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

ANNUAL REPORT FOR 1973

Prepared for

Toledo Edison Company
Toledo, Ohio

Prepared by

Center for Lake Erie Area Research
The Ohio State University
Columbus, Ohio

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See Also OHSU-S-75-020

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STUDY 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. Included in the assessment are studies of existing benthos, fish, and plankton populations and water quality and recent trends in these parameters.

PROCEDURES

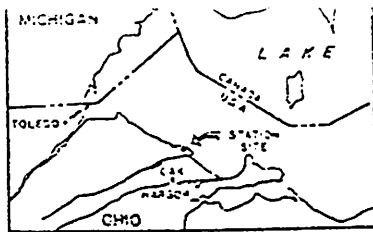
Station Position

Twenty stations, 18 along 4 transects in the open lake and 2 stations in the forebay, 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. Stations 19 and 20 were located in the center of the forebay, 1000 and 2500 ft from the lake shore, respectively.

Benthos

Benthos samples were taken monthly at 20 stations in the lake and intake channel (Fig. 1). Due to weather conditions and personnel limitations it was not always possible to space samples exactly one month apart. Actual sampling dates for each month were:

May	May 25
June	July 2
July	July 26 and August 1
August	August 23
September	September 19 and 26
October	November 2 and 7
November	December 4



SITE LOCATION

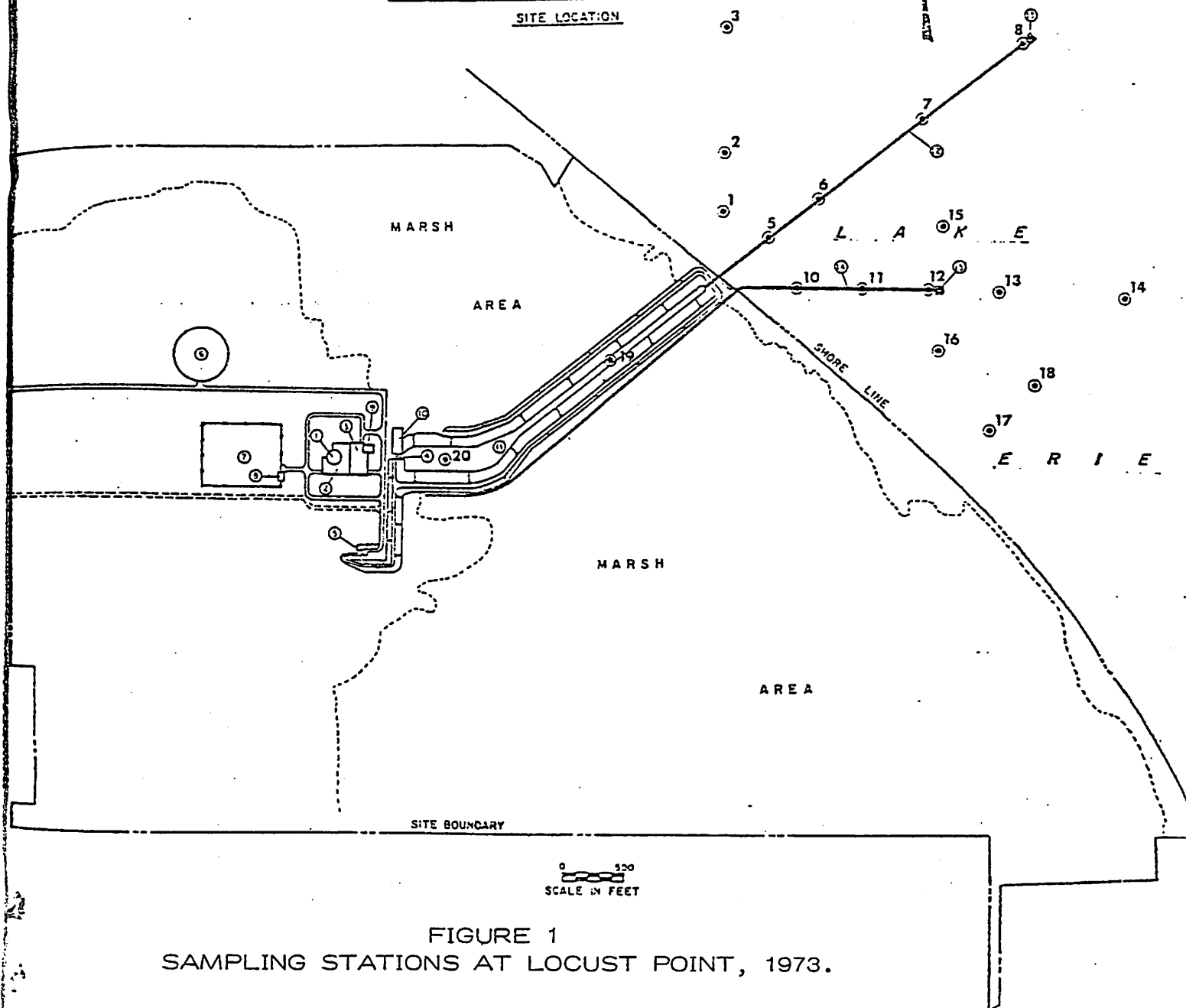


FIGURE 1
SAMPLING STATIONS AT LOCUST POINT, 1973.

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 STATION

Except in November all samples consisted of one Ponar grab ($A=0.055 \text{ m}^2$). In November, 3 replicates were taken at Stations 1, 4, 8, and 12 while other stations were represented by one grab.

Samples were sieved through a U.S. #40 sieve, preserved in 10% formalin and returned to the laboratory. They were stained with Rose Bengal and sorted in white enamel pans. Individuals were identified as far as possible (usually to genus; to species where possible) and reported as numbers of individuals per m^2 . 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.

Plankton

Plankton was sampled monthly, May through November, from 13 of the 20 sampling stations. Due to weather conditions it was impossible to space samples exactly one month apart. The exact dates of each collection were:

May	May 25
June	June 27
July	July 25
August	August 23
September	September 26
October	November 6
November	December 4

Previously, plankton had been sampled by passing water collected from a surface grab with a 3-l Kemmerer bottle through #25 silk bolting cloth. This year, along with the 3-l grab, one vertical tow (bottom to surface) was made with a Wisconsin plankton net (#25 silk bolting cloth) in an attempt to better sample the resident populations. The 3-l grab was deleted from our sampling program in August after analysis had shown it to be the inferior method.

Each sample was concentrated to 50 ml from which three 1-ml aliquots were taken for counting. Each aliquot was placed in a Sedgewick-Rafter cell, and the entire cell was scanned. Zooplankters were identified as far as feasible (genus or species) and counted for quantitative analysis. Phytoplankton was observed qualitatively and dominant species were recorded. The works of Chengalath, Fernando, 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.

Fish and Food Habits

Four methods were used to capture fish in the Locust Point vicinity including a cast net (8 ft diameter of 3/8 in bar mesh) used on October 3, 1973 to sample fish in the marshes. Fish were sampled in the lake with a 16 ft otter trawl, experimental gill nets (125 ft x 6 ft and composed of contiguous panels of 1/2, 3/4, 1, 1 1/2, and 2 inch bar mesh), and a 100 ft bag seine.

A series of four 5-minute trawls were made between the discharge (Station 12) and the intake (Station 8) monthly from June to October. Due to weather conditions it was impossible to space these trawls exactly 1 month apart. The exact dates of each trawl are listed below.

June	June 29
July	July 17
August	August 24
September	September 27
October	November 5

Gill nets were set monthly from June to November at the intake (Station 8) and discharge (Station 12). The nets were laid perpendicular to shore with the smaller mesh closest to shore. They were set in the late afternoon and retrieved in the early morning. Again, weather conditions prevented sampling exactly one month apart. The exact sampling dates are listed below.

June	July 2
July	August 2
August	August 30
September	September 28
October	November 12

Shore seining was done with a 100 ft bag seine 2500 ft west of the intake conduit and 2500 ft east of the intake conduit. Shore seining was accomplished on the following dates: June 14, August 1, October 3, and November 12. An additional seine haul was made over the intake conduit on June 14.

All fish were identified to species, weighed and measured. In addition, stomachs were taken from fish collected in the trawl to study feeding habits. Stomach contents were identified as far as possible, and individual food items were counted.

Water Chemistry

Water chemistry was measured monthly May through November at each of the twenty stations. These measurements were done simultaneously with the benthos and plankton collections. Again it was impossible to space the collections exactly one month apart. The collection dates for each month are listed below.

May	May 16-25
June	June 27 - July 2
July	July 25 - August 1
August	August 23
September	September 19-26
October	November 2
November	December 4

Parameters measured during this period included depth, transparency, dissolved oxygen (D.O.), carbon dioxide, temperature, conductivity, turbidity, alkalinity, pH, sulfate, and orthophosphate. Transparency was measured with a Secchi Disk. Temperature and conductivity were measured with a Beckman RB3-3341 Solubridge temperature-compensated conductivity meter, referenced to 25°C. All other parameters were measured with a Hack "Direct Reading" Portable Engineer's Laboratory.

PREVIOUS INVESTIGATIONS

The Ohio State University in cooperation with the Ohio Division of Wildlife and U. S. Bureau of Sport Fisheries and Wildlife (Federal Aid Project F-41-R) has conducted an aquatic ecology monitoring program at Locust Point since 1939. Results of this study can be found in annual reports submitted the The Ohio Division of Wildlife and U. S. Bureau of Sport Fisheries and Wildlife.

FINDINGS

Benthos

Between May and December, 1973, 31 benthic taxa were reported. Eleven of these were Oligochaeta and 10 were Chironomidae. The greatest number of taxa identified in any one month was 19 (September) and the fewest taxa (12) were found in June. The mean number of taxa found was 16.

The mean frequency of occurrence in 1973 was calculated for all benthic organisms (Table 1). Immature oligochaetes were the only organisms found in more than 50% of the samples (79.2%). Although no single genus of Chironomidae was found in more than 45% of the samples, the family was represented by at least one genus in 70.7% of the samples. Several taxa were present in more than 20% of samples: Limnodrilus cervix (23.8%); L. hoffmeisteri (21.5%); Potamothrix moldaviensis (35.4%); Chironomus (Chironomus) sp. (44.6%); C. (Cryptochironomus) sp. (28.5%); Tanytarsus sp. (33.8%) and Procladius sp. (23.8%). All of the above are Oligochaeta and Chironomidae. Organisms present in more than 10% of the samples were Hydra sp. (13.1%); Limnodrilus claparedeanus (13.8%); Potamothrix vejnovskyi (10.0%); Branchyura sowerbyi (19.2%); Gammarus fasciatus (13.1%) and Polypedilum sp. (12.3%).

Over the season, 11.3% of all samples contained no organisms. Four of these were on the intake transect, 2 on the discharge transect, 4 on the control transects and 4 at the forebay stations. All were within 1000 ft of shore, where severe wave action and shifting substrate are common occurrences.

When all stations were considered together there was some indication of increasing density through the season until November 7, after which density decreased (Fig. 2). The rate of increase was depressed through the spring and summer, which may have been due to dredging and pipe-laying activities along the intake and discharge transects. When the transects were considered separately the effects of construction were reflected in the population decreases on the intake and discharge transects (Fig. 3).

The trend toward increasing density with increasing distance offshore which has been observed in previous years was not so evident in 1973 except along the control west transect (Fig. 4).

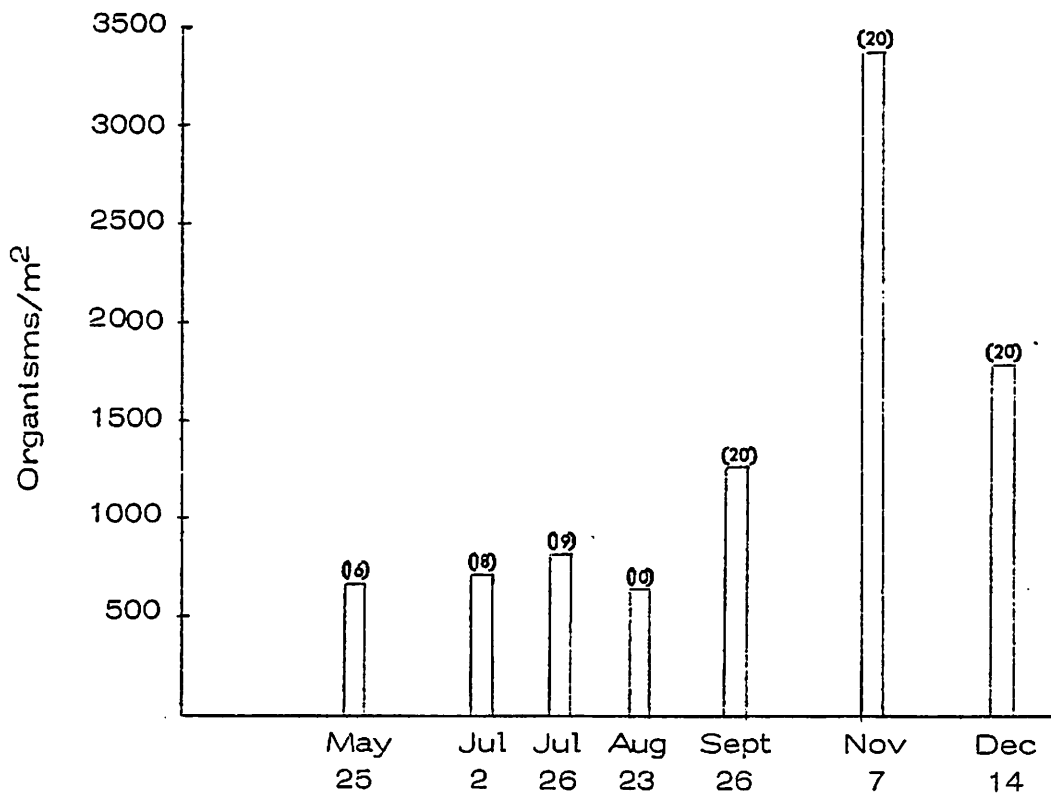
Raw data are contained in Appendix A.

TABLE 1
MEAN FREQUENCY OF OCCURRENCE (%) OF
BENTHIC MACROINVERTEBRATES AT LOCUST POINT
IN 1972 AND 1973.

	1972	1973
<u>Hydra</u> sp.	11.6	13.1
Hirudinea		
Glossiphonidae	6.9	0.7
Erpobdellidae	1.1	0.7
Oligochaeta		
<u>Limnodrilus cervix</u>	5.8	23.8
<u>L. hoffmeisteri</u>	8.1	21.5
<u>L. claparedeanus</u>	3.4	13.8
<u>Potamothenix vejdoskyi</u>	3.4	10.0
<u>P. moldaviensis</u>	15.1	35.4
<u>Branchyura sowerbyi</u>	15.1	19.2
<u>Naidium</u> sp.	10.4	0.0
<u>Pristina</u> sp.	3.4	0.0
<u>Uncinatis uncinata</u>	4.6	1.5
Naididae	1.1	0.0
immature	51.1	79.2
Amphipoda		
<u>Gammarus fasciatus</u>	24.4	13.1
Ephemeroptera		
<u>Caenis</u> sp.	4.6	2.3
Trichoptera		
Limnephilidae	1.1	0.0
Chironomidae		
<u>Chironomus (Chironomus)</u> sp.	19.7	44.6
<u>C. (Cryptochironomus)</u> sp.	26.7	28.5
<u>Polypedilum</u> sp.	15.1	12.3
<u>Pseudochironomus</u> sp.	3.4	2.3
<u>Tanytarsus</u> sp.	15.1	33.8
<u>Procladius</u> sp.	6.9	23.8
<u>Coelotanypus</u> sp.	3.4	9.2
<u>Cricotopus</u> sp.	1.1	0.0
Pelecypoda		
<u>Amblema plicata</u>	1.1	0.0
<u>Ligumia recta</u>	2.3	0.0
<u>Leptodea fragilis</u>	1.1	0.7
<u>Pisidium</u> sp.	26.8	0.7
<u>Sphaerium</u> sp.	0.0	6.9
Nothing	26.8	11.3
Total Number of Samples	86	123

FIGURE 2

MEAN DENSITY OF BENTHIC MACROINVERTEBRATES
AT LOCUST POINT ON SAMPLING DATES IN 1973



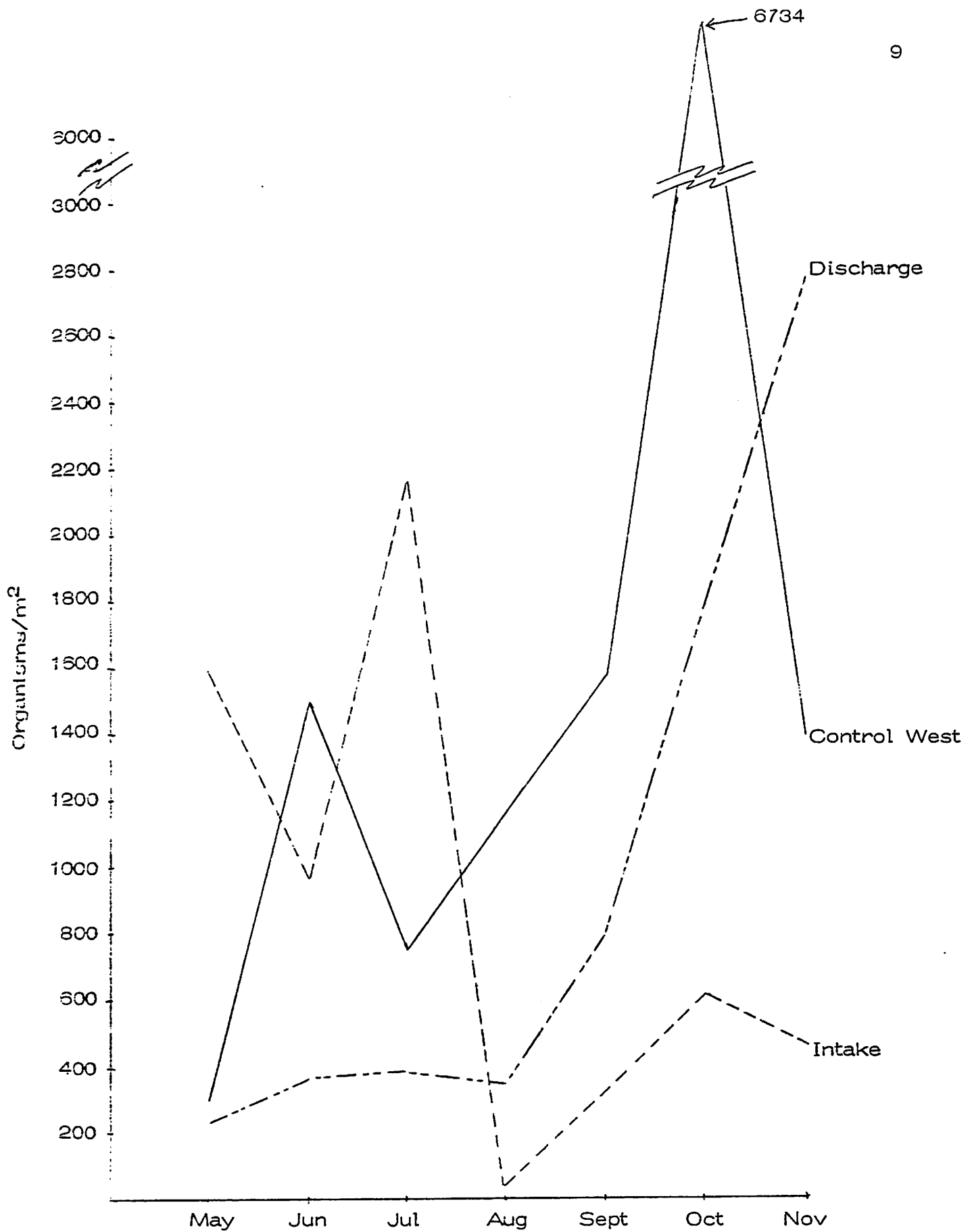


FIGURE 3
MACROBENTHOS POPULATIONS ALONG THE
THREE SAMPLING TRANSECTS AT LOCUST POINT, 1973

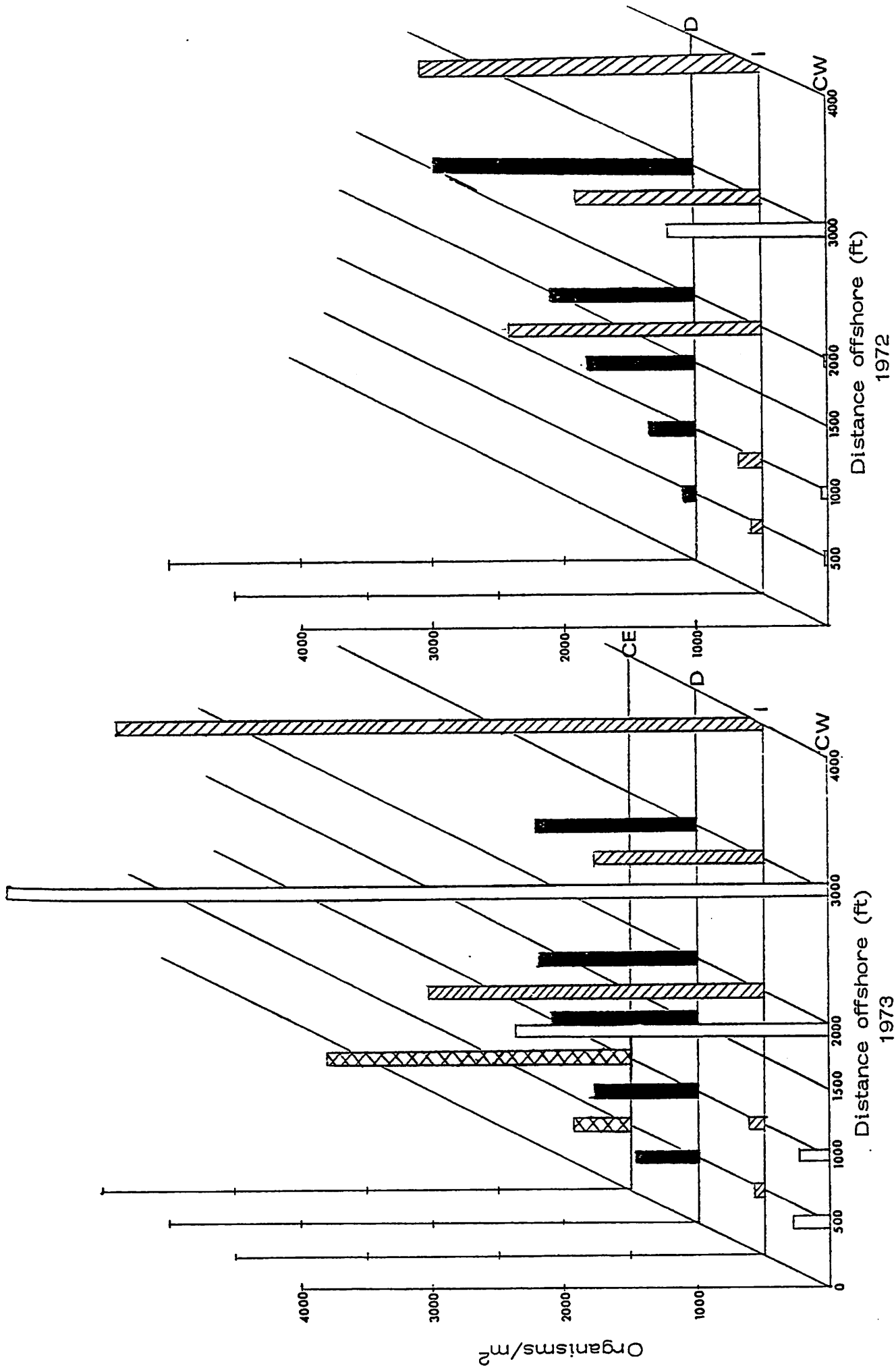


FIGURE 4
 DENSITY OF BENTHIC MACROINVERTEBRATES AS A FUNCTION OF DISTANCE
 OFFSHORE ALONG THE 4 TRANSECTS (Control West = CW, Intake = I,
 Discharge = D, Control East = CE) SAMPLED AT LOCUST POINT, 1972 and 1973

Plankton

During the 1973 field season zooplankton was collected and placed in 39 taxa (Table 2). Rotifers were placed in 23 taxa of which 18 were to the species level, 4 to the genus level, and one was reported as unidentifiable. There were 7 taxa of copepods of which 4 were to the genus level, one was immature calanoid, one was immature cyclopoid, and one contained all nauplii. For Cladocerans, there were 9 taxa of which 5 were to the species level and 4 to the genus level.

The number of zooplankton taxa reported from any one sampling date was the highest (30) on September 26, 1973 and the lowest (15) on December 4, 1973.

A comparison of mean species diversity per vertical tow with the Wisconsin plankton net and per 3-liter surface grab with the Kemmerer water bottle showed the vertical tow to be the better overall sampling method. Approximately 50% more species were found with the vertical tow (Table 3). Raw data from both methods are contained in Appendix B.

Percent frequency of occurrence was computed for all taxa each month and for the entire year (Table 4). Taxa occurring in more than 50% of the year's samples included the following: Rotifers: Asplanchna priodonta (70%), Brachionus angularis (71.4%), Keratella cochlearis (97.1%), and Polyarthra sp. (98.6%); Copepods: Diaptomus sp. (64.3%), Cyclops sp. (75.7%), immature cyclopoids (100.0%), and nauplii (100.0%); Cladocerans: Bosmina sp. (98.6%), and Daphnia retrocurva (71.4%).

Rotifer, copepod, and cladoceran populations all peaked in the late spring or summer (Figs. 5, 6, and 7). By December 4, all populations were steadily decreasing. Copepod and cladoceran populations peaked on June 27 at 590.7 and 142.4 per liter respectively, while the rotifer population was at its lowest point, 100.3 per liter. The rotifer population peaked on May 25 at 478.8 per liter.

These results are not directly comparable to 1972 data due to different sampling methods and different sampling stations (Fig. 8). However, there appears to be an increase in the zooplankton population at Locust Point from 1972 to 1973.

By computing the mean number of each taxa per liter for all samples from each month (Table 5) it was possible to determine seasonal abundance of each species in the Locust Point vicinity. A change in these values is expected after the plant is in operation and dispensing heat to the environment.

ZOOPLANKTON SPECIES FOUND AT LOCUST POINT, 1973

ZOOPLANKTON SPECIES	5-25 1973	6-27 1973	7-25 1973	8-23 1973	9-26 1973	11-6 1973	12-4 1973		
ROTIFERA									
<i>Asplanchna giroidi</i>				x					
<i>A. priodonta</i>	x	x	x	x	x	x	x		
<i>Brachionus angularis</i>	x	x	x	x	x	x	x		
<i>B. calyciflorus</i>	x	x	x	x		x	x		
<i>B. havanaensis</i>		x	x	x	x				
<i>B. (Platias) patulus</i>				x	x				
<i>B. quadridentatus</i>		x			x				
<i>Chromocaster ovalis</i>					x				
<i>Filinia terminalis</i>	x	x	x	x			x		
<i>Kellicottia longispina</i>	x	x	x			x	x		
<i>Keratella cochlearis</i>	x	x	x	x	x	x	x		
<i>K. quadrata</i>	x	x			x	x	x		
<i>Lecane luna</i>		x	x	x	x				
<i>L. lunaris</i>		x							
<i>Levadella patella</i>	x								
<i>Mytilina</i> sp.						x			
<i>Notholca squamula</i>				x					
<i>Pleosoma</i> sp.					x	x	x		
<i>Polyarthra</i> sp.	x	x	x	x	x	x	x		
<i>Trichocerca cylindrica</i>			x	x	x	x			
<i>T. multierinis</i>	x			x	x	x			
Unidentifiable Rotifer					x	x	x		
<i>Conochiloides</i> sp.			x	x	x				
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.	x	x	x	x	x	x	x		
<i>Eurytemora</i> sp.	x								
Immatures	x	x	x	x	x				
Cyclopoid copepods									
<i>Cyclops</i> sp.	x	x	x	x	x	x			
<i>Mesocyclops</i> sp.	x		x	x	x	x			
Immatures	x	x	x	x	x	x	x		
Nauplius	x	x	x	x	x	x	x		
CLADOCERA									
<i>Bosmina</i> sp.	x	x	x	x	x	x	x		
<i>Ceriodaphnia</i> sp.			x	x	x				
<i>Chydorus</i> sp.	x			x	x	x	x		
<i>Daphnia galeata</i>			x	x	x				
<i>D. pulex</i>		x	x		x				
<i>D. retrocurva</i>	x	x	x	x	x	x			
<i>Diaphanosoma</i> sp.					x				
<i>Holopedium gibberum</i>			x	x	x				
<i>Leptodora kindtii</i>	x		x	x	x				

TABLE 3

MEAN ZOOPLANKTON SPECIES DIVERSITY:
Vertical Tow and 3-liter Grab

Date	Mean No. of Species Found in Vertical Tow	Mean No. of Species Found in 3-l Grab
5-25-73	16.3	12.6
6-27-73	12.3	8.3
7-25-73	15.2	9.7
8-23-73	16.1	10.1
9-26-73	18.0	no sample taken
11-6-73	12.1	no sample taken
12-4-73	10.7	no sample taken

TABLE 4
FREQUENCY OF OCCURRENCE (%) OF ZOOPLANKTERS, 1973

ZOOPLANKTON SPECIES	5-25	6-27	7-25	8-23	9-26	11-6	12-4		Total
ROTIFERA									
<i>Asplanchna giroidi</i>				8.3					1.4
<i>A. priodonta</i>	85.7	11.1	90.0	91.7	50.0	70.0	90.0		70.0
<i>Brachionus curvator</i>	85.7	88.9	90.0	100.0	100.0	20.0	10.0		71.4
<i>B. calyciflorus</i>	100.0	11.1	10.0	41.7		80.0	100.0		45.7
<i>B. kavanaensis</i>		11.1	30.0	75.0	100.0				35.7
<i>B. (Planorbis) patulus</i>				8.3	25.0				5.7
<i>B. quadridentatus</i>		11.1			8.3				5.8
<i>Encrinurus ovalis</i>					8.3				1.4
<i>Filinia terminalis</i>	100.0	44.4	30.0	91.7			10.0		37.1
<i>Helicostoma longispina</i>	100.0	11.1	10.0			10.0	90.0		27.1
<i>Keratella cochlearis</i>	100.0	88.9	90.0	100.0	100.0	100.0	100.0		97.1
<i>K. quadrata</i>	100.0	22.2			8.3	100.0	100.0		42.9
<i>Lecane luna</i>			10.0		16.7				4.3
<i>L. lunaris</i>		11.1							1.4
<i>Levinseniella patella</i>	14.3								1.4
<i>Mytilina</i> sp.						10.0			1.4
<i>Notholca strumula</i>				8.3					1.4
<i>Pleuromma</i> sp.					25.0	10.0	10.0		7.1
<i>Polycarpha</i> sp.	100.0	100.0	100.0	91.7	100.0	100.0	100.0		98.6
<i>Trichocerca cylindrica</i>			20.0	58.3	91.7	10.0			30.0
<i>T. multiseriata</i>				75.0	100.0	50.0			37.1
Unidentifiable Rotifer					100.0	90.0	100.0		44.3
<i>Conochiloides</i> sp.			90.0	8.3	33.3				20.0
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.	57.1	100.0	90.0	75.0	91.7	20.0	10.0		64.3
<i>Eurytemora</i> sp.	28.6								2.8
Immatures	71.4	55.6	90.0	75.0	41.7				47.1
Cyclopoid copepods									
<i>Cyclops</i> sp.	100.0	100.0	100.0	83.3	100.0	70.0			75.7
<i>Mesocyclops</i> sp.			50.0	25.0	33.3	30.0			21.4
Immatures	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0
Nauplius	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0
CLADOCERA									
<i>Bosmina</i> sp.	100.0	100.0	100.0	91.7	100.0	100.0	100.0		98.6
<i>Ceriodaphnia</i> sp.			10.0	8.3	33.3				8.6
<i>Scudorus</i> sp.				25.0	100.0	100.0	50.0		42.9
<i>Daphnia galeata</i>		22.2	60.0	41.7	41.7				25.7
<i>D. pulex</i>		44.4	20.0						8.6
<i>D. retrocurva</i>	85.7	100.0	90.0	100.0	91.7	30.0			71.4
<i>Diaphanosoma</i> sp.					16.7				2.8
<i>Holopedium gibberum</i>			40.0	50.0	58.3				24.3
<i>Leptocora cinatii</i>	28.6		20.0	66.7	25.0				21.4

Note: Values represent percent of monthly samples containing individual taxa.

FIGURE 5
MONTHLY ROTIFER POPULATIONS
AT LOCUST POINT, 1973

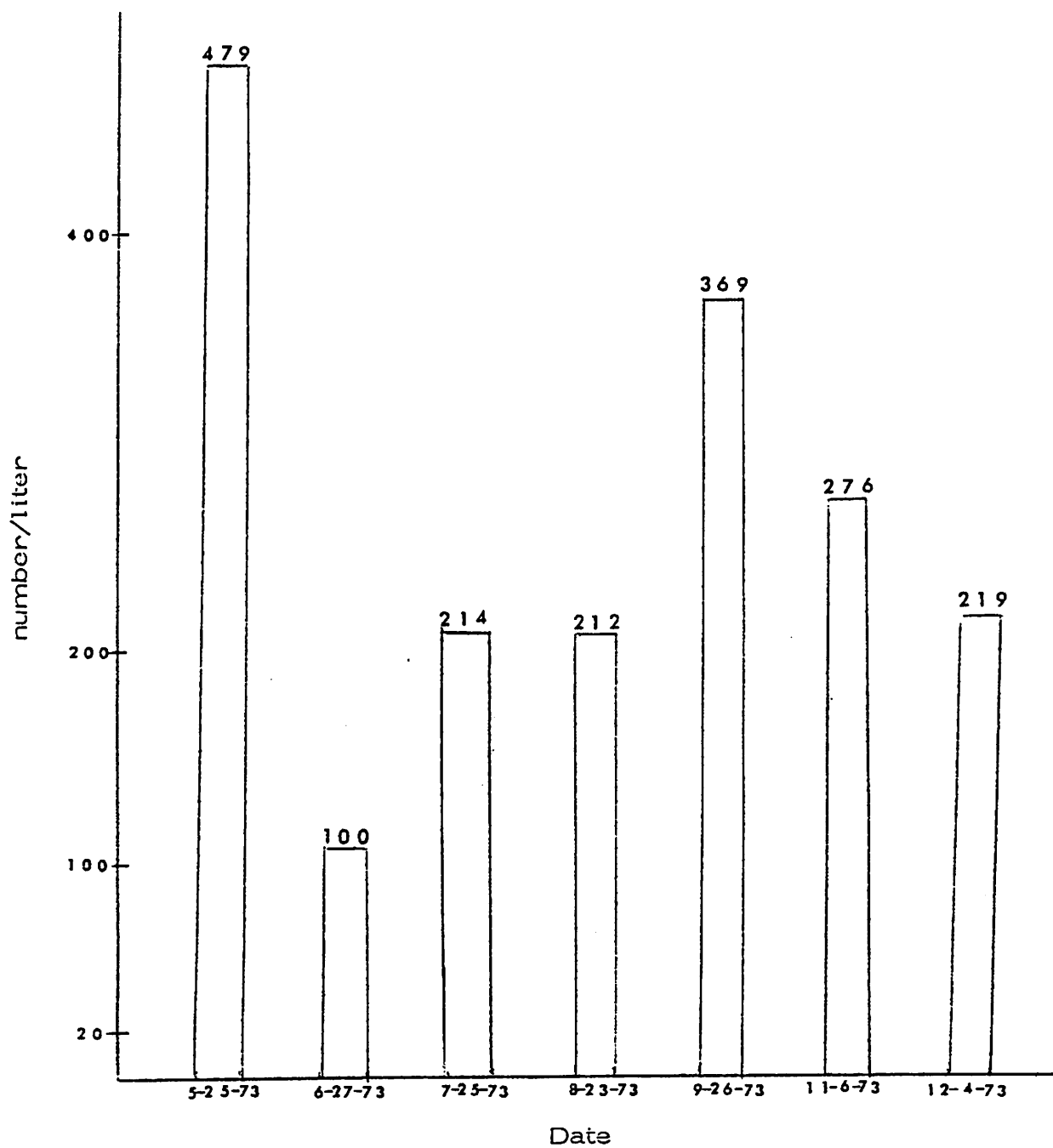


FIGURE 6

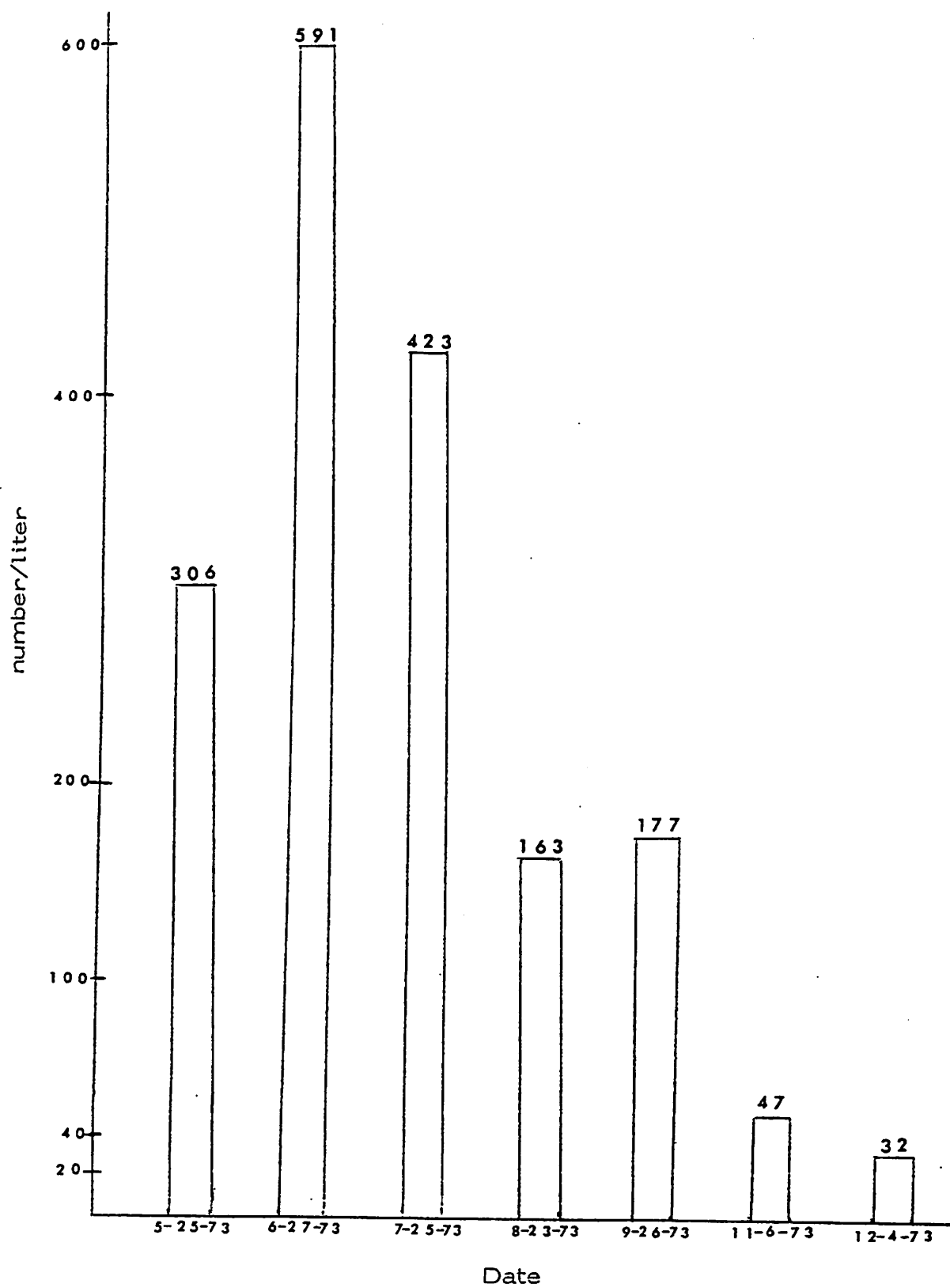
MONTHLY COPEPOD POPULATIONS
AT LOCUST POINT, 1973

FIGURE 7

MONTHLY CLADOCERAN POPULATIONS
AT LOCUST POINT, 1973

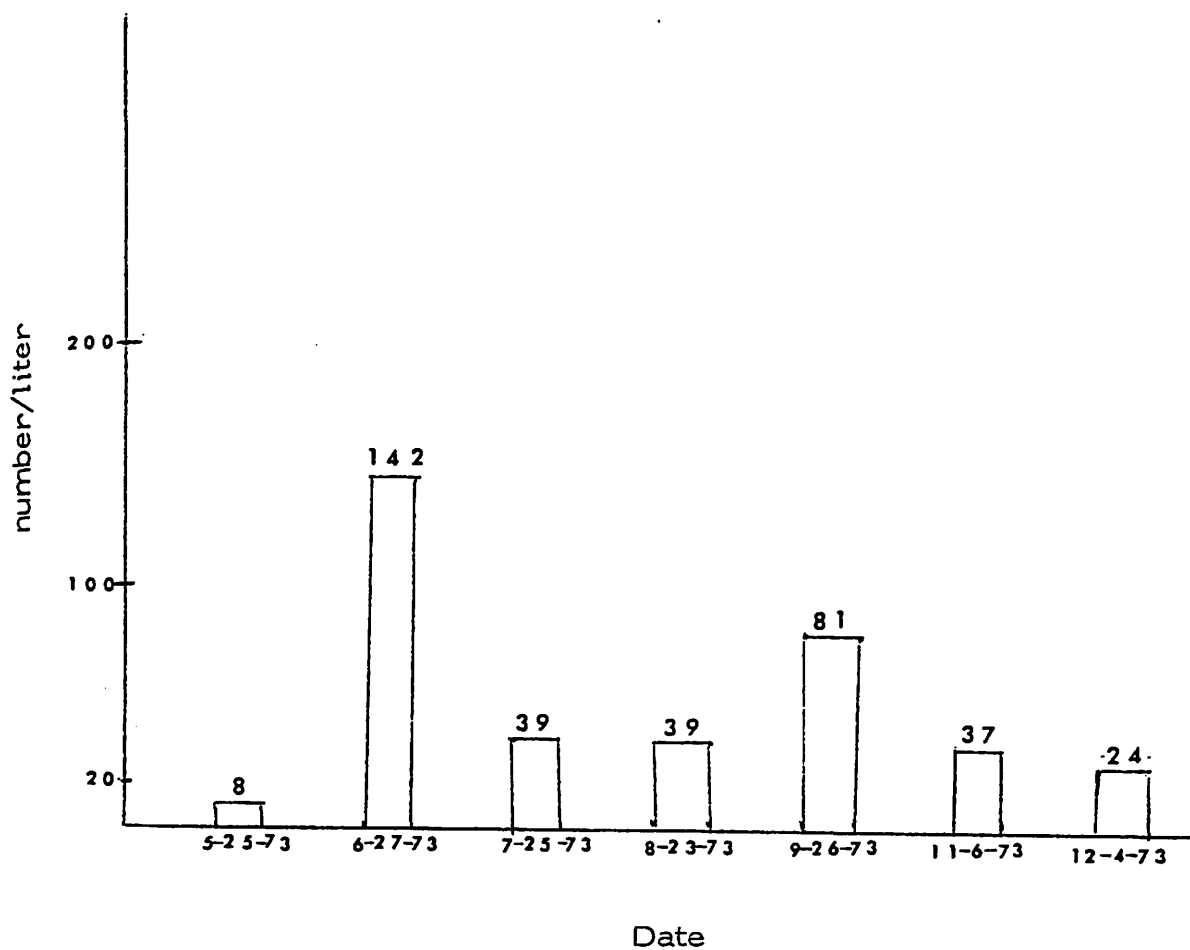


FIGURE 8

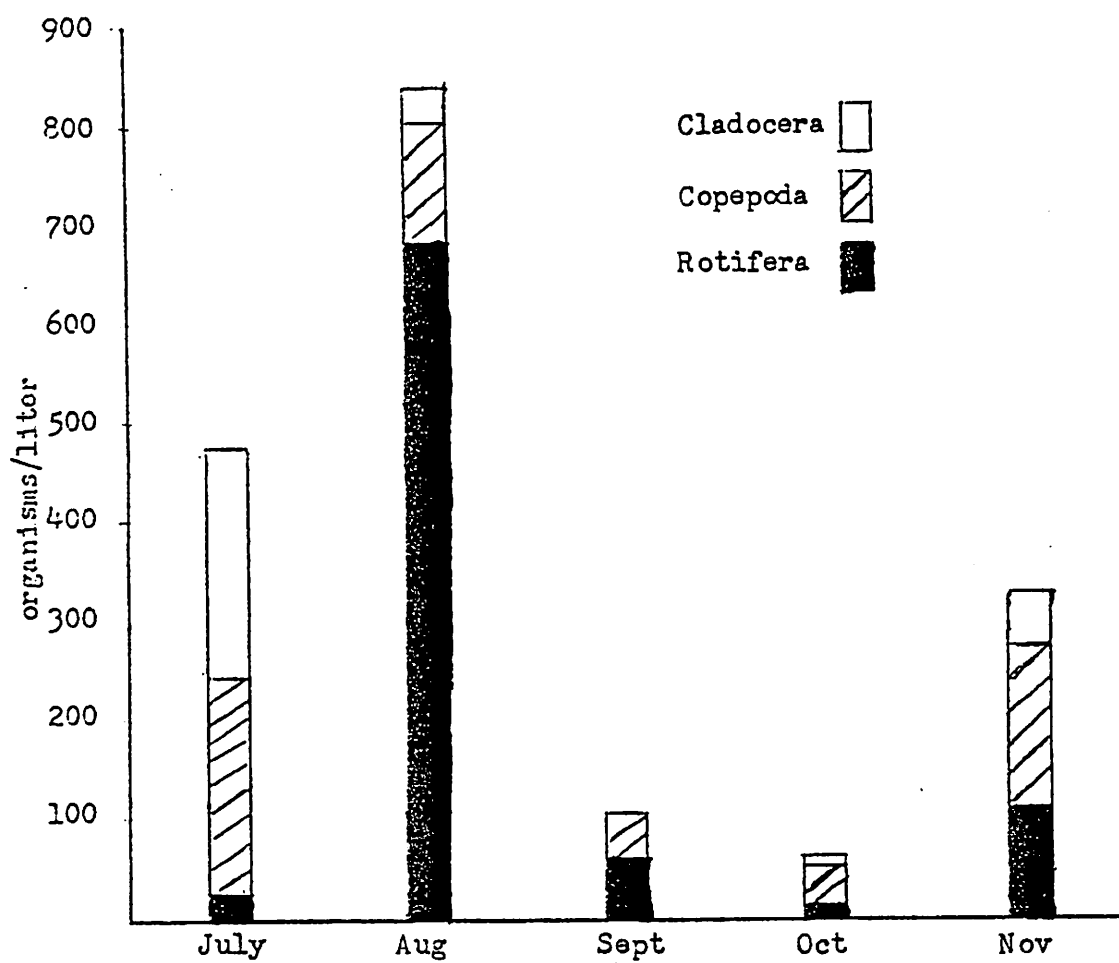
MEAN SEASONAL ABUNDANCE OF ZOOPLANKTON
AT LOCUST POINT, 1972

TABLE 5
MEAN NUMBER OF ZOOPLANKTERS PER STATION SAMPLED

ZOOPLANKTON SPECIES	5-25 1973	6-27 1973	7-25 1973	8-23 1973	9-26 1973	11-6 1973	12-4 1973		
ROTIFERA									
<i>Asplanchna girodi</i>				.1					
<i>A. priodonta</i>	12.5	.1	5.7	20.0	3.2	1.6	4.9		
<i>Brachionus angularis</i>	8.9	6.5	3.6	28.6	32.6	.1	.3		
<i>B. calyciflorus</i>	19.0	.2	.1	.5		2.4	19.8		
<i>B. havanaensis</i>		.3	4.3	6.9	11.8				
<i>B. (Planorbis) patulus</i>					.1				
<i>B. quadridentatus</i>		.2			.1				
<i>Chromocaster ovalis</i>					.3				
<i>Filinia terminalis</i>	37.3	5.8	.6	4.4			.2		
<i>Kellicottia longispina</i>	5.0	.4	.1			.1	3.0		
<i>Keratella cochlearis</i>	169.6	6.0	20.4	15.5	44.0	145.8	101.6		
<i>K. quadrata</i>	179.7	.2				13.2	14.2		
<i>Lecane luna</i>					.1				
<i>L. lunaris</i>		.1							
<i>Lepadella patella</i>	.4								
<i>Mytilina</i> sp.						.2			
<i>Notholca squamula</i>				.1					
<i>Pleosoma</i> sp.					.3	.2	.2		
<i>Polycartha</i> sp.	46.5	84.7	181.5	127.3	161.4	88.8	59.2		
<i>Trichocerca cylindrica</i>			.3	5.0	4.6	.1			
<i>T. multiseris</i>				3.2	23.1	1.0			
Unidentifiable Rotifer					32.7	13.1	19.7		
<i>Conochiloides</i> sp.			5.2	.1	2.5				
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.	4.4	29.8	14.8	4.0	2.1	.9	.2		
<i>Eurytemora</i> sp.	.4								
Immatures	2.1	2.4	3.2	3.2	.5				
Cyclopoid copepods									
<i>Cyclops</i> sp.	21.1	219.7	147.5	22.4	17.3	2.1			
<i>Mesocyclops</i> sp.			.4	.3	.7	.3			
Immatures	34.9	33.7	24.4	19.8	15.8	7.8	5.9		
Nauplius	242.0	300.5	232.5	112.7	131.1	35.1	26.2		
CLADOCERA									
<i>Bosmina</i> sp.	3.5	36.3	10.9	21.4	45.2	28.9	24.5		
<i>Ceriodaphnia</i> sp.				.2	.5				
<i>Chydorus</i> sp.					9.5	7.7	.7		
<i>Daphnia galeata</i>		.2	1.3	.4	3.5				
<i>D. pulex</i>		.6	.3						
<i>D. retrocurva</i>	3.4	94.7	25.3	14.4	17.2	.4			
<i>Diaphanosoma</i> sp.					.3				
<i>Holopedium gibberum</i>			.3	.7	.4				
<i>Leptodora kindtii</i>	.6		.1	1.3	.3				

Note: Reported as no./liter.

The total zooplankton population per liter from each station each month declined at all stations on the December 4 sampling date (Table 6). There also appeared to be a greater population closer to shore in shallower water. This was probably due to the population concentrating near the surface, and, therefore, diluting this population with the relatively barren bottom waters offshore.

Phytoplankton populations were observed qualitatively. Only the most common taxa were recorded. Nine taxa, *Aphanizomenon* sp., *Pediastrum* sp., *Ulothrix* sp., *Volvox* sp., *Asterionella* sp., *Fragilaria* sp., *Melosira* sp., *Tabellaria* sp., and *Ceratium* sp., became abundant between May 25 and December 4, 1973 (Appendix C). The population structure proceeded from a population dominated by Chlorophytes (green algae) and Bacillariophytes (diatoms) in the spring, to a Chlorophyte population, to a Chlorophyte Myxophyte (blue-green algae) population in the summer, and back to a Bacillariophyte population by December.

Fish

Since 1963, collection records of commercial fishermen have shown 38 species to be present at Locust Point (Table 7). During the 1973 field season we collected 5300 fish of 28 species by trawling, gill netting, and shore seining. An additional 23 fish of 8 species were captured in the adjacent marshes with a cast net (Table 8).

The most numerous species captured in the trawl were *Aplodinotus grunniens* (250), *Perca flavescens* (170), *Ictalurus punctatus* (143), and *Notropis hudsonius* (117) (Table 9). When ranked by biomass present rather than population size, this order changed to *Cyprinus carpio* (8081 g), *Perca flavescens* (7802 g), *Ictalurus punctatus* (6920 g), and *Aplodinotus grunniens* (4540 g).

The most numerous species captured in the gill nets were *Dorosoma cepedianum* (852), *Perca flavescens* (812), *Alosa pseudoharengus* (495), and *Aplodinotus grunniens* (182) (Table 10). When ranked by biomass present rather than population size, this order changed to *Perca flavescens* (70,555 g), *Dorosoma cepedianum* (49,202 g), *Cyprinus carpio* (31,877 g), and *Aplodinotus grunniens* (21,886 g).

The most numerous species captured in the shore seine were *Notropis a. atherinoides* (1124), *Alosa pseudoharengus* (237), *Notropis hudsonius* (129), and *Morone chrysops* (127) (Table 11). When ranked by biomass present rather than population size, this order changed to *Cyprinus carpio* (3751 g), *Notropis a. atherinoides* (3709 g), *Dorosoma cepedianum* (1462 g), and *Notropis hudsonius* (997 g).

TABLE 6
TOTAL ZOOPLANKTON POPULATIONS PER LITER

STATION	DATE						
	5-25-73	6-27-73	7-25-73	8-23-73	9-26-73	11-6-73	12-4-73
1	768.1	977.5	1,429.0	689.4	1,373.5	485.7	424.4
3	443.2	916.7	547.6	380.0	742.1	247.6	280.1
5	1,090.9	1,354.2	573.9	413.5	711.8	368.5	307.1
7	662.1	581.8	621.2	217.5	514.5	300.8	240.5
8				195.2	563.5		
9			563.0	335.4	410.7	246.7	248.4
10	845.4	1,133.0	878.0	686.5	594.0	902.7	555.7
12				499.9	408.3		
13	852.4	620.6	533.1	266.2	522.0	366.1	169.5
17			586.9	288.7	438.6	287.2	294.7
18	878.0	829.7					
19		512.8	599.0	597.9	183.5	114.0	179.0
20		475.6	373.0	362.5	270.1	179.1	106.2

TABLE 7

SPECIES FOUND IN THE LOCUST POINT AREA
1963 - 1973

Amiidae

Amia calva

bowfin

Catostomidae

Carpiodes cyprinus* Catostomus c. commersoniMinytrema melanopsMoxostoma erythrurumIctiobus cyprinellus

quillback carpsucker
common white sucker
spotted sucker
golden redhorse
bigmouth buffalo fish

Centrarchidae

Ambloplites rupestris* Lepomis cyanellus* L. humilis* L. microlophus* Micropterus d. dolomieu* M. s. salmoides* Pomoxis annularis* P. nigromaculatus

northern rockbass
green sunfish
orangespotted sunfish
redeer sunfish
smallmouth bass
largemouth bass
white crappie
black crappie

Clupeidae

* Alosa pseudoharengus* Dorosoma cepedianum

alewife
gizzard shad

Cyprinidae

* Carassius auratus* C. auratus x Cyprinus carpio* Cyprinus carpio* Hybopsis storeriana* Notropis a. atherinoides* N. hudsonius* N. spilopterus* N. v. volucellus

goldfish
Carp x goldfish hybrid
carp
silver chub
emerald shiner
spottail shiner
spotfin shiner
northern mimic shiner

Esocidae

Esox lucius

northern pike

TABLE 7 CONT.

SPECIES FOUND IN THE LOCUST POINT AREA
1963 - 1973

Ictaluridae

* <u>Ictalurus natalis</u>	yellow bullhead
* <u>I. nebulosus</u>	brown bullhead
* <u>I. punctatus</u>	channel catfish
<u>Noturus flavus</u>	stonecat madtom

Lepisosteidae

<u>Lepisosteus osseus</u>	longnose gar
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Osmeridae

* <u>Osmerus eperlanus mordax</u>	American smelt
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Percidae

* <u>Perca flavescens</u>	yellow perch
* <u>Percina caprodes</u>	logperch darter
* <u>Stizostedion v. vetreum</u>	walleye

Percichthyidae

* <u>Morone chrysops</u>	white bass
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Percopsidae

* <u>Percopsis omiscomaycus</u>	troutperch
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Salmonidae

<u>Oncorhynchus kisutch</u>	coho salmon
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Sciaenidae

* <u>Aplodinotus grunniens</u>	freshwater drum
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* Species found in 1973

TABLE 8
ANALYSIS OF FISH CAPTURED IN MARSH
AT LOCUST POINT, 1973

Species	No.	Length (cm)		Total Wt (g)
		Mean	Range	
<u>Cyprinus carpio</u>	1	133		40
<u>Dorosoma cepedianum</u>	9	125	111-132	212
<u>Ictalurus nebulosus</u>	1	60		4
<u>Lepomis cyanellus</u>	1	70		7
<u>L. microlophus</u>	8	69	47-86	50
<u>Micropterus d. dolomieu</u>	1	52		3
<u>M. s. salmoides</u>	1	294		440
<u>Pomoxis annularis</u>	1	74		6
TOTAL	23			762

Notes:

1. Method of capture: Cast net (8 ft diameter, 3/8 in. mesh)
2. Date of capture: 10-3-73

TABLE 9
LOCUST POINT TRAWLING SUMMARY, 1973

Species	No.	Length (mm)		Total Wt (g)
		Mean	Range	
<u>Alosa pseudoharengus</u>	21	111	97-123	253
<u>Aplodinotus grunniens</u>	250	60	11-362	4540
<u>Carassius auratus</u>	10	208	167-276	1826
<u>Catostomus c. commersoni</u>	1	38		21
<u>Cyprinus carpio</u>	25	255	157-514	8081
<u>Dorosoma cepedianum</u>	41	115	63-147	609
<u>Ictalurus nebulosus</u>	19	187	130-254	1519
<u>I. punctatus</u>	143	165	17-275	6920
<u>Morone chrysops</u>	74	66	16-155	314
<u>Notropis a. atherinoides</u>	21	88	25-108	112
<u>N. hudsonius</u>	117	101	33-150	1272
<u>Osmerus eperlanus mordax</u>	93	34	21-160	48
<u>Perca flavescens</u>	170	145	15-220	7802
<u>Percina caprodes</u>	2	61	57-64	2
<u>Percopsis omiscomaycus</u>	3	81	75-87	14
<u>Pomoxis annularis</u>	1	148		40
<u>P. nigromaculatus</u>	3	100	36-137	60
<u>Stizostedion v. vitreum</u>	2	48	41-55	-
TOTAL	996			33469

TABLE 10
LOCUST POINT GILL NETTING SUMMARY, 1973

Species	No.	Length (mm)		Total wt. (g)
		Mean	Range	
<u>Alosa pseudoharengus</u>	187*	113	98-195	1,825
<u>Aplodinotus grunniens</u>	182	204	85-355	21,886
<u>Carassius auratus</u>	11	229	145-305	2,448
<u>Catostomus c. commersoni</u>	2	406	326-486	1,621
<u>Cyprinus carpio</u>	64	318	160-476	31,877
<u>C. carpio</u> x <u>Carassius auratus</u>	19	309	169-383	8,575
<u>Dorosoma cepedianum</u>	580*	152	75-388	49,202
<u>Hybopsis storeriana</u>	2	167	166-168	90
<u>Ictalurus natalis</u>	1	173		76
<u>I. nebulosus</u>	3	194	176-213	283
<u>I. punctatus</u>	15	224	137-360	2,472
<u>Morone chrysops</u>	18	110	81-262	711
<u>Notropis a. atherinoides</u>	26	111	98-128	353
<u>N. hudsonius</u>	90	116	100-134	1,393
<u>Osmerus eperlanus mordax</u>	1	159		21
<u>Perca flavescens</u>	812	198	104-262	70,555
<u>Pomoxis annularis</u>	2	160	156-164	96
<u>Stizostedion v. vitreum</u>	1	346		496
TOTAL	2596			193,880

* Does not include young-of-the-year

Alosa pseudoharengus - 308

Dorosoma cepedianum - 272

TABLE 11
LOCUST POINT SHORE SEINING SUMMARY, 1973

Species	No.	Length (mm)		Total Wt (g)
		Mean	Range	
<u>Alosa pseudoharengus</u>	237	55	36-172	440
<u>Aplodinotus grunniens</u>	1	297		357
<u>Cyprinus carpio</u>	3	423	296-495	3751
<u>Dorosoma cepedianum</u>	78	102	60-183	1462
<u>Lepomis humilis</u>	1	76		10
<u>Morone chrysops</u>	127	64	37-143	385
<u>Notropis a. atherinoides</u>	1124	72	39-122	3709
<u>N. hudsonius</u>	129	110	73-127	997
<u>N. v. volucellus</u>	1	60		2
<u>Pomoxis annularis</u>	8	123	93-165	213
<u>P. nigromaculatus</u>	6	110	84-173	139
TOTAL	1715			11465

Sampling dates:

6-14-73

8-1-73

10-3-73

11-12-73

Overall, the most numerous species were Notropis a. atherinoides (1171), Perca flavescens (982), Dorosoma cepedianum (971), Alosa pseudoharengus (753), and Aplodinotus grunniens (433). When ranked by biomass present rather than population size this order changed to Perca flavescens (78,357 g), Dorosoma cepedianum (51,273 g), Cyprinus carpio (43,709 g), Aplodinotus grunniens (26,783 g), and Ictalurus punctatus (9,392 g).

Trawling results show certain species to be seasonal residents (Table 12). For example, Aplodinotus grunniens and Ictalurus punctatus both reach their peaks, in terms of numbers captured, in July at 150 and 107, respectively. Other species such as Cyprinus carpio and Perca flavescens maintained relatively stable populations.

The number of fish caught at each of the two gill netting locations was remarkably similar. A total of 1334 fish were captured at Station 12 (proposed discharge) while 1262 fish were captured at Station 8 (proposed intake) (Table 13).

Notropis a. atherinoides composed approximately 66% of all fish caught in the shore seine (Table 14). In all cases more fish were captured 2500 ft west of the intake pipeline. At this time, the reason for this is undetermined, but these results will be compared with other data as it becomes available.

Additional data from the fish captured at Locust Point in 1973 are contained in Appendix D.

Food Habits

Stomachs from 432 fish of 12 species were examined (Table 15). The stomach contents were placed in 34 taxa (Table 16). More stomachs from Perca flavescens were examined than from any other species due to their abundance and the fact that the number of full stomachs never exceeded 21.2% of the total number examined each month.

As expected, fish were a more common food item in larger specimens. Surprisingly, large Ictalurus punctatus ate more cladocerans and copepods than smaller individuals. One would have expected larger fish to eat the larger food items.

From Table 16 it is possible to determine the feeding location within the water column of each species. For example, cladocerans and copepods are generally midwater or surface dwellers (not sediment dwellers) while the Diptera cited here are generally sediment dwellers.

TABLE 12
TOTAL TRAWLING CATCH AT LOCUST POINT - 1973

FISH SPECIES	6-29	7-17	8-24	9-27	11-5	Total			
Amiidae									
<i>Amia calva</i>									
Catostomidae									
<i>Carpiodes cyprinus</i>									
<i>Catostomus c. commersoni</i>		1				1			
<i>Minytrema melanops</i>									
<i>Notostoma erythrum</i>									
<i>Ictalobus cyprinellus</i>									
Centrarchidae									
<i>Ambloplites rupestris</i>									
<i>Lepomis cyanellus</i>									
<i>Lepomis humilis</i>									
<i>Micropterus d. dolomieu</i>									
<i>Micropterus s. salmoides</i>									
<i>Pomoxis annularis</i>			1			1			
<i>Pomoxis nigromaculatus</i>			2	1		3			
Clupeidae									
<i>Alosa pseudoharengus</i>				21		21			
<i>Dorosoma cepedianum</i>			10	28	3	41			
Cyprinidae									
<i>Carassius auratus</i>	2	3			2	7			
<i>Cyprinus carpio</i>	7	10	2	4	5	28			
<i>Epiplatys storeriana</i>									
<i>Notropis a. atherinoides</i>	12	3	3	1	2	21			
<i>N. hudsonius</i>	8	6	20	45	38	117			
<i>N. spilopterus</i>									
Esocidae									
<i>Esox lucius</i>									
Ictaluridae									
<i>Ictalurus nebulosus</i>	10	8	1			17			
<i>I. punctatus</i>	12	107	3	9	12	143			
<i>Noturus flavus</i>									
Lepisosteidae									
<i>Lepisosteus osseus</i>									
Osmeridae									
<i>Osmerus eperlanus mordax</i>	69	22	2			93			

TABLE 12 CONT.
TOTAL TRAWLING CATCH AT LOCUST POINT - 1973

FISH SPECIES	6-29	7-17	8-24	9-27	11-5	Total			
Percidae									
<i>Perca flavescens</i>	26	21	39	33	51	170			
<i>Percina caprodes</i>				1	1	2			
<i>Stizostedion v. vitreum</i>	2					2			
Percopsidae									
<i>Percopsis omiscomaycus</i>	1			1	1	3			
Salmonidae									
<i>Oncorhynchus kisutch</i>									
Sciaenidae									
<i>Anlodinotus grunniens</i>	60	150	12	10	18	250			
Serranidae									
<i>Morone chrysops</i>	5	5	8	56		74			
Total	214	336	103	210	133	994			

TABLE 13
TOTAL GILL NETTING CATCH AT LOCUST POINT - 1973

FISH SPECIES	7-2 Sta. 12	7-2 Sta. 8	8-2 Sta. 12	8-2 Sta. 8	8-30 Sta. 12	8-30 Sta. 8	9-28 Sta. 12	9-28 Sta. 8	
Amiidae									
<i>Ania calva</i>									
Catostomidae									
<i>Carpiodes cyprinus</i>									
<i>Catostomus c. cormersoni</i>	1							1	
<i>Moxostoma melanops</i>									
<i>Moxostoma erythrum</i>									
<i>Ictiopus cyprinellus</i>									
Centrarchidae									
<i>Ambloplites rupestris</i>									
<i>Lepomis cyanellus</i>									
<i>Lepomis humilis</i>									
<i>Micropterus d. dolomieu</i>									
<i>Micropterus s. salmoides</i>									
<i>Pomoxis annularis</i>									
<i>Pomoxis nigromaculatus</i>								2	
Clupeidae									
<i>Alosa pseudoharengus</i>							322	172	
<i>Dorosoma cepedianum</i>	30	6	48	38	168	173	155	229	
Cyprinidae									
<i>Carassius auratus</i>	3		4	1	2		1		
<i>Cyprinus carpio</i>	11	3	8	9	11	5	10	7	
<i>Eubopsis storeriana</i>			1				1		
<i>Notropis a. atherinoides</i>					11	14			
<i>N. hudsonius</i>			3	9			32	32	
<i>N. spilopterus</i>									
<i>C. auratus</i> x <i>C. carpio</i>		2	7		5	1	3	1	
Esocidae									
<i>Esox lucius</i>									
Ictaluridae									
<i>Ictalurus nebulosus</i>					1		1	1	
<i>I. punctatus</i>	5	1	5	2	2				
<i>Noturus flavus</i>									
Yellow Bullhead						1			
Lepisosteidae									
<i>Lepisosteus osseus</i>									
Osmeridae									
<i>Ceremonis eperlanus mordax</i>				1					

Notes:

1. Station 12 is the discharge
2. Station 8 is the intake

TABLE 13 CONT.
TOTAL GILL NETTING CATCH AT LOCUST POINT - 1973

FISH SPECIES	7-2 Sta. 12	7-2 Sta. 8	8-2 Sta. 12	8-2 Sta. 8	8-30 Sta. 12	8-30 Sta. 8	9-28 Sta. 12	9-28 Sta. 8	
Percidae									
<i>Perca flavescens</i>	13	21	47	87	160	127	158	198	
<i>Percina caprodes</i>									
<i>Stizostedion v. vitreum</i>								1	
Percopsidae									
<i>Percopsis omiscomaycus</i>									
Salmonidae									
<i>Oncorhynchus kisutch</i>									
Sciaenidae									
<i>Astodionotus grunniens</i>	50	58	12	18	11	20	7	6	
Serranidae									
<i>Morone chrysops</i>			1	1	11	2	1	2	
Total	113	91	136	166	382	343	691	652	

Notes:

1. Station 12 is the discharge
2. Station 8 is the intake

TABLE 13 CONT.
TOTAL GILL NETTING CATCH AT LOCUST POINT - 1973

FISH SPECIES	11-12 Sta. 12	11-12 Sta. 8	Total Sta. 12	Total Sta. 8	Grand Total				
Amiidae									
<i>Amia calva</i>									
Catostomidae									
<i>Carniodes cyprinus</i>									
<i>Catostomus c. cormersoni</i>			1	1	2				
<i>Mnytrema melanops</i>									
<i>Hocostoma erythrum</i>									
<i>Ictiobus cyprinellus</i>									
Centrarchidae									
<i>Ambloplites rupestris</i>									
<i>Lepomis cyanellus</i>									
<i>Lepomis humilis</i>									
<i>Micropterus d. dolomieu</i>									
<i>Micropterus s. salmoides</i>									
<i>Pomoxis annularis</i>			1	2	3				
<i>Pomoxis nigromaculatus</i>									
Clupeidae									
<i>Alosa pseudoharengus</i>		1	322	173	495				
<i>Dorosoma cepedianum</i>	5		406	446	852				
Cyprinidae									
<i>Carassius auratus</i>			10	1	11				
<i>Cyprinus carpio</i>			40	24	64				
<i>Hybopsis storeriana</i>			2		2				
<i>Notropis a. atherinoides</i>		1	11	15	26				
<i>N. hudsonius</i>	6	8	41	49	90				
<i>N. spilopterus</i>									
<i>C. auratus</i> x <i>C. carpio</i>			15	4	19				
Esocidae									
<i>Esox lucius</i>									
Ictaluridae									
<i>Ictalurus nebulosus</i>			2	1	3				
<i>I. punctatus</i>			12	3	15				
<i>Noturus flavus</i>									
Yellow Bullhead				1	1				
Lepisosteidae									
<i>Lepisosteus osseus</i>									
Osmeridae									
<i>Osmerus eperlanus mordax</i>				1	1				

Notes:

1. Station 12 is the discharge
2. Station 8 is the intake

TABLE 13 CONT.
TOTAL GILL NETTING CATCH AT LOCUST POINT - 1973

FISH SPECIES	11-12 Sta. 12	11-12 Sta. 8	Total Sta. 12	Total Sta. 8	Grand Total				
Percidae									
<i>Perca flavescens</i>	1		378	433	811				
<i>Percina caprodes</i>									
<i>Stizostedion v. vitreum</i>				1	1				
Percopsidae									
<i>Percopsis omiscomaycus</i>									
Salmonidae									
<i>Oncorhynchus kisutch</i>									
Sciaenidae									
<i>Aplodinotus grunniens</i>			80	102	182				
Serranidae									
<i>Morone chrysops</i>			13	5	18				
Total	12	10	1334	1262	2596				

Notes:

1. Station 12 is the discharge
2. Station 8 is the intake

TABLE 14
TOTAL SHORE SEINING CATCH AT LOCUST POINT - 1973

FISH SPECIES	6-14 I	6-14 West	6-14 East	8-1 West	10-3 West	10-3 East	11-12 West	11-12 East	Total
Amiidae									
<i>Amia calva</i>									
Catostomidae									
<i>Catostomus commersoni</i>									
<i>Minytrema melanops</i>									
<i>Moxostoma erythrum</i>									
<i>Ictiobus cyprinellus</i>									
Centrarchidae									
<i>Anchoa mitchilli</i>									
<i>Lepomis cyanellus</i>									
<i>Lepomis humilis</i>	1								1
<i>Micropterus d. dolomieu</i>									
<i>Micropterus s. salmoides</i>									
<i>Pomoxis annularis</i>		2	5					1	8
<i>Pomoxis nigromaculatus</i>			6						6
Clupeidae									
<i>Alosa pseudoharengus</i>			5	232					237
<i>Dorosoma cepedianum</i>			2	47	3	5	20	1	78
Cyprinidae									
<i>Carassius auratus</i>									
<i>Cyprinus carpio</i>		1	2						3
<i>Hubbsia storeriana</i>									
<i>Notropis a. atherinoides</i>	25	191	90	474	7	5	240	92	1124
<i>N. hudsonius</i>	13	47	69						129
<i>N. spilopterus</i>									
<i>N. v. volucellus</i>				1					1
Esocidae									
<i>Esox lucius</i>									
Ictaluridae									
<i>Ictalurus nebulosus</i>									
<i>I. punctatus</i>									
<i>Noturus flavus</i>									
Lepisosteidae									
<i>Lepisosteus osseus</i>									
Osmeridae									
<i>Osmerus eperlanus mordax</i>									

Notes:

1. "I" designates intersection of intake and shore line.
2. "West" designates station 2500 ft west of "I".
3. "East" designates station 2500 ft east of "I".

TABLE 14 CONT.
TOTAL SHORE SEINING CATCH AT LOCUST POINT - 1973

FISH SPECIES	6-14 I	6-14 West	6-14 East	8-1 West	10-3 West	10-3 East	11-12 West	11-12 East	Total
Percidae									
<i>Perca flavescens</i>									
<i>Percina caprodes</i>									
<i>Stizostedion v. vitreum</i>									
Percopsidae									
<i>Percopsis omiscomaycus</i>									
Salmonidae									
<i>Oncorhynchus kisutch</i>									
Sciaenidae									
<i>Aplodinotus grunniens</i>		1							1
Serranidae									
<i>Morone chrysops</i>			2	122	2			1	127
Total	39	242	181	876	12	10	260	95	1715

Notes:

1. "I" designates intersection of intake and surge line.
2. "West" designates station 2500 ft west of "I".
3. "East" designates station 2500 ft east of "I".

TABLE 15

NUMBER OF STOMACHS COLLECTED AND PERCENT CONTAINING FOOD

SPECIES	6-29-73		7-17-73		8-24-73		9-27-73		11-5-73	
	No.	% Containing food	No.	% Containing food	No.	% Containing food	No.	% Containing food	No.	% Containing food
<i>Aplodinotus grunniens</i>	6	66.7	32	75.0	12	100.0	9	77.8	15	80.8
<i>Ictalurus nebulosus</i>	10	80.0	6	50.0			5	40.0		
<i>I. punctatus</i>	12	25.0	49	89.8	3	100.0	9	55.6	9	88.9
<i>Morone chrysops</i>	2	50.0			6	100.0	32	81.3		
<i>Notropis a. atherinoides</i>	11	0.9	3	33.3	1	100.0			1	100.0
<i>N. hudsonius</i>	8	0.0			19	68.4	29	93.1	17	35.3
<i>Osmerus eperlanus mordax</i>	2	0.0								
<i>Perca flavescens</i>	3	0.0	10	20.0	39	20.5	33	21.2	27	0.0
<i>Percina caprodes</i>	1	100.0							1	0.0
<i>Percopsis omiscomaycus</i>							1	100.0	1	100.0
<i>Pomoxis annularis</i>					1	100.0				
<i>P. nigromaculatus</i>					2	50.0	1	100.0		
TOTAL	55	30.9	101	71.3	84	53.6	120	63.3	72	38.9

STOMACH ANALYSIS OF FISH CAPTURED AT LOCUST POINT, 1976

Taxa of Food Items														
Species	Size (mm)	No. of Stomachs		Nematodea	Bryozoa	Oligochaeta	Tubificidae	Hirudinea	Cladocera	Bosmina sp.	Daphnia sp.	D. pulex	D. retrocurva	Leptodora kindtii
		Tot.	Full											
Aplodinotus grunniens	< 150	41	36			0.6	0.2				0.4			2.1
Aplodinotus grunniens	≥ 150	33	18						3.3				0.4	27.3
Ictalurus nebulosus	< 150	1												
Ictalurus nebulosus	≥ 150	20	14		x						0.5		162.9	3.0
Ictalurus punctatus	< 150	21	15											
Ictalurus punctatus	≥ 150	61	44						4.8		37.9	0.1	33.0	22.2
Morone chrysops	< 120	39	33							3.3	0.9		2.0	16.2
Morone chrysops	≥ 120	1												
Notropis a. atherinoides	< 90	5	1											
Notropis a. atherinoides	≥ 90	11	3	1.7					30.7				46.7	1.0
Notropis hudsonius	< 90	18	9		x									0.2
Notropis hudsonius	≥ 90	55	35		x									0.1
Osmerus eperlanus mordax	< 100													
Osmerus eperlanus mordax	≥ 100	2												
Perca flavescens	< 120	19	1											1.0
Perca flavescens	≥ 120	93	17					0.1						
Percina caprodes	< 90	1												
Percina caprodes	≥ 90													
Percopsis omiscomaycus	< 80	1	1							3.0			2.0	3.0
Percopsis omiscomaycus	≥ 80	1	1											
Pomoxis annularis	< 100													
Pomoxis annularis	≥ 100	1	1											160.0
Pomoxis nigromaculatus	< 100	1	1							49.0			1.0	3.0
Pomoxis nigromaculatus	≥ 100	2	1											

Notes: 1) Data presented as mean number of food organisms per full stomach.

2) "x" indicates item was present.

STOMACH ANALYSIS OF FISH CAPTURED AT LOCUST POINT, 1973

Species	Size (mm)	No. of Stomachs		Taxa of Food Items												
		Tot.	Full	Copepoda	Cyclopoid	<u>Gammarus</u> sp.	<u>Orconectes</u> sp.	Trichoptera	Coleoptera	Diptera	Chironomidae	<u>Procladius</u> sp.	<u>Coelotanypus</u> sp.	<u>Chironomus</u> (<u>Chironomus</u>)	<u>Chironomus</u>	
<u>Aplodinotus</u> grunniens	< 150	41	36	3.1		0.1					0.1	0.1			4.9	0.
<u>Aplodinotus</u> grunniens	≥ 150	33	18			0.3						0.1			2.0	0.
<u>Ictalurus</u> nebulosus	< 150	1														
<u>Ictalurus</u> nebulosus	≥ 150	20	14		0.3		0.1				0.1				0.2	
<u>Ictalurus</u> punctatus	< 150	21	15						0.1	0.1	0.1	0.1	0.1	0.1	3.9	0.
<u>Ictalurus</u> punctatus	≥ 150	61	44	0.2	0.1	0.1				0.3	0.5	0.1			0.9	0.
<u>Morone</u> chrysops	< 120	39	33	33.6	5.7						0.1					
<u>Morone</u> chrysops	≥ 120	1														
<u>Notropis</u> a. atherinoides	< 90	5	1													
<u>Notropis</u> a. atherinoides	≥ 90	11	3							0.3						
<u>Notropis</u> hudsonius	< 90	18	9												0.1	0.
<u>Notropis</u> hudsonius	≥ 90	55	35						0.1	0.1	0.3				0.1	
<u>Osmerus</u> eperlanus mordax	< 100															
<u>Osmerus</u> eperlanus mordax	≥ 100	2														
<u>Perca</u> flavescens	< 120	19	1								1.0	2.0			1.0	
<u>Perca</u> flavescens	≥ 120	93	17							0.1					0.9	
<u>Percina</u> caprodes	< 90	1														
<u>Percina</u> caprodes	≥ 90															
<u>Percopsis</u> omiscomaycus	< 80	1	1													
<u>Percopsis</u> omiscomaycus	≥ 80	1	1													
<u>Pomoxis</u> annularis	< 100															
<u>Pomoxis</u> annularis	≥ 100	1	1								1.0					
<u>Pomoxis</u> nigromaculatus	< 100	1	1		4.0											
<u>Pomoxis</u> nigromaculatus	≥ 100	2	1		2052											

Notes: 1) Data presented as mean number of food organisms per full stomach.

2) "x" indicates item was present.

STOMACH ANALYSIS OF FISH CAPTURED AT LOGCUST POINT, 1978

Species	Size (mm)	No. of Stomachs		Taxa of Food Items									
		Tot.	Full	<u>Chironomus</u> (<u>Endochironomus</u>)	<u>Pseudochironomus</u> sp.	<u>Polypedilum</u> sp.	<u>Tanytarsus</u> sp.	Gastropoda	Fish - unidentifiable	<u>Aplodinotus grunniens</u>	<u>Perca flavescens</u>	<u>Stizostedion v. vitreum</u>	Eggs
<u>Aplodinotus grunniens</u>	< 150	41	36		0.1	0.1	0.1		0.1				
<u>Aplodinotus grunniens</u>	≥ 150	33	18						0.2				
<u>ctalurus nebulosus</u>	< 150	1											
<u>ctalurus nebulosus</u>	≥ 150	20	14							0.1			
<u>ctalurus punctatus</u>	< 150	21	15				0.1						
<u>ctalurus punctatus</u>	≥ 150	61	44								0.1	0.1	
<u>lorone chrysops</u>	< 120	39	33						0.1				
<u>lorone chrysops</u>	≥ 120	1											
<u>lotropis a. atherinoides</u>	< 90	5	1										
<u>lotropis a. atherinoides</u>	≥ 90	11	3										
<u>lotropis hudsonius</u>	< 90	18	9										
<u>lotropis hudsonius</u>	≥ 90	55	35										
<u>smerus eperlanus mordax</u>	< 100												
<u>smerus eperlanus mordax</u>	≥ 100	2											
<u>perca flavescens</u>	< 120	19	1										
<u>perca flavescens</u>	≥ 120	93	17						0.6				
<u>percina caprodes</u>	< 90	1											
<u>percina caprodes</u>	≥ 90												
<u>percopsis omiscomaycus</u>	< 80	1	1										
<u>percopsis omiscomaycus</u>	≥ 80	1	1			2			1				
<u>omoxis annularis</u>	< 100												
<u>omoxis annularis</u>	≥ 100	1	1										
<u>omoxis nigromaculatus</u>	< 100	1	1										
<u>omoxis nigromaculatus</u>	≥ 100	2	1										

- Notes: 1) Data presented as mean number of food organisms per full stomach.
2) "x" indicates item was present.

Therefore, Morone chrysops (less than 120 mm) and Pomoxis nigromaculatus (less than 100 mm) were feeding above the bottom while Ictalurus punctatus (less than 150 mm) were feeding off the bottom.

Water Chemistry

Results show the Locust Point area to have a good supply of dissolved oxygen (5.9 ppm or more), low carbon dioxide (0-5 ppm), high conductivity (up to 390 umho/cm), and very low transparency (generally less than 0.5 m) (Table 17). Raw data are contained in Appendix E.

TABLE 17

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PHYSICOCHEMICAL MEASUREMENTS OF LAKE ERIE WATER
AT LOCUST POINT, OHIO

16 - 25 May 1973
Data Period

Parameter		No. Measurements	Range	Mean	Standard Deviation
Depth (m)		16	2.0-4.5	3.2	1.0
Trans (m)		17	0.30-0.91	0.67	0.14
DO (ppm)	Surface	6	12.0-14.0	12.8	0.7
	Bottom				
Temp (°C)	Surface	17	12.8-15.6	14.6	1.1
	Bottom	17	13.1-15.6	14.2	0.8
Cond (umho/cm)	Surface	17	300-350	331	14
	Bottom	17	300-350	325	14
Turbid (JTU)	Surface	8	11-43	19	10
	Bottom				
Alk (ppm)					
pH	Surface				
	Bottom				
Sulfate					
Orthophosphate (ppm)					

TABLE 17 CONT.

PHYSICOCHEMICAL MEASUREMENTS OF LAKE ERIE WATER
AT LOCUST POINT, OHIO

27 June - 2 July 1973
Data Period

Parameter		No. Measurements	Range	Mean	Standard Deviation
Depth (m)		19	1.6-4.8	3.4	1.0
Trans (m)		19	0.18-0.49	0.32	0.07
DO (ppm)	Surface	5	7.0-14.0	11.6	3.0
	Bottom				
Temp (°C)	Surface	19	22.8-27.5	24.5	1.4
	Bottom	17	22.8-24.5	23.4	0.4
Cond (umho/cm)	Surface	3	330-390	370	28
	Bottom				
Turbid (JTU)	Surface	6	18-34	30	5
	Bottom				
Alk (ppm)					
pH	Surface				
	Bottom				
Sulfate					
Orthophosphate (ppm)					

TABLE 17 CONT.

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PHYSICOCHEMICAL MEASUREMENTS OF LAKE ERIE WATER
AT LOCUST POINT, OHIO

25 July - 1 August 1973
Data Period

Parameter		No. Measurements	Range	Mean	Standard Deviation
Depth (m)		20	1.7-6.5	3.5	1.3
Trans (m)		20	0.15-0.64	0.39	0.13
DO (ppm)	Surface	10	7.0-13.0	10.6	1.9
	Bottom				
Temp (°C)	Surface	20	23.9-27.2	25.4	0.9
	Bottom	20	23.9-26.7	24.9	0.6
Cond (umho/cm)	Surface				
	Bottom				
Turbid (JTU)	Surface	10	9.0-50	26	14
	Bottom				
Alk (ppm)	Surface	10	95-180	114	23
pH	Surface				
	Bottom				
Sulfate					
Orthophosphate (ppm)					

TABLE 17 CONT.

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PHYSICOCHEMICAL MEASUREMENTS OF LAKE ERIE WATER
AT LOCUST POINT, OHIO

23 August 1973

Data Period

Parameter		No. Measurements	Range	Mean	Standard Deviation
Depth (m)		20	1.1-5.5	3.3	1.1
Trans (m)		20	0.18-0.43	0.31	0.06
DO (ppm)	Surface	11	7.0-12.0	10.0	1.5
	Bottom				
Temp (°C)	Surface				
	Bottom				
Cond (umho/cm)	Surface				
	Bottom				
Turbid (JTU)	Surface	11	16-26	19	3
	Bottom				
Alk (ppm)	Surface	11	105-155	130	20
pH	Surface				
	Bottom				
Sulfate					
Orthophosphate (ppm)					
CO ₂ (ppm)		11	All readings "0 - 5"	"0 - 5"	

TABLE 17 CONT.

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PHYSICOCHEMICAL MEASUREMENTS OF LAKE ERIE WATER
AT LOCUST POINT, OHIO

19-26 September 1973
Data Period

Parameter		No. Measurements	Range	Mean	Standard Deviation
Depth (m)		20	1.0-5.6	3.2	1.2
Trans (m)		20	0.18-0.49	0.29	0.09
DO (ppm)	Surface	16	5.9-10.0	8.8	0.9
	Bottom	16	6.0-10.0	8.4	0.9
Temp (°C)	Surface	16	17.0-20.0	18.7	1.2
	Bottom	16	16.5-19.0	18.1	1.1
Cond (umho/cm)	Surface	12	245-361	287	29
	Bottom				
Turbid (JTU)	Surface	12	14-50	29	10
	Bottom				
Alk (ppm)	phenol	12	0-0	0	
	total	12	120-155	135	11
pH	Surface	12	7.9-8.3	8.2	0.1
	Bottom				
Sulfate					
Orthophosphate (ppm)		12	0.03-0.4	0.10	0.11

PHYSICOCHEMICAL MEASUREMENTS OF LAKE ERIE WATER
AT LOCUST POINT, OHIO

2-7 November 1973

Data Period

Parameter		No. Measurements	Range	Mean	Standard Deviation
Depth (m)		20	1.2-5.4	2.9	1.1
Trans (m)		20	0.15-0.30	0.20	0.05
DO (ppm)	Surface	20	10.2-14.6	11.5	1.3
	Bottom	20	8.8-14.2	11.2	1.2
Temp (°C)	Surface	20	5.0-10.5	8.7	2.0
	Bottom	20	5.0-10.0	8.6	1.9
Cond (umho/cm)	Surface	5	270-380	330	41
	Bottom				
Turbid (JTU)	Surface	5	32-52	38	7
	Bottom				
Alk (ppm)					
pH	Surface	5	7.5-7.8	7.6	0.1
	Bottom				
Sulfate					
Orthophosphate (ppm)		5	.05-.15	.08	0.04

TABLE 17 CONT.

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PHYSICOCHEMICAL MEASUREMENTS OF LAKE ERIE WATER
AT LOCUST POINT, OHIO

4 December 1973

Data Period

Parameter		No. Measurements	Range	Mean	Standard Deviation
Depth (m)		10	1.5-5.6	3.1	1.3
Trans (m)		10	1.0-2.5	1.6	0.4
DO (ppm)	Surface	3	10.0-11.0	10.7	0.5
	Bottom	2	11.0	11.0	0.0
Temp (°C)	Surface	3	6.0	6.0	0.0
	Bottom	3	6.0	6.0	0.0
Cond (umho/cm)	Surface	9	300-380	347	26
	Bottom				
Turbid (JTU)	Surface	10	10-25	17	4
	Bottom				
Alk (ppm)	phenol	10	0-0	0	0.0
	total	10	85-135	114	15
pH	Surface	10	7.2-7.6	7.4	0.1
	Bottom				
Sulfate		10	0.8-5.1	2.5	1.4
Orthophosphate (ppm)		10	0.05-0.35	0.14	0.10

ANALYSIS

Benthos

The major differences between 1972 and 1973 results were in the frequency of occurrence of various species (Table 1). In general, chironomids and all species of oligochaetes except the Naididae were much more widespread in 1973 than in 1972, while Gammarus fasciatus, Caenis sp., Hirudinea and Pelecypoda occurred at fewer stations. It may be that changes in the substrate due to dredging and pipe-laying activities were responsible for these differences. Preliminary examination of sediment samples taken in 1973 showed an increase in clay and a decrease in sandy, gravelly substrate; however, until analysis of sediment samples has been completed and compared with the 1972 results, the evidence is not conclusive.

Although the total numbers of taxa found in both years were similar (30 in 1972, 31 in 1973), there were some differences when individual transects were compared (Table 18). Between June and November, 1973, the numbers of species were consistently lower on the intake and discharge transects than on the control west transect. Although missing data in 1972 precluded a complete comparison, it was evident that diversity was lower along the intake and discharge transects in 1973 than in 1972. These results may be related to changes in substrate and bottom topography resulting from dredging and pipe-laying activities.

When mean population densities were compared during the 2 years density appeared greater in 1973 than in 1972. This may be due in part to sampling artifacts since there was considerable missing data in 1972. If the stations not sampled in 1972 were those which normally had higher densities, the means would be biased downward. It may also be due to dredging and pipe-laying in that such activity may have exposed new sources of nutrients so that the species which could survive the change in substrate, increased turbidity, etc., had a more plentiful food supply and an increased rate of production.

Plankton

As stated earlier, comparisons of 1973 data and earlier results are difficult due to different sampling techniques and stations. However, 1973 results indicate much larger zooplankton populations than

TABLE 18

MEAN SPECIES DIVERSITY FOR EACH TRANSECT
AT LOCUST POINT IN 1972 AND 1973

	1972					1973						
	Jul	Aug	Sept	Oct	Nov	May	Jun	Jul	Aug	Sept	Oct	Nov
Control West	9	10	-	-	-	9	11	10	8	15	14	9
Intake	14	7	3	14	17	16	9	10	6	11	11	10
Discharge	16	6	-	18	-	10	8	10	7	14	12	12

were found in 1972 (Figures 5-8). There are also relative differences between the highs and lows of 1972 and 1973 populations. Zooplankton populations in 1972 were quite high in August and low in September while in 1973 they were low in August and high in September.

It is possible that these changes were due to the dredging for the intake and discharge pipelines which took place in 1973. It is also quite common to experience variability in zooplankton populations due to a patchy population distribution or short blooms of certain species. Differences in the weather between 1972 and 1973 undoubtedly also caused some of the changes in the zooplankton populations as it effected the stability of the environment. As with the benthos, a stable population can not be maintained in a shallow area that becomes as rough as Lake Erie at Locust Point.

Fish and Food Habits

Although Lake Erie adjacent to Locust Point is not a spawning area, results show it to support a healthy fish population. Twenty-eight of the 38 species found in the Locust Point vicinity since 1963 were captured again this past year. This is a good diversity again pointing to a healthy population and relatively unpolluted environment.

Of the 28 species collected in 1973, 7 species, Alosa pseudoharengus, Aplodinotus grunniens, Cyprinus carpio, Dorosoma cepedianum, Ictalurus punctatus, Notropis a. atherinoides, and Perca flavescens, made up the bulk of the population. The addition of Morone chrysops and Notropis hudsonius, which were both common in the area, to this list leads to an almost classic community structure.

Four of the 9 species mentioned, Alosa pseudoharengus, Dorosoma cepedianum, Notropis a. atherinoides, and N. hudsonius, would be considered forage fish or food items for the remaining species excluding Cyprinus carpio which would be the scavenger. These 4 species compete for the plankton and benthos as their food. However, the fish occupy different niches so direct competition for food is averted, although the plankton population is probably large enough to support direct competition. Notropis hudsonius is the bottom dweller of the 4 while the other 3 constitute surface or midwater dwellers. Notropis a. atherinoides resides in the shore or beach area. There are also differences in seasonal abundance.

The 4 predators, Aplodinotus grunniens, Ictalurus punctatus, Morone chrysops, and Perca flavescens, compete for the forage species. Again, this competition is reduced due to differences in the niches of the 4. Morone chrysops is a surface or midwater feeder.

Ictalurus punctatus and Perca flavescens are bottom feeders, but Ictalurus punctatus doubles as a scavenger. Aplodinotus grunniens feeds over the entire water column.

All this points to a well structured community and, therefore, a relatively stable community.

The remaining 19 less common species should not be overlooked for they constitute the indicator species. The Locust Point environment is on the fringe of their niches as their reduced numbers indicate. Therefore, slight changes in this environment will most drastically effect these species.

Water Chemistry

Water chemistry at Locust Point is being monitored so that a seasonal pattern can be developed. It will then be possible to detect changes in this pattern after the plant is in operation. The only limiting factor for aquatic life observed to date would be transparency which is often less than 0.5 m. However, the populations now present are surviving under this stress. All other parameters measured are at levels very conducive to the development and maintenance of aquatic life.

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APPENDIX A

BENTHOS POPULATIONS AT LOCUST POINT

1973

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
MAY, 1973

BENTHOS SAMPLES	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8	Sta. 9
COELENTERATA									
<i>Eydra</i> sp.			109					18	18
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
<i>Nepheleopsis pseudoobtus</i>							18		
Oligochaeta, Immature			543			181	3403	1032	923
Tubificidae									
<i>Branchiura sowerbui</i>							72	36	
<i>Eimodrilus cervix</i>									
<i>E. clavaredeanus</i>						36			
<i>E. clavaredeanus-cervix</i>									
<i>E. hoffmeisteri</i>								54	
<i>E. ranaeensis</i>									
<i>E. udakemianus</i>									
<i>Potamothrix moldaviensis</i>			36			163	163	72	91
<i>P. veldovskii</i>							109	91	
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaria wiciniata</i> sp.								18	109
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>			72			18	18		18
<i>Eubalella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.						18			
Trichoptera									
<i>Hydropsyche</i> sp.									
<i>Cecetis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 5-25-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
MAY, 1973

BENTHOS SPECIES	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8	Sta. 9
ARTHROPODA (Cont.)									
Limnephilidae									
Cnironomidae									
Chironominae									
<i>Chironomus (Chironomus) sp.</i>									
<i>C. (Cryptochironomus) sp.</i>			18					54	91
<i>Polypedilum sp.</i>						18	290	54	
<i>Pseudochironomus sp.</i>									18
<i>Tanytarsus sp.</i>			36				326	54	54
Tanypodinae									
<i>Coelotanytus sp.</i>									
<i>Procladius sp.</i>			36				18		
Orthoclaadiinae									
<i>Oricotopus sp.</i>									
<i>Psectrocladius sp.</i>									
MOLLUSCA									
Gastropoda									
<i>Amnicola sp.</i>									
<i>Eulimnaea sp.</i>									
<i>Gyrinus sp.</i>									
<i>Physa sp.</i>									
<i>Pleurocera-Goniobasis sp.</i>		18							
<i>Valvata sp.</i>									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium sp.</i>							18		
<i>Sphaerium sp.</i>			18						
Total	0	18	886		0	434	4435	1484	1321

Notes:

1. Sample collection date: 5-25-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
MAY, 1973

BENTHOS SAMPLES	Sta. 10	Sta. 11	Sta. 12	Sta. 13	Sta. 14	Sta. 15	Sta. 16	Sta. 17	Sta. 18
COELENTERATA									
<i>Hydra</i> sp.	18				18				
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures	326	13	91	145	217		72		380
Tubificidae									
<i>Branchiura sowerbyi</i>									
<i>Limnodrilus cervix</i>									
<i>L. claparedianus</i>									
<i>L. claparedianus-cervix</i>									
<i>L. hoffmeisteri</i>									36
<i>L. maumeensis</i>									
<i>L. udekemianus</i>									
<i>Potamothrix moldaviensis</i>		54		18	36				18
<i>P. vejovskyi</i>							18		
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>				109		36			
<i>Eualella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.				18					
Trichoptera									
<i>Atherosodes</i> sp.									
<i>Cecetis</i> sp.									
<i>Polucentropus</i> sp.									

Notes:

1. Sample collection date: 5-25-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-1 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
MAY, 1973

BENTHOS SPECIES	Sta. 10	Sta. 11	Sta. 12	Sta. 13	Sta. 14	Sta. 15	Sta. 16	Sta. 17	Sta. 18
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus (Chironomus) sp.</i>									
<i>C. (Cryptochironomus) sp.</i>		54		18	18	18			163
<i>Polypedilum sp.</i>				18	72				35
<i>Pseudochironomus sp.</i>									
<i>Tanytarsus sp.</i>			9	18					18
Tanypodinae									
<i>Coelotanypus sp.</i>									
<i>Procladius sp.</i>	18								
Orthoclaadiinae									
<i>Cricotopus sp.</i>									
<i>Psectrocladius sp.</i>									
MOLLUSCA									
Gastropoda									
<i>Armicoia sp.</i>									
<i>Bulimus sp.</i>									
<i>Gyrcaulus sp.</i>									
<i>Physa sp.</i>									
<i>Pleurocera-Goniobasis sp.</i>									
<i>Valvata sp.</i>									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium sp.</i>									
<i>Sphaerium sp.</i>									
Total	362	126	100	344	361	144	90		652

Notes:

1. Sample collection date: 5-25-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
MAY, 1973

BENTHOS SAMPLES	Sta. 19	Sta. 20							
COELENTERATA									
<i>Ephyra</i> sp.									
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures									
Tubificidae									
<i>Branchiura sowerbyi</i>									
<i>Limnodrilus cervix</i>									
<i>L. clavaredeanus</i>									
<i>L. clavaredeanus-cervix</i>									
<i>L. hoffmeisteri</i>									
<i>L. maumeensis</i>									
<i>L. udekemicus</i>									
<i>Potamothrix moldaviensis</i>									
<i>P. vejdvskyi</i>									
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>									
<i>Eualella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Athripsodes</i> sp.									
<i>Cecetis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 5-25-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE AT CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
MAY, 1973

BENTHOS SPECIES	Sta. 19	Sta. 20							
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus</i> (<i>Chironomus</i>) sp.									
<i>C.</i> (<i>Cryptochironomus</i>) sp.									
<i>Polypedilum</i> sp.									
<i>Pseudochironomus</i> sp.									
<i>Tanytarsus</i> sp.									
Tanypodinae									
<i>Coelotanypus</i> sp.									
<i>Procladius</i> sp.									
Orthoclaadiinae									
<i>Cricotopus</i> sp.									
<i>Psectrocladius</i> sp.									
MOLLUSCA									
Gastropoda									
<i>Amnicola</i> sp.									
<i>Bulimus</i> sp.									
<i>Gyraculus</i> sp.									
<i>Physa</i> sp.									
<i>Pleurocera-Goniobasis</i> sp.									
<i>Valvata</i> sp.									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium</i> sp.									
<i>Sphaerium</i> sp.									
Total									

Notes:

1. Sample collection date: 5-25-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
JUNE and JULY, 1973

BENTHOS SAMPLES	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8	Sta. 9
COELENTERATA									
<i>Eydra</i> sp.									
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures			2842	1321			815	1177	434
Tubificidae									
<i>Branchiura sowerbyi</i>									
<i>Limnodrilus cervix</i>	54		109				18		
<i>L. claredeanus</i>									
<i>L. claredeanus-cervix</i>									
<i>L. hoffmeisteri</i>							36	54	
<i>L. maumeensis</i>									
<i>L. udekemicus</i>									
<i>Potamothrix moldaviensis</i>	18		706	217			18		290
<i>P. vejovskyi</i>			398	36			72	36	
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>					18				
<i>Eualella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.			36						
Trichoptera									
<i>Athripsodes</i> sp.									
<i>Oecetis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 6-27-73 and 7-2-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
JUNE and JULY, 1973

BENTHOS SPECIES	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8	Sta. 9
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus (Chironomus) sp.</i>	91		36				235	36	18
<i>C. (Cryptochironomus) sp.</i>	18			36			18		36
<i>Polypedilum sp.</i>	18		18						
<i>Pseudochironomus sp.</i>								217	54
<i>Tanytarsus sp.</i>			18						
Tanypodinae									
<i>Coelotanypus sp.</i>								72	
<i>Procladius sp.</i>			18	36					
Orthoclaadiinae									
<i>Cricotopus sp.</i>									
<i>Psectrocladius sp.</i>									
MOLLUSCA									
Gastropoda									
<i>Amnicola sp.</i>									
<i>Eulimnaea sp.</i>									
<i>Gyracaulis sp.</i>									
<i>Physa sp.</i>									
<i>Pleurocera-Goniobasis sp.</i>									
<i>Valvata sp.</i>									
Pelecypoda									
Unionidae									
<i>Anodonta imbecilis</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium sp.</i>									
<i>Sphaerium sp.</i>	18								
Total	217	0	4181	1646	18		1212	1592	832

Notes:

1. Sample collection date: 6-27-73 and 7-2-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

JUNE and JULY, 1973

BENTHOS SAMPLES	Sta. 10	Sta. 11	Sta. 12	Sta. 13	Sta. 14	Sta. 15	Sta. 16	Sta. 17	Sta. 18
COELENTERATA									
<i>Hydra</i> sp.									
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures		18	181	561	561	109			380
Tubificidae									
<i>Branchiura sowerbyi</i>									
<i>Limnodrilus cervix</i>						36			
<i>L. clavaredeanus</i>						18			
<i>L. clavaredeanus-cervix</i>									
<i>L. hoffmeisteri</i>									
<i>L. raumeensis</i>									
<i>L. udekemianus</i>									
<i>Potamothrinx moldaviensis</i>			72		18				18
<i>P. vejdoskyi</i>						308			
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>									
<i>Hyalella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Athripsodes</i> sp.									
<i>Decetis</i> sp.									
<i>Polucentropus</i> sp.									

Notes:

1. Sample collection date: 6-27-73 and 7-2-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-2 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
JUNE and JULY, 1973

BENTHOS SPECIES	Sta. 10	Sta. 11	Sta. 12	Sta. 13	Sta. 14	Sta. 15	Sta. 16	Sta. 17	Sta. 18
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus (Chironomus) sp.</i>			380	199	54	72	109		91
<i>C. (Cryptochironomus) sp.</i>			18						
<i>Polypedilum sp.</i>						33			
<i>Pseudochironomus sp.</i>									
<i>Tanytarsus sp.</i>									
Tanypodinae									
<i>Coelotanypus sp.</i>									
<i>Procladius sp.</i>						72			36
Orthocladiinae									
<i>Cricotopus sp.</i>									
<i>Psectrocladius sp.</i>									
MOLLUSCA									
Gastropoda									
<i>Amnicola sp.</i>									
<i>Bulirus sp.</i>									
<i>Gyraulus sp.</i>									
<i>Ehusa sp.</i>									
<i>Pleurocera-Goniobasis sp.</i>									
<i>Valvata sp.</i>									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium sp.</i>									
<i>Sphaerium sp.</i>									
Total	0	18	551	761	633	651	109		525

Notes:

1. Sample collection date: 6-27-73 and 7-2-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
JUNE and JULY' 1973

BENTHOS SAMPLES	Sta. 19	Sta. 20							
COELENTERATA									
<i>Hydra</i> sp.									
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures									
Tubificidae									
<i>Branchiura sowerbyi</i>									
<i>Limnodrilus cervix</i>									
<i>L. clapparedae</i>									
<i>L. clapparedae-cervix</i>									
<i>L. hoffmeisteri</i>									
<i>L. mameensis</i>									
<i>L. udekemianus</i>									
<i>Potamothrix moldaviensis</i>									
<i>P. vejovskyi</i>									
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>									
<i>Gyalolella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Atherixodes</i> sp.									
<i>Decetis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 6-27-73 and 7-2-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-1 (Cont.)
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
JUNE and JULY, 1973

BENTHOS SPECIES	Sta. 19	Sta. 20							
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus</i> (<i>Chironomus</i>) sp.									
<i>C.</i> (<i>Cryptochironomus</i>) sp.									
<i>Polypedilum</i> sp.									
<i>Pseudochironomus</i> sp.									
<i>Tanytarsus</i> sp.									
Tanypodinae									
<i>Coelotanypus</i> sp.									
<i>Procladius</i> sp.									
Orthocladiinae									
<i>Cricotopus</i> sp.									
<i>Psectrocladius</i> sp.									
MOLLUSCA									
Gastropoda									
<i>Amnicola</i> sp.									
<i>Bulimus</i> sp.									
<i>Gyraculus</i> sp.									
<i>Physa</i> sp.									
<i>Pleurocera-Goniobasis</i> sp.									
<i>Valvata</i> sp.									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium</i> sp.									
<i>Sphaerium</i> sp.									
Total	0	0							

Notes:

1. Sample collection date: 6-27-73 and 7-2-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
JULY and AUGUST, 1973

BENTHOS SAMPLES	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8	Sta. 9
COELENTERATA									
<i>Hydra</i> sp.									
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>	18								
<i>Helobdella elongata</i>									
Oligochaeta, Immatures	18		1104	1177			2860	489	344
Tubificidae									
<i>Bronchidura sowerbyi</i>			18	72			72		
<i>Limnodrilus cervix</i>			36	18					
<i>L. clavaredeanus</i>									
<i>L. clavaredeanus-cervix</i>									
<i>L. hoffmeisteri</i>									
<i>L. maximeensis</i>									
<i>L. udekemianus</i>									
<i>Potamothriss moldaviensis</i>			127	54			543		36
<i>P. vejdvovskyi</i>			18	18			18		
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>						18			
<i>Hyalella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Athripsodes</i> sp.									
<i>Decetis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 7-25-73 and 8-1-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-3 (CONT.)
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
JULY and AUGUST, 1973

BENTHOS SPECIES	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8	Sta. 9
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus</i> (<i>Chironomus</i>) sp.			127	54			4453	72	525
<i>C.</i> (<i>Cryptochironomus</i>) sp.									
<i>Polypedilum</i> sp.						18		18	
<i>Pseudochironomus</i> sp.									
<i>Tanytarsus</i> sp.				54					18
Tanypodinae									
<i>Coelotanypus</i> sp.									
<i>Procladius</i> sp.			18	36			36		
Orthocladiinae									
<i>Cricotopus</i> sp.									
<i>Psectrocladius</i> sp.									
MOLLUSCA									
Gastropoda									
<i>Amnicola</i> sp.									
<i>Bulimus</i> sp.									
<i>Gyraulus</i> sp.									
<i>Physa</i> sp.									
<i>Pleurocera-Goniobasis</i> sp.									
<i>Valvata</i> sp.									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>								18	
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium</i> sp.									
<i>Sphaerium</i> sp.				18					
Total	36	0	1447	1519	0	33	8000	597	923

Notes:

1. Sample collection date: 7-25-73 and 8-1-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
JULY and AUGUST, 1973

BENTHOS SAMPLES	Sta. 10	Sta. 11	Sta. 12	Sta. 13	Sta. 14	Sta. 15	Sta. 16	Sta. 17	Sta. 18
COELENTERATA									
<i>Hydra</i> sp.									
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures			308	163	579	109	36	91	652
Tubificidae									
<i>Branchiura sowerbyi</i>					54				
<i>Limnodrilus cervix</i>					36				
<i>L. clavaredeanus</i>			18		36				18
<i>L. clavaredeanus-cervix</i>									
<i>L. hoffmeisteri</i>			18		18				18
<i>L. mameensis</i>									
<i>L. udakemianus</i>									
<i>Potamothrix moldaviensis</i>			109	18		72		72	109
<i>P. vejidovskyi</i>									18
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>			36						
<i>Euallela azteca</i>									
Ephemeroptera									
<i>Coenosis</i> sp.									
Trichoptera									
<i>Atopsyche</i> sp.									
<i>Deceis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 7-25-73 and 8-1-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-3 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
JULY and AUGUST, 1973

BENTHOS SPECIES	Sta. 10	Sta. 11	Sta. 12	Sta. 13	Sta. 14	Sta. 15	Sta. 16	Sta. 17	Sta. 18
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus (Chironomus) sp.</i>			91		36				72
<i>C. (Cryptochironomus) sp.</i>			36					18	
<i>Polypedilum sp.</i>									
<i>Pseudochironomus sp.</i>									
<i>Tanytarsus sp.</i>									
Tanypodinae									
<i>Coelotanypus sp.</i>									
<i>Procladius sp.</i>					18	18			
Orthoclaadiinae									
<i>Cricotopus sp.</i>									
<i>Psectrocladius sp.</i>									
MOLLUSCA									
Gastropoda									
<i>Amnicola sp.</i>									
<i>Bulimus sp.</i>									
<i>Gyraxulus sp.</i>									
<i>Physa sp.</i>									
<i>Pleurocera-Goniobasis sp.</i>									
<i>Valvata sp.</i>									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lamosilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Liamia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium sp.</i>									
<i>Sphaerium sp.</i>									
Total		36	580	181	777	199	36	182	887

Notes:

1. Sample collection date: 7-25-73 and 8-1-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
JULY and AUGUST, 1973

BENTHOS SAMPLES	Sta. 19	Sta. 20							
COELENTERATA									
<i>Hydra</i> sp.									
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures									
Tubificidae									
<i>Branchiura sowerbyi</i>									
<i>Limnodrilus cervix</i>									
<i>L. claparedeanus</i>									
<i>L. claparedeanus-cervix</i>									
<i>L. hoffmeisteri</i>	18								
<i>L. maumeensis</i>									
<i>L. udekemianus</i>									
<i>Potamothrix moldaviensis</i>									
<i>P. vejdoskyi</i>									
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>									
<i>Hyalella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Athripsodes</i> sp.									
<i>Oecetis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 7-25-73 and 8-1-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

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TABLE A-3 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
JULY and AUGUST, 1973

BENTHOS SPECIES	Sta. 19	Sta. 20							
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus</i> (<i>Chironomus</i>) sp.									
<i>C.</i> (<i>Cryptochironomus</i>) sp.									
<i>Polypedilum</i> sp.									
<i>Pseudochironomus</i> sp.									
<i>Tanytarsus</i> sp.									
Tanypodinae									
<i>Coelotanypus</i> sp.									
<i>Procladius</i> sp.									
Orthoclaadiinae									
<i>Cricotopus</i> sp.									
<i>Psectrocladius</i> sp.									
MOLLUSCA									
Gastropoda									
<i>Amnicola</i> sp.									
<i>Bulimus</i> sp.									
<i>Gyraulus</i> sp.									
<i>Physa</i> sp.									
<i>Pleurocera-Goniobasis</i> sp.									
<i>Valvata</i> sp.									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Lentorea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium</i> sp.									
<i>Sphaerium</i> sp.									
Total	18	0							

Notes:

1. Sample collection date: 7-25-73 and 8-1-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
AUGUST, 1973

BENTHOS SAMPLES	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8	Sta. 9
COELENTERATA									
<i>Hydra</i> sp.									
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures		127		1629				18	1520
Tubificidae									
<i>Branchiura sowerbyi</i>		18		18					
<i>Limnodrilus cervix</i>		18		18					
<i>L. claparedianus</i>									
<i>L. claparedianus-cervix</i>									
<i>L. hoffmeisteri</i>									
<i>L. maumeensis</i>									
<i>L. udekemianus</i>									
<i>Potamothrix moldaviensis</i>				36					18
<i>P. vejdoskyi</i>									
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.				18					
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>					54				
<i>Hyalella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Athripsodes</i> sp.									
<i>Oecetis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 8-23-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-4 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
AUGUST, 1973

BENTHOS SPECIES	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8	Sta. 9
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus</i> (<i>Chironomus</i>) sp.		72		145		18			181
<i>C. (Cryptochironomus)</i> sp.									
<i>Polypedilum</i> sp.									
<i>Pseudochironomus</i> sp.									
<i>Tanytarsus</i> sp.				778					489
<i>Glyptotendipes</i> sp.					18				
Tanypodinae									
<i>Coelotanytus</i> sp.					18				54
<i>Procladius</i> sp.		18							18
Orthoclaadiinae									
<i>Cricotopus</i> sp.									
<i>Psectrocladius</i> sp.									
MOLLUSCA									
Gastropoda									
<i>Amnicola</i> sp.									
<i>Bulimus</i> sp.									
<i>Gyraulus</i> sp.									
<i>Physa</i> sp.									
<i>Pleurocera-Goniobasis</i> sp.									
<i>Valvata</i> sp.									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodesa fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilius alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium</i> sp.									
<i>Sphaerium</i> sp.									
Total		253		2643	91	18		18	2280

Notes:

1. Sample collection date: 8-23-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
AUGUST, 1973

BENTHOS SAMPLES	Sta. 10	Sta. 11	Sta. 12	Sta. 13	Sta. 14	Sta. 15	Sta. 16	Sta. 17	Sta. 18
COELENTERATA									
<i>Hydra</i> sp.									
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures	181	199		326			36		
Tubificidae									
<i>Branchiura sowerbyi</i>									
<i>Limnodrilus cervix</i>									
<i>L. claparedeanus</i>				18					
<i>L. claparedeanus-cervix</i>									
<i>L. hoffmeisteri</i>									
<i>L. maumeensis</i>									
<i>L. udekemianus</i>									
<i>Potamothrix moldaviensis</i>		18					18		
<i>P. vejovskyi</i>									
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>		18							
<i>Hyalolella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Athripsodes</i> sp.									
<i>Oecetis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 8-23-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-4 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
AUGUST, 1973

BENTHOS SPECIES	Sta. 10	Sta. 11	Sta. 12	Sta. 13	Sta. 14	Sta. 15	Sta. 16	Sta. 17	Sta. 18
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus (Chironomus) sp.</i>	18			163			18		
<i>C. (Cryptochironomus) sp.</i>		36							
<i>Polypodilum sp.</i>	54	18							
<i>Pseudochironomus sp.</i>									
<i>Tanytarsus sp.</i>									
Tanypodinae									
<i>Coelotanypus sp.</i>									
<i>Procladius sp.</i>									
Orthoclaadiinae									
<i>Cricotopus sp.</i>									
<i>Psectrocladius sp.</i>									
MOLLUSCA									
Gastropoda									
<i>Amnicola sp.</i>									
<i>Bulimus sp.</i>									
<i>Gyraculus sp.</i>									
<i>Frysa sp.</i>									
<i>Planorbis-Goniobasis sp.</i>									
<i>Valvata sp.</i>									
Pelecypoda									
Unionidae									
<i>Anodonta plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilius alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium sp.</i>									
<i>Sphaerium sp.</i>									
Total	253	289		507			72		

Notes:

1. Sample collection date: 8-23-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
AUGUST, 1973

BENTHOS SAMPLES	Sta. 19	Sta. 20							
COELENTERATA									
<i>Eudira</i> sp.									
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures									
Tubificidae									
<i>Branchiura sowerbyi</i>									
<i>Limnodrilus cervix</i>									
<i>L. clavaredeanus</i>									
<i>L. clavaredeanus-cervix</i>									
<i>L. hoffmeisteri</i>									
<i>L. nameensis</i>									
<i>L. udekemianus</i>									
<i>Potamothrix moldaviensis</i>									
<i>P. vejdoskyi</i>									
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>									
<i>Hyalella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Atherosodes</i> sp.									
<i>Oecetis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 8-23-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-4 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
AUGUST, 1973

BENTHOS SPECIES	Sta. 19	Sta. 20							
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus</i> (<i>Chironomus</i>) sp.									
<i>C.</i> (<i>Cryptochironomus</i>) sp.									
<i>Polypedilum</i> sp.									
<i>Pseudochironomus</i> sp.									
<i>Tanytarsus</i> sp.									
Tanypodinae									
<i>Coelotanypus</i> sp.									
<i>Procladius</i> sp.									
Orthocladiinae									
<i>Cricotopus</i> sp.									
<i>Psectrocladius</i> sp.									
MOLLUSCA									
Gastropoda									
<i>Amnicola</i> sp.									
<i>Bulimus</i> sp.									
<i>Gyraulus</i> sp.									
<i>Physa</i> sp.									
<i>Pleurocera-Goniobasis</i> sp.									
<i>Valvata</i> sp.									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium</i> sp.									
<i>Sphaerium</i> sp.									
Total									

Notes:

1. Sample collection date: 8-23-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
SEPTEMBER, 1973

BENTHOS SAMPLES	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8	Sta. 9
COELENTERATA									
<i>Hydra</i> sp.	18								
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures	145	199	1611	2082		91	91	3005	1937
Tubificidae									
<i>Branchiura sowerbyi</i>				91		18			
<i>Limnodrilus cervix</i>			72	72					181
<i>L. claparedeanus</i>			72	18					91
<i>L. claparedeanus-cervix</i>									
<i>L. hoffmeisteri</i>			36						54
<i>L. maumeensis</i>			72						
<i>L. udekemianus</i>									
<i>Potamothrrix moldaviensis</i>			54	18					
<i>P. vejdoskyi</i>									
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>					36				
<i>Hyalella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Athripsodes</i> sp.									
<i>Oecetis</i> sp.									
<i>Polucentropus</i> sp.									

Notes:

1. Sample collection date: 9-19-73 and 9-26-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-5 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
SEPTEMBER, 1973

BENTHOS SPECIES	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8	Sta. 9
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus (Chironomus) sp.</i>	18	54	199	235				36	
<i>C. (Cryptochironomus) sp.</i>						36		18	
<i>Polypedilum sp.</i>	18								
<i>Pseudochironomus sp.</i>	18								
<i>Tanytarsus sp.</i>	36	72	36					36	54
<i>C. (Dicroptendipes)</i>						18			
Tanypodinae									
<i>Coelotanytus sp.</i>			18						
<i>Procladius sp.</i>			18	18					
Orthocladiinae									
<i>Cricotopus sp.</i>									
<i>Psectrocladius sp.</i>									
MOLLUSCA									
Gastropoda									
<i>Amnicola sp.</i>									
<i>Bulinus sp.</i>									
<i>Gurculus sp.</i>									
<i>Physa sp.</i>									
<i>Pleurocera-Goniobasis sp.</i>									
<i>Valvata sp.</i>									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium sp.</i>									
<i>Sphaerium sp.</i>			18				18		
Total	253	325	2206	2534	36	163	109	3095	2317

Notes:

1. Sample collection date: 9-19-73 and 9-26-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
SEPTEMBER, 1973

BENTHOS SAMPLES	Sta. 10	Sta. 11	Sta. 12	Sta. 13	Sta. 14	Sta. 15	Sta. 16	Sta. 17	Sta. 18
COELENTERATA									
<i>Hydra</i> sp.							18		
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Felobdella stagnalis</i>									
<i>Felobdella elongata</i>									
Oligochaeta, Immatures	181		27	2299	706	3964	706	597	2625
Tubificidae									
<i>Branchiura sowerbyi</i>						91			
<i>Limnodrilus cervix</i>	18			127	36	235		18	235
<i>L. claparedianus</i>									91
<i>L. claparedianus-cervix</i>									91
<i>L. hoffmeisteri</i>				272	18	181			181
<i>L. maumeensis</i>				54		54			36
<i>L. udekemianus</i>									
<i>Potamothrrix moldaviensis</i>							91	109	
<i>P. vejdoskyi</i>									
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Sturlaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>		18							
<i>Eualella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Athripsodes</i> sp.									
<i>Decetis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 9-19-73 and 9-26-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-5 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
SEPTEMBER, 1973

BENTHOS SPECIES	Sta. 10	Sta. 11	Sta. 12	Sta. 13	Sta. 14	Sta. 15	Sta. 16	Sta. 17	Sta. 18
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus</i> (<i>Chironomus</i>) sp.		18		72		109		109	54
<i>C.</i> (<i>Cryptochironomus</i>) sp.				18		18			36
<i>Polypedilum</i> sp.									
<i>Pseudochironomus</i> sp.									
<i>Tanytarsus</i> sp.						18			
Tanypodinae									
<i>Coelotanypus</i> sp.				54		127		18	18
<i>Procladius</i> sp.	18					18		54	54
Orthocladiinae									
<i>Cricotopus</i> sp.									
<i>Psectrocladius</i> sp.									
MOLLUSCA									
Gastropoda									
<i>Amnicola</i> sp.									
<i>Bulimus</i> sp.									
<i>Gyraculus</i> sp.									
<i>Physa</i> sp.									
<i>Pleurocera-Goniobasis</i> sp.									
<i>Valvata</i> sp.									
Pelecypoda									
Unionidae									
<i>Anodonta plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium</i> sp.									
<i>Sphaerium</i> sp.		18				18			
Total	217	54	27	2897	760	4833	815	905	3421

Notes:

1. Sample collection date: 9-19-73 and 9-26-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
SEPTEMBER, 1973

BENTHOS SAMPLES	Sta. 19	Sta. 20							
COELENTERATA									
<i>Eydra</i> sp.									
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures									
Tubificidae									
<i>Branchiura sowerbyi</i>									
<i>Limnodrilus cervix</i>	18								
<i>L. clavaredeanus</i>									
<i>L. clavaredeanus-cervix</i>									
<i>L. hoffmeisteri</i>									
<i>L. mameensis</i>									
<i>L. udekemianus</i>									
<i>Potamothrrix moldaviensis</i>									
<i>P. vajdovskyi</i>									
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>									
<i>Hyalella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Athripsodes</i> sp.									
<i>Psectis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 9-19-73 and 9-26-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-70 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
SEPTEMBER, 1973

BENTHOS SPECIES	Sta. 19	Sta. 20							
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus (Chironomus) sp.</i>	18								
<i>C. (Cryptochironomus) sp.</i>	18								
<i>Polypedilum sp.</i>									
<i>Pseudochironomus sp.</i>									
<i>Tanytarsus sp.</i>									
Tanypodinae									
<i>Coelotanytus sp.</i>	36								
<i>Procladius sp.</i>	36								
Orthoclaadiinae									
<i>Cricotopus sp.</i>									
<i>Psectrocladius sp.</i>									
MOLLUSCA									
Gastropoda									
<i>Amnicola sp.</i>									
<i>Bulimus sp.</i>									
<i>Gyraulus sp.</i>									
<i>Physa sp.</i>									
<i>Pleurocera-Goniobasis sp.</i>									
<i>Valvata sp.</i>									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium sp.</i>									
<i>Sphaerium sp.</i>									
Total	198	0							

Notes:

1. Sample collection date: 9-19-73 and 9-26-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
NOVEMBER, 1973

BENTHOS SAMPLES	Sta. 1	Sta. 1	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 4	Sta. 4	Sta. 5
COELENTERATA									
<i>Hydra</i> sp.					36	72	18		
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures	869	344	1466	253	2425	5321	2769	3421	
Tubificidae									
<i>Branchiura scwerbyi</i>	36				18	217	72	235	
<i>Limnodrilus cervix</i>						18		54	
<i>L. clapparedanus</i>								18	
<i>L. clapparedanus-cervix</i>									
<i>L. hoffmeisteri</i>						18			
<i>L. maximeensis</i>									
<i>L. udekemianus</i>									
<i>Potamothrix moldaviensis</i>	36							36	
<i>P. vejdoskyi</i>								18	
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>									
<i>Eualella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Athripsodes</i> sp.									
<i>Oaceta</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 11-2-73 and 11-7-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-6 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
NOVEMBER, 1973

BENTHOS SPECIES	Sta. 1	Sta. 1	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 4	Sta. 4	Sta. 5
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus</i> (<i>Chironomus</i>) sp.			36		54	127	18	181	
<i>C. (Cryptochironomus)</i> sp.		36	36						
<i>Polypadilum</i> sp.						18			
<i>Pseudochironomus</i> sp.									
<i>Tanytarsus</i> sp.		18	36	36	18	19566	18353	18589	
Tanypodinae									
<i>Coelotanytus</i> sp.									
<i>Procladius</i> sp.							36	127	
Orthocladiinae									
<i>Cricotopus</i> sp.									
<i>Psectrocladius</i> sp.									
MOLLUSCA									
Gastropoda									
<i>Amnicola</i> sp.									
<i>Bulinus</i> sp.									
<i>Gyraculus</i> sp.									
<i>Physa</i> sp.									
<i>Pleurocera-Coniobasis</i> sp.									
<i>Valvata</i> sp.									
Pelecypoda									
Unionidae									
<i>Anodonta plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilius alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium</i> sp.									
<i>Sphaerium</i> sp.				18					
Total	941	398	1574	307	2552	25357	21266	22679	0

Notes:

1. Sample collection date: 11-2-73 and 11-7-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
NOVEMBER, 1973

BENTHOS SAMPLES	Sta. 6	Sta. 7	Sta. 8	Sta. 8	Sta. 8	Sta. 9	Sta. 10	Sta. 11	Sta. 12
COELENTERATA									
<i>Hydra</i> sp.							18		18
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures	72	507	2769	181	1484	2045	54	109	2968
Tubificidae									
<i>Branchiura sowerbyi</i>		36	18						
<i>Limnodrilus cervix</i>			54						109
<i>L. clavaredeanus</i>			36						
<i>L. clavaredeanus-cervix</i>									
<i>L. hoffmeisteri</i>			36			18		18	18
<i>L. mameensis</i>									
<i>L. udekemianus</i>									
<i>Potamothrix moldaviensis</i>			91		72				54
<i>P. vejdoskyi</i>									
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>	54			18				36	
<i>Hyalella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Athripsodes</i> sp.									
<i>Oecetis</i> sp.									
<i>Polucentropus</i> sp.									

Notes:

1. Sample collection date: 11-2-73 and 11-7-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-5 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
NOVEMBER, 1973

BENTHOS SPECIES	Sta. 6	Sta. 7	Sta. 8	Sta. 8	Sta. 8	Sta. 9	Sta. 10	Sta. 11	Sta. 12
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus (Chironomus) sp.</i>			18			18	109	127	
<i>C. (Cryptochironomus) sp.</i>						18		18	18
<i>Polypedilum sp.</i>									
<i>Pseudochironomus sp.</i>								18	
<i>Tanytarsus sp.</i>		54	217	18	326	21503			
Tanypodinae									
<i>Coelotanypus sp.</i>									
<i>Procladius sp.</i>									
Orthoclaadiinae									
<i>Cricotopus sp.</i>									
<i>Psectrocladius sp.</i>									
MOLLUSCA									
Gastropoda									
<i>Amnicola sp.</i>									
<i>Bulimus sp.</i>									
<i>Gyraculus sp.</i>									
<i>Physa sp.</i>									
<i>Pleurocera-Goniobasis sp.</i>									
<i>Valvata sp.</i>									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>					18				
<i>Ligumia recta</i>									
<i>Potamilius alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium sp.</i>									
<i>Sphaerium sp.</i>									
Total	126	597	3240	217	1901	23602	181	326	3185

Notes:

1. Sample collection date: 11-2-73 and 11-7-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

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ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
NOVEMBER, 1973

BENTHOS SAMPLES	Sta. 12	Sta. 13	Sta. 14	Sta. 15	Sta. 16	Sta. 17	Sta. 18	Sta. 19	Sta. 20
COELENTERATA									
<i>Eydra</i> sp.	18	18							
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures	326	1249	2226	2534	434	615	2172	507	
Tubificidae									
<i>Branchyura sowerbyi</i>				36			36		
<i>Limnodrilus cervix</i>			235	54			163		
<i>L. claparedeanus</i>			109			18	18		
<i>L. claparedeanus-cervix</i>									
<i>L. hoffmeisteri</i>			181	18		18	127		
<i>L. maumeensis</i>									
<i>L. udekemianus</i>									
<i>Potamothrix moldaviensis</i>			54			18	91		
<i>P. vejdoskyi</i>									
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>							36		
<i>Hyaella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Athripsodes</i> sp.									
<i>Oecetis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 11-2-73 and 11-7-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-6 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
NOVEMBER, 1973

BENTHOS SPECIES	Sta. 12	Sta. 13	Sta. 14	Sta. 15	Sta. 16	Sta. 17	Sta. 18	Sta. 19	Sta. 20
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus</i> (<i>Chironomus</i>) sp.			344	416			380		18
<i>C. (Cryptochironomus)</i> sp.				36					
<i>Polypedilum</i> sp.				18					
<i>Pseudochironomus</i> sp.									
<i>Tanytarsus</i> sp.		18		18					
Tanypodinae									
<i>Coelotanytus</i> sp.				127			36		
<i>Procladius</i> sp.				36					
Orthoclaadiinae									
<i>Cricotopus</i> sp.									
<i>Psectrocladius</i> sp.			72						
MOLLUSCA									
Gastropoda									
<i>Amnicola</i> sp.									
<i>Bulimus</i> sp.									
<i>Gyraculus</i> sp.									
<i>Physa</i> sp.									
<i>Pleurocera-Goniobasis</i> sp.									
<i>Valvata</i> sp.									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium</i> sp.									
<i>Sphaerium</i> sp.									
Total	344	1285	3221	3293	434	669	3059	507	18

Notes:

1. Sample collection date: 11-2-73 and 11-7-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
DECEMBER, 1973

BENTHOS SAMPLES	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8	Sta. 9
COELENTERATA									
<i>Eudra</i> sp.							362		18
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures	127	235	2190	2118	145		579	253	2172
Tubificidae									
<i>Branchiura sowerbyi</i>				109					18
<i>Limnodrilus cervix</i>								36	
<i>L. olivaceus</i>				18					
<i>L. olivaceus-cervix</i>									
<i>L. hoffmeisteri</i>				18				18	
<i>L. manneensis</i>									
<i>L. udekemianus</i>									
<i>Potamothenis moldaviensis</i>				18					
<i>P. vajdovskyi</i>									
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaria uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>									
<i>Eubalella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Atherix</i> sp.									
<i>Oecetis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 12-4-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

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TABLE A-7 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
DECEMBER, 1973

BENTHOS SPECIES	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8	Sta. 9
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus (Chironomus) sp.</i>			18	36	54				18
<i>C. (Cryptochironomus) sp.</i>			18	18	72				
<i>Polypedilum sp.</i>									
<i>Pseudochironomus sp.</i>					36				
<i>Tanytarsus sp.</i>	36	54	416	91	127			18	380
Tanypodinae									
<i>Coelotanypus sp.</i>									
<i>Procladius sp.</i>			18	18					
Orthoclaadiinae									
<i>Cricotopus sp.</i>									
<i>Psectrocladius sp.</i>									
MOLLUSCA									
Gastropoda									
<i>Amnicola sp.</i>									
<i>Bulimus sp.</i>									
<i>Gyrinus sp.</i>									
<i>Physa sp.</i>									
<i>Pleurocera-Goniobasis sp.</i>									
<i>Valvata sp.</i>									
Pelecypoda									
Unionidae									
<i>Anodonta imbecilis</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium sp.</i>									
<i>Sphaerium sp.</i>					18				
Total	163	289	2660	2444	452	0	941	325	2503

Notes:

1. Sample collection date: 12-4-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
DECEMBER, 1973

BENTHOS SAMPLES	Sta. 10	Sta. 11	Sta. 12	Sta. 13	Sta. 14	Sta. 15	Sta. 16	Sta. 17	Sta. 18
COELENTERATA									
<i>Eydra</i> sp.					163				
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossiphonia complanata</i>									
<i>Helobdella sternalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures	959	2552	2850	2244	1285	4272	362		5231
Tubificidae									
<i>Branchiura sowerbyi</i>	36		36						217
<i>Limnodrilus cervix</i>		344	127			18			308
<i>L. clapparedianus</i>		326	54						91
<i>L. clapparedianus-cervix</i>									
<i>L. hoffmeisteri</i>		181	163	199					272
<i>L. mameensis</i>									
<i>L. udekemianus</i>									
<i>Potamothrix moldaviensis</i>	18	163	35						
<i>P. vejnovskyi</i>									
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaria uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>									
<i>Hyalella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Atherosodes</i> sp.									
<i>Psectis</i> sp.									
<i>Polycentropus</i> sp.									

Notes:

1. Sample collection date: 12-4-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-7 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
DECEMBER, 1973

BENTHOS SPECIES	Sta. 10	Sta. 11	Sta. 12	Sta. 13	Sta. 14	Sta. 15	Sta. 16	Sta. 17	Sta. 18
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus (Chironomus) sp.</i>	597	839	253						543
<i>C. (Cryptochironomus) sp.</i>	54		18	18	18	18			36
<i>Polypodilum sp.</i>									
<i>Pseudochironomus sp.</i>									
<i>Tanytarsus sp.</i>				36	54	36			
Tanypodinae									
<i>Coelotanypus sp.</i>			18						36
<i>Procladius sp.</i>	18	54	109						127
Orthocladiinae									
<i>Cricotopus sp.</i>									
<i>Psectrocladius sp.</i>									
MOLLUSCA									
Gastropoda									
<i>Amnicola sp.</i>									
<i>Bulinus sp.</i>									
<i>Gyraulus sp.</i>									
<i>Physa sp.</i>									
<i>Pleurocera-Goniobasis sp.</i>									
<i>Valvata sp.</i>									
Pelecypoda									
Unionidae									
<i>Amblema plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Licium recta</i>									
<i>Potamilus alatus</i>									
<i>Quadrula rustulosa</i>									
Sphaeriidae									
<i>Pisidium sp.</i>									
<i>Sphaerium sp.</i>									
Total	1682	4489	3674	2497	1520	4344	332	0	6861

Notes:

1. Sample collection date: 12-4-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
DECEMBER, 1973

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BENTHOS SAMPLES	Sta. 19	Sta. 20							
COELENTERATA									
<i>Hydra</i> sp.									
PLATYHELMINTHES									
Planariidae									
ANNELIDA									
Hirudinea									
<i>Glossinobia complanata</i>									
<i>Helobdella stagnalis</i>									
<i>Helobdella elongata</i>									
Oligochaeta, Immatures	235	181							
Tubificidae									
<i>Branchiura sowerbyi</i>									
<i>Limnodrilus cervix</i>									
<i>L. clapparedanus</i>									
<i>L. clapparedanus-cervix</i>									
<i>L. hoffmeisteri</i>	36								
<i>L. maximeensis</i>									
<i>L. udekemianus</i>									
<i>Potamothrix moldaviensis</i>									
<i>P. vejidovskyi</i>									
Naididae									
<i>Nais</i> sp.									
<i>Naidium</i> sp.									
<i>Pristina</i> sp.									
<i>Stylaria</i> sp.									
<i>Uncinaxis uncinata</i> sp.									
ARTHROPODA									
Isopoda									
<i>Asellus</i> sp.									
Amphipoda									
<i>Gammarus fasciatus</i>									
<i>Eualella azteca</i>									
Ephemeroptera									
<i>Caenis</i> sp.									
Trichoptera									
<i>Athripsodes</i> sp.									
<i>Cecatis</i> sp.									
<i>Polycerotropus</i> sp.									

Notes:

1. Sample collection date: 12-4-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

TABLE A-7 CONT.
ANALYSIS OF BENTHOS POPULATIONS AT LOCUST POINT
DECEMBER, 1973

BENTHOS SPECIES	Sta. 19	Sta. 20							
ARTHROPODA (Cont.)									
Limnephilidae									
Chironomidae									
Chironominae									
<i>Chironomus (Chironomus) sp.</i>									
<i>C. (Cryptochironomus) sp.</i>									
<i>Polypedilum sp.</i>									
<i>Pseudochironomus sp.</i>									
<i>Tanytarsus sp.</i>									
Tanypodinae									
<i>Coslotarupus sp.</i>									
<i>Procladius sp.</i>									
Orthoclaadiinae									
<i>Cricotopus sp.</i>									
<i>Psectrocladius sp.</i>									
MOLLUSCA									
Gastropoda									
<i>Amnicola sp.</i>									
<i>Bulinus sp.</i>									
<i>Gamulus sp.</i>									
<i>Physa sp.</i>									
<i>Pleurocera-Goniobasis sp.</i>									
<i>Valvata sp.</i>									
Pelecypoda									
Unionidae									
<i>Anodonta plicata</i>									
<i>Lampsilis ventricosa</i>									
<i>L. radiata</i>									
<i>Leptodea fragilis</i>									
<i>Ligumia recta</i>									
<i>Potamides alatus</i>									
<i>Quadrula pustulosa</i>									
Sphaeriidae									
<i>Pisidium sp.</i>									
<i>Sphaerium sp.</i>									
Total	271	181							

Notes:

1. Sample collection date: 12-4-73
2. Collection method: Ponar Grab
3. Reported as number of individuals per square meter

APPENDIX B

ZOOPLANKTON POPULATIONS AT LOCUST POINT

1973

TABLE 2-1
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
MAY, 1973

ZOOPLANKTON SPECIES	Sta. 1	Sta. 3	Sta. 5	Sta. 7	Sta. 8	Sta. 9	Sta. 10	Sta. 12	Sta. 13
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priocantha</i>		2.9	33.9	11.2			10.1		11.
<i>Brachionus calyciflorus</i>	10.1	10.3	16.3				6.2		10.
<i>B. calyciflorus</i>	18.8	14.3	51.5	8.1			4.3		8.
<i>B. havanensis</i>									
<i>B. (Planorbis) patulus</i>									
<i>B. quadridentatus</i>									
<i>Chromocaster ovalis</i>									
<i>Filinia terminalis</i>	79.4	17.7	40.7	19.3			57.8		23.
<i>Kellicottia longispina</i>	5.8	6.3	8.1	3.7			4.3		4.
<i>Keratella cochlearis</i>	225.3	34.2	192.4	168.8			238.3		169.
<i>K. quadrata</i>	82.3	94.1	276.4	145.2			176.2		234.
<i>Leocne lynce</i>									
<i>L. lunaris</i>									
<i>Lepadella patella</i>							2.9		
<i>Mytilina</i> sp.									
<i>Notholca squamula</i>									
<i>Pleosoma</i> sp.									
<i>Polyarthra</i> sp.	62.1	39.9	40.7	33.6			51.9		54.7
<i>Trichocerca cylindrica</i>									
<i>T. multicornis</i>									
Unidentifiable Rotifer									
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.		7.9		3.1			6.2		4.
<i>Eurytemora</i> sp.		1.1	1.4						
Immatures	4.3	2.9		2.5			2.9		2.
Cyclopoid copepods									
<i>Cyclops</i> sp.	14.4	17.7	20.3	23.1			27.4		16.
<i>Mesocyclops</i> sp.									
Immatures	46.2	19.4	36.6	23.6			43.3		34.
Nauplius	210.8	169.9	363.1	217.4			194.9		273.
CLADOCERA									
<i>Bosmina</i> sp.	2.9	2.9	8.1	0.6			5.8		2.
<i>Ceriodaphnia</i> sp.									
<i>Gnathodorus</i> sp.									
<i>Daphnia galeata</i>									
<i>D. pulex</i>									
<i>D. retrocurva</i>	4.3	1.7		1.9			12.9		1.
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>									
<i>Leptocora kindtii</i>	1.4		1.4						
Total	768.1	443.2	1090.9	662.1			845.4		852

Notes:

1. Sample collection date: 5-25-73
2. Collection method: Vertical Tow, Wisconsin Net
3. Reported as number of zooplankters per liter

TABLE B-1 CONT.
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
MAY, 1973

ZOOPLANKTON SPECIES	Sta. 17	Sta. 18	Sta. 19	Sta. 20	Mean # /Sta. Sampled				
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priodonta</i>		18.1			12.5				
<i>Brachionus angularis</i>		8.7			8.9				
<i>B. calyciflorus</i>		27.4			19.0				
<i>B. havanensis</i>									
<i>B. (Planias) patulus</i>									
<i>B. quadridentatus</i>									
<i>Chromosaster ovalis</i>									
<i>Filinia terminalis</i>		22.4			37.3				
<i>Kellicottia longispina</i>		2.2			5.0				
<i>Keratella cochlearis</i>		158.8			169.6				
<i>K. quadrata</i>		249.8			179.7				
<i>Lecane luna</i>									
<i>L. lunaris</i>									
<i>Levadeia patella</i>					0.4				
<i>Mutillina</i> sp.									
<i>Notholca squamula</i>									
<i>Pleosoma</i> sp.									
<i>Polyarthra</i> sp.		42.6			46.5				
<i>Trichocerca clypeifera</i>									
<i>T. multiseriis</i>									
Unidentifiable Rotifer									
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.		8.7			4.4				
<i>Eurytemora</i> sp.					0.4				
Immatures					2.1				
Cyclopoid copepods									
<i>Cyclops</i> sp.		28.2			21.1				
<i>Mesocyclops</i> sp.									
Immatures		41.2			34.9				
Nauplius		264.9			242.0				
CLADOCERA									
<i>Bosmina</i> sp.		2.2			3.5				
<i>Ceriodaphnia</i> sp.									
<i>Glydorus</i> sp.									
<i>Daphnia aleata</i>									
<i>D. pulex</i>									
<i>D. retrocurva</i>		1.4			3.4				
<i>Diphanosoma</i> sp.									
<i>Holopedium gibberum</i>									
<i>Leptodora kindtii</i>		1.4			0.6				
Total		878.0							

Notes:

1. Sample collection date: 5-25-73
2. Collection method: Vertical Tow, Wisconsin Net
3. Reported as number of zooplankters per liter

TABLE B-2
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
JUNE, 1973

ZOOPLANKTON SPECIES	Sta. 1	Sta. 3	Sta. 5	Sta. 7	Sta. 8	Sta. 9	Sta. 10	Sta. 12	Sta. 13
ROTIFERA									
<i>Asplanchna giroidi</i>							0.9		
<i>A. priocanta</i>							25.6		8.1
<i>Brachionus calyciflorus</i>		0.6	7.8	4.8			1.9		
<i>B. calyciflorus</i>							2.9		
<i>B. aculeatus</i>									
<i>B. (Planorbis) patulus</i>									
<i>B. quadridentatus</i>			1.7						
<i>Chironomaster ovalis</i>							9.9		0.6
<i>Filinia terminalis</i>									
<i>Kellicottia longispina</i>	1.9						31.5		2.5
<i>Keratella cochlearis</i>	3.9	3.1	7.8						1.9
<i>K. quadrata</i>									
<i>Lecane luna</i>							0.9		
<i>L. lunaris</i>									
<i>Lepadella patella</i>									
<i>Matilina</i> sp.									
<i>Notolca saumula</i>									
<i>Pleuromma</i> sp.									
<i>Polysphincta</i> sp.	39.4	74.9	137.9	92.9			168.4		74.1
<i>Trichocerca cylindrica</i>									
<i>T. multitorinis</i>									
Unidentifiable Rotifer									
<i>Conochiloides</i> sp.									
COPEPODA									
Calanoid copepods									
<i>Dicranopus</i> sp.	37.5	13.6	32.1	8.9			68.9		34.9
<i>Eurytemora</i> sp.							2.9		
Immatures	13.8	3.1		1.6					
Cyclopoid copepods									
<i>Cyclops</i> sp.	431.7	269.3	367.6	139.9			198.9		140.8
<i>Mesocyclops</i> sp.									
Immatures	25.6	22.3	59.8	26.4			68.9		33.0
Nauplius	295.6	456.2	423.9	166.3			328.9		234.9
CLADOCERA									
<i>Boeckia</i> sp.	17.7	13.6	104.9	31.2			58.1		34.3
<i>Ceriodaphnia</i> sp.									
<i>Chydorus</i> sp.									
<i>Daphnia galeata</i>			0.9	0.5					
<i>D. pulex</i>				1.6			0.9		1.6
<i>D. retrocurva</i>	110.4	60.0	209.8	107.7			163.5		54.2
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>									
<i>Leptocora kindtii</i>									
Total	977.5	916.7	1354.2	581.8			1133.0		620.6

Notes:

1. Sample collection date: 6-27-73
2. Collection method: Vertical Tow, Wisconsin Net
3. Reported as number of zooplankters per liter

TABLE B-2 CONT.
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
JUNE, 1973

ZOOPLANKTON SPECIES	Sta. 17	Sta. 18	Sta. 19	Sta. 20	Mean # /Sta. Sampled				
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priodonta</i>					0.1				
<i>Brachionus angularis</i>		6.9	1.9	2.4	6.5				
<i>B. calyciflorus</i>					0.2				
<i>B. havanensis</i>					0.3				
<i>B. (Platias) patulus</i>									
<i>B. quadridentatus</i>					0.2				
<i>Chromocaster ovalis</i>									
<i>Filinia terminalis</i>		1.9	39.2	0.9	5.8				
<i>Kellicottia longispina</i>		1.9			0.4				
<i>Keratella cochlearis</i>		2.5	0.9	1.4	6.0				
<i>K. quadrata</i>					0.2				
<i>Lecane luna</i>									
<i>L. lunaris</i>					0.1				
<i>Lepadella patella</i>									
<i>Mytilina</i> sp.									
<i>Notholea squamula</i>									
<i>Pleosoma</i> sp.									
<i>Polyarthra</i> sp.		94.1	39.4	40.9	84.7				
<i>Trichocerca cylindrica</i>									
<i>T. multierinis</i>									
Unidentifiable Rotifer									
<i>Conochiloides</i> sp.									
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.		47.0	12.9	12.5	29.8				
<i>Eurytemora</i> sp.									
Immatures		0.6			2.4				
Cyclopoid copepods									
<i>Cyclops</i> sp.		269.9	78.9	80.3	219.7				
<i>Mesocyclops</i> sp.									
Immatures		42.1	12.0	13.5	33.7				
Nauplius		263.1	269.4	266.5	300.5				
CLADOCERA									
<i>Bosmina</i> sp.		27.9	18.8	20.2	36.3				
<i>Ceriodaphnia</i> sp.									
<i>Chydorus</i> sp.									
<i>Daphnia galeata</i>					0.2				
<i>D. pulex</i>		1.2			0.6				
<i>D. retrocurva</i>		70.6	39.4	37.0	94.7				
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>									
<i>Leptodora kindtii</i>									
Total		829.7	512.8	475.6					

Notes:

1. Sample collection date: 6-27-73
2. Collection method: Vertical Tow, Wisconsin Net
3. Reported as number of zooplankters per liter

TABLE B-3
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
JULY, 1973

ZOOPLANKTON SPECIES	Sta. 1	Sta. 3	Sta. 5	Sta. 7	Sta. 8	Sta. 9	Sta. 10	Sta. 12	Sta. 13
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priodonta</i>	15.8	4.7	8.3	7.8		12.0	3.3		2.
<i>Brachionus angularis</i>	12.9	2.0	7.2	3.9		3.5	1.7		1.
<i>B. calyciflorus</i>	1.4								
<i>B. havanaensis</i>			5.5			0.5	1.7		
<i>B. (Platias) patulus</i>									
<i>B. quadridentatus</i>									
<i>Chromocaster ovalis</i>									
<i>Filinia terminalis</i>			1.0	1.7		3.5			
<i>Gellicottia longispina</i>						.5			
<i>Keratella cochlearis</i>	30.3	22.3	45.8	37.7		8.0	26.7		8.
<i>K. quadrata</i>									
<i>Leacore luna</i>			0.7						
<i>L. lunaris</i>									
<i>Levadeella patella</i>									
<i>Mytilina</i> sp.									
<i>Notholca squamula</i>									
<i>Pleosoma</i> sp.									
<i>Polycanthus</i> sp.	547.3	155.7	70.2	228.7		145.0	321.5		104.
<i>Trichocerca cylindrica</i>			2.4	0.6					
<i>T. multierinis</i>									
Unidentifiable Rotifer									
<i>Conochiloides</i> sp.	14.4	6.1	3.1	7.8		5.5	6.7		7.
COPEPODA									
Calanoid copepods									
<i>Diatomus</i> sp.		10.8	57.8	3.9		7.0	6.7		21.
<i>Eurytemora</i> sp.									
Immatures	1.4	2.0	1.4			7.0	1.7		5.
Cyclopoid copepods									
<i>Cyclops</i> sp.	46.2	115.8	218.1	51.6		47.0	138.3		221.
<i>Mesocyclops</i> sp.		0.7	1.0	0.6		1.0			
Immatures	50.5	12.9	8.3	7.8		26.0	34.9		15.
Nauplius	651.2	161.1	133.5	300.3		223.5	289.9		121.
CLADOCERA									
<i>Bosmina</i> sp.	12.9	9.5	9.6	13.9		10.0	19.9		15.
<i>Ceriodaphnia</i> sp.									
<i>Gnypodius</i> sp.									
<i>Daphnia galeata</i>	1.4	1.4		4.9		2.0			
<i>D. pulex</i>							1.7		
<i>D. retrocurva</i>	41.9	41.9		49.4		61.0	23.3		7.
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>	1.4								0.
<i>Leptodora kindtii</i>		0.7		0.6					
Total	1429.0	547.6	573.9	621.2		563.0	878.0		533.

Notes:

1. Sample collection date: 7-25-73
2. Collection method: Vertical Tow, Wisconsin Net
3. Reported as number of zooplankters per liter

ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
JULY, 1973

ZOOPLANKTON SPECIES	Sta. 17	Sta. 18	Sta. 19	Sta. 20	Mean # /Sta. Sampled				
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priodonta</i>	6.9			0.9	5.7				
<i>Brachionus angularis</i>			0.4	2.5	3.6				
<i>B. calyciflorus</i>					.1				
<i>B. havanensis</i>					4.3				
<i>B. (Planthias) patulus</i>									
<i>B. quadridentatus</i>									
<i>Comocaster ovalis</i>									
<i>Filinia terminalis</i>					0.6				
<i>Kellicottia longispina</i>					0.1				
<i>Lepadella cochlearis</i>	25.1		0.4		20.4				
<i>L. quadrata</i>									
<i>Leocne luna</i>									
<i>L. lunaris</i>									
<i>Lepadella patella</i>									
<i>Mutillina</i> sp.									
<i>Notholca squamula</i>									
<i>Plecoema</i> sp.									
<i>Polycartha</i> sp.	76.3		77.7	88.6	181.5				
<i>Trichocerca cylindrica</i>					0.3				
<i>T. multiseriis</i>									
Unidentifiable Rotifer									
<i>Conochiloides</i> sp.			0.4	.9	5.2				
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.	4.3		21.2	14.7	14.8				
<i>Eurytemora</i> sp.									
Immatures	8.7		1.2	2.9	3.2				
Cyclopoid copepods									
<i>Cyclops</i> sp.	276.6		242.1	118.1	147.5				
<i>Mesocyclops</i> sp.	0.9				0.4				
Immatures	19.9		54.4	13.3	24.4				
<i>Nauplius</i>	137.9		190.2	116.1	232.5				
CLADOCERA									
<i>Bosmina</i> sp.	13.0		0.4	3.9	10.9				
<i>Ceriodaphnia</i> sp.			0.4						
<i>Daphorus</i> sp.									
<i>Daphnia galeata</i>	1.7			1.9	1.3				
<i>D. pulex</i>				0.9	0.3				
<i>D. retrocurva</i>	15.6		4.9	7.9	25.3				
<i>Daphnoscuma</i> sp.									
<i>Holopedium gibberum</i>			0.4	0.4	0.3				
<i>Leptodora kindtii</i>					0.1				
Total	586.9		599.0	373.0					

Notes:

1. Sample collection date: 7-25-73
2. Collection method: Vertical Tow, Wisconsin Net
3. Reported as number of zooplankters per liter

TABLE B-4
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
AUGUST, 1973

ZOOPLANKTON SPECIES	Sta. 1	Sta. 3	Sta. 5	Sta. 7	Sta. 8	Sta. 9	Sta. 10	Sta. 12	Sta. 13
ROTIFERA									
<i>Asplanchna giroidi</i>		0.6							
<i>A. priocosta</i>	37.2	8.0	30.3	7.4	0.5		45.8	22.6	15.
<i>Brachionus angularis</i>	69.7	30.3	41.6	11.1	12.1	7.6	69.9	29.2	15.
<i>B. calyciflorus</i>	1.5	1.2	0.9			0.5			
<i>B. hutchinsoni</i>	15.5	1.9	8.7	4.9			24.1	11.3	5.
<i>B. (Pleuroxys) patulus</i>								0.9	
<i>B. quadridentatus</i>									
<i>Chironomaster ovalis</i>									
<i>Filinia terminalis</i>	6.2	0.6	5.2	1.2		0.5	7.2	5.7	4.
<i>Kellicottia longispina</i>									
<i>Keratella cochlearis</i>	15.5	18.6	17.3	15.5	5.3	4.5	36.1	20.7	11.
<i>K. quadrata</i>									
<i>Lecane luna</i>									
<i>L. lunaris</i>									
<i>Lepadella batella</i>									
<i>Mutillina</i> sp.									
<i>Notholca squamula</i>									
<i>Plecoema</i> sp.									
<i>Polysphincta</i> sp.	320.6	98.4	100.6		31.2	30.2	240.9	227.9	57.
<i>Trichocerca cylindrica</i>	18.6	4.3	5.2	1.9			19.3		
<i>T. multicornis</i>	9.3	4.9	1.7	3.1				7.5	2.
Unidentifiable Rotifer									
<i>Conochiloides</i> sp.									
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.		1.2	0.9	7.4	2.6	10.5		0.9	3.
<i>Eurytemora</i> sp.		3.7	5.2	1.6	1.6	6.0		2.8	3.
Immatures									
Cyclopoid copepods									
<i>Cyclops</i> sp.		14.9	6.1	14.9	33.2	131.0	2.4	3.8	5.
<i>Mesocyclops</i> sp.			1.7						0.
Immatures	12.4	22.3	11.3	21.0	20.6	20.2	14.5	21.6	20.
Nauplius	179.7	103.4	141.3	79.9	48.0	59.4	211.9	104.6	78.
CLADOCERA									
<i>Bosmina</i> sp.	18.6	38.4	13.0	27.2	25.3	39.8		22.6	24.
<i>Ceriodaphnia</i> sp.									
<i>Chydorus</i> sp.				0.6	0.5	0.5			
<i>Daphnia galeata</i>				1.2		1.5		0.9	
<i>D. pulex</i>									
<i>D. retrocurva</i>	4.6	25.4	19.9	16.1	12.1	21.2	12.0	15.1	14.
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>					1.1	2.0		0.9	0.
<i>Leptocora kinairi</i>		1.9	2.6	2.5	1.1		2.4	0.9	2.
Total	689.4	380.0	413.5	217.5	195.2	335.4	686.5	499.9	266.

Notes:

1. Sample collection date: 8-23-73
2. Collection method: Vertical Tow, Wisconsin Net
3. Reported as number of zooplankters per liter

TABLE B-4 CONT.
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
AUGUST, 1973

ZOOPLANKTON SPECIES	Sta. 17	Sta. 18	Sta. 19	Sta. 20	Mean # /Sta. Sampled				
ROTIFERA									
<i>Asplanchna giroidi</i>					.1				
<i>A. priodonta</i>	12.0		35.1	25.4	20.0				
<i>Brachionus angularis</i>	13.2		32.8	9.4	28.6				
<i>B. calyciflorus</i>				2.3	.5				
<i>B. havanaensis</i>			7.0	3.7	6.9				
<i>B. (Platias) patulus</i>									
<i>B. quadridentatus</i>									
<i>Chromosaster ovalis</i>									
<i>Filinia terminalis</i>	1.2		14.6	5.3	4.4				
<i>Kellicottia longispina</i>									
<i>Keratella cochlearis</i>	10.8		24.6	6.1	15.5				
<i>K. quadrata</i>									
<i>Lecane luna</i>									
<i>L. lunaris</i>									
<i>Lepadella patella</i>									
<i>Mutillina</i> sp.									
<i>Notholca squamula</i>	1.2				.1				
<i>Pleosoma</i> sp.									
<i>Polyarthra</i> sp.	61.4		309.5	50.3	127.3				
<i>Trichocerca cluindrica</i>			7.0	3.7	5.0				
<i>T. multierinis</i>	9.6				3.2				
Unidentifiable Rotifer									
<i>Conochiloides</i> sp.			.6		.1				
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.	10.8			10.7	4.0				
<i>Eurytemora</i> sp.									
Immatures			4.7	8.9	3.2				
Cyclopoid copepods									
<i>Cyclops</i> sp.	1.2			55.6	22.4				
<i>Mesocyclops</i> sp.				1.6	.3				
Immatures	34.9		2.9	35.9	19.8				
Nauplius	67.4		155.0	123.5	112.7				
CLADOCERA									
<i>Bosmina</i> sp.	37.3		2.3	7.4	21.4				
<i>Ceriodaphnia</i> sp.	2.4				.2				
<i>Cydorus</i> sp.									
<i>Daphnia galeata</i>	1.2			1.6	.4				
<i>D. pulex</i>									
<i>D. retrocurva</i>	22.9		.6	8.2	14.4				
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>	1.2			2.9	.7				
<i>Leptodora kindtii</i>			1.2		1.3				
Total	288.7		597.9	362.5					

Notes:

1. Sample collection date: 8-23-73
2. Collection method: Vertical Tow, Wisconsin Net
3. Reported as number of zooplankters per liter

TABLE B-5
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
SEPTEMBER, 1973

ZOOPLANKTON SPECIES	Sta. 1	Sta. 3	Sta. 5	Sta. 7	Sta. 8	Sta. 9	Sta. 10	Sta. 12	Sta. 13
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priodonta</i>	5.9	2.5	23.3			0.9			2
<i>Brachionus angularis</i>	80.8	64.9	59.9	24.4	41.2	34.9	13.0	14.4	15
<i>B. calyciflorus</i>									
<i>B. havanaensis</i>	17.7	9.2	13.3	12.2	11.9	5.2	39.0	4.3	5
<i>B. (Planias) patulus</i>					0.7	0.5			
<i>B. quadridentatus</i>		0.8	0.8						
<i>Chromosaster ovalis</i>			3.3						
<i>Filinia terminalis</i>									
<i>Kellicottia longispina</i>									
<i>Keratella cochlearis</i>	171.5	23.3	56.6	24.4	20.3	9.4	41.2	49.8	66
<i>K. quadrata</i>						0.5			
<i>Lecane luna</i>			0.8						
<i>L. lunaris</i>									
<i>Lepadella patella</i>									
<i>Mytilina</i> sp.									
<i>Notholca squamula</i>									
<i>Pleosoma</i> sp.	1.9				0.7			0.7	
<i>Polarthra</i> sp.	484.9	265.7	159.1	166.5	150.3	124.3	179.9	111.2	144
<i>Trichocerca cylindrica</i>	11.8	2.5	4.9	7.4	7.7	2.4	6.5	1.4	6
<i>T. multicornis</i>	72.9	17.5	32.5	7.4	23.1	13.2	39.0	18.7	28
Unidentifiable Rotifer	7.9	70.6	42.5	46.0	60.8	38.2	15.2	15.2	37
<i>Conochiloides</i> sp.	17.7	9.9							
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.		0.8	5.8	0.7	4.2	0.9	2.2	1.4	1
<i>Eurytemora</i> sp.									
Immatures		1.7				0.5		0.7	
Cyclopoid copepods									
<i>Cyclops</i> sp.	35.5	9.2	13.3	4.7	9.9	7.5	49.9	27.4	7
<i>Mesocyclops</i> sp.			1.7		2.1	1.4		2.9	
Immatures	41.4	25.8	43.3	6.8	4.9	11.3	13.0	2.2	6
Nauplius	303.5	168.3	178.3	113.1	125.1	84.3	147.4	88.1	114
CLADOCERA									
<i>Bosmina</i> sp.	61.1	35.8	44.1	59.6	53.8	44.7	26.0	43.3	43
<i>Ceriodaphnia</i> sp.		2.5		2.0		0.9			
<i>Chydorus</i> sp.	25.6	14.2	9.9	10.2	13.9	13.2	6.5	0.7	6
<i>Daphnia galeata</i>		1.7						20.9	
<i>D. pulex</i>									
<i>D. retrocurva</i>	29.6	14.2	16.8	28.4	32.2	16.0	15.2	4.3	34
<i>Diaphanosoma</i> sp.	1.9		0.8	0.7					
<i>Holopedium gibberum</i>					0.7	0.5		0.7	0
<i>Leptodora kindtii</i>	1.9	0.8	0.8						
Total	1373.5	742.1	711.8	514.5	563.5	410.7	594.0	408.3	522

Notes:

1. Sample collection date: 9-26-73
2. Collection method: Vertical Tow, Wisconsin Net
3. Reported as number of zooplankters per liter.

TABLE B-5 CONT.
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
SEPTEMBER, 1973

ZOOPLANKTON SPECIES	Sta. 17	Sta. 18	Sta. 19	Sta. 20	Mean # /Sta. Sampled				
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priodonta</i>			3.8		3.2				
<i>Brachionus angularis</i>	13.4		14.1	13.7	32.6				
<i>B. calyciflorus</i>									
<i>B. havanensis</i>	7.2		6.5	9.9	11.8				
<i>B. (Platias) patulus</i>					0.1				
<i>B. quadridentatus</i>					0.1				
<i>Chromogaster ovalis</i>					0.3				
<i>Filinia terminalis</i>									
<i>Kellicottia longispina</i>									
<i>Keratella cochlearis</i>	55.7		7.0	2.5	44.0				
<i>K. quadrata</i>					0.0				
<i>Lecane luna</i>			0.5		0.1				
<i>L. lunaris</i>									
<i>Lepadella patella</i>									
<i>Mutillina</i> sp.									
<i>Notholca squamula</i>									
<i>Pleosoma</i> sp.					0.3				
<i>Polyarthra</i> sp.	121.8		25.5	3.3	161.4				
<i>Trichocerca cylindrica</i>	3.1		0.5		4.6				
<i>T. multierinis</i>	13.4		4.3	7.1	23.1				
Unidentifiable Rotifer	44.4		3.8	9.9	32.7				
<i>Conochiloides</i> sp.	2.1				2.5				
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.	2.1		1.6	4.2	2.1				
<i>Eurytemora</i> sp.									
Immatures			1.6	1.2	0.5				
Cyclopoid copepods:									
<i>Cyclops</i> sp.	10.3		5.4	26.2	17.3				
<i>Mesocyclops</i> sp.					0.7				
Immatures	5.2		11.4	17.5	15.8				
Nauplius	97.0		69.9	83.2	131.1				
CLADOCERA									
<i>Bosmina</i> sp.	38.2		18.9	73.6	45.2				
<i>Ceriodaphnia</i> sp.	1.0				0.5				
<i>Chydorus</i> sp.	6.2		3.3	3.7	9.5				
<i>Daphnia galeata</i>	17.5		0.5	1.2	3.5				
<i>D. pulex</i>									
<i>D. retrocurva</i>			3.3	12.1	17.2				
<i>Diaphanosoma</i> sp.					0.3				
<i>Holopedium gibberum</i>			1.6	0.8	0.4				
<i>Leptodora kindtii</i>					0.3				
Total	438.6		183.5	270.1					

Notes:

1. Sample collection date: 9-25-73
2. Collection method: Vertical Tow, Wisconsin Net
3. Reported as number of zooplankters per liter

TABLE B-6
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
NOVEMBER, 1973

ZOOPLANKTON SPECIES	Sta. 17	Sta. 18	Sta. 19	Sta. 20	Mean # /Sta. Sampled				
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priodonta</i>			1.9		1.6				
<i>Brachionus angularis</i>			0.6		0.1				
<i>B. calyciflorus</i>	4.3				2.4				
<i>B. havanensis</i>									
<i>B. (Planorbis) patulus</i>									
<i>B. quadridentatus</i>									
<i>Carinaster ovalis</i>									
<i>Filinia terminalis</i>									
<i>Kellicottia longispina</i>					0.1				
<i>Keratella cochlearis</i>	144.4		50.1	58.1	145.8				
<i>K. quadrata</i>	10.1		5.6	5.9	13.2				
<i>Lecce luna</i>									
<i>L. lunaris</i>									
<i>Lepadella patella</i>									
<i>Mutillina</i> sp.					0.2				
<i>Notholca squamula</i>									
<i>Pleosoma</i> sp.					0.2				
<i>Polycartha</i> sp.	53.4		3.1	2.9	88.8				
<i>Trichocerca cylindrica</i>					0.1				
<i>T. multiseriis</i>	1.4		1.9		1.0				
Unidentifiable Rotifer	5.8		1.9		13.1				
<i>Conochiloides</i> sp.									
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.					0.9				
<i>Eurytemora</i> sp.									
Immatures									
Cyclopoid copepods									
<i>Cyclops</i> sp.	1.4		1.2	2.9	2.1				
<i>Mesocyclops</i> sp.					0.3				
Immatures	4.3		3.7	8.9	7.8				
Nauplius	34.7		22.3	46.3	35.1				
CLADOCERA									
<i>Bosmina</i> sp.	14.4		18.6	50.2	28.9				
<i>Ceriodaphnia</i> sp.									
<i>Chydorus</i> sp.	11.6		3.1	3.9	7.7				
<i>Daphnia aleata</i>									
<i>D. pulex</i>									
<i>D. retrocurva</i>	1.4				0.4				
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>									
<i>Leptodora kindtii</i>									
Total	287.2		114.0	179.1					

Notes:

1. Sample collection date: 11-6-73
2. Collection method: Vertical Tow, Wisconsin Net
3. Reported as number of zooplankters per liter

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TABLE B-6 CONT.
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
NOVEMBER, 1973

ZOOPLANKTON SPECIES	Sta. 1	Sta. 3	Sta. 5	Sta. 7	Sta. 8	Sta. 9	Sta. 10	Sta. 12	Sta. 13
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priodonta</i>	2.2	2.9	4.3			1.8			3.6
<i>Brachionus angularis</i>				0.7					
<i>B. calyciflorus</i>	8.7	1.4	2.2	1.4		6.0			
<i>B. havanaensis</i>									
<i>B. (Platytas) patulus</i>									
<i>B. quadridentatus</i>									
<i>Chromosaster ovalis</i>									
<i>Filinia terminalis</i>									
<i>Kellicottia longispina</i>									0.7
<i>Keratella cochlearis</i>	197.3	106.9	143.1	132.8		101.1	370.7		153.7
<i>K. quadrata</i>	23.8	10.1	15.2	12.3		14.4	23.8		10.8
<i>Lecane luna</i>									
<i>L. lunaris</i>									
<i>Lepadella patella</i>									
<i>Mytilina</i> sp.			2.2						
<i>Notholca squamula</i>									
<i>Pleosoma</i> sp.		2.2							
<i>Polyarthra</i> sp.	117.1	65.7	86.7	80.1		57.2	342.0		79.4
<i>Trichocerca cylindrica</i>									0.7
<i>T. multierinis</i>	6.5					0.6			
Unidentifiable Rotifer	19.5	10.1	32.5	17.3		12.0	21.7		10.8
<i>Conochiloides</i> sp.									
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.				0.7			8.5		
<i>Eurytemora</i> sp.									
Immatures									
Cyclopoid copepods									
<i>Cyclops</i> sp.		0.7				1.8	8.5		4.7
<i>Mesocyclops</i> sp.				0.7		0.6			1.4
Immatures	8.7	2.2	13.0	2.9		4.8	21.7		7.4
Nauplius	56.4	19.5	39.0	26.7		22.3	45.5		38.4
CLADOCERA									
<i>Bosmina</i> sp.	34.7	20.2	23.8	20.9		20.5	43.4		41.4
<i>Ceriodaphnia</i> sp.									
<i>Chydorus</i> sp.	10.8	4.3	6.5	4.3		3.6	16.9		12.4
<i>Daphnia galeata</i>									
<i>D. pulex</i>									
<i>D. retrocurva</i>		1.4							1.4
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>									
<i>Leptodora kindtii</i>									
Total	485.7	247.6	368.5	300.8		246.7	902.7		366.4

Notes:

1. Sample collection date: 11-6-73
2. Collection method: Vertical Tow, Wisconsin Net
3. Reported as number of zooplankters per liter

TABLE B-7
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
DECEMBER, 1973

ZOOPLANKTON SPECIES	Sta. 1	Sta. 3	Sta. 5	Sta. 7	Sta. 8	Sta. 9	Sta. 10	Sta. 12	Sta. 13
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priodonta</i>	13.0	1.7		7.2		8.9	8.1		6.9
<i>Brachionus granulatus</i>							2.7		
<i>B. calyciflorus</i>	13.0	36.7	21.7	19.2		18.4	24.4		19.4
<i>B. havanaensis</i>									
<i>B. (Platias) patulus</i>									
<i>B. quadridentatus</i>									
<i>Chromosaster ovalis</i>									
<i>Filinia terminalis</i>			1.8						
<i>Kellicottia longispina</i>	6.5	3.3	1.8	1.6		3.2			2.9
<i>Keratella cochlearis</i>	175.6	97.5	90.4	85.8		75.5	235.9		47.9
<i>K. quadrata</i>	13.0	17.0	12.6	10.4		8.9	24.4		17.9
<i>Lecane luna</i>									
<i>L. lunaris</i>									
<i>Levinsella patella</i>									
<i>Mytilina</i> sp.									
<i>Notholca squamula</i>									
<i>Pleosoma</i> sp.									
<i>Polycantha</i> sp.	38.6	42.5	79.5	40.1		68.1	146.4		38.9
<i>Trichocerca cylindrica</i>									
<i>T. multiseriis</i>									
Unidentifiable Rotifer	23.8	23.3	12.6	20.9		18.4	37.9		19.4
<i>Conochiloides</i> sp.									
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.	2.2								
<i>Eurytemora</i> sp.									
Immatures									
Cyclopoid copepods									
<i>Cyclops</i> sp.									
<i>Mesocyclops</i> sp.									
Immatures	26.0	4.9	5.4	7.2		3.2	2.7		0.9
Nauplius	39.0	38.3	21.7	33.7		33.3	32.5		9.9
CLADOCERA									
<i>Bosmina</i> sp.	73.7	14.9	57.8	12.8		8.9	40.7		6.9
<i>Ceriodaphnia</i> sp.									
<i>Chydorus</i> sp.			1.8	1.6		1.6			
<i>Daphnia galeata</i>									
<i>D. pulex</i>									
<i>D. retrocurva</i>									
<i>Diaphanosoma</i> sp.									
<i>Eubosmina gibberium</i>									
<i>Leptocora kindtii</i>									
Total	424.4	280.1	307.1	240.5		248.4	555.7		169.9

Notes:

1. Sample collection date: 12-4-73
2. Collection method: Vertical Tow, Wisconsin Net
3. Reported as number of zooplankters per liter

TABLE B-7 CONT.
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
DECEMBER, 1973

ZOOPLANKTON SPECIES	Sta. 17	Sta. 18	Sta. 19	Sta. 20	Mean # /Sta. Sampled				
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priodonta</i>	1.7		1.1	0.8	4.9				
<i>Brachionus angularis</i>					.3				
<i>B. calyciflorus</i>	23.3		15.4	6.3	19.8				
<i>B. havanaensis</i>									
<i>B. (Planities) patulus</i>									
<i>B. quadridentatus</i>									
<i>Comocaster ovalis</i>									
<i>Filinia terminalis</i>					0.2				
<i>Kellicottia longispina</i>	6.7		3.9	1.3	3.0				
<i>Keratella cochlearis</i>	104.9		50.2	52.2	101.6				
<i>K. quadrata</i>	14.9		18.8	3.8	14.2				
<i>Leane luna</i>									
<i>L. lunaris</i>									
<i>Levaelia patella</i>									
<i>Mytilina</i> sp.									
<i>Notholca savanula</i>									
<i>Pleosoma</i> sp.	1.7				0.2				
<i>Polysartha</i> sp.	84.9		38.2	15.2	59.2				
<i>Trichocerca cylindrica</i>									
<i>T. multicrinis</i>									
Unidentifiable Rotifer	13.3		21.1	6.7	19.7				
<i>Conochiloides</i> sp.									
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.					0.2				
<i>Eurytemora</i> sp.									
Immatures									
Cyclopoid copepods									
<i>Cyclops</i> sp.									
<i>Mesocyclops</i> sp.									
Immatures	1.7		5.7	1.3	5.9				
<i>Nauplius</i>	23.3		19.4	11.4	26.2				
CLADOCERA									
<i>Bosmina</i> sp.	18.3		4.6	5.9	24.5				
<i>Geriadaphnia</i> sp.									
<i>Chydorus</i> sp.			0.6	1.3	0.7				
<i>Bosmina oaleata</i>									
<i>D. pulex</i>									
<i>D. retrocurva</i>									
<i>Diaphanosoma</i> sp.									
<i>Eolopedium gibberum</i>									
<i>Leptodora kindtii</i>									
Total	294.7		179.0	106.2					

Notes:

1. Sample collection date: 12-4-73
2. Collection method: Vertical Tow, Wisconsin Net
3. Reported as number of zooplankters per liter

TABLE B-8
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
MAY, 1973

ZOOPLANKTON SPECIES	Sta. 1	Sta. 3	Sta. 5	Sta. 7	Sta. 8	Sta. 9	Sta. 10	Sta. 12	Sta. 13
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priozonta</i>	11.2		22.4	11.2			16.8		11.
<i>Brachionus angularis</i>	16.8	5.6	11.2				22.4		39.
<i>B. calyciflorus</i>	16.8	11.2	22.4	28.0			11.2		5.
<i>B. havanaensis</i>									
<i>B. (Planorbis) patulus</i>									
<i>B. quadridentatus</i>									
<i>Chromaster ovalis</i>									
<i>Filinia terminalis</i>	61.6	44.8	28.0	22.4			44.8		72.
<i>Kellicottia longispina</i>	5.6	39.2	5.6	11.2					11.
<i>Keratella cochlearis</i>	106.4	67.2	106.4	190.4			252.0		117.
<i>K. quadrata</i>	61.6	212.8	117.6	604.8			218.4		414.
<i>Lecane luna</i>									
<i>L. lunaris</i>									
<i>Lepadella patella</i>									
<i>Mytilina</i> sp.									
<i>Notholca squamula</i>									
<i>Pleosoma</i> sp.									
<i>Polarthra</i> sp.	39.2	67.2	11.2	72.8			50.4		61.
<i>Trichocerca cylindrica</i>									
<i>T. multiseriis</i>							5.6		
Unidentifiable Rotifer									
<i>Conochiloides</i> sp.									
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.		16.8					5.6		
<i>Eurytemora</i> sp.									
Immatures		11.2					11.2		
Cyclopoid copepods									
<i>Cyclops</i> sp.	16.8	11.2	11.2	5.6			22.4		11.
<i>Mesocyclops</i> sp.									
Immatures	33.6	33.6	11.2	22.4			39.6		33.
Nauplius	235.2	218.4	235.2	358.4			229.6		319.
CLADOCERA									
<i>Bosmina</i> sp.	5.6			5.6					
<i>Ceriodaphnia</i> sp.									
<i>Chydorus</i> sp.									
<i>Daphnia galeata</i>									
<i>D. pulex</i>									
<i>D. retrocurva</i>	11.2								
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>									
<i>Leptodora kindtii</i>	5.6	5.6							
Total	627.2	744.8	582.4	1332.8			930.0		1097.

Notes:

1. Sample collection date: 5-25-73
2. Collection method: 3-liter Surface Grab
3. Reported as number of zooplankters per liter

TABLE B-8 CONT.
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
MAY, 1973

ZOOPLANKTON SPECIES	Sta. 17	Sta. 18	Sta. 19	Sta. 20	Mean # /Sta. Sampled			
ROTIFERA								
<i>Asplanchna giroidi</i>								
<i>A. priodonta</i>					12.1			
<i>Brachionus angularis</i>					15.9			
<i>B. calyciflorus</i>					15.9			
<i>B. havanensis</i>								
<i>B. (Platias) patulus</i>								
<i>B. quadridentatus</i>								
<i>Chromocaster ovalis</i>								
<i>Filinia terminalis</i>					45.7			
<i>Kellicottia longispina</i>					12.1			
<i>Keratella cochlearis</i>					140.7			
<i>K. quadrata</i>					271.6			
<i>Lecane luna</i>								
<i>L. lunaris</i>								
<i>Lepadella patella</i>								
<i>Mytilina</i> sp.								
<i>Notholca squamula</i>								
<i>Pleosoma</i> sp.								
<i>Polyarthra</i> sp.					50.4			
<i>Trichocerca cluindrica</i>								
<i>T. multierinis</i>					0.9			
Unidentifiable Rotifer								
<i>Conochiloides</i> sp.								
COPEPODA								
Calanoid copepods								
<i>Dianthus</i> sp.					3.7			
<i>Eurytemora</i> sp.								
Immatures					3.7			
Cyclopoid copepods								
<i>Cyclops</i> sp.					13.1			
<i>Mesocyclops</i> sp.								
Immatures					29.0			
Nauplius					266.0			
CLADOCERA								
<i>Bosmina</i> sp.								
<i>Ceriodaphnia</i> sp.					1.9			
<i>Chydorus</i> sp.								
<i>Daphnia galeata</i>								
<i>D. pulex</i>								
<i>D. retrocurva</i>					1.9			
<i>Diaphanosoma</i> sp.								
<i>Holopedium gibberum</i>								
<i>Leptocora kindtii</i>					1.9			
Total								

Notes:

1. Sample collection date: 5-25-73
2. Collection method: 3-liter Surface Grab
3. Reported as number of zooplankters per liter

TABLE B-9
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
JUNE, 1973

ZOOPLANKTON SPECIES	Sta. 1	Sta. 3	Sta. 5	Sta. 7	Sta. 8	Sta. 9	Sta. 10	Sta. 12	Sta. 13
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priodonta</i>									
<i>Brachionus angularis</i>			16.8				16.8		5.
<i>B. calyciflorus</i>									
<i>B. havanensis</i>									
<i>B. (Platias) patulus</i>									
<i>B. quadridentatus</i>									
<i>Chromosaster ovalis</i>									
<i>Filinia terminalis</i>		5.6	5.6				5.6		
<i>Kellicottia longispina</i>									
<i>Keratella cochlearis</i>									
<i>K. quadrata</i>									
<i>Lecane luna</i>									
<i>L. lunaris</i>									
<i>Lepadella patella</i>									
<i>Mytilina</i> sp.									
<i>Notholca squamula</i>									
<i>Pleosoma</i> sp.									
<i>Polarthra</i> sp.	50.4	84.0	112.0	414.4			84.0		95.
<i>Trichocerca cylindrica</i>									
<i>T. multierinis</i>									
Unidentifiable Rotifer									
<i>Conochiloides</i> sp.									
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.	11.2		11.2	5.6			5.6		22.
<i>Eurytemora</i> sp.									
Immatures							11.2		
Cyclopoid copepods									
<i>Cyclops</i> sp.	84.0	89.6	128.8	106.4			67.8		100.
<i>Mesocyclops</i> sp.									
Immatures		28.0	11.2	11.2			44.8		50.
Nauplius	352.8	582.4	498.4	308.0			319.2		319.
CLADOCERA									
<i>Bosmina</i> sp.	16.8	50.4	33.6	16.8			44.8		22.
<i>Ceriodaphnia</i> sp.									
<i>Chydorus</i> sp.									
<i>Daphnia galeata</i>									
<i>D. pulex</i>									
<i>D. retrocurva</i>	11.2	22.4	61.6	50.4			22.4		56.
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>									
<i>Leptodora kindtii</i>									
Total	526.4	862.4	879.2	912.8			622.2		672.

Notes:

1. Sample collection date: 6-27-73
2. Collection method: 3-liter Surface Grab
3. Reported as number of zooplankters per liter

TABLE B-9 CONT.
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
JUNE, 1973

ZOOPLANKTON SPECIES	Sta. 17	Sta. 18	Sta. 19	Sta. 20	Mean # /Sta. Sampled				
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priodonta</i>									
<i>Brachionus angularis</i>			16.8	11.2	7.5				
<i>B. calyciflorus</i>									
<i>B. havanaensis</i>									
<i>B. (Platias) patulus</i>									
<i>B. quadridentatus</i>			5.6		0.6				
<i>Chromocaster ovalis</i>									
<i>Filinia terminalis</i>			39.2	11.2	7.5				
<i>Kellicottia longispina</i>									
<i>Keratella cochlearis</i>									
<i>K. quadrata</i>									
<i>Lecane luna</i>				5.6	0.6				
<i>L. lunaris</i>									
<i>Lepadella patella</i>									
<i>Mytilina</i> sp.									
<i>Notholca squamula</i>									
<i>Pleosoma</i> sp.									
<i>Polarthra</i> sp.		95.2	134.4	50.4	124.4				
<i>Trichocerca cylindrica</i>									
<i>T. multierinis</i>									
Unidentifiable Rotifer									
<i>Conochiloides</i> sp.									
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.		11.2	11.2	5.6	9.3				
<i>Eurytemora</i> sp.									
Immatures					1.2				
Cyclopoid copepods									
<i>Cyclops</i> sp.		16.8	61.6	67.2	80.3				
<i>Mesocyclops</i> sp.									
Immatures		22.4	16.8	5.6	21.2				
Nauplius		117.6	487.2	296.8	364.6				
CLADOCERA									
<i>Bosmina</i> sp.		22.4	16.8	16.8	26.8				
<i>Ceriodaphnia</i> sp.									
<i>Chydorus</i> sp.									
<i>Daphnia galeata</i>									
<i>D. pulex</i>									
<i>D. retrocurva</i>		33.6	16.8	16.8	32.4				
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>									
<i>Leptodora kindtii</i>									
Total		319.2	306.4	487.2					

Notes:

1. Sample collection date: 6-27-73
2. Collection method: 3-liter Surface Grab
3. Reported as number of zooplankters per liter

TABLE B-10
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
JULY, 1973

ZOOPLANKTON SPECIES	Sta. 1	Sta. 3	Sta. 5	Sta. 7	Sta. 8	Sta. 9	Sta. 10	Sta. 12	Sta. 13
ROTIFERA									
<i>Asplanorbis giroidi</i>									
<i>A. priocanta</i>	5.6	5.6	16.8	5.6		33.6	28.0		28.0
<i>Brachionus angularis</i>						44.8			
<i>B. calyciflorus</i>									
<i>B. havanensis</i>			33.6	5.6					
<i>B. (Planorbis) patulus</i>									
<i>B. quadridentatus</i>									
<i>Chromocaster ovalis</i>									
<i>Filinia terminalis</i>			11.2	5.6		5.6			
<i>Kellicottia longispina</i>									
<i>Keratella cochlearis</i>	50.4	16.8	195.8	67.2		16.8	11.2		22.4
<i>K. quadrata</i>									
<i>Lecane luna</i>						5.6			
<i>L. lunaris</i>									
<i>Lepadella patella</i>									
<i>Mytilina</i> sp.									
<i>Notholca squamula</i>									
<i>Pleosoma</i> sp.									
<i>Polarthra</i> sp.	425.6	324.8	515.4	957.6		952.0	347.2		246.4
<i>Trichocerca cluindrica</i>			28.0						
<i>T. multiorinis</i>									
Unidentifiable Rotifer									
<i>Conochiloides</i> sp.		11.2	16.8	5.6		16.8			
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.		5.6		11.2		5.6			16.8
<i>Eurytemora</i> sp.									
Immatures		33.6		61.6		11.2	11.2		16.8
Cyclopoid copepods									
<i>Cyclops</i> sp.	28.0	44.8	139.8			44.8	89.6		285.6
<i>Mesocyclops</i> sp.									
Immatures		22.4	44.8	22.4		50.4	44.8		22.4
Nauplius	526.6	375.2	392.0	543.4		632.8	453.6		269.8
CLADOCERA									
<i>Bosmina</i> sp.	11.2		61.6	5.6		16.8			11.2
<i>Ceriodaphnia</i> sp.									
<i>Chydorus</i> sp.									
<i>Daphnia galeata</i>		5.6		5.6					5.6
<i>D. pulex</i>							5.6		
<i>D. retrocurva</i>		22.4	16.8	89.6		15.0			16.8
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>									
<i>Leptocora kindtii</i>									
Total	1047.4	868.0	1472.6	1786.6		1851.8	991.2		941.2

Notes:

1. Sample collection date: 7-25-73
2. Collection method: 3-liter Surface Grab
3. Reported as number of zooplankters per liter

TABLE B-10 CONT.
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
JULY, 1973

ZOOPLANKTON SPECIES	Sta. 17	Sta. 18	Sta. 19	Sta. 20	Mean # /Sta. Sampled				
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. prhodonta</i>	11.2				13.4				
<i>Brachionus calyciflorus</i>					4.5				
<i>B. havanensis</i>					3.9				
<i>B. (Planias) patulus</i>									
<i>B. quadridentatus</i>									
<i>Chironomaster ovalis</i>									
<i>Filinia terminalis</i>				5.6	2.8				
<i>Yellioctitia longispina</i>									
<i>Keratella cochlearis</i>	16.8				39.7				
<i>K. quadrata</i>									
<i>Lecane luna</i>									
<i>L. lunaris</i>									
<i>Lepadella patella</i>									
<i>Mutillina</i> sp.									
<i>Notholea squamula</i>									
<i>Pleopsis</i> sp.									
<i>Polyarthra</i> sp.	285.6		269.8	319.2	464.4				
<i>Trichocerca cylindrica</i>					2.8				
<i>T. multicornis</i>									
Unidentifiable Rotifer									
<i>Conochiloides</i> sp.					5.0				
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.	11.2			5.6	5.6				
<i>Eurytemora</i> sp.									
Immatures				22.4	15.7				
Cyclopoid copepods									
<i>Cyclops</i> sp.	139.8		44.8	100.8	91.8				
<i>Mesocyclops</i> sp.									
Immatures	22.4			28.0	25.8				
Nauplius	285.6		280.0	375.2	413.4				
CLADOCERA									
<i>Bosmina</i> sp.				11.2	11.8				
<i>Ceriodaphnia</i> sp.									
<i>Glydorus</i> sp.									
<i>Daphnia galeata</i>					1.7				
<i>D. pulex</i>			5.6	16.8	2.8				
<i>D. retrocurva</i>	5.6				16.6				
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>									
<i>Leptodora kindtii</i>									
Total	778.2		500.2	884.8					

Notes:

1. Sample collection date: 7-25-73
2. Collection method: 3-liter Surface Grab
3. Reported as number of zooplankters per liter

TABLE B-11
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
AUGUST, 1973

ZOOPLANKTON SPECIES	Sta. 1	Sta. 3	Sta. 5	Sta. 7	Sta. 8	Sta. 9	Sta. 10	Sta. 12	Sta. 13
ROTIFERA									
<i>Asplanchna giroldi</i>									
<i>A. priocosta</i>	5.6	11.2	33.6	11.2		11.2	39.2	50.4	33.6
<i>Brachionus ngularis</i>	151.2	128.8	5.6	50.4		33.6	72.8	33.6	5.6
<i>B. calyciflorus</i>									
<i>B. havanensis</i>			16.8	16.8				33.6	5.6
<i>B. (Planorbis) rotulus</i>									
<i>B. quadridentatus</i>									
<i>Chironomaster ovalis</i>									
<i>Filinia terminalis</i>			22.4					16.8	
<i>Kellicottia longispina</i>									
<i>Keratella cochlearis</i>	95.2	67.2	28.0	50.4		11.2	39.2	16.8	28.0
<i>K. quadrata</i>									
<i>Lecme lyma</i>									
<i>L. lunaris</i>									
<i>Levadella patella</i>									
<i>Mytilina</i> sp.									
<i>Notholca squamula</i>									
<i>Pleosoma</i> sp.									
<i>Polysphincta</i> sp.	319.2	285.6	123.2	280.0		162.4	72.8	364.0	156.0
<i>Trichocerca cylindrica</i>	33.6	22.4							
<i>T. multiseriis</i>		11.2							16.8
Unidentifiable Rotifer									
<i>Conochiloides</i> sp.						11.2			
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.				11.2					
<i>Eurytemora</i> sp.									
Immatures		5.6							
Cyclopoid copepods									
<i>Cyclops</i> sp.				16.8		50.4			
<i>Mesocyclops</i> sp.									
Immatures	5.6	5.6	11.2	16.8		16.8	16.8		5.6
Nauplius	212.8	162.4	140.0	268.8		95.2	168.0	100.8	100.8
CLADOCEPA									
<i>Bosmina</i> sp.	16.8	16.8	22.4	39.2		33.6	16.8	33.6	11.2
<i>Ceriodaphnia</i> sp.									
<i>Glydorus</i> sp.									
<i>Daphnia galeata</i>									
<i>D. pulex</i>									
<i>D. retrocurva</i>	11.2	33.6	16.8	28.0			5.6		11.2
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>				5.6					5.6
<i>Leptodora kindtii</i>							11.2	5.6	
Total	951.2	750.4	420.0	795.2		425.6	442.4	655.2	380.0

Notes:

1. Sample collection date: 8-23-73
2. Collection method: 3-liter Surface Grab
3. Reported as number of zooplankters per liter

TABLE B-11 CONT.
ANALYSIS OF ZOOPLANKTON POPULATIONS AT LOCUST POINT
AUGUST, 1973

ZOOPLANKTON SPECIES	Sta. 17	Sta. 18	Sta. 19	Sta. 20	Mean # /Sta. Sampled				
ROTIFERA									
<i>Asplanchna giroidi</i>									
<i>A. priodonta</i>	11.2		117.6	84.0	37.2				
<i>Brachionus angularis</i>	33.6		39.2	78.2	57.5				
<i>B. calyciflorus</i>				5.6	.5				
<i>B. havanaensis</i>			11.2	16.8	9.2				
<i>B. (Platytas) patulus</i>									
<i>B. quadridentatus</i>									
<i>Chromogaster ovalis</i>									
<i>Filinia terminalis</i>			78.4	33.6	13.7				
<i>Kellicottia longispina</i>									
<i>Keratella cochlearis</i>			78.4	179.2	54.0				
<i>K. quadrata</i>									
<i>Lecane luna</i>			11.2		1.0				
<i>L. lunaris</i>									
<i>Lepadella patella</i>									
<i>Mytilina</i> sp.									
<i>Notholca squamula</i>									
<i>Pleosoma</i> sp.									
<i>Polyarthra</i> sp.	151.2		1041.6	991.2	358.9				
<i>Trichocerca cylindrica</i>			44.8	22.4	11.2				
<i>T. multierinis</i>					2.5				
Unidentifiable Rotifer					1.0				
<i>Conochiloides</i> sp.									
COPEPODA									
Calanoid copepods									
<i>Diaptomus</i> sp.				16.8	2.5				
<i>Eurytemora</i> sp.									
Immatures	28.0				3.1				
Cyclopoid copepods									
<i>Cyclops</i> sp.				16.8	7.6				
<i>Mesocyclops</i> sp.									
Immatures				16.8	8.7				
Nauplius	84.0		319.2	369.6	183.8				
CLADOCERA									
<i>Bosmina</i> sp.	22.4		11.2	11.2	21.4				
<i>Ceriodaphnia</i> sp.									
<i>Chydorus</i> sp.									
<i>Daphnia galeata</i>									
<i>D. pulex</i>									
<i>D. retrocurva</i>	11.2		5.6		11.2				
<i>Diaphanosoma</i> sp.									
<i>Holopedium gibberum</i>					1.0				
<i>Leptodora kindtii</i>					1.5				
Total	341.6		1758.4	1842.2					

Notes:

1. Sample collection date: 8-23-73
2. Collection method: 3-liter Surface Grab
3. Reported as number of zooplankters per liter

APPENDIX C

PHYTOPLANKTON POPULATIONS AT LOCUST POINT

1973

TABLE C-1

DOMINANT PHYTOPLANKTON TAXA
AT LOCUST POINT, MAY, 1973

Collection Date 5-25-73

PHYTOPLANKTON SPECIES	STA. 1		STA. 2		STA. 3		STA. 5		STA. 7		STA. 10		STA. 13		STA. 17		STA.		STA.		STA.		STA.	
	VT	31		31	VT	31	VT	31	VT	31	VT	31	VT	31	VT		VT	31	VT	31	VT	31	VT	31
MYXOPHYCEAE (Blue-Green Algae)																								
<i>Aphanizomenon</i> sp.																								
CHLOROPHYCEAE (Green Algae)																								
<i>Pediastrum</i> sp.	●	●		●	●	●	●	●	●		●	●	●	●	●									
<i>Ulothrix</i> sp.	●			●	●	●	●	●	●	●	●	●	●	●	●									
<i>Volvox</i> sp.									●	●					●									
BACILLARIOPHYCEAE (Diatoms)																								
<i>Asterionella</i> sp.	●	●		●	●	●	●	●	●	●	●	●	●	●	●									
<i>Fragilaria</i> sp.	●	●		●	●	●	●	●	●	●	●	●	●	●	●									
<i>Melosira</i> sp.	●	●		●	●	●	●	●		●	●	●	●	●	●									
<i>Tabellaria</i> sp.	●	●		●	●	●	●	●	●	●	●	●	●	●	●									
DINOPHYCEAE (Dinoflagellates)																								
<i>Ceratium</i> sp.	●	●			●	●	●								●									

VT - vertical tow, Wisconsin net (40 mesh)

31 - 3 liter water sample (1 meter below surface)

TABLE C-2

DOMINANT PHYTOPLANKTON TAXA
AT LOCUST POINT, JUNE, 1973Collection Date 6-27-73

PHYTOPLANKTON SPECIES	STA. 1		STA. 3		STA. 5		STA. 7		STA. 10		STA. 13		STA. 17		STA. 20		STA. 19		STA.		STA.		STA.	
	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31
MYXOPHYCEAE (Blue-Green Algae)																								
<i>Aphanizomenon</i> sp.																								
CHLOROPHYCEAE (Green Algae)																								
<i>Pediastrum</i> sp.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●						
<i>Ulothrix</i> sp.																								
<i>Volvox</i> sp.																								
BACILLARIOPHYCEAE (Diatoms)																								
<i>Asterionella</i> sp.																								
<i>Fragilaria</i> sp.																								
<i>Melosira</i> sp.							●		●		●													
<i>Tabellaria</i> sp.																								
DINOPIHYCEAE (Dinoflagellates)																								
<i>Ceratium</i> sp.																								

VT - vertical tow, Wisconsin net (40 mesh)
 31 - 3 liter water sample (1 meter below surface)

TABLE C-3

DOMINANT PHYTOPLANKTON TAXA
AT LOCUST POINT, JULY, 1973

Collection Date 7-25-73

PHYTOPLANKTON SPECIES	STA. 1		STA. 3		STA. 5		STA. 7		STA. 9		STA. 10		STA. 13		STA. 18		STA. 19		STA. 20		STA.		STA.	
	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31
MYXOPHYCEAE (Blue-Green Algae)																								
<i>Aphanizomenon</i> sp.	•		•	•			•				•		•				•							
CHLOROPHYCEAE (Green Algae)																								
<i>Pediastrum</i> sp.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•				
<i>Ulothrix</i> sp.																								
<i>Volvox</i> sp.																								
BACILLARIOPHYCEAE (Diatoms)																								
<i>Asterionella</i> sp.																								
<i>Fragilaria</i> sp.																								
<i>Melosira</i> sp.	•	•			•	•		•					•		•									
<i>Tabellaria</i> sp.																								
DINOPHYCEAE (Dinoflagellates)																								
<i>Ceratium</i> sp.							•		•	•														

VT - vertical tow, Wisconsin net (40 mesh)

31 - 3 liter water sample (1 meter below surface)

TABLE C-4

DOMINANT PHYTOPLANKTON TAXA
AT LOCUST POINT, AUGUST, 1973Collection Date 8-23-73

PHYTOPLANKTON SPECIES	STA. 1		STA. 3		STA. 5		STA. 7		STA. 8		STA. 9		STA. 10		STA. 12		STA. 13		STA. 18		STA. 19		STA. 20	
	VT	31	VT	31	VT	31	VT	31	VT		VT	31	VT	31	VT	31	VT	31	VT	31	VT	31	VT	31
MYXOPHYCEAE (Blue-Green Algae)																								
<i>Aphanizomenon</i> sp.	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
CHLOROPHYCEAE (Green Algae)																								
<i>Pediastrum</i> sp.	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
<i>Ulothrix</i> sp.																								
<i>Volvox</i> sp.																								
BACILLARIOPHYCEAE (Diatoms)																								
<i>Asterionella</i> sp.																								
<i>Fragilaria</i> sp.			•		•				•		•					•				•				•
<i>Melosira</i> sp.															•									
<i>Tabellaria</i> sp.																								
DINOPHYCEAE (Dinoflagellates)																								
<i>Ceratium</i> sp.									•		•						•		•		•			•

VT - vertical tow, Wisconsin net (40 mesh)

31 - 3 liter water sample (1 meter below surface)

TABLE C-5

DOMINANT PHYTOPLANKTON TAXA
AT LOCUST POINT, SEPTEMBER, 1973

Collection Date 9-26-73

PHYTOPLANKTON SPECIES	STA. 1	STA. 3	STA. 5	STA. 7	STA. 8	STA. 9	STA. 10	STA. 12	STA. 13	STA. 18	STA. 19	STA. 20
	VT	VT	VT	VT	VT	VT	VT	VT	VT	VT	VT	VT
MYXOPHYCEAE (Blue-Green Algae)												
<i>Aphanizomenon</i> sp.	●	●									●	●
CHLOROPHYCEAE (Green Algae)												
<i>Pediastrum</i> sp.	●	●	●	●	●	●	●	●	●	●	●	●
<i>Ulothrix</i> sp.												
<i>Volvox</i> sp.												
BACILLARIOPHYCEAE (Diatoms)												
<i>Asterionella</i> sp.												
<i>Fragilaria</i> sp.	●	●		●	●	●	●	●	●	●	●	●
<i>Melosira</i> sp.	●	●	●	●	●	●	●		●	●	●	●
<i>Tabellaria</i> sp.												
DINOPIHYCEAE (Dinoflagellates)												
<i>Ceratium</i> sp.												

VT - vertical tow, Wisconsin net (40 mesh)

31 - 3 liter water sample (1 meter below surface)

TABLE C-6

DOMINANT PHYTOPLANKTON TAXA
AT LOCUST POINT, OCTOBER, 1973

Collection Date 11-6-73

PHYTOPLANKTON SPECIES	STA. 1		STA. 3		STA. 5		STA. 7		STA. 9		STA. 10		STA. 13		STA. 18		STA. 19		STA. 20		STA. 31		STA. 31	
	VT		VT		VT		VT		VT		VT		VT		VT		VT		VT		VT	31	VT	31
MYXOPHYCEAE (Blue-Green Algae)																								
<i>Aphanizomenon</i> sp.																								
CHLOROPHYCEAE (Green Algae)																								
<i>Pediastrum</i> sp.	•		•				•		•		•		•		•		•		•					
<i>Ulothrix</i> sp.																								
<i>Volvox</i> sp.																								
BACILLARIOPHYCEAE (Diatoms)																								
<i>Asterionella</i> sp.	•		•		•		•		•		•		•		•		•		•					
<i>Fragilaria</i> sp.																								
<i>Melosira</i> sp.	•		•		•		•		•		•		•		•		•		•					
<i>Tabellaria</i> sp.					•												•							
DINOPHYCEAE (Dinoflagellates)																								
<i>Ceratium</i> sp.																								

VT - vertical tow, Wisconsin net (40 mesh)

31 - 3 liter water sample (1 meter below surface)

TABLE C-7

DOMINANT PHYTOPLANKTON TAXA
AT LOCUST POINT, NOVEMBER, 1973

Collection Date 12-4-73

PHYTOPLANKTON SPECIES	STA. 1		STA. 3		STA. 5		STA. 7		STA. 9		STA. 10		STA. 13		STA. 18		STA. 19		STA. 20		STA. 31		STA. 31	
	VT		VT		VT		VT		VT		VT		VT		VT		VT		VT		VT	31	VT	31
MYXOPHYCEAE (Blue-Green Algae)																								
<i>Aphanizomenon</i> sp.																								
CHLOROPHYCEAE (Green Algae)																								
<i>Pediastrum</i> sp.																								
<i>Ulothrix</i> sp.																								
<i>Volvox</i> sp.																								
BACILLARIOPHYCEAE (Diatoms)																								
<i>Asterionella</i> sp.	●		●										●		●									
<i>Fragilaria</i> sp.	●				●						●		●		●		●							
<i>Melosira</i> sp.	●		●		●		●		●		●		●		●		●		●					
<i>Tabellaria</i> sp.	●		●		●		●		●		●		●		●		●							
DINOPHYCEAE (Dinoflagellates)																								
<i>Ceratium</i> sp.																								

VT - vertical tow, Wisconsin net (40 mesh)

31 - 3 liter water sample (1 meter below surface)

APPENDIX D

FISH POPULATIONS AT LOCUST POINT

1973

TABLE D-1

ANALYSIS OF TRAWLING CATCH AT LOCUST POINT, 1973

Species	6-29-73				7-17-73			
	No.	Length (mm)		Total Wt (g)	No.	Length (mm)		Total Wt (g)
		Mean	Range			Mean	Range	
<u>Alosa pseudoharengus</u>								
<u>Aplodinotus grunniens</u>	60	34	11-267	662	150	54	20-248	2258
<u>Carassius auratus</u>	2	208	202-213	384	3	211	167-242	536
<u>Catostomus c. commersoni</u>					1	138	-	21
<u>Cyprinus carpio</u>	7	277	166-514	2886	10	223	157-445	2531
<u>Dorosoma cepedianum</u>								
<u>Ictalurus nebulosus</u>	10	195	165-222	1142	8	180	130-254	313
<u>I. punctatus</u>	12	179	17-197	225	107	182	83-275	6586
<u>Morone chrysops</u>	5	75	21-155	90	5	24	16-31	-
<u>Notropis a. atherinoides</u>	12	99	85-108	78	3	103	100-107	24
<u>N. hudsonius</u>	8	104	88-113	86	6	40	33-44	-
<u>Osmerus eperlanus mordax</u>	69	33	21-160	48	22	35	30-41	-
<u>Perca flavescens</u>	26	43	15-175	169	21	84	40-198	318
<u>Percina caprodes</u>								
<u>Percopsis omiscomaycus</u>	1	82	-	3				
<u>Pomoxis annularis</u>								
<u>P. nigromaculatus</u>								
<u>Stizostedion v. vitreum</u>	2	48	41-55	-				
TOTAL	214			5773	336			12587

TABLE D-1 CONT.

ANALYSIS OF TRAWLING CATCH AT LOCUST POINT, 1973

Species	8-24-73				9-27-73			
	No.	Length (mm)		Total Wt (g)	No.	Length (mm)		Total Wt (g)
		Mean	Range			Mean	Range	
<u>Alosa pseudoharengus</u>					21	111	97-123	253
<u>Aplodinotus grunniens</u>	12	136	80-220	443	10	99	61-159	124
<u>Carassius auratus</u>								
<u>Catostomus c. commersoni</u>								
<u>Cyprinus carpio</u>	2	236	232-240	444	4	306	228-360	1718
<u>Dorosoma cepedianum</u>	10	115	63-147	193	28	114	101-138	347
<u>Ictalurus nebulosus</u>	1	166		64				
<u>I. punctatus</u>	3	67	56-74	9	9	91	56-98	88
<u>Morone chrysops</u>	8	59	37-73	18	56	70	40-105	206
<u>Notropis a. atherinoides</u>	3	49	25-94	6	1	85	-	4
<u>N. hudsonius</u>	20	110	90-124	263	45	103	70-131	510
<u>Osmerus eperlanus mordax</u>	2	44	36-52	-				
<u>Perca flavescens</u>	39	171	80-220	2596	33	168	78-210	2003
<u>Percina caprodes</u>					1	64		2
<u>Percopsis omiscomaycus</u>					1	87		8
<u>Pomoxis annularis</u>	1	148	-	40				
<u>P. nigromaculatus</u>	2	86	36-137	40	1	128		20
<u>Stizostedion v. vitreum</u>								
TOTAL	103			4116	210			5283

TABLE D-1 CONT.

ANALYSIS OF TRAWLING CATCH AT LOCUST POINT, 1973

Species	11-5-73				Total Wt (g)
	No.	Length (mm)		Range	
		Mean			
<u>Alosa pseudoharengus</u>	18	124		65-362	1053
<u>Aplodinotus grunniens</u>	5	207		170-276	906
<u>Carassius auratus</u>					
<u>Catostomus c. commersoni</u>	2	258		250-265	502
<u>Cyprinus carpio</u>	3	129		119-145	69
<u>Dorosoma cepedianum</u>					
<u>Ictalurus nebulosus</u>	12	77		55-100	48
<u>I. punctatus</u>					
<u>Morone chrysops</u>	2	59		55-62	-
<u>Notropis a. atherinoides</u>	38	103		50-130	413
<u>N. hudsonius</u>					
<u>Osmerus eperlanus mordax</u>	51	161		80-210	2716
<u>Perca flavescens</u>	1	57			-
<u>Percina caprodes</u>	1	75			3
<u>Percopsis omiscomaycus</u>					
<u>Pomoxis annularis</u>					
<u>P. nigromaculatus</u>					
<u>Stizostedion v. vitreum</u>					
TOTAL	133				5710

TABLE D-2

ANALYSIS OF GILL NETTING CATCH AT LOCUST POINT, 1973

Species	7-2-73				8-2-73			
	No.	Length (mm)		Total Wt (g)	No.	Length (mm)		Total Wt (g)
		Mean	Range			Mean	Range	
<u>Alosa pseudoharengus</u>								
<u>Aplodinotus grunniens</u>	108	211	102-355	13616	30	176	121-280	2481
<u>Carassius auratus</u>	3	281	254-300	1025	5	201	145-305	847
<u>Catostomus c. commersoni</u>	1	326		400				
<u>Cyprinus carpio</u>	14	340	160-476	8706	17	335	226-435	9196
<u>C. carpio</u> x <u>Carassius auratus</u>	2	329	325-332	1107	7	300	169-332	3123
<u>Dorosoma cepedianum</u>	36	289	205-375	10977	86	184.5	76-352	12207
<u>Hybopsis storeriana</u>					1	168		40
<u>Ictalurus natalis</u>								
<u>I. nebulosus</u>								
<u>I. punctatus</u>	6	210	165-322	627	7	249	158-360	1715
<u>Morone chrysops</u>					2	172	81-262	276
<u>Notropis a. atherinoides</u>								
<u>N. hudsonius</u>					12	113	100-122	172
<u>Osmerus eperlanus mordax</u>					1	159		21
<u>Perca flavescens</u>	34	186	164-218	2720	134	184	132-262	11269
<u>Pomoxis annularis</u>								
<u>Stizostedion v. vitreum</u>								
TOTAL	204			39178	302			41347

TABLE D-2 CONT.

ANALYSIS OF GILL NETTING CATCH AT LOCUST POINT, 1973

Species	8-30-73				9-28-73			
	No.	Length (mm)		Total Wt (g)	No.	Length (mm)		Total Wt (g)
		Mean	Range			Mean	Range	
<u>Alosa pseudoharengus</u>					186*	113	98-195	1895
<u>Aplodinotus grunniens</u>	31	192	85-329	3650	13	233	125-281	2139
<u>Carassius auratus</u>	2	223	205-241	384	1	228		192
<u>Catostomus c. commersoni</u>					1	486		1221
<u>Cyprinus carpio</u>	16	299	215-421	6811	17	300	230-382	7164
<u>C. carpio</u> x <u>Carassius auratus</u>	6	320	245-383	2974	4	299	234-334	1371
<u>Dorosoma cepedianum</u>	341	134	75-388	21662	112*	138	86-372	3892
<u>Hybopsis storeriana</u>					1	166		50
<u>Ictalurus natalis</u>	1	173		76				
<u>I. nebulosus</u>	1	194		98	2	195	176-213	185
<u>I. punctatus</u>	2	178	137-219	130				
<u>Morone chrysops</u>	13	105	85-144	207	3	93	83-106	28
<u>Notropis a. atherinoides</u>	25	111	98-128	348				
<u>N. hudsonius</u>					64	116	100-134	1044
<u>Osmerus eperlanus mordax</u>								
<u>Perca flavescens</u>	287	186	141-236	25330	356	215	104-226	31144
<u>Pomoxis annularis</u>					2	160	156-164	96
<u>Stizostedion v. vitreum</u>					1	346		496
TOTAL	725			61670	763*			50917

* Does not include Young-of-the-year

Alosa pseudoharengus - 308Dorosoma cepedianum - 272

TABLE D-2 CONT.

ANALYSIS OF GILL NETTING CATCH AT LOCUST POINT, 1973

Species	11-12-73			
	No.	Length (mm)		Total Wt (g)
		Mean	Range	
<u>Alosa pseudoharengus</u>	1	137		24
<u>Aplodinotus grunniens</u>				
<u>Carassius auratus</u>				
<u>Catostomus c. commersoni</u>				
<u>Cyprinus carpio</u>				
<u>C. carpio</u> x <u>Carassius auratus</u>	5	167	122-330	464
<u>Dorosoma cepedianum</u>				
<u>Hybopsis storeriana</u>				
<u>Ictalurus natalis</u>				
<u>I. nebulosus</u>				
<u>I. punctatus</u>	1	100		5
<u>Morone chrysops</u>				
<u>Notropis a. atherinoides</u>	14	116	106-131	177
<u>N. hudsonius</u>				
<u>Osmerus eperlanus mordax</u>	1	191		92
<u>Perca flavescens</u>				
<u>Pomoxis annularis</u>				
<u>Stizostedion v. vitreum</u>				
Total	22			762

TABLE D-3

ANALYSIS OF SHORE SEINING CATCH AT LOCUST POINT, 1973

Species	6-14-73				8-1-73			
	No.	Length (mm)		Total Wt (g)	No.	Length (mm)		Total Wt (g)
		Mean	Range			Mean	Range	
<u>Alosa pseudoharengus</u>	5	164	153-172	190	232	53	36-74	250
<u>Aplodinotus grunniens</u>	1	297		357				
<u>Cyprinus carpio</u>	3	423	296-495	3751				
<u>Dorosoma cepedianum</u>	2	303	299-307	556	47	81	60-118	188
<u>Lepomis humilis</u>	1	76		10				
<u>Morone chrysops</u>	2	137	130-143	68	122	63	37-90	300
<u>Notropis a. atherinoides</u>	306	68.3	45-119	979	474	83	39-122	2124
<u>N. hudsonius</u>	129	110	73-127	997				
<u>N. v. volucellus</u>					1	60		2
<u>Pomoxis annularis</u>	7	123	93-165	188				
<u>P. nigromaculatus</u>	6	109.5	84-173	139				
TOTAL	462			7235	876			2864

TABLE D-3 CONT.

ANALYSIS OF SHORE SEINING CATCH AT LOCUST POINT, 1973

Species	10-3-73				11-12-73			
	No.	Length (mm)		Total Wt (g)	No.	Length (mm)		Total Wt (g)
		Mean	Range			Mean	Range	
<u>Alosa pseudoharengus</u>	8	108	67-154	144	21	130	75-183	574
<u>Aplodinotus grunniens</u>								
<u>Cyprinus carpio</u>								
<u>Dorosoma cepedianum</u>								
<u>Lepomis humilis</u>	2	67	67-67	8	1	95		9
<u>Morone chrysops</u>	12	82	67-105	57	332	59	43-95	549
<u>Notropis a. atherinoides</u>								
<u>N. hudsonius</u>								
<u>N. v. volucellus</u>								
<u>Pomoxis annularis</u>					1	122		25
<u>P. nigromaculatus</u>								
Total	22			209	355			1157

APPENDIX E

WATER CHEMISTRY AT LOCUST POINT

1973

PHYSICO-CHEMICAL MEASUREMENTS OF LAKE ERIE WATER
AT LOCUST POINT, OHIO

<u>Data Period</u>	1990-1999	2000-2009	2010-2019	2020-2029
Q1	10	15	20	25
Q2	15	20	25	30
Q3	20	25	30	35
Q4	25	30	35	40
Q5	30	35	40	45
Q6	35	40	45	50
Q7	40	45	50	55
Q8	45	50	55	60
Q9	50	55	60	65
Q10	55	60	65	70
Q11	60	65	70	75
Q12	65	70	75	80
Q13	70	75	80	85
Q14	75	80	85	90
Q15	80	85	90	95
Q16	85	90	95	100
Q17	90	95	100	105
Q18	95	100	105	110
Q19	100	105	110	115
Q20	105	110	115	120
Q21	110	115	120	125
Q22	115	120	125	130
Q23	120	125	130	135
Q24	125	130	135	140
Q25	130	135	140	145
Q26	135	140	145	150
Q27	140	145	150	155
Q28	145	150	155	160
Q29	150	155	160	165
Q30	155	160	165	170
Q31	160	165	170	175
Q32	165	170	175	180
Q33	170	175	180	185
Q34	175	180	185	190
Q35	180	185	190	195
Q36	185	190	195	200
Q37	190	195	200	205
Q38	195	200	205	210
Q39	200	205	210	215
Q40	205	210	215	220
Q41	210	215	220	225
Q42	215	220	225	230
Q43	220	225	230	235
Q44	225	230	235	240
Q45	230	235	240	245
Q46	235	240	245	250
Q47	240	245	250	255
Q48	245	250	255	260
Q49	250	255	260	265
Q50	255	260	265	270
Q51	260	265	270	275
Q52	265	270	275	280
Q53	270	275	280	285
Q54	275	280	285	290
Q55	280	285	290	295
Q56	285	290	295	300
Q57	290	295	300	305
Q58	295	300	305	310
Q59	300	305	310	315
Q60	305	310	315	320
Q61	310	315	320	325
Q62	315	320	325	330
Q63	320	325	330	335
Q64	325	330	335	340
Q65	330	335	340	345
Q66	335	340	345	350
Q67	340	345	350	355
Q68	345	350	355	360
Q69	350	355	360	365
Q70	355	360	365	370
Q71	360	365	370	375
Q72	365	370	375	380
Q73	370	375	380	385
Q74	375	380	385	390
Q75	380	385	390	395
Q76	385	390	395	400
Q77	390	395	400	405
Q78	395	400	405	410
Q79	400			

[illegible]

TABLE E-2

PHYSICOCHEMICAL MEASUREMENTS OF LAKE ERIE WATER
AT LOCUST POINT, OHIO

27 June-2 July
Data Period

Sta	Date/Time	Depth (m)	Trans (m)	DO (ppm)		Temp (C°)		Cond (µmho/cm)		Turbid JTU		Alk (ppm)		pH	
				S	B	S	B	S	B	S	B	S	B	S	B
1	6-27/1515	1.6	0.27			23.4	22.8								
2	6-27/1520	2.6	0.24			22.8	22.8								
3	6-27/1530	3.7	0.34	7.0		22.8	23.1			32					
4	6-27/1550	4.1	0.43			22.8	22.8								
5	7-2/1400	1.9	0.18			25.6	24.5								
6	7-2/1350	3.1	0.27			25.0	23.9								
7	7-2/1330	4.5	0.43	14.0		24.2	23.4	330		18					
8	7-2/1320	4.5	0.34			24.5	23.4								
9	7-2/1310	4.8	0.49			24.5	23.4								
10	7-2/1140	2.9	0.24			25.6	23.9								
11	7-2/1150	3.2	0.30			25.6	23.6								
12	7-2/1220	2.2	0.34			25.0	23.4								
13	6-27/1255	3.5	0.30	9.0		23.4	22.8			32					
14	6-27/1205	3.9	0.40			23.1	23.1								
15	7-2/1200	2.3	0.34			24.5	23.4								
16	7-2/1210	2.3	0.34			24.7	23.4								
17															
18	6-27/1230	3.5	0.34			23.1	23.4			32					
19	7-2/1510	4.5	0.27	14.0		27.5		390		32					
20	7-2/1450	4.8	0.30	14.0		27.2		390		34					
21															
22															

TABLE E-3.

PHYSICOCHEMICAL MEASUREMENTS OF LAKE ERIE WATER
AT LOCUST POINT, OHIO

25 July-1 Aug. 1978

Data Period

Sta	Date/Time	Depth (m)	Trans (m)	DO (ppm)		Temp (C°)		Cond (umho/cm)		Turbid JTU		Alk (ppm)		pH			
				S	B	S	B	S	B	S	B	S	B	S	B		
1	7-25/1415	1.7	0.37	12.0		25.6	25.0			17		95					
2	7-25/1435	2.3	0.40			27.2	25.0										
3	7-25/1445	3.3	0.49	13.0		26.7	25.3			15		105					
4	7-25/1505	4.0	0.49			26.1	26.1										
5	8-1/1225	6.5	0.18	7.0		24.5	24.5			50		180					
6	8-1/1245	2.7	0.15			24.5	24.5										
7	8-1/1150	4.0	0.34	9.0		23.9	25.0			19		120					
8	8-1/1135	4.1	0.43			24.5	24.5										
9	8-1/1110	4.5	0.64	9.0		24.2	23.9			9		105					
10	7-25/1100	1.7	0.15	9.0		26.4	24.5			51		110					
11	7-25/1120	2.3	0.37			25.3	25.0										
12	7-25/1155	2.9	0.43			25.6	24.5										
13	7-25/1205	3.3	0.55	12.0		24.5	24.5			14		110					
14	7-25/1225	4.0	0.46			25.6	24.7										
15	7-25/1135	3.2	0.58			25.0	24.5										
16	7-25/1145	2.1	0.40			24.5	24.5										
17	7-25/1245	2.7	0.40	12.0		25.9	24.5			21		100					
18	7-25/1235	3.6	0.43			25.6	24.5										
19	7-25/1600	5.5	0.24	11.0		26.7	26.7			32		110					
20	7-25/1615	6.2	0.27	12.0		26.1	25.3			32		100					
21																	
22																	

TABLE E-4

PHYSICOCHEMICAL MEASUREMENTS OF LAKE ERIE WATER
AT LOCUST POINT, OHIO

23 August 1973

Data Period

Sta	Date/Time	Depth (m)	Trans (m)	DO (ppm)		Temp (C°)		Cond (umho/cm)		Turbid JTU		Alk (ppm)		pH		CO ₂ (ppm)	
				S	B	S	B	S	B	S	B	S	B	S	B		
1	8-23/1705	1.9	0.30	12.0						17		120				0-5	
2	8-23/1655	2.3	0.30														
3	8-23/1640	3.9	0.34	9.0						19		120				0-5	
4	8-23/1630	4.3	0.40														
5	8-23/1540	2.9	0.18	8.0						19		155				0-5	
6	8-23/1530	3.0	0.34														
7	8-23/1510	3.0	0.34	7.0						19		120				0-5	
8	8-23/1450	4.1	0.43														
9	8-23/1430	4.5	0.43	10.0						16		135				0-5	
10	8-23/1245	1.1	0.21	11.0						26		170				0-5	
11	8-23/1230	2.1	0.24														
12	8-23/1205	3.0	0.30	11.0						18		105				0-5	
13	8-23/1120	3.8	0.27	11.0						16		120				0-5	
14	8-23/1030	4.3	0.30														
15	8-23/1140	3.5	0.27														
16	8-23/1155	2.6	0.30														
17	8-23/1050	2.2	0.27	9.0						22		155				0-5	
18	8-23/1045	3.9	0.34														
19	8-23/1325	4.9	0.30	11.0						18		120				0-5	
20	8-23/1345	5.5	0.37	11.0						16		105				0-5	
21																	
22																	

TABLE E-5

PHYSICOCHEMICAL MEASUREMENTS OF LAKE ERIE WATER
AT LOCUST POINT, OHIO

19-26 Sept. 1973

Data Period

Sta	Date/Time	Depth (m)	Trans (m)	DO (ppm)		Temp (C°)		Cond (umho/cm)		Turbid JTU		Alk (ppm)		pH		OrthoPhos- phate (ppm)
				S	B	S	B	S	B	S	B	phenol	total	S	B	
1	9-26/1410	1.7	0.21	9.6	8.8	20.0	19.0	300		27		0	155	8.3		0.05
2	9-26/1350	2.0	0.24	9.5	9.2	20.0	19.0									
3	9-26/1330	3.0	0.30	10.0	9.1	20.0	19.0	281		25		0	135	8.2		0.05
4	9-26/1315	3.6	0.30	8.8	10.0	19.5	19.0									
5	9-26/1230	3.3	0.18	8.4	7.3	20.0	19.0	260		35		0	135	8.2		0.05
6	9-26/1215	2.5	0.18	9.1	8.6	19.5	19.0									
7	9-26/1150	3.6	0.46	9.1	9.0	19.1	19.0	281		18		0	155	8.2		0.25
8	9-26/1125	4.3	0.49	8.8	8.5	19.0	18.6	260		14		0	120	8.3		0.40
9	9-26/1100	5.6	0.49	9.0	8.2	19.0	18.5	245		16		0	135	8.3		0.05
10	9-19/1220	1.0	0.27	10.0	9.0	17.0	16.0	287		37		0	120	7.9		0.03
11	9-19/1235	2.4	0.27													
12	9-19/0130	2.6	0.30	5.9	8.2	17.0	17.0	306		24		0	120	7.9		0.04
13	9-19/1200	3.3	0.27	8.8	8.2	17.0	17.0	306		33		0	135	8.2		0.04
14	9-19/1105	4.0	0.34	8.8	8.1	17.0	17.0									
15	9-19/0100	3.2	0.24													
16	9-19/1250	1.8	0.24													
17	9-19/1140	2.3	0.34	8.8	8.1	17.0	16.5	361		27		0	135	8.1		0.08
18	9-19/1125	3.3	0.34													
19	9-26/0945	4.6	0.18	8.4	7.3	19.5	18.5	286		50		0	135	8.3		0.1
20	9-26/1015	5.5	0.21	8.3	6.0	19.0	17.0	270		38		0	135	8.1		0.05
21																
22																

TABLE E-6

PHYSICOCHEMICAL MEASUREMENTS OF LAKE ERIE WATER
AT LOCUST POINT, OHIO

2 November 1970

Data Period

Sta	Date/Time	Depth (m)	Trans (m)	DO (ppm)		Temp (C°)		Cond (umho/cm)		Turbid JTU		Alk (ppm)		pH		OrthoPhos phate (ppm)	
				S	B	S	B	S	B	S	B	S	B	S	B		
1	11/2-1500	1.2	0.15	10.6	10.8	10.0	10.0										
2	11-2/1440	1.9	0.18	10.2	10.8	10.5	10.0										
3	11-2/1420	3.0	0.18	10.6	10.4	10.0	10.0										
4	11-2/1355	3.8	0.18	10.2	8.8	10.0	10.0										
5	11-7/1245	1.5	0.15	12.6	12.4	5.0	5.0	320		52				7.5		0.07	
6	11-7/1230	1.9	0.18	13.6	13.4	5.0	5.0										
7	11-7/1215	3.6	0.18	14.6	14.2	6.0	6.0	310		32				7.6		0.15	
8	11-7/1130	4.0	0.30	14.2	13.2	6.0	6.0										
9	11-7/1100	4.2	0.24	12.4	11.2	6.0	6.0	270		37				7.8		0.05	
10	11-2/1145	1.5	0.15	11.0	10.8	10.0	10.0										
11	11-2/1200	2.0	0.18	10.8	11.0	10.0	10.0										
12	11-2/1215	2.8	0.15	11.0	11.0	10.0	10.0										
13	11-2/1250	3.2	0.21	10.8	10.0	10.0	10.0										
14	11-2/1100	4.1	0.30	10.8	10.6	10.0	10.0										
15	11-2/1320	3.0	0.18	10.8	10.6	10.5	9.5										
16	11-2/1300	1.9	0.15	10.2	10.6	10.5	10.0										
17	11-2/1125	2.0	0.18	11.2	11.0	10.0	10.0										
18	11-2/1135	3.1	0.30	11.6	11.8	10.0	9.8										
19	11-7/1345	4.0	0.27	11.8	11.2	7.0	7.0	370		36				7.5		0.07	
20	11-7/1400	5.4	0.24	11.0	10.4	7.0	7.0	380		34				7.7		0.05	
21																	
22																	

TABLE E-7

PHYSICOCHEMICAL MEASUREMENTS OF LAKE ERIE WATER
AT LOCUST POINT, OHIO

4 December 1973

Data Period

Sta	Date/Time	Depth (m)	Trans (m)	DO (ppm)		Temp (C°)		Cond (umho/cm)		Turbid JTU		Alk (ppm)		pH		Sul- fate	Ortho- Phos- phate
				S	B	S	B	S	B	S	B	pheno	total	S	B		
1	12-4/	1.6	1.2	11.0		6.0	6.0	370		17		0	85	7.5		1.0	0.05
2																	
3	12-4/1045	3.1	1.6					340		15		0	105	7.4		2.6	0.05
4																	
5	12-4/	1.9	1.5							15		0	105	7.4		1.2	0.15
6																	
7	12-4/	3.2	2.0					310		14		0	120	7.4		2.7	0.07
8																	
9	12-4/	4.5	2.5	10.0	11.0	6.0	6.0	300		10		0	105	7.5		4.1	0.2
10	12-4/	1.5	1.5					360		17		0	135	7.5		0.8	0.35
11																	
12																	
13	12-4/1300	3.2	1.6	11.0	11.0	6.0	6.0	380		16		0	105	7.4		2.8	0.25
14																	
15																	
16																	
17	12-4/	1.9	1.5					370		14		0	120	7.6		1.3	0.17
18																	
19	12-4/	4.2	1.1					340		22		0	120	7.3		3.8	0.05
20	12-4/	5.6	1.0					350		25		0	135	7.2		5.1	0.05
21																	
22																	