total	579.3	112.0	528.4	767.9	2903.2	606.4	3737.2	985.3

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-4 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - OCTOBER 10, 1974

TAXA	Station 5		Station 6		Station 7		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)					6.3	11.0		
NEMATODEA			6.3	11.0				
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis			6.3	11.0				
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	1725.3	358.5	1095.0	699.2	312.0	312.0	1107.9	646.9
Branchyura sowerbyi			127.3	108.6	31.9	39.8	44.6	11.0
Limnodrilus cervix	12.8	11.0						
L. claparedeanus	12.8	22.0	19.1	33.0			6.3	11.0
L. claparedeanus-cervix								
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis	31.9	39.8						
Nais sp.								
Stylaria sp.					6.3	11.0		
ARTHROPODA								
Cladocera								
Leptodora kindtii	6.3	11.0			12.8	11.0		
Amphipoda								
Gammarus fasciatus	6.3	11.0			44.6	61.4	133.8	83.2
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	38.2	66.1	70.0	67.0	12.8	22.0	82.8	72.3
Chironomus pupa								
Coelotanypus sp.								
Cryptochironomus sp.	44.6	11.0	38.2	50.6			12.8	22.0
Polypedilum sp.			6.3	11.0	6.3	11.0		
Procladius sp.			12.7	11.0			6.3	11.0
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	25.4	44.1	31.9	55.1	38.2	50.6	44.6	39.8
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata							6.3	11.0
Sphaerium sp.								
Station Total	1903.7	328.8	1413.4	782.1	471.1	249.2	1445.2	553.7

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-4 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - OCTOBER 10, 1974

TAXA	Station 9		Station 10		Station 11		Station 12	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)	63.7	110.2					12.8	22.0
Hydra sp. (single polyp)	121.0	112.0					47.8	40.6
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata							31.9	55.1
H. stagnalis	12.8	22.0					6.3	11.0
Oligochaeta (unidentified)								
Immatures (hair setae)							6.3	11.0
Immatures (no hair setae)	885.0	488.7	127.3	138.1	76.4	33.0	222.9	238.9
Branchyura sowerbyi					6.3	11.0		
Limnodrilus cervix			6.3	11.0				
L. claparedeanus	6.3	11.0			6.3	11.0		
L. claparedeanus-cervix	6.3	11.0						
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis								
Nais sp.								
Stylaria sp.	101.9	127.1					12.8	22.0
ARTHROPODA								
Cladocera								
Leptodora kindtii	89.1	48.0			6.3	11.0		
Amphipoda								
Gammarus fasciatus	25.4	44.1	12.8	22.0			133.8	215.2
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	44.6	61.4	6.3	11.0			76.4	19.1
Chironomus pupa								
Coelotanypus sp.								
Cryptochironomus sp.	6.3	11.0	6.3	11.0				
Polypedilum sp.								
Procladius sp.	6.3	11.0						
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	267.4	353.8	19.1	19.1	6.3	11.0	19.1	33.0
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata	6.3	11.0						
Sphaerium sp.			6.3	11.0				
Station Total	1642.7	906.7	184.7	140.8	101.9	29.1	560.2	548.3

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-4 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - OCTOBER 10, 1974

TAXA	Station 13		Station 14		Station 15		Station 16	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)			12.8	11.0				
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)								
Immatures (hair setae)	25.4	44.1	44.6	11.0	6.3	11.0		
Immatures (no hair setae)	191.0	152.9	2841.1	353.8	1604.4	1191.6	611.2	364.0
Branchyura sowerbyi			12.8	22.0				
Limnodrilus cervix			12.8	22.0	12.8	22.0		
L. claparedeanus								
L. claparedeanus-cervix			76.4	68.9	6.3	11.0	6.3	11.0
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis							114.6	33.0
Nais sp.							6.3	11.0
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii	31.9	39.8	6.3	11.0				
Amphipoda								
Gammarus fasciatus	6.3	11.0	12.8	11.0				
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	38.2	66.1	70.0	61.4	31.9	55.1		
Chironomus pupa								
Coelotanypus sp.			25.1	29.1	6.3	11.0		
Cryptochironomus sp.	6.3	11.0	63.7	29.1	19.1	19.1	6.3	11.0
Polypedilum sp.								
Procladius sp.			89.1	48.0	12.8	22.0	6.3	11.0
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	38.2	33.0	420.2	191.0			51.0	39.8
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.								
Station Total	337.4	162.4	3444.3	1104.6	1700.0	1241.0	802.2	364.4

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-4 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - OCTOBER 10, 1974

TAXA	Station 17		Station 18		Station 19		Station 20	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)								
NEMATODEA			6.3	11.0				
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	292.9	121.3	751.2	245.6	19.1	19.1		
Branchyura sowerbyi					19.1	33.0		
Limnodrilus cervix								
L. claparedeanus			6.3	11.0				
L. claparedeanus-cervix			6.3	11.0				
L. hoffmeisteri								
L. maumeensis								
L. udekemianus								
Potamothrix moldaviensis	19.1	33.0	44.6	39.8				
Nais sp.								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii			12.8	11.0				
Amphipoda								
Gammarus fasciatus								
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.								
Chironomus pupa								
Coelotanypus sp.								
Cryptochironomus sp.	12.8	22.0	12.8	11.0				
Polypedilum sp.								
Procladius sp.								
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	6.3	11.0						
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.								
Station Total	331.0	154.3	840.4	252.7	38.2	50.6		

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-5

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - NOVEMBER 7, 1974

TAXA	Station 1		Station 2		Station 3		Station 4	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)							44.6	61.4
Hydra sp. (single polyp)					6.4	11.0	57.3	38.2
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis	6.4	11.0						
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	127.3	122.8	108.2	86.1	2935.0	2966.0	1489.8	949.1
Branchyura sowerbyi					76.4	19.1	70.0	29.2
Limnodrilus cervix					70.0	105.2		
L. claparedeanus	19.1	19.1			19.1	33.1		
L. claparedeanus-cervix					25.5	44.1		
L. hoffmeisteri								
L. maumeensis								
Nais sp.								
Potamothrix moldaviensis								
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii								
Amphipoda								
Gammarus fasciatus	31.8	55.1	63.7	79.5	6.4	11.0	6.4	11.0
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.			25.5	11.0	25.5	22.1		
Cricotopus sp.							19.1	19.1
Coelotanypus sp.								
Cryptochironomus sp.	12.7	22.1			19.1	0.0	12.7	11.0
Polypedilum sp.								
Procladius sp.			6.4	11.0	38.2	33.1		
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	6.4	11.0			25.5	29.2	19.1	0.0
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.	6.4	11.0	6.4	11.0			6.4	11.0
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.							19.1	19.1
Station Total	210.1	199.4	210.1	136.5	3247.0	3184.8	1744.5	1032.3

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-5 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - NOVEMBER 7, 1974

TAXA	Station 5		Station 6		Station 7		Station 8	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)					25.5	44.1		
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	6.4	11.0	286.5	257.0	165.5	72.3	369.3	164.7
Branchyura sowerbyi			44.6	48.1	12.7	22.1	19.1	19.1
Limnodrilus cervix							6.4	11.0
L. claparedeanus								
L. claparedeanus-cervix								
L. hoffmeisteri								
L. maumeensis								
Nais sp.								
Potamothrix moldaviensis								
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii								
Amphipoda								
Gammarus fasciatus			76.4	57.3	38.2	19.1	178.3	90.3
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.			38.2	33.1			89.1	138.2
Cricotopus sp.								
Coelotanypus sp.								
Cryptochironomus sp.	19.1	19.1	50.9	29.2			25.5	29.2
Polypedilum sp.								
Procladius sp.					6.4	11.0	6.4	11.0
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	6.4	11.0	12.7	22.1	6.4	11.0	57.3	99.3
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.			6.4	11.0				
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.			31.8	39.8				
Station Total	31.8	22.1	547.5	357.5	254.7	148.4	751.3	287.4

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-5 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - NOVEMBER 7, 1974

TAXA	Station 9		Station 10		Station 11		Station 12	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)	6.4	11.0					31.8	55.1
Hydra sp. (single polyp)							63.7	110.3
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	1999.1	1262.7	31.8	11.0	464.8	723.9	789.5	1172.8
Branchyura sowerbyi					25.5	44.1		
Limnodrilus cervix								
L. claparedeanus								
L. claparedeanus-cervix	31.8	11.0			31.8	55.1		
L. hoffmeisteri								
L. maumeensis					12.7	11.0		
Nais sp.								
Potamothrix moldaviensis								
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii	6.4	11.0						
Amphipoda								
Gammarus fasciatus	12.7	22.1			12.7	11.0	203.7	210.4
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.			6.4	11.0	25.5	29.2	31.8	11.0
Cricotopus sp.								
Coelotanypus sp.								
Cryptochironomus sp.	25.5	44.1			6.4	11.0	6.4	11.0
Polypedilum sp.								
Procladius sp.	12.7	11.0			6.4	11.0	6.4	11.0
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.							12.7	11.0
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.							6.4	11.0
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.							6.4	11.0
Station Total	2094.6	1224.8	38.2	19.1	585.7	868.2	1158.7	1573.2

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-5 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - NOVEMBER 7, 1974

TAXA	Station 13		Station 14		Station 15		Station 16	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)			12.7	22.1	12.7	22.1	6.4	11.0
Hydra sp. (single polyp)			6.4	11.0	31.8	39.8		
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)								
Immatures (hair setae)					25.5	22.1		
Immatures (no hair setae)	1311.5	1083.2	2400.2	964.9	515.7	262.6	235.6	159.0
Branchyura sowerbyi			31.8	29.2				
Limnodrilus cervix	63.7	110.3	31.8	29.2			12.7	22.1
L. claparedeanus	25.5	44.1	57.3	19.1				
L. claparedeanus-cervix	31.8	55.1	50.9	22.1				
L. hoffmeisteri								
L. maumeensis								
Nais sp.					89.1	67.1		
Potamothrix moldaviensis								
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii								
Amphipoda								
Gammarus fasciatus	6.4	11.0	44.6	61.4	6.4	11.0		
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	19.1	0.0	95.5	68.9	31.8	39.8		
Cricotopus sp.								
Coelotanypus sp.			25.5	29.2				
Cryptochironomus sp.	19.1	33.1	44.6	22.1	6.4	11.0		
Polypedilum sp.								
Procladius sp.	6.4	11.0	483.9	408.0				
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	6.4	11.0	999.6	529.8	19.1	19.1		
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.					6.4	11.0		
Trichoptera								
Hydropsychidae								
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.			6.4	11.0				
Station Total	1489.8	1319.3	4291.1	1799.5	744.9	380.6	254.7	177.5

S.D. = Standard Deviation. Data presented as number/m^2.

TABLE C-5 CONT.

ANALYSIS OF BENTHOS POPULATIONS
AT LOCUST POINT - NOVEMBER 7, 1974

TAXA	Station 17		Station 18		Station 19		Station 20	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
COELENTERATA								
Hydra sp. (budding polyp)								
Hydra sp. (single polyp)			12.7	11.0				
NEMATODEA								
ANNELIDA								
Hirudinea								
Helobdella elongata								
H. stagnalis								
Oligochaeta (unidentified)								
Immatures (hair setae)								
Immatures (no hair setae)	70.0	58.4	935.9	569.5				
Branchyura sowerbyi								
Limnodrilus cervix								
L. claparedeanus								
L. claparedeanus-cervix			44.6	29.2				
L. hoffmeisteri								
L. maumeensis								
Nais sp.								
Potamothrix moldaviensis								
P. vejdovskyi								
Stylaria sp.								
ARTHROPODA								
Cladocera								
Leptodora kindtii								
Amphipoda								
Gammarus fasciatus								
Hyalella azteca								
Decopoda								
Orconectes sp.								
Chironomidae								
Chironomus (chironomus) sp.	6.4	11.0	31.8	29.2				
Cricotopus sp.								
Coelotanypus sp.								
Cryptochironomus sp.			70.0	44.1				
Polypedilum sp.								
Procladius sp.			6.4	11.0				
Procladius pupa								
Pseudochironomus sp.								
Tanypodinae pupa								
Tanytarsus sp.	6.4	11.0						
Tanytarsus pupa								
Ephemeroptera								
Caenis sp.								
Trichoptera								
Hydropsychidae			6.4	11.0				
MOLLUSCA								
Gastropoda								
Bulimus sp.								
Pelecypoda								
Amblema plicata								
Sphaerium sp.								
Station Total	82.8	67.1	1107.8	610.3	0.0	0.0		

S.D. = Standard Deviation. Data presented as number/m^2.