



KEWAUNEE NUCLEAR POWER PLANT

PREOPERATIONAL THERMAL MONITORING PROGRAM OF LAKE MICHIGAN NEAR KEWAUNEE NUCLEAR POWER PLANT

THIRD ANNUAL REPORT
JANUARY - DECEMBER 1973

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1810 FRONTAGE ROAD
NORTHBROOK, ILLINOIS 60062

TOXICOLOGY
ENVIRONMENTAL SCIENCES
CHEMISTRY
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AREA CODE 312
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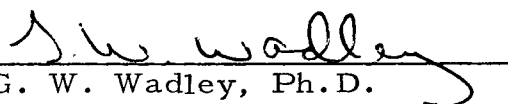
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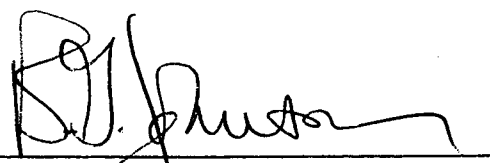
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APPENDIX - VOLUME II

PREPARED AND SUBMITTED
BY
INDUSTRIAL BIO-TEST LABORATORIES, INC.

Report approved by:


G. W. Wadley, Ph.D.
Technical Manager
Environmental Sciences


B. G. Johnson, Ph.D.
Manager
Environmental Sciences

March 29, 1974

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Results of analyses of zooplankton samples
collected from Lake Michigan near the
Kewaunee Nuclear Power Plant,
April - November 1973.

Table 1 Results of zooplankton analyses, vertical tows from 3 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 13 April 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 6					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1768	1493	1631	1611	1626	12.13
CALANOID COPEPODITES	0	0	20	59	20	0.14
CYCLOPOID COPEPODITES	1336	1218	1336	1533	1356	10.11
CYCLOPS BICUSPIDATUS THOMASI	4519	4028	4362	5344	4563	34.04
DIAPTOMUS SPP. (FEMALE)	1926	1729	1552	1886	1773	13.22
DIAPTOMUS ASPLANDI (MALE)	845	865	884	884	870	6.49
DIAPTOMUS MINUTUS (MALE)	59	20	39	157	69	0.51
DIAPTOMUS DREGENSIENSIS (MALE)	79	59	20	196	89	0.66
DIAPTOMUS SICILIS (MALE)	20	0	39	0	15	0.11
DIAPTOMUS SICILOIDES (MALE)	0	0	0	20	5	0.03
LIMNOCALANUS MACRUPUS	0	0	7	7	4	0.02
TROPPOCYCLOPS PRASINUS	79	0	79	20	45	0.33
HARPACTICOIDA	20	0	0	20	10	0.07
TOTAL COPEPODA	10651	9412	9969	11737	10445	77.93
CLADOCERA						
DUSIMINA LONGIROSTRIS	20	0	0	20	10	0.07
DAPHNIA GALEATA MENDOTAE	59	59	0	59	44	0.32
DAPHNIA LONGIRENIS	216	98	275	295	221	1.64
DAPHNIA SPP.	0	0	0	20	5	0.03
EUBOSMINA CORECUNI	0	39	79	59	44	0.32
TOTAL CLADOCERA	295	196	354	453	324	2.41
ROTIFERA						
ROTIFERA	2358	2515	2377	3281	2633	19.64
TOTAL ROTIFERA	2358	2515	2377	3281	2633	19.64
TOTAL ZOOPLANKTON	13304	12123	12700	15471	13402	

Table 1 Results of zooplankton analyses, vertical tows from 3 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 13 April 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 11				NO. PER CUBIC METER	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1474	1572	1238	1690	1494	11.93
CALANOID COPEPODITES	39	20	0	20	20	0.15
CYCLOPID COPEPODITES	1336	1493	1592	1572	1498	11.96
CYCLOPS BICUSPIDATUS THOMASI	3380	3262	3910	4342	3724	29.74
DIAPTOMUS SPP. (FEMALE)	1218	1690	1218	1002	1282	10.23
DIAPTOMUS ASHLANDI (MALE)	786	1041	1002	943	943	7.53
DIAPTOMUS MINUTUS (MALE)	59	39	20	79	49	0.39
DIAPTOMUS OREGONENSIS (MALE)	39	59	59	20	44	0.35
DIAPTOMUS SICILIS (MALE)	20	39	59	59	44	0.35
LIMNOCALANUS MACRURUS	9	0	0	0	2	0.01
TROPICOCYCLUS PRASINUS	0	20	0	59	20	0.15
HARPACTICOIDA	0	0	20	0	5	0.03
TOTAL COPEPODA	8360	9235	9118	9786	9125	72.88
CLADOCERA						
BOSMINA LONGIROSTRIS	0	79	0	20	25	0.19
CHYDORUS SPHERICUS	0	0	20	0	5	0.03
DAPHNIA GALEATA MENDOTAE	0	20	20	39	20	0.15
DAPHNIA LONGIREMIS	295	255	236	138	231	1.84
TUBOSMINA COREGONI	59	79	39	20	49	0.39
TOTAL CLADOCERA	354	433	315	217	330	2.63
ROTIFERA						
ROTIFERA	3144	2633	3203	3281	3065	24.48
TOTAL ROTIFERA	3144	2633	3203	3281	3065	24.48
TOTAL ZOOPLANKTON	11858	12301	12636	13284	12520	

Table 1 -- Results of zooplankton analyses, vertical tows from 3 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 13 April 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 15					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1533	1022	1081	1533	1292	14.08
CALANOID COPEPODITES	0	0	59	0	15	0.16
CYCLOPOID COPEPODITES	1081	1415	1474	1238	1302	14.19
CYCLOPS BICUSPIDATUS THOMASI	3360	2712	2770	4716	3390	36.96
DIAPTOMUS SPP. (FEMALE)	511	334	531	629	501	5.46
DIAPTOMUS ASHLANDI (MALE)	314	157	236	295	251	2.73
DIAPTOMUS MINUTUS (MALE)	177	98	393	334	251	2.73
DIAPTOMUS OREGONENSIS (MALE)	79	98	79	98	89	0.97
DIAPTOMUS SICILIS (MALE)	79	59	98	79	79	0.86
DIAPTOMUS SICILOIDES (MALE)	0	0	0	39	10	0.10
LYNCECALANUS MACRUPUS	0	2	0	0	0*	0.00
TROPPOCYCLOPS PRASINUS	118	79	39	39	69	0.75
HARPACTICOIDA	295	0	236	413	236	2.57
TOTAL COPEPODA	7547	5976	6996	9413	7485	81.61
CLADOCERA						
EUBOSMINA LONGIROSTRIS	79	0	59	79	54	0.58
CHYDORUS SPHAERICUS	39	0	59	39	34	0.37
DAPHNIA GALEATA MENDOTAE	79	0	0	0	20	0.21
DAPHNIA LONGIREMIS	79	216	118	138	138	1.50
EUBOSMINA COREGONI	118	59	59	118	89	0.97
TOTAL CLADOCERA	394	275	295	374	335	3.65
ROTIFERA						
ROTIFERA	1316	1395	1159	1533	1351	14.73
TOTAL ROTIFERA	1316	1395	1159	1533	1351	14.73
TOTAL ZOOPLANKTON	9257	7646	8450	11320	9171	

* ORGANISM PRESENT IN DENSITIES LESS THAN ONE PER CUBIC METER

TABLE 2 SUMMARY OF ZOOPLANKTON ANALYSES, VERTICAL TOPS FROM 3 METERS TO THE SURFACE, SAMPLING LOCATIONS 6, 11, 15; LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, 13 APRIL 1973

PROJECT NO: W3208
MEAN OF 3 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	1471	12.57
CALANOID COPEPODITES	18	0.15
CYCLOPOID COPEPODITES	1385	11.83
CYCLOPS BICUSPIDATUS THOMASI	3892	33.26
DIAPTOMUS SPP. (FEMALE)	1185	10.12
DIAPTOMUS ASHLANDI (MALE)	688	5.88
DIAPTOMUS MINUTUS (MALE)	123	1.05
DIAPTOMUS OREGONENSIS (MALE)	74	0.63
DIAPTOMUS SICILIS (MALE)	46	0.39
DIAPTOMUS SICILIOIDES (MALE)	5	0.04
LIMNOCALANUS MACRURUS	2	0.01
TROPPOCYCLOPS PRASINUS	45	0.38
HARPACTICOIDA	84	0.71
TOTAL COPEPODA	9018	77.08
CLADOCERA		
DIOSMINA LONGIROSTRIS	30	0.25
CHYDORUS SPHAERICUS	13	0.11
DAPHNIA GALEATA MENDOTAE	28	0.23
DAPHNIA LONGIREMIS	197	1.68
DAPHNIA SPP.	2	0.01
ENDOSMINA GREGONI	61	0.52
TOTAL CLADOCERA	331	2.82
ROTIFERA		
ROTIFERA	2350	20.08
TOTAL ROTIFERA	2350	20.08
TOTAL ZOOPLANKTON	11699	

Table 3 Results of zooplankton analyses, vertical tows from 6 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 13 April 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 7					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	982	1513	1552	1454	1375	13.20
CALANOID COPEPODITES	0	20	20	20	15	0.14
CYCLOPOID COPEPODITES	1592	1356	1729	1631	1577	15.13
CYCLOPS EICUSPIDATUS THOMASI	2122	2476	2554	2770	2481	23.81
CYCLOPS VERNALIS	0	0	20	0	5	0.04
DIAPTOMUS SPP. (FEMALE)	1513	1513	1533	1533	1523	14.62
DIAPTOMUS ASHLANDI (MALE)	1022	786	963	982	938	9.00
DIAPTOMUS MINUTUS (MALE)	157	59	39	98	88	0.84
DIAPTOMUS DREGONEZSI (MALE)	79	118	118	118	108	1.03
DIAPTOMUS SICILIS (MALE)	20	20	39	39	30	0.28
LIMNOCALANUS MACRUPUS	2	0	0	0	0*	0.00
TROPECYCLOPS PRASINUS	39	39	98	79	64	0.61
TOTAL COPEPODA	7528	7900	8665	8724	8204	78.76
CLADOCERA						
EUBOSMINA LONGIROSTRIS	39	20	20	0	20	0.19
CHYDORUS SPHAERICUS	0	0	0	39	10	0.09
DAPHNIA GALEATA MENDOTAE	20	20	20	20	20	0.19
DAPHNIA LONGIREMIS	79	118	196	138	133	1.27
EUBOSMINA COPEGOMI	59	39	20	98	54	0.51
TOTAL CLADOCERA	197	197	256	295	237	2.27
ROTIFERA						
ROTIFERA	1611	1631	2161	2495	1975	18.96
TOTAL ROTIFERA	1611	1631	2161	2495	1975	18.96
TOTAL ZOOPLANKTON	9336	9728	11082	11514	10416	

* ORGANISM PRESENT IN DENSITIES LESS THAN ONE PER CUBIC METER

Table 3 Results of zooplankton analyses, vertical tows from 6 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 13 April 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 12

	NO. PER CUBIC METER				MEAN	OCCUR- PENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	1277	1140	1100	982	1125	11.06
CALANOID COPEPODITES	20	0	0	0	5	0.04
CYCLOPOID COPEPODITES	884	1493	1592	1140	1277	12.55
CYCLOPS DICUSPIDATUS THOMASI	2456	2633	2495	2751	2584	25.40
DIAPTOMUS SPP. (FEMALE)	1434	1336	1316	1454	1385	13.61
DIAPTOMUS ASHLANDI (MALE)	1061	1199	1100	982	1086	10.67
DIAPTOMUS MINUTUS (MALE)	39	157	118	98	103	1.01
DIAPTOMUS OREGONENSIS (MALE)	79	20	118	118	84	0.82
DIAPTOMUS SICILIS (MALE)	20	39	39	0	25	0.24
LEPTOCALANUS MACRURUS	4	0	6	2	3	0.02
TROPICOCYCLOPS PRASINUS	59	20	20	59	40	0.39
HARPACTICOIDA	20	0	20	0	10	0.09
TOTAL COPEPODA	7353	8037	7924	7586	7727	75.97
CLAUCCERA						
EUBOSMINA LONGIROSTRIS	20	39	0	0	15	0.14
CHYDORUS SPHAERICUS	0	0	0	20	5	0.04
DAPHNIA GALEATA MENDOTAE	20	20	59	79	45	0.44
DAPHNIA LONGIREMIS	177	216	196	177	192	1.88
EUBOSMINA COREGONI	20	79	79	59	59	0.58
TOTAL CLAUCCERA	237	354	334	335	316	3.10
ROTIFERA						
ROTIFERA	1474	2692	2338	2004	2127	20.91
TOTAL ROTIFERA	1474	2692	2338	2004	2127	20.91
TOTAL ZOOPLANKTON	9064	11083	10596	9925	10170	

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Table 3 . Results of zooplankton analyses, vertical tows from 6 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 13 April 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 16

	NO. PER CUBIC METER					OCCUR- FENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1179	982	1592	1159	1228	16.04
CALANOID COPEPODITES	20	39	39	0	25	0.32
CYCLOPID COPEPODITES	688	943	825	766	806	10.53
CYCLOPS BICUSPIDATUS THOMASI	1945	1867	2142	1749	1926	25.16
DIAPTOMUS SPP. (FEM/LE)	314	275	511	354	364	4.75
DIAPTOMUS ASHLANDI (MALE)	275	118	255	177	206	2.69
DIAPTOMUS MINUTUS (MALE)	39	39	138	79	74	0.96
DIAPTOMUS OREGONENSIS (MALE)	39	0	20	20	20	0.26
DIAPTOMUS SICILIS (MALE)	98	79	59	20	64	0.83
DIAPTOMUS SICILOIDES (MALE)	0	0	0	20	5	0.06
LIMNOCALANUS MACRURUS	0	0	0	1	0*	0.00
TROPPOCYCLOPS PRASINUS	0	20	20	20	15	0.19
HAPPACTICOIDA	39	0	0	0	10	0.13
TOTAL COPEPODA	4636	4362	5601	4365	4743	61.97
CLADOCERA						
EUROMINA LONGIROSTRIS	20	39	20	59	35	0.45
CHYDOERUS SPHAERICUS	0	0	20	0	5	0.06
DAPHNIA GALEATA MENDOTAE	0	0	20	39	15	0.19
DAPHNIA LONGIRENIS	59	79	39	118	74	0.96
DAPHNIA PULEX	0	0	20	0	5	0.06
DAPHNIA SPP.	39	0	0	0	10	0.13
EUROMINA COREGONI	157	79	98	138	118	1.54
TOTAL CLADOCERA	275	197	217	354	262	3.42
ROTIFERA						
ROTIFERA	2672	2436	2987	2495	2648	34.59
TOTAL ROTIFERA	2672	2436	2987	2495	2648	34.59
TOTAL ZOOPLANKTON	7583	6995	8805	7214	7653	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 4 SUMMARY OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, SAMPLING LOCATIONS 7, 12, 16; LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, 13 APRIL 1973

PROJECT NO: W3208
MEAN OF 3 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	1243	13.20
CALANOID COPEPODITES	15	0.15
CYCLOPID COPEPODITES	1220	12.95
CYCLOPS BICUSPIDATUS THOMASI	2330	24.74
CYCLOPS VERNALIS	2	0.02
DIAPTOMUS SPP. (FEMALE)	1091	11.58
DIAPTOMUS ASHLANDI (MALE)	743	7.89
DIAPTOMUS MINUTUS (MALE)	88	0.93
DIAPTOMUS OREGONENSIS (MALE)	71	0.75
DIAPTOMUS SICILIS (MALE)	40	0.42
DIAPTOMUS SICILOIDES (MALE)	2	0.02
LIMNOCALANUS MACRURUS	1	0.01
TROPICYCLOPS PRASINUS	40	0.42
HARPACTICOIDA	7	0.07
TOTAL COPEPODA	6893	73.21
CLADOCERA		
EUDOSMINA LONGIROSTRIS	23	0.24
CHYDERUS SPHAERICUS	7	0.07
DAPHNIA GALEATA MENDOTAE	27	0.28
DAPHNIA LONGIRENIS	133	1.41
DAPHNIA PULEX	2	0.02
DAPHNIA SPP.	3	0.03
EUDOSMINA COREGONI	77	0.81
TOTAL CLADOCERA	272	2.88
ROTIFERA		
ROTIFERA	2250	23.89
TOTAL ROTIFERA	2250	23.89
TOTAL ZOOPLANKTON	9415	

Table 5 Results of zooplankton analyses, vertical tows from 9 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 13 April 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 8					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1454	1208	1356	1503	1380	17.33
CALANOID COPEPODITES	20	0	10	20	13	0.16
CYCLOPOID COPEPODITES	894	815	786	756	813	10.20
CYCLOPS BICUSPIDATUS THOMASI	1228	1091	1149	1375	1211	15.20
CYCLOPS VERNALIS	0	0	10	0	3	0.03
DIAPTOMUS SPP. (FEMALE)	422	531	550	354	464	5.82
DIAPTOMUS ASHLANDI (MALE)	295	255	265	147	241	3.02
DIAPTOMUS MINUTUS (MALE)	39	49	79	98	66	0.82
DIAPTOMUS DREGDENSI (MALE)	39	39	20	39	34	0.42
DIAPTOMUS SICILIS (MALE)	29	10	39	39	29	0.36
DIAPTOMUS SICILOIDES (MALE)	10	0	0	0	3	0.03
LIMNOCALANUS MACRUFUS	6	3	0	2	3	0.03
TROPICOCYCLOPS PRASINUS	88	59	98	69	79	0.99
TOTAL COPEPODA	4524	4060	4362	4402	4339	54.48
CLADOCERA						
EUSMINA LONGIROSTRIS	49	29	0	39	29	0.36
DAPHNIA GALEATA MENDOTAE	49	39	69	29	47	0.59
DAPHNIA LONGIREMIS	255	196	138	246	209	2.62
DAPHNIA PULEX	10	0	0	0	3	0.03
DAPHNIA SCHODLERI	0	0	0	10	3	0.03
EUPHOSMINA COREGONI	79	59	69	108	79	0.99
TOTAL CLADOCERA	442	323	276	432	370	4.64
ROTIFERA						
ROTIFERA	3399	2987	2829	3802	3254	40.86
TOTAL ROTIFERA	3399	2987	2829	3802	3254	40.86
TOTAL ZOOPLANKTON	8365	7370	7467	8636	7963	

Table 5 Results of zooplankton analyses, vertical tows from 9 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 13 April 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 13

	NO. PER CUBIC METER				MEAN	OCCUR- FENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	963	737	992	776	867	12.91
CALANOID COPEPODITES	20	20	29	10	20	0.29
CYCLOPOID COPEPODITES	776	619	521	599	629	9.36
CYCLOPS BICUSPIDATUS THOMASI	1110	1542	1169	1611	1358	20.22
DIAPTOMUS SPP. (FEMALE)	589	472	422	629	528	7.86
DIAPTOMUS ASHLANDI (MALE)	108	216	216	236	194	2.88
DIAPTOMUS MINUTUS (MALE)	108	88	79	108	96	1.42
DIAPTOMUS DREGENSIS (MALE)	29	39	20	39	32	0.47
DIAPTOMUS SICILIS (MALE)	39	49	88	59	59	0.87
LIMNOCALANUS MACRURUS	0*	0	0	0*	0*	0.00
TROPICOCYCLOPS PRASINUS	0	0	39	69	27	0.40
TOTAL COPEPODA	3742	3782	3575	4136	3810	56.74
CLADOCERA						
BOSMINA LONGICORNIS	49	20	0	20	22	0.32
CHYDORUS SPHAERICUS	10	20	0	0	8	0.11
DAPHNIA GALEATA MENDOTAE	10	10	29	39	22	0.32
DAPHNIA LONGIREMIS	187	177	138	69	143	2.12
EURYSMINA COREGONI	20	118	20	79	59	0.87
TOTAL CLADOCERA	276	345	187	207	254	3.78
ROTIFERA						
ROTIFERA	2790	2554	2368	2888	2650	39.46
TOTAL ROTIFERA	2790	2554	2368	2888	2650	39.46
TOTAL ZOOPLANKTON	6808	6681	6130	7231	6714	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

Table 5. Results of zooplankton analyses, vertical tows from 9 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 13 April 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 17

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1503	1768	1434	1739	1611	16.00
CALANOID COPEPODITES	20	29	10	20	20	0.19
CYCLOPOID COPEPODITES	1336	1051	1120	1218	1181	11.73
CYCLOPS BICUSPIDATUS THOMASI	2289	2201	1994	1965	2112	20.98
CYCLOPS VERNALIS	0	0	10	0	3	0.02
DIAPTOMUS SPP. (FEMALE)	1356	1218	1395	1208	1294	12.85
DIAPTOMUS ASHLANDI (MALE)	943	727	815	933	855	8.49
DIAPTOMUS MINUTUS (MALE)	118	157	167	167	152	1.51
DIAPTOMUS DREGDENSI (MALE)	157	88	88	128	115	1.14
DIAPTOMUS SICILIS (MALE)	59	79	20	39	49	0.48
LIMNOCALANUS MACRURUS	0*	2	4	5	3	0.02
TROPECYCLOPS PRASINUS	187	108	49	49	98	0.97
HARPACTICOIDA	0	20	29	20	17	0.16
		1				
TOTAL COPEPODA	7968	7448	7135	7491	7510	74.61
CLADOCERA						
BOESMINA LONGIROSTRIS	0	10	20	0	8	0.07
DAPHNIA GALEATA MENDOTAE	39	29	0	29	24	0.23
DAPHNIA LONGIREMIS	167	138	216	206	182	1.80
DAPHNIA SPP.	0	0	20	0	5	0.04
EUROSMINA COREGONI	10	29	10	59	27	0.26
TOTAL CLADOCERA	216	206	266	294	246	2.44
ROTIFERA						
ROTIFERA	2004	2476	2043	2712	2309	22.94
TOTAL ROTIFERA	2004	2476	2043	2712	2309	22.94
TOTAL ZOOPLANKTON	10188	10130	9444	10497	10065	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 6 SUMMARY OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, SAMPLING LOCATIONS 8, 13, 17; LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, 13 APRIL 1973.

PROJECT NO: W3208
MEAN OF 3 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	1266	15.58
CALANOID COPEPODITES	18	0.21
CYCLOPOID COPEPODITES	874	10.59
CYCLOPS BICUSPIDATUS THOMASI	1560	18.91
CYCLOPS VERNALIS	2	0.02
DIAPTOMUS SPP. (FEMALE)	762	9.23
DIAPTOMUS ASHLANDI (MALE)	430	5.21
DIAPTOMUS MINUTUS (MALE)	105	1.27
DIAPTOMUS OREGONENSIS (MALE)	60	0.72
DIAPTOMUS SICILIS (MALE)	46	0.55
DIAPTOMUS SICILOIDES (MALE)	1	0.01
LIMNOCALANUS MACRURUS	2	0.02
TROPPOCYCLOPS PRASINUS	68	0.82
HARPACTICOIDA	6	0.07
TOTAL COPEPODA	5220	63.28
CLADOCERA		
BOSMINA LONGIRESTRIS	20	0.24
CHYDORUS SPHAERICUS	3	0.03
DAPHNIA GALEATA MENDOTAE	31	0.37
DAPHNIA LONGIREMIS	178	2.15
DAPHNIA PULEX	1	0.01
DAPHNIA SCHODLERI	1	0.01
DAPHNIA SPP.	2	0.02
EUBOSMINA COREGONI	55	0.66
TOTAL CLADOCERA	291	3.52
ROTIFERA		
ROTIFERA	2738	33.19
TOTAL ROTIFERA	2738	33.19
TOTAL ZOOPLANKTON	8249	

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Table 7 Results of zooplankton analyses, vertical tows from 3 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 2

	NO. PER CUBIC METER					OCCUR- PENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	3920	4274	3851	3900	3986	20.34
CALANOID COPEPODITES	1140	1238	1032	1022	1108	5.65
CYCLOPOID COPEPODITES	599	688	521	501	577	2.94
CYCLOPS BICUSPIDATUS THOMASI	10	10	0	10	8	0.04
DIAPTOMUS SPP. (FEMALE)	20	0	10	0	8	0.04
DIAPTOMUS ASHLANDI (MALE)	10	0	10	0	5	0.02
DIAPTOMUS MINUTUS (MALE)	0	0	0	10	3	0.01
EURYTOMERA AFFINIS	0	0	0	20	5	0.02
TROPIDOCYCLOPS PRASINUS	49	29	69	29	44	0.22
TOTAL COPEPODA	5748	6239	5493	5492	5744	29.32
CLADOCERA						
EUBOSMINA LONGIROSTRIS	206	157	550	373	322	1.64
BAPHNIA GALEATA MENDOTAE	10	0	10	0	5	0.02
EUBOSMINA COREGONI	39	39	0	29	27	0.13
LEPTODORA KINDTII	10	0	0	0	3	0.01
TOTAL CLADOCERA	265	196	560	402	357	1.82
ROTIFERA						
ROTIFERA	17743	9726	12497	13980	13487	68.85
TOTAL ROTIFERA	17743	9726	12497	13980	13487	68.85
TOTAL ZOOPLANKTON	23756	16161	18550	19874	19588	

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Table 7. Results of zooplankton analyses, vertical tows from 3 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 6					OCCUR- PENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	4146	2977	3566	2269	3240	16.08
CALANOID COPEPODITES	1228	1238	1444	1189	1275	6.32
CYCLOPID COPEPODITES	275	206	275	187	236	1.17
CYCLOPS BICUSPIDATUS THOMASI	10	20	29	98	39	0.19
DIAPTOMUS SPP. (FEMALE)	10	10	0	20	10	0.04
DIAPTOMUS ASHLANDI (MALE)	0	0	0	10	3	0.01
DIAPTOMUS MINUTUS (MALE)	0	10	29	10	12	0.05
EURYTEMORA AFFINIS	10	0	10	20	10	0.04
PAPACYCLOPS FIMBRIATUS POPPEI	0	0	10	0	3	0.01
TREPOCYCLOPS PRASINUS	59	108	69	79	79	0.39
HARPACTICOIDA	0	10	0	0	3	0.01
 TOTAL COPEPODA	 5738	 4579	 5432	 3882	 4910	 24.36
 CLADOCERA						
EUBOSMINA LONGIROSTRIS	354	462	619	540	494	2.45
CHYDORUS SPHAERICUS	0	10	0	0	3	0.01
DAPHNIA GALEATA MENDOTAE	0	0	0	10	3	0.01
DAPHNIA LONGIREMIS	0	0	29	20	12	0.05
EUBOSMINA CUPEGONI	10	0	29	10	12	0.05
 TOTAL CLADOCERA	 364	 472	 677	 580	 524	 2.60
 ROTIFERA						
ROTIFERA	15355	13174	9284	5688	10875	53.97
ADDITIONAL ROTIFERA	15355	0	0	0	3839	19.05
 TOTAL ROTIFERA	 30710	 13174	 9284	 5688	 14714	 73.02
 TOTAL ZOOPLANKTON	 36812	 18225	 15393	 10150	 20148	

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Table 7 Results of zooplankton analyses, vertical tows from 3 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 11					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
FAUPLII	2810	3095	2564	2879	2837	31.16
CALANOID COPEPODITES	540	560	835	914	712	7.82
CYCLOPOID COPEPODITES	305	314	167	236	256	2.81
CYCLOPS BICUSPIDATUS THOMASI	10	20	49	39	30	0.32
DIAPTOMUS SPP. (FEMALE)	29	29	49	49	39	0.42
DIAPTOMUS ASPLANDI (MALE)	10	0	10	0	5	0.05
DIAPTOMUS MINUTUS (MALE)	0	0	20	10	8	0.08
EURYTOMERA AFFINIS	49	29	59	39	44	0.48
TROPPOCYCLOPS PRASINUS	177	177	69	39	116	1.27
TOTAL COPEPODA	3930	4224	3822	4205	4047	44.45
CLADOCERA						
BOSMINA LONGIROSTRIS	98	226	108	118	138	1.51
CHYDORUS SPHAERICUS	0	0	0	10	3	0.03
DAPHNIA LONGIREMIS	10	10	20	0	10	0.10
EUBOSMINA COREGONI	0	20	0	0	5	0.05
HOLOPENIUM GIBBERUM	0	0	0	10	3	0.03
TOTAL CLADOCERA	108	256	128	138	159	1.74
ROTIFERA						
ROTIFERA	5629	2888	5816	5256	4897	53.79
TOTAL ROTIFERA	5629	2888	5816	5256	4897	53.79
TOTAL ZOOPLANKTON	9667	7368	9766	9599	9103	

Table 7 Results of zooplankton analyses, vertical tows from 3 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 15					OCCUR- RENCE (%)
	REP.A	NC. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	3026	2476	2299	2741	2636	20.84
CALANOID COPEPODITES	1248	963	1061	1307	1145	9.05
CYCLOPOID COPEPODITES	383	413	216	383	349	2.75
CYCLOPS BICUSPIDATUS THOMASI	69	29	98	29	56	0.44
DIAPTOMUS SPP. (FEMALE)	20	10	10	0	10	0.07
DIAPTOMUS ASHLANDI (MALE)	10	0	0	0	3	0.02
DIAPTOMUS MINUTUS (MALE)	0	0	10	0	3	0.02
EURYTEMORA AFFINIS	0	0	10	10	5	0.03
TROPICOCYCLOPS PRASINUS	147	108	88	167	128	1.01
TOTAL COPEPODA	4903	3999	3792	4637	4335	34.27
CLADOCERA						
EUBOSMINA LONGIROSTRIS	138	147	108	295	172	1.36
DAPHNIA LONGIREMIS	0	0	10	10	5	0.03
EUBOSMINA COPECONI	0	0	0	10	3	0.02
TOTAL CLADOCERA	138	147	118	315	180	1.42
ROTIFERA						
ROTIFERA	5158	6297	12438	8636	8132	64.29
TOTAL ROTIFERA	5158	6297	12438	8636	8132	64.29
TOTAL ZOOPLANKTON	10199	10443	16348	13588	12647	

Table 7 Results of zooplankton analyses, vertical tows from 3 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 20					OCCUR- RANCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	3439	2456	3655	3311	3215	24.23
CALANOID COPEPODITES	1366	1248	1729	1405	1437	10.83
CYCLOPOID COPEPODITES	324	216	285	236	265	1.99
CYCLOPS BICUSPIDATUS THOMASI	20	29	118	59	57	0.42
DIAPTOMUS SPP. (FEMALE)	0	20	0	0	5	0.03
DIAPTOMUS ASHLANDI (MALE)	10	0	0	0	3	0.02
DIAPTOMUS MINUTUS (MALE)	0	0	0	20	5	0.03
EURYTEMORA AFFINIS	29	0	0	0	7	0.05
TROPIDOCYCLOPS PRASINUS	79	128	138	196	135	1.01
TOTAL COPEPODA	5267	4097	5925	5227	5129	38.65
CLADOCERA						
BUSHRINA LONGIROSTRIS	206	167	187	275	209	1.57
TOTAL CLADOCERA	206	167	187	275	209	1.57
ROTIFERA						
ROTIFERA	8695	5600	9196	8223	7929	59.76
TOTAL ROTIFERA	8695	5600	9196	8223	7929	59.76
TOTAL ZOOPLANKTON	14168	9864	15308	13725	13267	

TABLE 8 SUMMARY OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, SAMPLING LOCATIONS 2, 6, 11, 15, AND 20; LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, 26 MAY 1973

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	3183	21.29
CALANOID COPEPODITES	1135	7.59
CYCLOPOID COPEPODITES	337	2.25
CYCLOPS BICUSPIDATUS THOMASI	38	0.25
DIAPTOMUS SPP. (FEMALE)	14	0.09
DIAPTOMUS ASHLANDI (MALE)	4	0.02
DIAPTOMUS MINUTUS (MALE)	6	0.04
EURYTEMORA AFFINIS	14	0.09
PAPACYCLOPS FIMBRIATUS POPPEI	C*	0.00
TROPICOCYCLOPS PRASINUS	100	0.66
HARPACTICUIDA	C*	0.00
TOTAL COPEPODA	4832	32.32
CLADOCERA		
BOSMINA LONGIROSTRIS	267	1.78
CHYDORUS SPHAERICUS	1	0.00
DAPHNIA GALEATA MENDOTAE	2	0.01
DAPHNIA LONGIREMIS	5	0.03
EUBOSMINA COREGONI	9	0.06
HOLopedium GIBBERUM	C*	0.00
LEPTODERA KINDTII	C*	0.00
TOTAL CLADOCERA	285	1.90
ROTIFERA		
ROTIFERA	9064	60.63
ADDITIONAL ROTIFERA	768	5.13
TOTAL ROTIFERA	9832	65.76
TOTAL ZOOPLANKTON	14949	

* ORGANISM PRESENT IN DENSITIES LESS THAN ONE PER CUBIC METER

Table 9 Results of zooplankton analyses, vertical tows from 6 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 3

	NO. PER CUBIC METER				MEAN	OCCUR- FENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
DAPHNII	5963	6140	6916	7172	6549	19.74
CALANOID COPEPODITES	1366	1876	1759	1562	1641	4.94
CYCLOPOID COPEPODITES	1061	1228	1218	1366	1218	3.67
CYCLOPS BICUSPIDATUS THOMASI	20	20	0	29	17	0.05
DIAPYCNUS SPP. (FEMALE)	20	10	0	29	15	0.04
DIAPYCNUS ASHLANDI (MALE)	0	10	0	0	3	0.00
DIAPYCNUS MINUTUS (MALE)	10	0	0	0	3	0.00
TROPICOCYCLIPS PRASINUS	20	29	39	39	32	0.09
HARPACTICOIDA	10	0	0	0	3	0.00
TOTAL COPEPODA	8470	9313	9932	10197	9480	28.58
CLADOCERA						
DAPHNIA LONGIRESTRIS	521	393	393	403	428	1.29
DAPHNIA GALEATA TENUOTAE	0	0	10	0	3	0.00
DAPHNIA LONGIRESTRIS	10	10	10	20	13	0.03
EUBOSMINA COREGONI	10	39	29	39	29	0.08
TOTAL CLADOCERA	541	442	442	462	473	1.42
ROTIFERA						
ROTIFERA	19393	13086	12202	11436	14029	42.30
ADDITIONAL ROTIFERA	0	13086	12202	11436	9181	27.68
TOTAL ROTIFERA	19393	26172	24404	22872	23210	69.98
TOTAL ZOOPLANKTON	28404	35927	34778	33531	33163	

Table 9 Results of zooplankton analyses, vertical tows from 6 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 7					OCCUR- RENCE (%)
	REP. A	NO. PER CUBIC METER REP. B	REP. C	REP. D	MEAN	
COPEPODA						
DIAPYLLI	4617	4529	4323	5246	4679	18.89
CALANOID COPEPODITES	1238	1336	1149	1768	1373	5.54
CYCLOPOID COPEPODITES	462	491	639	521	521	2.10
CYCLOPS BICUSPIDATUS THOMASI	29	59	20	49	39	0.15
DIAPYLLUS SPP. (FEMALE)	20	0	20	10	13	0.05
DIAPYLLUS ASHLANDI (MALE)	0	10	0	10	5	0.02
DIAPYLLUS MINUTUS (MALE)	10	20	10	39	20	0.08
DIAPYLLUS OREGONENSIS (MALE)	0	0	10	20	8	0.03
DIAPYLLUS AFFINIS	0	10	0	0	3	0.01
TROPICOCYCLOPS PRASINUS	39	88	29	98	64	0.25
TOTAL COPEPODA	6415	6543	6170	7761	6725	27.15
CLADOCERA						
DAPHNIA LONGICORNIS	481	383	511	442	454	1.83
CHYDORUS SPHAERICUS	0	0	0	20	5	0.02
DAPHNIA GALEATA MENDOTAE	0	10	0	10	5	0.02
DAPHNIA COREGONI	0	69	39	10	30	0.12
TOTAL CLADOCERA	481	462	550	482	494	1.99
ROTIFERA						
ROTIFERA	17419	9697	14766	18598	15120	61.05
ADDITIONAL ROTIFERA	0	9697	0	0	2424	9.78
TOTAL ROTIFERA	17419	19394	14766	18598	17544	70.84
TOTAL ZOOPLANKTON	24315	26399	21486	26841	24763	

Table 9 Results of zooplankton analyses, vertical tows from 6 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 12					OCCUR- FENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
CAUPELII	2486	2633	2034	2633	2447	19.78
CALANOID COPEPODITES	570	531	393	472	492	3.97
CYCLOPOID COPEPODITES	265	196	108	196	191	1.54
CYCLOPS BICUSPIDATUS THOMASI	29	10	10	20	17	0.13
DIAPYCNUS SPP. (FEMALE)	118	49	49	79	74	0.59
DIAPYCNUS MINUTUS (MALE)	10	10	0	0	5	0.04
EURYTHEREA AFFINIS	0	0	0	29	7	0.05
TROPICOCYCLUS PRASINUS	88	79	39	29	59	0.47
TOTAL COPEPODA	3566	3508	2633	3458	3292	26.61
CLADOCERA						
POHODIA LONGIROSTRIS	108	206	79	98	123	0.99
DAPHNIA LONGIRENIS	0	0	10	10	5	0.04
EURYSMINA COREGONI	39	10	0	0	12	0.09
TOTAL CLADOCERA	147	216	89	108	140	1.13
ROTIFERA						
ROTIFERA	8636	10080	6042	10993	8938	72.25
TOTAL ROTIFERA	8636	10080	6042	10993	8938	72.25
TOTAL ZOOPLANKTON	12349	13804	8764	14559	12370	

Table 9. Results of zooplankton analyses, vertical tows from 6 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 16					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	6160	5158	4755	4038	5028	15.62
CALANOID COPEPODITES	1601	1218	1199	1238	1314	4.08
CYCLOPOID COPEPODITES	481	442	305	344	393	1.22
CYCLOPS BICUSPIDATUS THOMASI	79	59	39	20	49	0.15
CYCLOPS VERNALIS	10	0	0	0	3	0.00
DIAPYCNUS SPP. (FEMALE)	59	0	0	20	20	0.06
DIAPYCNUS MINUTUS (MALE)	0	20	0	0	5	0.01
DIAPYCNUS OREGONENSIS (MALE)	10	0	0	0	3	0.00
TROPICOCYCLUS PRASINUS	79	49	10	20	40	0.12
TOTAL COPEPODA	8479	6946	6308	5680	6855	21.30
CLADOCERA						
BOUSHINA LONGIRESTRIS	295	255	128	196	219	0.68
CHYDORUS SPHAERICUS	10	0	0	0	3	0.00
DAFANIA LONGIRESTRIS	20	0	10	0	8	0.02
BOUSHINA COREONI	0	10	0	10	5	0.01
TOTAL CLADOCERA	325	265	138	206	235	0.73
ROTIFERA						
ROTIFERA	18814	11996	12251	14206	14317	44.49
ADDITIONAL ROTIFERA	18823	11996	12271	0	10773	33.47
TOTAL ROTIFERA	37637	23992	24522	14206	25090	77.96
TOTAL ZOOPLANKTON	46441	31203	30968	20092	32180	

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Table 9 Results of zooplankton analyses, vertical tows from 6 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 21					OCCUR- FENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	4951	5413	5060	5325	5187	19.00
CALANOID COPEPODITES	1709	2063	1975	1945	1923	7.04
CYCLOPOID COPEPODITES	511	364	452	442	442	1.61
CYCLOPS FICUSPIDATUS THOMASI	88	79	59	118	86	0.31
DIAPTOMUS SPP. (FEMALE)	20	10	49	20	25	0.09
DIAPTOMUS ASHLANDI (MALE)	0	20	20	0	10	0.03
DIAPTOMUS MINUTUS (MALE)	29	10	20	0	15	0.05
TROPICOCYCLOPS PRASINUS	59	49	59	49	54	0.19
HARPACTICOIDA	0	10	0	0	3	0.01
TOTAL COPEPODA	7367	8018	7694	7899	7745	28.37
CLADOCERA						
BUSMIA LONGIROSTRIS	246	314	255	255	268	0.98
DAPHNIA LONGIREMIS	0	10	0	0	3	0.01
BUSMIA COREGONI	39	0	0	0	10	0.03
TOTAL CLADOCERA	285	324	255	255	281	1.02
ROTIFERA						
ROTIFERA	14353	12497	18126	9795	13693	50.16
ADDITIONAL ROTIFERA	0	12497	0	9805	5576	20.42
TOTAL ROTIFERA	14353	24994	18126	19600	19269	70.59
TOTAL ZOOPLANKTON	22005	33336	26075	27754	27295	

TABLE 10. SUMMARY OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, SAMPLING LOCATIONS 3, 7, 12, 16, AND 21; LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, 26 MAY 1973

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	4778	18.40
CALANOID COPEPODITES	1349	5.19
CYCLOPID COPEPODITES	553	2.13
CYCLOPS BICUSPIDATUS THOMASI	42	0.16
CYCLOPS VERNALIS	0*	0.00
DIAPYCNUS SPP. (FEMALE)	29	0.11
DIAPYCNUS ASHLANDI (MALE)	4	0.01
DIAPYCNUS MINUTUS (MALE)	10	0.03
DIAPYCNUS DREGENSIS (MALE)	2	0.00
EURYTEMORA AFFINIS	2	0.00
TROPYCYCLOPS PRASINUS	50	0.19
HARPACTICOIDA	1	0.00
TOTAL COPEPODA	6820	26.27
CLADOCERA		
BOSMINA LONGIROSTRIS	298	1.14
CHYDORUS SPHAERICUS	2	0.00
MACRHYTHA GALEATA MENDOTAE	2	0.00
MACRHYTHA LONGIROSTRIS	6	0.02
BOSMINA COREGONI	17	0.06
TOTAL CLADOCERA	325	1.25
ROTIFERA		
ROTIFERA	13219	50.92
ADDITIONAL ROTIFERA	5591	21.54
TOTAL ROTIFERA	18810	72.46
TOTAL ZOOPLANKTON	25955	

* ORGANISM PRESENT IN DENSITIES LESS THAN ONE PER CUBIC METER

Table 11 Results of zooplankton analyses, vertical tows from 9 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 4					OCCUR- RENCE (%)
	NO. PER CUBIC METER					
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
MALPLII	6078	5567	5895	5541	5770	18.77
CALANOID COPEPODITES	1336	1140	1153	1231	1215	3.95
CYCLOPOID COPEPODITES	1611	1454	1624	1231	1480	4.81
CYCLOPS BICUSPIDATUS THOMASI	79	79	105	65	82	0.26
DIAPTOMUS SPP. (FEMALE)	79	52	52	65	62	0.20
DIAPTOMUS ASHLANDI (MALE)	0	13	0	0	3	0.00
DIAPTOMUS MINUTUS (MALE)	26	13	0	0	10	0.03
DIAPTOMUS OREGONENSIS (MALE)	0	0	0	39	10	0.03
EURYTEMORA AFFINIS	0	13	0	0	3	0.00
TROPICOCYCLOPS PRASINUS	26	26	13	13	20	0.06
TOTAL COPEPODA	9235	8357	8842	8185	8655	28.15
CLADOCERA						
BOSMINA LONGIROSTRIS	576	472	236	380	416	1.35
DAPHNIA GALEATA MENDOTAE	13	0	0	13	7	0.02
DAPHNIA LONGIREMIS	0	13	26	13	13	0.04
EUBOSMINA COREGONI	26	65	39	26	39	0.12
TOTAL CLADOCERA	615	550	301	432	475	1.54
ROTIFERA						
ROTIFERA	20985	24011	24653	16780	21607	70.29
TOTAL ROTIFERA	20985	24011	24653	16780	21607	70.29
TOTAL ZOOPLANKTON	30835	32918	33796	25397	30737	

Table 11. Results of zooplankton analyses, vertical tows from 9 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 8

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	6419	6013	6759	6694	6471	28.60
CALANOID COPEPODITES	1624	1637	1821	1703	1696	7.49
CYCLOPOID COPEPODITES	1153	878	1140	891	1016	4.49
CYCLOPS BICUSPIDATUS THOMASI	39	13	52	79	46	0.20
DIAPTOMUS SPP. (FEMALE)	13	39	26	39	29	0.12
DIAPTOMUS ASHLANDI (MALE)	0	13	13	0	7	0.03
DIAPTOMUS MINUTUS (MALE)	0	39	26	13	20	0.08
TROPPOCYCLOPS PRASINUS	105	79	79	65	82	0.36
TOTAL COPEPODA	9353	8711	9916	9484	9367	41.40
CLADOCERA						
BOSMINA LONGIROSTRIS	223	262	288	458	308	1.36
DAPHNIA LONGIREMIS	0	0	13	13	7	0.03
EUBOSMINA COREGONI	13	52	13	26	26	0.11
TOTAL CLADOCERA	236	314	314	497	341	1.50
ROTIFERA						
ROTIFERA	9864	12798	15902	13086	12913	57.08
TOTAL ROTIFERA	9864	12798	15902	13086	12913	57.08
TOTAL ZOOPLANKTON	19453	21823	26132	23067	22621	

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Table 11 Results of zooplankton analyses, vertical tows from 9 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 22					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	7938	9955	9183	8449	8881	37.21
CALANOID COPEPODITES	2174	2528	2345	2607	2414	10.11
CYCLOPOID COPEPODITES	747	1113	694	996	888	3.72
CYCLOPS BICUSPIDATUS THOMASI	52	26	26	39	36	0.15
DIAPTOMUS SPP. (FEMALE)	52	92	13	118	69	0.28
DIAPTOMUS ASHLANDI (MALE)	0	26	26	13	16	0.06
DIAPTOMUS MINUTUS (MALE)	13	13	52	13	23	0.09
DIAPTOMUS OREGONENSIS (MALE)	0	0	0	13	3	0.01
EURYTEMORA AFFINIS	0	0	0	13	3	0.01
TROPIDOCYCLOPS PRASINUS	13	13	52	13	23	0.09
TOTAL COPEPODA	10989	13766	12391	12274	12356	51.77
CLADOCERA						
POSMINA LONGIROSTRIS	249	105	157	236	187	0.78
DAPHNIA GALEATA MENDOTAE	0	0	13	0	3	0.01
DAPHNIA LONGIREMIS	13	0	13	13	10	0.04
EUBOSMINA COREGONI	0	13	0	0	3	0.01
TOTAL CLADOCERA	262	118	183	249	203	0.85
ROTIFERA						
ROTIFERA	8803	11593	13597	11239	11308	47.37
TOTAL ROTIFERA	8803	11593	13597	11239	11308	47.37
TOTAL ZOOPLANKTON	20054	25477	26171	23762	23867	

Table 11 Results of zooplankton analyses, vertical tows from 9 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 17

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	11187	7519	8501	11121	9582	37.22
CALANOID COPEPODITES	3720	2659	3000	3091	3118	12.11
CYCLOPOID COPEPODITES	1231	891	1100	1113	1084	4.21
CYCLOPS BICUSPIDATUS THOMASI	92	13	92	39	59	0.22
DIAPTOMUS SPP. (FEMALE)	52	26	0	13	23	0.08
DIAPTOMUS ASHLANDI (MALE)	39	0	0	0	10	0.03
DIAPTOMUS MINUTUS (MALE)	13	0	0	13	7	0.02
TROPIDOCYCLOPS PRASINUS	65	26	13	39	36	0.13
TOTAL COPEPODA	16399	11134	12706	15429	13919	54.07
CLADOCERA						
ALONA CUTTATA	0	0	0	13	3	0.01
POSMINA LONGIROSTRIS	262	262	196	170	223	0.86
CHYDORUS SPHAERICUS	0	0	13	0	3	0.01
DAPHNIA LONGIRENIS	0	13	0	13	7	0.02
EUBOSMINA COREGONI	13	0	79	39	33	0.12
TOTAL CLADOCERA	275	275	288	235	269	1.04
ROTIFERA						
ROTIFERA	13047	8921	10676	13558	11551	44.87
TOTAL ROTIFERA	13047	8921	10676	13558	11551	44.87
TOTAL ZOOPLANKTON	29721	20330	23670	29222	25739	

Table 11 Results of zooplankton analyses, vertical tows from 9 meters to the surface, Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 13					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII						
CALANOID COPEPODITES	3301	3602	3681	3812	3599	14.15
CYCLOPOID COPEPODITES	681	563	589	681	629	2.47
CYCLOPS RICUSPIDATUS THOMASI	432	576	537	367	478	1.87
DIAPTOMUS SPP. (FEMALE)	52	92	39	92	69	0.27
DIAPTOMUS MINUTUS (MALE)	65	39	52	39	49	0.19
DIAPTOMUS OREGONENSIS (MALE)	13	0	52	13	20	0.07
TROPICOCYCLOPS PRASINUS	0	13	0	0	3	0.01
	118	92	79	105	99	0.38
TOTAL COPEPODA	4662	4977	5029	5109	4946	19.44
CLADOCERA						
BOSMINA LONGIROSTRIS	196	105	131	92	131	0.51
CHYDORUS SPHAERICUS	0	0	13	0	3	0.01
DAPHNIA GALEATA PENDOTAE	0	0	0	13	3	0.01
DAPHNIA LONGIREMIS	0	0	13	0	3	0.01
EUROSHINA COREGONI	26	52	26	0	26	0.10
HOLOPEDIUM GIBBERUM	0	0	0	13	3	0.01
TOTAL CLADOCERA	222	157	183	118	169	0.66
ROTIFERA						
ROTIFERA	18457	23985	15719	23107	20317	79.88
TOTAL ROTIFERA	18457	23985	15719	23107	20317	79.88
TOTAL ZOOPLANKTON	23341	29119	20931	28334	25432	

TABLE 12 SUMMARY OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, SAMPLING LOCATIONS 4, 8, 13, 17, AND 22; LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, 26 MAY 1973

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	6861	26.72
CALANOID COPEPODITES	1814	7.06
CYCLOPOID COPEPODITES	989	3.85
CYCLOPS BICUSPIDATUS THOMASI	58	0.22
DIAPTOMUS SPP. (FEMALE)	46	0.17
DIAPTOMUS ASHLANDI (MALE)	7	0.02
DIAPTOMUS MINUTUS (MALE)	16	0.06
DIAPTOMUS DREGONENSIS (MALE)	3	0.01
EURYTEMORA AFFINIS	1	0.00
TROPICOCYCLOPS PRASINUS	52	0.20
TOTAL COPEPODA	9847	38.34
CLADOCERA		
ALONA CUTTATA	0*	0.00
BOSMINA LONGIROSTRIS	253	0.98
CHYDORUS SP. AERICUS	1	0.00
DAPHNIA GALEATA MENDOTAE	3	0.01
DAPHNIA LONGIREMIS	8	0.03
EUBOSMINA COREGONI	25	0.09
HOLUPEDIUM GIBBERUM	0*	0.00
TOTAL CLADOCERA	291	1.13
ROTIFERA		
ROTIFERA	15539	60.51
TOTAL ROTIFERA	15539	60.51
TOTAL ZOOPLANKTON	25677	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 13. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 2

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	736	170	736	141	446	18.99
CALANOID COPEPODITES	1056	472	1169	368	766	32.62
CYCLOPOID COPEPODITES	613	189	415	104	330	14.05
CYCLOPS BICUSPIDATUS THOMASI	113	0	38	0	38	1.61
DIAPTOMUS SPP. (FEMALE)	19	0	19	0	10	0.42
DIAPTOMUS ASHLANDI (MALE)	19	0	0	0	5	0.21
TROPOCYCLOPS PRASINUS MEXICANUS	9	0	0	0	2	0.08
TOTAL COPEPODA	2565	831	2377	613	1597	68.01
CLADOCERA						
BOSMINA LONGIROSTRIS	783	226	434	57	375	15.97
DAPHNIA LONGIREMIS	66	47	66	28	52	2.21
EUBOSMINA COREGONI	9	0	9	0	5	0.21
TOTAL CLADOCERA	858	273	509	85	432	18.39
ROTIFERA						
ROTIFERA	736	141	274	123	319	13.58
TOTAL ROTIFERA	736	141	274	123	319	13.58
TOTAL ZOOPLANKTON	4159	1245	3160	821	2348	

TABLE 13 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 6

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	2848	2216	1764	2612	2360	28.85
CALANOID COPEPODITES	4933	2499	2518	2792	3186	38.95
CYCLOPOID COPEPODITES	953	472	500	453	595	7.27
CYCLOPS BICUSPIDATUS THOMASI	189	9	19	47	66	0.80
DIAPTOMUS SPP. (FEMALE)	38	19	9	0	17	0.20
DIAPTOMUS SICILIS (MALE)	0	9	0	0	2	0.02
HARPACTICOIDA	19	0	0	0	5	0.06
TOTAL COPEPODA	8980	5224	4810	5904	6231	76.19
CLADOCERA						
BOSMINA LONGIROSTRIS	1320	670	773	613	844	10.32
CHYDORUS SPHAERICUS	9	0	0	0	2	0.02
DAPHNIA LONGIREMIS	113	28	113	66	80	0.97
EUBOSMINA COREGONI	0	0	0	9	2	0.02
TOTAL CLADOCERA	1442	698	886	688	928	11.34
ROTIFERA						
ROTIFERA	1169	1066	1019	821	1019	12.46
TOTAL ROTIFERA	1169	1066	1019	821	1019	12.46
TOTAL ZOOPLANKTON	11591	6988	6715	7413	8178	

TABLE 13 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 26 JUNE 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 11

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	3310	1603	1537	1792	2061	30.14
CALANOID COPEPODITES	3527	1132	1556	1434	1912	27.96
CYCLOPOID COPEPODITES	472	462	302	481	429	6.27
CYCLOPS BICUSPIDATUS THOMASI	207	38	94	28	92	1.34
DIAPTOMUS SPP. (FEMALE)	170	0	9	0	45	0.65
DIAPTOMUS ASHLANDI (MALE)	0	0	9	0	2	0.02
HARPACTICOIDA	47	0	47	28	31	0.45
TOTAL COPEPODA	7733	3235	3554	3763	4572	66.88
CLADOCERA						
BOSMINA LONGIROSTRIS	1236	830	575	660	825	12.06
CHYDORUS SPHAERICUS	66	0	38	47	38	0.55
DAPHNIA LONGIREMIS	274	9	94	47	106	1.55
EUBOSMINA COREGONI	75	0	0	0	19	0.27
TOTAL CLADOCERA	1651	839	707	754	988	14.45
ROTIFERA						
ROTIFERA	2330	839	962	971	1276	18.66
TOTAL ROTIFERA	2330	839	962	971	1276	18.66
TOTAL ZOOPLANKTON	11714	4913	5223	5488	6836	

TABLE 13. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 15					OCCUR- RENCE (%)
	NO. PER CUBIC METER					
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1830	2150	2198	1726	1976	38.27
CALANOID COPEPODITES	1754	1877	1754	1452	1709	33.10
CYCLOPOID COPEPODITES	302	311	330	264	302	5.85
CYCLOPS BICUSPIDATUS THOMASI	19	19	19	19	19	0.36
DIAPTOMUS SPP. (FEMALE)	9	28	28	9	19	0.36
TOTAL COPEPODA	3914	4385	4329	3470	4025	77.97
CLADOCERA						
BIOSMINA LONGIROSTRIS	358	377	519	556	453	8.77
CERIODAPHNIA QUADRANGULA	0	0	19	0	5	0.09
DAPHNIA LONGIREMIS	28	19	85	57	47	0.91
BIOSMINA COREONI	0	9	19	0	7	0.13
TOTAL CLADOCERA	386	405	642	613	512	9.91
ROTIFERA						
ROTIFERA	622	594	651	632	625	12.10
TOTAL ROTIFERA	622	594	651	632	625	12.10
TOTAL ZOOPLANKTON	4922	5384	5622	4715	5162	

TABLE 13 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 26 JUNE 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 20					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII						
CALANOID COPEPODITES	868	509	679	613	667	29.29
CYCLOPOID COPEPODITES	490	255	292	283	330	14.49
CYCLOPS BICUSPIDATUS THOMASI	47	75	75	38	59	2.59
DIAPTOMUS SPP. (FEMALE)	19	9	19	0	12	0.52
DIAPTOMUS ASHLANDI (MALE)	0	0	19	0	5	0.21
	9	9	9	0	7	0.30
TOTAL COPEPODA	1433	857	1093	934	1080	47.43
CLADOCERA						
BOSMINA LONGIROSTRIS	236	160	255	189	210	9.22
CHYDORUS SPHAERICUS	19	0	0	9	7	0.30
DAPHNIA LONGIREMIS	0	19	0	9	7	0.30
EUBOSMINA COREGONI	0	0	9	0	2	0.08
TOTAL CLADOCERA	255	179	264	207	226	9.92
ROTIFERA						
ROTIFERA	1971	613	622	679	971	42.64
TOTAL ROTIFERA	1971	613	622	679	971	42.64
TOTAL ZOOPLANKTON	3659	1649	1979	1820	2277	

TABLE 13 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	1502	30.28
CALANOID COPEPODITES	1581	31.88
CYCLOPOID COPEPODITES	343	6.91
CYCLOPS BICUSPIDATUS THOMASI	45	0.90
DIAPTOMUS SPP. (FEMALE)	19	0.38
DIAPTOMUS ASHLANDI (MALE)	3	0.06
DIAPTOMUS SICILIS (MALE)	0*	0.00
TROPICOCYCLOPS PRASINUS MEXICANUS	0*	0.00
HARPACTICOIDA	7	0.14
TOTAL COPEPODA	3500	70.59
CLADOCERA		
BOSMINA LONGIROSTRIS	541	10.90
CERIODAPHNIA QUADRANGULA	1	0.02
CHYDORUS SPHAERICUS	9	0.18
DAPHNIA LONGIREMIS	58	1.16
EUBOSMINA COREGONI	7	0.14
TOTAL CLADOCERA	616	12.42
ROTIFERA		
ROTIFERA	842	16.97
TOTAL ROTIFERA	842	16.97
TOTAL ZOOPLANKTON	4958	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 14 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 3					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1100	835	432	403	693	27.26
CALANOID COPEPODITES	1508	1213	845	604	1043	41.03
CYCLOPOIC COPEPODITES	309	393	147	128	244	9.59
CYCLOPS BICUSPIDATUS THOMASI	5	5	0	20	8	0.31
DIAPTOMUS SPP. (FEMALE)	15	10	15	10	13	0.51
DIAPTOMUS ASHLANDI (MALE)	5	0	0	0	1	0.03
TOTAL COPEPODA	2942	2456	1439	1165	2002	78.75
CLADOCERA						
BOSMINA LONGIROSTRIS	476	383	368	128	339	13.33
DAPHNIA LONGIREMIS	20	10	5	5	10	0.39
EUBOSMINA COREGONI	0	0	5	0	1	0.03
TOTAL CLADOCERA	496	393	378	133	350	13.76
ROTIFERA						
ROTIFERA	432	147	59	123	190	7.47
TOTAL ROTIFERA	432	147	59	123	190	7.47
TOTAL ZOOPLANKTON	3870	2996	1876	1421	2542	

TABLE 14. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 7

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	4617	3836	3871	3630	3989	28.10
CALANOID COPEPODITES	5261	5787	4976	4318	5086	35.83
CYCLOPOID COPEPODITES	2314	2304	1744	1415	1944	13.69
CYCLOPS BICUSPIDATUS THOMASI	177	177	138	152	161	1.13
DIAPTOMUS SPP. (FEMALE)	147	167	54	98	117	0.82
DIAPTOMUS ASHLANDI (MALE)	25	49	44	84	51	0.35
DIAPTOMUS MINUTUS (MALE)	0	0	0	5	1	0.00
EURYTOMORA AFFINIS	0	0	0	10	3	0.02
TOTAL COPEPODA	12541	12320	10827	9712	11352	79.99
CLADOCERA						
DUBOSHINA LONGIROSTRIS	865	943	889	698	849	5.98
DUBOSHINA LONGIREMIS	226	231	84	98	160	1.12
DUBOSHINA COREGONI	15	34	0	34	21	0.14
TOTAL CLADOCERA	1106	1208	973	830	1030	7.25
ROTIFERA						
ROTIFERA	1434	1876	2191	1734	1809	12.74
TOTAL ROTIFERA	1434	1876	2191	1734	1809	12.74
TOTAL ZOOPLANKTON	15081	15404	13991	12276	14191	

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TABLE 14 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 12

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	4288	5521	2648	4603	4265	22.50
CALANOID COPEPODITES	11706	7805	5295	7511	8079	42.63
CYCLOPOID COPEPODITES	3036	2456	1238	3389	2530	13.35
CYCLOPS BICUSPIDATUS THOMASI	187	255	123	231	199	1.05
DIAPTOMUS SPP. (FEMALE)	118	177	103	216	154	0.81
DIAPTOMUS ASHLANDI (MALE)	270	54	69	162	139	0.73
DIAPTOMUS MINUTUS (MALE)	0	0	0	5	1	0.00
DIAPTOMUS SICILIS (MALE)	0	0	0	5	1	0.00
EUCYCLOPS AGILIS	0	5	0	0	1	0.00
TOTAL COPEPODA	19605	16273	9476	16122	15369	81.11
CLADOCERA						
BOSMINA LONGIROSTRIS	997	928	683	899	877	4.62
CHYDORUS SPHAERICUS	0	0	5	5	3	0.01
DAPHNIA GALEATA MENDOTAE	0	10	0	15	6	0.03
DAPHNIA LONGIREMIS	290	368	226	314	300	1.58
EUBOSMINA COREGONI	0	25	0	74	25	0.13
TOTAL CLADOCERA	1287	1331	914	1307	1211	6.39
ROTIFERA						
ROTIFERA	2245	3719	1385	2122	2368	12.49
TOTAL ROTIFERA	2245	3719	1385	2122	2368	12.49
TOTAL ZOOPLANKTON	23137	21323	11775	19551	18948	

TABLE 14 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE
SURFACE , LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 16					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	6317	5664	3247	6553	5445	36.62
CALANOID COPEPODITES	6135	5600	3999	5074	5202	34.99
CYCLOPOID COPEPODITES	1036	855	506	1208	901	6.06
CYCLOPS BICUSPIDATUS THOMASI	88	79	34	79	70	0.47
DIAPTOMUS SPP. (FEMALE)	84	25	88	25	56	0.37
DIAPTOMUS ASHLANDI (MALE)	64	49	54	20	47	0.31
TOTAL COPEPODA	13724	12272	7928	12959	11721	78.84
CLADOCERA						
BOSMINA LONGIROSTRIS	702	722	427	914	691	4.64
CHYDORUS SPHAERICUS	0	5	0	0	1	0.00
DAPHNIA GALEATA MENOOTAE	0	10	10	0	5	0.03
DAPHNIA LONGIREMIS	280	84	29	64	114	0.76
EUBOSMINA COREGONI	0	0	0	10	3	0.02
TOTAL CLADOCERA	982	821	466	988	814	5.47
ROTIFERA						
ROTIFERA	2294	2800	1159	3065	2330	15.67
TOTAL ROTIFERA	2294	2800	1159	3065	2330	15.67
TOTAL ZOOPLANKTON	17000	15893	9553	17012	14865	

TABLE 14. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 21

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	12118	10340	12177	7324	10490	47.97
CALANOID COPEPODITES	5772	6671	6366	3777	5647	25.82
CYCLOPOID COPEPODITES	1690	1857	2186	992	1681	7.68
CYCLOPS BICUSPIDATUS THOMASI	108	69	187	59	106	0.48
DIAPTOMUS SPP. (FEMALE)	152	187	216	93	162	0.74
DIAPTOMUS ASHLANDI (MALE)	162	98	84	39	96	0.43
DIAPTOMUS MINUTUS (MALE)	0	34	49	5	22	0.10
TROPIDOCYCLOPS PRASINUS MEXICANUS	0	5	0	0	1	0.00
 TOTAL COPEPODA	 20002	 19261	 21265	 12289	 18205	 83.26
 CLADOCERA						
BOSMINA LONGIROSTRIS	531	639	624	398	548	2.50
CHYDORUS SPHAERICUS	0	0	10	10	5	0.02
DAPHNIA LONGIREMIS	187	206	196	128	179	0.81
EUBOSMINA COREGONI	0	34	10	10	14	0.06
 TOTAL CLADOCERA	 718	 879	 840	 546	 746	 3.41
 ROTIFERA						
ROTIFERA	2657	3006	3227	2761	2913	13.32
 TOTAL ROTIFERA	 2657	 3006	 3227	 2761	 2913	 13.32
 TOTAL ZOOPLANKTON	 23377	 23146	 25332	 15596	 21864	

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TABLE 14 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	4976	34.35
CALANGID COPEPODITES	5011	34.60
CYCLOPOID COPEPODITES	1460	10.08
CYCLOPS BICUSPIDATUS THOMASI	109	0.75
DIAPTOMUS SPP. (FEMALE)	100	0.69
DIAPTOMUS ASHLANDI (MALE)	67	0.46
DIAPTOMUS MINUTUS (MALE)	5	0.03
DIAPTOMUS SICILIS (MALE)	C*	0.00
EUCYCLOPS AGILIS	C*	0.00
EURYTEMORA AFFINIS	C*	0.00
TROPOCYCLOPS PRASINUS MEXICANUS	D*	0.00
TOTAL COPEPODA	11729	80.99
CLADOCERA		
BOSMINA LONGIROSTRIS	661	4.56
CHYDORUS SPHAERICUS	2	0.01
DAPHNIA GALEATA MENDOTAE	2	0.01
DAPHNIA LONGIREMIS	153	1.05
EUBOSMINA COREGONI	13	0.08
TOTAL CLADOCERA	831	5.73
ROTIFERA		
ROTIFERA	1922	13.27
TOTAL ROTIFERA	1922	13.27
TOTAL ZOOPLANKTON	14482	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 14 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 4					
	REP.A	REP.B	REP.C	REP.D	MEAN	OCCUR- RENCE (%)
COPEPODA						
NAUPLII	3065	1690	1454	1179	1847	21.53
CALANOID COPEPODITES	3340	2436	1690	1533	2250	26.23
CYCLOPOID COPEPODITES	1375	1572	1336	1179	1366	15.92
CYCLOPS BICUSPIDATUS THOMASI	511	354	196	236	324	3.77
DIAPTOMUS SPP. (FEMALE)	157	236	196	79	167	1.94
DIAPTOMUS ASHLANDI (MALE)	39	0	39	0	20	0.23
DIAPTOMUS MINUTUS (MALE)	0	39	0	0	10	0.11
TOTAL COPEPODA	8487	6327	4911	4206	5984	69.76
CLADOCERA						
BOSMINA LONGIROSTRIS	943	982	747	1375	1012	11.79
DAPHNIA LONGIREMIS	118	39	39	157	88	1.02
TOTAL CLADOCERA	1061	1021	786	1532	1100	12.82
ROTIFERA						
ROTIFERA	2476	1179	1336	982	1493	17.40
TOTAL ROTIFERA	2476	1179	1336	982	1493	17.40
TOTAL ZOOPLANKTON	12024	8527	7033	6720	8577	

TABLE 15. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

ORGANISM PROJECT NO: W3208
SAMPLING LOCATION 8

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	5423	4755	6209	5934	5580	29.09
CALANOID COPEPODITES	5462	4834	5344	6445	5521	28.78
CYCLOPOID COPEPODITES	2201	3065	3222	3419	2977	15.52
CYCLOPS BICUSPIDATUS THOMASI	511	275	314	354	364	1.89
DIAPTOMUS SPP. (FEMALE)	196	393	314	393	324	1.68
DIAPTOMUS ASHLANDI (MALE)	79	157	196	157	147	0.76
TOTAL COPEPODA	13872	13479	15599	16702	14913	77.76
CLADOCERA						
BOSMINA LONGIROSTRIS	982	786	786	1100	914	4.76
DAPHNIA LONGIREMIS	354	39	314	236	236	1.23
DAPHNIA SPP.	0	0	0	39	10	0.05
EUBOSMINA COREGONI	0	39	39	0	20	0.10
TOTAL CLADOCERA	1336	864	1139	1375	1180	6.15
ROTIFERA						
ROTIFERA	2397	3890	2751	3301	3085	16.08
TOTAL ROTIFERA	2397	3890	2751	3301	3085	16.08
TOTAL ZOOPLANKTON	17605	18233	19489	21378	19178	

TABLE 15. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 13

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	9038	6130	6641	6916	7181	34.15
CALANOID COPEPODITES	7899	6681	6877	6405	6966	33.13
CYCLOPOID COPEPODITES	2201	1690	1611	2515	2004	9.53
CYCLOPS BICUSPIDATUS THOMASI	314	196	472	236	305	1.45
DIAPTOMUS SPP. (FEMALE)	157	118	39	275	147	0.69
DIAPTOMUS ASHLANDI (MALE)	236	196	39	39	128	0.60
DIAPTOMUS MINUTUS (MALE)	0	39	0	0	10	0.04
 TOTAL COPEPODA	 19845	 15050	 15679	 16386	 16741	 79.62
 CLADOCERA						
BOSMINA LONGIROSTRIS	865	904	825	668	816	3.88
CHYDORUS SPHAERICUS	0	0	39	0	10	0.04
DAPHNIA LONGIREMIS	432	354	196	275	314	1.49
DAPHNIA RETROCURVA	0	39	0	0	10	0.04
EUBOSMINA COREGONI	157	39	79	0	69	0.32
 TOTAL CLADOCERA	 1454	 1336	 1139	 943	 1219	 5.79
 ROTIFERA						
ROTIFERA	4283	2436	2476	3065	3065	14.57
 TOTAL ROTIFERA	 4283	 2436	 2476	 3065	 3065	 14.57
 TOTAL ZOOPLANKTON	 25582	 18822	 19294	 20394	 21025	

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TABLE 15 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 17

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	13125	10807	9706	7506	10286	38.00
CALANOID COPEPODITES	11239	8921	8606	6838	8901	32.88
CYCLOPOID COPEPODITES	5384	3930	4834	3262	4353	16.08
CYCLOPS BICUSPIDATUS THOMASI	589	354	786	668	599	2.21
CYCLOPS VERNALIS	0	0	39	0	10	0.03
DIAPTOMUS SPP. (FEMALE)	157	236	904	589	472	1.74
DIAPTOMUS ASHLANDI (MALE)	393	0	157	79	157	0.58
DIAPTOMUS MINUTUS (MALE)	0	0	79	118	49	0.18
DIAPTOMUS OREGONENSIS (MALE)	0	39	0	0	10	0.03
TOTAL COPEPODA	30887	24287	25111	19060	24837	91.75
CLADOCERA						
BOSMINA LONGIROSTRIS	589	943	393	825	688	2.54
DAPHNIA LONGIREMIS	275	393	79	118	216	0.79
EUBOSMINA COREGONI	0	39	79	0	30	0.11
TOTAL CLADOCERA	864	1375	551	943	934	3.45
ROTIFERA						
ROTIFERA	2397	1415	747	629	1297	4.79
TOTAL ROTIFERA	2397	1415	747	629	1297	4.79
TOTAL ZOOPLANKTON	34148	27077	26409	20632	27068	

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TABLE 15 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 22					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	24443	20749	19924	21889	21751	41.06
CALANOID COPEPODITES	23146	16112	17959	20356	19393	36.60
CYCLOPOID COPEPODITES	7545	6798	5855	7270	6867	12.96
CYCLOPS BICUSPIDATUS THOMASI	865	275	472	393	501	0.94
DIAPTOMUS SPP. (FEMALE)	1100	432	275	550	589	1.11
DIAPTOMUS ASHLANDI (MALE)	196	354	314	196	265	0.50
LIMNOCALANUS MACRURUS	39	0	0	0	10	0.01
TOTAL COPEPODA	57334	44720	44799	50654	49376	93.20
CLADOCERA						
BOISMIA LONGIROSTRIS	1768	354	314	314	688	1.29
DAPHNIA LONGIREMIS	79	236	79	236	158	0.29
EUBOISMIA COREGONI	0	0	39	39	20	0.03
TOTAL CLADOCERA	1847	590	432	589	866	1.63
ROTIFERA						
ROTIFERA	3812	2161	2712	2240	2731	5.15
TOTAL ROTIFERA	3812	2161	2712	2240	2731	5.15
TOTAL ZOOPLANKTON	62993	47471	47943	53483	52973	

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TABLE 15. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
26 JUNE 1973

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	9329	36.20
CALANOID COPEPODITES	8606	33.40
CYCLOPOID COPEPODITES	3513	13.63
CYCLOPS BICUSPIDATUS THOMASI	419	1.62
CYCLOPS VERNALIS	2	0.00
DIAPTOMUS SPP. (FEMALE)	340	1.31
DIAPTOMUS ASHLANDI (MALE)	143	0.55
DIAPTOMUS MINUTUS (MALE)	14	0.05
DIAPTOMUS OREGONENSIS (MALE)	2	0.00
LIMNOCALANUS MACRURUS	2	0.00
TOTAL COPEPODA	22370	86.82
CLADOCERA		
BOSMINA LONGIROSTRIS	824	3.19
CHYDORUS SPHAERICUS	2	0.00
DAPHNIA LONGIREMIS	202	0.78
DAPHNIA RETROCURVA	2	0.00
DAPHNIA SPP.	2	0.00
EUBOSMINA COREGONI	28	0.10
TOTAL CLADOCERA	1060	4.11
ROTIFERA		
ROTIFERA	2334	9.05
TOTAL ROTIFERA	2334	9.05
TOTAL ZOOPLANKTON	25764	

TABLE 16 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 2

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	1022	472	314	629	609	0.58
CALANOID COPEPODITES	550	865	314	550	570	0.54
CYCLOPOID COPEPODITES	7074	6916	6838	6995	6956	6.62
CYCLOPS BICUSPIDATUS THOMASI	0	236	79	157	118	0.11
DIAPTOMUS SPP. (FEMALE)	0	79	0	79	40	0.03
DIAPTOMUS ASHLANDI (MALE)	79	157	157	157	138	0.13
DIAPTOMUS MINUTUS (MALE)	157	0	79	79	79	0.07
EURYTEMORA AFFINIS	0	79	79	79	59	0.05
TROPOCYCLOPS PRASINUS MEXICANUS	314	0	393	236	236	0.22
TOTAL COPEPODA	9196	8804	8253	8961	8805	8.38
CLADOCERA						
BOSMINA LONGIROSTRIS	69714	66255	63819	66570	66590	63.45
DAPHNIA GALEATA MENDOTAE	157	0	0	79	59	0.05
DAPHNIA LONGIREMIS	0	314	236	236	197	0.18
DAPHNIA RETROCURVA	393	79	0	157	157	0.14
HOLOPEDIIUM GIBBERUM	79	0	0	0	20	0.01
POLYPHEMUS PEDICULUS	236	236	79	236	197	0.18
TOTAL CLADOCERA	70579	66884	64134	67278	67220	64.05
ROTIFERA						
ROTIFERA	36075	21142	29552	28923	28923	27.55
TOTAL ROTIFERA	36075	21142	29552	28923	28923	27.55
TOTAL ZOOPLANKTON	115850	96830	101939	105162	104948	

TABLE 16 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 6					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	236	472	236	393	334	0.33
CALANOID COPEPODITES	472	550	393	1100	629	0.63
CYCLOPOID COPEPODITES	1022	2043	1179	2515	1690	1.71
CYCLOPS BICUSPIDATUS THOMASI	157	79	0	0	59	0.05
DIAPTOMUS SPP. (FEMALE)	79	79	79	157	99	0.10
DIAPTOMUS ASHLANDI (MALE)	79	0	236	79	99	0.10
DIAPTOMUS MINUTUS (MALE)	157	79	0	0	59	0.05
EURYTEMORA AFFINIS	0	79	0	157	59	0.05
TROPIDOCYCLOPS PRASINUS MEXICANUS	79	0	0	0	20	0.02
TOTAL COPEPODA	2281	3381	2123	4401	3048	3.09
CLADOCERA						
BOSMINA LONGIROSTRIS	57296	58946	56903	47314	55115	56.04
CHYDORUS SPHAERICUS	79	0	0	0	20	0.02
DAPHNIA GALEATA MENDOTAE	472	0	0	0	118	0.11
DAPHNIA LONGIREMIS	0	786	1022	393	550	0.55
DAPHNIA RETROCURVA	393	0	0	0	98	0.09
HOLOPEDIUM GIBBERUM	0	79	0	157	59	0.05
POLYPHEMUS PEDICULUS	1650	786	314	314	766	0.77
TOTAL CLADOCERA	59890	60597	58239	48178	56726	57.68
ROTIFERA						
ROTIFERA	9667	61068	42127	41419	38570	39.21
TOTAL ROTIFERA	9667	61068	42127	41419	38570	39.21
TOTAL ZOOPLANKTON	71838	125046	102489	93998	98344	

TABLE 16 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 11

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	314	236	0	314	216	0.47
CALANOID COPEPODITES	1336	707	1100	707	963	2.11
CYCLOPOID COPEPODITES	2829	2436	1886	1886	2259	4.95
CYCLOPS BICUSPIDATUS THOMASI	0	79	79	0	40	0.08
CYCLOPS VERNALIS	0	0	236	0	59	0.12
DIAPTOMUS ASHLANDI (MALE)	236	236	79	79	158	0.34
DIAPTOMUS MINUTUS (MALE)	0	79	79	0	40	0.08
EURYTEMORA AFFINIS	0	79	157	0	59	0.12
TROPIDOCYCLOPS PRASINUS MEXICANUS	79	79	0	0	40	0.08
TOTAL COPEPODA	4794	3931	3616	2986	3834	8.41
CLADOCERA						
BOSMINA LONGIROSTRIS	21456	27351	23185	24050	24011	52.71
CHYDORUS SPHAERICUS	0	0	79	0	20	0.04
DAPHNIA GALEATA MENDOTAE	236	79	79	314	177	0.38
DAPHNIA LONGIREMIS	0	79	0	0	20	0.04
DAPHNIA RETROCURVA	157	79	79	236	138	0.30
HOLOPEIDIUM GIBBERUM	79	79	157	157	118	0.25
POLYPHEMUS PEDICULUS	865	550	472	865	688	1.51
TOTAL CLADOCERA	22793	28217	24051	25622	25172	55.26
ROTIFERA						
ROTIFERA	23343	23500	2201	17134	16545	36.32
TOTAL ROTIFERA	23343	23500	2201	17134	16545	36.32
TOTAL ZOOPLANKTON	50930	55648	29868	45742	45551	

TABLE 16. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 15					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	314	472	314	236	334	0.90
CALANOID COPEPODITES	314	236	393	629	393	1.06
CYCLOPOID COPEPODITES	786	1179	943	1179	1022	2.76
CYCLOPS BICUSPIDATUS THOMASI	79	157	0	0	59	0.15
DIAPTOMUS MINUTUS (MALE)	0	157	157	236	138	0.37
TOTAL COPEPODA	1493	2201	1807	2280	1946	5.26
CLADOCERA						
BOSMINA LONGIROSTRIS	25386	23107	21142	20042	22419	60.62
DAPHNIA GALEATA MENDOTAE	0	0	0	79	20	0.05
DAPHNIA LONGIREMIS	0	0	79	0	20	0.05
HOLOPEDIUM GIBBERUM	0	79	79	0	40	0.10
POLYPHEMUS PEDICULUS	707	472	707	1022	727	1.96
TOTAL CLADOCERA	26093	23658	22007	21143	23226	62.80
ROTIFERA						
ROTIFERA	14854	17448	9353	5580	11809	31.93
TOTAL ROTIFERA	14854	17448	9353	5580	11809	31.93
TOTAL ZOOPLANKTON	42440	43307	33167	29003	36981	

TABLE 16 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 20

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	314	314	79	79	197	0.33
CALANOID COPEPODITES	786	943	393	786	727	1.25
CYCLOPOID COPEPODITES	1179	1179	629	1886	1218	2.09
CYCLOPS BICUSPIDATUS THOMASI	0	236	79	0	79	0.13
DIAPTOMUS MINUTUS (MALE)	79	157	0	79	79	0.13
 TOTAL COPEPODA	 2358	 2829	 1180	 2830	 2300	 3.95
 CLADOCERA						
BOSMINA LONGIROSTRIS	26015	20277	24050	27508	24463	42.07
DAPHNIA GALEATA MENDOTAE	157	0	0	314	118	0.20
DAPHNIA LONGIREMIS	0	0	79	0	20	0.03
DAPHNIA RETROCURVA	0	79	0	0	20	0.03
HOLOPEDIIUM GIBBERUM	157	79	236	79	138	0.23
POLYPHEMUS PEDICULUS	472	79	314	629	374	0.64
 TOTAL CLADOCERA	 26801	 20514	 24679	 28530	 25133	 43.22
 ROTIFERA						
ROTIFERA	40869	22557	29159	30259	30711	52.81
 TOTAL ROTIFERA	 40869	 22557	 29159	 30259	 30711	 52.81
 TOTAL ZOOPLANKTON	 70028	 45900	 55018	 61619	 58144	

TABLE 16 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	338	0.49
CALANOID COPEPODITES	656	0.95
CYCLOPOID COPEPODITES	2629	3.82
CYCLOPS BICUSPIDATUS THOMASI	71	0.10
CYCLOPS VERNALIS	12	0.01
DIAPTOMUS SPP. (FEMALE)	28	0.04
DIAPTOMUS ASHLANDI (MALE)	79	0.11
DIAPTOMUS MINUTUS (MALE)	79	0.11
EURYTEMORA AFFINIS	35	0.05
TROPIDOCYCLOPS PRASINUS MEXICANUS	59	0.08
TOTAL COPEPODA	3986	5.79
CLADOCERA		
BOSMINA LONGIROSTRIS	38520	55.99
CHYDORUS SPHAERICUS	8	0.01
DAPHNIA GALEATA MENDOTAE	98	0.14
DAPHNIA LONGIREMIS	161	0.23
DAPHNIA RETROCURVA	83	0.12
HOLOPEDIUM GIBBERUM	75	0.10
POLYPHEMUS PEDICULUS	550	0.79
TOTAL CLADOCERA	39495	57.41
ROTIFERA		
ROTIFERA	25312	36.79
TOTAL ROTIFERA	25312	36.79
TOTAL ZOOPLANKTON	68793	

TABLE 17 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 3					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	707	943	943	825	855	1.44
CALANOID COPEPODITES	236	589	354	354	383	0.64
CYCLOPOID COPEPODITES	1886	3419	2240	1768	2328	3.93
CYCLOPS BICUSPIDATUS THOMASI	236	118	472	0	207	0.34
DIAPTOMUS SPP. (FEMALE)	118	0	0	0	30	0.05
DIAPTOMUS MINUTUS (MALE)	118	118	236	0	118	0.19
MESOCYCLOPS EDAX	0	0	118	118	59	0.09
TOTAL COPEPODA	3301	5187	4363	3065	3980	6.72
CLADOCERA						
BOSMINA LONGIROSTRIS	53287	40319	39494	39612	43178	72.95
CERIODAPHNIA SPP.	118	0	0	0	30	0.05
CHYDORUS SPHAERICUS	0	0	118	0	30	0.05
DAPHNIA GALEATA MENDOTAE	354	472	118	118	266	0.44
DAPHNIA RETROCURVA	118	589	472	118	324	0.54
EUBOSMINA COREGONI	0	0	118	236	89	0.15
HOLOPEIDIUM GIBBERUM	118	0	0	118	59	0.09
POLYPHEMUS PEDICULUS	236	0	236	0	118	0.19
TOTAL CLADOCERA	54231	41380	40556	40202	44094	74.50
ROTIFERA						
ROTIFERA	14737	10492	7663	11553	11111	18.77
TOTAL ROTIFERA	14737	10492	7663	11553	11111	18.77
TOTAL ZOOPLANKTON	72269	57059	52582	54820	59185	

TABLE 17 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 7

	NO. PER CUBIC METER					OCCUR- RECE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	589	118	1061	707	619	0.64
CALANOID COPEPODITES	472	118	943	236	442	0.46
CYCLOPOID COPEPODITES	2122	943	2122	2476	1916	2.00
CYCLOPS BICUSPIDATUS THOMASI	118	0	236	0	89	0.09
DIAPTOMUS SPP. (FEMALE)	0	0	0	354	89	0.09
DIAPTOMUS ASHLANDI (MALE)	0	0	118	0	30	0.03
MESOCYCLOPS EDAX	0	0	0	118	30	0.03
PARACYCLOPS FIMBRIATUS POPPEI	118	0	0	0	30	0.03
TOTAL COPEPODA	3419	1179	4480	3891	3245	3.40
CLADOCERA						
BOSMINA LONGIROSTRIS	62011	42323	78634	54230	59300	62.15
DAPHNIA GALEATA MENDOTAE	0	0	825	472	324	0.33
DAPHNIA LONGIREMIS	236	0	0	0	59	0.06
DAPHNIA RETROCURVA	825	0	0	0	206	0.21
EUBOSMINA COREGONI	0	236	118	0	89	0.09
HOLOPEDIUM GIBBERUM	354	0	118	118	148	0.15
POLYPHEMUS PEDICULUS	472	1415	1533	354	944	0.98
TOTAL CLADOCERA	63898	43974	81228	55174	61070	64.00
ROTIFERA						
ROTIFERA	36429	29945	36311	21692	31094	32.59
TOTAL ROTIFERA	36429	29945	36311	21692	31094	32.59
TOTAL ZOOPLANKTON	103746	75098	122019	80757	95409	

TABLE 17 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 12					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	118	825	825	825	648	0.89
CALANOID COPEPODITES	1886	1061	1768	707	1356	1.87
CYCLOPOID COPEPODITES	4126	3419	3301	2829	3419	4.72
CYCLOPS BICUSPIDATUS THOMASI	0	0	236	118	89	0.12
DIAPTOMUS SPP. (FEMALE)	118	118	0	0	59	0.08
DIAPTOMUS ASHLANDI (MALE)	118	0	0	118	59	0.08
DIAPTOMUS MINUTUS (MALE)	354	0	236	0	148	0.20
EPISCHURA LACUSTRIS	118	0	0	0	30	0.04
TROPOCYCLOPS PRASINUS MEXICANUS	118	0	118	0	59	0.08
 TOTAL COPEPODA	 6956	 5423	 6484	 4597	 5867	 8.10
 CLADOCERA						
BOSMINA LONGIROSTRIS	39140	50694	41616	34660	41528	57.34
DAPHNIA GALEATA MENDOTAE	118	236	118	354	207	0.28
DAPHNIA RETROCURVA	236	589	118	354	324	0.44
HOLOPEDIUM GIBBERUM	0	472	0	236	177	0.24
POLYPHEMUS PEDICULUS	118	2004	354	0	619	0.85
 TOTAL CLADOCERA	 39612	 53995	 42206	 35604	 42855	 59.17
 ROTIFERA						
ROTIFERA	11082	25347	36075	22282	23697	32.72
 TOTAL ROTIFERA	 11082	 25347	 36075	 22282	 23697	 32.72
 TOTAL ZOOPLANKTON	 57650	 84765	 84765	 62483	 72419	

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TABLE 17 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 16

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	472	472	118	236	325	0.64
CALANOID COPEPODITES	118	354	236	354	266	0.52
CYCLOPOID COPEPODITES	1179	707	236	1533	914	1.81
CYCLOPS BICUSPIDATUS THOMASI	236	0	0	0	59	0.11
DIAPTOMUS SPP. (FEMALE)	0	118	0	118	59	0.11
DIAPTOMUS ASHLANDI (MALE)	0	0	118	0	30	0.05
DIAPTOMUS MINUTUS (MALE)	0	236	118	354	177	0.35
TROPIDOCYCLOPS PRASINUS MEXICANUS	0	0	0	118	30	0.05
TOTAL COPEPODA	2005	1887	826	2713	1860	3.69
CLADOCERA						
BOSMINA LONGIROSTRIS	35368	26526	32420	51283	36399	72.30
DAPHNIA GALEATA MENDOTAE	589	236	236	236	324	0.64
DAPHNIA RETROCURVA	0	0	0	354	89	0.17
HOLOPEIDIUM GIBBERUM	354	118	0	118	148	0.29
POLYPHEMUS PEDICULUS	118	472	236	1061	472	0.93
TOTAL CLADOCERA	36429	27352	32892	53052	37432	74.35
ROTIFERA						
ROTIFERA	13911	12143	11671	6484	11052	21.95
TOTAL ROTIFERA	13911	12143	11671	6484	11052	21.95
TOTAL ZOOPLANKTON	52345	41382	45389	62249	50344	

TABLE 17 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 21

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII						
CALANOID COPEPODITES	354	118	472	236	295	0.60
CYCLOPOID COPEPODITES	472	236	118	589	354	0.72
CYCLOPS BICUSPIDATUS THOMASI	1061	1179	1415	1886	1385	2.82
DIAPTOMUS SPP. (FEMALE)	236	118	0	118	118	0.24
DIAPTOMUS ASHLANDI (MALE)	118	0	236	236	148	0.30
DIAPTOMUS MINUTUS (MALE)	118	0	0	0	30	0.06
TROPIDOCYCLOPS PRASINUS MEXICANUS	0	236	0	0	59	0.12
	0	0	118	0	30	0.06
TOTAL COPEPODA	2359	1887	2359	3065	2419	4.92
CLADOCERA						
BOSMINA LONGIROSTRIS	38669	30180	25936	28058	30711	62.57
DAPHNIA GALEATA MENDOTAE	0	236	118	118	118	0.24
DAPHNIA LONGIREMIS	354	0	0	0	89	0.18
HOLOPEDIUM GIBBERUM	0	118	118	0	59	0.12
POLYPHEMUS PEDICULUS	354	354	236	118	266	0.54
TOTAL CLADOCERA	39377	30888	26408	28294	31243	63.66
ROTIFERA						
ROTIFERA	17566	16269	15562	12261	15415	31.40
TOTAL ROTIFERA	17566	16269	15562	12261	15415	31.40
TOTAL ZOOPLANKTON	59302	49044	44329	43620	49077	

TABLE 17 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	548	0.83
CALANOID COPEPODITES	560	0.85
CYCLOPOID COPEPODITES	1992	3.05
CYCLOPS BICUSPIDATUS THOMASI	112	0.17
DIAPTOMUS SPP. (FEMALE)	77	0.11
DIAPTOMUS ASHLANDI (MALE)	30	0.04
DIAPTOMUS MINUTUS (MALE)	100	0.15
EPISCHURA LACUSTRIS	6	0.00
MESOCYCLOPS EDAX	18	0.02
PARACYCLOPS FIMBRIATUS POPPEI	6	0.00
TROPICOCYCLOPS PRASINUS MEXICANUS	24	0.03
TOTAL COPEPODA	3473	5.31
CLADOCERA		
BOSMINA LONGIROSTRIS	42223	64.67
CERIODAPHNIA SPP.	6	0.00
CHYDORUS SPHAERICUS	6	0.00
DAPHNIA GALEATA MENDOTAE	248	0.37
DAPHNIA LONGIREMIS	30	0.04
DAPHNIA RETROCURVA	189	0.28
EUBOSMINA COREGONI	36	0.05
HOLOPEDIUM GIBBERUM	118	0.18
POLYPHEMUS PEDICULUS	484	0.74
TOTAL CLADOCERA	43340	66.38
ROTIFERA		
ROTIFERA	18474	28.29
TOTAL ROTIFERA	18474	28.29

TABLE 18 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 4					
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	OCCUR- RENCE (%)
COPEPODA						
NAUPLII						
CALANOID COPEPODITES	2043	1258	1729	2358	1847	2.96
CYCLOPOID COPEPODITES	786	786	1415	3144	1533	2.46
CYCLOPS BICUSPIDATUS THOMASI	2358	3615	2043	2829	2711	4.35
DIAPTOMUS SPP. (FEMALE)	314	157	157	157	196	0.31
DIAPTOMUS MINUTUS (MALE)	629	1100	943	0	668	1.07
EPISCHURA LACUSTRIS	314	157	157	314	236	0.37
TROPPOCYCLOPS PRASINUS MEXICANUS	0	0	0	157	39	0.06
	0	0	0	314	79	0.12
TOTAL COPEPODA	6444	7073	6444	9273	7309	11.73
CLADOCERA						
BOSMINA LONGIROSTRIS						
CHYDORUS SPHAERICUS	28609	40555	39926	53287	40594	65.17
DAPHNIA GALEATA MENDOTAE	0	0	0	157	39	0.06
DAPHNIA RETROCURVA	1729	1572	1100	786	1297	2.08
EUBOSMINA COREGONI	0	0	0	2201	550	0.88
HOLLOPEDIIUM GIBBERUM	0	786	786	629	550	0.88
POLYPHEMUS PEDICULUS	157	0	0	314	118	0.18
	157	0	0	157	79	0.12
TOTAL CLADOCERA	30652	42913	41812	57531	43227	69.40
ROTIFERA						
ROTIFERA	5973	13833	8960	18234	11750	18.86
TOTAL ROTIFERA	5973	13833	8960	18234	11750	18.86
TOTAL ZOOPLANKTON	43069	63819	57216	85038	62286	

TABLE 18 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 8

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	943	2358	1100	1886	1572	1.40
CALANOID COPEPODITES	943	943	472	786	786	0.70
CYCLOPOID COPEPODITES	3773	2829	2201	3773	3144	2.81
CYCLOPS BICUSPIDATUS THOMASI	314	629	157	157	314	0.28
DIAPTOMUS ASHLANDI (MALE)	157	0	0	0	39	0.03
DIAPTOMUS MINUTUS (MALE)	786	314	157	157	354	0.31
DIAPTOMUS OREGONENSIS (MALE)	314	0	0	0	79	0.07
DIAPTOMUS SICILIS (MALE)	0	0	0	314	79	0.07
MESOCYCLOPS EDAX	157	0	0	0	39	0.03
TROPYCYCLOPS PRASINUS MEXICANUS	786	0	0	629	354	0.31
TOTAL COPEPODA	8173	7073	4087	7702	6760	6.05
CLADOCERA						
BOSMINA LONGIROSTRIS	99187	89598	87398	93999	92546	82.89
DAPHNIA GALEATA MENDOTAE	629	472	629	943	668	0.59
DAPHNIA LONGIREMIS	472	157	0	0	157	0.14
DAPHNIA RETROCURVA	629	1100	1258	1886	1218	1.09
EUBOSMINA COREGONI	314	629	157	629	432	0.38
HOLOPEDIUM GIBBERUM	157	786	314	0	314	0.28
POLYPHEMUS PEDICULUS	157	0	314	472	236	0.21
TOTAL CLADOCERA	101545	92742	90070	97929	95571	85.60
ROTIFERA						
ROTIFERA	8017	10689	12104	6445	9314	8.34
TOTAL ROTIFERA	8017	10689	12104	6445	9314	8.34
TOTAL ZOOPLANKTON	117735	110504	106261	112076	111645	

TABLE 18 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 13					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	629	314	314	472	432	0.54
CALANOID COPEPODITES	157	472	0	314	236	0.29
CYCLOPOID COPEPODITES	786	2358	1886	1729	1690	2.13
CYCLOPS BICUSPIDATUS THOMASI	472	314	314	157	314	0.39
DIAPTOMUS SPP. (FEMALE)	0	0	0	157	39	0.04
TROPPOCYCLOPS PRASINUS MEXICANUS	943	0	0	0	236	0.29
 TOTAL COPEPODA	 2987	 3458	 2514	 2829	 2947	 3.72
CLADOCERA						
BOSMINA LONGIROSTRIS	75608	72150	55488	52973	64055	80.97
DAPHNIA GALEATA MENDOTAE	314	786	472	629	550	0.69
DAPHNIA RETROCURVA	157	0	0	0	39	0.04
EUBOSMINA COREGONI	314	157	314	157	236	0.29
HOLOPEDIUM GIBBERUM	472	0	0	157	157	0.19
POLYPHEMUS PEDICULUS	1100	314	629	472	629	0.79
 TOTAL CLADOCERA	 77965	 73407	 56903	 54388	 65666	 83.01
ROTIFERA						
ROTIFERA	6288	15090	9431	11160	10492	13.26
 TOTAL ROTIFERA	 6288	 15090	 9431	 11160	 10492	 13.26
 TOTAL ZOOPLANKTON	 87240	 91955	 68848	 68377	 79105	

TABLE 18. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 17				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	943	472	314	314	511	0.60
CALANOID COPEPODITES	629	943	629	629	708	0.83
CYCLOPOID COPEPODITES	3301	1258	2043	1258	1965	2.33
CYCLOPS BICUSPIDATUS THOMASI	472	157	629	314	393	0.46
DIAPTOMUS SPP. (FEMALE)	0	0	314	0	79	0.09
DIAPTOMUS MINUTUS (MALE)	0	157	314	314	196	0.23
EPISCHURA LACUSTRIS	157	0	0	0	39	0.04
MESOCYCLOPS EDAX	0	0	0	157	39	0.04
TROPIDOCYCLOPS PRASINUS MEXICANUS	157	0	0	0	39	0.04
TOTAL COPEPODA	5659	2987	4243	2986	3969	4.70
CLADOCERA						
BOSMINA LONGIROSTRIS	76866	58160	66806	64133	66491	78.87
DAPHNIA GALEATA MENODTAE	786	472	2358	629	1061	1.25
DAPHNIA LONGIREMIS	314	0	0	0	79	0.09
DAPHNIA RETROCURVA	472	629	629	1886	904	1.07
EUBOSMINA COREGONI	314	0	157	0	118	0.13
POLYPHEMUS PEDICULUS	0	0	157	157	79	0.09
TOTAL CLADOCERA	78752	59261	70107	66805	68732	81.53
ROTIFERA						
ROTIFERA	8174	12261	10846	15090	11593	13.75
TOTAL ROTIFERA	8174	12261	10846	15090	11593	13.75
TOTAL ZOOPLANKTON	92585	74509	85196	84881	84294	

TABLE 18 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 22					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	629	629	472	1258	747	1.23
CALANOID COPEPODITES	472	786	157	472	472	0.77
CYCLOPOID COPEPODITES	1100	1886	1572	1415	1493	2.46
CYCLOPS BICUSPIDATUS THOMASI	0	157	157	157	118	0.19
DIAPTOMUS SPP. (FEMALE)	0	157	157	0	79	0.13
DIAPTOMUS MINUTUS (MALE)	0	0	0	157	39	0.06
MESOCYCLOPS EDAX	0	157	0	0	39	0.06
TOTAL COPEPODA	2201	3772	2515	3459	2987	4.92
CLADOCERA						
BOSMINA LONGIROSTRIS	42284	41184	50929	51873	46568	76.84
DAPHNIA GALEATA MENDOTAE	0	786	472	157	354	0.58
DAPHNIA LONGIREMIS	314	0	0	0	79	0.13
DAPHNIA RETROCURVA	943	314	1100	472	707	1.16
EUBOSMINA COREGONI	314	0	0	472	197	0.32
POLYPHEMUS PEDICULUS	157	314	943	314	432	0.71
TOTAL CLADOCERA	44012	42598	53444	53288	48337	79.76
ROTIFERA						
ROTIFERA	8174	7388	13047	8488	9274	15.30
TOTAL ROTIFERA	8174	7388	13047	8488	9274	15.30
TOTAL ZOOPLANKTON	54387	53758	69006	65235	60598	

TABLE 18 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 24 JULY 1973.

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	1022	1.28
CALANOID COPEPODITES	747	0.93
CYCLOPOID COPEPODITES	2201	2.76
CYCLOPS BICUSPIDATUS THOMASI	267	0.33
DIAPTOMUS SPP. (FEMALE)	173	0.21
DIAPTOMUS ASHLANDI (MALE)	8	0.01
DIAPTOMUS MINUTUS (MALE)	165	0.20
DIAPTOMUS OREGONENSIS (MALE)	16	0.02
DIAPTOMUS SICILIS (MALE)	16	0.02
EPISCHURA LACUSTRIS	16	0.02
MESOCYCLOPS EDAX	23	0.02
TROPOCYCLOPS PRASINUS MEXICANUS	142	0.17
TOTAL COPEPODA	4796	6.02
CLADOCERA		
BOSMINA LONGIROSTRIS	62051	77.96
CHYDORUS SPHAERICUS	8	0.01
DAPHNIA GALEATA MENDOTAE	786	0.98
DAPHNIA LONGIREMIS	63	0.07
DAPHNIA RETROCURVA	684	0.85
EUBOSMINA COREGONI	307	0.38
HOLOPEDIUM GIBBERUM	118	0.14
POLYPHEMUS PEDICULUS	291	0.36
TOTAL CLADOCERA	64308	80.80
ROTIFERA		
ROTIFERA	10485	13.17
TOTAL ROTIFERA	10485	13.17

TABLE 19 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, 28 AUGUST 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 2

	NO. PER CUBIC METER			MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C		
COPEPODA					
NAUPLII	865	707	393	550	629
CALANOID COPEPODITES	10767	9038	8331	10060	9549
CYCLOPOID COPEPODITES	13361	10925	10610	13204	12025
CYCLOPS BICUSPIDATUS THOMASI	2515	1886	2201	2279	2220
DIAPTOMUS SPP. (FEMALE)	865	1415	1650	1258	1297
DIAPTOMUS ASHLANDI (MALE)	707	629	472	472	570
DIAPTOMUS OREGONENSIS (MALE)	236	236	236	79	197
MESOCYCLOPS EDAX	236	0	0	79	79
TROPIDOCYCLOPS PRASINUS MEXICANUS	4716	3301	4480	5109	4402
TOTAL COPEPODA	34268	28137	28373	33090	30968
					65.30
CLADOCERA					
ALONA AFFINIS	79	0	0	0	20
BOSMINA LONGIROSTRIS	11396	8017	6995	6130	8135
CERIODAPHNIA LACUSTRIS	0	0	79	0	20
CHYDORUS SPHAERICUS	157	236	0	79	118
DAPHNIA GALEATA MENDOTAE	0	353	786	236	354
DAPHNIA LONGIREMIS	157	0	157	157	118
DAPHNIA RETROCURVA	4559	3458	4008	2987	3753
EUBOSMINA COREGONI	1415	1415	1493	1179	1376
TOTAL CLADOCERA	17763	13519	13518	10768	13894
					29.30
ROTIFERA					
ROTIFERA	3380	2594	2201	2043	2555
					5.38
TOTAL ROTIFERA	3380	2594	2201	2043	2555
					5.38
TOTAL ZOOPLANKTON	55411	44250	44092	45901	47417

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TABLE 19 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, 28 AUGUST 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 6					OCCUR- RENCE (%)
	NO. PER CUBIC METER					
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	2122	2751	1808	1336	2004	2.47
CALANOID COPEPODITES	11553	9510	9824	11082	10492	12.97
CYCLOPOID COPEPODITES	26565	31674	22793	22321	25838	31.96
CYCLOPS BICUSPIDATUS THOMASI	3065	2908	1415	2829	2554	3.15
DIAPTOMUS SPP. (FEMALE)	865	786	393	629	668	0.82
DIAPTOMUS ASHLANDI (MALE)	314	707	393	314	432	0.53
DIAPTOMUS MINUTUS (MALE)	79	0	0	0	20	0.02
DIAPTOMUS OREGONENSIS (MALE)	79	157	157	472	216	0.26
EUCYCLOPS AGILIS	79	0	0	0	20	0.02
MESOCYCLOPS EDAX	79	0	79	79	59	0.07
TROPOCYCLOPS PRASINUS MEXICANUS	2672	4244	1258	1100	2319	2.86
TOTAL COPEPODA	47472	52737	38120	40162	44622	55.19
CLADOCERA						
BOSMINA LONGIROSTRIS	21692	31752	20120	20513	23519	29.09
CERIODAPHNIA QUADRANGULA	0	0	79	0	20	0.02
CERIODAPHNIA RETICULATA	0	0	0	629	157	0.19
CERIODAPHNIA SPP.	0	550	0	0	138	0.17
CHYDORUS SPHAERICUS	236	629	393	314	393	0.48
DAPHNIA GALEATA MENDOTAE	314	79	472	157	256	0.31
DAPHNIA LONGIREMIS	2122	2672	3301	2987	2771	3.42
DAPHNIA RETROCURVA	3222	2829	3144	2358	2888	3.57
EUBOSMINA COREGONI	786	1258	707	1179	983	1.21
LEPTODORA KINDTII	0	0	0	79	20	0.02
TOTAL CLADOCERA	28372	39769	28216	28216	31145	38.52
ROTIFERA						
ROTIFERA	5659	5187	5266	4166	5070	6.27
TOTAL ROTIFERA	5659	5187	5266	4166	5070	6.27
TOTAL ZOOPLANKTON	81503	97693	71602	72544	80837	

TABLE 19 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT,
28 AUGUST 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 11

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	1729	1886	2358	2043	2004	2.77
CALANOID COPEPODITES	2751	3380	2672	1886	2672	3.69
CYCLOPOID COPEPODITES	20120	21142	20435	17212	19727	27.28
CYCLOPS BICUSPIDATUS THOMASI	2358	3222	2987	2122	2672	3.69
DIAPTOMUS SPP. (FEMALE)	314	472	393	393	393	0.54
DIAPTOMUS ASHLANDI (MALE)	157	236	236	0	157	0.21
DIAPTOMUS OREGONENSIS (MALE)	157	79	79	79	99	0.13
EPISCHURA LACUSTRIS	157	0	0	0	39	0.05
EURYTEMORA AFFINIS	79	0	0	0	20	0.02
MESOCYCLOPS EDAX	0	157	0	0	39	0.05
TROPPOCYCLOPS PRASINUS MEXICANUS	5187	2829	3694	2672	3596	4.97
TOTAL COPEPODA	33009	33403	32854	26407	31418	43.46
CLADOCERA						
EOSMINA LONGIROSTRIS	31281	31752	32224	35053	32578	45.06
CERIODAPHNIA LACUSTRIS	314	550	314	157	334	0.46
CERIODAPHNIA QUADRANGULA	157	314	472	393	334	0.46
CHYDORUS SPHAERICUS	943	1650	1100	1022	1179	1.63
DAPHNIA GALEATA MENDOTAE	157	472	314	0	236	0.32
DAPHNIA LONGIREMIS	1336	236	236	786	649	0.89
DAPHNIA RETROCURVA	1100	1258	1493	1100	1238	1.71
EUBOSMINA COREGONI	393	393	314	0	275	0.38
TOTAL CLADOCERA	35681	36625	36467	38511	36823	50.93
ROTIFERA						
ROTIFERA	4087	4637	3615	3851	4048	5.59
TOTAL ROTIFERA	4087	4637	3615	3851	4048	5.59
TOTAL ZOOPLANKTON	72777	74665	72936	68769	72289	

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TABLE 19 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, 28 AUGUST 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 15					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	472	550	393	79	374	1.38
CALANOID COPEPODITES	1493	2594	2436	1022	1886	6.97
CYCLOPOID COPEPODITES	5423	7388	5895	5973	6170	22.81
CYCLOPS BICUSPIDATUS THOMASI	707	943	1179	865	924	3.41
DIAPTOMUS SPP. (FEMALE)	0	393	157	314	216	0.79
DIAPTOMUS ASHLANDI (MALE)	79	314	472	236	275	1.01
DIAPTOMUS OREGONENSIS (MALE)	0	79	0	236	79	0.29
TROPIDOCYCLOPS PRASINUS MEXICANUS	1100	3144	1415	1415	1769	6.54
TOTAL COPEPODA	9274	15405	11947	10140	11693	43.24
CLADOCERA						
BOSMINA LONGIROSTRIS	5266	18077	7545	9746	10159	37.57
CERIODAPHNIA LACUSTRIS	0	236	157	0	98	0.36
CERIODAPHNIA QUADRANGULA	0	157	0	0	39	0.14
CHYDORUS SPHAERICUS	79	0	0	0	20	0.07
DAPHNIA GALEATA MENDOTAE	157	79	0	314	138	0.51
DAPHNIA LONGIREMIS	79	157	157	314	177	0.65
DAPHNIA RETROCURVA	550	472	629	943	649	2.40
EUBOSMINA COREGONI	0	236	236	0	118	0.43
HOLOPEDIIUM GIBBERUM	157	0	0	0	39	0.14
TOTAL CLADOCERA	6288	19414	8724	11317	11437	42.29
ROTIFERA						
ROTIFERA	4008	3537	4716	3380	3910	14.46
TOTAL ROTIFERA	4008	3537	4716	3380	3910	14.46
TOTAL ZOOPLANKTON	19570	38356	25387	24837	27040	

TABLE 19 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, 28 AUGUST 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 20

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	943	157	472	236	452	1.62
CALANOID COPEPODITES	786	1258	1179	943	1042	3.73
CYCLOPOID COPEPODITES	8488	6602	5659	5187	6484	23.26
CYCLOPS BICUSPIDATUS THOMASI	629	629	393	236	472	1.69
DIAPTOMUS ASHLANDI (MALE)	0	0	79	0	20	0.07
DIAPTOMUS OREGONENSIS (MALE)	0	79	0	0	20	0.07
EPISCHURA LACUSTRIS	79	0	0	0	20	0.07
EURYTEMORA AFFINIS	79	0	0	0	20	0.07
MESOCYCLOPS EDAX	0	79	0	0	20	0.07
TROPOCYCLOPS PRASINUS MEXICANUS	4323	1100	1100	1965	2122	7.61
TOTAL COPEPODA	15327	5904	8882	8567	10672	38.29
CLADOCERA						
BOSMINA LONGIROSTRIS	9274	17920	10060	8331	11396	40.89
CERIODAPHNIA QUADRANGULA	0	79	157	236	118	0.42
CERIODAPHNIA RETICULATA	236	0	0	0	59	0.21
CHYDORUS SPHAERICUS	0	236	157	157	138	0.49
DAPHNIA GALEATA MENDOTAE	0	79	0	0	20	0.07
DAPHNIA LONGIREMIS	79	943	550	629	550	1.97
DAPHNIA RETROCURVA	314	472	236	79	275	0.98
EUBOSMINA COREGONI	79	79	0	0	40	0.14
HOLOPEDIIUM GIBBERUM	0	0	79	0	20	0.07
TOTAL CLADOCERA	9982	19808	11239	9432	12616	45.27
ROTIFERA						
ROTIFERA	5659	4951	4244	3458	4578	16.42
TOTAL ROTIFERA	5659	4951	4244	3458	4578	16.42
TOTAL ZOOPLANKTON	30968	34663	24365	21457	27866	

TABLE 19 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, 28 AUGUST 1973

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	1093	2.13
CALANOID COPEPODITES	5128	10.03
CYCLOPOID COPEPODITES	14049	27.49
CYCLOPS BICUSPIDATUS THOMASI	1768	3.46
DIAPTOMUS SPP. (FEMALE)	515	1.00
DIAPTOMUS ASHLANDI (MALE)	291	0.56
DIAPTOMUS MINUTUS (MALE)	4	0.00
DIAPTOMUS DREGENSIS (MALE)	122	0.23
EPISCHURA LACUSTRIS	12	0.02
EUCYCLOPS AGILIS	4	0.00
EURYTEMORA AFFINIS	8	0.01
MESOCYCLOPS EDAX	39	0.07
TROPIDOCYCLOPS PRASINUS MEXICANUS	2842	5.56
TOTAL COPEPODA	25875	50.64
CLADOCERA		
ALONA AFFINIS	4	0.00
BOSMINA LONGIROSTRIS	17157	33.58
CERIODAPHNIA LACUSTRIS	90	0.17
CERIODAPHNIA QUADRANGULA	102	0.19
CERIODAPHNIA RETICULATA	43	0.08
CERIODAPHNIA SPP.	28	0.05
CHYDORUS SPHAERICUS	370	0.72
DAPHNIA GALEATA MENDOTAE	201	0.39
DAPHNIA LONGIREMIS	853	1.66
DAPHNIA RETROCURVA	1761	3.44
EUBOSMINA COREGONI	558	1.09
HOLOPEDIIUM GIBBERUM	12	0.02
LEPTODORA KINDTII	4	0.00
TOTAL CLADOCERA	21183	41.46
ROTIFERA		
ROTIFERA	4032	7.89

TABLE 19 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE
SURFACE , LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT,
28 AUGUST 1973

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
TOTAL ZOOPLANKTON	51090	

TABLE 20 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
28 AUGUST 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 3					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
NO. PER CUBIC METER						
COPEPODA						
NAUPLII	1179	472	707	707	766	1.71
CALANOID COPEPODITES	11789	6602	7781	8252	8606	19.28
CYCLOPOID COPEPODITES	19216	11436	12497	14854	14501	32.49
CYCLOPS BICUSPIDATUS THOMASI	2122	2122	2829	2122	2299	5.15
DIAPTOMUS SPP. (FEMALE)	1061	354	943	1179	884	1.98
DIAPTOMUS ASHLANDI (MALE)	707	589	943	707	737	1.65
DIAPTOMUS MINUTUS (MALE)	118	0	0	118	59	0.13
MESOCYCLOPS EDAX	354	472	354	589	442	0.99
TROPYCYCLOPS PRASINUS MEXICANUS	707	472	1297	943	855	1.91
TOTAL COPEPODA	37253	22519	27351	29471	29149	65.31
CLADOCERA						
BOSMINA LONGIROSTRIS	8488	6013	5305	5777	6396	14.33
CERIODAPHNIA LACUSTRIS	0	118	0	0	30	0.06
CERIODAPHNIA QUADRANGULA	0	118	0	0	30	0.06
CHYDORUS SPHAERICUS	354	118	472	118	266	0.59
DAPHNIA GALEATA MENDOTAE	825	236	118	0	295	0.66
DAPHNIA LONGIREMIS	707	1061	825	236	707	1.58
DAPHNIA RETROCURVA	7781	4951	3890	4244	5217	11.69
EUBOSMINA COREGONI	1415	118	0	236	442	0.99
POLOPEDIUM GIBBERUM	118	236	0	354	177	0.39
TOTAL CLADOCERA	19688	12969	10610	10965	13560	30.38
ROTIFERA						
ROTIFERA	3301	1179	1768	1415	1916	4.29
TOTAL ROTIFERA	3301	1179	1768	1415	1916	4.29
TOTAL ZOOPLANKTON	60242	36667	39729	41851	44625	

TABLE 20 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
28 AUGUST 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 7					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	2594	1768	2712	943	2004	2.33
CALANOID COPEPODITES	10139	9903	11907	8488	10109	11.80
CYCLOPOID COPEPODITES	33481	27940	28058	30063	29886	34.89
CYCLOPS BICUSPIDATUS THOMASI	4834	6013	4951	4126	4981	5.81
DIAPTOMUS SPP. (FEMALE)	472	472	825	825	649	0.75
DIAPTOMUS ASHLANDI (MALE)	236	354	354	354	325	0.37
DIAPTOMUS MINUTUS (MALE)	0	0	118	0	30	0.03
DIAPTOMUS OREGONENSIS (MALE)	354	0	236	0	148	0.17
MESOCYCLOPS EDAX	118	0	354	354	207	0.24
TROPYCYCLOPS PRASINUS MEXICANUS	6602	5069	4126	3537	4834	5.64
TOTAL COPEPODA	58830	51519	53641	48690	53173	62.07
CLADOCERA						
BOSMINA LONGIROSTRIS	21928	19924	19216	17566	19659	22.95
CERIODAPHNIA LACUSTRIS	118	0	236	0	89	0.10
CERIODAPHNIA QUADRANGULA	118	236	0	0	89	0.10
CHYDORUS SPHAERICUS	825	589	472	236	531	0.61
DAPHNIA GALEATA MENDOTAE	118	472	472	825	472	0.55
DAPHNIA LONGIREMIS	2947	589	943	943	1356	1.58
DAPHNIA RETROCURVA	4362	6248	4716	3301	4657	5.43
EUBOSMINA COREGONI	943	589	472	707	678	0.79
HOLOPEDIUM GIBBERUM	0	236	118	0	89	0.10
LEPTODOGRA KINDTII	0	118	0	0	30	0.03
TOTAL CLADOCERA	31359	29001	26645	23578	27650	32.27
ROTIFERA						
ROTIFERA	6130	4716	4716	3773	4834	5.64
TOTAL ROTIFERA	6130	4716	4716	3773	4834	5.64
TOTAL ZOOPLANKTON	96319	85236	85002	76041	85657	

TABLE 20 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
28 AUGUST 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 12					OCCUR- RENCE (%)
	REP.A	NC. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	3773	472	1179	1415	1710	2.89
CALANOID COPEPODITES	12143	7781	6484	6602	8253	13.97
CYCLOPOID COPEPODITES	32538	13558	18509	20513	21280	36.02
CYCLOPS BICUSPIDATUS THOMASI	5659	1061	2240	2240	2800	4.73
DIAPTOMUS SPP. (FEMALE)	472	707	825	354	590	0.99
DIAPTOMUS ASHLANDI (MALE)	472	354	118	0	236	0.39
DIAPTOMUS MINUTUS (MALE)	118	0	0	0	30	0.05
DIAPTOMUS OREGONENSIS (MALE)	236	0	0	0	59	0.09
MESOCYCLOPS EDAX	0	354	0	236	148	0.25
TROPIDOCYCLOPS PRASINUS MEXICANUS	2594	2476	1415	3065	2388	4.04
 TOTAL COPEPODA	 58005	 26763	 30770	 34425	 37494	 63.47
CLADOCERA						
BOSMINA LONGIROSTRIS	17330	12025	11318	7545	12055	20.40
CERIODAPHNIA LACUSTRIS	118	118	0	0	59	0.09
CERIODAPHNIA QUADRANGULA	0	118	0	0	30	0.05
CHYDORUS SPHAERICUS	236	1533	118	354	560	0.94
DAPHNIA GALEATA MENDOTAE	472	825	943	943	796	1.34
DAPHNIA LONGIREMIS	2358	1061	472	707	1150	1.94
DAPHNIA RETROCURVA	3890	4126	4008	2476	3625	6.13
EUROSMINA COREGONI	472	118	118	354	266	0.45
HOLLOPEDIUM GIBBERUM	236	236	0	118	148	0.25
LEPTODORA KINDTII	0	118	0	0	30	0.05
 TOTAL CLADOCERA	 25112	 20278	 16977	 12497	 18719	 31.68
ROTIFERA						
ROTIFERA	3890	3065	1768	2712	2859	4.83
 TOTAL ROTIFERA	 3890	 3065	 1768	 2712	 2859	 4.83
 TOTAL ZOOPLANKTON	 87007	 50106	 49515	 49634	 59072	

TABLE 20 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
28 AUGUST 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 16

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	943	236	1061	1179	855	1.55
CALANOID COPEPODITES	5423	5423	5541	5187	5394	9.83
CYCLOPOID COPEPODITES	15798	16151	14619	17566	16034	29.24
CYCLOPS BICUSPIDATUS THOMASI	2829	1768	2122	2004	2181	3.97
DIAPTOMUS SPP. (FEMALE)	236	472	1179	825	678	1.23
DIAPTOMUS ASHLANDI (MALE)	118	236	0	236	148	0.26
DIAPTOMUS OREGONENSIS (MALE)	354	0	0	0	89	0.16
EPISCHURA LACUSTRIS	118	0	0	0	30	0.05
MESOCYCLOPS EDAX	707	354	118	118	324	0.59
TROPIDOCYCLOPS PRASINUS MEXICANUS	3890	3537	3655	2947	3507	6.39
TOTAL COPEPODA	30416	28177	28295	30062	29240	53.33
CLADOCERA						
BOSMINA LONGIROSTRIS	13558	17684	15680	14737	15415	28.11
CERIODAPHNIA LACUSTRIS	118	0	0	0	30	0.05
CERIODAPHNIA SPP.	0	118	0	236	89	0.16
CHYDORUS SPHAERICUS	0	236	236	236	177	0.32
DAPHNIA GALEATA MENDOTAE	118	118	118	354	177	0.32
DAPHNIA LONGIREMIS	825	2240	2240	1886	1798	3.27
DAPHNIA RETROCURVA	2829	2712	2829	2476	2712	4.94
EUBOSMINA COREGONI	707	589	1061	825	796	1.45
HOLOPEIDIUM GIBBERUM	0	118	0	354	118	0.21
TOTAL CLADOCERA	18155	23815	22164	21104	21312	38.87
ROTIFERA						
ROTIFERA	4008	4951	4244	3890	4273	7.79
TOTAL ROTIFERA	4008	4951	4244	3890	4273	7.79
TOTAL ZOOPLANKTON	52579	56943	54703	55056	54825	

TABLE 20 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
28 AUGUST 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 21

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1886	825	825	1650	1297	2.26
CALANOID COPEPODITES	6366	3773	3183	7781	5276	9.23
CYCLOPOID COPEPODITES	19216	24168	15915	35014	23578	41.25
CYCLOPS BICUSPIDATUS THOMASI	3419	2358	1533	1533	2211	3.86
DIAPTOMUS SPP. (FEMALE)	118	236	236	825	354	0.61
DIAPTOMUS ASHLANDI (MALE)	236	236	0	472	236	0.41
DIAPTOMUS MINUTUS (MALE)	118	0	0	0	30	0.05
DIAPTOMUS OREGONENSIS (MALE)	236	0	0	236	118	0.20
MESOCYCLOPS EDAX	472	472	118	354	354	0.61
TROPICOCYCLOPS PRASINUS MEXICANUS	4716	5069	2240	4834	4215	7.37
TOTAL COPEPODA	36783	37137	24050	52699	37669	65.90
CLADOCERA						
BOSMINA LONGIROSTRIS	10728	12850	8724	17094	12349	21.60
CERIODAPHNIA LACUSTRIS	0	0	118	118	59	0.10
CHYDORUS SPHAERICUS	118	589	118	236	265	0.46
DAPHNIA GALEATA MENDOTAE	0	118	354	118	148	0.25
DAPHNIA LONGIREMIS	825	472	1061	118	619	1.08
DAPHNIA RETROCURVA	2829	3537	2004	1533	2476	4.33
EUBOSMINA COREGONI	236	354	0	472	266	0.46
HOLOPEDIUM GIBBERUM	0	0	236	118	89	0.15
LEPTODORA KINDTII	0	0	0	118	30	0.05
TOTAL CLADOCERA	14736	17920	12615	19925	16301	28.52
ROTIFERA						
ROTIFERA	3890	3183	2712	2947	3183	5.56
TOTAL ROTIFERA	3890	3183	2712	2947	3183	5.56
TOTAL ZOOPLANKTON	55409	58240	39377	75571	57153	

TABLE 20 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
28 AUGUST 1973

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	1326	2.20
CALANOID COPEPODITES	7528	12.49
CYCLOPOID COPEPODITES	21056	34.93
CYCLOPS BICUSPIDATUS THOMASI	2894	4.80
DIAPTOMUS SPP. (FEMALE)	631	1.04
DIAPTOMUS ASHLANDI (MALE)	336	0.55
DIAPTOMUS MINUTUS (MALE)	30	0.04
DIAPTOMUS OREGONENSIS (MALE)	83	0.13
EPISCHURA LACUSTRIS	6	0.00
MESOCYCLOPS EDAX	295	0.48
TROPIDOCYCLOPS PRASINUS MEXICANUS	3160	5.24
TOTAL COPEPODA	37345	61.96
CLADOCERA		
BOSMINA LONGIROSTRIS	13175	21.86
CERIODAPHNIA LACUSTRIS	53	0.08
CERIODAPHNIA QUADRANGULA	30	0.04
CERIODAPHNIA SPP.	18	0.02
CHYDORUS SPHAERICUS	360	0.59
DAPHNIA GALEATA MENDOTAE	278	0.62
DAPHNIA LONGIREMIS	1126	1.86
DAPHNIA RETROCURVA	3737	6.20
EUROSMINA COREGONI	490	0.81
HOLOPEIDIUM GIBBERUM	124	0.20
LEPTODORA KINDTII	18	0.02
TOTAL CLADOCERA	19509	32.37
ROTIFERA		
ROTIFERA	3413	5.66
TOTAL ROTIFERA	3413	5.66
TOTAL ZOOPLANKTON	60267	

TABLE 21 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
28 AUGUST 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 4					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	629	629	1048	1572	970	1.44
CALANOID COPEPODITES	11527	10584	12575	16557	12811	19.07
CYCLOPOID COPEPODITES	19072	23998	18863	30704	23159	34.47
CYCLOPS BICUSPIDATUS THOMASI	2725	1991	2725	5135	3144	4.68
CYCLOPS VERNALIS	105	0	0	0	26	0.03
DIAPTOMUS SPP. (FEMALE)	629	629	838	1153	812	1.20
DIAPTOMUS ASHLANDI (MALE)	838	629	838	1991	1074	1.59
DIAPTOMUS OREGONENSIS (MALE)	105	314	0	0	105	0.15
MESOCYCLOPS EDAX	1153	629	210	629	655	0.97
TROPIDOCYCLOPS PRASINUS MEXICANUS	1467	1258	2096	1781	1651	2.45
TOTAL COPEPODA	38250	40661	39193	59522	44407	66.10
CLADOCERA						
BOSMINA LONGIROSTRIS	7545	12785	10479	10898	10427	15.52
CHYDORUS SPHAERICUS	210	210	0	210	158	0.23
DAPHNIA GALEATA MENDOTAE	419	1258	524	1153	839	1.24
DAPHNIA LONGIREMIS	1677	2201	2096	2201	2044	3.04
DAPHNIA RETROCURVA	5344	5659	4401	6812	5554	8.26
EUBOSMINA COREGONI	629	1677	1258	1258	1206	1.79
HOLOPEDIUM GIBBERUM	314	105	210	314	236	0.35
LEPTODORA KINDTII	105	0	0	0	26	0.03
TOTAL CLADOCERA	16243	23895	18968	22846	20490	30.50
ROTIFERA						
ROTIFERA	1781	1991	2305	3039	2279	3.39
TOTAL ROTIFERA	1781	1991	2305	3039	2279	3.39
TOTAL ZOOPLANKTON	56274	66547	60466	85407	67176	

TABLE 21 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
28 AUGUST 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 8

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	1467	1467	419	1048	1100	1.90
CALANOID COPEPODITES	14671	13414	11108	14147	13335	23.05
CYCLOPOID COPEPODITES	18444	22950	17081	18234	19177	33.15
CYCLOPS BICUSPIDATUS THOMASI	4401	2305	2201	3668	3144	5.43
DIAPTOMUS SPP. (FEMALE)	734	314	210	210	367	0.63
DIAPTOMUS ASHLANDI (MALE)	734	734	943	1153	891	1.54
DIAPTOMUS MINUTUS (MALE)	0	0	0	314	79	0.13
DIAPTOMUS OREGONENSIS (MALE)	314	0	0	105	105	0.18
EPISCHURA LACUSTRIS	0	0	105	0	26	0.04
MESOCYCLOPS EDAX	419	105	419	734	419	0.72
TROPIDOCYCLOPS PRASINUS MEXICANUS	1572	943	1677	1467	1415	2.44
TOTAL COPEPODA	42756	42232	34163	41080	40058	69.24
CLADOCERA						
BOSMINA LONGIROSTRIS	5973	7859	6183	6392	6602	11.41
CERIODAPHNIA LACUSTRIS	0	105	0	105	53	0.09
CHYDORIS SPHAERICUS	105	105	0	105	79	0.13
DAPHNIA GALEATA MENDOTAE	734	838	629	1153	839	1.45
DAPHNIA LONGIREMIS	1991	1677	1677	1991	1834	3.17
DAPHNIA RETROCURVA	5135	3773	5449	3877	4559	7.88
EUBOSMINA COREGONI	943	1048	419	943	838	1.44
HOLOPEDIDUM GIBBERUM	419	105	210	629	341	0.58
TOTAL CLADOCERA	15300	15510	14567	15195	15145	26.18
ROTIFERA						
ROTIFERA	2201	2620	2620	3144	2646	4.57
TOTAL ROTIFERA	2201	2620	2620	3144	2646	4.57
TOTAL ZOOPLANKTON	60257	60362	51350	59419	57849	

TABLE 21 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
28 AUGUST 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 13

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.O	MEAN	
COPEPODA						
NAUPLII	1781	943	838	943	1126	2.08
CALANOID COPEPODITES	11422	12785	12261	11003	11868	21.93
CYCLOPOID COPEPODITES	18653	17396	19701	15405	17789	32.88
CYCLOPS BICUSPIDATUS THOMASI	4192	3039	3039	1572	2961	5.47
DIAPTOMUS SPP. (FEMALE)	1153	419	1048	629	812	1.50
DIAPTOMUS ASHLANDI (MALE)	314	629	734	629	577	1.06
DIAPTOMUS MINUTUS (MALE)	0	210	105	0	79	0.14
DIAPTOMUS OREGONENSIS (MALE)	314	0	0	105	105	0.19
MESOCYCLOPS EDAX	734	943	210	314	550	1.01
TROPIDOCYCLOPS PRASINUS MEXICANUS	1153	1153	1467	105	970	1.79
 TOTAL COPEPODA	 39716	 37517	 39403	 30705	 36837	 68.08
CLADOCERA						
BOSMINA LONGIROSTRIS	6392	8383	6602	6392	6942	12.83
CERIODAPHNIA SPP.	0	210	105	105	105	0.19
CHYDORUS SPHAERICUS	0	210	105	210	131	0.24
DAPHNIA GALEATA MENDOTAE	524	105	419	1153	550	1.01
DAPHNIA LONGIREMIS	2201	2096	1781	2201	2070	3.82
DAPHNIA RETROCURVA	3563	2620	3353	2934	3118	5.76
EUBOSMINA COREGONI	838	1048	1153	943	996	1.84
HOLOPEDIIUM GIBBERUM	210	943	314	314	445	0.82
 TOTAL CLADOCERA	 13728	 15615	 13832	 14252	 14357	 26.53
ROTIFERA						
ROTIFERA	2410	2620	3563	3039	2908	5.37
 TOTAL ROTIFERA	 2410	 2620	 3563	 3039	 2908	 5.37
 TOTAL ZOOPLANKTON	 55854	 55752	 56798	 47996	 54102	

TABLE 21 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
28 AUGUST 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 17

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1362	1048	1153	734	1074	1.74
CALANOID COPEPODITES	11213	9431	13099	13937	11920	19.31
CYCLOPOID COPEPODITES	25150	21587	26094	23893	24181	39.19
CYCLOPS BICUSPIDATUS THOMASI	3982	2725	2934	2829	3118	5.05
DIAPTOMUS SPP. (FEMALE)	105	419	1153	943	655	1.06
DIAPTOMUS ASHLANDI (MALE)	524	838	838	1572	943	1.52
DIAPTOMUS OREGONENSIS (MALE)	210	314	210	314	262	0.42
MESOCYCLOPS EDAX	314	629	419	419	445	0.72
TROPPOCYCLOPS PRASINUS MEXICANUS	3039	2305	1991	1467	2201	3.56
TOTAL COPEPODA	45899	39296	47891	46108	44799	72.61
CLADOCERA						
BOSMINA LONGIROSTRIS	10584	7964	7755	8803	8777	14.22
CERIODAPHNIA LACUSTRIS	0	0	105	105	53	0.08
CERIODAPHNIA QUADRANGULA	0	105	0	0	26	0.04
CHYDORUS SPHAERICUS	105	105	0	210	105	0.17
DAPHNIA GALEATA MENOOTAE	105	524	314	734	419	0.67
DAPHNIA LONGIREMIS	2201	838	943	943	1231	1.99
DAPHNIA RETROCURVA	2410	2829	2934	2829	2751	4.45
EUBOSMINA COREGONI	1258	210	838	419	681	1.10
HOLOPEDIUM GIBBERUM	314	314	314	629	393	0.63
LEPTODORA KINDTII	0	0	0	105	26	0.04
TOTAL CLADOCERA	16977	12889	13203	14777	14462	23.43
ROTIFERA						
ROTIFERA	2201	3249	1991	2305	2437	3.94
TOTAL ROTIFERA	2201	3249	1991	2305	2437	3.94
TOTAL ZOOPLANKTON	65077	55434	63085	63190	61698	

TABLE 21 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT.
28 AUGUST 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 22					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	2201	838	1048	1258	1336	1.58
CALANOID COPEPODITES	17605	12051	10479	11842	12994	15.41
CYCLOPOID COPEPODITES	39926	31124	29133	27980	32041	38.00
CYCLOPS BICUSPIDATUS THOMASI	7964	8174	5973	5135	6812	8.07
DIAPTOMUS SPP. (FEMALE)	1153	1258	1048	838	1074	1.27
DIAPTOMUS ASHLANDI (MALE)	838	838	1153	629	865	1.02
DIAPTOMUS OREGONENSIS (MALE)	105	314	210	314	236	0.27
MESOCYCLOPS EDAX	105	105	0	734	236	0.27
TROPICOCYCLOPS PRASINUS MEXICANUS	6602	5135	3773	1572	4271	5.06
 TOTAL COPEPODA	 76499	 59837	 52817	 50302	 59865	 71.00
CLADOCERA						
BOSMINA LONGIROSTRIS	10898	13204	9327	8069	10375	12.30
CERIODAPHNIA QUADRANGULA	0	0	0	105	26	0.03
CHYDORUS SPHAERICUS	210	105	105	0	105	0.12
DAPHNIA GALEATA MENDOTAE	629	838	524	629	655	0.77
DAPHNIA LONGIREMIS	5240	3144	2515	2934	3458	4.10
DAPHNIA RETROCURVA	4192	6288	4297	5240	5004	5.93
EUBOSMINA COREGONI	734	943	524	629	708	0.83
HOLOPEDIUM GIBBERUM	419	524	524	314	445	0.52
LEPTODORA KINDTII	105	0	105	105	79	0.09
 TOTAL CLADOCERA	 22427	 25046	 17921	 18025	 20855	 24.73
ROTIFERA						
ROTIFERA	6916	2515	2934	1991	3589	4.25
 TOTAL ROTIFERA	 6916	 2515	 2934	 1991	 3589	 4.25
 TOTAL ZOOPLANKTON	 105842	 87398	 73672	 70318	 84309	

TABLE 21 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
28 AUGUST 1973

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	1121	1.72
CALANOID COPEPODITES	12586	19.35
CYCLOPOID COPEPODITES	23269	35.78
CYCLOPS BICUSPIDATUS THOMASI	3836	5.89
CYCLOPS VERNALIS	5	0.00
DIAPTOMUS SPP. (FEMALE)	744	1.14
DIAPTOMUS ASHLANDI (MALE)	870	1.33
DIAPTOMUS MINUTUS (MALE)	32	0.04
DIAPTOMUS OREGONENSIS (MALE)	163	0.25
EPISCHURA LACUSTRIS	5	0.00
MESOCYCLOPS EDAX	461	0.70
TROPOCYCLOPS PRASINUS MEXICANUS	2102	3.23
TOTAL COPEPODA	45194	69.50
CLADOCERA		
BOSMINA LONGIROSTRIS	8625	13.26
CERIODAPHNIA LACUSTRIS	21	0.03
CERIODAPHNIA QUADRANGULA	10	0.01
CERIODAPHNIA SPP.	21	0.03
CHYDORUS SPHAERICUS	116	0.17
DAPHNIA GALEATA MENDOTAE	660	1.01
DAPHNIA LONGIREMIS	2127	3.27
DAPHNIA RETROCURVA	4197	6.45
EUBOSMINA COREGONI	886	1.36
HOLOPEIDIUM GIBBERUM	372	0.57
LEPTODOGRA KINDTII	26	0.03
TOTAL CLADOCERA	17061	26.23
ROTIFERA		
ROTIFERA	2772	4.26
TOTAL ROTIFERA	2772	4.26
TOTAL ZOOPLANKTON	65027	

TABLE 22 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE. LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT. 26 SEPTEMBER 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 2					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	2122	1768	825	1886	1650	3.30
CALANOID COPEPODITES	3301	3537	2712	3773	3331	6.67
CYCLOPOID COPEPODITES	24875	21928	21221	24757	23195	46.48
CYCLOPS BICUSPIDATUS THOMASI	825	236	472	589	531	1.06
CYCLOPS VERNALIS	236	707	236	236	354	0.70
DIAPTOMUS SPP. (FEMALE)	118	0	0	0	30	0.06
DIAPTOMUS MINUTUS (MALE)	0	0	118	0	30	0.06
DIAPTOMUS OREGONENSIS (MALE)	118	0	0	0	30	0.06
EPISCHURA LACUSTRIS	118	0	0	0	30	0.06
MESOCYCLOPS EDAX	472	354	118	0	236	0.47
TROPYCYCLOPS PRASINUS MEXICANUS	3537	2947	3065	2476	3006	6.02
TOTAL COPEPODA	35722	31477	28767	33717	32423	64.97
CLADOCERA						
BOSMINA LONGIROSTRIS	4598	5777	5187	5777	5335	10.69
CERIODAPHNIA QUADRANGULA	0	0	118	236	89	0.17
CHYDORUS SPHAERICUS	1179	1650	1179	1061	1267	2.53
DAPHNIA GALEATA MENDOTAE	236	354	354	354	325	0.65
DAPHNIA LONGIREMIS	0	236	118	118	118	0.23
DAPHNIA RETROCURVA	943	1179	1297	1650	1267	2.53
EUBOSMINA COREGONI	6013	6720	5541	6013	6072	12.16
HOLOPEDIIUM GIBBERUM	118	236	354	118	207	0.41
TOTAL CLADOCERA	13087	16152	14148	15327	14680	29.41
ROTIFERA						
ROTIFERA	2122	4244	2594	2240	2800	5.61
TOTAL ROTIFERA	2122	4244	2594	2240	2800	5.61
TOTAL ZOOPLANKTON	50931	51873	45509	51284	49903	

TABLE 22 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT. 26 SEPTEMBER 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 6					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	3065	1061	1297	1179	1651	2.14
CALANOID COPEPODITES	5305	6013	6602	6130	6013	7.81
CYCLOPOID COPEPODITES	48925	47746	42559	51755	47746	62.06
CYCLOPS BICUSPIDATUS THOMASI	707	707	1650	1415	1120	1.45
CYCLOPS VERNALIS	236	589	472	589	472	0.61
DIAPTOMUS SPP. (FEMALE)	118	354	472	825	442	0.57
DIAPTOMUS ASHLANDI (MALE)	354	236	118	0	177	0.23
DIAPTOMUS MINUTUS (MALE)	0	0	0	118	30	0.03
DIAPTOMUS DREGONENSIS (MALE)	0	118	0	0	30	0.03
EUCYCLOPS AGILIS	0	0	0	354	89	0.11
MESOCYCLOPS EDAX	0	118	0	236	89	0.11
TROPIDOCYCLOPS PRASINUS MEXICANUS	1886	2358	1650	1768	1916	2.49
TOTAL COPEPODA	60596	59300	54820	64369	59775	77.69
CLADOCERA						
ALONA AFFINIS	118	118	0	118	89	0.11
BOSMINA LONGIROSTRIS	8960	6248	5895	7545	7162	9.30
CERIODAPHNIA QUADRANGULA	118	0	118	236	118	0.15
CHYDORUS SPHAERICUS	1415	1768	1297	1886	1592	2.06
DAPHNIA GALEATA MENDOTAE	589	1179	589	236	648	0.84
DAPHNIA LONGIREMIS	118	0	118	0	59	0.07
DAPHNIA RETROCURVA	707	1179	1179	943	1002	1.30
EUBOSMINA COREGONI	3419	5777	2947	4008	4038	5.24
HOLOPEDIIUM GIBBERUM	236	0	236	236	177	0.23
LEPTODORA KINDTII	5	2	7	0	4	0.00
MACROTHRIX LATICORNIS	0	118	0	236	89	0.11
TOTAL CLADOCERA	15685	16389	12386	15444	14978	19.46
ROTIFERA						
ROTIFERA	2947	1533	2240	2004	2181	2.83
TOTAL ROTIFERA	2947	1533	2240	2004	2181	2.83

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TABLE 22. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE. LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT. 26 SEPTEMBER 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 6					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
TOTAL ZOOPLANKTON	79228	77222	69446	81817	76934	

TABLE 22 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE. LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT. 26 SEPTEMBER 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 11					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER		REP.D	MEAN	
	REP.B	REP.C				
COPEPODA						
NAUPLII	1061	2004	1061	1297	1356	2.43
CALANOID COPEPODITES	5069	7309	5541	6248	6042	10.86
CYCLOPOID COPEPODITES	26172	27705	25583	26762	26556	47.73
CYCLOPS BICUSPIDATUS THOMASI	707	1061	825	825	855	1.53
CYCLOPS VERNALIS	0	707	118	236	265	0.47
DIAPTOMUS SPP. (FEMALE)	236	118	354	118	207	0.37
DIAPTOMUS ASHLANDI (MALE)	0	472	118	0	148	0.26
DIAPTOMUS MINUTUS (MALE)	118	0	0	0	30	0.05
MESOCYCLOPS EDAX	0	0	118	0	30	0.05
TROPOCYCLOPS PRASINUS MEXICANUS	2947	2240	2358	2829	2594	4.66
TOTAL COPEPODA	36310	41616	36076	38315	38083	68.45
CLADOCERA						
BOSMINA LONGIROSTRIS	6248	8370	8488	6602	7427	13.35
CERIDOPHNA QUADRANGULA	0	118	118	0	59	0.10
CHYDORUS SPHAERICUS	1297	1061	2594	1415	1592	2.86
DAPHNIA GALEATA MENOOTAE	472	354	589	1179	649	1.16
DAPHNIA LONGIREMIS	0	0	0	354	89	0.15
DAPHNIA RETROCURVA	1179	1061	1415	1179	1209	2.17
EUBOSMINA COREGONI	3655	4008	5777	4126	4392	7.89
HOLOPEDIUM GIBBERUM	0	236	236	0	118	0.21
LEPTODORA KINDTII	7	7	9	7	8	0.01
TOTAL CLADOCERA	12858	15215	19226	14862	15543	27.93
ROTIFERA						
ROTIFERA	2712	2240	1650	1415	2004	3.60
TOTAL ROTIFERA	2712	2240	1650	1415	2004	3.60
TOTAL ZOOPLANKTON	51880	59071	56952	54592	55630	

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TABLE 22 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE. LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT. 26 SEPTEMBER 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 15					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1179	943	1415	1886	1356	2.68
CALANOID COPEPODITES	7309	8370	6956	7781	7604	15.06
CYCLOPOID COPEPODITES	19806	22989	16859	23814	20867	41.34
CYCLOPS BICUSPIDATUS THOMASI	1179	1061	2829	1650	1680	3.32
CYCLOPS VERNALIS	118	0	0	0	30	0.05
DIAPTOMUS SPP. (FEMALE)	589	589	943	707	707	1.40
DIAPTOMUS ASHLANDI (MALE)	472	118	0	236	207	0.41
DIAPTOMUS OREGONENSIS (MALE)	236	0	354	354	236	0.46
EPISCHURA LACUSTRIS	118	118	0	118	89	0.17
EUCYCLOPS AGILIS	0	118	0	0	30	0.05
MESOCYCLOPS EDAX	118	118	236	0	118	0.23
TROPIDOCYCLOPS PRASINUS MEXICANUS	1533	1533	1297	1415	1445	2.86
HARPACTICOIDA	0	0	0	118	30	0.05
TOTAL COPEPODA	32657	35957	30889	38079	34399	68.16
CLADOCERA						
BOSMINA LONGIROSTRIS	6956	9667	2829	8370	6956	13.78
CERIODAPHNIA QUADRANGULA	0	0	118	118	59	0.11
CHYDORUS SPHAERICUS	1533	2004	2122	1533	1798	3.56
DAPHNIA GALEATA MENDOTAE	1179	707	825	472	796	1.57
DAPHNIA RETROCURVA	943	1886	1179	1533	1385	2.74
EUBOSMINA COREGONI	3183	3890	2358	2712	3036	6.01
HOLOPEDIIUM GIBBERUM	472	589	354	354	442	0.87
LEPTODORA KINDTII	5	7	2	0	4	0.00
TOTAL CLADOCERA	14271	18750	9787	15092	14476	28.68
ROTIFERA						
ROTIFERA	1415	825	1415	2712	1592	3.15
TOTAL ROTIFERA	1415	825	1415	2712	1592	3.15
TOTAL ZOOPLANKTON	48343	55532	42091	55883	50467	

TABLE 22 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE. LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT. 26 SEPTEMBER 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 20

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	1886	2240	2947	2947	2505	3.01
CALANOID COPEPODITES	10728	10375	11907	13204	11554	13.92
CYCLOPOID COPEPODITES	30416	28648	26997	33128	29797	35.91
CYCLOPS BICUSPIDATUS THOMASI	2476	3419	1886	3301	2771	3.33
CYCLOPS VERNALIS	118	707	354	707	472	0.56
DIAPTOMUS SPP. (FEMALE)	472	589	707	118	472	0.56
DIAPTOMUS ASHLANDI (MALE)	0	118	236	354	177	0.21
DIAPTOMUS OREGONENSIS (MALE)	118	0	0	0	30	0.03
EPISCHURA LACUSTRIS	118	0	0	0	30	0.03
MESOCYCLOPS EDAX	354	0	0	0	89	0.10
TROPIDOCYCLOPS PRASINUS MEXICANUS	5423	6366	5187	6130	5777	6.96
TOTAL COPEPODA	52109	52462	50221	59889	53674	64.68
CLADOCERA						
BOSMINA LONGIROSTRIS	9549	11907	9431	11436	10581	12.75
CERIODAPHNIA QUADRANGULA	118	0	0	0	30	0.03
CHYDORUS SPHAERICUS	943	825	472	2476	1179	1.42
DAPHNIA GALEATA MENDOTAE	3419	1650	1650	1768	2122	2.55
DAPHNIA LONGIREMIS	118	0	0	0	30	0.03
DAPHNIA RETROCURVA	5187	9196	7663	7191	7309	8.80
EUBOSMINA COREGONI	4126	4598	3301	3773	3950	4.76
HOLOPEDIIUM GIBBERUM	354	943	236	825	590	0.71
LEPTODORA KINDTII	0	236	0	0	59	0.07
TOTAL CLADOCERA	23814	29355	22753	27469	25850	31.15
ROTIFERA						
ROTIFERA	2122	2829	5187	3655	3448	4.15
TOTAL ROTIFERA	2122	2829	5187	3655	3448	4.15

TABLE 22 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE. LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT. 26 SEPTEMBER 1973.

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	1704	2.69
CALANOID COPEPODITES	6909	10.93
CYCLOPOID COPEPODITES	29632	46.89
CYCLOPS BICUSPIDATUS THOMASI	1391	2.20
CYCLOPS VERNALIS	319	0.50
DIAPTOMUS SPP. (FEMALE)	372	0.58
DIAPTOMUS ASHLANDI (MALE)	142	0.22
DIAPTOMUS MINUTUS (MALE)	18	0.02
DIAPTOMUS OREGONENSIS (MALE)	65	0.10
EPISCHURA LACUSTRIS	30	0.04
EUCYCLOPS AGILIS	24	0.03
MESOCYCLOPS EDAX	112	0.17
TROPOCYCLOPS PRASINUS MEXICANUS	2948	4.66
HARPACTICOIDA	6	0.00
TOTAL COPEPODA	43672	69.11
CLAODCERA		
ALONA AFFINIS	18	0.02
BOSMINA LONGIROSTRIS	7492	11.85
CERIODAPHNIA QUADRANGULA	71	0.11
CHYDORUS SPHAERICUS	1486	2.35
DAPHNIA GALEATA MENDOTAE	908	1.43
DAPHNIA LONGIREMIS	59	0.09
DAPHNIA RETROCURVA	2434	3.85
EUBOSMINA COREGONI	4298	6.80
HOLOPEDIIUM GIBBERUM	307	0.48
LEPTODORA KINDTII	15	0.02
MACROTHRIX LATICORNIS	18	0.02
TOTAL CLAODCERA	17106	27.07
ROTIFERA		
ROTIFERA	2405	3.80
TOTAL ROTIFERA	2405	3.80

TABLE 22 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE. LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT. 26 SEPTEMBER 1973.

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
TOTAL ZOOPLANKTON	63183	

TABLE 23. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, 26 SEPTEMBER 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 3

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	1415	943	550	786	924	2.23
CALANOID COPEPODITES	3851	3694	2594	2829	3242	7.83
CYCLOPOID COPEPODITES	19806	16505	19806	15955	18019	43.55
CYCLOPS BICUSPIDATUS THOMASI	1258	1493	2279	1493	1631	3.94
CYCLOPS VERNALIS	79	0	0	0	20	0.04
DIAPTOMUS SPP. (FEMALE)	79	314	236	79	177	0.42
DIAPTOMUS ASHLANDI (MALE)	79	314	0	0	98	0.23
DIAPTOMUS OREGONENSIS (MALE)	79	0	0	0	20	0.04
EPISCHURA LACUSTRIS	79	0	79	0	40	0.09
MESOCYCLOPS EDAX	393	157	0	0	138	0.33
TROPICOCYCLOPS PRASINUS MEXICANUS	3615	2594	2201	3380	2948	7.12
TOTAL COPEPODA	30733	26014	27745	24522	27256	65.88
CLADOCERA						
BOSMINA LONGIROSTRIS	7781	4480	4244	3144	4912	11.87
CERIODAPHNIA QUADRANGULA	0	79	0	314	98	0.23
CHYDORUS SPHAERICUS	550	1415	0	0	491	1.18
DAPHNIA GALEATA MENDOTAE	314	393	236	157	275	0.66
DAPHNIA LONGIREMIS	79	0	0	0	20	0.04
DAPHNIA RETROCURVA	3222	2908	1965	3930	3006	7.26
EUBOSMINA COREGONI	4559	3065	2672	3222	3380	8.17
HOLOPEIDIUM GIBBERUM	236	157	236	79	177	0.42
LEPTODORA KINDTII	12	4	0	8	6	0.01
TOTAL CLADOCERA	16753	12501	9353	10854	12365	29.88
ROTIFERA						
ROTIFERA	2043	1808	1336	1808	1749	4.22
TOTAL ROTIFERA	2043	1808	1336	1808	1749	4.22
TOTAL ZOOPLANKTON	49529	40323	38434	37184	41370	

TABLE 23. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT. 26 SEPTEMBER 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 7

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1729	1258	2043	786	1454	2.90
CALANOID COPEPODITES	11082	9353	10767	14068	11318	22.59
CYCLOPOID COPEPODITES	22321	18863	18470	18155	19452	38.83
CYCLOPS BICUSPIDATUS THOMASI	943	629	943	1179	924	1.84
CYCLOPS VERNALIS	79	157	0	0	59	0.11
DIAPTOMUS SPP. (FEMALE)	550	707	1336	629	806	1.60
DIAPTOMUS ASHLANDI (MALE)	314	236	550	550	413	0.82
DIAPTOMUS MINUTUS (MALE)	0	0	157	0	39	0.07
DIAPTOMUS OREGONENSIS (MALE)	0	79	79	0	40	0.07
EPISCHURA LACUSTRIS	0	0	0	157	39	0.07
MESOCYCLOPS EDAX	157	157	79	79	118	0.23
TROPIDOCYCLOPS PRASINUS MEXICANUS	2672	3537	1965	943	2279	4.54
TOTAL COPEPODA	39847	34976	36389	36546	36941	73.74
CLADOCERA						
BOSMINA LONGIROSTRIS	5423	3222	5266	4480	4598	9.17
CERIODAPHNIA QUADRANGULA	0	0	79	79	40	0.07
CHYDORUS SPHAERICUS	1336	1022	1258	1808	1356	2.70
DAPHNIA GALEATA MENDOTAE	707	629	707	786	707	1.41
DAPHNIA LONGIREMIS	0	0	79	0	20	0.03
DAPHNIA RETROCURVA	1572	1729	1179	1965	1611	3.21
EUBOSMINA COREGONI	1650	1650	2829	2829	2240	4.47
HOLLOPEDIUM GIBBERUM	79	236	157	79	138	0.27
LEPTODORA KINDTII	0	5	5	11	5	0.00
TOTAL CLADOCERA	10767	8493	11559	12037	10715	21.39
ROTIFERA						
ROTIFERA	2358	2436	2594	2358	2437	4.86
TOTAL ROTIFERA	2358	2436	2594	2358	2437	4.86
TOTAL ZOOPLANKTON	52972	45905	50542	50941	50093	

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TABLE 23 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE. LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT. 26 SEPTEMBER 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 12

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	797	1100	865	629	825	2.04
CALANOID COPEPODITES	8724	6209	8410	4244	6897	17.07
CYCLOPOID COPEPODITES	18706	12025	15090	10925	14187	35.12
CYCLOPS BICUSPIDATUS THOMASI	943	1572	1493	865	1218	3.01
DIAPTOMUS SPP. (FEMALE)	157	236	707	236	334	0.82
DIAPTOMUS ASHLANDI (MALE)	157	236	314	0	177	0.43
ERGASILUS SPP.	0	0	79	0	20	0.04
MESOCYCLOPS EDAX	0	0	79	0	20	0.04
TROPOCYCLOPS PRASINUS MEXICANUS	2751	1336	1965	1022	1769	4.38
TOTAL COPEPODA	32145	22714	29002	17921	25447	63.00
CLADOCERA						
BOSMINA LONGIROSTRIS	3065	5423	4008	3222	3930	9.73
CERIODAPHNIA QUADRANGULA	236	0	0	79	79	0.19
CHYDORUS SPHAERICUS	707	393	393	472	491	1.21
DAPHNIA GALEATA MENDOTAE	707	629	472	472	570	1.41
DAPHNIA RETROCURVA	2122	2987	2829	1965	2476	6.13
EUBOSMINA COREGONI	1886	3144	2279	2751	2515	6.22
HOLOPEDIUM GIBBERUM	236	0	157	236	157	0.38
LEPTODORA KINDTII	7	11	5	6	7	0.01
TOTAL CLADOCERA	8966	12587	10143	9203	10225	25.31
ROTIFERA						
ROTIFERA	2279	6759	4559	5266	4716	11.67
TOTAL ROTIFERA	2279	6759	4559	5266	4716	11.67
TOTAL ZOOPLANKTON	43390	42060	43704	32390	40388	

TABLE 23 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT.
26 SEPTEMBER 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 16					
	NO. PER CUBIC METER					OCCUR- RECE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1808	1415	1336	1258	1454	3.39
CALANOID COPEPODITES	7624	7467	5816	5816	6681	15.60
CYCLOPOID COPEPODITES	16584	16348	13361	14068	15090	35.23
CYCLOPS BICUSPIDATUS THOMASI	1415	1965	1258	1258	1474	3.44
DIAPTOMUS SPP. (FEMALE)	314	314	550	0	295	0.68
DIAPTOMUS ASHLANDI (MALE)	79	236	79	0	99	0.23
DIAPTOMUS MINUTUS (MALE)	0	236	0	79	79	0.18
EPISCHURA LACUSTRIS	0	79	0	79	40	0.09
MESOCYCLOPS EDAX	157	0	157	79	98	0.22
TROPIDOCYCLOPS PRASINUS MEXICANUS	2043	1729	1258	1179	1552	3.62
TOTAL COPEPODA	30024	29789	23815	23816	26862	62.72
CLADOCERA						
ALONA GUTTATA	0	0	0	79	20	0.04
BOSMINA LONGIROSTRIS	6288	6759	6838	6130	6504	15.18
CERIODAPHNIA QUADRANGULA	79	236	0	79	99	0.23
CHYDORUS SPHAERICUS	314	550	393	786	511	1.19
DAPHNIA GALEATA MENDOTAE	314	157	707	314	373	0.87
DAPHNIA LONGIREMIS	0	79	0	0	20	0.04
DAPHNIA RETROCURVA	2436	2436	2436	1808	2279	5.32
EUBOSMINA COREGONI	3301	2829	3773	2515	3105	7.25
HOLLOPEDIUM GIBBERUM	629	550	550	393	531	1.23
LEPTODORA KINDTII	5	5	5	6	5	0.01
TOTAL CLADOCERA	13366	13601	14702	12110	13447	31.40
ROTIFERA						
ROTIFERA	2594	2515	2279	2672	2515	5.87
TOTAL ROTIFERA	2594	2515	2279	2672	2515	5.87
TOTAL ZOOPLANKTON	45984	45905	40796	38598	42824	

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TABLE 23 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE. LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT. 26 SEPTEMBER 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 21					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	707	1179	1336	1336	1140	2.56
CALANOID COPEPODITES	6445	6130	5187	4637	5600	12.62
CYCLOPOID COPEPODITES	13597	13597	11003	13047	12811	28.87
CYCLOPS BICUSPIDATUS THOMASI	1179	2279	1258	1650	1592	3.58
DIAPTOMUS SPP. (FEMALE)	707	393	314	472	472	1.06
DIAPTOMUS ASHLANDI (MALE)	157	0	157	79	98	0.22
DIAPTOMUS MINUTUS (MALE)	79	0	79	236	99	0.22
EPISCHURA LACUSTRIS	0	157	0	79	59	0.13
MESOCYCLOPS EDAX	0	79	0	79	40	0.09
TROPIDOCYCLOPS PRASINUS MEXICANUS	1493	1808	1179	1336	1454	3.27
TOTAL COPEPODA	24364	25622	20513	22951	23365	52.66
CLADOCERA						
BOSMINA LONGIROSTRIS	6523	6445	5973	6209	6288	14.17
CERIODAPHNIA QUADRANGULA	0	0	79	0	20	0.04
CHYDORUS SPHAERICUS	393	314	550	393	413	0.93
DAPHNIA GALEATA MENDOTAE	1179	314	786	1100	845	1.90
DAPHNIA RETROCURVA	3851	3615	3458	4637	3890	8.76
DIAPHANOSOMA LEUCHTENBERGIANUM	79	0	0	0	20	0.04
EUBOSMINA COREGONI	2751	4008	2594	4559	3478	7.84
HOLOPEDIIUM GIBBERUM	865	786	707	629	747	1.68
LEPTODOCRA KINDTII	11	9	11	8	10	0.02
TOTAL CLADOCERA	15652	15491	14158	17535	15711	35.41
ROTIFERA						
ROTIFERA	4244	5187	6209	5502	5286	11.91
TOTAL ROTIFERA	4244	5187	6209	5502	5286	11.91
TOTAL ZOOPLANKTON	44260	46300	40890	45988	44362	

TABLE 23 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE. LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT. 26 SEPTEMBER 1973.

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	1159	2.64
CALANOID COPEPODITES	6748	15.40
CYCLOPOID COPEPODITES	15912	36.32
CYCLOPS BICUSPIDATUS THOMASI	1368	3.12
CYCLOPS VERNALIS	16	0.03
DIAPTOMUS SPP. (FEMALE)	417	0.95
DIAPTOMUS ASHLANDI (MALE)	177	0.40
DIAPTOMUS MINUTUS (MALE)	43	0.09
DIAPTOMUS OREGONENSIS (MALE)	12	0.02
EPICHURA LACUSTRIS	36	0.08
ERGASILUS SPP.	4	0.00
MESOCYCLOPS EDAX	83	0.18
TROPIDOCYCLOPS PRASINUS MEXICANUS	2000	4.56
TOTAL COPEPODA	27975	63.85
CLADOCERA		
ALONA GUTTATA	4	0.00
BOSMINA LONGIROSTRIS	5246	11.97
CERIODAPHNIA QUADRANGULA	67	0.15
CHYDORUS SPHAERICUS	652	1.48
DAPHNIA GALEATA MENDOTAE	554	1.26
DAPHNIA LONGIREMIS	12	0.02
DAPHNIA RETROCURVA	2652	6.05
DIAPHANOSOMA LEUCHTENBERGIANUM	4	0.00
EUBUSMINA COREGONI	2944	6.72
HOLLOPEDIIUM GIBBERUM	350	0.79
LEPTODORA KINDTII	7	0.01
TOTAL CLADOCERA	12492	28.51
ROTIFERA		
ROTIFERA	3341	7.62
TOTAL ROTIFERA	3341	7.62
TOTAL ZOOPLANKTON	43808	

TABLE 24 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE. LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT .
26 SEPTEMBER 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 4					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1258	2436	1100	1415	1552	3.17
CALANOID COPEPODITES	6838	10139	9510	10060	9137	18.70
CYCLOPOID COPEPODITES	14383	16269	17369	17841	16466	33.71
CYCLOPS BICUSPIDATUS THOMASI	1729	1493	1022	1729	1493	3.05
DIAPTOMUS SPP. (FEMALE)	79	79	393	236	197	0.40
DIAPTOMUS ASHLANDI (MALE)	393	314	79	0	197	0.40
DIAPTOMUS MINUTUS (MALE)	79	0	0	79	40	0.08
DIAPTOMUS OREGONENSIS (MALE)	79	79	79	0	59	0.12
EPISCHURA LACUSTRIS	0	79	0	0	20	0.04
EURYTEMORA AFFINIS	0	0	0	79	20	0.04
MESOCYCLOPS EDAX	236	0	236	314	197	0.40
TROPIDOCYCLOPS PRASINUS MEXICANUS	1022	1100	1022	1179	1081	2.21
 TOTAL COPEPODA	 26096	 31988	 30810	 32932	 30459	 62.36
CLADOCERA						
BOSMINA LONGIROSTRIS	4559	4637	6995	4244	5109	10.46
CERIODAPHNIA LACUSTRIS	79	0	0	0	20	0.04
CHYDORUS SPHAERICUS	865	550	393	707	629	1.28
DAPHNIA GALEATA MENDOTAE	629	314	550	550	511	1.04
DAPHNIA LONGIREMIS	0	79	79	236	99	0.20
DAPHNIA RETROCURVA	5737	4559	9038	9038	7093	14.52
DIAPHANOSOMA LEUCHTENBERGIANUM	0	79	0	0	20	0.04
EUBOSMINA COREGONI	2201	2122	2672	2751	2437	4.98
HOLOPEDIUM GIBBERUM	236	393	472	393	374	0.76
LEPTODORA KINDTII	5	17	2	0*	6	0.01
 TOTAL CLADOCERA	 14311	 12750	 20201	 17919	 16298	 33.37
ROTIFERA						
ROTIFERA	1886	2515	1572	2358	2083	4.26
 TOTAL ROTIFERA	 1886	 2515	 1572	 2358	 2083	 4.26
 TOTAL ZOOPLANKTON	 42293	 47253	 52583	 53209	 48840	

* ORGANISM PRESENT IN DENSITIES LESS THAN ONE PER CUBIC METER

TABLE 24 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, 26 SEPTEMBER 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 8					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1415	1258	1258	1179	1278	2.71
CALANOID COPEPODITES	13204	13125	13597	12497	13106	27.85
CYCLOPOID COPEPODITES	14854	15955	14226	15405	15110	32.10
CYCLOPS BICUSPIDATUS THOMASI	1650	1808	2201	1886	1886	4.00
DIAPTOMUS SPP. (FEMALE)	393	157	472	472	374	0.79
DIAPTOMUS ASHLANDI (MALE)	393	0	0	157	138	0.29
DIAPTOMUS MINUTUS (MALE)	0	79	0	157	59	0.12
DIAPTOMUS OREGONENSIS (MALE)	0	0	157	79	59	0.12
EPISCHURA LACUSTRIS	0	79	79	79	59	0.12
LIMNOCALANUS MACRURUS	2	2	2	2	2	0.00
MESOCYCLOPS EDAX	157	157	157	314	196	0.41
TROPIDOCYCLOPS PRASINUS MEXICANUS	1100	707	629	1258	924	1.96
TOTAL COPEPODA	33168	33327	32778	33485	33191	70.53
CLADOCERA						
EUSMINA LONGIROSTRIS	3301	3222	3301	3851	3419	7.26
CERIODAPHNIA QUADRANGULA	0	79	0	0	20	0.04
CHYDORUS SPHAERICUS	393	0	314	157	216	0.45
DAPHNIA GALEATA MENDOTAE	314	472	629	157	393	0.83
DAPHNIA LONGIRENIS	0	0	79	0	20	0.04
DAPHNIA RETROCURVA	4716	4244	6445	2908	4578	9.72
EUBOSMINA COREGONI	2594	1493	1729	2279	2024	4.30
HOLOPEDIUM GIBBERUM	550	707	707	472	609	1.29
LEPTODORA KINDTII	44	21	37	28	33	0.07
TOTAL CLADOCERA	11912	10238	13241	9852	11312	24.03
ROTIFERA						
ROTIFERA	1886	4559	2201	1572	2555	5.42
TOTAL ROTIFERA	1886	4559	2201	1572	2555	5.42
TOTAL ZOOPLANKTON	46966	48124	48220	44909	47058	

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TABLE 24 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE. LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT .
26 SEPTEMBER 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 13

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1100	1729	865	865	1140	2.38
CALANOID COPEPODITES	10610	8567	10767	9903	9962	20.87
CYCLOPOID COPEPODITES	15798	13204	17762	12104	14717	30.84
CYCLOPS BICUSPIDATUS THOMASI	3458	865	1886	1258	1867	3.91
DIAPTOMUS SPP. (FEMALE)	157	157	157	157	157	0.32
DIAPTOMUS ASHLANDI (MALE)	157	236	236	79	177	0.37
DIAPTOMUS MINUTUS (MALE)	0	157	314	0	118	0.24
DIAPTOMUS OREGONENSIS (MALE)	0	79	0	0	20	0.04
EPISCHURA LACUSTRIS	0	0	79	79	40	0.08
LIMNOCALANUS MACRURUS	0	0	0*	0	0*	0.00
MESOCYCLOPS EDAX	393	79	393	0	216	0.45
TROPIDOCYCLOPS PRASINUS MEXICANUS	1179	1258	1258	1100	1199	2.51
TOTAL COPEPODA	32852	26331	33717	25545	29613	62.06
CLADOCERA						
BOSMINA LONGIROSTRIS	5109	4559	5737	1258	4166	8.73
CERIODAPHNIA LACUSTRIS	79	0	0	0	20	0.04
CERIODAPHNIA QUADRANGULA	0	157	79	79	79	0.16
CHYDORUS SPHAERICUS	629	707	707	236	570	1.19
DAPHNIA GALEATA MENDOTAE	236	550	393	1100	570	1.19
DAPHNIA LONGIREMIS	0	0	157	79	59	0.12
DAPHNIA RETROCURVA	9117	5030	7545	5580	6818	14.28
EUBOSMINA COREGONI	3615	2515	3144	4087	3340	7.00
HOLOPEDIUM GIBBERUM	236	865	707	707	629	1.31
LEPTODORA KINDTII	3	3	3	2	3	0.00
TOTAL CLADOCERA	19024	14386	18472	13128	16254	34.06
ROTIFERA						
ROTIFERA	1336	1258	3458	1336	1847	3.87
TOTAL ROTIFERA	1336	1258	3458	1336	1847	3.87
TOTAL ZOOPLANKTON	53212	41975	55647	40009	47714	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 24 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT .
26 SEPTEMBER 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 17

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	786	1336	943	943	1002	1.90
CALANOID COPEPODITES	11318	11789	8724	12182	11003	20.94
CYCLOPOID COPEPODITES	14697	12890	10532	13754	12968	24.68
CYCLOPS BICUSPIDATUS THOMASI	2436	2358	1886	2672	2338	4.44
DIAPTOMUS SPP. (FEMALE)	472	472	472	314	433	0.82
DIAPTOMUS ASHLANDI (MALE)	314	0	236	79	157	0.29
DIAPTOMUS MINUTUS (MALE)	0	236	0	79	79	0.15
DIAPTOMUS OREGONENSIS (MALE)	157	79	0	0	59	0.11
EURYTEMORA AFFINIS	79	0	0	0	20	0.03
LIMNOCALANUS MACRURUS	0*	0	0	0	0*	0.00
MESOCYCLOPS EOAX	79	79	0	0	40	0.07
TROPPOCYCLOPS PRASINUS MEXICANUS	1179	1100	1022	1100	1100	2.09
TOTAL COPEPODA	31517	30339	23815	31123	29199	55.57
CLADOCERA						
BOSMINA LONGIROSTRIS	5973	7388	5109	7231	6425	12.22
CERIODAPHNIA QUADRANGULA	79	79	0	0	40	0.07
CHYDORUS SPHAERICUS	393	314	314	79	275	0.52
DAPHNIA GALEATA MENDOTAE	1336	1572	1179	1886	1493	2.84
DAPHNIA LONGIREMIS	236	0	0	0	59	0.11
DAPHNIA RETROCURVA	9982	9746	6681	8252	8665	16.49
EUBOSMINA COREGONI	4323	4008	2751	4480	3891	7.40
HOLOPEIDIUM GIBBERUM	786	314	943	550	648	1.23
LEPTODORA KINDTII	33	21	31	3	22	0.04
TOTAL CLADOCERA	23141	23442	17008	22481	21518	40.95
ROTIFERA						
ROTIFERA	1493	1808	2122	1886	1827	3.47
TOTAL ROTIFERA	1493	1808	2122	1886	1827	3.47
TOTAL ZOOPLANKTON	56151	55589	42945	55490	52544	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 1. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT .
26 SEPTEMBER 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 22

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	865	1100	550	943	865	1.58
CALANOID COPEPODITES	14697	12811	13440	12497	13361	24.44
CYCLOPOID COPEPODITES	14933	11946	13754	11711	13086	23.94
CYCLOPS BICUSPIDATUS THOMASI	3301	2908	1808	2594	2653	4.85
DIAPTOMUS SPP. (FEMALE)	707	472	236	157	393	0.71
DIAPTOMUS ASHLANDI (MALE)	707	314	236	314	393	0.71
DIAPTOMUS MINUTUS (MALE)	79	79	79	157	99	0.18
DIAPTOMUS DREGONENSIS (MALE)	157	79	0	0	59	0.10
EPISCHURA LACUSTRIS	79	0	0	0	20	0.03
MESOCYCLOPS EDAX	157	0	79	157	98	0.17
TROPOCYCLOPS PRASINUS MEXICANUS	1729	1965	1493	1729	1729	3.16
TOTAL COPEPODA	37411	31674	31675	30259	32756	59.93
CLADOCERA						
BOSMINA LONGIROSTRIS	7938	7467	7152	8724	7820	14.30
CHYDORUS SPHAERICUS	393	236	393	79	275	0.50
DAPHNIA GALEATA MENDOTAE	865	865	786	629	786	1.43
DAPHNIA LONGIREMIS	0	0	79	0	20	0.03
DAPHNIA RETROCURVA	6995	8174	8095	7859	7781	14.23
DIAPHANOSOMA LEUCHTENBERGIANUM	79	79	0	0	40	0.07
EUBOSMINA COREGONI	1965	2594	3458	4008	3006	5.50
HOLOPEDIUM GIBBERUM	472	314	157	157	275	0.50
LEPTODORA KINDTII	24	22	25	30	25	0.04
TOTAL CLADOCERA	18731	19751	20145	21486	20028	36.64
ROTIFERA						
ROTIFERA	1650	1808	1650	2358	1867	3.41
TOTAL ROTIFERA	1650	1808	1650	2358	1867	3.41
TOTAL ZOOPLANKTON	57792	53233	53470	54103	54651	

TABLE 24 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE. LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT . 26 SEPTEMBER 1973.

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	1167	2.32
CALANOID COPEPODITES	11314	22.55
CYCLOPOID COPEPODITES	14469	28.84
CYCLOPS BICUSPIDATUS THOMASI	2047	4.08
DIAPTOMUS SPP. (FEMALE)	311	0.61
DIAPTOMUS ASHLANDI (MALE)	212	0.42
DIAPTOMUS MINUTUS (MALE)	79	0.15
DIAPTOMUS OREGONENSIS (MALE)	51	0.10
EPISCHURA LACUSTRIS	28	0.05
EURYTEMORA AFFINIS	8	0.01
LIMNOCALANUS MACRURUS	0*	0.00
MESOCYCLOPS EDAX	149	0.29
TROPIDOCYCLOPS PRASINUS MEXICANUS	1207	2.40
TOTAL COPEPODA	31042	61.88
CLADOCERA		
BOSMINA LONGIROSTRIS	5388	10.74
CERIODAPHNIA LACUSTRIS	8	0.01
CERIODAPHNIA QUADRANGULA	28	0.05
CHYDORUS SPHAERICUS	393	0.78
DAPHNIA GALEATA MENDOTAE	751	1.49
DAPHNIA LONGIREMIS	51	0.10
DAPHNIA RETROCURVA	6987	13.92
DIAPHANOSOMA LEUCHTENBERGIANUM	12	0.02
EUBOSMINA COREGONI	2940	5.86
HOLOPEDIUM GIBBERUM	507	1.01
LEPTODOCERA KINDTII	18	0.03
TOTAL CLADOCERA	17083	34.05
ROTIFERA		
ROTIFERA	2036	4.05
TOTAL ROTIFERA	2036	4.05
TOTAL ZOOPLANKTON	50161	

TABLE 25 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 2

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	1022	341	524	445	583	4.71
CALANOID COPEPODITES	1860	1520	1572	2148	1775	14.36
CYCLOPOID COPEPODITES	3065	2017	1912	3301	2574	20.83
CYCLOPS BICUSPIDATUS THOMASI	105	0	105	183	98	0.79
DIAPTOMUS SPP. (FEMALE)	79	26	26	52	46	0.37
DIAPTOMUS OREGONENSIS (MALE)	0	26	0	0	7	0.05
EPISCHURA LACUSTRIS	26	52	26	52	39	0.31
TROPOCYCLOPS PRASINUS MEXICANUS	157	157	79	183	144	1.16
TOTAL COPEPODA	6314	4139	4244	6364	5266	42.62
CLADOCERA						
BOSMINA LONGIROSTRIS	2698	3144	4323	5737	3976	32.17
DAPHNIA GALEATA MENDOTAE	52	26	0	0	20	0.16
DAPHNIA LONGIREMIS	0	0	0	26	7	0.05
DAPHNIA RETROCURVA	1755	2463	2594	3746	2640	21.36
EUBOSMINA COREGONI	210	341	288	472	328	2.65
HOLOPEDIUM GIBBERUM	0	52	26	26	26	0.21
LEPTODOCRA KINDTII	0	0	0	2	0*	0.00
TOTAL CLADOCERA	4715	6026	7231	10009	6997	56.63
ROTIFERA						
ROTIFERA	210	105	0	52	92	0.74
TOTAL ROTIFERA	210	105	0	52	92	0.74
TOTAL ZOOPLANKTON	11239	10270	11475	16425	12355	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 25 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 6

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	2043	1179	1415	1572	1552	6.59
CALANOID COPEPODITES	2934	3877	3275	2410	3124	13.27
CYCLOPOID COPEPODITES	5816	4978	5737	4113	5161	21.93
CYCLOPS BICUSPIDATUS THOMASI	393	341	210	131	269	1.14
CYCLOPS VERNALIS	52	0	52	0	26	0.11
DIAPTOMUS SPP. (FEMALE)	26	52	52	79	52	0.22
DIAPTOMUS OREGONENSIS (MALE)	0	0	26	0	7	0.02
EPISCHURA LACUSTRIS	0	26	26	0	13	0.05
MESOCYCLOPS EDAX	52	26	26	0	26	0.11
TROPYCYCLOPS PRASINUS MEXICANUS	1074	655	996	288	753	3.20
TOTAL COPEPODA	12390	11134	11815	8593	10983	46.68
CLADOCERA						
BOSMINA LONGIROSTRIS	7414	5999	15640	10060	9778	41.56
DAPHNIA GALEATA MENDOTAE	0	0	183	0	46	0.19
DAPHNIA RETROCURVA	1153	1127	4506	1624	2103	8.93
EUBOBOSMINA COREGONI	157	183	472	236	262	1.11
TOTAL CLADOCERA	8724	7309	20801	11920	12189	51.81
ROTIFERA						
ROTIFERA	236	288	472	419	354	1.50
TOTAL ROTIFERA	236	288	472	419	354	1.50
TOTAL ZOOPLANKTON	21350	18731	33088	20932	23526	

TABLE 25. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 11

	NG. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	891	812	786	786	819	2.90
CALANOID COPEPODITES	707	681	786	969	786	2.78
CYCLOPOID COPEPODITES	8252	7231	7755	8174	7853	27.85
CYCLOPS BICUSPIDATUS THOMASI	236	105	262	288	223	0.79
CYCLOPS VERNALIS	236	105	183	157	170	0.60
DIAPTOMUS SPP. (FEMALE)	0	0	0	26	7	0.02
DIAPTOMUS ASHLANDI (MALE)	0	0	26	0	7	0.02
EPISCHURA LACUSTRIS	0	52	0	0	13	0.04
EUCYCLOPS AGILIS	0	0	0	26	7	0.02
EURYTEMORA AFFINIS	0	0	0	52	13	0.04
MESOCYCLOPS EDAX	26	26	0	26	20	0.07
TROPOCYCLOPS PRASINUS MEXICANUS	550	524	707	1022	701	2.48
TOTAL COPEPODA	10898	9536	10505	11526	10619	37.66
CLADOCERA						
ALONA SPP.	0	0	0	26	7	0.02
BOSMINA LONGIROSTRIS	11082	13702	16453	17343	14645	51.94
CHYDORUS SPHAERICUS	183	262	210	210	216	0.76
DAPHNIA GALEATA MENDOTAE	0	0	0	26	7	0.02
DAPHNIA RETROCURVA	105	367	603	603	420	1.48
DIAPHANOSOMA LEUCHTENBERGIANUM	0	0	0	26	7	0.02
EUBOSMINA COREGONI	79	367	341	629	354	1.25
HOLLOPEDIUM GIBBERUM	0	0	26	52	20	0.07
MACROTHRIX LATICORNIS	0	0	0	26	7	0.02
TOTAL CLADOCERA	11449	14698	17633	18941	15683	55.62
ROTIFERA						
ROTIFERA	1520	2279	1781	1991	1893	6.71
TOTAL ROTIFERA	1520	2279	1781	1991	1893	6.71
TOTAL ZOOPLANKTON	23867	26513	29919	32458	28195	

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TABLE 25 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 15					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	419	707	341	576	511	4.22
CALANOID COPEPODITES	314	314	105	393	282	2.33
CYCLOPOID COPEPODITES	1362	2960	1808	2463	2148	17.75
CYCLOPS BICUSPIDATUS THOMASI	105	105	52	183	111	0.91
CYCLOPS VERNALIS	105	52	26	79	65	0.54
DIAPTOMUS SPP. (FEMALE)	0	26	0	26	13	0.10
EPISCHURA LACUSTRIS	0	26	0	0	7	0.05
MESOCYCLOPS EDAX	26	0	26	79	33	0.27
TROPICOCYCLOPS PRASINUS MEXICANUS	79	183	314	498	269	2.22
TOTAL COPEPODA	2410	4373	2672	4297	3440	28.42
CLADOCERA						
BOSMINA LONGIROSTRIS	5056	7205	7624	11868	7938	65.60
CHYDORUS SPHAERICUS	0	26	0	0	7	0.05
DAPHNIA RETROCURVA	157	105	157	183	151	1.24
EUBOSMINA COREGONI	105	367	262	288	256	2.11
HOLLOPEDIIUM GIBBERUM	26	0	0	0	7	0.05
TOTAL CLADOCERA	5344	7703	8043	12339	8359	69.08
ROTIFERA						
ROTIFERA	498	236	157	314	301	2.48
TOTAL ROTIFERA	498	236	157	314	301	2.48
TOTAL ZOOPLANKTON	8252	12312	10872	16950	12100	

TABLE 25 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 20

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	1127	655	472	812	767	0.98
CALANOID COPEPODITES	2122	3851	2070	2305	2587	2.97
CYCLOPOID COPEPODITES	16662	27037	23893	19072	21666	24.94
CYCLOPS BICUSPIDATUS THOMASI	210	629	865	524	557	0.64
CYCLOPS VERNALIS	0	0	288	131	105	0.12
DIAPTOMUS SPP. (FEMALE)	52	0	0	0	13	0.01
DIAPTOMUS ASHLANDI (MALE)	0	26	26	39	23	0.02
ERGASILUS SPP.	0	0	0	39	10	0.01
EURYTEMORA AFFINIS	0	0	52	26	20	0.02
MESOCYCLOPS EDAX	0	0	52	52	26	0.02
TROPIDOCYCLOPS PRASINUS MEXICANUS	393	655	655	550	563	0.64
TOTAL COPEPODA	20566	32853	28373	23550	26337	30.31
CLADOCERA						
ALONA QUADRANGULARIS	0	0	26	0	7	0.00
ALONELLA SPP.	0	26	0	26	13	0.01
BOSMINA LONGIROSTRIS	41079	83442	53235	46790	56137	64.62
CERIODAPHNIA QUADRANGULA	0	0	0	26	7	0.00
CHYDORUS SPHAERICUS	0	52	393	52	124	0.14
DAPHNIA GALEATA MENDOTAE	157	498	445	419	380	0.43
DAPHNIA LONGIREMIS	0	0	0	26	7	0.00
DAPHNIA RETROCURVA	236	1048	419	655	590	0.67
EUBOSMINA COREGONI	943	996	2358	2384	1670	1.92
HOLLOPEDIIUM GIBBERUM	0	210	26	0	59	0.06
LEPTODOCERA KINDTII	2	0	0	0	0*	0.00
TOTAL CLADOCERA	42417	86272	56902	50378	58994	67.91
ROTIFERA						
ROTIFERA	1336	1572	1677	1546	1533	1.76
TOTAL ROTIFERA	1336	1572	1677	1546	1533	1.76
TOTAL ZOOPLANKTON	64319	120697	86952	75474	86864	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

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TABLE 25- RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

PROJECT NO: W3206
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	846	2.59
CALANOID COPEPODITES	1711	5.24
CYCLOPOID COPEPODITES	7880	24.16
CYCLOPS BICUSPIDATUS THOMASI	252	0.77
CYCLOPS VERNALIS	73	0.22
DIAPTOMUS SPP. (FEMALE)	26	0.07
DIAPTOMUS ASHLANDI (MALE)	6	0.01
DIAPTOMUS DREGUNENSIS (MALE)	3	0.00
EPISCHURA LACUSTRIS	14	0.04
ERGASILUS SPP.	2	0.00
EUCYCLOPS AGILIS	1	0.00
EURYTEMORA AFFINIS	7	0.02
MESOCYCLOPS EDAX	21	0.06
TROPIDOCYCLOPS PRASINUS MEXICANUS	486	1.49
TOTAL COPEPODA	11328	34.74
CLADOCERA		
ALONA QUADRANGULARIS	1	0.00
ALONA SPP.	1	0.00
ALBANELLA SPP.	3	0.00
BOSMINA LONGIROSTRIS	18495	56.72
CERIODAPHNIA QUADRANGULA	1	0.00
CHYDORUS SPHAERICUS	69	0.21
DAPHNIA GALEATA MENDOTAE	91	0.27
DAPHNIA LONGIREMIS	3	0.00
DAPHNIA RETROCURVA	1181	3.62
DIAPHANOSOMA LEUCHTENBERGIANUM	1	0.00
EUBOSMINA COREGONI	574	1.76
HOLLOPEDIUM GIBBERUM	22	0.06
LEPTODORA KINDTII	0*	0.00
MACROTHRIX LATICORNIS	1	0.00
TOTAL CLADOCERA	20443	62.69
ROTIFERA		
ROTIFERA	835	2.56
TOTAL ROTIFERA	835	2.56

TABLE 25 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO THE
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
TOTAL ZOOPLANKTON	32606	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 26 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 23 OCTOBER 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 3					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	684	483	224	165	389	12.80
CALANOID COPEPODITES	389	318	307	153	292	9.61
CYCLOPOID COPEPODITES	1686	637	295	424	761	25.05
CYCLOPS BICUSPIDATUS THOMASI	71	24	0	12	27	0.88
DIAPTOMUS SPP. (FEMALE)	0	0	0	12	3	0.09
EPISCHURA LACUSTRIS	47	0	12	47	27	0.88
MESOCYCLOPS EDAX	0	12	0	0	3	0.09
TROPOCYCLOPS PRASINUS MEXICANUS	141	24	24	130	80	2.63
TOTAL COPEPODA	3018	1498	862	943	1582	52.09
CLADOCERA						
BOSMINA LONGIROSTRIS	1261	990	519	625	849	27.95
CHYDORUS SPHAERICUS	12	0	0	0	3	0.09
DAPHNIA GALEATA MENDOTAE	35	0	0	12	12	0.39
DAPHNIA LONGIREMIS	0	0	12	0	3	0.09
DAPHNIA RETROCURVA	601	401	307	318	407	13.40
EUBOSMINA COREGONI	71	106	47	189	103	3.39
HOLOPEIDIUM GIBBERUM	0	12	0	0	3	0.09
LEPTODORA KINDTII	0	0	2	1	0*	0.02
TOTAL CLADOCERA	1980	1509	887	1145	1380	45.46
ROTIFERA						
ROTIFERA	141	47	83	24	74	2.43
TOTAL ROTIFERA	141	47	83	24	74	2.43
TOTAL ZOOPLANKTON	5139	3054	1832	2112	3036	

* ORGANISM PRESENT IN DENSITIES LESS THAN ONE PER CUBIC METER

TABLE 26 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 7

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	1874	1320	672	943	1202	6.54
CALANOID COPEPODITES	2122	2004	1485	1745	1839	10.01
CYCLOPOID COPEPODITES	5847	6413	4975	4940	5544	30.18
CYCLOPS BICUSPIDATUS THOMASI	330	696	271	153	363	1.97
CYCLOPS VERNALIS	153	200	94	71	130	0.70
DIAPTOMUS SPP. (FEMALE)	12	47	24	24	27	0.14
DIAPTOMUS ASHLANDI (MALE)	12	0	0	0	3	0.01
DIAPTOMUS OREGONENSIS (MALE)	0	12	0	0	3	0.01
EPISCHURA LACUSTRIS	35	59	47	24	41	0.22
MESOCYCLOPS EDAX	35	47	35	94	53	0.28
TROPPOCYCLOPS PRASINUS MEXICANUS	189	943	743	283	540	2.93
TOTAL COPEPODA	10609	11741	8346	8277	9745	53.04
CLADOCERA						
BOSMINA LONGIROSTRIS	6437	8677	7191	6260	7141	38.87
CHYDORUS SPHAERICUS	12	35	24	0	18	0.09
DAPHNIA GALEATA MENDOTAE	59	0	24	35	30	0.16
DAPHNIA RETROCURVA	872	931	825	377	751	4.08
EUBOSMINA COREGONI	401	212	307	259	295	1.60
HOLOPEDIUM GIBBERUM	0	12	0	0	3	0.01
LEPTODORA KINDTII	0	0	2	0	0*	0.00
TOTAL CLADOCERA	7781	9867	8373	6931	8238	44.84
ROTIFERA						
ROTIFERA	448	613	283	200	386	2.10
TOTAL ROTIFERA	448	613	283	200	386	2.10
TOTAL ZOOPLANKTON	18838	22221	17002	15408	18369	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 26 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 23 OCTOBER 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 12					
	REP.A	REP.B	REP.C	REP.D	MEAN	OCCUR- RENCE (%)
COPEPODA						
NAUPLII	825	896	790	825	834	5.71
CALANOID COPEPODITES	813	766	519	766	716	4.90
CYCLOPOID COPEPODITES	7215	1792	4315	5588	4728	32.38
CYCLOPS BICUSPIDATUS THOMASI	189	71	212	153	156	1.06
CYCLOPS VERNALIS	118	12	59	24	53	0.36
DIAPTOMUS SPP. (FEMALE)	24	0	0	12	9	0.06
DIAPTOMUS OREGONENSIS (MALE)	0	0	12	0	3	0.02
EPISCHURA LACUSTRIS	24	12	59	12	27	0.18
MESOCYCLOPS EDAX	130	47	71	12	65	0.44
TROPIDOCYCLOPS PRASINUS MEXICANUS	448	94	342	330	304	2.08
TOTAL COPEPODA	9786	3690	6379	7722	6895	47.22
CLADOCERA						
BOSMINA LONGIROSTRIS	8276	4421	4928	5635	5815	39.82
CHYDORUS SPHAERICUS	85	47	47	35	53	0.36
DAPHNIA GALEATA MENDOTAE	24	0	47	0	18	0.12
DAPHNIA RETROCURVA	1509	566	813	849	934	6.39
DIAPHANOSOMA LEUCHTENBERGIANUM	24	0	0	12	9	0.06
EUBOSMINA COREGONI	436	130	330	295	298	2.04
HOLOPEDIIUM GIBBERUM	35	12	47	24	30	0.20
LEPTODORA KINDTII	4	0	0	1	1	0.00
TOTAL CLADOCERA	10391	5176	6212	6851	7158	49.02
ROTIFERA						
ROTIFERA	625	589	531	448	548	3.75
TOTAL ROTIFERA	625	589	531	448	548	3.75
TOTAL ZOOPLANKTON	20802	9455	13122	15021	14601	

TABLE 26 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 16					OCCUR- RENCE (%)
	NO. PER CUBIC METER					
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	1910	1037	613	589	1037	5.28
CALANOID COPEPODITES	3784	1285	1544	1309	1981	10.09
CYCLOPOID COPEPODITES	6543	1521	2912	2452	3357	17.10
CYCLOPS BICUSPIDATUS THOMASI	542	165	330	342	345	1.75
CYCLOPS VERNALIS	130	24	71	24	62	0.31
DIAPTOMUS SPP. (FEMALE)	94	0	59	35	47	0.23
EPISCHURA LACUSTRIS	71	24	24	0	30	0.15
MESOCYCLOPS EDAX	118	59	35	71	71	0.36
TROPDCYCLOPS PRASINUS MEXICANUS	2452	672	1085	931	1285	6.54
 TOTAL COPEPODA	 15644	 4787	 6673	 5753	 8215	 41.86
CLADOCERA						
BOSMINA LONGIROSTRIS	14902	7616	9879	6602	9750	49.68
DAPHNIA GALEATA MENDOTAE	94	59	0	12	41	0.20
DAPHNIA RETROCURVA	1544	542	813	106	751	3.82
EUBOSMINA COREGONI	495	130	177	106	227	1.15
 TOTAL CLADOCERA	 17035	 8347	 10869	 6826	 10769	 54.87
ROTIFERA						
ROTIFERA	1415	401	377	365	640	3.26
 TOTAL ROTIFERA	 1415	 401	 377	 365	 640	 3.26
 TOTAL ZOOPLANKTON	 34094	 13535	 17919	 12944	 19624	

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TABLE 26 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 21

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	719	507	460	307	498	2.80
CALANOID COPEPODITES	1863	861	1863	1061	1412	7.95
CYCLOPOID COPEPODITES	9691	5069	6649	9561	7743	43.64
CYCLOPS BICUSPIDATUS THOMASI	153	165	177	318	203	1.14
CYCLOPS VERNALIS	35	83	59	295	118	0.66
DIAPTOMUS SPP. (FEMALE)	0	24	35	24	21	0.11
DIAPTOMUS ASHLANDI (MALE)	12	0	0	12	6	0.03
DIAPTOMUS MINUTUS (MALE)	0	0	12	0	3	0.01
EPISCHURA LACUSTRIS	59	12	12	12	24	0.13
TROPIDOCYCLOPS PRASINUS MEXICANUS	743	330	660	472	551	3.10
TOTAL COPEPODA	13275	7051	9927	12062	10579	59.63
CLADOCERA						
BOSMINA LONGIROSTRIS	9396	4303	5175	5329	6051	34.11
CHYDORUS SPHAERICUS	12	12	0	35	15	0.08
DAPHNIA GALEATA MENDOTAE	141	59	71	83	89	0.50
DAPHNIA RETROCURVA	849	436	531	377	548	3.08
EUBOSMINA COREGONI	153	94	94	71	103	0.58
LEPTODORA KINOTII	0	2	0	0	0*	0.00
TOTAL CLADOCERA	10551	4906	5871	5895	6806	38.36
ROTIFERA						
ROTIFERA	813	365	153	83	354	1.99
TOTAL ROTIFERA	813	365	153	83	354	1.99
TOTAL ZOOPLANKTON	24639	12322	15951	18040	17739	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 26 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO THE
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	792	5.39
CALANOID COPEPODITES	1248	8.50
CYCLOPOID COPEPODITES	4427	30.16
CYCLOPS BICUSPIDATUS THOMASI	219	1.49
CYCLOPS VERNALIS	73	0.49
DIAPTOMUS SPP. (FEMALE)	21	0.14
DIAPTOMUS ASHLANDI (MALE)	2	0.01
DIAPTOMUS MINUTUS (MALE)	0*	0.00
DIAPTOMUS OREGONENSIS (MALE)	1	0.00
EPISCHURA LACUSTRIS	30	0.20
MESOCYCLOPS EDAX	38	0.25
TROPIDOCYCLOPS PRASINUS MEXICANUS	552	3.76
TOTAL COPEPODA	7403	50.45
CLADOCERA		
BOSMINA LONGIROSTRIS	5921	40.35
CHYDORUS SPHAERICUS	18	0.12
DAPHNIA GALEATA MENDOTAE	38	0.25
DAPHNIA LONGIREMIS	0*	0.00
DAPHNIA RETROCURVA	678	4.62
DIAPHANOSOMA LEUCHTENBERGIANUM	2	0.01
EUBOSMINA COREGONI	205	1.39
HOLOPEDIUM GIBBERUM	7	0.04
LEPTODORA KINDTII	0*	0.00
TOTAL CLADOCERA	6870	46.81
ROTIFERA		
ROTIFERA	400	2.72
TOTAL ROTIFERA	400	2.72
TOTAL ZOOPLANKTON	14673	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

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TABLE 27 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 4

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	419	996	524	1022	740	6.18
CALANOID COPEPODITES	2908	3642	2489	3222	3065	25.63
CYCLOPOID COPEPODITES	2672	3196	2201	3589	2915	24.38
CYCLOPS BICUSPIDATUS THOMASI	131	79	131	157	125	1.04
DIAPTOMUS SPP. (FEMALE)	26	79	0	26	33	0.27
DIAPTOMUS ASHLANDI (MALE)	26	0	0	0	7	0.05
DIAPTOMUS OREGONENSIS (MALE)	79	0	26	0	26	0.21
DIAPTOMUS SICILIS (MALE)	0	26	0	0	7	0.05
EPISCHURA LACUSTRIS	26	52	0	26	26	0.21
TROPOCYCLOPS PRASINUS MEXICANUS	131	262	262	157	203	1.69
TOTAL COPEPODA	6418	8332	5633	8199	7147	59.77
CLADOCERA						
BOSMINA LONGIROSTRIS	655	550	576	786	642	5.36
CHYDORUS SPHAERICUS	52	0	26	0	20	0.16
DAPHNIA GALEATA MENDOTAE	0	131	52	52	59	0.49
DAPHNIA RETROCURVA	3013	3668	3144	5397	3806	31.83
EUBOSMINA COREGONI	157	157	105	262	170	1.42
LEPTODORA KINDTII	0*	0*	0	0	0*	0.00
TOTAL CLADOCERA	3877	4506	3903	6497	4697	39.28
ROTIFERA						
ROTIFERA	236	79	52	79	112	0.93
TOTAL ROTIFERA	236	79	52	79	112	0.93
TOTAL ZOOPLANKTON	10531	12917	9598	14775	11956	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 27. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 8					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	498	1127	472	812	727	6.73
CALANOID COPEPODITES	996	1834	812	1336	1245	11.53
CYCLOPOID COPEPODITES	2174	2751	1336	2358	2155	19.96
CYCLOPS BICUSPIDATUS THOMAS1	236	341	79	26	171	1.58
CYCLOPS VERNALIS	26	26	0	0	13	0.12
DIAPTOMUS SPP. (FEMALE)	52	52	0	0	26	0.24
DIAPTOMUS ASHLANDI (MALE)	26	0	0	0	7	0.06
DIAPTOMUS DREGONENSIS (MALE)	0	26	0	0	7	0.06
EPISCHURA LACUSTRIS	26	26	0	26	20	0.18
MESOCYCLOPS EDAX	0	26	0	0	7	0.06
TROPOCYCLOPS PRASINUS MEXICANUS	210	157	79	393	210	1.94
TOTAL COPEPODA	4244	6366	2778	4951	4588	42.51
CLADOCERA						
BOSMINA LONGIROSTRIS	4087	5187	3956	5554	4696	43.51
CERIODAPHNIA QUADRANGULA	26	0	0	0	7	0.06
DAPHNIA GALEATA MENDOTAE	26	52	52	26	39	0.36
DAPHNIA RETROCURVA	917	865	1572	1205	1140	10.56
EUBOSMINA COREGONI	79	105	131	210	131	1.21
LEPTODORA KINDTII	0	0	0*	0*	0*	0.00
TOTAL CLADOCERA	5135	6209	5711	6995	6013	55.72
ROTIFERA						
ROTIFERA	236	341	157	26	190	1.76
TOTAL ROTIFERA	236	341	157	26	190	1.76
TOTAL ZOOPLANKTON	9615	12916	8646	11972	10791	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 27 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 23 OCTOBER 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 13					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	943	1153	734	629	865	6.98
CALANOID COPEPODITES	4061	2908	2148	2384	2875	23.23
CYCLOPOID COPEPODITES	3406	3170	3196	3380	3288	26.56
CYCLOPS BICUSPIDATUS THOMASI	131	157	131	26	111	0.89
DIAPTOMUS SPP. (FEMALE)	0	52	52	0	26	0.21
DIAPTOMUS ASHLANDI (MALE)	26	0	0	0	7	0.05
DIAPTOMUS OREGONENSIS (MALE)	26	0	0	26	13	0.10
EPISCHURA LACUSTRIS	0	26	0	0	7	0.05
MESOCYCLOPS EDAX	52	52	52	26	46	0.37
TROPIDOCYCLOPS PRASINUS MEXICANUS	1153	734	838	917	911	7.36
TOTAL COPEPODA	9798	8252	7151	7388	8149	65.84
CLADOCERA						
BOSMINA LONGIROSTRIS	2515	3039	3144	2856	2889	23.34
CHYDORUS SPHAERICUS	26	0	0	0	7	0.05
DAPHNIA GALEATA MENDOTAE	26	26	0	79	33	0.26
DAPHNIA RETROCURVA	1179	786	760	865	898	7.25
EUBOSMINA COREGONI	236	236	262	79	203	1.64
HOLOPEDIUM GIBBERUM	0	52	0	0	13	0.10
LEPTODORA KINDTII	2	0	3	0	1	0.00
TOTAL CLADOCERA	3984	4139	4169	3879	4044	32.67
ROTIFERA						
ROTIFERA	288	210	183	52	183	1.47
TOTAL ROTIFERA	288	210	183	52	183	1.47
TOTAL ZOOPLANKTON	14070	12601	11503	11319	12376	

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TABLE 27. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 17					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	681	603	550	550	596	8.48
CALANOID COPEPODITES	1755	1074	996	1205	1258	17.91
CYCLOPOID COPEPODITES	3222	1965	1336	1598	2030	28.90
CYCLOPS BICUSPIDATUS THOMASI	183	236	105	288	203	2.89
CYCLOPS VERNALIS	0	26	26	26	20	0.28
DIAPTOMUS SPP. (FEMALE)	26	26	52	52	39	0.55
DIAPTOMUS ASHLANDI (MALE)	0	26	0	0	7	0.09
EPISCHURA LACUSTRIS	26	26	26	0	20	0.28
MESOCYCLOPS EDAX	26	26	26	0	20	0.28
TROPIDOCYCLOPS PRASINUS MEXICANUS	288	236	131	157	203	2.89
TOTAL COPEPODA	6207	4244	3248	3876	4396	62.58
CLADOCERA						
BOSMINA LONGIROSTRIS	2253	2410	1650	1493	1952	27.79
CHYDORUS SPHAERICUS	0	0	26	0	7	0.09
DAPHNIA GALEATA MENDOTAE	0	131	52	26	52	0.74
DAPHNIA RETROCURVA	760	236	498	210	426	6.06
EUBOSMINA COREGONI	262	79	0	79	105	1.49
LEPTODORA KINDTII	0	0	0	2	0*	0.00
TOTAL CLADOCERA	3275	2856	2226	1810	2542	36.19
ROTIFERA						
ROTIFERA	52	105	105	79	85	1.21
TOTAL ROTIFERA	52	105	105	79	85	1.21
TOTAL ZOOPLANKTON	9534	7205	5579	5765	7023	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 27 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 22

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	786	524	707	341	590	4.75
CALANOID COPEPODITES	4716	4349	4506	4270	4460	35.90
CYCLOPOID COPEPODITES	3589	3537	5161	3039	3832	30.85
CYCLOPS BICUSPIDATUS THOMASI	157	0	157	105	105	0.84
CYCLOPS VERNALIS	0	26	26	0	13	0.10
DIAPTOMUS SPP. (FEMALE)	26	52	26	105	52	0.41
DIAPTOMUS ASHLANDI (MALE)	52	0	0	26	20	0.16
EPISCHURA LACUSTRIS	0	26	52	0	20	0.16
TROPOCYCLOPS PRASINUS MEXICANUS	341	105	262	288	249	2.00
TOTAL COPEPODA	9667	8619	10897	8174	9341	75.20
CLADOCERA						
BOSMINA LONGIROSTRIS	1624	1493	1074	1258	1362	10.96
CHYDORUS SPHAERICUS	26	52	26	0	26	0.20
DAPHNIA GALEATA MENDOTAE	52	52	26	0	33	0.26
DAPHNIA RETROCURVA	1572	1284	1284	1284	1356	10.91
EUBOSMINA COREGONI	52	183	262	157	164	1.32
TOTAL CLADOCERA	3326	3064	2672	2699	2941	23.67
ROTIFERA						
ROTIFERA	210	52	157	131	138	1.11
TOTAL ROTIFERA	210	52	157	131	138	1.11
TOTAL ZOOPLANKTON	13203	11735	13726	11004	12420	

TABLE 27 RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO THE SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
23 OCTOBER 1973

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	704	6.45
CALANOID COPEPODITES	2581	23.64
CYCLOPOID COPEPODITES	2844	26.05
CYCLOPS BICUSPIDATUS THOMASI	143	1.31
CYCLOPS VERNALIS	9	0.08
DIAPTOMUS SPP. (FEMALE)	35	0.32
DIAPTOMUS ASHLANDI (MALE)	10	0.09
DIAPTOMUS OREGONENSIS (MALE)	9	0.08
DIAPTOMUS SICILIS (MALE)	1	0.00
EPISCHURA LACUSTRIS	19	0.17
MESOCYCLOPS EDAX	15	0.13
TROPYCLOPS PRASINUS MEXICANUS	355	3.25
TOTAL COPEPODA	6725	61.61
CLADOCERA		
BOSMINA LONGIROSTRIS	2308	21.14
CERIODAPHNIA QUADRANGULA	1	0.00
CHYDOCRUS SPHAERICUS	12	0.10
DAPHNIA GALEATA MENDOTAE	43	0.39
DAPHNIA RETROCURVA	1525	13.97
EUBOSMINA COREGONI	155	1.42
HOLOPEDIUM GIBBERUM	3	0.02
LEPTODOCRA KINDTII	0*	0.00
TOTAL CLADOCERA	4047	37.08
ROTIFERA		
ROTIFERA	142	1.30
TOTAL ROTIFERA	142	1.30
TOTAL ZOOPLANKTON	10914	

* ORGANISM PRESENT IN DENSITIES LESS THAN
ONE PER CUBIC METER

TABLE 28. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 2					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	295	943	472	177	472	1.39
CALANOID COPEPODITES	7427	8370	8547	7191	7884	23.29
CYCLOPOID COPEPODITES	13499	19099	16387	13086	15518	45.85
CYCLOPS BICUSPIDATUS THOMASI	589	825	707	825	737	2.17
CYCLOPS VERNALIS	236	118	59	236	162	0.47
DIAPTOMUS SPP. (FEMALE)	1061	943	825	1120	987	2.91
DIAPTOMUS ASHLANDI (MALE)	177	0	59	118	89	0.26
DIAPTOMUS MINUTUS (MALE)	413	472	413	589	472	1.39
DIAPTOMUS OREGONENSIS (MALE)	295	589	1002	884	693	2.04
EPISCHURA LACUSTRIS	354	0	177	0	133	0.39
MESOCYCLOPS EDAX	59	0	0	0	15	0.04
TROPOCYCLOPS PRASINUS MEXICANUS	295	413	825	472	501	1.48
TOTAL COPEPODA	24700	31772	29473	24698	27663	81.73
CLADOCERA						
BOSMINA LONGIROSTRIS	4421	4008	3714	5718	4465	13.19
DAPHNIA GALEATA MENODTAE	236	354	295	295	295	0.87
DAPHNIA RETROCURVA	236	472	236	648	398	1.17
EUBOSMINA COREGONI	314	354	413	177	315	0.93
LEPTODORA KINDTII	59	0	0	0	15	0.04
TOTAL CLADOCERA	5266	5188	4658	6838	5488	16.21
ROTIFERA						
ROTIFERA	472	825	1120	354	693	2.04
TOTAL ROTIFERA	472	825	1120	354	693	2.04
TOTAL ZOOPLANKTON	30438	37785	35251	31890	33844	

TABLE 28. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 6					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	0	354	354	118	207	0.75
CALANOID COPEPODITES	3360	3714	2712	3124	3228	11.81
CYCLOPOID COPEPODITES	13793	19924	11377	17802	15724	57.57
CYCLOPS BICUSPIDATUS THOMASI	707	648	354	1002	679	2.48
CYCLOPS VERNALIS	0	177	59	0	59	0.21
DIAPTOMUS SPP. (FEMALE)	295	413	236	295	310	1.13
DIAPTOMUS ASHLANDI (MALE)	118	236	0	354	177	0.64
DIAPTOMUS MINUTUS (MALE)	177	177	0	0	89	0.32
DIAPTOMUS OREGONENSIS (MALE)	118	236	118	354	207	0.75
DIAPTOMUS SICILIS (MALE)	0	59	0	0	15	0.05
EPISCHURA LACUSTRIS	0	177	0	0	44	0.16
EURYTEMORA AFFINIS	59	59	0	0	30	0.10
TROPIDOCYCLOPS PRASINUS MEXICANUS	943	1179	599	1474	1045	3.82
TOTAL COPEPODA	19570	27353	15799	24523	21814	79.86
CLADOCERA						
BOSMINA LONGIROSTRIS	2770	5187	3124	4008	3772	13.81
CHYDORUS SPHAERICUS	59	0	0	0	15	0.05
DAPHNIA GALEATA MENDOTAE	295	295	472	295	339	1.24
DAPHNIA RETROCURVA	295	354	354	59	266	0.97
EUBOSMINA COREGONI	531	413	413	766	531	1.94
TOTAL CLADOCERA	3950	6249	4363	5128	4923	18.02
ROTIFERA						
ROTIFERA	413	766	589	531	575	2.10
TOTAL ROTIFERA	413	766	589	531	575	2.10
TOTAL ZOOPLANKTON	23933	34368	20751	30182	27312	

TABLE 28. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 11					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	118	118	59	177	119	0.49
CALANOID COPEPODITES	3419	2417	3537	2594	2992	12.48
CYCLOPOID COPEPODITES	18096	14913	10610	12084	13925	58.10
CYCLOPS BICUSPIDATUS THOMASI	236	648	531	354	442	1.84
CYCLOPS VERNALIS	118	59	59	0	59	0.24
DIAPTOMUS SPP. (FEMALE)	118	531	354	825	457	1.90
DIAPTOMUS ASHLANDI (MALE)	0	177	59	118	89	0.37
DIAPTOMUS MINUTUS (MALE)	59	59	59	118	74	0.30
DIAPTOMUS OREGONENSIS (MALE)	177	118	295	236	207	0.86
DIAPTOMUS SICILIS (MALE)	59	0	0	0	15	0.06
EPISCHURA LACJSTRIS	59	59	0	0	30	0.12
TROPIDOCYCLOPS PRASINUS MEXICANUS	589	1061	825	707	795	3.32
TOTAL COPEPODA	23048	20160	16398	17213	19205	90.13
CLADOCERA						
BOSMINA LONGIROSTRIS	2888	2476	2535	2653	2638	11.00
CHYDORUS GLOBOSUS	0	0	59	0	15	0.06
DAPHNIA GALEATA MENDOTAE	295	236	177	354	265	1.10
DAPHNIA RETROCURVA	472	118	589	177	339	1.41
EUBOSMINA COREGONI	648	1061	707	472	722	3.01
HOLOPEDIIUM GIBBERUM	0	0	0	59	15	0.06
LEYDIGIA QUADRANGULARIS	0	0	59	0	15	0.06
TOTAL CLADOCERA	4303	3891	4126	3715	4010	16.73
ROTIFERA						
ROTIFERA	472	884	1238	413	752	3.13
TOTAL ROTIFERA	472	884	1238	413	752	3.13
TOTAL ZOOPLANKTON	27823	24935	21752	21341	23267	

TABLE 28. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 15					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	59	177	295	236	192	0.45
CALANOID COPEPODITES	1297	1238	1592	1415	1386	3.31
CYCLOPOID COPEPODITES	14913	11671	14038	16446	14280	34.12
CYCLOPS BICUSPIDATUS THOMASI	766	413	472	1179	709	1.69
CYCLOPS VERNALIS	118	118	0	0	59	0.14
DIAPTOMUS SPP. (FEMALE)	118	118	118	59	103	0.24
DIAPTOMUS ASHLANDI (MALE)	0	59	59	0	30	0.07
DIAPTOMUS MINUTUS (MALE)	0	59	0	118	44	0.10
DIAPTOMUS OREGONENSIS (MALE)	59	0	0	0	15	0.03
MESOCYCLOPS EDAX	0	59	0	0	15	0.03
TROPICOCYCLOPS PRASINUS MEXICANUS	1474	2535	2535	2004	2137	5.10
TOTAL COPEPODA	18904	16447	19159	21457	18969	45.33
CLADOCERA						
BOSMINA LONGIROSTRIS	14678	18981	21339	25642	20160	48.18
DAPHNIA GALEATA MENDOTA	413	354	118	472	339	0.81
DAPHNIA RETROCURVA	354	472	236	236	325	0.77
EUBOSMINA COREGONI	295	354	118	413	295	0.70
TOTAL CLADOCERA	15740	20161	21811	26763	21119	50.47
ROTIFERA						
ROTIFERA	1061	1415	1945	2594	1754	4.19
TOTAL ROTIFERA	1061	1415	1945	2594	1754	4.19
TOTAL ZOOPLANKTON	35605	38023	42915	50814	41842	

TABLE 28. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 20

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
"AUPLII	236	177	236	236	221	0.38
CALANOID COPEPODITES	5718	2535	2476	2712	3360	5.89
CYCLOPID COPEPODITES	16623	9019	8665	12968	11819	20.73
CYCLOPS BICUSPIDATUS THOMASI	1592	472	648	707	855	1.50
CYCLOPS VERNALIS	59	0	0	118	44	0.07
DIAPTOMUS SPP. (FEMALE)	354	59	236	0	162	0.28
DIAPTOMUS ASHLANDI (MALE)	59	59	59	59	59	0.10
DIAPTOMUS MINUTUS (MALE)	177	0	0	118	74	0.12
DIAPTOMUS OREGONENSIS (MALE)	354	118	0	0	118	0.20
EPISCHURA LACUSTRIS	59	177	295	118	162	0.28
EUCYCLOPS AGILIS	0	0	0	59	15	0.02
EURYTOMERA AFFINIS	0	59	0	0	15	0.02
TROPIDOCYCLOPS PRASINUS MEXICANUS	1356	1120	766	1474	1179	2.06
TOTAL COPEPODA	26587	13795	13381	18569	18083	31.73
CLADOCERA						
ALONA QUADRANGULARIS	0	0	0	59	15	0.02
BOSMINA LONGIROSTRIS	40319	29827	32538	42264	36237	63.58
CHYDORUS SPHAERICUS	59	0	59	0	30	0.05
DAPHNIA GALEATA MENDOTAE	1061	1002	413	472	737	1.29
DAPHNIA RETROCURVA	1592	707	177	472	737	1.29
EUBOSMINA COREGONI	884	413	472	295	516	0.90
TOTAL CLADOCERA	43915	31949	33659	43562	38272	67.15
ROTIFERA						
ROTIFERA	1061	413	413	648	634	1.11
TOTAL ROTIFERA	1061	413	413	648	634	1.11
TOTAL ZOOPLANKTON	71563	46157	47453	62779	56989	

TABLE 28. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1973.

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	242	0.65
CALANOID COPEPODITES	3770	10.24
CYCLOPOID COPEPODITES	14253	38.73
CYCLOPS BICUSPIDATUS THOMASI	684	1.85
CYCLOPS VERNALIS	77	0.20
DIAPTOMUS SPP. (FEMALE)	404	1.09
DIAPTOMUS ASHLANDI (MALE)	89	0.24
DIAPTOMUS MINUTUS (MALE)	151	0.41
DIAPTOMUS OREGONENSIS (MALE)	248	0.67
DIAPTOMUS SICILIS (MALE)	6	0.01
EPISCHURA LACUSTRIS	74	0.20
EUCYCLOPS AGILIS	3	0.00
EURYTEMORA AFFINIS	9	0.02
MESOCYCLOPS EDAX	6	0.01
TROPIDOCYCLOPS PRASINUS MEXICANUS	1132	3.07
TOTAL COPEPODA	21148	57.47
CLADOCERA		
ALONA QUADRANGULARIS	3	0.00
BOSMINA LONGIROSTRIS	13454	36.56
CHYDORUS GLOBOSUS	3	0.00
CHYDORUS SPHAERICUS	9	0.02
DAPHNIA GALEATA MENDOTA	395	1.07
DAPHNIA RETROCURVA	413	1.12
EUBOSMINA COREGONI	476	1.29
HYALOPEDIIUM GIBBERUM	3	0.00
LEPTODORA KINDTII	3	0.00
LEYDIGIA QUADRANGULARIS	3	0.00
TOTAL CLADOCERA	14762	40.12
ROTIFERA		
ROTIFERA	882	2.39

TABLE 28. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 3 METERS TO
SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
13 NOVEMBER 1973.

PROJECT NO: W3208
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
TOTAL ZOOPLANKTON	36792	

TABLE 29. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1974

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 3

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	177	648	766	589	545	1.06
CALANOID COPEPODITES	5541	6425	6720	6661	6337	12.41
CYCLOPOID COPEPODITES	32833	39553	34601	31831	34705	67.97
CYCLOPS BICUSPIDATUS THOMASI	943	1415	1533	1179	1268	2.48
CYCLOPS VERNALIS	118	0	0	0	30	0.05
DIAPTOMUS SPP. (FEMALE)	943	1061	1709	1533	1312	2.56
DIAPTOMUS ASHLANDI (MALE)	472	236	177	177	266	0.52
DIAPTOMUS MINUTUS (MALE)	236	59	295	295	221	0.43
DIAPTOMUS OREGONENSIS (MALE)	413	648	531	472	516	1.01
DIAPTOMUS SICILIS (MALE)	0	59	0	59	30	0.05
EPISCHURA LACUSTRIS	0	0	59	0	15	0.02
MESOCYCLOPS EDAX	0	59	0	0	15	0.02
TROPIDOCYCLOPS PRASINUS MEXICANUS	1297	1297	1533	1533	1415	2.77
TOTAL COPEPODA	42973	51460	47924	44329	46675	91.42
CLADOCERA						
BOSMINA LONGIROSTRIS	1896	2240	1896	2004	2004	3.92
CHYDORUS SPHAERICUS	0	59	0	59	30	0.05
DAPHNIA GALEATA MENDOTAE	354	884	472	472	546	1.06
DAPHNIA RETROCURVA	472	413	354	413	413	0.80
EUBOSMINA COREGOVI	354	472	766	354	487	0.95
TOTAL CLADOCERA	3066	4068	3478	3302	3480	6.81
ROTIFERA						
ROTIFERA	1002	648	1415	531	899	1.76
TOTAL ROTIFERA	1002	648	1415	531	899	1.76
TOTAL ZOOPLANKTON	47041	56176	52817	48162	51054	

TABLE 29. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1974

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 7

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	354	177	295	236	266	0.90
CALANOID COPEPODITES	6071	3655	2535	3183	3861	13.14
CYCLOPOID COPEPODITES	23343	16151	16033	18038	18391	62.60
CYCLOPS BICUSPIDATUS THOMASI	1238	648	236	825	737	2.50
CYCLOPS VERNALIS	0	0	118	0	30	0.10
DIAPTOMYS SPP. (FEMALE)	531	0	236	295	266	0.90
DIAPTOMYS ASHLANDI (MALE)	59	59	0	177	74	0.25
DIAPTOMYS MINUTUS (MALE)	295	118	118	59	148	0.50
DIAPTOMYS OREGONENSIS (MALE)	707	118	177	118	280	0.95
DIAPTOMYS SICILIS (MALE)	0	0	59	0	15	0.05
EPISCHURA LACUSTRIS	0	59	0	0	15	0.05
TROPICOCYCLOPS PRASINUS MEXICANUS	943	1356	1356	943	1150	3.91
TOTAL COPEPODA	33541	22341	21163	23874	25233	95.89
CLADOCERA						
BOSMINA LONGIROSTRIS	2004	2181	1886	1709	1945	6.62
CHYDORUS SPHAERICUS	59	0	118	0	44	0.14
DAPHNIA GALEATA MENDOTAE	236	59	177	236	177	0.60
DAPHNIA LONGIRENIS	59	0	0	0	15	0.05
DAPHNIA RETROCURVA	531	295	472	413	429	1.45
EUBOSMINA COREGONI	766	589	295	472	531	1.80
TOTAL CLADOCERA	3655	3124	2948	2830	3140	10.68
ROTIFERA						
ROTIFERA	707	1415	1002	884	1002	3.41
TOTAL ROTIFERA	707	1415	1002	884	1002	3.41
TOTAL ZOOPLANKTON	37903	26880	25113	27588	29375	

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TABLE 29. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
13 NOVEMBER 1974

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 12

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
VAUPLII	531	295	295	236	339	2.01
CALANOID COPEPODITES	4303	2770	1827	1886	2697	16.04
CYCLOPOID COPEPODITES	12909	10846	5541	6543	8960	53.32
CYCLOPS BICUSPIDATUS THOMASI	589	413	236	118	339	2.01
CYCLOPS VERNALIS	0	118	0	0	30	0.17
DIAPTOMUS SPP. (FEMALE)	295	295	236	0	207	1.23
DIAPTOMUS ASHLANDI (MALE)	0	59	59	59	44	0.26
DIAPTOMUS MINUTUS (MALE)	236	236	59	118	162	0.96
DIAPTOMUS DREGONENSIS (MALE)	295	59	0	177	133	0.79
DIAPTOMUS SICILIS (MALE)	0	0	0	59	15	0.08
TROPIDOCYCLOPS PRASINUS MEXICANUS	766	707	472	295	560	3.33
TOTAL COPEPODA	19924	15798	8725	9491	13486	90.25
CLADOCERA						
BOSMINA LONGIROSTRIS	2417	2594	1650	1650	2078	12.36
CHYDORUS SPHAERICUS	59	0	0	59	30	0.17
DAPHNIA GALEATA MENDOTAE	589	177	0	118	221	1.31
DAPHNIA RETROCURVA	413	177	59	236	221	1.31
EUBOSMINA COREGONI	295	472	177	354	325	1.93
LEPTODORA KINOTII	59	0	0	0	15	0.08
TOTAL CLADOCERA	3832	3420	1886	2417	2890	17.19
ROTIFERA						
ROTIFERA	295	648	413	354	428	2.54
TOTAL ROTIFERA	295	648	413	354	428	2.54
TOTAL ZOOPLANKTON	24051	19866	11024	12262	16804	

TABLE 29. RESULTS OF ZOOPLANKTON ANALYSES. VERTICAL TOWS FROM 6 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT
13 NOVEMBER 1974

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 16

	NO. PER CUBIC METER					OC- CURREN- CE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	177	354	236	177	235	1.04
CALANOID COPEPODITES	2417	4185	2712	2535	2962	13.10
CYCLOPOID COPEPODITES	10198	14088	12909	12084	12320	54.52
CYCLOPS BICUSPIDATUS THOMASI	531	354	295	707	472	2.08
DIAPTOMUS SPP. (FEMALE)	59	648	413	59	295	1.30
DIAPTOMUS ASHLANDI (MALE)	295	59	118	0	118	0.52
DIAPTOMUS MINUTUS (MALE)	59	177	59	0	74	0.32
DIAPTOMUS OREGONENSIS (MALE)	0	0	118	118	59	0.26
EPISCHURA LACUSTRIS	118	59	0	295	118	0.52
EURYTEMORA AFFINIS	0	0	59	0	15	0.06
TROPIDOCYCLOPS PRASINUS MEXICANUS	648	1120	707	943	855	3.78
TOTAL COPEPODA	14502	21044	17626	16918	17524	77.55
CLADOCERA						
BOSMINA LONGIROSTRIS	4008	3419	3537	3596	3640	16.10
DAPHNIA GALEATA MENDOTAE	118	531	295	413	339	1.50
DAPHNIA RETROCURVA	354	118	236	236	235	1.04
EUBOSMINA COREGONI	531	472	236	472	429	1.89
TOTAL CLADOCERA	5011	4540	4304	4717	4643	20.54
ROTIFERA						
ROTIFERA	354	472	413	472	429	1.89
TOTAL ROTIFERA	354	472	413	472	429	1.89
TOTAL ZOOPLANKTON	19867	26056	22343	22107	22595	

TABLE 29. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1974

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 21

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	236	531	413	236	354	0.48
CALANOID COPEPODITES	9078	7840	8076	6071	7765	10.58
CYCLOPOID COPEPODITES	48100	36723	30004	33481	37077	50.52
CYCLOPS BICUSPIDATUS THOMASI	5305	3065	2063	2888	3330	4.53
CYCLOPS VERNALIS	59	0	59	0	30	0.04
DIAPTOMUS SPP. (FEMALE)	943	766	1002	648	840	1.14
DIAPTOMUS ASHLANDI (MALE)	413	295	59	295	265	0.36
DIAPTOMUS MINUTUS (MALE)	766	648	295	413	531	0.72
DIAPTOMUS OREGONENSIS (MALE)	707	472	648	531	590	0.80
EPISCHURA LACUSTRIS	59	236	295	236	207	0.28
EURYTEMORA AFFINIS	59	0	59	0	30	0.04
MESOCYCLOPS EDAX	118	0	0	0	30	0.04
TROPIDOCYCLOPS PRASINUS MEXICANUS	2358	2299	1297	2417	2093	2.85
TOTAL COPEPODA	68201	52875	44270	47216	53144	72.42
CLADOCERA						
BOSMINA LONGIROSTRIS	16623	15621	13970	16033	15562	21.20
DAPHNIA GALEATA MENDOTAE	1650	1533	1297	1061	1385	1.88
DAPHNIA LONGIREMIS	59	0	0	59	30	0.04
DAPHNIA RETROCURVA	3360	1709	413	1415	1724	2.34
EUBOSMINA COREGONI	589	589	834	413	619	0.84
HOLOPEDIUM GIBBERUM	0	59	0	0	15	0.02
LEPTODORA KINDTII	59	0	0	0	15	0.02
TOTAL CLADOCERA	22340	19511	16564	18981	19350	26.37
ROTIFERA						
ROTIFERA	766	943	1179	648	884	1.20
TOTAL ROTIFERA	766	943	1179	648	884	1.20
TOTAL ZOOPLANKTON	91307	73329	62013	66845	73378	

TABLE 29. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 6 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1974

PROJECT NO: W3209
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	348	0.90
CALANOID COPEPODITES	4725	12.22
CYCLOPOID COPEPODITES	22291	57.68
CYCLOPS BICUSPIDATUS THOMASI	1229	3.18
CYCLOPS VERNALIS	24	0.06
DIAPTOMUS SPP. (FEMALE)	584	1.51
DIAPTOMUS ASHLANDI (MALE)	154	0.39
DIAPTOMUS MINUTUS (MALE)	227	0.58
DIAPTOMUS OREGONENSIS (MALE)	316	0.81
DIAPTOMUS SICILIS (MALE)	12	0.03
EPISCHURA LACUSTRIS	71	0.18
EURYTEMORA AFFINIS	9	0.02
MESOCYCLOPS EDAX	9	0.02
TROPOCYCLOPS PRASINUS MEXICANUS	1215	3.14
TOTAL COPEPODA	31214	80.77
CLADOCERA		
BOSMINA LONGIROSTRIS	5046	13.05
CHYDORUS SPHAERICUS	21	0.05
DAPHNIA GALEATA MENDOTAE	534	1.38
DAPHNIA LONGIREMIS	9	0.02
DAPHNIA RETROCURVA	604	1.56
EUBOSMINA COREGONI	478	1.23
HYLOPEDIUM GIBBERUM	3	0.00
LEPTODORA KINDTII	6	0.01
TOTAL CLADOCERA	6701	17.34
ROTIFERA		
ROTIFERA	728	1.88
TOTAL ROTIFERA	728	1.88
TOTAL ZOOPLANKTON	38643	

TABLE 30. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1973.

ORGANISM	PROJECT NO: W3208 SAMPLING LOCATION 4					OCCUR- RENCE (%)
	REP.A	NO. PER CUBIC METER REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	157	472	472	943	511	1.43
CALANOID COPEPODITES	4008	3065	4008	4401	3971	10.85
CYCLOPOID COPEPODITES	25622	20828	21614	26565	23657	66.36
CYCLIPS BICUSPIDATUS THOMASI	943	1022	1100	1100	1041	2.92
DIAPTOMUS SPP. (FEMALE)	314	314	236	629	373	1.04
DIAPTOMUS ASHLANDI (MALE)	550	157	0	393	275	0.77
DIAPTOMUS MINUTUS (MALE)	314	236	0	79	157	0.44
DIAPTOMUS OREGONENSIS (MALE)	550	314	236	0	275	0.77
EPISCHURA LACUSTRIS	79	0	0	0	20	0.05
TROPIDOCYCLOPS PRASINUS MEXICANUS	1729	1415	1808	1022	1494	4.19
TOTAL COPEPODA	34266	27823	29474	35132	31674	88.85
CLADOCERA						
BOSMINA LONGIROSTRIS	1415	1258	1022	1258	1238	3.47
DAPHNIA GALEATA MENDOTAE	472	236	314	472	374	1.04
DAPHNIA RETROCURVA	707	79	0	236	256	0.71
EUBOSMINA COREGONI	1179	865	1729	1258	1258	3.52
HOLOPEDIUM GIBBERUM	0	79	0	0	20	0.05
TOTAL CLADOCERA	3773	2517	3065	3224	3146	8.82
ROTIFERA						
ROTIFERA	472	707	865	1258	826	2.31
TOTAL ROTIFERA	472	707	865	1258	826	2.31
TOTAL ZOOPLANKTON	38511	31047	33404	39614	35646	

TABLE 30. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 8

	NO. PER CUBIC METER				MEAN	OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D		
COPEPODA						
NAUPLII	629	472	943	236	570	1.20
CALANOID COPEPODITES	1729	3380	3537	5109	3439	7.29
CYCLIPOID COPEPODITES	25622	36154	35525	39533	34209	72.59
CYCLOPS BICUSPIDATUS THOMASI	1258	2201	1493	2358	1828	3.87
DIAPTOMUS SPP. (FEMALE)	472	314	629	550	491	1.04
DIAPTOMUS ASHLANDI (MALE)	0	157	0	79	59	0.12
DIAPTOMUS MINUTUS (MALE)	0	157	236	157	138	0.29
DIAPTOMUS OREGONENSIS (MALE)	157	472	236	393	315	0.66
EPISCHURA LACUSTRIS	0	79	0	157	59	0.12
TROPOCYCLOPS PRASINUS MEXICANUS	1022	1650	1022	1258	1238	2.62
TOTAL COPEPODA	30889	45036	43621	49830	42346	89.86
CLADOCERA						
BOSMINA LONGIROSTRIS	1729	3222	2908	2122	2495	5.29
DAPHNIA GALEATA MENDOTAE	314	393	314	393	354	0.75
DAPHNIA RETROCURVA	472	550	1336	1258	904	1.91
EUBOSMINA COREGONI	865	472	472	865	667	1.41
TOTAL CLADOCERA	3380	4637	5030	4638	4422	9.38
ROTIFERA						
ROTIFERA	157	629	236	393	354	0.75
TOTAL ROTIFERA	157	629	236	393	354	0.75
TOTAL ZOOPLANKTON	34426	50302	48897	54861	47122	

TABLE 30. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 13

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	629	393	236	550	452	0.75
CALANOID COPEPODITES	6209	6209	7152	5659	6307	10.57
CYCLOPOID COPEPODITES	37097	38040	40476	37726	38335	64.25
CYCLOPS BICUSPIDATUS THOMASI	2201	3380	2358	2987	2732	4.57
CYCLOPS VERNALIS	0	79	0	0	20	0.03
DIAPTOMUS SPP. (FEMALE)	550	629	865	1336	845	1.41
DIAPTOMUS ASHLANDI (MALE)	79	393	550	236	315	0.52
DIAPTOMUS MINUTUS (MALE)	314	472	472	550	452	0.75
DIAPTOMUS DREGONENSIS (MALE)	472	629	629	472	551	0.92
EPISCHURA LACUSTRIS	0	0	79	0	20	0.03
TROPICOCYCLOPS PRASINUS MEXICANUS	1493	314	1572	2201	1395	2.33
TOTAL COPEPODA	49044	50538	54389	51717	51424	86.19
CLADOCERA						
BOSMINA LONGIROSTRIS	2908	3065	4244	3851	3517	5.89
DAPHNIA GALEATA MENDOTAE	865	550	333	1493	825	1.38
DAPHNIA RETROCURVA	2594	2672	1415	3065	2437	4.08
EUBOSMINA COREGONI	865	1100	629	865	865	1.44
HYDRODROMIDIA GIBBERUM	0	0	0	79	20	0.03
TOTAL CLADOCERA	7232	7387	6681	9353	7664	12.84
ROTIFERA						
ROTIFERA	157	943	333	786	570	0.95
TOTAL ROTIFERA	157	943	333	786	570	0.95
TOTAL ZOOPLANKTON	56433	58868	61463	61856	59658	

TABLE 30. RESULTS OF ZOOPLANKTON ANALYSES. VERTICAL TOWS FROM 9 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 17

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	314	1022	157	472	491	1.63
CALANOID COPEPODITES	3930	4637	4951	4323	4460	14.84
CYCLOPOID COPEPODITES	19334	20906	17448	18155	18961	63.10
CYCLIPS BICUSPIDATUS THOMASI	707	943	472	786	727	2.41
CYCLIPS VERNALIS	0	0	0	79	20	0.06
DIAPTOMUS SPP. (FEMALE)	157	1100	333	550	550	1.83
DIAPTOMUS ASHLANDI (MALE)	79	79	333	157	177	0.58
DIAPTOMUS MINUTUS (MALE)	236	314	236	236	256	0.85
DIAPTOMUS DREGONENSIS (MALE)	157	157	333	79	197	0.65
DIAPTOMUS SICILIS (MALE)	79	0	0	0	20	0.06
EPISCHURA LACJSTRIS	79	0	0	0	20	0.06
TROPIDOCYCLOPS PRASINUS MEXICANUS	1336	1100	1336	1179	1239	4.12
TOTAL COPEPODA	26409	30258	25779	26016	27117	90.25
CLADOCERA						
BOSMINA LONGIROSTRIS	1572	1808	1258	1415	1513	5.03
DAPHNIA GALEATA MENDOTAE	236	236	236	157	216	0.71
DAPHNIA RETROCURVA	393	236	629	157	354	1.17
EJBOSMINA COREGONI	550	472	629	629	570	1.89
TOTAL CLADOCERA	2751	2752	2752	2358	2653	8.83
ROTIFERA						
ROTIFERA	157	472	314	157	275	0.91
TOTAL ROTIFERA	157	472	314	157	275	0.91
TOTAL ZOOPLANKTON	29316	33482	28845	28531	30045	

TABLE 30. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1973.

ORGANISM

PROJECT NO: W3208
SAMPLING LOCATION 22

	NO. PER CUBIC METER					OCCUR- RENCE (%)
	REP.A	REP.B	REP.C	REP.D	MEAN	
COPEPODA						
NAUPLII	236	393	943	472	511	1.01
CALANOID COPEPODITES	5266	5973	5895	6130	5816	11.52
CYCLOPOID COPEPODITES	33481	33953	22793	28373	29650	58.75
CYCLOPS BICUSPIDATUS THOMASI	1729	1729	865	1650	1493	2.95
CYCLOPS VERNALIS	79	79	157	79	99	0.19
DIAPTOMUS SPP. (FEMALE)	550	629	786	472	609	1.20
DIAPTOMUS ASHLANDI (MALE)	393	314	0	393	275	0.54
DIAPTOMUS MINUTUS (MALE)	314	393	157	314	295	0.58
DIAPTOMUS OREGONENSIS (MALE)	236	707	550	629	531	1.05
DIAPTOMUS SICILIS (MALE)	157	0	0	79	59	0.11
EPISCHURA LACUSTRIS	0	79	314	0	98	0.19
TROPIDOCYCLOPS PRASINUS MEXICANUS	1022	1415	943	0	845	1.67
TOTAL COPEPODA	43463	45664	33403	38591	40281	79.82
CLADOCERA						
BOSMINA LONGIROSTRIS	6052	5895	5816	7152	6229	12.34
DAPHNIA GALEATA MENDOTAE	472	550	472	393	472	0.93
DAPHNIA RETROCURVA	3851	2515	1336	2043	2436	4.82
EUBOSMINA COREGONI	393	1100	472	707	669	1.32
TOTAL CLADOCERA	10768	10060	8096	10295	9805	19.43
ROTIFERA						
ROTIFERA	314	472	236	472	374	0.74
TOTAL ROTIFERA	314	472	236	472	374	0.74
TOTAL ZOOPLANKTON	54545	56196	41735	49358	50460	

TABLE 30. RESULTS OF ZOOPLANKTON ANALYSES, VERTICAL TOWS FROM 9 METERS TO SURFACE, LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT 13 NOVEMBER 1973.

PROJECT NO: W3209
MEAN OF 5 SAMPLING LOCATIONS

ORGANISM	MEAN DENSITY NO. PER CUBIC METER	OCCUR- RENCE (%)
COPEPODA		
NAUPLII	507	1.13
CALANOID COPEPODITES	4779	10.71
CYCLOPOID COPEPODITES	28962	64.95
CYCLOPS BICUSPIDATUS THOMASI	1564	3.50
CYCLOPS VERNALIS	28	0.06
DIAPTOMUS SPP. (FEMALE)	574	1.28
DIAPTOMUS ASHLANDI (MALE)	220	0.49
DIAPTOMUS MINUTUS (MALE)	260	0.58
DIAPTOMUS OREGONENSIS (MALE)	374	0.83
DIAPTOMUS SICILIS (MALE)	16	0.03
EPISCHURA LACUSTRIS	43	0.09
TROPOCYCLOPS PRASINUS MEXICANUS	1242	2.78
TOTAL COPEPODA	39569	96.50
CLADOCERA		
BOSMINA LONGIROSTRIS	2998	6.72
DAPHNIA GALEATA MENDOTA	448	1.00
DAPHNIA RETROCURVA	1277	2.86
EUBOSMINA COREGONI	806	1.80
HYLOPEDIUM GIBBERUM	8	0.01
TOTAL CLADOCERA	5537	12.41
ROTIFERA		
ROTIFERA	480	1.07
TOTAL ROTIFERA	480	1.07
TOTAL ZOOPLANKTON	44586	

APPENDIX 4-B

Summary of density and percent composition by
depth contours and by transects of dominant
zooplankton taxa collected in Lake Michigan
near the Kewaunee Nuclear Power Plant,
April - November 1973.

Table 1 Mean density and percent composition of dominant Zooplankton organisms collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 13 April 1973. Each density is the mean of four replicates.

	Inshore Locations (3m tows)					
	6		11		15	
	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition
Total Zooplankton	13402		12520		9171	
Total Crustacea	10769	80.3	9455	75.4	7820	85.27
Total Copepoda	10455	77.9	9125	72.9	7485	81.6
nauplii	1626	12.13	1494	11.9	1292	14.1
calanoid copepodites	20	0.1	20	0.2	15	0.2
cyclopoid copepodites	1356	10.1	1498	12.0	1302	14.2
Total Adult Copepoda	7443	55.5	6113	48.8	4876	53.1
<u>Cyclops bicuspidatus thomasi</u>	4563	34.0	3724	29.7	3390	37.0
<u>Diaptomus</u> spp. (female)	1773	13.2	1282	10.2	501	5.5
<u>Diaptomus ashlandi</u> (male)	870	6.5	943	7.5	251	2.7
<u>Diaptomus minutus</u> (male)	69	0.5	49	0.4	251	2.7
<u>Tropocyclops prasinus mexicanus</u>	45	0.3	20	0.2	69	0.8
Total Cladocera	324	2.4	330	2.6	335	3.7
<u>Bosmina longirostris</u>	10	0.1	25	0.2	54	0.6
<u>Daphnia longiremis</u>	221	1.6	231	1.8	138	1.5
<u>Eubosmina coregoni</u>	44	0.3	49	0.4	89	1.0
Rotifers	2633	19.6	3065	24.5	1351	14.7

Table 1 Continued.

	Middle Locations (6m tows)					
	7		12		16	
	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition
Total Zooplankton	10416		10170		7653	
Total Crustacea	8441	81.0	8043	79.1	5005	65.4
Total Copepoda	8204	78.8	7727	76.0	4743	62.0
nauplii	1375	13.2	1125	11.1	1228	16.4
calanoid copepodites	15	0.1	5	0.0	25	0.3
cyclopoid copepodites	1577	15.1	1277	12.6	806	10.5
Total Adult Copepoda	5237	49.8	5320	51.4	2684	35.0
<u>Cyclops bicuspidatus thomasi</u>	2481	23.8	2584	25.4	1926	25.2
<u>Diaptomus</u> spp. (female)	1523	14.6	1385	13.6	364	4.8
<u>Diaptomus ashlandi</u> (male)	938	9.0	1086	10.7	206	2.7
<u>Diaptomus minutus</u> (male)	88	0.8	103	1.0	74	1.0
<u>Tropocyclops prasinus mexicanus</u>	64	0.6	40	0.4	15	0.2
Total Cladocera	237	2.3	316	3.1	262	3.4
<u>Bosmina longirostris</u>	20	0.2	15	0.1	35	0.5
<u>Daphnia longiremis</u>	133	1.3	192	1.9	74	1.0
<u>Eubosmina coregoni</u>	54	0.5	59	0.6	118	1.5
Rotifers	1975	19.0	2127	20.9	2648	34.6

Table 1 Continued.

	Offshore Locations (9m tows)					
	8		13		17	
	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition
Total Zooplankton	7963		6714		10065	
Total Crustacea	4709	59.1	4064	60.5	7756	77.1
nauplii	1380	17.3	867	12.9	1611	16.0
calanoid copepodites	13	0.2	20	0.3	20	0.2
cyclopoid copepodites	813	10.2	629	9.4	1181	11.7
Total Adult Copepoda	2133	26.7	2294	34.2	4698	46.7
<u>Cyclops bicuspidatus thomasi</u>	1211	15.2	1358	20.2	2112	21.0
<u>Diaptomus</u> spp. (female)	464	5.8	528	7.9	1294	12.9
<u>Diaptomus ashlandi</u> (male)	241	3.0	194	2.9	855	8.5
<u>Diaptomus minutus</u> (male)	66	0.8	96	1.4	152	1.5
<u>Tropocyclops prasinus mexicanus</u>	79	1.0	27	0.4	98	1.0
Total Cladocera	370	4.6	254	3.8	246	2.4
<u>Bosmina longirostris</u>	29	0.4	22	0.3	8	0.1
<u>Daphnia longiremis</u>	209	2.6	143	2.1	182	1.8
<u>Eubosmina coregoni</u>	79	1.0	59	0.9	27	0.3
Rotifers	3254	40.9	2650	39.5	2309	22.9

Table 2 Mean density and percent composition of dominant Zooplankton organisms collected at three distances from shore in Lake Michigan near the Kewaunee Nuclear Power Plant, 13 April 1973. Each density is the mean of three locations.

	Distance from shore					
	inshore (3m tows)		middle (6m tows)		offshore (9m tows)	
	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition
Total Zooplankton	11699		9415		8247	
Total Crustacea	9349	79.9	7165	76.1	5511	6.8
Total Copepoda	9018	77.1	6893	73.2	5220	63.3
nauplii	1471	12.6	1243	13.2	1286	15.6
calanoid copepodites	18	0.2	15	0.2	18	0.2
cyclopoid copepodites	1385	11.8	1220	13.0	874	10.6
Total Adult Copepoda	6144	52.5	4415	47.0	3042	36.9
<u>Cyclops bicuspidatus thomasi</u>	3892	33.3	2330	24.7	1560	18.9
<u>Diaptomus</u> spp. (female)	1185	10.1	1091	11.6	762	9.2
<u>Diaptomus ashlandi</u> (male)	688	5.9	743	8.0	430	5.2
<u>Diaptomus minutus</u> (male)	123	1.1	88	0.9	105	1.3
<u>Tropocyclops prasinus mexicanus</u>	45	0.4	40	0.4	68	0.8
Total Cladocera	331	2.8	272	2.9	291	3.5
<u>Bosmina longirostris</u>	30	0.3	23	0.2	20	0.3
<u>Daphnia longiremis</u>	197	1.7	133	1.4	178	2.2
<u>Eubosmina coregoni</u>	61	0.5	77	0.8	55	0.7
Rotifers	2350	20.1	2250	23.9	2738	33.2

Table 3 Mean density and percent composition of dominant Zooplankton organisms collected along transects in Lake Michigan near the Kewaunee Nuclear Power Plant, 13 April 1973. Each density is the mean of three locations.

	Transects					
	II		III		IV	
	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition
Total Zooplankton	9687		8834		9112	
Total Crustacea	6963	71.9	6286	71.2	6850	75.2
Total Copepods	6645	68.6	6002	67.9	6584	72.3
nauplii	1419	14.6	1058	12.0	1430	15.7
calanoid copepodites	15	0.2	15	0.2	21	0.2
cyclopoid copepodites	1158	12.0	990	11.2	942	10.3
Total Adult Copepoda	4048	41.8	3939	44.6	4056	44.5
<u>Cyclops bicuspidatus thomasi</u>	2193	22.1	2161	24.5	2263	24.8
<u>Diaptomus</u> spp. (female)	1035	10.7	939	10.6	852	9.4
<u>Diaptomus ashlandi</u> (male)	578	6.0	616	7.0	538	5.9
<u>Diaptomus minutus</u> (male)	74	0.8	91	1.0	143	1.6
<u>Tropocyclops prasinus mexicanus</u>	68	0.7	30	0.3	66	0.7
Total Cladocera	318	3.3	287	3.2	266	2.9
<u>Bosmina longirostris</u>	23	0.2	20	0.2	25	0.3
<u>Daphnia longiremis</u>	186	1.9	174	2.0	139	1.5
<u>Eubosmina coregoni</u>	65	0.7	57	0.6	68	0.7
Rotifers	2724	28.1	2545	28.8	2262	24.8

Table 4 Mean density and percent composition of dominant Zooplankton organisms collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973. Each density is the mean of four replicates.

	Inshore Locations (3m tows)									
	2		6		11		15		20	
	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition
Total Zooplankton	19588		20148		9103		12647		13267	
Total Crustacea	6101	31.1	5434	27.0	4206	46.2	4515	35.7	5338	40.2
Total Copepoda	5744	29.3	4910	24.4	4047	44.5	4335	34.3	5129	38.7
nauplii	3896	20.3	3240	16.1	2837	31.2	2636	20.8	3215	24.2
calanoid copepodites	1108	5.7	1275	6.3	712	7.8	1145	9.1	1437	10.8
cyclopoid copepodites	577	2.9	236	1.2	256	2.8	349	2.8	265	2.0
Total Adult Copepoda	73	0.4	159	0.8	242	2.7	205	1.6	212	1.6
<u>Cyclops bicuspidatus thomasi</u>	8	0.0	39	0.2	30	0.3	56	0.4	57	0.4
<u>Diaptomus</u> spp (female)	8	0.0	10	0.0	39	0.4	10	0.1	5	0.0
<u>Diaptomus ashlandi</u> (male)	5	0.0	3	0.0	5	0.1	3	0.0	3	0.0
<u>Diaptomus minutus</u> (male)	3	0.0	12	0.0	8	0.1	3	0.0	5	0.0
<u>Tropocyclops prasinus mexicanus</u>	44	0.2	79	0.4	116	1.3	128	1.0	135	1.0
Total Cladocera	357	1.8	524	2.6	159	1.7	180	1.4	209	1.6
<u>Bosmina longirostris</u>	322	1.6	494	2.5	138	1.5	172	1.4	209	1.6
<u>Daphnia longiremis</u>	0	0.0	12	0.1	10	0.1	5	0.0	0	0.0
<u>Eubosmina coregoni</u>	27	0.1	12	0.1	5	0.1	3	0.0	0	0.0
Rotifers	13487	68.9	14714	73.0	4987	53.8	8132	64.3	7929	59.8

Table 4 Continued.

	Middle Locations (6m tows)									
	3		7		12		16		21	
	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition
Total Zooplankton	33163		24763		12370		32180		27295	
Total Crustacea	9953	30.0	7219	29.1	3432	27.7	7090	22.0	8026	29.4
Total Copepoda	9480	28.6	6725	27.2	3292	26.6	6855	21.3	7745	28.4
nauplii	6548	19.7	4679	18.9	2447	19.8	5028	15.6	5187	19.0
calanoid copepodites	1641	4.9	1373	5.5	492	4.0	1314	4.1	1923	7.0
cyclopoid copepodites	1218	3.7	521	2.1	191	1.5	393	1.2	442	1.6
Total Adult Copepoda	73	0.2	152	0.6	162	1.3	120	0.3	193	0.7
<u>Cyclops bicuspidatus thomasi</u>	17	0.1	39	0.2	17	0.1	49	0.2	86	0.3
<u>Diaptomus</u> spp. (female)	15	0.0	13	0.1	74	0.6	20	0.1	25	0.1
<u>Diaptomus ashlandi</u> (male)	3	0.0	5	0.0	0	0.0	0	0.0	10	0.0
<u>Diaptomus minutus</u> (male)	3	0.0	20	0.1	5	0.0	5	0.0	15	0.1
<u>Tropocyclops prasinus mexicanus</u>	32	0.1	64	0.3	59	0.5	40	0.1	54	0.2
Total Cladocera	473	1.4	494	2.0	140	1.1	235	0.7	281	1.0
<u>Bosmina longirostris</u>	428	1.3	454	1.8	123	1.0	219	0.7	268	1.0
<u>Daphnia longiremis</u>	13	0.0	0	0.0	5	0.0	8	0.0	3	0.0
<u>Eubosmina coregoni</u>	29	0.1	30	0.1	12	0.1	5	0.0	10	0.0
Rotifers	23210	70.0	17544	70.8	8938	72.3	25090	78.0	19269	70.6

Table 4 Continued.

	Locations Offshore (9m tows)									
	4		8		13		17		22	
	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition
Total Zooplankton	20737		22621		25432		25739		23867	
Total Crustacea	9130	29.7	9708	42.9	5115	20.1	14188	55.1	12559	52.6
Total Copepoda	8655	28.2	9367	41.4	4946	19.4	13919	54.1	12356	51.8
nauplii	5770	18.8	6471	28.6	3599	14.2	9582	37.2	8881	37.2
calanoid copepodites	1215	4.0	1696	7.5	629	2.5	3118	12.1	2414	10.1
cyclopoid copepodites	1480	4.8	1016	4.5	478	1.9	1084	4.2	888	3.7
Total Adult Copepoda	190	0.6	184	0.8	240	1.0	135	0.5	173	0.7
<u>Cyclops bicuspidatus thomasi</u>	82	0.3	46	0.2	69	0.3	59	0.2	36	0.2
<u>Diaptomus</u> spp. (female)	62	0.2	29	0.2	49	0.2	23	0.1	69	0.3
<u>Diaptomus ashlandi</u> (male)	3	0.0	7	0.0	0	0.0	10	0.0	16	0.1
<u>Diaptomus minutus</u> (male)	10	0.0	20	0.1	20	0.1	7	0.0	23	0.1
<u>Tropocyclops prasinus mexicanus</u>	20	0.1	82	0.4	99	0.4	36	0.1	23	0.1
Total Cladocera	475	1.5	341	1.5	169	0.7	269	1.0	203	0.9
<u>Bosmina longirostris</u>	416	1.4	308	1.4	131	0.5	223	0.9	187	0.8
<u>Daphnia longiremis</u>	13	0.0	7	0.0	3	0.0	7	0.0	10	0.0
<u>Eubosmina coregoni</u>	39	0.1	26	0.1	26	0.1	33	0.1	3	0.0
Rotifers	21607	70.3	12913	57.1	20317	79.9	11551	44.9	11308	47.4

Table 5 Mean density and percent composition of dominant zooplankton organisms collected at three distances from shore in Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973. Each density is the mean of five locations.

	Distance from shore					
	inshore (3m tows)		middle (6m tows)		offshore (9m tows)	
	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition
Total Zooplankton	14949		25955		25677	
Total Crustacea	5117	34.2	7145	27.5	10138	39.5
Total Copepoda	4832	32.3	6820	26.3	9849	38.3
nauplii	3183	21.3	4778	18.4	6861	26.7
calanoid copepodites	1135	7.6	1349	5.2	1814	7.1
cyclopoid copepodites	337	2.3	553	2.1	989	3.9
Total adult Copepods	149	1.0	140	0.5	183	0.7
<u>Cyclops bicuspidatus thomasi</u>	38	0.3	42	0.2	58	0.2
<u>Diaptomus</u> spp. (female)	14	0.1	29	0.1	46	0.2
<u>Diaptomus ashlandi</u> (male)	4	0.0	4	0.0	7	0.0
<u>Diaptomus minutus</u> (male)	6	0.0	10	0.0	16	0.1
<u>Tropocyclops prasinus mexicanus</u>	100	0.7	50	0.2	52	0.2
Total Cladocera	286	1.9	325	1.3	291	1.1
<u>Bosmina longirostris</u>	267	1.8	298	1.2	253	1.0
<u>Daphnia longiremis</u>	5	0.0	6	0.0	8	0.0
<u>Eubosmina coregoni</u>	9	0.1	17	0.1	25	0.1
Rotifers	9832	65.8	18810	72.5	15539	60.5

Table 6 Mean density and percent composition of dominant zooplankton organisms collected along five transects in Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973. Each density is the mean of three locations.

	Transects									
	I		II		III		IV		V	
	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition	#/m ³	% composition
Total Zooplankton	29687		22923		18382		25680		23243	
Total Crustacea	8900	30.0	8166	35.6	4404	21.8	10209	39.8	9845	42.4
Total Copepoda	8445	28.5	7744	33.8	4245	23.1	9967	38.8	9615	41.4
nauplii	5732	19.3	5335	23.3	3088	16.8	6906	26.9	6705	28.9
calanoid copepodites	1339	4.5	1518	6.6	597	3.3	2188	8.5	2088	9.0
cyclopoid copepodites	1242	4.2	721	3.2	345	1.9	731	2.9	635	2.7
Total Adult Copepoda	132	0.4	169	0.7	204	1.1	142	0.6	186	0.8
<u>Cyclops bicuspidatus thomasi</u>	48	0.2	43	0.2	45	0.2	55	0.2	50	0.2
<u>Diaptomus</u> spp. (female)	37	0.1	21	0.1	56	0.3	20	0.1	44	0.2
<u>Diaptomus ashlandi</u> (male)	3	0.0	6	0.0	3	0.0	6	0.0	12	0.1
<u>Diaptomus minutus</u> (male)	7	0.0	19	0.1	11	0.1	6	0.0	17	0.1
<u>Tropocyclops prasinus mexicanus</u>	28	0.1	76	0.3	89	0.5	53	0.2	52	0.2
Total Cladocera	455	1.5	423	1.9	158	0.9	243	1.0	230	1.0
<u>Bosmina longirostris</u>	404	1.4	388	1.7	130	0.7	213	0.8	218	0.9
<u>Daphnia longiremis</u>	11	0.0	6	0.0	5	0.0	7	0.0	6	0.3
<u>Eubosmina coregoni</u>	34	0.1	25	0.1	18	0.1	19	0.1	5	0.0
Rotifers	20788	70.0	14757	64.4	13954	75.9	15494	60.3	13399	57.7

Table 7 Mean density and per cent composition of dominant zooplankton organisms collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 26 June 1973. Each density is the mean of four replicates.

	Inshore Locations (3m tows)									
	2		6		11		15		20	
	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition
Total Zooplankton	2348		8178		6836		5162		2277	
Total Crustacea	2029	86.4	7159	87.5	5560	81.3	4537	87.9	1306	57.4
Total Copepoda	1597	68.0	6231	76.2	4572	66.9	4025	78.0	1080	47.4
nauplii	446	19.0	2360	28.9	2061	30.1	1976	38.3	667	29.3
calanoid copepodites	766	32.6	3186	39.0	1912	28.0	1709	33.1	330	14.5
cyclopoid copepodites	330	14.1	595	7.3	429	6.3	302	5.9	59	2.6
Total Adult Copepoda	55	2.3	90	8.3	170	2.5	38	0.7	24	1.0
<u>Cyclops bicuspidatus thomasi</u>	38	1.6	66	0.8	92	1.3	19	0.4	12	0.5
<u>Diaptomus</u> spp. (female)	10	0.4	17	0.2	45	0.7	19	0.4	5	0.2
<u>Diaptomus ashlandi</u> (male)	5	0.2	0	0.0	2	0.0	0	0.0	7	0.3
<u>Diaptomus minutus</u> (male)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Cladocera	432	18.4	928	11.3	988	14.5	512	9.9	226	9.9
<u>Bosmina longirostris</u>	375	16.0	844	10.3	825	12.1	453	8.8	210	9.2
<u>Daphnia longi remis</u>	52	2.2	80	1.0	106	1.6	47	0.9	7	0.3
<u>Eubosmina coregoni</u>	5	0.2	2	0.0	19	0.3	7	0.1	2	0.1
Total Rotifera	319	13.6	1019	12.5	1276	18.7	625	12.1	971	42.6

Table 7 Continued.

	Middle Locations (6m tows)									
	3		7		12		16		21	
	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition
Total Zooplankton	2542		14191		18948		14865		21864	
Total Crustacea	2352	92.5	12382	87.2	16580	87.5	12535	84.3	18951	86.7
Total Copepoda	2002	78.8	11352	80.0	15369	81.1	11721	78.8	18205	83.3
nauplii	693	27.3	3989	28.1	4265	22.5	5445	36.6	10490	48.0
calanoid copepodites	1043	41.0	5086	35.8	8079	42.6	5202	35.0	5647	25.8
cyclopoid copepodites	244	9.6	1944	13.7	2530	13.4	901	6.1	1681	7.7
Total Adult Copepoda	22	0.9	333	2.3	495	2.6	172	1.2	387	1.8
<u>Cyclops bicuspidatus thomasi</u>	8	0.3	161	1.1	199	1.1	70	0.5	106	0.5
<u>Diaptomus</u> spp. (female)	13	0.5	117	0.8	154	0.8	56	0.4	162	0.7
<u>Diaptomus ashlandi</u> (male)	1	0.0	51	0.4	139	0.7	47	0.3	96	0.4
<u>Diaptomus minutus</u> (male)	0	0.0	11	0.0	1	0.0	0	0.0	22	0.1
Total Cladocera	350	13.8	1030	7.3	1211	6.4	814	5.5	746	3.4
<u>Bosmina longirostris</u>	339	13.3	849	6.0	877	4.6	691	4.6	548	2.5
<u>Daphnia longiremis</u>	10	0.4	160	1.1	300	1.6	114	0.8	179	0.8
<u>Eubosmina coregoni</u>	1	0.0	21	0.1	25	0.0	3	0.0	14	0.1
Total Rotifera	190	7.5	1809	12.7	2368	12.5	2330	15.7	2913	13.3

Table 7 Continued.

	Offshore Locations (9m tows)									
	4		8		13		17		22	
	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition
Total Zooplankton	8577		19178		21025		27068		52973	
Total Crustacea	7084	82.6	16093	83.9	17960	85.4	25771	95.2	50242	94.8
Total Copepoda	5984	69.8	14913	77.8	16741	79.6	24837	91.8	49376	93.2
nauplii	1847	21.5	5580	29.1	7181	34.2	10286	38.0	21751	41.1
calanoid copepodites	2250	26.2	5521	28.8	6966	33.1	8901	32.9	19393	36.6
cyclopoid copepodites	1366	15.9	2977	15.5	2004	9.5	4353	16.1	6867	13.0
Total Adult Copepoda	521	6.1	835	4.3	590	2.8	1297	4.8	1365	2.6
<u>Cyclops bicuspidatus thomasi</u>	324	3.8	364	1.9	305	1.5	599	2.2	501	0.9
<u>Diaptomus</u> spp. (female)	167	1.9	324	1.7	147	0.7	472	1.7	589	1.1
<u>Diaptomus ashlandi</u> (male)	20	0.2	147	0.8	128	0.6	157	0.6	265	0.5
<u>Diaptomus minutus</u> (male)	10	0.1	0	0.0	10	0.0	49	0.2	0	0.0
Total Cladocera	1100	12.8	1180	6.2	1218	5.8	934	3.5	866	1.6
<u>Bosmina longirostris</u>	1012	11.8	914	4.8	816	3.9	688	2.5	688	1.3
<u>Daphnia longiremis</u>	88	1.0	236	1.2	314	1.5	216	0.8	158	0.3
<u>Eubosmina coregoni</u>	0	0.0	20	0.1	69	0.3	30	0.1	20	0.0
Total Rotifera	1493	17.4	3085	16.1	3065	14.6	1297	4.8	2731	5.2

Table 8 Mean density and per cent composition of dominant zooplankton organisms collected at three distances from shore in Lake Michigan near the Kewaunee Nuclear Power Plant, 26 June 1973. Each density is the mean of five locations.

	Distance from Shore					
	Inshore (3m tows)		Middle (6m tows)		Offshore (9m tows)	
	#/m	% Composition	#/m	% Composition	#/m	% Composition
Total Zooplankton	4958		14482		25764	
Total Crustacea	4116	83.0	12560	86.7	23430	90.9
Total Copepoda	3500	70.6	11729	81.0	22370	86.8
nauplii	1502	30.3	4976	34.4	9329	36.2
calanoid copepodites	1581	31.9	5011	34.6	8606	33.4
cyclopoid copepodites	343	6.9	1460	10.1	3513	13.6
Total Adult Copepoda	74	1.4	281	1.9	921	3.5
<u>Cyclops bicuspidatus thomasi</u>	45	0.9	109	0.8	419	1.6
<u>Diaptomus</u> spp. (female)	19	0.4	100	0.7	340	1.3
<u>Diaptomus ashlandi</u> (male)	3	0.1	67	0.5	143	0.6
<u>Diaptomus minutus</u> (male)	0	0.0	5	0.0	14	0.1
Total Cladocera	616	12.4	831	5.7	1060	4.1
<u>Bosmina longirostris</u>	541	10.9	661	4.6	824	3.2
<u>Daphnia longiremis</u>	58	1.2	153	1.1	202	0.8
<u>Eubosmina coregoni</u>	7	0.1	13	0.1	28	0.1
Total Rotifera	842	17.0	1922	13.3	2334	9.1

Table 9 Mean density and per cent composition of dominant zooplankton organisms collected along five transects in Lake Michigan near the Kewaunee Nuclear Power Plant, 26 June 1973. Each density is the mean of three locations.

	Transects									
	I		II		III		IV		IV	
	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition
Total Zooplankton	5521		15682		17967		19349		34154	
Total Crustacea	4664	84.4	13367	85.2	15433	85.9	17820	92.1	31656	92.7
Total Copepoda	3926	71.0	12279	78.3	14256	79.4	16996	87.8	30936	90.6
nauplii	1229	22.2	4513	28.8	5356	29.8	7287	37.7	14483	42.4
calanoid copepodites	1600	29.0	4987	31.8	6495	36.2	6474	33.4	11634	34.1
cyclopoid copepodites	819	14.8	2236	14.3	1917	10.7	2527	13.1	4004	11.7
Total Adult Copepoda	277	5.0	544	3.5	488	2.7	713	3.7	816	2.4
<u>Cyclops bicuspidatus thomasi</u>	171	3.1	247	1.6	234	1.3	326	1.7	288	0.8
<u>Diaptomus</u> spp. (female)	90	1.6	204	1.3	132	0.7	258	1.3	349	1.0
<u>Diaptomus ashlandi</u> (male)	11	0.2	91	0.6	111	0.6	94	0.5	166	0.5
<u>Diaptomus minutus</u> (male)	5	0.1	0*	0.0	5	0.0	25	0.1	7	0.0
Total Cladocera	739	13.4	1088	6.9	1178	6.6	824	4.3	719	2.1
<u>Bosmina longirostris</u>	682	12.3	881	5.6	838	4.7	650	3.4	560	1.6
<u>Daphnia longiremis</u>	56	1.0	185	1.2	275	1.5	154	0.8	140	0.4
<u>Eubosmina coregoni</u>	1	0.0	17	0.1	46	0.3	17	0.1	15	0.0
Total Rotifera	863	15.6	2315	14.8	2535	14.1	1529	7.9	2498	7.3

* Organisms present in densities less than one per cubic meter

Table 10 Mean density and percent composition of dominant Zooplankton organisms collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 24 July 1973. Each density is the mean of four replicates.

Inshore locations (3m tows)										
	2		6		11		15		20	
	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition
Total Zooplankton	104948		98344		45551		36981		58144	
Total Crustacea	76025	72.4	59774	60.7	29006	63.7	25172	68.1	27433	47.2
Total Copepoda	8805	8.4	3048	3.1	3834	8.4	1946	5.3	2300	4.0
nauplii	609	0.6	334	0.3	216	0.5	334	0.9	197	0.3
calanoid copepodites	570	0.5	629	0.6	963	2.1	393	1.1	727	1.3
cyclopoid copepodites	6956	6.6	1690	1.7	2259	5.0	1022	2.8	1219	2.1
Total Adult Copepoda	670	0.6	395	0.4	396	0.9	197	0.5	188	0.3
<i>Cyclop. bicuspidatus thomasi</i>	118	0.1	59	0.1	40	0.1	59	0.2	79	0.1
<i>Diaptomus</i> spp (female)	40	0.0	99	0.1	0	0.0	0	0.0	0	0.0
<i>Diaptomus minutus</i> (male)	79	0.1	59	0.1	40	0.1	138	0.4	79	0.1
<i>Tropocyclops prasinus mexicanus</i>	236	0.2	20	0.0	40	0.1	0	0.0	0	0.0
Total Cladocera	67220	64.1	56726	57.7	25172	55.3	23226	63.8	23133	43.2
<i>Bosmina longirostris</i>	66590	63.5	55115	56.0	24011	52.7	22419	60.6	24403	42.1
<i>Daphnia galeata mendotae</i>	59	0.1	118	0.1	177	0.4	20	0.1	118	0.2
<i>Daphnia longiremis</i>	197	0.2	550	0.6	20	0.0	20	0.1	20	0.0
<i>Daphnia retrocurva</i>	157	0.1	98	0.1	138	0.3	0	0.0	20	0.0
<i>Holopedium gibberum</i>	20	0.0	59	0.1	118	0.3	40	0.1	138	0.2
<i>Polychemus pediculus</i>	197	0.2	766	0.8	688	1.5	727	2.0	374	0.6
Total Rotifera	28923	27.6	38570	39.2	16545	36.3	11809	31.9	30711	52.8

Table 10 Continued.

	Middle locations (6m tows)									
	3		7		12		16		21	
	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition
Total Zooplankton	59185		95409		72419		50344		49077	
Total Crustacea	48074	81.2	64315	67.4	48722	67.3	39292	78.0	33662	68.6
Total Copepoda	3980	6.7	3245	3.4	5867	8.1	1860	3.7	2419	4.9
nauplii	855	1.4	619	0.6	648	0.9	325	0.6	295	0.6
calanoid copepodites	383	0.6	442	0.5	1356	1.9	266	0.5	354	0.7
cyclopoid copepodites	2328	3.9	1916	2.0	3419	4.7	914	1.8	1385	2.8
Total Adult Copepoda	414	0.7	268	0.3	444	0.6	355	0.7	385	0.8
<i>Cyclops bicuspidatus thomasi</i>	207	0.3	89	0.1	89	0.1	59	0.1	118	0.2
<i>Diaptomus</i> spp (female)	30	0.1	89	0.1	59	0.1	59	0.1	148	0.3
<i>Diaptomus minutus</i> (male)	118	0.2	0	0.0	148	0.2	177	0.4	59	0.1
<i>Tropocyclops prasinus mexicanus</i>	0	0.0	0	0.0	59	0.1	30	0.1	30	0.1
Total Cladocera	44094	74.5	61070	64.0	42855	59.2	37432	74.4	31243	63.7
<i>Bosmina longirostris</i>	43178	73.0	59300	62.2	41528	57.3	36399	72.3	30711	62.6
<i>Daphnia galeata mendotae</i>	266	0.4	324	0.3	207	0.3	324	0.6	118	0.2
<i>Daphnia longiremis</i>	0	0.0	59	0.1	0	0.0	0	0.0	89	0.2
<i>Daphnia retrocurva</i>	324	0.5	206	0.2	324	0.4	89	0.2	0	0.0
<i>Holopedium gibberum</i>	59	0.1	148	0.2	177	0.2	148	0.3	59	0.1
<i>Polyphemus pediculus</i>	118	0.2	944	1.0	619	0.9	472	0.9	266	0.5
Total Rotifera	11111	18.8	31094	32.6	23697	32.7	11052	22.0	15415	31.4

Table 10 Continued.

	Offshore Locations (9m tows)									
	4		8		13		17		22	
	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition
Total Zooplankton	62286		111645		79105		84294		60508	
Total Crustacea	50536	81.1	102331	91.7	68613	86.7	72701	86.2	51324	84.7
Total Copepoda	7309	11.7	6760	6.1	2947	3.7	3969	4.7	2987	4.9
nauplii	1847	3.0	1572	1.4	432	0.5	511	0.6	747	1.2
calanoid copepodites	1533	2.5	786	0.7	236	0.3	708	0.8	471	0.8
cyclopoid copepodites	2711	4.4	3144	2.8	1690	2.1	1965	2.3	1493	2.5
Total Adult Copepoda	1218	1.9	1258	1.1	589	0.7	785	0.9	275	0.5
<u>Cyclops bicuspidatus thomasi</u>	196	0.3	314	0.3	314	0.4	393	0.5	118	0.2
<u>Diaptomus</u> spp (female)	668	1.1	0	0.0	39	0.0	79	0.1	79	0.1
<u>Diaptomus minutus</u> (male)	236	0.4	354	0.3	0	0.0	196	0.2	39	0.1
<u>Euprocyclops prasinus mexicanus</u>	79	0.1	354	0.3	236	0.3	39	0.0	0	0.0
Total Cladocera	45227	69.4	95571	85.6	65666	83.0	68732	81.5	48337	79.5
<u>Bosmina longirostris</u>	40594	65.2	92546	82.9	64055	81.0	66491	78.9	46568	76.8
<u>Daphnia galeata mendotae</u>	1297	2.1	668	0.6	550	0.7	1061	1.3	354	0.6
<u>Daphnia longiremis</u>	0	0.0	157	0.1	0	0.0	79	0.1	79	0.1
<u>Daphnia retrocurva</u>	550	0.9	1218	1.1	39	0.0	904	1.1	707	1.2
<u>Holopedium gibberum</u>	118	0.2	314	0.3	157	0.2	0	0.0	0	0.0
<u>Polyschelus pediculus</u>	79	0.1	236	0.2	629	0.8	79	0.1	432	0.7
Total Rotifera	11750	18.9	9314	8.3	10492	13.3	11593	13.8	9274	15.3

Table 11. Mean density and percent composition of dominant Zooplankton organisms collected at three distances from shore in Lake Michigan near the Kewaunee Nuclear Power Plant, 24 July 1973. Each density is the mean of five locations.

	Distance from Shore					
	Inshore (3m tows)		Middle (6m tows)		Offshore (9m tows)	
	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition
Total Zooplankton	68794		65287		79589	
Total Crustacea	43482	63.2	46813	71.7	69104	86.8
Total Copepoda	3987	5.8	3473	5.3	4796	6.0
nauplii	338	0.5	548	0.8	1022	1.3
calanoid copepodites	656	1.0	560	0.9	747	0.9
cyclopoid copepodites	2629	3.8	1992	3.1	2201	2.8
Total Adult Copepoda	363	0.5	373	0.6	826	1.0
<u>Cyclops bicuspidatus thomasi</u>	71	0.1	112	0.2	267	0.3
<u>Diaptomus</u> spp. (female)	28	0.0	77	0.1	173	0.2
<u>Diaptomus minutus</u> (male)	79	0.1	100	0.2	165	0.2
<u>Tropocyclops prasinus mexicanus</u>	59	0.1	24	0.0	142	0.2
Total Cladocera	39495	57.4	43340	66.4	64307	80.8
<u>Bosmina longirostris</u>	38520	56.0	42223	64.7	62051	78.0
<u>Daphnia galeata mendotae</u>	98	0.1	248	0.4	786	1.0
<u>Daphnia longiremis</u>	161	0.2	30	0.0	63	0.1
<u>Daphnia retrocurva</u>	83	0.1	189	0.3	684	0.9
<u>Holopedium gibberum</u>	67	0.1	118	0.2	118	0.2
<u>Polyphemus pediculus</u>	550	0.8	484	0.7	291	0.4
Total Rotifera	23212	36.8	18474	28.3	10485	13.2

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Table 12. Mean density and percent composition of dominant Zooplankton organisms collected along five transects in Lake Michigan near the Kewaunee Nuclear Power Plant, 24 July 1973. Each density is the mean of three locations.

	Transects									
	I		II		III		IV		V	
	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition
Total Zooplankton	68363		104016		71284		65092		56349	
Total Crustacea	53964	78.9	82566	79.4	55382	77.7	53643	82.4	41455	73.6
Total Copepoda	6449	9.4	4970	4.8	4068	5.7	2929	4.5	2683	4.8
nauplii	1310	1.9	1048	1.0	468	0.7	420	0.6	505	0.9
calanoid copepodites	989	1.4	645	0.6	731	1.0	508	0.8	475	0.8
cyclopoid copepodites	3290	4.8	2492	2.4	2361	3.3	1458	2.2	1411	2.5
Total Adult Copepoda	859	1.3	784	0.8	509	0.7	544	0.8	292	0.5
<u>Cyclops bicuspidatus thomasi</u>	187	0.3	197	0.2	193	0.3	226	0.3	125	0.2
<u>Diaptomus</u> spp (female)	351	0.5	46	0.0	39	0.1	59	0.1	89	0.2
<u>Diaptomus minutus</u> (male)	171	0.3	187	0.2	56	0.1	180	0.3	52	0.1
<u>Tropocyclops prasinus mexicanus</u>	79	0.1	180	0.2	144	0.2	30	0.0	10	0.0
Total Cladocera	47515	69.5	77597	74.6	51313	72.0	50714	77.9	35772	68.8
<u>Bosmina longirostris</u>	45768	67.0	75226	72.3	49872	70.0	49115	75.5	37598	66.7
<u>Daphnia galeata mendotae</u>	747	1.1	462	0.4	374	0.5	642	1.0	230	0.4
<u>Daphnia longiremis</u>	33	0.0	190	0.2	3	0.0	43	0.1	75	0.1
<u>Daphnia retrocurva</u>	409	0.6	694	0.7	151	0.2	482	0.7	357	0.6
<u>Holopedium gibberum</u>	82	0.1	216	0.2	157	0.2	56	0.1	43	0.1
<u>Polyphemus pediculus</u>	112	0.1	560	0.5	636	0.9	318	0.5	367	0.7
Total Rotifera	14399	21.1	21450	20.6	15903	22.3	11449	17.6	14894	26.4

Table 13 Mean density and per cent composition of dominant zooplankton organisms collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 28 August 1973. Each density is the mean of four replicates.

	Inshore Locations (3m tows)									
	2		6		11		15		20	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	47417		80837		72289		27040		27866	
Total Crustacea	44862	95.0	75767	93.7	68241	94.4	23130	85.5	23288	83.6
Total Copepoda	30968	65.3	44622	55.2	31418	43.5	11693	43.2	10672	38.3
nauplii	629	1.3	2004	2.5	2004	2.8	374	1.4	452	1.6
calanoid copepodites	9549	20.1	10492	13.0	2672	3.7	1886	7.0	1042	3.7
cyclopoid copepodites	12025	25.4	25838	32.0	19727	27.3	6170	22.8	6484	23.3
Total adult Copepoda	8765	18.5	6288	7.7	7015	9.7	3263	12.0	2694	9.7
<i>Cyclops bicuspidatus thomasi</i>	2220	4.7	2554	3.2	2672	3.7	924	3.4	472	1.7
<i>Diaptomus</i> spp. (female)	1297	2.7	668	0.8	393	0.5	216	0.8	20	0.1
<i>Diaptomus ashlandi</i> (male)	570	1.2	432	0.5	157	0.2	275	1.0	20	0.1
<i>Diaptomus oregonensis</i> (male)	197	0.4	216	0.3	99	0.1	79	0.3	20	0.1
<i>Mesocyclops edax</i>	79	0.2	59	0.1	39	0.1	0	0.0	20	0.1
<i>Tropocyclops prasinus mexicanus</i>	4402	9.3	2319	2.9	3596	5.0	1769	6.5	2122	7.6
Total Cladocera	13894	29.3	31145	38.5	36823	50.9	11437	42.3	12616	45.3
<i>Bosmina longirostris</i>	8135	17.2	23519	29.1	32578	45.1	10159	37.6	11396	40.9
<i>Chydorus sphaericus</i>	118	0.2	393	0.5	1179	1.6	20	0.1	138	0.5
<i>Daphnia galeata mendotae</i>	354	0.7	256	0.3	236	0.3	138	0.5	20	0.1
<i>Daphnia longiremis</i>	118	0.2	2771	3.4	649	0.9	177	0.7	550	2.0
<i>Daphnia retrocurva</i>	3753	7.9	2888	3.6	1238	1.7	649	2.4	275	1.0
<i>Eubosmina coregoni</i>	1376	2.9	983	1.2	275	0.4	118	0.4	40	0.1
<i>Holopedium gibberum</i>	0	0.0	0	0.0	0	0.0	39	0.1	20	0.1
Total Rotifera	2555	5.4	5070	6.3	4048	5.6	3910	14.5	4578	16.4

Table 13 Continued.

	Middle Locations (6m tows)									
	3		7		12		16		21	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	44625		85657		59072		54825		57153	
Total Crustacea	42709	95.7	80823	94.3	56213	95.2	50552	92.2	53970	94.4
Total Copepoda	29419	65.3	53173	62.1	37494	63.5	29240	53.33	37669	65.9
nauplii	766	1.7	2004	2.3	1710	2.9	855	1.6	1297	2.3
calanoid copepodites	8606	19.3	10109	11.8	8253	14.0	5394	9.8	5276	9.2
cyclopoid copepodites	14501	32.5	29886	34.9	21280	36.0	16034	29.2	23578	41.3
Total Adult Copepoda	5276	11.8	11174	13.0	6251	10.5	6957	6.7	7518	13.1
<i>Cyclops bicuspidatus thomasi</i>	2299	5.2	4981	5.8	2800	4.7	2181	4.0	2211	3.9
<i>Diaptomus</i> spp. (female)	884	2.0	649	0.8	590	1.0	678	1.2	354	0.6
<i>Diaptomus ashlandi</i> (male)	737	1.7	325	0.4	236	0.4	148	0.3	236	0.4
<i>Diaptomus oregonensis</i> (male)	0	0.0	148	0.2	59	0.1	89	0.2	118	0.2
<i>Mesocyclops edax</i>	442	1.0	207	0.2	148	0.3	324	0.6	354	0.6
<i>Tropocyclops prasinus mexicanus</i>	855	1.9	4834	5.6	2388	4.0	3507	6.4	4215	7.4
Total Cladocera	13560	30.4	27650	32.3	18719	31.7	21312	38.9	16301	28.5
<i>Bosmina longirostris</i>	6396	14.3	19659	23.0	12055	20.4	15415	28.1	12349	21.6
<i>Chydorus sphaericus</i>	266	0.6	531	0.6	560	0.9	177	0.3	265	0.5
<i>Daphnia galeata mendotae</i>	295	0.7	472	0.6	796	1.3	177	0.3	148	0.3
<i>Daphnia longiremis</i>	707	1.6	1356	1.6	1150	1.9	1798	3.3	619	1.1
<i>Daphnia retrocurva</i>	5217	11.7	4657	5.4	3625	6.1	2712	4.9	2476	4.3
<i>Eubosmina coregoni</i>	442	1.0	678	0.8	266	0.5	796	1.5	266	0.5
<i>Holopedium gibberum</i>	177	0.4	89	0.1	148	0.3	118	0.2	89	0.2
Total Rotifera	1916	4.3	4834	5.6	2859	4.8	4273	7.8	3183	5.6

Table 13 Continued.

	Offshore locations (9m tows)									
	4		8		13		17		22	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	67176		57849		54102		61698		84309	
Total Crustacea	64897	96.6	55203	95.4	51194	94.6	59261	96.0	80720	95.7
Total Copepoda	44407	66.1	40058	69.2	36837	68.1	44799	72.6	59865	71.0
nauplii	970	1.4	1100	1.9	1126	2.1	1074	1.7	1336	1.6
calanoid copepodites	12811	19.1	13335	23.1	11868	21.9	11920	19.3	12994	15.4
cyclopoid copepodites	23159	34.5	19177	33.2	17789	32.9	24181	39.2	32041	38.0
Total Adult Copepoda	7467	11.1	6446	11.1	6054	11.2	7535	12.3	13494	16.0
<i>Cyclops bicuspidatus thomasi</i>	3144	4.7	3144	5.4	2961	5.5	3118	5.1	6812	8.1
<i>Diaptomus</i> spp. (female)	812	1.2	367	0.6	812	1.5	655	1.1	1074	1.3
<i>Diaptomus ashlandi</i> (male)	1074	1.6	891	1.5	577	1.1	943	1.5	865	1.0
<i>Diaptomus oregonensis</i> (male)	105	0.2	105	0.2	105	0.2	262	0.4	236	0.3
<i>Mesocyclops edax</i>	655	1.0	419	0.7	550	1.0	445	0.7	236	0.3
<i>Tropocyclops prasinus mexicanus</i>	1651	2.5	1415	2.4	970	1.8	2201	3.6	4271	5.1
Total Cladocera	20490	30.5	15145	26.2	14357	26.5	14462	23.4	20855	24.7
<i>Bosmina longirostris</i>	10427	15.5	6602	11.4	6942	12.8	8777	14.2	10375	12.3
<i>Chydorus sphaericus</i>	158	0.2	71	0.1	131	0.2	105	0.2	105	0.1
<i>Daphnia galeata mendotae</i>	839	1.2	839	1.5	550	1.0	419	0.7	655	0.8
<i>Daphnia longiremis</i>	2044	3.0	1834	3.2	2070	3.8	1231	2.0	3458	4.1
<i>Daphnia retrocurva</i>	5554	8.3	4559	7.9	3118	5.8	2751	4.5	5004	5.9
<i>Eubosmina coregoni</i>	1206	1.8	838	1.4	996	1.8	681	1.1	708	0.8
<i>Holopedium gibberium</i>	236	0.4	341	0.6	445	0.8	393	0.6	445	0.5
Total Rotifera	2279	3.4	2646	4.6	2908	5.4	2437	3.9	3589	4.3

Table 14 Mean density and per cent composition of dominant zooplankton organisms collected at three distances from shore in Lake Michigan near the Kewaunee Nuclear Power Plant, 28 August 1973. Each density is the mean of five locations.

	Distance from Shore					
	Inshore (3m tows)		Middle (6m tows)		Offshore (9m tows)	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	51090		60267		65027	
Total Crustacea	47058	92.1	56854	94.3	62255	95.7
Total Copepoda	25875	50.6	37345	62.0	45194	69.5
nauplii	1093	2.1	1326	2.2	1121	1.7
calanoid copepodites	5128	10.0	7528	12.5	12586	19.4
cyclopoid copepodites	14049	27.5	21056	34.9	23269	35.8
Total Adult Copepoda	5605	10.9	7435	12.3	8218	12.6
<i>Cyclops bicuspidatus thomasi</i>	1768	3.5	2894	4.8	3836	5.9
<i>Diaptomus</i> spp (female)	515	1.0	631	1.0	744	1.1
<i>Diaptomus ashlandi</i> (male)	291	0.6	336	0.6	870	1.3
<i>Diaptomus oregonensis</i> (male)	122	0.2	83	0.1	163	0.3
<i>Mesocyclops edax</i>	39	0.1	295	0.5	461	0.7
<i>Tropocyclops prasinus mexicanus</i>	2842	5.6	3160	5.2	2102	3.2
Total Cladocera	21183	41.5	19509	32.4	17061	26.2
<i>Bosmina longirostris</i>	17157	33.6	13175	21.9	8625	13.3
<i>Chydorus sphaericus</i>	370	0.7	360	0.6	116	0.2
<i>Daphnia galeata mendotae</i>	201	0.4	378	0.6	660	1.0
<i>Daphnia longiremis</i>	853	1.7	1126	1.9	2127	3.3
<i>Daphnia retrocurva</i>	1761	3.4	3737	6.2	4197	6.5
<i>Eubosmina coregoni</i>	558	1.1	490	0.8	886	1.4
<i>Holopedium gibberium</i>	12	0.0	124	0.2	372	0.6
Total Rotifera	4032	7.9	3413	5.7	2772	4.3

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Table 15 Mean density and per cent composition of dominant zooplankton organisms collected along five transects in Lake Michigan near the Kewaunee Nuclear Power Plant, 28 August 1973. Each density is the mean of three locations.

	Transects									
	I		II		III		IV		V	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	56366		70950		58790		53631		65850	
Total Crustacea	54162	96.1	67170	94.7	55708	94.8	50336	93.9	62231	94.5
Total Copepoda	37081	65.8	45191	63.7	36153	61.5	34095	63.6	44268	67.2
nauplii	845	1.5	1552	2.2	1467	2.5	884	1.7	1176	1.8
calanoid copepodites	10865	19.3	11786	16.6	9130	15.5	8072	15.1	8429	12.8
cyclopoid copepodites	18417	32.7	23857	33.6	19276	32.8	18464	34.4	24961	37.9
Total Adult Copepoda	6953	12.3	7996	11.3	6280	10.7	6675	12.5	9702	14.7
<i>Cyclops bicuspidatus thomasi</i>	2708	4.8	3658	5.2	2859	4.9	2440	4.6	4222	6.4
<i>Diaptomus</i> spp. (female)	917	1.6	511	0.7	668	1.1	590	1.1	655	1.0
<i>Diaptomus ashlandi</i> (male)	878	1.6	626	0.9	393	0.7	567	1.1	515	0.8
<i>Diaptomus oregonensis</i> (male)	85	0.2	138	0.2	89	0.2	174	0.3	161	0.2
<i>Mesocyclops edax</i>	488	0.9	288	0.4	331	0.6	331	0.6	239	0.4
<i>Tropocyclops prasinus mexicanus</i>	1844	3.3	2705	3.8	1880	3.2	2564	4.8	3894	5.9
Total Cladocera	17081	30.3	21980	31.0	19555	33.3	16241	30.3	17964	27.3
<i>Bosmina longirostris</i>	8701	15.5	13774	19.4	12919	22.0	11220	20.9	11203	17.0
<i>Chydorus sphaericus</i>	187	0.3	282	0.4	449	0.8	115	0.2	164	0.3
<i>Daphnia galeata mendotae</i>	577	1.0	620	0.9	580	1.0	292	0.5	380	0.6
<i>Daphnia longiremis</i>	1277	2.3	1831	2.6	1527	2.6	1244	2.3	2027	3.1
<i>Daphnia retrocurva</i>	5142	9.1	4313	6.1	2974	5.1	2388	4.5	3373	5.1
<i>Eubosmina coregoni</i>	980	1.7	809	1.1	633	1.1	626	1.2	449	0.7
<i>Holopedium gibberum</i>	177	0.3	200	0.3	272	0.5	242	0.5	256	0.4
Total Rotifera	2204	3.9	3777	5.3	3082	5.2	3293	6.1	3619	5.5

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Table 16 Mean density and percent composition of dominant zooplankton organisms collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 26 September 1973. Each density is the mean of four replicates.

	Inshore Locations (3m tows)									
	2		6		11		15		20	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	49903		76934		55630		50467		82972	
Total Crustacea	47103	94.4	74753	97.2	53626	96.4	48875	96.8	79497	95.8
Total Copepoda	32423	65.0	59775	77.7	38083	68.5	34399	68.2	53674	64.7
nauplii	1650	3.3	1651	2.1	1356	2.4	1356	2.7	2505	3.0
calanoid copepodites	3331	6.7	6013	7.8	6042	10.9	7604	15.1	11554	13.9
cyclopoid copepodites	23195	46.5	47746	62.1	26556	47.7	20867	41.3	29797	35.9
Total Adult Copepoda	4247	8.49	4365	5.6	4129	7.4	4572	9.0	9818	11.8
<u>Cyclops bicuspidatus thomasi</u>	531	1.1	1120	1.5	855	1.5	1680	3.3	2771	3.3
<u>Diaptomus</u> spp (female)	30	0.1	442	0.6	207	0.4	707	1.4	472	0.6
<u>Diaptomus ashlandi</u> (male)	0	0.0	177	0.2	148	0.3	207	0.4	177	0.2
<u>Mesocyclops edax</u>	236	0.5	89	0.1	30	0.1	118	0.2	89	0.1
<u>Tropocyclops prasinus mexicanus</u>	3006	6.0	1916	2.5	2594	4.7	1445	2.9	5777	7.0
Total Cladocera	14680	29.4	14978	19.5	15543	27.9	14476	28.7	25850	31.2
<u>Bosmina longirostris</u>	5335	10.7	7162	9.3	7427	13.4	6956	13.8	10581	12.8
<u>Ceriodaphnia quadrangula</u>	89	0.2	118	0.2	59	0.1	59	0.1	30	0.0
<u>Chydorus sphaericus</u>	1267	2.5	1592	2.1	1592	2.9	1798	3.6	1179	1.4
<u>Daphnia galeata mendotae</u>	325	0.7	648	0.8	649	1.2	796	1.6	2122	2.6
<u>Daphnia longiremis</u>	118	0.2	59	0.1	89	0.2	0	0.0	30	0.0
<u>Daphnia retrocurva</u>	1267	2.5	1002	1.3	1209	2.2	1385	2.7	7309	8.8
<u>Eubosmina coregoni</u>	6072	12.2	4038	5.2	4392	7.9	3036	6.0	3950	4.8
Total Rotifera	2800	5.6	2181	2.8	2004	3.6	1592	3.2	3448	4.2

Table 16 Continued.

	Middle Locations (6m tows)									
	3		7		12		16		21	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	41370		50093		40388		42824		44362	
Total Crustacea	39621	95.8	47656	95.1	35672	25.3	40309	94.1	39076	88.1
Total Copepoda	27256	65.9	36941	73.7	25447	63.0	26862	62.7	23365	52.7
nauplii	924	2.2	1454	2.9	825	2.0	1454	3.4	1140	2.6
calanoid copepodites	3242	7.8	11318	22.6	6897	17.1	6681	15.6	5600	12.6
cyclopoid copepodites	18018	43.6	19452	38.8	14187	35.1	15090	35.2	12811	28.9
Total Adult Copepoda	5072	12.2	4717	9.4	3538	8.7	3637	8.5	3814	8.6
<u>Cyclops bicuspidatus thomasi</u>	1631	3.9	924	1.8	1218	3.0	1474	3.4	1592	3.6
<u>Diaptomus</u> spp (female)	177	0.4	806	1.6	334	0.8	295	0.7	472	1.1
<u>Diaptomus ashlandi</u> (male)	98	0.2	413	0.8	177	0.4	99	0.2	98	0.2
<u>Mesocyclops edax</u>	138	0.3	118	0.2	20	0.4	98	0.2	40	0.1
<u>Tropocyclops prasinus mexicanus</u>	2948	7.1	2279	4.5	1769	4.4	1552	3.6	1454	3.3
Total Cladocera	12365	29.9	10715	21.4	10225	25.3	13447	31.4	15711	35.4
<u>Bosmina longirostris</u>	4912	11.9	4598	9.2	3930	9.7	6504	15.2	6288	14.2
<u>Ceriodaphnia quadrangula</u>	98	0.2	40	0.1	79	0.2	99	0.2	20	0.0
<u>Chydorus sphaericus</u>	491	1.2	1356	2.7	491	1.2	511	1.2	431	0.9
<u>Daphnia galeata mendotae</u>	275	0.7	707	1.4	570	1.4	373	0.9	845	1.9
<u>Daphnia longiremis</u>	20	0.0	20	0.0	0	0.0	20	0.0	0	0.0
<u>Daphnia retrocurva</u>	3006	7.3	1611	3.2	2476	6.1	2279	5.3	3890	8.8
<u>Eubosmina coregoni</u>	3380	8.2	2240	4.5	2515	6.2	3105	7.3	3478	7.8
Total Rotifera	1749	4.22	2437	4.9	4716	11.7	2515	5.9	5286	11.9

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Table 17 Continued.

	Offshore Locations (9m tows)									
	4		8		13		17		22	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	48840		47058		47714		52544		54651	
Total Crustacea	46757	95.7	44503	94.6	45867	96.2	50717	96.5	52784	96.6
Total Copepoda	30459	62.4	33191	70.5	29613	62.1	29199	55.6	32756	59.9
nauplii	1552	3.2	1278	2.7	1140	2.4	1002	1.9	865	1.6
calanoid copepodites	9137	18.7	13106	27.9	9962	20.9	11003	20.94	13361	24.4
cyclopoid copepodites	16466	33.7	15110	32.1	14717	30.8	12968	24.7	13086	23.9
Total Adult Copepoda	3304	6.7	3697	7.8	3794	7.9	4285	8.0	5444	9.9
<i>Cyclops bicuspidatus thomasi</i>	1493	3.1	1886	4.0	1867	3.9	2338	4.4	2653	4.9
<i>Diaptomus</i> spp (female)	197	0.4	347	0.8	157	0.3	433	0.8	393	0.7
<i>Diaptomus ashlandi</i> (male)	197	0.4	138	0.3	177	0.4	157	0.3	393	0.7
<i>Mesocyclops edax</i>	197	0.4	196	0.4	216	0.5	40	0.1	98	0.2
<i>Tropocyclops prasinus mexicanus</i>	1081	2.2	924	2.0	1199	2.5	1100	2.1	1729	3.2
Total Cladocera	16298	33.4	11312	24.0	16254	34.1	21518	41.0	20028	36.6
<i>Bosmina longirostris</i>	5109	10.5	3419	7.3	4166	8.7	6425	12.2	7820	14.3
<i>Ceriodaphnia quadrangula</i>	0	0.0	20	0.0	79	0.2	40	0.1	0	0.0
<i>Chydorus sphaericus</i>	629	1.3	216	0.5	570	1.2	275	0.5	275	0.5
<i>Daphnia galeata mendotae</i>	511	1.0	393	0.8	570	1.2	1493	2.8	786	1.4
<i>Daphnia longiremis</i>	99	0.2	20	0.0	59	0.1	59	0.1	20	0.0
<i>Daphnia retrocurva</i>	7093	14.5	4578	9.7	6818	14.3	8665	16.5	7781	14.2
<i>Eubosmina coregoni</i>	2437	5.0	2024	4.3	3340	7.0	3891	7.4	3006	5.5
Total Rotifera	2083	4.3	2555	5.4	1847	3.9	1827	3.5	1867	3.4

Table 17 Mean density and percent composition of dominant Zooplankton organisms collected at three distances from shore in Lake Michigan near the Kewaunee Nuclear Power Plant, 26 September 1973. Each density is the mean of five locations.

	Inshore (3m tows)		Distance from Shore Middle (6m tows)		Offshore (9m tows)	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	63183		43808		50161	
Total Crustacea	60078	96.2	40467	92.4	48125	95.9
Total Copepoda	43672	69.1	27975	63.9	31042	61.9
nauplii	1704	2.7	1159	2.6	1167	2.3
calanoid copepodites	6909	10.9	6748	15.4	11314	22.6
cyclopoid copepodites	29632	46.9	15912	36.3	14469	28.8
Total Adult Copepoda	5427	8.5	4156	9.4	4092	8.1
<i>Cyclops bicuspidatus thomasi</i>	1391	2.2	1368	3.1	2047	4.1
<i>Diaptomus</i> spp (female)	372	0.6	417	1.0	311	0.6
<i>Diaptomus ashlandi</i> (male)	142	0.2	177	0.4	212	0.4
<i>Diacyclops edax</i>	142	0.2	83	0.2	149	0.3
<i>Euprocyclops prasinus mexicanus</i>	2948	4.7	2000	4.6	1207	2.4
Total Cladocera	17106	27.1	12492	28.5	17083	34.1
<i>Bosmina longirostris</i>	7492	11.9	5246	12.0	5388	10.7
<i>Chydorus sphaericus</i>	1486	2.4	652	1.5	393	0.8
<i>Daphnia galeata mendotae</i>	908	1.4	554	1.3	751	1.5
<i>Daphnia longiremis</i>	59	0.1	12	0.0	51	0.1
<i>Daphnia retrocurva</i>	2434	3.9	2652	6.1	6987	13.9
<i>Eubosmina coregoni</i>	4298	6.8	2944	6.7	2940	5.9
Total Rotifera	2405	3.8	3341	7.6	2036	4.1

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Table 18 Mean density and percent composition of dominant zooplankton organisms collected along five transects in Lake Michigan near the Kewaunee Nuclear Power Plant, 26 September 1973. Each density is the mean of three locations.

	Transects									
	I		II		III		IV		V	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	46527		53049		46591		48958		55941	
Total Crustacea	44436	95.5	50596	95.4	43762	94.1	46941	95.9	52667	94.2
Total Copepoda	29719	63.9	38872	73.3	29636	63.7	29287	59.8	33112	59.2
nauplii	1359	2.9	1399	2.7	1071	2.3	1212	2.5	1230	2.2
calanoid copepodites	6204	13.3	11328	21.4	8287	17.9	8996	18.4	10472	18.8
cyclopoid copepodites	18105	38.9	21997	41.5	16514	35.5	14992	30.6	15780	28.2
Total Adult Copepoda	4051	8.7	4148	7.9	3765	8.1	4117	8.4	5630	10.1
<u>Cyclops bicuspidatus thomasi</u>	1379	3.0	1438	2.8	1482	3.2	1940	4.0	2319	4.2
<u>Diaptomus spp (female)</u>	163	0.4	516	0.1	224	0.5	433	0.9	433	0.8
<u>Diaptomus ashlandi (male)</u>	131	0.3	236	0.5	172	0.4	146	0.3	259	0.5
<u>Mesocyclops edax</u>	184	0.4	137	0.3	120	0.3	72	0.2	77	0.2
<u>Tropocyclops prasinus mexicanus</u>	2024	4.4	1541	2.9	1622	3.5	1308	2.7	2312	4.2
Total Cladocera	14717	31.6	11724	22.1	14126	30.4	17654	36.1	19559	3.5
<u>Bosmina longirostris</u>	5081	10.9	4433	8.4	4631	10.0	6540	13.4	7770	13.9
<u>Ceriodaphnia quadrangula</u>	48	0.1	43	0.1	76	0.2	63	0.1	12	0.1
<u>Chydorus sphaericus</u>	689	1.5	825	1.6	714	1.6	608	1.2	478	0.9
<u>Daphnia galeata mendotae</u>	401	0.9	546	1.1	583	1.3	1004	2.1	1028	1.9
<u>Daphnia longiremis</u>	76	0.2	27	0.1	44	0.1	36	0.1	15	0.1
<u>Daphnia retrocurva</u>	4760	10.2	2993	5.7	4436	9.6	5323	10.9	6405	11.5
<u>Eubosmina coregoni</u>	3357	7.2	2432	4.6	3240	7.0	3487	7.1	3321	6.0
Total Rotifera	2091	4.5	2453	4.7	2830	6.1	2017	4.2	3270	5.9

Table 19 Mean density and percent composition of dominant Zooplankton organisms collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 23 October 1973. Each density is the mean of four replicates.

	Inshore Locations (3m tows)									
	2		6		11		15		20	
	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition
Total Zooplankton	12355		23526		28195		12100		80864	
Total Crustacea	12263	99.3	23172	98.5	26302	93.3	11799	97.5	85531	98.2
Total Copepoda	5266	42.6	10983	46.7	10619	37.7	3440	28.4	26337	30.3
nauplii	583	4.7	1552	6.6	819	2.9	511	4.2	767	0.9
calanoid copepodites	1775	14.4	3124	13.3	786	2.8	282	2.3	2587	3.0
cyclopoid copepodites	2574	20.8	5161	21.9	7853	27.9	2148	17.6	21666	24.9
Total Adult Copepoda	334	2.8	1146	4.9	1161	4.1	499	4.1	1317	1.5
<i>Cyclops bicuspidatus thomasi</i>	98	0.8	269	1.1	223	0.8	111	0.9	551	0.6
<i>Cyclops vernalis</i>	0	0.0	26	0.1	170	0.6	66	0.5	105	0.1
<i>Diaptomus</i> spp. (female)	46	0.4	52	0.2	7	0.0	13	0.1	13	0.0
<i>Diaptomus ashlandi</i> (male)	0	0.0	0	0.0	7	0.0	0	0.0	23	0.0
<i>Diaptomus minutus</i> (male)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Epischura lacustris</i>	39	0.3	13	0.1	13	0.0	7	0.1	0	0.0
<i>Mesocyclops edax</i>	0	0.0	26	0.1	20	0.1	33	0.3	26	0.0
<i>Tropocyclops prasinus mexicanus</i>	144	1.2	753	3.2	701	2.5	269	2.2	563	0.6
Total Cladocera	6997	56.6	12189	51.8	15683	55.6	8359	69.1	58994	67.9
<i>Bosmina longirostris</i>	3976	32.2	9778	41.6	14645	51.9	7938	65.6	58137	64.6
<i>Chydorus sphaericus</i>	0	0.0	0	0.0	216	0.8	7	0.1	124	0.1
<i>Daphnia galeata mendotae</i>	20	0.2	46	0.2	7	0.0	0	0.0	350	0.4
<i>Daphnia retrocurva</i>	2640	21.4	2103	8.9	420	1.5	151	1.2	550	0.7
<i>Eubosmina coregoni</i>	528	2.7	262	1.1	354	1.3	256	2.1	1670	1.9
Total Rotifera	92	0.7	354	1.5	1893	6.7	301	2.5	1533	1.8

Table 19 Continued.

	Middle Locations (6m tows)									
	3		7		12		16		21	
	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition
Total Zooplankton	3036		18369		14601		19624		17739	
Total Crustacea	2962	97.6	17983	97.9	14053	96.2	18984	96.7	17385	98.0
Total Copepoda	1582	52.1	9745	53.0	6895	47.2	8215	41.9	10579	59.6
nauplii	389	12.8	1202	6.5	834	5.7	1037	5.3	498	2.8
calanoid copepodites	292	9.6	1839	10.0	716	4.9	1981	10.1	1412	8.0
cyclopoid copepodites	761	25.1	5544	30.2	4728	32.4	3357	17.1	7743	43.6
Total Adult Copepoda	140	4.6	1160	6.3	617	4.2	1840	9.3	926	5.2
<u>Cyclops bicuspidatus thomasi</u>	27	0.9	363	2.0	156	1.1	345	1.8	203	1.1
<u>Cyclops vernalis</u>	0	0.0	130	0.7	53	0.4	62	0.3	118	0.7
<u>Diaptomus</u> spp. (female)	3	0.1	27	0.1	9	0.1	47	0.2	21	0.1
<u>Diaptomus ashlandi</u> (male)	0	0.0	3	0.0	0	0.0	0	0.0	6	0.0
<u>Diaptomus minutus</u> (male)	0	0.0	0	0.0	0	0.0	0	0.0	3	0.0
<u>Epischura lacustris</u>	27	0.9	41	0.2	27	0.2	30	0.2	24	0.1
<u>Mesocyclops edax</u>	3	0.1	53	0.3	65	0.4	71	0.4	0	0.0
<u>Tropocyclops prasinus mexicanus</u>	80	2.6	540	2.9	304	2.1	1285	6.5	551	3.1
Total Cladocera	1380	45.5	8238	44.8	7158	49.0	10769	54.9	6806	38.4
<u>Bosmina longirostris</u>	849	28.0	7141	38.9	5815	39.8	9750	49.7	6051	34.1
<u>Chydorus sphaericus</u>	3	0.1	18	0.1	53	0.4	0	0.0	15	0.1
<u>Daphnia galeata mendotae</u>	12	0.4	30	0.2	18	0.1	41	0.2	89	0.5
<u>Daphnia retrocurva</u>	407	13.4	751	4.1	934	6.4	751	3.8	548	3.1
<u>Eubosmina coregoni</u>	103	3.4	295	1.6	298	2.0	227	1.2	103	0.6
Total Rotifera	74	2.4	386	2.1	548	3.8	640	3.3	354	2.0

Table 19 Continued.

	Offshore Locations (9m tows)									
	4		8		13		17		22	
	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition
Total Zooplankton	11956		10791		12376		7023		12420	
Total Crustacea	11844	99.1	10601	98.2	12193	98.5	6938	95.8	12282	98.9
Total Copepoda	7147	59.8	4588	42.5	8149	65.8	4396	62.6	9341	75.2
nauplii	720	6.2	727	6.7	865	7.0	596	8.5	590	4.8
calanoid copepodites	3065	25.6	1245	11.5	2875	23.2	1258	17.9	4460	35.9
cyclopoid copepodites	2915	24.4	2155	20.0	3288	26.6	2030	28.9	3832	30.9
Total Adult Copepoda	427	3.5	461	4.2	1121	9.0	512	7.5	459	3.7
<u>Cyclops bicuspidatus thomasi</u>	125	1.0	171	1.6	111	0.9	203	2.9	195	0.5
<u>Cyclops vernalis</u>	0	0.0	13	0.1	0	0.0	20	0.3	13	0.1
<u>Diaptomus</u> spp. (female)	33	0.3	26	0.2	26	0.2	39	0.6	52	0.4
<u>Diaptomus ashlandi</u> (male)	7	0.1	7	0.1	7	0.1	7	0.1	20	0.2
<u>Diaptomus minutus</u> (male)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<u>Epischura lacustris</u>	26	0.2	20	0.2	7	0.1	20	0.3	20	0.2
<u>Mesocyclops edax</u>	0	0.0	7	0.1	46	0.4	20	0.3	0	0.0
<u>Tropocyclops prasinus mexicanus</u>	203	1.7	201	1.9	911	7.4	203	2.9	249	2.0
Total Cladocera	4697	39.3	6013	55.7	4044	32.7	2542	36.2	2991	23.7
<u>Bosmina longirostris</u>	642	5.4	4696	43.5	2889	23.3	1952	27.8	1362	11.0
<u>Chydorus sphaericus</u>	20	0.2	0	0.0	7	0.1	7	0.1	26	0.2
<u>Daphnia galeata mendotae</u>	59	0.5	39	0.4	33	0.3	52	0.7	33	0.3
<u>Daphnia retrocurva</u>	3806	31.8	1140	10.6	898	7.3	426	6.1	1356	10.9
<u>Eubosmina coregoni</u>	170	1.4	131	1.2	203	1.6	105	1.5	164	1.3
Total Rotifera	112	0.9	190	1.8	183	1.5	85	1.2	138	1.1

Table-20 - Mean density and percent composition of dominant Zooplankton organisms collected at three distances from shore in Lake Michigan near the Kewaunee Nuclear Power Plant, 23 October 1973. Each density is the mean of five locations.

	Distance from Shore					
	Inshore (3m tows)		Middle (6m tows)		Offshore (9m tows)	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	32606		14673		10914	
Total Crustacea	31771	97.4	14273	97.3	10772	98.7
Total Copepoda	11328	34.7	7403	50.5	6725	61.6
nauplii	846	2.6	792	5.4	704	6.5
calanoid copepodites	1711	5.2	1248	8.5	2581	23.6
cyclopoid copepodites	7880	24.2	4427	30.2	2844	26.1
Total Adult Copepods	891	2.7	936	6.3	596	5.4
<u>Cyclops bicuspidatus thomasi</u>	252	0.8	219	1.5	143	1.3
<u>Cyclops vernalis</u>	73	0.2	73	0.5	9	0.1
<u>Diaptomus</u> spp. (female)	26	0.1	21	0.1	35	0.3
<u>Diaptomus ashlandi</u> (male)	6	0.0	2	0.0	10	0.1
<u>Epischura lacustris</u>	14	0.0	30	0.2	19	0.2
<u>Mesocyclops edax</u>	21	0.1	38	0.3	15	0.1
<u>Tropocyclops prasinus mexicanus</u>	486	1.5	552	3.8	355	3.3
Total Cladocera	20443	62.7	6870	46.8	4047	37.1
<u>Bosmina longirostris</u>	18495	56.7	5921	40.4	2308	21.1
<u>Chydorus sphaericus</u>	69	0.2	18	0.1	12	0.1
<u>Daphnia galeata mendotae</u>	91	0.3	38	0.3	43	0.4
<u>Daphnia retrocurva</u>	1181	3.6	678	4.6	1525	14.0
<u>Eubosmina coregoni</u>	574	1.8	205	1.4	155	1.4
Total Rotifera	835	2.6	400	2.7	142	1.3

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Table 21 Mean density and percent composition of dominant Zooplankton organisms collected along five transects in Lake Michigan near the Kewaunee Nuclear Power Plant, 23 October 1973. Each density is the mean of three locations.

	Transects									
	I		II		III		IV		V	
	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition	#/m ³	% Composition
Total Zooplankton	9049		15440		15754		12070		26800	
Total Crustacea	8954	99.0	15158	98.2	15165	96.3	11764	97.5	26159	98.3
Total Copepoda	4979	55.0	7373	47.8	8143	51.7	5510	45.7	12586	47.3
nauplii	597	6.6	1023	6.6	847	5.4	729	6.0	589	2.2
calanoid copepodites	1926	1.3	1756	11.4	1807	11.5	1336	11.1	3132	11.8
cyclopoid copepodites	2140	23.3	3786	24.5	4529	28.7	2492	20.6	3108	30.5
Total Adult Copepods	316	3.5	808	5.2	960	6.1	953	7.9	758	2.8
<u>Cyclops bicuspidatus thomasi</u>	88	1.0	251	1.6	145	0.9	235	1.9	213	0.8
<u>Cyclops vernalis</u>	0	0.0	54	0.3	46	0.3	42	0.3	63	0.2
<u>Diaptomus</u> spp. (female)	25	0.3	31	0.2	17	0.1	37	0.3	35	0.1
<u>Diaptomus ashlandi</u> (male)	4	0.0	5	0.0	5	0.0	4	0.0	16	0.1
<u>Eubosmina lacustris</u>	29	0.3	26	0.2	19	0.1	21	0.2	18	0.1
<u>Mesocyclops edax</u>	1	0.0	26	0.2	48	0.3	39	0.3	4	0.0
<u>Tropocyclops prasinus mexicanus</u>	152	1.7	406	2.6	674	4.3	575	4.8	402	1.5
Total Cladocera	3975	43.9	7784	50.4	7022	44.6	6254	51.8	13572	51.0
<u>Bosmina longirostris</u>	1267	14.0	6358	41.2	5824	37.0	5549	46.0	12054	45.3
<u>Chydorus sphaericus</u>	11	0.1	6	0.0	57	0.4	5	0.0	39	0.1
<u>Daphnia galeata mendotae</u>	37	0.4	37	0.2	24	0.2	40	0.3	110	0.4
<u>Daphnia retrocurva</u>	2480	27.4	1171	7.6	830	5.3	489	4.1	959	3.6
<u>Eubosmina coregoni</u>	174	1.9	208	1.3	260	1.7	171	1.4	395	1.5
Total Rotifera	96	1.1	283	1.8	590	3.7	306	2.5	443	1.7

Table 22 Mean densities and percent composition of dominant zooplankton organisms collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 13 November 1973. Each density is the mean of four replicates.

	Inshore Locations (3m tows)									
	2		6		11		15		20	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	33844		27312		23967		41842		56989	
Total Crustacea	33151	97.9	26737	97.9	23215	96.9	40088	95.8	56355	98.9
Total Copepoda	27663	81.7	21814	79.9	19205	80.1	18969	45.3	18083	31.7
nauplii	472	1.4	207	0.8	118	0.5	192	0.5	221	0.4
calanoid copepodites	7884	23.3	3228	11.8	2992	12.5	1386	3.3	3360	5.9
cyclopoid copepodites	15518	45.9	15724	57.6	13926	58.1	14280	34.1	11819	20.7
Total Adult Copepoda	3789	11.2	2655	9.7	2169	8.7	3111	7.4	2683	4.7
<u>Cyclops bicuspidatus thomasi</u>	737	2.2	678	2.5	442	1.8	708	1.7	855	1.5
<u>Cyclops vernalis</u>	162	0.5	59	0.2	59	0.2	59	0.1	44	0.1
<u>Diaptomus</u> spp.(female)	987	2.9	301	1.1	457	1.9	103	0.2	162	0.3
<u>Diaptomus ashlandi</u> (male)	89	0.3	177	0.6	89	0.4	30	0.1	59	0.1
<u>Diaptomus minutus</u> (male)	472	1.4	89	0.3	74	0.3	44	0.1	74	0.1
<u>Diaptomus oregonensis</u> (male)	693	2.0	207	0.8	207	0.9	15	0.0	118	0.2
<u>Epischura lacustris</u>	133	0.4	44	0.2	30	0.1	0	0.0	162	0.3
<u>Tropocyclops prasinus mexicanus</u>	501	1.5	1046	3.8	796	3.3	2137	5.1	1179	2.1
Total Cladocera	5488	16.2	4923	18.0	4010	16.7	21119	50.5	38272	67.2
<u>Bosmina longirostris</u>	4465	13.2	3772	13.8	2638	11.0	20160	48.2	36237	63.6
<u>Daphnia galeata mendotae</u>	295	0.9	339	1.2	266	1.1	339	0.8	737	1.3
<u>Daphnia retrocurva</u>	398	1.2	266	1.0	339	1.4	325	0.8	737	1.3
<u>Eubosmina coregoni</u>	315	0.9	531	1.9	722	3.0	295	0.7	516	0.9
Total Rotifera	693	2.0	575	2.1	752	3.1	1754	4.2	634	1.1

Table 22 Continued.

	Middle Locations (6m tows)									
	3		7		12		16		21	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	51054		29375		16804		22595		73378	
Total Crustacea	50155	98.2	28373	96.6	16376	98.4	22167	98.1	72494	98.8
Total Copepoda	46675	91.4	25233	85.9	13486	80.3	17524	77.6	53144	72.4
nauplii	545	1.1	266	0.9	339	2.0	236	1.0	354	0.5
calanoid copepodites	6337	12.4	3861	13.1	2697	16.0	2962	13.1	7766	10.6
cyclopoid copepodites	34705	68.0	18391	62.6	8960	53.3	12320	54.5	37077	50.5
Total Adult Copepoda	5088	9.9	2715	9.2	1490	8.8	2006	8.8	7947	10.8
<u>Cyclops bicuspidatus thomasi</u>	1263	2.5	737	2.5	339	2.0	472	2.1	3330	4.5
<u>Cyclops vernalis</u>	30	0.1	30	0.1	30	0.2	0	0.0	30	0.0
<u>Diaptomus</u> spp.(female)	1312	2.6	266	0.9	207	1.2	295	1.3	840	1.1
<u>Diaptomus ashlandi</u> (male)	266	0.5	74	0.3	44	0.3	118	0.5	265	0.4
<u>Diaptomus minutus</u> (male)	221	0.4	148	0.5	162	1.0	74	0.3	531	0.7
<u>Diaptomus oregonensis</u> (male)	516	1.0	280	1.0	133	0.8	59	0.3	590	0.8
<u>Epischura lacustris</u>	15	0.0	15	0.1	0	0.0	118	0.5	207	0.3
<u>Tropocyclops prasinus mexicanus</u>	1415	2.8	1150	3.9	560	3.3	855	3.8	2093	2.9
Total Cladocera	3480	6.8	3140	10.7	2890	17.2	4643	20.5	19350	26.4
<u>Bosmina longirostris</u>	2004	3.9	1945	6.6	2078	12.4	3640	16.1	15562	21.2
<u>Daphnia galeata mendotae</u>	546	1.1	177	0.6	221	1.3	339	1.5	1385	1.9
<u>Daphnia retrocurva</u>	413	0.8	428	1.5	221	1.3	236	1.0	1724	2.3
<u>Eubosmina coregoni</u>	487	1.0	531	1.8	325	1.9	428	1.9	619	0.8
Total Rotifera	899	1.8	1002	3.4	428	2.5	428	1.9	844	1.2

Table 22 Continued.

	Offshore Locations (9m tows)									
	4		8		13		17		22	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	35646		47122		59658		30045		50460	
Total Crustacea	34820	97.7	46768	99.2	59088	99.0	29770	99.1	50086	99.3
Total Copepoda	31674	88.9	42346	89.9	51424	86.2	27117	90.3	40281	79.8
nauplii	511	1.4	570	1.2	452	0.8	491	1.6	511	1.0
calanoid copepodites	3871	10.9	3439	7.3	6307	10.6	4460	14.8	5816	11.5
cyclopoid copepodites	23657	66.4	34209	72.6	38335	64.3	18961	63.1	29650	58.8
Total Adult Copepoda	3635	10.2	4128	8.7	6330	10.6	3205	10.6	4304	8.5
<u>Cyclops bicuspidatus thomasi</u>	1041	2.9	1828	3.9	2732	4.6	727	2.4	1493	3.0
<u>Cyclops vernalis</u>	0	0.0	0	0.0	20	0.0	20	0.1	99	0.2
<u>Diaptomus</u> spp (female)	373	1.0	491	1.0	845	1.4	550	1.8	609	1.2
<u>Diaptomus ashlandi</u> (male)	275	0.8	59	0.2	315	0.5	177	0.6	275	0.5
<u>Diaptomus minutus</u> (male)	157	0.4	138	0.3	452	0.8	256	0.9	295	0.6
<u>Diaptomus oregonensis</u> (male)	275	0.8	315	0.7	551	0.9	197	0.7	531	1.1
<u>Epischura lacustris</u>	20	0.1	59	0.1	20	0.0	20	0.1	98	0.2
<u>Tropocyclops prasinus mexicanus</u>	1494	4.2	1238	2.6	1395	2.3	1238	4.1	845	1.7
Total Cladocera	3146	8.8	4422	9.4	7664	12.8	2653	8.8	9805	19.4
<u>Bosmina longirostris</u>	1238	3.5	2495	5.3	3517	5.9	1513	5.0	6229	12.3
<u>Daphnia galeata mendotae</u>	374	1.0	354	0.8	825	1.4	216	0.7	472	0.9
<u>Daphnia retrocurva</u>	256	0.7	904	1.9	2437	4.1	354	1.2	2436	4.8
<u>Eubosmina coregoni</u>	1258	3.5	669	1.4	865	1.4	570	1.9	668	1.3
Total Rotifera	826	2.3	354	0.8	570	1.0	275	0.9	374	0.7

Table 23 Mean density and percent composition of dominant Zooplankton organisms collected at three distances from shore in Lake Michigan near the Kewaunee Nuclear Power Plant, 13 November 1973. Each density is the mean of five locations.

	Inshore (3m tows)		Distance from Shore			
	#/m ³	%Composition	Middle (6m tows)		Offshore (9m tows)	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	36792		38643		44568	
Total Crustacea	35910	97.6	37915	99.1	44106	98.9
Total Copepoda	21148	57.5	31214	80.8	38569	86.5
nauplii	242	0.7	348	0.9	507	1.1
calanoid copepodites	3770	10.2	4725	12.2	4779	10.7
cyclopoid copepodites	14253	38.7	22291	57.7	28962	65.0
Total Adult Copepoda	2883	7.8	3850	9.9	4331	9.7
<i>Cyclops bicuspidatus thomasi</i>	684	1.9	1229	3.2	1564	3.5
<i>Cyclops vernalis</i>	77	0.2	24	0.1	28	0.1
<i>Diaptomus</i> spp.(female)	404	1.1	584	1.5	574	1.3
<i>Diaptomus ashlandi</i> (male)	89	0.2	154	0.4	220	0.5
<i>Diaptomus minutus</i> (male)	151	0.4	227	0.6	260	0.6
<i>Diaptomus oregonensis</i> (male)	248	0.7	316	0.8	374	0.8
<i>Epischura lacustris</i>	74	0.2	71	0.2	43	0.1
<i>Tropocyclops prasinus mexicanus</i>	1132	3.1	1215	3.1	1242	2.8
Total Cladocera	14762	40.1	6701	17.3	5537	12.4
<i>Bosmina longirostris</i>	13454	36.6	5046	13.1	2998	6.7
<i>Daphnia galeata mendotae</i>	395	1.1	534	1.4	448	1.0
<i>Daphnia retrocurva</i>	413	1.1	604	1.6	1277	2.9
<i>Eubosmina coregoni</i>	476	1.3	478	1.2	806	1.8
Total Rotifera	882	2.4	728	1.9	480	1.1

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Table 24 Mean density and per cent composition of dominant zooplankton organisms collected along five transects in Lake Michigan near the Kewaunee Nuclear Power Plant, 13 November 1973. Each density is the mean of three locations.

	Transects									
	I		II		III		IV		V	
	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition	#/m ³	%Composition
Total Zooplankton	40482		37904		39425		29528		59188	
Total Crustacea	39654	98.0	37298	98.4	38872	98.6	28955	98.1	58600	99.0
Total Copepoda	36006	88.9	33219	87.6	33408	84.7	22561	76.4	40869	69.0
nauplii	516	1.3	408	1.1	359	0.9	356	1.2	410	0.7
calanoid copepodites	5362	13.2	3545	9.4	4551	11.5	3448	11.7	6057	10.2
cyclopoid copepodites	25983	64.2	25856	68.2	24475	62.1	15967	54.1	29154	49.3
Total Adult Copepoda	4145	10.2	3412	9.0	4023	10.2	2790	9.4	5248	8.9
<u>Cyclops bicuspidatus thomasi</u>	1064	2.6	1273	3.3	1553	3.9	639	2.2	1999	3.4
<u>Cyclops vernalis</u>	37	0.1	20	0.1	30	0.1	20	0.1	67	0.1
<u>Diaptomus</u> spp.(female)	788	1.9	386	1.0	568	1.4	391	1.3	612	1.0
<u>Diaptomus ashlandi</u> (male)	241	0.6	84	0.2	187	0.5	133	0.5	236	0.4
<u>Diaptomus minutus</u> (male)	231	0.6	133	0.4	392	1.0	160	0.5	337	0.6
<u>Diaptomus oregonensis</u> (male)	425	1.0	285	0.8	354	0.9	121	0.4	482	0.8
<u>Eubischura lacustris</u>	37	0.1	42	0.1	15	0.0	30	0.1	145	0.2
<u>Tropocyclops prasinus mexicanus</u>	1302	3.2	1177	3.1	1084	2.7	1260	4.3	1317	2.2
Total Cladocera	3648	9.0	4078	10.8	5464	13.9	6394	21.7	17731	30.0
<u>Bosmina longirostris</u>	2031	5.0	2525	6.7	2891	7.3	5330	18.1	12265	20.7
<u>Daphnia galeata mendotae</u>	418	1.0	293	0.8	531	1.3	278	0.9	821	1.4
<u>Daphnia retrocurva</u>	332	0.8	639	1.7	1349	3.4	310	1.0	1916	3.2
<u>Eubosmina coregoni</u>	791	2.0	600	1.6	661	1.7	477	1.6	626	1.1
Total Rotifera	828	2.0	607	1.6	553	1.4	573	1.9	587	1.0

APPENDIX 4-C

Results of ANOVA applied to zooplankton
data from samples collected from
Lake Michigan near the
Kewaunee Nuclear Power Plant,
April - November 1973.

Table 1 Summary of nested ANOVA and Kruskal Wallis non-parametric ANOVA with multiple comparisons on abundance of major groups of zooplankton collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 13 April 1973.

Organism	Depth of tow (meters)	Nested ANOVA		Tukey's Multiple Comparison Transects	Kruskal-Wallis H Among Locations	Multiple Comparison Transects
		F Among Replicates	F Among Locations			
Total Zooplankton	3	14.020***	12.345***	II, III>IV	8.000**	II>IV
	6	4.995**	11.843**	II, III>IV	7.471**	II>IV
	9	1.936	40.200***	IV>III, II II>III	9.846**	IV>III
Total Crustacea	3	8.280***	6.925*	II>IV	6.038*	II>IV
	6	1.520	51.617***	II, III>IV	7.731**	II>IV
	9	1.435	239.240***	IV III, II II>III	9.846**	IV>III
Total Copepoda	3	7.549**	7.502**	II>IV	7.125*	II>IV
	6	1.505	53.673***	II, III>IV	7.731**	II>IV
	9	1.591	218.275***	IV>III, II II>III	9.269**	IV>III
Immature Copepoda	3	0.520	5.621*	III, II>IV	6.500*	ns
	6	1.042	10.091**	II>IV	7.538*	II>IV
	9	1.813	57.013***	IV>III, II II>III	9.846**	IV>III
Nauplii	3	0.654	2.457	-	3.846	-
	6	1.228	1.283	-	1.654	-
	9	1.573	29.535***	IV, II>III	8.548**	IV>III
Total Copepodites	3	0.767	1.886	-	2.923	-
	6	-	-	-	7.875*	II>IV
	9	1.062	29.515***	IV>III, II	9.010**	IV>III
Cyclopoid Copepodites	3	0.546	2.198	-	3.577	-
	6	0.948	14.458***	II, III>IV	7.875*	II>IV
	9	1.294	28.788***	IV>III, II II>III	9.269**	IV>III
Total Adult Copepoda	3	16.360***	7.423**	II>IV	8.000**	II>IV
	6	1.108	102.156***	III, II>IV	7.538*	III>IV
	9	2.319	102.299***	IV>II, III	7.385*	ns

Table 1 Continued.

Organism	Depth of tow (meters)	Nested ANOVA		Tukey's Multiple Comparison Transects	Kruskal-Wallis H Among Locations	Multiple Comparison Transects
		F Among Replicates	F Among Locations			
Total Adult Cyclopoids	3	5.107**	3.072	-	4.192	-
	6	-	-	-	7.408*	III>IV
	9	3.070*	20.939***	IV>II, III	7.423*	IV>II
Total Adult Calanoids	3	-	-	-	8.769**	II>IV
	6	-	-	-	7.385*	ns
	9	-	-	-	7.423*	IV>III
<u>Diaptomus</u> spp. (female)	3	1.336	44.997***	II>IV, III III>IV	9.269**	II>IV
	6	0.415	152.095***	II, III>IV	9.846*	II>IV
	9	1.120	66.728***	IV>II, III	7.856**	IV>II
<u>Diaptomus ashlandi</u> (male)	3	0.217	92.643***	III, II>IV	8.000**	III>IV
	6	0.687	63.778***	III, II>IV	9.010	III>IV
	9	1.821	59.160***	IV>III, II	8.346**	IV>III
<u>Diaptomus minutus</u> (male)	3	-	-	-	6.529*	ns
	6	-	-	-	0.875	-
	9	0.554	10.751**	IV>II	8.548**	IV>II
<u>Diaptomus oregonensis</u> (male)	3	-	-	-	4.875	-
	6	-	-	-	-	-
	9	0.710	20.152***	IV>III, II	7.471*	IV>III
<u>Diaptomus sicilis</u> (male)	3	-	-	-	8.115*	IV>II
	6	-	-	-	-	-
	9	-	-	-	3.962	-
<u>Cyclops bicuspidatus thomasi</u>	3	4.696**	3.168	-	4.308	-
	6	1.604	13.162***	III, II>IV	6.577*	ns
	9	2.703	24.133***	IV>II, III	7.731**	IV>II
<u>Tropocyclops prasinus mexicanus</u>	3	-	-	-	3.298	-
	6	-	-	-	-	-
	9	3.463*	3.638	-	4.510	-
Total <u>Daphnia</u> spp.	3	0.649	4.614*	II>IV	5.279	-
	6	0.452	11.122**	III>IV	7.654**	III>IV
	9	1.100	4.679*	II>III	6.529*	II>III

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Table 1 Continued.

Organism	Depth of tow (meters)	Nested ANOVA		Tukey's Multiple Comparison Transects	Kruskal-Wallis H Among Locations	Multiple Comparison Transects
		F Among Replicates	F Among Locations			
<u>Daphnia longiremis</u>	3	0.959	2.051	-	3.577	-
	6	-	-	-	7.279*	III>IV
	9	0.881	1.371	-	5.115	-
Total Cladocera	3	1.277	0.044	-	0.029	-
	6	0.755	2.059	-	3.010	-
	9	2.078	3.724	-	4.510	-
Total Rotifera	3	1.402	39.506***	II, III>IV	8.163**	III>IV
	6	-	-	-	3.933	-
	9	1.433	7.305**	II>IV	7.654**	II>IV

- Statistical test not applied.

* $p \leq 0.05$ ** $p < 0.01$ *** $p < 0.001$

ns Non-significant.

Table 2 Summary of nested ANOVA and Kruskal-Wallis non-parametric ANOVA with multiple comparisons on abundance of major groups of Zooplankton collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 26 May 1973.

Organism	Depth of tow (meters)	Nested ANOVA		Tukey's Multiple Comparison Transects	Kruskal-Wallis	
		F Among Replicates	F Among Locations		H Among Locations	Multiple Comparison Transects
Total Zooplankton	3	26.519***	3.654*	I>III	13.529**	I>III
	6	27.886***	11.542***	I, IV, V, II>III	13.186*	I>III
	9	29.665***	2.745	-	7.186	
Total Crustacea	3	2.949*	7.024**	I>III, IV	11.118*	ns
	6	16.303***	43.382***	I>III, IV, II, V V>III	15.500**	I>III
	9	7.188***	45.941***	IV, V, II, I>III IV, V>I, II	17.043**	IV, V>III
Total Copepods	3	3.106*	5.211**	I>III, IV	10.429*	ns
	6	17.976***	42.597***	I>III, II, IV V, IV, II>III	15.214**	I>III
	9	8.065***	45.057***	IV, V, II, I>III IV, V>I, II	17.200**	IV, V>III
Total Cladocera	3	2.928*	8.186***	II>III, IV, V	12.661*	II>III
	6	0.771	25.345***	II>III, IV, V I>III, IV, V V>III	16.043**	II>III
	9	1.207	7.967***	I>III, V	14.389**	I>III
Total Rotifera	3	43.340***	3.076*	ns	11.300*	ns
	6	23.837***	8.280***	IV, I, V, II>III	11.696*	ns
	9	24.659***	11.732***	I, III>V, IV, II	13.671**	ns
Immature Copepoda	3	3.585**	5.890**	I>III, IV	10.100*	ns
	6	14.648***	50.401***	I, V, IV, II>III I>II, IV, V	15.714**	I>III
	9	8.273***	49.397***	IV, V, II, I>III IV, V>I, II	17.200**	IV, V>III
Nauplii	3	4.724***	4.532**	I>IV, III	9.743*	ns
	6	7.795***	37.670***	I, V, IV, II>III I>II, IV, V	14.686**	I>III

Table 2 Continued.

Organism	Depth of tow (meters)	Nested ANOVA		Tukey's Multiple Comparison Transects	Kruskal-Wallis H Among Locations	Multiple Comparison Transects
		F Among Replicates	F Among Locations			
Total Copepodites	3	1.195	12.823***	V, I, II, IV>III	11.604*	ns
	6	4.175**	61.804***	I, V, II, IV>III I, V>I V I>II	17.514**	I>III
	9	1.646	75.432***	IV, V, II, I>III IV, V>I IV>II, V	16.286**	IV>III
Calanoid Copepodites	3	1.313	12.310***	V, II, IV, I>III	13.921**	V>III
	6	2.540*	41.640***	V, I, II, IV>III V>IV, II	14.975**	V>III
	9	2.878*	120.888***	IV, V, II, I>III IV, V, II>I IV, V>II IV>V	18.286**	IV>III
Cyclopoid Copepodites	3	1.364	13.536***	I>II, III, V, IV	11.975*	I>II
	6	1.493	67.810***	I, II, V, IV>III I>IV, V, II	16.646**	I>III II>III
	9	1.311	22.130***	I, IV, II, V>III I>V, II	-	-
Total Adult Copepods	3	1.229	8.720***	III, V, IV>I	11.804*	III>I
	6	1.495	3.053*	V>I	7.739	-
	9	0.579	3.344*	III>IV	7.836	-
Total Adult Cyclopoids	3	1.601	6.750**	V, IV, III>I	10.571*	ns
	6	1.127	3.053*	V>I	9.229	-
	9	0.301	8.772***	III, II, I>V III>IV	-	-
Total Adult Calanoids	3	-	-	-	9.996*	ns
	6	-	-	-	9.575*	ns
	9	-	-	-	-	-
<u>Cyclops bicuspidatus thomasi</u>	3	-	-	-	9.261	-
	6	-	-	-	-	-
	9	0.642	2.348	-	-	-

Table 2 Continued.

Organism	Depth of tow (meters)	Nested ANOVA		Tukey's Multiple Comparison	Kruskal-Wallis	
		F Among Replicates	F Among Locations		H Among Locations	Multiple Comparison
<u>Tropocyclops prasinus mexicanus</u>	3	-	-	-	9.682*	ns
	6	0.857	1.177	-	4.782	-
	9	-	-	-	-	-
<u>Bosmina longirostris</u>	3	3.706**	7.389***	II>III, IV, V	11.521*	ns
	6	0.912	21.326***	II, I, V>III	16.057**	II, I>III
	9	1.497	6.831**	II, I>IV, V I, II>III I>V	12.132*	I>III

Statistical test not applied.
non significant.

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

Table 3 Summary of nested ANOVA and Kruskal-Wallis non-parametric ANOVA with multiple comparisons on abundance of major groups of zooplankton collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 26 June 1973.

	Depth of tow (meters)	Nested Anova		Tukey's Multiple Comparison Transsects	Kruskal-Wallis	
		F Among Replicates	F Among Locations		H Among Locations	Multiple Comparison Transsects
Total Zooplankton	3	45.422***	9.519***	II, III > I, V	15.500**	II > V
	6	4.135***	28.819***	V, III, IV, II > I	13.675**	V > I
	9	17.732***	60.739***	V > I, II, III, IV III, II > I	16.857**	V > I
Total Crustacea	3	26.434***	12.368***	II, III, IV > I, V	15.543**	II > V, I
	6	70.462***	26.598***	V, III, IV, II > I	9.500*	ns
	9	12.750***	81.216***	V > I, II, III, IV IV > I, II, III III, II > I	17.329	V > I
Total Copepoda	3	36.113***	14.121***	II, III, IV > V, I	15.529**	II > I, V
	6	35.925***	27.344***	V, III, IV, II > I	12.757*	V > I
	9	12.689***	86.294***	V > I, II, III, IV IV > I, II, III III, II > I	17.329	V > I
Total Cladocera	3	12.725***	6.167***	III, II > V	13.071	ns
	6	11.237***	11.540***	III, II, IV, V > I	13.743**	III > I
	9	2.318*	.877	-	3.382	ns
Total Rotifera	3	21.203***	4.433**	III, II > I	11.989	ns
	6	11.381***	22.223***	V, III, IV, II > I	12.414*	V > I
	9	4.316**	6.009**	II, III > IV	10.943*	ns
Immature Copepoda	3	28.472***	15.220***	II, III, IV > V, I	15.557**	II > I, V
	6	62.785***	27.770***	V, III, IV, II > I	12.900*	V > I
	9	11.918***	88.853***	V > I, II, III, IV IV > I, II III, II > I	17.471**	V > I
Nauplii	3	16.979***	17.911***	II, III, IV > I, V	14.514**	ns
	6	27.789***	32.849***	V > I, III, II, IV	15.529**	V > I
	9	3.987**	89.216***	V > I, II, III, IV IV > I, II III, II > I	17.843**	V > I
Total Copepodites	3	28.055***	15.027***	II > V, I	15.871**	II > V
	6	42.979***	22.535***	III > I, IV	13.129*	III > I
	9	8.139***	78.394***	V, II, IV > I V > I, II, III, IV IV > I, II, III III, II > I	17.354**	V > I
Calanoid Copepodites	3	23.114***	14.922***	II > V, I	15.714**	II > V
	6	27.677***	22.894***	III, IV > V III, V, IV, II > I	12.786*	III > I

Table 3 Continued.

	Depth of tow (meters)	Nested Anova		Tukey's Multiple Comparison Transects	Kruskal-Wallis H Among Locations	Multiple Comparison Transects
		F Among Replicates	F Among Locations			
Calanoid Copepodites	9	7.900***	70.339***	V > I, II, III, IV IV > I, II III, II > I	17.643**	V > I
Cyclopoid Copepodites	3	6.777***	11.619***	II, III, I, IV > V	13.025*	II > V
	6	13.294***	16.812***	III > I, IV II, V, IV > I	15.043**	III > I
	9	2.161	51.962***	V > I, III, II, IV IV > I, III, II II > I	17.739**	V > I
Total Adult Copepoda	3	-	-	-	5.575	ns
	6	4.266**	32.052***	III > I, IV V > I, IV II, IV > I	15.132**	III > I
	9	1.551	6.410**	V > I, III IV > I, III	13.789**	ns
Total Adult Cyclopoids	3	-	-	-	6.579	ns
	6	2.409**	27.394***	III > I, IV, V II > I, IV V, IV > I	14.875**	III > I
	9	.989	2.725	ns	6.896	ns
Total Adult Calanoids	3	-	-	-	.832	ns
	6	5.637***	20.182***	III > I, IV V > I, IV II, IV > I	14.439**	III > I
	9	1.943	6.517**	V > I, III IV > I	13.029*	V > I
<u>Diaptomus</u> spp (female)	3	-	-	-	-	-
	6	3.986***	15.306***	V > I, IV III, II > I	14.689**	V > I
	9	2.607*	3.631*	V > III	10.179*	ns
<u>Diaptomus ashlandi</u> (male)	3	-	-	-	-	-
	6	4.265***	8.371***	III, V, II, IV > I	12.729*	III > I
	9	-	-	-	9.389	ns
<u>Bosmina longirostris</u>	3	12.590***	6.174***	II, III > V	12.557*	ns
	6	7.490***	8.571***	III, II, IV > I	13.529**	III > I
	9	2.906*	.916	ns	4.539	ns

Table 3 Continued.

	Depth of tow (meters)	Nested Anova		Tukey's Multiple Comparison Transects	Kruskall-Wallis H Among Locations	Multiple Comparison Transects
		F Among Replicates	F Among Locations			
<u>Daphnia longiremis</u>	3	-	-	-	9.218	ns
	6	6.560***	13.128***	III > I, IV V, II, IV > I	111.125**	III > I
	9	1.435	1.770	ns	6.946	ns

*** $p < .001$

ns non-significant

** $p < .01$

- statistical test not applied.

* $p \leq .05$

Table 4. Summary of Nested One-Way Anova and Kruskal-Wallis non-parametric ANOVA with multiple comparisons on abundance of major groups of Zooplankton collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 24 July 1973.

	Depth of Tow (meters)	Nested ANOVA		Tukey's Multiple comparison Transects	Kruskal-Wallis	
		F Among Replicates	F Among Locations		H Among Locations	Multiple comparison Transects
Total Zooplankton	3	15.061***	23.662***	I > IV, III, V, II II > IV, III, V	16.186**	I > IV
	6	11.757***	8.869***	II > V, IV	13.271*	ns
	9	3.530**	12.073***	II > V, I	14.114**	II > V, I
Total Crustacea	3	3.193**	169.950***	I > IV, V, III, II II > IV, V, III	15.989**	I > IV
	6	10.067***	5.139**	II > V, IV	11.554*	ns
	9	3.512**	16.644***	II > I, V, III, IV IV > I, V	15.271**	II > V, I
Total Copepoda	3	3.286**	34.618***	I > IV, V, II, III III > IV	14.532**	I > IV
	6	4.249**	7.328***	III > IV, V	13.625**	III > IV
	9	1.681	12.012***	I, II > V, III, IV	13.746**	ns
Total Cladocera	3	3.783***	125.840***	I > IV, V, III, II II > IV, V, III	15.157**	I > IV
	6	10.584***	5.074**	II > V, IV	12.529*	ns
	9	3.081*	18.780***	II > I, V, III, IV IV > I, V III > I	15.757**	II > I, V
Total Rotifera	3	21.666***	3.308*	ns	9.929**	ns
	6	10.625***	8.772***	II > IV, I, V III > IV, I	12.529*	ns
	9	3.797**	.403	ns	1.889	-
Immature Copepoda	3	3.517***	31.567***	I > IV, V, II, III III > IV	13.871**	I > IV
	6	3.396**	9.216***	III > IV, V, II I > IV	13.811**	III > IV
	9	1.602	9.918**	I > III, V, IV II > IV, V	13.636**	ns
Nauplii	3	1.725	2.884*	I > V	7.425	-
	6	2.242*	2.294	ns	8.386	-
	9	1.309	10.481***	I > III, IV, V II > III, IV	13.668**	ns
Total Copepodites	3	3.426***	30.880***	I > IV, V, II, III III > IV	15.929**	I > IV
	6	3.151**	9.296***	III > IV, V, II	11.504*	III > IV
	9	1.276	5.200**	I > III, V	11.900*	ns

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Table 4. Continued.

	Depth of Tow (meters)	Nested ANOVA		Tukey's Multiple comparison Transects	Kruskal-Wallis	
		F Among Replicates	F Among Locations		H Among Locations	Multiple comparison Transects
Calanoid Copepodites	3	1.471	2.511	ns	7.757	-
	6	1.753	5.307*	III > IV, II, V, I	9.225	-
	9	1.268	4.965**	I > III, V	12.129*	I > III
Cyclopoid Copepodites	3	1.847	50.309***	I > IV, V, II, III	13.700**	I > IV
	6	2.760**	8.530***	III > IV, V	13.189*	III > IV
	9	1.020	2.973*	I > IV ns	10.436*	-
Total Adult Copepoda	3	.742	7.882***	I > V, IV II > V	-	-
	6	1.365	.200	ns	.946	-
	9	1.364	3.452*	I > V	7.696	-
Total Adult Calanoids	3	-	-	-	10.239*	ns
	6	-	-	-	-	-
	9	1.226	7.583***	I > III, V	-	-
Total Adult Cyclopoids	3	-	-	-	8.550	-
	6	-	-	-	-	-
	9	-	-	-	5.682	-
<u>Bosmina longirostris</u>	3	3.503***	137.038***	I > IV, III, V, II II > IV, III, V	15.346**	I > IV
	6	10.858***	5.127**	II > V, IV	12.329*	II > V
	9	2.851*	20.256***	II > I, V, III, IV IV > I, V III > I	16.271*	II > I, V
Total <u>Daphnia</u> spp.	3	-	-	-	14.704**	II > IV
	6	2.132	.356	ns	4.911	-
	9	1.710	4.952**	II, IV > III	12.207*	ns
<u>Daphnia galeata mendotae</u>	3	-	-	-	3.996	-
	6	-	-	-	2.946	-
	9	.921	4.267**	I > V	11.832*	I > V
<u>Daphnia retrocurva</u>	3	-	-	-	7.264	-
	6	-	-	-	-	-
	9	3.807**	3.646*	II > III	8.900	-

- statistical test not applied.

ns non significant

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 5 Summary of One-Way ANOVA and Kruskal-Wallis non-parametric ANOVA with multiple comparisons on abundance of major groups of zooplankton collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 28 August 1973.

	Depth of tow (meters)	one-way ANOVA F Among Locations	Tukey's Multiple Comparison Transects	Kruskal-Wallis H Among Locations	Multiple Comparison Transects
Total Zooplankton	3	42.441***	II, III > IV, V, I I > IV, V	16.514**	ns
	6	5.910**	II > I, IV, V	9.114	-
	9	6.211**	V > III, II, IV	12.557*	V > III
Total Crustacea	3	42.676***	II, III > IV, V, I I > IV, V	16.514**	ns
	6	5.697**	II > I, IV, V	8.700	-
	9	6.770**	V > III, II, IV	13.043*	V > III
Total Copepoda	3	57.341***	II > V, IV, I, III III, I > V, IV	16.700**	II > V, IV
	6	4.783*	II > I, IV	8.471	-
	9	5.663**	V > III, II	11.071*	V > III
Total Cladocera	3	22.451***	III, II > IV, V, I	14.386**	ns
	6	7.243**	II > I, V	12.529*	II > I
	9	8.123**	V, I > III, IV, II	13.629**	ns
Total Rotifera	3	8.964***	II, V, III, IV > I	12.707*	II > I
	6	8.494***	II > I, III IV > I	13.339**	ns
	9	0.870	ns	3.689	-
Immature Copepoda	3	98.136***	II > V, IV, I, III III, I > V, IV	16.871**	II > V, IV
	6	4.282*	II > IV, I	8.482	ns
	9	4.072*	V > III	11.114*	V > III
Nauplii	3	19.091**	III, II > IV, V, I	14.432**	ns
	6	1.851	ns	6.314	-
	9	0.324	ns	1.064	-
Total Copepodites	3	104.942***	II > V, IV, I, III III, I > V, IV	16.586**	II > V, IV
	6	6.814**	V > III, II, I	.971	-
	9	2.791	ns	3.239	-
Calanoid Copepodites	3	105.996***	II, I > V, IV, III III > V	16.743**	II > V
	6	5.221**	II > V, IV	12.782*	ns
	9	0.364	ns	1.743	-
Cyclopoid Copepodites	3	72.190***	II > IV, V, I, III III > IV, V, I I > IV, V	17.371**	II > IV, V
	6	2.451	ns	7.954	-
	9	8.900***	V > IV, II, I	13.757**	V > III

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Table 5 Continued.

	Depth of tow (meters)	one-way ANOVA F Among Locations	Tukey's Multiple Comparison Transects	Kruskal-Wallis H Among Locations	Multiple Comparison Transects
Total Adult Copepoda	3	10.945***	I, III > V, IV II > V	15.046**	I > V
	6	5.968**	II > I, III	10.346*	ns
	9	5.722**	V > III, II, I, IV	9.968*	ns
Total Adult Calanoids	3	27.025***	I > V, IV, III II > V, IV; III, IV > V	16.857**	I > V
	6	2.678	ns	6.743	-
	9	1.047	ns	4.489	-
Total Adult Cyclopoids	3	7.772**	I, III > V, IV	12.529*	ns
	6	8.217**	II > I, III	12.911*	II > I
	9	6.859**	V > III, II, I, IV	9.304	-
Total <u>Diaptomus</u> spp.	3	32.724***	I > V, IV, III II > V, IV; III, IV > V	17.039**	I > V
	6	2.673	ns	6.764	-
	9	0.392	ns	4.532	-
<u>Diaptomus</u> spp (female)	3	29.767***	I > V, IV, III II > V, IV; III, IV > V	16.525**	I > V
	6	1.629	ns	5.657	-
	9	2.663	ns	7.411	-
<u>Diaptomus ashlandi</u> (male)	3	11.427***	I > V, III II, IV > V	14.629**	I > V
	6	3.614*	I > IV	11.036*	ns
	9	1.164	ns	5.239	-
<u>Diaptomus minutus</u> (male)	3	1.000	ns	.571	-
	6	1.050	ns	2.000	-
	9	1.332	ns	2.157	-
<u>Diaptomus oregonensis</u> (male)	3	2.953	ns	7.629	-
	6	0.709	ns	1.929	-
	9	1.563	ns	4.339	-
<u>Cyclops bicuspidatus thomasi</u>	3	26.969***	III, II, I > V, IV	15.329**	III > V
	6	4.487*	II > V, IV, I	8.014	-
	9	6.704**	V > III, I, II, IV	9.046	-
<u>Tropocyclops prasinus mexicanus</u>	3	3.069*	ns	8.846	-
	6	15.844***	II > I, III V, IV, III > I	14.054**	II > I
	9	5.797**	V > III, II	11.507*	V > III
<u>Mesocyclops edax</u>	3	1.131	ns	3.271	ns
	6	1.828	ns	6.068	ns
	9	1.549	ns	3.618	ns

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Table 5 Continued.

	Depth of tow (meters)	one-way ANOVA F Among Locations	Tukey's Multiple Comparison Transects	Kruskal-Wallis H Among Locations	Multiple Comparison Transects
<u>Bosmina longirostris</u>	3	20.090***	III, II > I, IV, V	14.932**	III > I
	6	13.250***	II > I, III, V	15.029**	II > I
	9	5.795**	IV, IV, III > I V > II, III I > II	11.814*	ns
Total <u>Daphnia</u> spp.	3	56.363***	II, I > V, IV, III III > V	17.461**	I > V, IV
	6	4.551*	II, I > V	11.164*	ns
	9	17.482***	V, I > IV, III II > IV	15.439**	V > III
<u>Daphnia galeata mendotae</u>	3	1.838	ns	6.079	
	6	3.616*	III > V	9.761*	ns
	9	1.425	ns	5.082	
<u>Daphnia retrocurva</u>	3	74.967***	I, II > V, IV, III III > V, IV	17.775**	I > V
	6	5.452**	I > V, IV II > V	12.368*	ns
	9	11.998***	I, V > IV, III II > IV	15.046**	I > IV
<u>Daphnia Longiremis</u>	3	21.241***	II > I, IV, V, III	13.389**	II > I
	6	1.999	ns	4.868	
	9	7.951**	V > IV, II	12.482*	V > IV
<u>Holopedium gibberum</u>	3	-	-	-	-
	6	0.307	ns	1.354	-
	9	0.326	ns	5.418	-

*** p<.001

ns non-significant

** p<.01

- statistical test not applied.

* p<.05

Table 6 Summary of One-Way ANOVA and Kruskal-Wallis non-parametric ANOVA with multiple comparisons on abundance of major groups of zooplankton collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 26 September 1973.

	Depth of Tow (meters)	<u>One-Way ANOVA</u> F Among Locations	<u>Tukey's</u> Multiple Comparison Transects	<u>Kruskal-Wallis</u> H Among Locations	<u>Multiple</u> Comparison Transects
Total Zooplankton	3	36.347***	V, II > I, IV, III	15.614**	V > I
	6	2.988	ns	8.975	-
	9	1.522	ns	6.686	-
Total Crustacea	3	34.458***	V, II > I, IV, III	15.743**	V > I
	6	2.634	ns	9.246	-
	9	1.743	ns	6.757	-
Total Copepoda	3	49.918***	II, V > I, IV, III	16.557**	II > I
	6	6.839**	II > V, III, IV, I	11.029*	II > V
	9	1.351	ns	6.704	-
Total Cladocera	3	10.965***	V > IV, I, II, III	9.729*	ns
	6	4.897**	V > III, II	10.661*	ns
	9	7.805	IV, > II, I; V > II	11.857*	ns
Total Rotifera	3	2.855	ns	7.079	-
	6	13.213***	V, III > I, II, IV	13.825**	V > I
	9	.562	ns	3.618	-
Immature Copepoda	3	43.721***	II > I, IV, III, V	16.625**	II > I
	6	8.128**	V > I, IV, III	11.482*	II > V
	9	1.575	ns	6.643	-
Nauplii	3	2.275	ns	6.111	-
	6	2.718	ns	7.654	-
	9	2.417	ns	8.182	-
Total Copepodites	3	49.045***	II > I, IV, III, V	16.400**	II > I
	6	7.757**	V > I, IV, III; III > I	11.114*	II > V
	9	1.388	ns	6.654	-
Calanoid Copepodites	3	9.679***	IV > I, II, III	16.232**	V, IV > I
	6	17.666***	V > I	15.186**	II > I
	9	8.870***	II > I, V, IV, III	16.889**	V > I

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Table 6 Continued.

	Depth of Tow (meters)	One-Way ANOVA F Among Locations	Tukey's Multiple Comparison Transects	Kruskal-Wallis H Among Locations	Multiple Comparison Transects
Cyclopoid Copepodites	3	19,254***	II > IV, I, III, V V, III > IV	17.671**	II > IV
	6	6.120**	II > V, III; I > V	11.343*	ns
	9	2.833	ns	17.386**	I > IV
Total Adult Copepoda	3	25,934***	V > III, I, II, IV	9.825*	ns
	6	2.712	ns	10.336*	ns
	9	3.143*	V > I	8.216	-
Total Adult Cyclopoids	3	29,567***	V > IV, II, III, I	10.893*	ns
	6	2,777	ns	8.157	-
	9	1,416	ns	4.546	-
Total Adult Calanoids	3	12,894***	IV > I, III V, II > I	15.132**	IV > I
	6	4.651*	II > I	9.786*	ns
	9	3.028	ns	7.811	-
Total <u>Diaptomus</u> spp.	3	14,169***	IV > I, III V, II > I	14.757**	IV > I
	6	5,421**	II > I, IV	10.868*	ns
	9	1,667	ns	5.225	-
<u>Diaptomus</u> spp. (female)	3	10,425***	IV > I, III V, II > I	12.696*	IV > I
	6	3,434*	II > I	9.964*	ns
	9	3,047	-	8.589	-
<u>Diaptomus ashlandi</u> (male)	3	1,424	ns	4.361	-
	6	2,519	ns	7.968	-
	9	1,298	ns	4.164	-
<u>Cyclops bicuspidatus thomasi</u>	3	11,369***	V > I, III, II; IV > I	14.168**	V > I
	6	2,725	ns	8.018	-
	9	2,156	ns	8.596	-
<u>Tropocyclops prasinus mexicanus</u>	3	76,268***	V > IV, II, III, I I > IV, II; III > IV	17.439**	V > IV
	6	2,820	ns	7.204	-
	9	10,798***	V > II, I, IV, III	11.714*	ns

Table 6 Continued.

	Depth of Tow (meters)	One-Way ANOVA F Among Locations	Tukey's Multiple Comparison Transects	Kruskall-Wallis H Among Locations	Multiple Comparison Transects
<u>Mesocyclops edax</u>	3	0.997	ns	3.346	-
	6	-	-	-	-
	9	1.254	ns	5.543	-
<u>Bosmina longirostris</u>	3	4.189*	V > I	12.082*	V > I
	6	3.901*	IV > III	10.546*	ns
	9	5.591**	V > II, III	14.304**	V > II
Total <u>Daphnia</u> spp.	3	87.522***	V > II, I, III, IV	11.146*	ns
	6	8.704***	V > II, IV, III, I	12.296*	V > II
	9	5.064**	IV, V > II	9.911*	ns
<u>Daphnia galeata mendotae</u>	3	6.363**	V > I, II, III, IV	13.132*	V > I
	6	4.798*	V, II > I	10.471*	ns
	9	3.002	ns	7.414	-
<u>Daphnia retrocurva</u>	3	62.636***	V > II, III, I, IV	10.904*	V > II
	6	10.416***	V > II, IV, III; I > II	13.786**	V > II
	9	3.648*	IV > II	8.743	-
<u>Chydorus sphaericus</u>	3	1.161	ns	5.639	-
	6	3.182*	II > I	7.839	-
	9	2.463	ns	7.314	-
<u>Eubosmina coregoni</u>	3	6.971**	I > IV, V, II	11.704*	I > IV
	6	2.378	ns	5.361	-
	9	4.864*	IV > II	10.561	ns
<u>Holopedium gibberum</u>	3	3.972*	V > III	11.168*	ns
	6	13.884***	V, IV > III, II, I	14.074	ns
	9	3.078*	ns	8.536	-

*** p < .001

ns non-significant

** p < .01

- statistical test not applied.

* p < .05

Table 7. Summary of One-Way ANOVA and Kruskal-Wallis non-parametric ANOVA with multiple comparisons on abundance of major groups of zooplankton collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 23 October 1973.

	Depth of Tow (meters)	One-Way ANOVA F Among Locations	Tukey's Multiple comparison Transects	Kruskal-Wallis H Among Locations	Multiple comparison Transects
Total Zooplankton	3	46.985***	V > IV, I, II, III III > IV, I	16.686**	V > I, IV
	6	11.693***	IV, II, V, III > I	10.343*	ns
	9	7.250***	III, V, I, II > IV	9.814*	ns
Total Crustacea	3	42.608***	V > IV, I, II, III III > IV, I	16.686**	V > I, IV
	6	11.877***	IV, II, V, III > I	10.343*	ns
	9	5.604**	III, I, V > IV	9.157	-
Total Copepoda	3	61.495***	V > IV, I, III, II II, III > IV, I	16.814**	V > IV, I
	6	10.041***	V, II, IV, III > I	12.114*	V > I
	9	10.552***	V, III > IV, II	14.018**	ns
Total Cladocera	3	30.484***	V > I, IV, II, III	14.129**	V > I
	6	13.847***	IV, III, II, V > I	11.986*	IV > I
	9	15.840**	II > IV, V, III; I > IV, V III > IV	15.743**	II > IV
Total Rotifera	3	58.015***	III, V > I, IV, II; II, IV > I	16.539**	III > I
	6	4.301*	IV, III > I	10.636*	ns
	9	0.790	ns	2.761	-
Immature Copepoda	3	70.810***	V > IV, I, III, II II, III > IV, I	17.386**	V > IV
	6	10.405***	V, II, III, IV > I	12.129*	V > I
	9	11.446***	V, III, I > IV, II	14.618**	V > IV
Nauplii	3	9.406***	II > IV, I, V, III	12.550*	II > IV
	6	4.175*	II > I	11.029*	ns
	9	0.863	ns	3.608	-
Total Copepodites	3	70.983***	V > IV, I, II, III	17.386**	V > IV
	6	11.288***	V, II, III, IV > I	12.729*	V > I
	9	17.824***	V > IV, II, I III, I > IV, II	16.043**	V > IV
Calanoid Copepodites	3	41.512***	II > IV, III, I; V, I > IV, III III > IV	17.243**	II > IV
	6	11.190***	IV, II > I, III; V > I	15.243**	II > I
	9	24.261***	V > II, IV, III, I I, III > II, IV	16.836**	V > II
Cyclopoid Copepodites	3	82.314***	V > IV, I, II, III III, II > IV, I	17.600**	V > IV, I
	6	11.190***	V > I, IV; II, III > I	12.614*	V > I
	9	5.141**	V > IV, II	10.557*	ns

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Table 7. Continued.

	Depth of Tow (meters)	One-Way ANOVA F Among Locations	Tukey's Multiple comparison Transects	Kruskall-Wallis H Among Locations	Multiple comparison Transects
Total Adult Copepoda	3	7.180**	V > I, IV III, II > I	12.596*	ns
	6	7.060**	IV, II > I	12.529*	IV > I
	9	8.978***	III > I, II, V, IV	10.625*	III > I
Total Adult Calanoids	3	3.359*	I > IV	9.168	-
	6	0.845	ns	3.771	-
	9	0.788	ns	2.975	-
Total Adult Cyclopoids	3	8.048**	V > I, IV III, II > I	12.789*	ns
	6	9.296***	IV > I, III; II, V > I	13.786**	IV > I
	9	11.744***	III > I, V, II, IV	10.804*	III > I
Total <u>Diaptomus</u> spp.	3	4.799*	II > III, IV	10.225*	ns
	6	3.185*	ns	9.111	-
	9	0.906	ns	1.361	-
<u>Cyclops bicuspidatus thomasi</u>	3	6.111**	V > I, IV	12.286*	ns
	6	6.083**	II, IV, V > I	10.536*	ns
	9	0.309	ns	3.039	-
<u>Tropocyclops prasinus mexicanus</u>	3	7.852**	II, III > I, IV V > I	12.811*	ns
	6	8.225**	IV > I, III; V > I	13.061**	IV > I
	9	18.075***	III > II, IV, I, V	9.682*	ns
<u>Mesocyclops edax</u>	3	1.561	ns	4.529	-
	6	14.852***	IV, III, II > V, I	13.736**	ns
	9	11.743***	III > I, V, II IV > I, V	11.132*	ns
<u>Bosmina longirostris</u>	3	37.957***	V > I, IV, II, III III > I	16.214**	V > I
	6	19.732***	IV, II, V, III > I	12.900*	IV > I
	9	65.739***	II > I, V, IV, III; III > I, V, IV IV > I, V	17.975**	II > I
Total <u>Daphnia</u> spp.	3	11.721***	I > IV, III, V II > IV, III	15.904**	I > IV
	6	1.114	ns	5.421	-
	9	32.989***	I > IV, III, II, V V, II, > IV	16.725**	I > IV
<u>Daphnia galatea mendotae</u>	3	14.212***	V > IV, III, I, II	9.489*	ns
	6	2.763	ns	8.654	-
	9	0.952	ns	0.896	-

Table 7. Continued.

	Depth of Tow (meters)	One-Way ANOVA F Among Locations	Tukey's Multiple comparison Transects	Kruskall-Wallis H Among Locations	Multiple comparison Transects
<u>Daphnia retrocurva</u>	3	13.134***	I > IV, III, V, II	-	-
	6	1.224	ns	5.761	-
	9	32.219***	I > IV, III, II, V V, II > IV	16.925**	I > IV
<u>Eubosmina coregoni</u>	3	11.453***	V > IV, II, III, I	9.961*	ns
	6	4.012*	ns	10.739*	ns
	9	0.986	ns	2.725	ns

*** p<.001

ns non-significant

** p<.01

- statistical test not applied.

* p<.5

Table 8 Summary of One-Way ANOVA and Kruskal-Wallis non parametric ANOVA with multiple comparisons on abundance of major groups of zooplankton collected in Lake Michigan near the Kewaunee Nuclear Power Plant, 13 November 1973.

	Depth of tow (meters)	One-Way ANOVA F Among Locations	Tukey's Multiple Comparison Transects	Kruskal-Wallis H Among Locations	Multiple Comparison Transects
Total Zooplankton	3	15.320***	V>III, II, I; IV>III, II	16.186**	V>III
	6	44.015***	V>III, IV, II, I; D>III, IV, II; ID>III	17.396**	V>III
	9	18.785***	III, D>IV, I; ID>IV	16.400**	ID>IV
Total Crustacea	3	13.903***	V>III, II, I; IV>III	16.800**	V>III
	6	42.890***	V>III, IV, II, I; D>III, IV, II; ID>III	17.243**	V>III
	9	19.484***	III, V, ID>IV, I	16.400**	ID>IV
Total Copepoda	3	2.099	ns	6.054	ns
	6	34.442***	V>III, IV, II; D>III, IV, II; ID>III	16.861**	V>III
	9	15.237***	III, ID>IV, I; V>IV	15.386**	ID>IV
Total Cladocera	3	109.397***	V>III, II, I, IV; IV>III, II, I	16.689**	V>III
	6	151.910***	V>III, II, I, IV; IV>III	15.157**	V>III
	9	61.284***	V>IV, I, II, III; ID>IV, I, II; ID>IV	17.257**	V>IV
Total Rotifera	3	5.238**	IV>II, V, I, III	8.161	ns
	6	6.005**	ID>III, III	12.857*	ns
	9	2.843	ns	7.386	ns
Immature Copepoda	3	1.914	ns	5.386	ns
	6	45.034***	V, D>III, IV, II; ID>III	17.200**	V>III
	9	14.857***	ID>IV, I; II, V>IV	14.729**	ID>IV
Nauplii	3	1.899	ns	6.486	ns
	6	2.108	ns	4.764	ns
	9	0.077	ns	0.414	ns
Total Copepodites	3	1.872	ns	5.196	ns
	6	34.616***	V, D>III, IV, II; ID>III	16.700**	V>III
	9	14.760***	III, ID>IV, I	15.057**	ID>IV
Calanoid Copepodites	3	32.206***	D>IV, III, II, V; V, ID>IV	14.961**	D>IV
	6	14.123***	V>III, IV, II; D>III, IV	14.061**	ns
	9	8.264***	III, V>II, I	14.814**	ns
Cyclopoid Copepodites	3	1.027	ns	2.925	ns
	6	37.984***	VD>III, IV, II; ID>III	16.761**	V>III
	9	16.640***	III, ID>IV, I; V>IV	15.682**	ID>IV
Total Adult Copepoda	3	1.876	ns	6.061	ns
	6	30.985***	V>III, IV, II, I; D>III, IV, II	16.625**	V>III
	9	8.173***	ID>IV, I, II, V	12.232*	ID>IV

Table 8 Continued.

	Depth of tow (meters)	One-Way ANOVA F Among Locations	Tukey's Multiple Comparison Transects	Kruskall-Wallis H Among Locations	Multiple Comparison Transects
Total Adult Calanoids	3	22.874	D>IV, V, II, III; III, ID>IV	15.157**	D>IV
	6	23.707***	V, D>III, IV, II	13.957**	ns
	9	4.557*	IID>II, I	10.868*	ns
Total Adult Cyclopoids	3	6.091**	IV>III, I	10.664*	ns
	6	23.512***	V>III, IV, II, I; D>III, IV	17.329**	V>III
	9	8.197***	IID>IV, V, I	12.625*	IID>IV
Total <u>Diaptomus</u> spp.	3	20.049***	D>IV, V, II, III; III, ID>IV	15.157**	D>IV
	6	17.257***	I, V>IV, III, II	13.796**	ns
	9	5.084**	IID>II, I	10.943*	ns
<u>Diaptomus</u> spp. (female)	3	11.022***	D>IV, V, II	13.471**	D>IV
	6	7.849**	D>III, II, IV; V>III	14.232**	ns
	9	1.801	ns	6.171	ns
<u>Diaptomus ashlandi</u> (male)	3	0.902	ns	3.914	ns
	6	3.222*	ns	8.857	ns
	9	1.288	ns	4.718	ns
<u>Diaptomus minutus</u> (male)	3	8.463***	D>II, IV, V, III	9.979*	ns
	6	6.282	V>IV, II, III	11.161*	V>IV
	9	3.419*	IID>II	11.275	ns
<u>Diaptomus oregonensis</u> (male)	3	9.725***	D>IV, V	12.546*	D>IV
	6	8.152**	V, D>IV, III	12.239*	ns
	9	2.575	ns	9.650*	ns
<u>Cyclops bicuspidatus thomasi</u>	3	1.488	ns	6.011	ns
	6	18.299***	V>III, IV, II, I	15.046**	V>III
	9	15.840***	IID>IV, I, V; II, V>IV	15.225**	IID>IV
<u>Tropocyclops prasinus mexicanus</u>	3	12.386***	IV>I, III, II, V; V>I	13.661**	IV>I
	6	15.269***	V>III, IV, II, I, ID>III	14.625**	V>III
	9	0.564	ns	4.571	ns
<u>Bosmina longirostris</u>	3	116.410***	V>III, II, I, IV; IV>III, II, I	17.268**	V>III
	6	374.417***	V>I, II, III, IV; IV, I, II, III	14.661**	ns
	9	32.444***	V>IV, I, II, III; IID>IV, I; ID>IV	16.921**	V>I, IV
Total <u>Daphnia</u> spp.	3	2.661	ns	4.825	ns
	6	13.972***	V>III, IV, II, I	13.314**	V>III
	9	14.546***	IID>IV, I, II; V>IV, I	15.668**	IID>IV

Table 8 Continued.

	Depth of tow (meters)	One-Way ANOVA F Among Locations	Tukey's Multiple Comparison Transects	Kruskall-Wallis H Among Locations	Multiple Comparison Transects
<u>Daphnia galeata mendotae</u>	3	4.507*	V>III, I, IV	8.900	ns
	6	11.916***	V>III, II, IV, I	12.818*	ns
	9	5.669**	III>IV, II	13.111*	III>IV
<u>Daphnia retrocurva</u>	3	1.219	ns	2.675	ns
	6	1.823	ns	7.336	ns
	9	14.447***	III>I, IV, II; V>I, IV	15.221**	ns
<u>Eubosmina coregoni</u>	3	4.102*	III>V, III	11.496	ns
	6	1.743	ns	5.782	ns
	9	4.465*	I>IV, V, II	9.504*	ns
***	p<.001	ns non-significant			
**	p<.01	- statistical test not applied.			
*	p<.05				

APPENDIX 5-A

Species composition and enumeration of phytoplankton
in physiology samples collected at the
Kewaunee Nuclear Power Plant,
March - December 1973.

SPECIES		UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA			
CENTRALES			
STEPHANODISCUS MINUTUS		1150	33.37%
STEPHANODISCUS SP.		488	14.16%
CYCLOTELLA STELLIGERA		105	3.05%
MELOSIRA ITALICA		87	2.52%
MELOSIRA ISLANDICA		81	2.35%
STEPHANODISCUS ASTRAEA		46	1.33%
CYCLOTELLA SP.		46	1.33%
RHIZOSOLENIA ERIENSIS		29	0.84%
CYCLOTELLA GLABERATA		29	0.84%
STEPHANODISCUS TENUIS		17	0.49%
CYCLOTELLA OCELLATA		6	0.17%
TOTAL		2084	60.47%
BACILLARIOPHYTA			
PENNALES			
FRAGILARIA CROTONENSIS		279	8.10%
FRAGILARIA PINNATA		221	6.41%
TABELLARIA FLOCCULOSA		186	5.40%
FRAGILARIA CAPUCINA		58	1.68%
ASTERIONELLA FORMOSA		52	1.51%
SYNEDRA FILIFORMIS		46	1.33%
ACHNANTHES MINUTISSIMA		35	1.02%
ACHNANTHES SP.		35	1.02%
NITZSCHIA SP.		35	1.02%
DIATOMA TENUE VAR. ELONGATUM		35	1.02%
FRAGILARIA CONSTRUENS		29	0.84%
AMPHICRA OVALIS VAR. PEDICULUS		23	0.67%
NAVICULA SP.		23	0.67%
FRAGILARIA SP.		12	0.35%
AMPHICRA SP.		12	0.35%
GOMPHONEMA ANGUSTATUM		12	0.35%
SYNEDRA ULNA		12	0.35%
FRAGILARIA LEPTOSTAURON		12	0.35%
NITZSCHIA PALEA		12	0.35%
CYMEELLA PROSTRATA		12	0.35%
NITZSCHIA DISERTA		12	0.35%
TOTAL		1153	33.46%
CHLOROPHYTA			
NON-FILAMENTOUS			
CRUCIGENIA QUADRATA		3	0.09%
SCENEDESMUS ARCUATUS		1	0.03%
STAUROSTRUM SP.	<	1	0.02%
CHLAMYDOMONAS SP.	<	1	0.02%
OOCYSTIS PUSILLA	<	1	0.02%
CLOSTERIOPSIS LONGISSIMA	<	1	0.02%

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TABLE 1 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 27 MAR 1973

	SPECIES	UNITS	OCCUR-
		PER ML.	RENCE
	ANKISTRODESMUS FALCATUS VAR. MIRABILIS	< 1	0.02%
	TOTAL	7	0.22%
CHLOROPHYTA			
FILAMENTOUS			
	RADIOFILUM IRREGULARE	9	0.26%
	TOTAL	9	0.26%
CHRYSTOPHYTA			
	DINOBRYON CYLINDRICUM	141	4.09%
	CLADOMONAS FRUTICULOSA	14	0.41%
	MALLOMONAS SP.	3	0.09%
	MALLOMONAS TONSURATA	< 1	0.02%
	TOTAL	159	4.60%
CYANOPHYTA			
NON-FILAMENTOUS			
A-615	COELOSPHAERIUM NAEGELIANUM	17	0.49%
	APHANOTHECE NIDULANS	7	0.20%
	TOTAL	24	0.70%
CYANOPHYTA			
FILAMENTOUS			
	OSCILLATORIA TENUIS	6	0.17%
	OSCILLATORIA LIMNETICA	3	0.09%
	TOTAL	9	0.26%
MISCELLANEOUS			
	RHODOMONAS SP.	1	0.03%
	TOTAL	1	0.03%
	TOTAL PHYTOPLANKTON	3446.	

TABLE 2 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 30 MAR 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA CENTRALES		
STEPHANODISCUS MINUTUS	1851	34.88%
STEPHANODISCUS SP.	868	16.36%
CYCLOTELLA GLOMERATA	114	2.15%
STEPHANODISCUS ASTRAEA	76	1.43%
MELOSIRA ISLANDICA	57	1.07%
CYCLOTELLA STELLIGERA	57	1.07%
RHIZOSOLENIA ERIENSIS	48	0.90%
CYCLOTELLA SP.	48	0.90%
MELOSIRA ITALICA	38	0.72%
STEPHANODISCUS TENUIS	19	0.36%
CYCLOTELLA OCELLATA	19	0.36%
STEPHANODISCUS HANTZSCHII	19	0.36%
TOTAL	3214	60.57%
BACILLARIOPHYTA PENNALES		
FRAGILARIA PINNATA	687	12.95%
FRAGILARIA CROTONENSIS	477	8.99%
TABELLARIA FLOCCULOSA	267	5.03%
NAVICULA SP.	57	1.07%
NITZSCHIA SP.	38	0.72%
CYMBELLA PROSTRATA	38	0.72%
ACHNANTHES MINUTISSIMA	38	0.72%
ACHNANTHES SP.	38	0.72%
SYNEDRA ULNA	38	0.72%
DIATOMA TENUE VAR. ELONGATUM	29	0.55%
NITZSCHIA PALEA	19	0.36%
RHODICOSPHEA CURVATA	19	0.36%
DIATOMA TENUE	19	0.36%
ASTERIONELLA FORMOSA	19	0.36%
SYNEDRA FILIFORMIS	19	0.36%
FRAGILARIA INTERMEDIA	10	0.19%
TOTAL	1812	34.15%
CHLOROPHYTA NON-FILAMENTOUS		
TETRASPORA GELATINOSA	6	0.11%
SCENEDESMUS ARCUATUS	3	0.06%
ANKISTRODESMUS SPIRALIS	3	0.06%
ANKISTRODESMUS FALCATUS	< 1	0.01%
STAURASTRUM SP.	< 1	0.01%
TOTAL	13	0.25%

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TABLE 2 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 30 MAR 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHRYSTOPHYTA		
DINOBRYON CYLINDRICUM	257	4.84%
CLADMONAS FRUTICULOSA	3	0.06%
AULOMONAS SP.	< 1	0.01%
TOTAL	261	4.91%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA LIMNETICA	3	0.06%
OSCILLATORIA TENUIS	2	0.04%
TOTAL	5	0.09%
PYRRHOPHYTA		
GLENODINIUM SP.	1	0.02%
TOTAL	1	0.02%
TOTAL PHYTOPLANKTON	5306.	

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TABLE 3 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 27 MAR 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA CENTRALES		
STEPHANODISCUS MINUTUS	1045	24.82%
STEPHANODISCUS SP.	668	15.87%
CYCLOTELLA GLOMERATA	165	3.92%
MELOSIRA SLANDICA	134	3.18%
CYCLOTELLA STELLIGERA	110	2.61%
MELOSIRA ITALICA	110	2.61%
STEPHANODISCUS ASTRAEA	47	1.12%
RHIZOSOLENIA ERIENSIS	24	0.57%
STEPHANODISCUS BINDERANUS	24	0.57%
CYCLOTELLA SP.	24	0.57%
CYCLOTELLA KUTZINGIANA	16	0.38%
CYCLOTELLA BODANICA	16	0.38%
CYCLOTELLA OCELLATA	16	0.38%
TOTAL	2399	56.98%
BACILLARIOPHYTA PENNALES		
FRAGILARIA CROTONENSIS	471	11.19%
FRAGILARIA PINNATA	440	10.45%
TABELLARIA FLOCCULOSA	354	8.41%
SYNECRA FILIFORMIS	79	1.88%
ACHNANTHES MINUTISSIMA	63	1.50%
FRAGILARIA CAPUCINA	47	1.12%
FRAGILARIA INTERMEDIA	47	1.12%
CYMBELLA PROSTRATA	31	0.74%
SYNECRA ULNA	31	0.74%
ASTERIONELLA FORMOSA	31	0.74%
ACHNANTHES SP.	24	0.57%
FRAGILARIA SP.	16	0.38%
DIATEMA TENUE VAR. ELONGATUM	16	0.38%
AMPHICRA SP.	16	0.38%
DIATOMA TENUE	16	0.38%
DIATOMA SP.	16	0.38%
TOTAL	1698	40.33%
CHLOROPHYTA NON-FILAMENTOUS		
CRUCIGENIA QUADRATA	8	0.19%
ANKISTRODESMUS FALCATUS	< 1	0.02%
ANKISTRODESMUS SPIRALIS	< 1	0.02%
SCENEDESMUS ARCUATUS	< 1	0.01%
TOTAL	10	0.23%

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TABLE 3 : PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 27 MAR 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHRYSTOPHYTA		
DINOBRYON CYLINDRICUM	95	2.26%
DINOBRYON DIVERGENS	5	0.12%
CLADMONAS FRUTICULOSA	3	0.07%
MALLOMONAS TONSURATA	< 1	0.02%
TOTAL	104	2.46%
TOTAL PHYTOPLANKTON	4210.	

TABLE 4 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS. LOCATION E2 30 MAR 1973

	SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA			
CENTRALES			
	STEPHANODISCUS MINUTUS	1803	39.57%
	STEPHANODISCUS SP.	943	20.69%
	CYCLOTELLA GLOMERATA	184	4.04%
	MELOSIRA ISLANDICA	167	3.66%
	CYCLOTELLA STELLIGERA	159	3.49%
	STEPHANODISCUS ASTRAEA	75	1.65%
	MELOSIRA ITALICA	50	1.10%
	RHIZOSOLENIA ERIENSIS	25	0.55%
	CYCLOTELLA OCELLATA	17	0.37%
	TOTAL	3423	75.12%
BACILLARIOPHYTA			
PENNALES			
	FRAGILARIA CROTONENSIS	384	8.43%
	TABELLARIA FLOCCULOSA	175	3.84%
	ASTERIONELLA FORMOSA	75	1.65%
	SYNEDRA FILIFORMIS	58	1.27%
	AMPHICRA OVALIS VAR. PEDICULUS	50	1.10%
	FRAGILARIA SP.	33	0.72%
	FRAGILARIA VAUCHERIAE	33	0.72%
	FRAGILARIA PINNATA	33	0.72%
	ACHNANTHES SP.	25	0.55%
	ACHNANTHES MINUTISSIMA	25	0.55%
	COCCONEIS PEDICULUS	17	0.37%
	NITZSCHIA ACICULARIS	17	0.37%
	NAVICULA SP.	17	0.37%
	DIATOMA TENUE VAR. ELONGATUM	8	0.18%
	TOTAL	950	20.85%
CHLOROPHYTA			
NON-FILAMENTOUS			
	DICTYOSPHAERIUM PULCHELLUM	20	0.44%
	ANKISTRODESMUS SPIRALIS	4	0.09%
	SCENEDESMUS ARCUATUS	2	0.04%
	TETRASPORA GELATINOSA	2	0.04%
	SCENEDESMUS BIJUGA	< 1	0.01%
	SCENEDESMUS LONGUS	< 1	0.01%
	ANKISTRODESMUS FALCATUS VAR. MIRABILIS	< 1	0.01%
	ANKISTRODESMUS FALCATUS	< 1	0.01%
	OOCYSTIS BORGEI	< 1	0.01%
	TOTAL	31	0.69%

A-620

TABLE 4 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS.

LOCATION E2 30 MAR 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHLOROPHYTA FILAMENTOUS		
RADIOFILUM IRREGULARE	12	0.26%
TOTAL	12	0.26%
CHRYSTOPHYTA		
DINOBRYON CYLINDRICUM	111	2.44%
CLADOMONAS FRUTICULOSA	9	0.20%
TOTAL	120	2.63%
CYANOPHYTA NON-FILAMENTOUS		
COELOSPHAERIUM NAEGELIANUM	17	0.37%
CHROOCOCCUS LIMNETICUS	1	0.02%
TOTAL	18	0.40%
CYANOPHYTA FILAMENTOUS		
OSCILLATORIA TENUIS	2	0.04%
TOTAL	2	0.04%
PYRRHOPHYTA		
GLENODINIUM SP.	< 1	0.01%
TOTAL	< 1	0.01%
TOTAL PHYTOPLANKTON	4557.	

A-621

TABLE 5 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 24 APR 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
STEPHANODISCUS MINUTUS	248	13.52%
STEPHANODISCUS SP.	150	8.18%
HELOSIRA ISLANDICA	111	6.05%
CYCLOTELLA STELLIGERA	91	4.96%
HELOSIRA TALICA	85	4.63%
RHIZOSOLUNIA ERIENSIS	65	3.54%
CYCLOTELLA GLOMERATA	62	3.38%
STEPHANODISCUS ASTRAEA	29	1.58%
CYCLOTELLA SP.	16	0.87%
CYCLOTELLA OCELLATA	7	0.38%
STEPHANODISCUS HANTZSCHII	7	0.38%
TOTAL	871	47.47%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA CROTONENSIS	228	12.43%
FRAGILARIA PINNATA	156	8.50%
TABELLARIA FLOCCULOSA	134	7.30%
SYNEDRA FILIFORMIS	107	5.83%
FRAGILARIA INTERMEDIA	33	1.80%
ASTERIONELLA FORMOSA	29	1.58%
DIATOMA TENUE VAR. ELONGATUM	26	1.42%
NITZSCHIA SP.	13	0.71%
FRAGILARIA LEPTOSTAURON	13	0.71%
ACHNANTHES SP.	10	0.55%
SYNEDRA ULNA	7	0.38%
SYNEDRA FAMELICA	7	0.38%
NITZSCHIA ACICULARIS	7	0.38%
NITZSCHIA DISSIPATA	7	0.38%
NAVICULA TRIPUNCTATA	7	0.38%
GOMPHONEMA OLIVACEUM	7	0.38%
AMPHICRA OVALIS VAR. PEDICULUS	7	0.38%
TOTAL	798	43.49%
CHLOROPHYTA		
NON-FILAMENTOUS		
ANKISTRODESMUS FALCATUS	8	0.44%
SCENEDESMUS ARCUATUS	4	0.22%
ANKISTRODESMUS SPIRALIS	3	0.16%
CHLAMYDOMONAS SP.	2	0.11%
TETRASPORA GELATINOSA	2	0.11%
ANKISTRODESMUS FALCATUS VAR. MIRABILIS	1	0.05%
OCCYSTIS PUSILLA	< 1	0.04%
CLOSTEROPSIS LONGISSIMA VAR. TROPICA	< 1	0.04%
ELAKATOTHRIX VIRIDIS	< 1	0.02%

A-622

TABLE 5 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 24 APR 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
TOTAL	22	1.18%
CHRYSDOPHYTA		
DINOBRYON CYLINDRICUM	136	7.41%
HALLOMONAS SP.	2	0.11%
CLADOMONAS FRUTICULOSA	1	0.05%
DINOBRYON SP.	1	0.05%
TOTAL	140	7.63%
CYANOPHYTA		
FILAMENTOUS		
APHANIZOMENON FLOS-AQUAE	2	0.11%
OSCILLATORIA TENUIS	2	0.11%
TOTAL	4	0.22%
TOTAL PHYTOPLANKTON	1835.	

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TABLE 6 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 27 APR 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
STEPHANODISCUS MINUTUS	275	13.31%
STEPHANODISCUS SP.	234	11.32%
HELOSIRA ITALICA	185	8.95%
HELOSIRA ISLANDICA	167	8.08%
CYCLOTELLA STELLIGERA	111	5.37%
CYCLOTELLA GLOMERATA	100	4.84%
STEPHANODISCUS ASTRAEA	45	2.18%
RHIZOSOLENIA FRIENSIS	22	1.06%
CYCLOTELLA MICHIGANIANA	19	0.92%
CYCLOTELLA SP.	15	0.73%
CYCLOTELLA OCELLATA	7	0.34%
STEPHANODISCUS NIAGARAE	7	0.34%
TOTAL	1187	57.43%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA CROTONENSIS	197	9.53%
TABELLARIA FLOCCULOSA	137	6.63%
SYNEDRA FILIFORMIS	111	5.37%
FRAGILARIA INTERMEDIA	59	2.85%
FRAGILARIA PINNATA	45	2.18%
NITZSCHIA SP.	30	1.45%
NITZSCHIA ACICULARIS	22	1.06%
ACHNANTHES SP.	15	0.73%
NITZSCHIA PALEA	15	0.73%
FRAGILARIA CONSTRUENS	15	0.73%
SYNEDRA ULNA	15	0.73%
CYMBELLA SP.	11	0.53%
DIATOMA TENUE VAR. ELONGATUM	7	0.34%
DIATOMA SP.	7	0.34%
FRAGILARIA VAUCHERIAE	7	0.34%
AMPHICRA OVALIS VAR. PEDICULUS	7	0.34%
GOMPHONEMA SP.	7	0.34%
NITZSCHIA DISSIPATA	7	0.34%
NAVICULA SP.	7	0.34%
TOTAL	721	34.89%
CHLOROPHYTA		
NON-FILAMENTOUS		
ANKISTRODESMUS SPIRALIS	20	0.97%
ANKISTRODESMUS FALCATUS	10	0.48%
SCENEDESMUS ARCUATUS	8	0.39%
ANKISTRODESMUS FALCATUS VAR. MIRABILIS	3	0.15%
BOTRYOCOCCUS BRAUNII	2	0.10%
ELAKATOTHRIS VIRIDIS	1	0.05%
CHLAMYDOMONAS SP.	< 1	0.03%

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TABLE 6 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 27 APR 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
OOCYSTIS PUSILLA	< 1	0.03%
TETRASTRUM STAUROGENIAEFORME	< 1	0.03%
SCENEDESMUS LONGUS	< 1	0.03%

TOTAL	47	2.26%

CHRYSTOPHYTA

DINOBRYON CYLINDRICUM	101	4.89%
STIPITOCOCCUS URCEOLATUS	2	0.10%
DINOBRYON SP.	1	0.05%
MALLOMONAS SP.	< 1	0.03%

TOTAL	105	5.07%

CYANOPHYTA

NON-FILAMENTOUS

CHROOCOCCUS LIMNETICUS	< 1	0.03%

TOTAL	< 1	0.03%

CYANOPHYTA

FILAMENTOUS

OSCILLATORIA TENUIS	6	0.29%

TOTAL	6	0.29%

PYRRHOPHYTA

GLENODINIUM SP.	< 1	0.03%

TOTAL	< 1	0.03%

TOTAL PHYTOPLANKTON	2067.	

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TABLE 7 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 24 APR 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA CENTRALES		
STEPHANODISCUS MINUTUS	230	13.80%
STEPHANODISCUS SP.	127	7.62%
HELOSIRA ISLANDICA	102	6.12%
CYCLOTELLA STELLIGERA	87	5.22%
HELOSIRA ITALICA	71	4.26%
CYCLOTELLA GLOMERATA	50	3.00%
RHIZOSOLENIA FRIENSIS	25	1.50%
STEPHANODISCUS ASTRAEA	25	1.50%
CYCLOTELLA COLLATA	16	0.96%
STEPHANODISCUS HANTZSCHII	12	0.72%
CYCLOTELLA SP.	6	0.36%
TOTAL	751	45.05%
BACILLARIOPHYTA PENNALES		
FRAGILARIA CROTONENSIS	376	22.55%
TABELLARIA FLOCCULOSA	183	10.98%
SYNEDRA FILIFORMIS	127	7.62%
ASTERIONELLA FORMOSA	50	3.00%
SYNEDRA ULNA	16	0.96%
ACHNANTHES SP.	16	0.96%
DIATOMA TENUE VAR. ELONGATUM	12	0.72%
FRAGILARIA INTERMEDIA	12	0.72%
ACHNANTHES MICROCEPHALA	6	0.36%
NAVICULA GASTRUM	6	0.36%
NITZSCHIA SP.	6	0.36%
AMPHORA OVALIS VAR. PEDICULUS	6	0.36%
ACHNANTHES CLEVEI	6	0.36%
ACHNANTHES LANCEOLATA	6	0.36%
FRAGILARIA SP.	3	0.18%
CYMBELLA SP.	3	0.18%
GOMPHONEMA SP.	3	0.18%
TOTAL	837	50.21%
CHLOROPHYTA NON-FILAMENTOUS		
ANKISTRODESMUS SPIRALIS	5	0.30%
ANKISTRODESMUS FALCATUS	2	0.12%
CHLAMYDOMONAS SP.	2	0.12%
ANKISTRODESMUS FALCATUS VAR. MIRABILIS	1	0.06%
STAURASTRUM PARADOXUM	1	0.06%
SCENEDESMUS ARCUATUS	< 1	0.04%
DOCCYSTIS PUSILLA	< 1	0.04%
POLYBLEPHARIDES SP.	< 1	0.04%

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TABLE 7 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 24 APR 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
TOTAL	13	0.78%
CHRYSOPHYTA		
DINOBRYON CYLINDRICUM	27	1.62%
DINOBRYON DIVERGENS	16	0.96%
TOTAL	43	2.58%
CYANOPHYTA NON-FILAMENTOUS		
COELOSPHAERIUM NAEGELIANUM	17	1.02%
APHANOTHECE NIDULANS	3	0.18%
TOTAL	20	1.20%
CYANOPHYTA FILAMENTOUS		
OSCILLATORIA TENUIS	3	0.18%
TOTAL	3	0.18%
TOTAL PHYTOPLANKTON	1667.	

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TABLE 8 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS. LOCATION E2 27 APR 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
STEPHANODISCUS MINUTUS	190	11.95%
MELOSIRA ISLANDICA	187	11.76%
MELOSIRA ITALICA	161	10.12%
CYCLUTELLA STELLIGERA	109	6.85%
STEPHANODISCUS SP.	106	6.67%
CYCLUTELLA GLOMERATA	77	4.84%
STEPHANODISCUS ASTRAEA	45	2.83%
CYCLUTELLA SP.	39	2.45%
RHIZOSOLENIA ERIENSIS	35	2.20%
CYCLUTELLA OCELLATA	26	1.63%
STEPHANODISCUS NIAGARAE	6	0.38%
CYCLUTELLA MICHIGANIANA	6	0.38%
CYCLUTELLA MENECHINIANA	6	0.38%
TOTAL	993	62.44%
BACILLARIOPHYTA		
PENNALES		
TABELLARIA FLOCCULOSA	177	11.13%
SYNEDRA FILIFORMIS	132	8.30%
FRAGILARIA INTERMEDIA	32	2.01%
ASTERIONELLA FORMOSA	26	1.63%
NITZSCHIA SP.	19	1.19%
ACHNANTHES SP.	13	0.82%
NITZSCHIA ACICULARIS	13	0.82%
ACHNANTHES CLEVEI	13	0.82%
FRAGILARIA PINNATA	13	0.82%
SYNEDRA ULNA	10	0.63%
DIATOMA TENUE VAR. ELONGATUM	6	0.38%
SYNEDRA FAMELICA	6	0.38%
CYMBELLA MICROCEPHALA	6	0.38%
ACHNANTHES MINUTISSIMA	6	0.38%
AMPHICRA OVALIS VAR. PEDICULUS	6	0.38%
NAVICULA SP.	6	0.38%
AMPHIPRORA ORNATA	3	0.19%
FRAGILARIA CONSTRUENS	3	0.19%
TOTAL	490	30.81%
CHLOROPHYTA		
NON-FILAMENTOUS		
ANKISTRODESMUS SPIRALIS	13	0.82%
SCENEDESMUS ARCUATUS	4	0.25%
ANKISTRODESMUS FALCATUS VAR. MIRABILIS	3	0.19%
ANKISTRODESMUS FALCATUS	3	0.19%
ODDYSSEUS BORGEI	1	0.06%
CLOSTERIOPSIS LONGISSIMA	< 1	0.04%
KIRCHNERIELLA CONTORTA	< 1	0.04%

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TABLE 8 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS. LOCATION E2 27 APR 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
ELAKATOTHRIX VIRIDIS	< 1	0.03%
TOTAL	26	1.63%
CHRYSDOPHYTA		
DINOBRYON CYLINDRICUM	78	4.90%
DINOBRYON SP.	< 1	0.04%
DINOBRYON BAVARICUM	< 1	0.04%
TOTAL	79	4.99%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA TENUIS	2	0.13%
TOTAL	2	0.13%
TOTAL PHYTOPLANKTON	1590.	

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TABLE 9 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 15 MAY 1973

SPECIES		UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA			
CENTRALES			
MELOSIRA ITALICA		439	9.05%
STEPHANODISCUS BINDERANUS		325	6.70%
MELOSIRA ISLANDICA		246	5.07%
STEPHANODISCUS SP.		175	3.61%
RHIZOSOLENIA FRIENSIS		140	2.89%
STEPHANODISCUS MINUTUS		97	2.00%
CYCLOTELLA STELLIGERA		61	1.26%
STEPHANODISCUS SP. 2		53	1.09%
CYCLOTELLA OCELLATA		35	0.72%
CYCLOTELLA MENEGHINIANA		18	0.37%
CYCLOTELLA MICHIGANIANA		9	0.19%
STEPHANODISCUS ALPINUS		9	0.19%
STEPHANODISCUS HANTZSCHII		9	0.19%
STEPHANODISCUS TRANSILVANICUS		9	0.19%
TOTAL		1625	33.50%
BACILLARIOPHYTA			
PENNALES			
A-630	FRAGILARIA CROTONENSIS	781	16.10%
	TABELLARIA FLOCCULOSA	588	12.12%
	SYNEDRA FILIFORMIS	474	9.77%
	FRAGILARIA PINNATA	333	6.86%
	FRAGILARIA CAPUCINA	307	6.33%
	DIATOMA TENUE VAR. ELONGATUM	114	2.35%
	FRAGILARIA INTERMEDIA	105	2.16%
	ASTERIONELLA FORMOSA	88	1.81%
	NITZSCHIA ACICULARIS	88	1.81%
	NITZSCHIA SP.	79	1.63%
	SYNEDRA RADIAN	35	0.72%
	NITZSCHIA DISSIPATA	26	0.54%
	FRAGILARIA VAUCHERIAE	18	0.37%
	NITZSCHIA LAUENBURGIANA	18	0.37%
	SYNEDRA DELICATISSIMA VAR. ANGUSTISSIMA	18	0.37%
	TOTAL	3072	63.32%
CHLOROPHYTA			
NON-FILAMENTOUS			
	SCENEDESMUS ARCUATUS	12	0.25%
	ANKISTRODESMUS SPIRALIS	10	0.21%
	ANKISTRODESMUS FALCATUS	5	0.10%
	COSMARUM SP.	3	0.06%
	CRUCIGENIA QUADRATA	3	0.06%
	ELAKATOTHRIX VIRIDIS	1	0.02%
	ANKISTRODESMUS FALCATUS VAR. MIRABILIS	< 1	0.01%
	POLYBLEPHARIDES SP.	< 1	0.01%
	MICRACTINIUM PUSILLUM	< 1	0.01%

TABLE 9 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 15 MAY 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CLOSTERIOPSIS LONGISSIMA	< 1	0.01%
TOTAL	37	0.76%
CHRYSTOPHYTA		
CLADOMONAS FRUTICULOSA	76	1.57%
DINOBRYON CYLINDRICUM	20	0.41%
AULOMONAS SP.	8	0.16%
DINOBRYON DIVERGENS	3	0.06%
MALLOMONAS TONSURATA	< 1	0.01%
DINOBRYON BAVARICUM	< 1	0.01%
TOTAL	108	2.23%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA LIMNETICA	5	0.10%
OSCILLATORIA TENUIS	3	0.06%
TOTAL	8	0.16%
EUGLENOPHYTA		
TRACHELOMONAS CREBEA	< 1	0.01%
TOTAL	< 1	0.01%
PYRRHOPHYTA		
GLENODINIUM SP.	< 1	0.01%
TOTAL	< 1	0.01%
TOTAL PHYTOPLANKTON	4851.	

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TABLE 10 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 18 MAY 1973

SPECIES		UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA			
CENTRALES			
MELOSIRA ITALICA		138	5.53%
STEPHANODISCUS BINDERANUS		104	4.17%
STEPHANODISCUS SP.		83	3.33%
MELOSIRA ISLANDICA		79	3.17%
CYCLOTELLA STELLIGERA		71	2.85%
RHIZOSOLEA ERIENSIS		63	2.53%
STEPHANODISCUS MINUTUS		58	2.33%
STEPHANODISCUS SP. 2		25	1.00%
CYCLOTELLA GCELLATA		17	0.68%
CYCLOTELLA GLOMERATA		8	0.32%
STEPHANODISCUS HANTZSCHII		4	0.16%
STEPHANODISCUS NIAGARAE		4	0.16%
TOTAL		654	26.22%
BACILLARIOPHYTA			
PENNALES			
TABELLARIA FLOCCULOSA		392	15.71%
FRAGILARIA CROTONENSIS		288	11.54%
SYNEDRA FILIFORMIS		271	10.86%
FRAGILARIA PINNATA		134	5.37%
FRAGILARIA CAPUCINA		109	4.37%
DIATOMA TENUE VAR. ELONGATUM		88	3.53%
FRAGILARIA INTERMEDIA		83	3.33%
ASTERIONELLA FORMOSA		67	2.69%
ACHNANTHES SP.		50	2.00%
NITZSCHIA ACICULARIS		33	1.32%
NITZSCHIA SP.		25	1.00%
AMPHORA OVALIS VAR. PEDICULUS		17	0.68%
SYNEDRA RADIANIS		17	0.68%
CYMBELLA MICROCEPHALA		8	0.32%
NAVICULA SP.		8	0.32%
NITZSCHIA DISSIPATA		8	0.32%
SYNEDRA ULNA VAR. DANICA		8	0.32%
NITZSCHIA LAUENBURGIANA		4	0.16%
SYNEDRA ULNA VAR. CHASEANA		4	0.16%
TOTAL		1614	64.70%
CHLOROPHYTA			
NON-FILAMENTOUS			
ANKISTRODESMUS SPIRALIS		39	1.56%
ANKISTRODESMUS FALCATUS		18	0.72%
ANKISTRODESMUS FALCATUS VAR. MIRABILIS		8	0.32%
SCENEDESMUS ARCUATUS		7	0.28%
COELASTRUM SPHAERICUM		3	0.12%
ELAKATOTHRIX VIRIDIS		2	0.08%
MICRACTINIUM PUSILLUM		1	0.04%

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TABLE 10 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 18 MAY 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
DOCYSTIS GLOEOCYSTIFORMIS	1	0.04%
SCENEDESMUS QUADRICAUDA	< 1	0.03%
SCHROEDERIA SETIGERA	< 1	0.03%
TOTAL	80	3.22%

CHRYSDOPHYTA

CLADOMONAS FRUTICULOSA	91	3.65%
AULOMONAS SP.	17	0.68%
DINOBRYON CYLINDRICUM	14	0.56%
DINOBRYON SOCIALE	4	0.16%
DINOBRYON DIVERGENS	3	0.12%
DINOBRYON SP.	2	0.08%
TOTAL	131	5.25%

CYANOPHYTA

NON-FILAMENTOUS

APHANOTHECE SP.	< 1	0.04%
CHROOCOCCUS PRESCOTTII	< 1	0.03%
TOTAL	2	0.06%

CYANOPHYTA

FILAMENTOUS

OSCELLATORIA TENUIS	8	0.32%
APHANIZOMENON FLOS-AQUAE	5	0.20%
TOTAL	13	0.52%

PYRRHOPHYTA

PERIDINIUM SP.	< 1	0.03%
TOTAL	< 1	0.03%

TOTAL PHYTOPLANKTON

2495.

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TABLE 11 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 15 MAY 1973

SPECIES		UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA			
CENTRALES			
MELOSIRA ISLANDICA		132	6.87%
STEPHANODISCUS MINUTUS		115	5.99%
MELOSIRA ITALICA		105	5.47%
STEPHANODISCUS SP.		101	5.26%
STEPHANODISCUS BINDERANUS		78	4.06%
RHIZOSOLENIA ERIENSIS		74	3.85%
CYCLOTELLA STELLIGERA		37	1.93%
STEPHANODISCUS SP. 2		30	1.56%
CYCLOTELLA GLOMERATA		24	1.25%
CYCLOTELLA OCELLATA		17	0.89%
CYCLOTELLA MICHIGANIANA		7	0.36%
CYCLOTELLA MENECHINIANA		3	0.16%
STEPHANODISCUS ASTRAEA		3	0.16%
STEPHANODISCUS TENUIS		3	0.16%
TOTAL		729	37.95%
BACILLARIOPHYTA			
PENNALES			
TABELLARIA FLOCCULOSA		260	13.54%
SYNEDRA FILIFORMIS		203	10.57%
FRAGILARIA CROTONENSIS		166	8.64%
FRAGILARIA INTERMEDIA		125	6.51%
FRAGILARIA CAPUCINA		112	5.83%
FRAGILARIA PINNATA		54	2.81%
DIATOMA TENUE VAR. ELONGATUM		30	1.56%
ASTERIONELLA FORMOSA		27	1.41%
ACHNANTHES SP.		20	1.04%
NITZSCHIA ACICULARIS		20	1.04%
NITZSCHIA LAUENBURGIANA		20	1.04%
FRAGILARIA VAUCHERIAE		14	0.73%
NITZSCHIA SP.		14	0.73%
NITZSCHIA DISSIPATA		10	0.52%
SYNEDRA RADIAN		10	0.52%
CYMBELLA MICROCEPHALA		7	0.36%
NITZSCHIA ANGUSTATA VAR. ACUTA		7	0.36%
ACHNANTHES LANCEOLATA VAR. DUBIA		3	0.16%
GYROSIGMA ATTENUATUM		3	0.16%
TABELLARIA FENESTRATA VAR. GENICULATA		3	0.16%
TOTAL		1108	57.69%
CHLOROPHYTA			
NON-FILAMENTOUS			
SCENEDESMUS ARCUATUS		6	0.31%
ANKISTRODESMUS SPIRALIS		4	0.21%
ANKISTRODESMUS FALCATUS VAR. MIRABILIS		2	0.10%
ELAKATOTHRIS VIRIDIS		1	0.05%

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TABLE 11 . PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 15 MAY 1973.

SPECIES	UNITS PER ML.	OCCUR- RENCE
TETRASPORA LAMELLOSA	1	0.05%
ANKISTRODESMUS FALCATUS	1	0.05%
OOCYSTIS BORGEI	< 1	0.04%
TOTAL	16	0.82%

CHRYSTOPHYTA

CLADOMONAS FRUTICULOSA	29	1.51%
DINOBRYON CYLINDRICUM	22	1.15%
AULOMONAS SP.	5	0.26%
DINOBRYON SP.	1	0.05%
MALLOMONAS TONSURATA	< 1	0.04%
MALLOMONAS PRODUCTA	< 1	0.04%
TOTAL	58	3.04%

CYANOPHYTA

FILAMENTOUS

OSCILLATORIA LIMNETICA	3	0.16%
OSCILLATORIA TENUIS	3	0.16%
APHANIZOMENON FLOS-AQUAE	3	0.16%
TOTAL	9	0.47%

EUGLENOPHYTA

EUGLENA POLYMORPHA	< 1	0.04%
TOTAL	< 1	0.04%

TOTAL PHYTOPLANKTON 1921.

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TABLE 12 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS. LOCATION E2 18 MAY 1973

SPECIES		UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA			
CENTRALES			
MELOSIRA ITALICA		145	5.54%
STEPHANODISCUS BINDERANUS		141	5.39%
STEPHANODISCUS SP.		110	4.20%
CYCLOTELLA STELLIGERA		106	4.05%
MELOSIRA ISLANDICA		98	3.74%
RHIZOSOLENIA ERIENSIS		79	3.02%
STEPHANODISCUS MINUTUS		75	2.87%
CYCLOTELLA OCELLATA		31	1.18%
STEPHANODISCUS ASTRAEA		16	0.61%
STEPHANODISCUS HANTZSCHII		12	0.46%
CYCLOTELLA GLOMERATA		8	0.31%
STEPHANODISCUS SP. 2		8	0.31%
STEPHANODISCUS NIAGARAE		4	0.15%
TOTAL		833	31.82%
BACILLARIOPHYTA			
PENNALES			
A-636 SYNEDRA FILIFORMIS		322	12.30%
TABELLARIA FLOCCULOSA		271	10.35%
FRAGILARIA CROTONENSIS		185	7.07%
FRAGILARIA CAPUCINA		126	4.81%
FRAGILARIA INTERMEDIA		126	4.81%
FRAGILARIA PINNATA		110	4.20%
ASTERIONELLA FORMOSA		79	3.02%
DIATOMA TENUE VAR. ELONGATUM		51	1.95%
NITZSCHIA ACICULARIS		47	1.80%
NITZSCHIA SP.		39	1.49%
NITZSCHIA DISSIPATA		24	0.92%
NAVICULA SP.		16	0.61%
ACHNANTHES SP.		12	0.46%
SYNEDRA RADIAN		12	0.46%
ACHNANTHES CLEVEI VAR. ROSTRATA		8	0.31%
DIATOMA ELONGATUM VAR. MINOR		8	0.31%
MERIDION CIRCULARE		8	0.31%
NITZSCHIA PALEACEA		8	0.31%
SYNEDRA DELICATISSIMA VAR. ANGUSTISSIMA		8	0.31%
SURIPELLA ANGUSTA		8	0.31%
TOTAL		1468	56.08%
CHLOROPHYTA			
NON-FILAMENTOUS			
ANKISTRODESMUS SPIRALIS		70	2.67%
ANKISTRODESMUS FALCATUS VAR. MIRABILIS		18	0.69%
ANKISTRODESMUS FALCATUS		16	0.61%
SCENEDESMUS ARCUATUS		6	0.23%
COSMARUM SP.		3	0.11%

TABLE 12 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS. LOCATION E2 18 MAY 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
ELAKATOTHRIX VIRIDIS	2	0.08%
ODCYSTIS GLOEODCYSTIFORMIS	2	0.08%
DICTYOSPHAERIUM PULCHELLUM	1	0.04%
TETRASPORA GELATINOSA	1	0.04%
LAGERHEIMIA CILIATA	< 1	0.03%
TOTAL	120	4.57%
CHRYSDOPHYTA		
CLADOMONAS FRUTICULOSA	113	4.32%
DINOBRYON CYLINDRICUM	43	1.64%
AULOMONAS SP.	11	0.42%
DINOBRYON SP.	8	0.31%
DINOBRYON BAVARICUM	5	0.19%
DINOBRYON SERTULARIA	5	0.19%
DINOBRYON SOCIALE	4	0.15%
DICHOTOMOCOCCLUS LUNATUS	3	0.11%
DINOBRYON DIVERGENS	2	0.08%
MALLOMONAS ACARDIDES	< 1	0.03%
TOTAL	195	7.44%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA SP.	1	0.04%
TOTAL	1	0.04%
EUGLENOPHYTA		
TRACHELOMONAS SP.	< 1	0.03%
TOTAL	< 1	0.03%
PYRRHOPHYTA		
PERIDINIUM SP.	< 1	0.03%
TOTAL	< 1	0.03%
TOTAL PHYTOPLANKTON	2618.	

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TABLE 13 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 19 JUN 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
MELDSTRA ITALICA	321	8.30%
STEPHANODISCUS SP.	240	6.20%
MELDSTRA ISLANDICA	160	4.14%
STEPHANODISCUS BINDERANUS	53	1.37%
STEPHANODISCUS ASTRAEA	45	1.16%
RHIZOSOLENIA LONGISETA	45	1.16%
CYCLOTELLA SP.	18	0.47%
CYCLOTELLA OCELLATA	18	0.47%
CYCLOTELLA STELLIGERA	18	0.47%
CYCLOTELLA GLOMERATA	9	0.23%
TOTAL	927	23.96%
BACILLARIOPHYTA		
PENNALES		
TABELLARIA FLOCCULOSA	712	18.40%
FRAGILARIA CROTTONENSIS	641	16.57%
SYNEDRA FILIFORMIS	570	14.73%
FRAGILARIA CAPUCINA	267	6.90%
ASTERIONELLA FORMOSA	169	4.37%
NITZSCHIA SP.	142	3.67%
FRAGILARIA PINNATA	125	3.23%
SYNEDRA RADIAN	71	1.83%
AMPHIPLEURA PELLUCIDA	36	0.93%
SYNEDRA DELICATISSIMA VAR. ANGUSTISSIMA	27	0.70%
FRAGILARIA SP.	18	0.47%
SYNEDRA FAMELICA	18	0.47%
NAVICULA SP.	9	0.23%
TOTAL	2805	72.49%
CHLOROPHYTA		
NON-FILAMENTOUS		
ANKISTRODESMUS SPIRALIS	34	0.88%
ANKISTRODESMUS FALCATUS	12	0.31%
SCENEDESMUS ARCUATUS	6	0.16%
DICTYOSPHAERIUM PULCHELLUM	4	0.10%
SPONDYLISUM SP.	3	0.08%
SCENEDESMUS LONGUS	< 1	0.02%
CHLAMYDOMONAS SP.	< 1	0.02%
ELAKATOTHRIS VIRIDIS	< 1	0.01%
TOTAL	61	1.57%

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TABLE 13. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 19 JUN 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHRYSTOPHYTA		
DINOBRYON SOCIALE	1	0.03%
DINOBRYON CYLINDRICUM	< 1	0.02%
TOTAL	2	0.04%
CYANOPHYTA NON-FILAMENTOUS		
COELOSPHAERIUM NAEGELIANUM	14	0.36%
TOTAL	14	0.36%
CYANOPHYTA FILAMENTOUS		
OSCILLATORIA GEMINATA	30	0.78%
OSCILLATORIA LIMNETICA	18	0.47%
OSCILLATORIA TENUIS	13	0.34%
TOTAL	61	1.58%
TOTAL PHYTOPLANKTON	3869.	

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TABLE 14 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 22 JUN 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
MELOSIRA ITALICA	160	4.86%
STEPHANODISCUS BINDERANUS	154	4.67%
MELOSIRA ISLANDICA	140	4.25%
STEPHANODISCUS SP.	107	3.25%
RHIZOSOLENIA ERIENSIS	107	3.25%
CYCLOTELLA SP.	33	1.00%
CYCLOTELLA STELLIGERA	33	1.00%
CYCLOTELLA PCELLATA	20	0.61%
CYCLOTELLA GLOMERATA	20	0.61%
STEPHANODISCUS ASTRAEA	7	0.21%
TOTAL	781	23.70%
BACILLARIOPHYTA		
PENNALES		
TABELLARIA FLOCCULOSA	514	15.60%
SYNEDRA FILIFORMIS	494	14.99%
FRAGILARIA CROTONENSIS	294	8.92%
FRAGILARIA INTERMEDIA	240	7.28%
ASTERIONELLA FORMOSA	180	5.46%
NITZSCHIA SP.	167	5.07%
FRAGILARIA CAPUCINA	93	2.82%
NITZSCHIA ACICULARIS	80	2.43%
FRAGILARIA PINNATA	60	1.82%
SYNEDRA RADIANUS	27	0.82%
SYNEDRA FAMELICA	27	0.82%
NAVICULA SP.	13	0.39%
NITZSCHIA DISSIPATA	13	0.39%
AMPHIPLEURA PELLUCIDA	13	0.39%
DIATOMA TENUE VAR. ELONGATUM	7	0.21%
SYNEDRA DELICATISSIMA VAR. ANGUSTISSIMA	7	0.21%
SYNEDRA ULNA VAR. CHASEANA	7	0.21%
TOTAL	2236	67.86%
CHLOROPHYTA		
NON-FILAMENTOUS		
ANKISTRODESMUS SPIRALIS	76	2.31%
SCENEDESMUS ARCUATUS	36	1.09%
ANKISTRODESMUS FALCATUS	23	0.70%
ANKISTRODESMUS FALCATUS VAR. MIRABILIS	5	0.15%
PEDIASTRUM BRYANUM VAR. LONGICORNE	5	0.15%
CLOSTERIOPSIS LONGISSIMA VAR. TROPICA	1	0.03%
ODCYSTIS PUSILLA	< 1	0.02%
ELAKATOTHRIX VIRIDIS	< 1	0.01%
TOTAL	147	4.46%

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TABLE 14 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E 1 22 JUN 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA LIMNETICA	45	1.37%
OSCILLATORIA GEMINATA	44	1.34%
OSCILLATORIA TENUIS	41	1.24%
TOTAL	130	3.95%
PYRRHOPHYTA		
PERIDINIUM SP.	1	0.03%
TOTAL	1	0.03%
TOTAL PHYTOPLANKTON	3295.	

TABLE 15 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 15 JUN 1973
Before chlorination

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
MELOSIRA ITALICA	219	7.80%
MELOSIRA ISLANDICA	160	5.70%
STEPHANODISCUS BINDERANUS	144	5.13%
STEPHANODISCUS SP.	128	4.56%
CYCLOTELLA STELLIGERA	118	4.20%
RHIZOSOLENIA LONGISETA	32	1.14%
CYCLOTELLA SP.	16	0.57%
CYCLOTELLA OCELLATA	11	0.39%
CYCLOTELLA KUTZINGIANA	11	0.39%
CYCLOTELLA MENECHINIANA	11	0.39%
CYCLOTELLA GLOMERATA	11	0.39%
TOTAL	861	30.66%
BACILLARIOPHYTA		
PENNALES		
SYNEDRA FILIFORMIS	518	18.45%
TABELLARIA FLOCCULOSA	449	15.99%
FRAGILARIA CAPUCINA	321	11.43%
FRAGILARIA CROTONENSIS	139	4.95%
ASTERIONELLA FORMOSA	112	3.99%
NITZSCHIA SP.	85	3.03%
FRAGILARIA INTERMEDIA	32	1.14%
SYNEDRA RADIANIS	32	1.14%
SYNEDRA DELICATISSIMA VAR. ANGUSTISSIMA	27	0.96%
FRAGILARIA PINNATA	27	0.96%
NITZSCHIA ACICULARIS	21	0.75%
SYNEDRA FAMELICA	11	0.39%
FRAGILARIA SP.	11	0.39%
CYMPHELLA MICROCEPHALA	11	0.39%
NAVICULA SP.	11	0.39%
DIATOMA TENUE VAR. ELONGATUM	11	0.39%
NITZSCHIA DISSIPATA	11	0.39%
DIATOMA SP.	11	0.39%
TOTAL	1840	65.52%
CHLOROPHYTA		
NON-FILAMENTOUS		
ANKISTRODESMUS SPIRALIS	39	1.39%
SCENEDESMUS ARCUATUS	6	0.21%
ANKISTRODESMUS FALCATUS	4	0.14%
CLOSTERIOPSIS LONGISSIMA	< 1	0.02%
DOCYSTIS PUSILLA	< 1	0.02%
SCENEDESMUS LONGUS	< 1	0.02%
ANKISTRODESMUS FALCATUS VAR. MIRABILIS	< 1	0.02%
TETRASTRUM ELGANS	< 1	0.02%
ELAKATOTHRIX VIRIDIS	< 1	0.01%

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TABLE 15. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 19 JUN 1973
Before Chlorination

SPECIES	UNITS PER ML.	OCCUR- RENCE
TOTAL	53	1.88%
CHRYSTOPHYTA		
DINOBRYON SOCIALE	< 1	0.02%
DINOBRYON DIVERGENS	< 1	0.02%
TOTAL	1	0.05%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA LIMNETICA	41	1.46%
OSCILLATORIA TENUIS	12	0.43%
TOTAL	53	1.89%
TOTAL PHYTOPLANKTON	2808.	

TABLE 16 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS.

LOCATION E2 22 JUN 1973

Before Chlorination

SPECIES		UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA			
CENTRALES			
MELOSIRA ITALICA		300	8.24%
MELOSIRA ISLANDICA		187	5.14%
STEPHANODISCUS PINDERANUS		167	4.59%
STEPHANODISCUS SP.		154	4.23%
RHIZOSOLENIA LONGISETA		80	2.20%
STEPHANODISCUS ASTRAEA		40	1.10%
CYCLOTELLA GLOMERATA		40	1.10%
CYCLOTELLA STELLIGERA		40	1.10%
MELOSIRA AMBIGUA		27	0.74%
CYCLOTELLA OCELLATA		13	0.36%
CYCLOTELLA BODANICA		13	0.36%
CYCLOTELLA SP.		13	0.36%
RHIZOSOLENIA ERIENSIS		7	0.19%
TOTAL		1081	29.70%
BACILLARIOPHYTA			
PENNALES			
TABELLARIA FLOCCULOSA		534	14.67%
SYNEDRA FILIFORMIS		481	13.22%
FRAGILARIA CROTONENSIS		381	10.47%
FRAGILARIA CAPUCINA		254	6.98%
NITZSCHIA SP.		220	6.04%
ASTERIONELLA FORMOSA		120	3.30%
FRAGILARIA PINNATA		93	2.56%
SYNEDRA RADIANUS		53	1.46%
NAVICULA SP.		53	1.46%
DIATOMA TENUE VAR. ELONGATUM		40	1.10%
NITZSCHIA DISSIPATA		27	0.74%
NITZSCHIA ACICULARIS		27	0.74%
FRAGILARIA INTERMEDIA		27	0.74%
CYMBELLA SP.		27	0.74%
SYNEDRA DELICATISSIMA VAR. ANGUSTISSIMA		20	0.55%
ACHNANTHES MINUTISSIMA		13	0.36%
SYNEDRA ULNA VAR. CHASEANA		13	0.36%
COCCONEIS PEDICULUS		13	0.36%
TOTAL		2396	65.83%
CHLOROPHYTA			
NON-FILAMENTOUS			
ANKISTRODESMUS SPIRALIS		42	1.15%
DICTYOSPHAERIUM PULCHELLUM		17	0.47%
ANKISTRODESMUS FALCATUS		16	0.44%
SCENEDESMUS ARCUATUS		12	0.33%
ANKISTRODESMUS FALCATUS VAR. MIRABILIS		1	0.03%
ODCYSTIS GLOEDOCYSTIFORMIS	<	1	0.02%
SCENEDESMUS QUADRICAUDA	<	1	0.02%

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TABLE 16 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS.

LOCATION E2 22 JUN 1973.
Before Chlorination

SPECIES	UNITS PER ML.	OCCUR- RENCE
SCENEDESMUS LONGUS	< 1	0.02%
TOTAL	90	2.47%
CHRYSTOPHYTA		
DINOBRYON CYLINDRICUM	1	0.03%
DINOBRYON SOCIALE	< 1	0.02%
TOTAL	2	0.05%
CYANOPHYTA NON-FILAMENTOUS		
COELOSPHAERIUM NAEGELIANUM	34	0.93%
TOTAL	34	0.93%
CYANOPHYTA FILAMENTOUS		
OSCILLATORIA TENUIS	22	0.60%
OSCILLATORIA LIMNETICA	9	0.25%
OSCILLATORIA GEMINATA	6	0.16%
TOTAL	37	1.02%
TOTAL PHYTOPLANKTON	3640.	

TABLE 17 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E₂ 19 JUN 1973
After Chlorination

SPECIES

UNITS
PER ML. OCCUR-
RENCEBACILLARIOPHYTA
CENTRALES

MELOSIRA ITALICA	183	7.65%
STEPHANODISCUS SP.	151	6.32%
MELOSIRA ISLANDICA	102	4.27%
STEPHANODISCUS BINDERANUS	102	4.27%
RHIZOSOLEMIA LONGISETA	76	3.18%
CYCLOTELLA STELLIGERA	67	2.80%
CYCLOTELLA OCELLATA	27	1.13%
CYCLOTELLA GLOMERATA	22	0.92%
CYCLOTELLA BODANICA	9	0.38%
TOTAL	739	30.91%

BACILLARIOPHYTA
PENNALES

TABELLARIA FLOCCULOSA	463	19.37%
SYNEDRA FILIFORMIS	303	12.67%
FRAGILARIA CROTONENSIS	276	11.54%
ASTERIONELLA FORMOSA	107	4.48%
NITZSCHIA SP.	76	3.18%
FRAGILARIA PINNATA	58	2.43%
SYNEDRA DELICATISSIMA VAR. ANGUSTISSIMA	45	1.88%
NITZSCHIA ACICULARIS	36	1.51%
SYNEDRA RADIANIS	36	1.51%
FRAGILARIA CAPUCINA	27	1.13%
NAVICULA SP.	22	0.92%
FRAGILARIA INTERMEDIA	18	0.75%
SYNEDRA FAMELICA	18	0.75%
SYNEDRA ULNA VAR. CHASEANA	13	0.54%
ACHNANTHES SP.	9	0.38%
CYMPHELLA SP.	9	0.38%
CYMPHELLA TURGIDA	9	0.38%
DIATOMA TENUE VAR. ELONGATUM	9	0.38%
TOTAL	1534	64.17%

CHLOROPHYTA
NON-FILAMENTOUS

ANKISTRODESMUS SPIRALIS	30	1.25%
ANKISTRODESMUS FALCATUS	5	0.21%
SCENEDESMUS ARCUATUS	4	0.17%
TETRAPSDRA GELATINOSA	3	0.13%
ANKISTRODESMUS FALCATUS VAR. MIRABILIS	1	0.04%
OCCYSTIS PUSILLA	1	0.04%
SCENEDESMUS ABUNDANS	< 1	0.03%
STAUSTRUM PARADOXUM	< 1	0.03%
ELAKATOTHRIS VIRIDIS	< 1	0.01%

TABLE 17: PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION^E 2 19 JUN 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE	After Chlorination
TOTAL	46	1.91%	
CHRYSTOPHYTA			
MONOSIGA SP.	8	0.33%	
DINOBRYON CYLINDRICUM	1	0.04%	
TOTAL	9	0.38%	
CYANOPHYTA NON-FILAMENTOUS			
COELOSPHAERIUM NAEGELIANUM	10	0.42%	
STICHOSIPHON SP.	1	0.04%	
TOTAL	11	0.46%	
CYANOPHYTA FILAMENTOUS			
OSCILLATORIA LIMNETICA	18	0.75%	
OSCILLATORIA GEMINATA	17	0.71%	
OSCILLATORIA TENUIS	17	0.71%	
TOTAL	52	2.18%	
TOTAL PHYTOPLANKTON	2391.		

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TABLE 18 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS.

LOCATION E₂ 22 JUN 1973.

SPECIES		UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA			
CENTRALES			
MELOSIRA ITALICA		367	9.18%
STEPHANODISCUS SP.		234	5.86%
MELOSIRA ISLANDICA		194	4.86%
STEPHANODISCUS BINDERANUS		147	3.68%
CYCLOTELLA STELLIGERA		80	2.00%
RHIZOSOLENIA LONGISETA		60	1.50%
CYCLOTELLA GLOMERATA		33	0.83%
CYCLOTELLA OCELLATA		20	0.50%
CYCLOTELLA SP.		20	0.50%
STEPHANODISCUS ASTRAEA		20	0.50%
MELOSIRA GRANULATA		13	0.33%
CYCLOTELLA ATOMUS		13	0.33%
TOTAL		1201	30.06%
BACILLARIOPHYTA			
PENNALES			
SYNEDRA FILIFORMIS		715	17.89%
TABELLARIA FLOCCULOSA		541	13.54%
NITZSCHIA SP.		341	8.53%
FRAGILARIA PINNATA		214	5.36%
FRAGILARIA CAPUCINA		187	4.68%
FRAGILARIA CROTONENSIS		174	4.35%
SYNEDRA DELICATISSIMA VAR. ANGUSTISSIMA		140	3.50%
ASTERIONELLA FORMOSA		140	3.50%
NITZSCHIA ACICULARIS		53	1.33%
NITZSCHIA PALEA		40	1.00%
SURIRELLA ANGUSTA		40	1.00%
SYNEDRA SP.		27	0.68%
DIATOMA TENUE VAR. ELONGATUM		27	0.68%
DIATOMA TENUE		13	0.33%
NITZSCHIA DISSIPATA		13	0.33%
AMPHIPLEURA PELLUCIDA		13	0.33%
SYNEDRA ULNA VAR. CHASEANA		13	0.33%
NAVICULA SP.		7	0.18%
TOTAL		2698	67.52%
CHLOROPHYTA			
NON-FILAMENTOUS			
ANKISTRODESMUS SPIRALIS		37	0.93%
ANKISTRODESMUS FALCATUS		16	0.40%
SCENEDESMUS ARCUATUS		12	0.30%
ANKISTRODESMUS FALCATUS VAR. MIRABILIS		5	0.13%
SCENEDESMUS QUADRICAUDA		1	0.03%
SCENEDESMUS LONGUS		1	0.03%
CLOSTERIOPSIS LONGISSIMA VAR. TROPICA	<	1	0.02%
ELAKATOTHRIS VIRIDIS	<	1	0.01%

After Chlorination

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TABLE 18 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS.

LOCATION E2 22 JUN 1973

After Chlorination

SPECIES	UNITS PER ML.	OCCUR- RENCE
TOTAL	73	1.83%
CHRYSOPHYTA		
DINOBRYON SP.	< 1	0.02%
TOTAL	< 1	0.02%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA GEMINATA	13	0.33%
OSCILLATORIA LIMNETICA	6	0.15%
OSCILLATORIA TENUIS	4	0.10%
TOTAL	23	0.58%
TOTAL PHYTOPLANKTON	3996.	

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TABLE 19 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 17 JUL 1973

SPECIES	UNITS PER ML.	OCCUR- RANCE
BACILLARIOPHYTA		
CENTRALES		
CYCLOTELLA PSEUDOSTELLIGERA	51	4.12%
CYCLOTELLA STELLIGERA	43	3.47%
MELOSIRA ISLANDICA	35	2.82%
RHIZOSOLENIA LONGISETA	35	2.82%
STEPHANODISCUS SP.	35	2.82%
RHIZOSOLENIA ERIENSIS	22	1.78%
STEPHANODISCUS MINUTUS	16	1.29%
STEPHANODISCUS INVISITATUS	10	0.81%
CYCLOTELLA MICHIGANIANA	8	0.65%
CYCLOTELLA OCELLATA	8	0.65%
CYCLOTELLA SP.	8	0.65%
STEPHANODISCUS HANTZSCHII	8	0.65%
MELOSIRA ITALICA	6	0.48%
CYCLOTELLA MENEGHINIANA VAR. PLANA	4	0.32%
STEPHANODISCUS BINDERANUS	4	0.32%
STEPHANODISCUS SP. 2	4	0.32%
CYCLOTELLA GLOMERATA	2	0.16%
STEPHANODISCUS ASTRAEA	2	0.16%
TOTAL	301	24.29%
BACILLARIOPHYTA		
PENNALES		
TABELLARIA FLOCCULOSA	167	13.48%
ASTERIONELLA FUMOSA	161	12.99%
SYNEURA FILIFORMIS	161	12.99%
FRAGILARIA CROTONENSIS	63	5.08%
NITZSCHIA SP.	39	3.15%
DIATOMA TENUE	26	2.10%
FRAGILARIA PINNATA	26	2.10%
DIATOMA TENUE VAR. ELONGATUM	20	1.61%
NITZSCHIA ACICULARIS	8	0.65%
SYNEURA RADIANIS	8	0.65%
SYNEURA DELICATISSIMA	6	0.48%
ACHNANTHES MINUTISSIMA	4	0.32%
ACHNANTHES SP.	4	0.32%
CYMBELLA MICROCEPHALA	4	0.32%
FRAGILARIA PINNATA VAR. INTERCEDENS	4	0.32%
NAVICULA SP.	4	0.32%
SYNEURA ULNA VAR. CHASEANA	4	0.32%
AMPHORA OVALIS VAR. PEDICULUS	2	0.16%
DIATOMA VULGARE	2	0.16%
TOTAL	713	57.55%

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TABLE 19. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 17 JUL 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHLOROPHYTA		
NON-FILAMENTOUS		
ANKISTRODESMUS SPIRALIS	22	1.78%
SCENEDESMUS ARCUATUS	18	1.45%
MICRACTINIUM PUSILLUM	5	0.40%
SFLENASTRUM MINUTUM	3	0.24%
ANKISTRODESMUS FALCATUS	3	0.24%
TOTAL	51	4.12%
CHLOROPHYTA		
FILAMENTOUS		
MOUGEOTIA SP.	12	0.97%
TOTAL	12	0.97%
CHRYSDOPHYTA		
MONOSIGA SP.	30	2.42%
STIPITOCOCCUS URCEOLATUS	14	1.13%
DINOBRYON DIVERGENS	5	0.40%
DINOBRYON SERTULARIA	3	0.24%
DINOBRYON SOCIALE	3	0.24%
DINOBRYON CYLINDRICUM	3	0.24%
TOTAL	58	4.68%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA TENUIS	49	3.95%
OSCILLATORIA LIMNETICA	29	2.34%
OSCILLATORIA GEMINATA	23	1.86%
TOTAL	101	8.15%
MISCELLANEOUS		
RHODOSPIRILLUM SP.	3	0.24%
TOTAL	3	0.24%
TOTAL PHYTOPLANKTON	1239.	

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TABLE 20. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 20 JUL 1973

SPECIES		UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA			
CENTRALES			
CYCLotella PSUDOSTELLIGERA		155	9.78%
STEPHANODISCUS SP.		102	5.78%
CYCLotella STELLIGERA		93	5.27%
RHIZOSULENIA FRIENSIS		56	3.17%
RHIZOSULENIA LONGISETA		47	2.66%
CYCLotella OCELLATA		28	1.59%
HELOSIRA ITALICA		25	1.42%
HELOSIRA ISLANDICA		22	1.25%
STEPHANODISCUS PINDERANUS		16	0.91%
STEPHANODISCUS ASTRAEA		6	0.34%
STEPHANODISCUS INVISITATUS		3	0.17%
STEPHANODISCUS MINUTUS		3	0.17%
TOTAL		556	31.50%
BACILLARIOPHYTA			
PENNALES			
TABELLARIA FLOCCULOSA		208	11.78%
ASTERIONELLA FORMOSA		193	10.93%
SYNEDRA FILIFORMIS		160	10.20%
FRAGILARIA CROTONENSIS		158	8.95%
NITZSCHIA SP.		53	3.00%
DIATOMA TENUE VAR. FLONGATUM		50	2.83%
FRAGILARIA PINNATA		47	2.66%
FRAGILARIA CAPUCINA		43	2.44%
DIATOMA TENUE		37	2.10%
ACHMANTHES SP.		16	0.91%
AMPHORA OVALIS VAR. PEDICULUS		6	0.34%
FRAGILARIA VAUCHERIAE		6	0.34%
NAVICULA CRYPTOCEPHALA VAR. VENETA		6	0.34%
NITZSCHIA DISSIPATA		6	0.34%
NITZSCHIA ACICULARIS		6	0.34%
SYNEDRA RADIANIS		6	0.34%
SYNEDRA FAMELICA		6	0.34%
ACHMANTHES LANCEOLATA VAR. DUBIA		3	0.17%
SYNEDRA DELICATISSIMA		3	0.17%
TOTAL		1033	58.53%
CHLOROPHYTA			
NON-FILAMENTOUS			
ANKISTRODESMUS SPIRALIS		27	1.53%
SCENEDESMUS ARCUATUS		19	1.08%
CRUCIGENIA QUADRATA		11	0.62%
COELASTRUM MICROPORUM		11	0.62%
ANKISTRODESMUS FALCATUS		5	0.28%
SCENEDESMUS LONGUS		3	0.17%

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TABLE 20 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 20 JUL 1973

SPECIES	UNITS PER ML.	OCCUR- RANCE
TOTAL	76	4.31%
CHRYSTOPHYTA		
DINOBRYON SOCIALE	49	2.78%
STIPITOCOCCUS URCEOLATUS	11	0.62%
DINOBRYON DIVERGENS	11	0.62%
MONOSIGA SP.	8	0.45%
TOTAL	79	4.48%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA LIMNETICA	21	1.19%
TOTAL	21	1.19%
TOTAL PHYTOPLANKTON	1765.	

TABLE 21 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 17 JUL 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHLOROPHYTA		
NON-FILAMENTOUS		
OCCYSTIS LACUSTRIS	5	0.36%
SCENEDESMUS ARCUATUS	4	0.29%
ANKISTRODESMUS FALCATUS	3	0.22%
ANKISTRODESMUS SPIRALIS	3	0.22%
TOTAL	15	1.08%
CHRYSTOPHYTA		
DINOBRYON DIVERGENS	101	7.25%
MONOSIGA SP.	44	3.16%
STIPITOCUCCUS URCEOLATUS	19	1.36%
DINOBRYON SOCIALE	3	0.22%
DINOBRYON CYLINDRICUM	3	0.22%
TOTAL	170	12.20%
CYANOPHYTA		
NON-FILAMENTOUS		
STICHOSIPHUM SP.	3	0.22%
TOTAL	3	0.22%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA GEMINATA	25	1.79%
OSCILLATORIA TENUIS	25	1.79%
OSCILLATORIA LIMNETICA	10	0.72%
TOTAL	60	4.31%
MISCELLANEOUS		
RHODOMUNAS SP.	3	0.22%
TOTAL	3	0.22%
TOTAL PHYTOPLANKTON	1393.	

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TABLE 21 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 17 JUL 1973

SPECIES	UNITS PER ML.	OCCUR- RANCE
BACILLARIOPHYTA		
CENTRALES		
CYCLOTELLA PSEUDOSTELLIGERA	107	7.68%
STEPHANODISCUS SP.	71	5.10%
RHIZOSOLENIA LONGISETA	56	4.02%
CYCLOTELLA STELLIGERA	49	3.52%
RHIZOSOLENIA FRIENSIS	47	3.37%
STEPHANODISCUS INVISITATUS	42	3.02%
MELOSIRA ITALICA	33	2.37%
MELOSIRA ISLANDICA	27	1.94%
CYCLOTELLA GLOMERATA	9	0.65%
CYCLOTELLA MICHIGANIANA	9	0.65%
CYCLOTELLA SP.	9	0.65%
CYCLOTELLA OCELLATA	7	0.50%
STEPHANODISCUS HANTZSCHII	7	0.50%
STEPHANODISCUS BINDERANUS	4	0.29%
STEPHANODISCUS MINUTUS	4	0.29%
STEPHANODISCUS ASTRAEA	2	0.14%
TOTAL	483	34.67%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA CROTONENSIS	142	10.19%
ASTERIONELLA FORMOSA	140	10.05%
TABELLARIA FLOCCULOSA	111	7.97%
SYNEDRA FILIFORMIS	100	7.18%
DIATOMA TENUE	49	3.52%
NITZSCHIA SP.	24	1.72%
DIATOMA TENUE VAR. ELONGATUM	22	1.58%
NAVICULA SP.	11	0.79%
FRAGILARIA PINNATA	9	0.65%
ACHNANTHES SP.	7	0.50%
AMPHIOLEURA PELLUCIDA	4	0.29%
CYMBELLA MICROCEPHALA	4	0.29%
CYMBELLA TURGIDA	4	0.29%
FRAGILARIA PINNATA VAR. INTERCEDENS	4	0.29%
GOMPHONEMA OLIVACEUM	4	0.29%
NITZSCHIA ACICULARIS	4	0.29%
NITZSCHIA PALEACEA	4	0.29%
SYNEDRA DELICATISSIMA VAR. ANGUSTISSIMA	4	0.29%
SYNEDRA RADIANIS	4	0.29%
SYNEDRA FAMELICA	4	0.29%
FRAGILARIA INTERMEDIA	2	0.14%
SYNEDRA DELICATISSIMA	2	0.14%
TOTAL	659	47.31%

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TABLE 22 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS. LOCATION E2 20 JUL 1973

SPECIES		UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA			
CENTRALES			
CYCLOTELLA PSEUDOSTELLIGERA		106	7.54%
RHIZOSOLENIA LONGISSETA		63	4.48%
STEPHANODISCUS SP.		54	3.84%
CYCLOTELLA STELLIGERA		41	2.92%
CYCLOTELLA DCELLATA		38	2.70%
RHIZOSOLENIA FRIENSIS.		32	2.28%
STEPHANODISCUS INVISITATUS		27	1.92%
MELOSIRA ITALICA		18	1.28%
MELOSIRA ISLANDICA		14	1.00%
STEPHANODISCUS ASTRAEA		9	0.64%
STEPHANODISCUS MINUTUS		7	0.50%
CYCLOTELLA ATOMUS		5	0.36%
CYCLOTELLA MICHIGANIANA		5	0.36%
CYCLOTELLA PODANICA		2	0.14%
CYCLOTELLA SP.		2	0.14%
TOTAL		423	30.11%
BACILLARIOPHYTA			
PENNALES			
A-656	SYNEURA FILIFORMIS	136	9.68%
	TAFFELARIA FLOCCULOSA	127	9.04%
	ASTERIONELLA FORMOSA	113	8.04%
	FRAGILARIA CROTCHENSIS	95	6.76%
	FRAGILARIA PINNATA	68	4.84%
	DIATOMA TENUE	41	2.92%
	NITZSCHIA SP.	32	2.28%
	FRAGILARIA PINNATA VAR. INTERCEDENS	27	1.92%
	DIATOMA TENUE VAR. ELONGATUM	18	1.28%
	AMPHORA OVALIS VAR. PEDICULUS	14	1.00%
	NITZSCHIA ACICULARIS	14	1.00%
	ACHMANTHES SP.	9	0.64%
	FRAGILARIA VAUCHERIAE	9	0.64%
	SYNEURA FAMELICA	9	0.64%
	CYMBELLA MICROCEPHALA	5	0.36%
	CYMBELLA TURGIDA	5	0.36%
	NITZSCHIA ANGUSTATA VAR. ACUTA	5	0.36%
	NITZSCHIA PALFACIA	5	0.36%
	RHOICOSPHERIA CURVATA	5	0.36%
	SYNEURA DELICATISSIMA VAR. ANGUSTISSIMA	2	0.14%
	SYNEURA ULNA VAR. CHASEANA	2	0.14%
	TOTAL	741	52.74%

TABLE 22 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS.

LOCATION E2 20 JUL 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHLOROPHYTA		
NON-FILAMENTOUS		
SCENEDESMUS ARCUATUS	37	2.63%
ANKISTRODESMUS SPIRALIS	30	2.14%
ANKISTRODESMUS FALCATUS	5	0.36%
KIRCHNERIELLA CONTORTA	3	0.21%
CLUSTERIOPSIS LONGISSIMA	3	0.21%
BOCYSTIS PUSILLA	3	0.21%
SCENEDESMUS LONGUS	3	0.21%
BOCYSTIS PARVA	3	0.21%
TOTAL	87	6.19%
CHRYSOPHYTA		
DINOBRYON SOCIALE	35	2.49%
MONOSIGA SP.	27	1.92%
DINOBRYON DIVERGENS	19	1.35%
STIPITOCOCCUS URCEOLATUS	8	0.57%
TOTAL	89	6.33%
CYANOPHYTA		
NON-FILAMENTOUS		
STICHOSIPHON SP.	3	0.21%
TOTAL	3	0.21%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA TENUIS	59	4.20%
TOTAL	59	4.20%
PYRRHOPHYTA		
PERIDINIUM SP.	3	0.21%
TOTAL	3	0.21%
TOTAL PHYTOPLANKTON	1405.	

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TABLE 23 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 14 AUG 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
MELOSIRA ITALICA	70	4.61%
STEPHANODISCUS SP.	61	4.01%
CYCLOTELLA STELLIGERA	45	2.96%
STEPHANODISCUS BINDERANUS	33	2.17%
CYCLOTELLA BCELLATA	28	1.84%
MELOSIRA ISLANDICA	28	1.84%
RHIZOSOLENIA LONGISETA	11	0.72%
STEPHANODISCUS MINUTUS	8	0.53%
CYCLOTELLA GLOMERATA	6	0.39%
STEPHANODISCUS INVISITATUS	6	0.39%
CYCLOTELLA BOCCANICA	3	0.20%
CYCLOTELLA MICHIGANIANA	3	0.20%
RHIZOSOLENIA ERIENSIS	3	0.20%
STEPHANODISCUS ASTRAEA	3	0.20%
TOTAL	308	20.27%
BACILLARIOPHYTA		
PENNALES		
TABELLARIA FLOCCULOSA	607	39.95%
FRAGILARIA CROTONENSIS	147	9.67%
ASTERIONELLA FORMOSA	86	5.66%
FRAGILARIA PINNATA	42	2.76%
NITZSCHIA SP.	42	2.76%
SYNEDRA FILIFORMIS	39	2.57%
NITZSCHIA ANGUSTATA VAR. ACUTA	28	1.84%
FRAGILARIA PINNATA VAR. INTERCEDENS	19	1.25%
FRAGILARIA INTERMEDIA	14	0.92%
ACHNANTHES SP.	11	0.72%
DIATOMA TENUE	11	0.72%
NITZSCHIA ACICULARIS	11	0.72%
COCCONEIS PEDICULUS	8	0.53%
NITZSCHIA DISSIPATA	8	0.53%
ACHNANTHES MINUTISSIMA	6	0.39%
AMPHIPLEURA PELLUCIDA	6	0.39%
CYMBELLA MICROCEPHALA	6	0.39%
FRAGILARIA LEPTOSTAURON	6	0.39%
FRAGILARIA VAUCHERIAE	6	0.39%
NITZSCHIA DISERTA	6	0.39%
NITZSCHIA PALEA	6	0.39%
SYNEDRA ULNA VAR. CHASEANA	6	0.39%
SURIELLA OVATA	6	0.39%
COCCONEIS PLACENTULA VAR. EUGLYPTA	3	0.20%
SYNEDRA DELICATISSIMA	3	0.20%
TOTAL	1133	74.57%

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TABLE 23 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 14 AUG 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHLOROPHYTA		
NON-FILAMENTOUS		
DICTYOSPHAERIUM PULCHELLUM	27	1.78%
TETRASPORA LAMELLOSA	12	0.79%
STAURASTRUM NATATOR VAR. CRASSUM	5	0.33%
PEDIASTRUM BORYANUM	3	0.20%
OOCYSTIS PARVA	2	0.13%
ANKISTRODESMUS SPIRALIS	1	0.07%
SCENEDESMUS ARCUATUS	< 1	0.04%
KIRCHNERIELLA CONTORTA	< 1	0.04%
ELAKATOTHRIX VIRIDIS	< 1	0.02%
TOTAL	52	3.40%
CHRYSOPHYTA		
MONOSIGA SP.	1	0.07%
TOTAL	1	0.07%
CYANOPHYTA		
NON-FILAMENTOUS		
CHROCOCCUS LIMNETICUS	1	0.07%
TOTAL	1	0.07%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA TENUIS	21	1.38%
OSCILLATORIA LIMNETICA	2	0.13%
TOTAL	23	1.51%
EUGLENOPHYTA		
TRACHELOMONAS HISPIDA	< 1	0.04%
TOTAL	< 1	0.04%
PYRRHOPHYTA		
CERATIUM HIRUNDINELLA	1	0.07%
TOTAL	1	0.07%
TOTAL PHYTOPLANKTON	1519.	

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SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
MELOSIRA ITALICA	96	5.64%
CYCLOTELLA STELLIGERA	75	4.41%
STEPHANODISCUS SP.	71	4.17%
STEPHANODISCUS BINDERANUS	43	2.53%
MELOSIRA ISLANDICA	37	2.18%
CYCLOTELLA OCELLATA	34	2.00%
CYCLOTELLA PSEUDOSTELLIGERA	31	1.82%
STEPHANODISCUS ASTRAEA	12	0.71%
STEPHANODISCUS MINUTUS	12	0.71%
RHIZOSOLENIA LONGISETA	9	0.53%
CYCLOTELLA BODANICA	3	0.18%
RHIZOSOLENIA ERIENSIS	3	0.18%
TOTAL	426	25.05%
BACILLARIOPHYTA		
PENNALES		
TABELLARIA FLOCCULOSA	662	38.92%
FRAGILARIA CROTONENSIS	124	7.29%
ASTERIONELLA FOPMOSA	90	5.29%
FRAGILARIA INTERMEDIA	53	3.12%
SYNEDRA FILIFORMIS	53	3.12%
NITZSCHIA SP.	28	1.65%
NITZSCHIA ACICULARIS	25	1.47%
FRAGILARIA PINNATA	19	1.12%
FRAGILARIA PINNATA VAR. INTERCEDENS	12	0.71%
FRAGILARIA VAUCHERIAE	12	0.71%
NAVICULA SP.	12	0.71%
AMPHORA OVALIS VAR. PEDICULUS	6	0.35%
CALCONEIS BACILLUM	6	0.35%
COCONEIS PEDICULUS	6	0.35%
FRAGILARIA SP.	6	0.35%
NAVICULA GRACILIS	6	0.35%
NITZSCHIA ANGUSTATA VAR. ACUTA	6	0.35%
NITZSCHIA PALEACEA	6	0.35%
NITZSCHIA FONTICOLA	6	0.35%
AMPHIPLEURA PELLUCIDA	3	0.18%
DENTICULA TENUIS VAR. CRASSULA	3	0.18%
SYNEDRA DELICATISSIMA	3	0.18%
TOTAL	1147	67.44%
CHLOROPHYTA		
NON-FILAMENTOUS		
ANKISTRODESMUS SPIRALIS	5	0.29%
SPHAEROCYSTIS SCHRADERI	5	0.29%
ODCYSTIS PUSILLA	3	0.18%
SCENEDESMUS ARCUATUS	3	0.18%

TABLE 24. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 17 AUG 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
COELASTRUM SPHAERICUM	3	0.18%
TETPASPORA GELATINOSA	2	0.12%
DICTYOSPHAERIUM PULCHELLUM	2	0.12%
NEPHROCITIUM OBESUM	2	0.12%
CLUSTERIOPSIS LONGISSIMA	< 1	0.04%
ANKISTRODESMUS FALCATUS	< 1	0.04%
CRUCIGENIA IRREGULARIS	< 1	0.04%
TOTAL	27	1.59%
CHLOROPHYTA FILAMENTOUS		
MOUGEDIOTIA SP.	3	0.18%
TOTAL	3	0.18%
CYANOPHYTA NON-FILAMENTOUS		
COELOSPHAERIUM NAEGELIANUM	51	3.00%
CHROOCOCCUS LIMNETICUS	3	0.18%
STICHOSIPHON SP.	1	0.06%
TOTAL	55	3.23%
CYANOPHYTA FILAMENTOUS		
OSCILLATORIA TENUIS	30	1.76%
OSCILLATORIA LIMNETICA	8	0.47%
TOTAL	38	2.23%
PYRRHOPHYTA		
PERIDINIUM SP.	3	0.18%
CERATIUM HIRUNDINELLA	1	0.06%
TOTAL	4	0.24%
MISCELLANEOUS		
RHODOMONAS SP.	< 1	0.04%
TOTAL	< 1	0.04%
TOTAL PHYTOPLANKTON	1701.	

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SPECIES	UNITS PER ML.	OCCUR- RENCE

BACILLARIOPHYTA
CENTRALES

MELOSIRA ISLANDICA	72	4.30%
MELOSIRA ITALICA	61	3.64%
STEPHANODISCUS SP.	61	3.64%
CYCLOTELLA STELLIGERA	43	2.57%
CYCLOTELLA OCELLATA	32	1.91%
CYCLOTELLA GLOMERATA	11	0.66%
STEPHANODISCUS BINDERANUS	11	0.66%
CYCLOTELLA MICHIGANIANA	8	0.48%
RHIZOSOLENIA LONGISETA	8	0.48%
STEPHANODISCUS MINUTUS	8	0.48%
STEPHANODISCUS SP. 2	8	0.48%
MELOSIRA AMBIGUA	5	0.30%
STEPHANODISCUS ASTRAEA	5	0.30%
CYCLOTELLA PSEUDOSTELLIGERA	3	0.18%
RHIZOSOLENIA ERIENSIS	3	0.18%
STEPHANODISCUS INVISITATUS	3	0.18%
TOTAL	342	20.41%

BACILLARIOPHYTA
PENNALES

TABELLARIA FLOCCULOSA	462	27.57%
FRAGILARIA CAPUCINA	203	12.11%
FRAGILARIA CROTONENSIS	99	5.91%
ASTERIONELLA FORMOSA	61	3.64%
NITZSCHIA SP.	53	3.16%
FRAGILARIA PINNATA	32	1.91%
SYNEDRA FILIFORMIS	21	1.25%
FRAGILARIA VAUCHERIAE	19	1.13%
ACHNANTHES SP.	16	0.95%
FRAGILARIA PINNATA VAR. INTERCEDENS	11	0.66%
SYNEDRA FAMELICA	11	0.66%
NITZSCHIA DISSIPATA	8	0.48%
NITZSCHIA ACICULARIS	5	0.30%
NITZSCHIA ANGUSTATA VAR. ACUTA	5	0.30%
SYNEDRA ULNA VAR. CHASEANA	5	0.30%
NAVICULA GRACILIS	3	0.18%
NAVICULA SP.	3	0.18%
SYNEDRA DELICATISSIMA	3	0.18%
TOTAL	1020	60.87%

CHLOROPHYTA
NON-FILAMENTOUS

STAURASTRUM NATATOR VAR. CRASSUM	1	0.06%
OOCYSTIS PARVA	< 1	0.04%
SCHPOEDERIA SETIGERA	< 1	0.04%
OOCYSTIS LACUSTRIS	< 1	0.02%

TABLE 25. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 14 AUG 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
SCENEDESMUS ARCUATUS	< 1	0.02%
TOTAL	3	0.18%
CHRYSTOPHYTA		
MONOSIGA SP.	2	0.12%
TOTAL	2	0.12%
CYANOPHYTA NON-FILAMENTOUS		
MERISMOPEDIA GLAUCA	262	15.63%
COELOSPHAERIUM NAEGELIANUM	31	1.85%
TOTAL	293	17.48%
CYANOPHYTA FILAMENTOUS		
OSCILLATORIA TENUIS	12	0.72%
OSCILLATORIA LIMNETICA	3	0.18%
TOTAL	15	0.90%
PYRRHOPHYTA		
PERIDINIUM SP.	< 1	0.04%
TOTAL	< 1	0.04%
TOTAL PHYTOPLANKTON	1676.	

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TABLE 26. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS. LOCATION E2 17 AUG 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
CYCLOTELLA OCELLATA	67	4.06%
MELOSIRA ISLANDICA	57	3.46%
MELOSIRA ITALICA	57	3.46%
STEPHANODISCUS SP.	57	3.46%
STEPHANODISCUS BINDERANUS	41	2.49%
CYCLOTELLA STELLIGERA	22	1.33%
STEPHANODISCUS MINUTUS	13	0.79%
STEPHANODISCUS ASTRAEA	10	0.61%
STEPHANODISCUS ALPINUS	3	0.18%
TOTAL	327	19.83%
BACILLARIOPHYTA		
PENNALES		
TABELLARIA FLOCCULOSA	448	27.17%
FRAGILARIA CROTONENSIS	353	21.41%
FRAGILARIA PINNATA	137	8.31%
NITZSCHIA SP.	92	5.58%
ASTERIONELLA FORMOSA	76	4.61%
FRAGILARIA CAPUCINA	70	4.25%
FRAGILARIA PINNATA VAR. INTERCEDENS	45	2.73%
SYNEDRA FILIFORMIS	19	1.15%
NAVICULA SP.	13	0.79%
NITZSCHIA ACICULARIS	13	0.79%
NITZSCHIA ANGUSTATA VAR. ACUTA	10	0.61%
COCCONEIS PEDICULUS	6	0.36%
CYMBELLA TURGIDA	6	0.36%
FRAGILARIA VAUCHERIAE	6	0.36%
TOTAL	1294	78.48%
CHLOROPHYTA		
NON-FILAMENTOUS		
STAUROSTRUM NATATOR VAR. CRASSUM	3	0.18%
COELASTRUM MICROPORUM	3	0.18%
ANKISTRODESMUS SPIRALIS	2	0.12%
SCENEDESMUS ARCUATUS	2	0.12%
SPHAEROCYSTIS SCHROETERI	1	0.06%
SCENEDESMUS DIMORPHUS	1	0.06%
ODCYSTIS GLOEOCYSTIFORMIS	1	0.06%
CLOSTERIOPSIS LONGISSIMA	< 1	0.04%
ODCYSTIS BORGEI	< 1	0.04%
ANKISTRODESMUS FALCATUS	< 1	0.04%
ODCYSTIS PUSILLA	< 1	0.04%
ODCYSTIS SOLITARIA	< 1	0.02%
TOTAL	16	0.97%

TABLE 26 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS. LOCATION E2 17 AUG 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHRYSTOPHYTA		
STIPITOCOCCUS URCEOLATUS	5	0.30%
TOTAL	5	0.30%
CYANOPHYTA		
NON-FILAMENTOUS		
APHANOTHECE NIOULANS	2	0.12%
TOTAL	2	0.12%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA TENUIS	2	0.12%
OSCILLATORIA LIMNETICA	2	0.12%
TOTAL	4	0.24%
PYRRHOPHYTA		
CERATIUM HIRUNDINELLA	< 1	0.04%
TOTAL	< 1	0.04%
TOTAL PHYTOPLANKTON	1649.	

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SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
CYCLOTELLA GLOMERATA	217	11.49%
MELOSIRA ISLANDICA	117	6.20%
CYCLOTELLA OCELLATA	77	4.08%
STEPHANODISCUS SP.	53	2.81%
RHIZOSOLENIA LONGISETA	23	1.22%
MELOSIRA ITALICA	17	0.90%
RHIZOSOLENIA ERIENSIS	13	0.69%
STEPHANODISCUS ASTRAEA	13	0.69%
STEPHANODISCUS BINDERANUS	10	0.53%
CYCLOTELLA BODANICA	7	0.37%
STEPHANODISCUS MINUTUS	3	0.16%
TOTAL	550	29.13%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA CROTONENSIS	351	18.59%
TABELLARIA FLOCCULOSA	194	10.28%
ASTERIONELLA FORMOSA	77	4.08%
NITZSCHIA SP.	70	3.71%
FRAGILARIA PINNATA	53	2.81%
SYNEDRA FILIFORMIS	33	1.75%
NITZSCHIA PALEA	20	1.06%
COCconeis PEDICULUS	17	0.90%
CYMBELLA TURGIDA	13	0.69%
NITZSCHIA ACICULARIS	13	0.69%
NAVICULA SP.	13	0.69%
ACHNANTHES SP.	13	0.69%
CYMBELLA SP.	10	0.53%
GYROSIGMA SP.	7	0.37%
NITZSCHIA DISERTA	7	0.37%
NITZSCHIA DISSIPATA	7	0.37%
SYNEDRA FAMELICA	7	0.37%
NITZSCHIA ANGUSTATA	7	0.37%
SYNEDRA DELICATISSIMA	3	0.16%
TOTAL	915	48.46%
CHLOROPHYTA		
NON-FILAMENTOUS		
SCENEDESMUS ARCUATUS	3	0.16%
STAUROSTRUM PARADOXUM	3	0.16%
COELASTRUM MICROPORUM	3	0.16%
STAUROSTRUM SP.	2	0.11%
SCENEDESMUS ABUNDANS	1	0.05%
GLOEOPHYTIS AMPLA	1	0.05%
SCHROEDERIA SETIGERA	1	0.05%
DICTYOSPHAERIUM PULCHELLUM	< 1	0.04%

TABLE 27 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 4 SEP 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
ANKISTRODESMUS SPIRALIS	< 1	0.04%
CLOSTERIDOPSIS LONGISSIMA	< 1	0.04%
LAGERHEIMIA SUBSALSA	< 1	0.04%
SCENEDESMUS SERRATUS	< 1	0.04%
ELAKATOTHRIX VIRIDIS	< 1	0.03%
ODCYSTIS LACUSTRIS	< 1	0.02%
TOTAL	18	0.97%
CHRYSDOPHYTA		
STIPITOCOCCUS URCEOLATUS	6	0.32%
DINOBRYON DIVERGENS	< 1	0.04%
TOTAL	7	0.35%
CYANOPHYTA		
NON-FILAMENTOUS		
APHANOTHECE NIDULANS	103	5.46%
COELOSPHAERIUM NAEGELIANUM	94	4.98%
APHANOTHECE CASTAGNEI	14	0.74%
CHROOCOCCUS LIMNETICUS	< 1	0.04%
STICHOSIPHON SP.	< 1	0.04%
TOTAL	212	11.25%
CYANOPHYTA		
FILAMENTOUS		
OSCELLATORIA TENUIS	38	2.01%
OSCELLATORIA GEMINATA	23	1.22%
OSCELLATORIA LIMNETICA	10	0.53%
ANABAENA CIRCINALIS	6	0.32%
TOTAL	77	4.08%
PYRRHOPHYTA		
CERATIUM HIRUNDINELLA	1	0.05%
GLENODINIUM SP.	< 1	0.04%
TOTAL	2	0.09%
MISCELLANEOUS		
CRYPTOMONAS OVATA	60	3.18%
RHODOMONAS SP.	47	2.49%
TOTAL	107	5.67%
TOTAL PHYTOPLANKTON	1888.	

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TABLE 28 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 7 SEP 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
CYCLOTELLA GLOMERATA	285	10.27%
STEPHANODISCUS SP.	214	7.71%
CYCLOTELLA OCELLATA	129	4.65%
MELOSIRA ITALICA	111	4.00%
STEPHANODISCUS BINDERANUS	98	3.53%
MELOSIRA ISLANDICA	35	3.06%
RHIZOSOLENIA ERIENSIS	45	1.62%
STEPHANODISCUS MINUTUS	18	0.65%
CYCLOTELLA MENEGHINIANA	13	0.47%
STEPHANODISCUS NIAGARAE	9	0.32%
STEPHANODISCUS ASTRAEA	9	0.32%
CYCLOTELLA SP.	4	0.14%
TOTAL	1020	36.75%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA CROTONENSIS	548	19.75%
TABELLARIA FLOCCULOSA	187	6.74%
FRAGILARIA PINNATA	160	5.77%
ASTERIONELLA FORMOSA	116	4.18%
SYNEDRA FILIFORMIS	89	3.21%
NITZSCHIA SP.	85	3.06%
NITZSCHIA ACICULARIS	49	1.77%
NITZSCHIA PALEA	45	1.62%
NITZSCHIA ANGUSTATA	27	0.97%
CYMBELLA TURGIDA	18	0.65%
FRAGILARIA LEPTOSTAURON	13	0.47%
COCCONEIS PEDICULUS	9	0.32%
NAVICULA SP.	9	0.32%
SURIPELLA ANGUSTA	9	0.32%
NITZSCHIA DISERTA	9	0.32%
SYNEDRA DELICATISSIMA VAR. ANGUSTISSIMA	9	0.32%
SYNEDRA ULNA VAR. CHASEANA	9	0.32%
CYMBELLA VENTRICOSA	9	0.32%
SYNEDRA SP.	9	0.32%
TOTAL	1409	50.77%
CHLOROPHYTA		
NON-FILAMENTOUS		
DICTYOSPHAERIUM PULCHELLUM	14	0.50%
ANKISTRODESMUS SPIRALIS	10	0.36%
CRUCIGENIA QUADRATA	4	0.14%
STAUSTRUM SP.	3	0.11%
SCENEDESMUS ARCUATUS	3	0.11%
DOCCYSTIS LACUSTRIS	2	0.07%
TETRAEDRON REGULARE VAR. INCUS FA. MAJOR	1	0.04%

TABLE 28. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 7 SEP 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CRUCIGENIA IRREGULARIS	1	0.04%
OOCYSTIS BORGEI	1	0.04%
OOCYSTIS GLOEOCYSTIFORMIS	1	0.04%
GLOEOCYSTIS AMPLA	1	0.04%
SCENEDESMUS QUADRICAUDA	< 1	0.02%
ANKISTRODESMUS FALCATUS	< 1	0.02%
OOCYSTIS PARVA	< 1	0.01%
TOTAL	43	1.54%
CHRYSTOPHYTA		
STIPITOCOCCUS URCEOLATUS	5	0.18%
DINOBRYON DIVERGENS	1	0.04%
TOTAL	6	0.22%
CYANOPHYTA NON-FILAMENTOUS		
COELOSPHAERIUM NAEGELIANUM	108	3.89%
APHANOTHECE NIDULANS	59	2.13%
APHANOTHECE CASTAGNEI	10	0.36%
GLOEOCAPSA AERUGINOSA	5	0.18%
CHROOCOCCUS LIMNETICUS	2	0.07%
CHROOCOCCUS PRESCOTTII	1	0.04%
TOTAL	185	6.67%
CYANOPHYTA FILAMENTOUS		
OSCELLATORIA GEMINATA	38	1.37%
OSCELLATORIA TENUIS	7	0.25%
ANABAENA CIRCINALIS	< 1	0.03%
TOTAL	46	1.65%
PYRRHOPHYTA		
CERATIUM HIRUNDINELLA	3	0.11%
GLENODINIUM SP.	< 1	0.02%
TOTAL	4	0.13%
MISCELLANEOUS		
RHODOMONAS SP.	38	1.37%
CRYPTOMONAS OVATA	25	0.90%
TOTAL	63	2.27%
TOTAL PHYTOPLANKTON	2775.	

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SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
CYCLOTELLA GLOMERATA	160	7.74%
MELOSIRA ISLANDICA	100	4.83%
CYCLOTELLA OCELLATA	97	4.69%
STEPHANODISCUS BINDERANUS	33	1.60%
MELOSIRA ITALICA	33	1.60%
STEPHANODISCUS SP.	27	1.31%
CYCLOTELLA MICHIGANIANA	23	1.11%
MELOSIRA GRANULATA	23	1.11%
RHIZOSOLENIA ERIENSIS	17	0.82%
STEPHANODISCUS ASTRAEA	13	0.63%
CYCLOTELLA KUTZINGIANA	10	0.48%
RHIZOSOLENIA LONGISETA	10	0.48%
STEPHANODISCUS NIAGARAE	10	0.48%
CYCLOTELLA BODANICA	3	0.15%
TOTAL	559	27.03%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA CROTONENSIS	304	14.70%
TABELLARIA FLOCCULOSA	200	9.67%
FRAGILARIA CAPUCINA	100	4.83%
SYNEDRA FILIFORMIS	87	4.21%
ASTERIONELLA FORMOSA	43	2.08%
FRAGILARIA PINNATA	40	1.93%
NITZSCHIA SP.	30	1.45%
NITZSCHIA ACICULARIS	27	1.31%
NITZSCHIA ANGUSTATA	27	1.31%
CYMBELLA MICROCEPHALA	20	0.97%
NITZSCHIA DISSIPATA	13	0.63%
SYNEDRA FANELICA	13	0.63%
NITZSCHIA PALFA	13	0.63%
COCCONEIS PEDICULUS	13	0.63%
NAVICULA SP.	13	0.63%
SYNEDRA ULNA VAR. CHASEANA	13	0.63%
FRAGILARIA INTERMEDIA	13	0.63%
FRAGILARIA LEPTOSTAURON	7	0.34%
DIATOMA TENUE VAR. ELONGATUM	7	0.34%
NEIDIUM SP.	7	0.34%
CYMBELLA SP.	7	0.34%
TOTAL	997	48.20%

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TABLE 29. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 4 SEP 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHLOROPHYTA		
NON-FILAMENTOUS		
DICTYOSPHAERIUM PULCHELLUM	5	0.24%
SCENEDESMUS ARCUATUS	5	0.24%
ANKISTRODESMUS SPIRALIS	3	0.15%
BOCYSTIS LACUSTRIS	3	0.15%
CRUCIGENIA QUADRATA	3	0.15%
BOCYSTIS GLOBOCYSTIFORMIS	3	0.15%
ANKISTRODESMUS FALCATUS	2	0.10%
SCENEDESMUS LONGUS	1	0.05%
STAUROSTRUM SP.	1	0.05%
SCENEDESMUS OPOLIENSIS	1	0.05%
GLOBOCYSTIS AMPLA	< 1	0.03%
SCENEDESMUS ABUNDANS	< 1	0.03%
CLOSTERIOPSIS LONGISSIMA VAR. TROPICA	< 1	0.03%
TETRAEDRON MINIMUM	< 1	0.03%
ELAKATOTHRIS VIRIDIS	< 1	0.02%
BOCYSTIS SOLITARIA	< 1	0.01%
TOTAL	30	1.47%
CHRYSTOPHYTA		
STIPITOCOCCUS URCEOLATUS	5	0.24%
DINOBRYON DIVERGENS	3	0.15%
TOTAL	8	0.39%
CYANOPHYTA		
NON-FILAMENTOUS		
APHANOTHECE NIDULANS	102	4.93%
COELOSPHERIUM NAEGELIANUM	94	4.54%
GOMPHOSPHERIA LACUSTRIS VAR. COMPACTA	48	2.32%
GLOBOCAPSA AERUGINOSA	37	1.79%
APHANOTHECE CASTAGNEI	15	0.73%
CHROOCOCCUS LIMNETICUS	3	0.15%
TOTAL	299	14.46%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA TENUIS	33	1.60%
OSCILLATORIA GEMINATA	32	1.55%
ANABAENA CIRCINALIS	5	0.24%
TOTAL	70	3.38%

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TABLE 29 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 4 SEP 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
PYRRHOPHYTA		
CERATIUM HIRUNDINELLA	3	0.15%
GLENODINIUM SP.	1	0.05%
TOTAL	4	0.19%
MISCELLANEOUS		
CRYPTOMONAS OVATA	68	3.29%
RHODDOMONAS SP.	33	1.60%
TOTAL	101	4.88%
TOTAL PHYTOPLANKTON	2068.	

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TABLE 30 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS.

LOCATION E2 7 SEP 1973

SPECIES		UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA			
CENTRALES			
CYCLOTELLA GLOMERATA		209	8.65%
MELOSIRA ITALICA		142	5.87%
CYCLOTELLA OCELLATA		111	4.59%
MELOSIRA ISLANDICA		76	3.14%
STEPHANODISCUS SP.		27	1.12%
CYCLOTELLA SP.		27	1.12%
STEPHANODISCUS TRANSILVANICUS		18	0.74%
STEPHANODISCUS ASTRAEA		18	0.74%
RHIZOSOLENIA LONGISETA		13	0.54%
RHIZOSOLENIA ERIENSIS		13	0.54%
CYCLOTELLA BODANICA		9	0.37%
STEPHANODISCUS BINDERANUS		9	0.37%
CYCLOTELLA STELLIGERA		9	0.37%
STEPHANODISCUS MINUTUS		9	0.37%
CYCLOTELLA KUTZINGIANA		4	0.17%
TOTAL		694	28.71%
BACILLARIOPHYTA			
PENNALES			
A-673	FRAGILARIA CROTONENSIS	703	29.08%
	FRAGILARIA PINNATA	196	8.11%
	NITZSCHIA SP.	160	6.62%
	ASTERIONELLA FORMOSA	134	5.54%
	TABELLARIA FLOCCULOSA	129	5.34%
	NITZSCHIA ACICULARIS	36	1.49%
	SYNEDRA FAMELICA	27	1.12%
	SYNEDRA FILIFORMIS	22	0.91%
	FRAGILARIA SP.	18	0.74%
	NITZSCHIA ANGUSTATA	18	0.74%
	COCCONEIS PEDICULUS	13	0.54%
	CYMBELLA MICROCEPHALA	13	0.54%
	CYMBELLA SP.	13	0.54%
	NITZSCHIA DISSIPATA	9	0.37%
	NITZSCHIA PALEA	9	0.37%
	NAVICULA SP.	9	0.37%
	TOTAL	1509	62.43%
CHLOROPHYTA			
NON-FILAMENTOUS			
	SCENEDESMUS ARCUATUS	10	0.41%
	ANKISTRODESMUS SPIRALIS	3	0.12%
	OOCYSTIS GLOEOCYSTIFORMIS	3	0.12%
	COELASTRUM MICROPORUM	3	0.12%
	ANKISTRODESMUS FALCATUS	2	0.08%
	ELAKATOTHRIX VIRIDIS	1	0.04%
	OOCYSTIS SOLITARIA	1	0.04%

TABLE 30 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS. LOCATION E2 7 SEP 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
SPHAEROCYSTIS SCHROETERI	< 1	0.03%
SCENEDESMUS QUADRICAUDA	< 1	0.03%
CLOSTERIOPSIS LONGISSIMA VAR. TROPICA	< 1	0.03%
SCENEDESMUS ABUNDANS	< 1	0.03%
TOTAL	26	1.06%
CHLOROPHYTA		
FILAMENTOUS		
MOUGESOTIA SP.	3	0.12%
TOTAL	3	0.12%
CHRYSTOPHYTA		
DINOBRYON DIVERGENS	1	0.04%
TOTAL	1	0.04%
CYANOPHYTA		
NON-FILAMENTOUS		
COELOSPHAERIUM NAEGELIANUM	73	3.02%
APHANOTHECE NIOULANS	68	2.81%
GLUEOCAPSA AERUGINOSA	20	0.83%
APHANOTHECE CASTAGNEI	10	0.41%
STICHOSIPHON SP.	< 1	0.03%
TOTAL	172	7.10%
CYANOPHYTA		
FILAMENTOUS		
OSCELLATORIA GEMINATA	3	0.12%
OSCELLATORIA TENUIS	2	0.08%
TOTAL	5	0.21%
PYRRHOPHYTA		
GLENDINIUM SP.	1	0.04%
CERATIUM HIRUNDINELLA	< 1	0.03%
TOTAL	2	0.07%
MISCELLANEOUS		
CRYPTOMONAS OVATA	3	0.12%
RHODOMONAS SP.	3	0.12%
TOTAL	6	0.25%
TOTAL PHYTOPLANKTON	2417.	

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TABLE 31 -PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 23 OCT 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
STEPHANODISCUS SP.	217	10.32%
CYCLUTELLA OCELLATA	60	2.85%
MELOSIRA ITALICA	43	2.05%
STEPHANODISCUS ASTRAEA	43	2.05%
CYCLUTELLA GLUMERATA	40	1.90%
CYCLUTELLA MICHIGANIANA	33	1.57%
MELOSIRA ISLANDICA	30	1.43%
CYCLUTELLA STELLIGERA	27	1.28%
RHIZOSOLENIA ERIENSIS	13	0.62%
STEPHANODISCUS MINUTUS	13	0.62%
STEPHANODISCUS NIAGARAE	7	0.33%
STEPHANODISCUS TRANSILVANICUS	7	0.33%
RHIZOSOLENIA LONGISETA	3	0.14%
CYCLUTELLA MENEGHINIANA	3	0.14%
TOTAL	539	25.64%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA CROTONENSIS	207	9.85%
ASTERIONELLA FORMOSA	140	6.66%
FRAGILARIA PINNATA	134	6.37%
SYNEDRA FILIFORMIS	114	5.42%
NITZSCHIA SP.	104	4.95%
TABELLARIA FLOCCULOSA	60	2.85%
NITZSCHIA FONTICOLA	30	1.43%
NITZSCHIA ANGUSTATA	27	1.28%
COCconeis PEDICULUS	20	0.95%
SYNEDRA FAMELICA	20	0.95%
NITZSCHIA ACICULARIS	20	0.95%
NAVICULA SP.	17	0.81%
FRAGILARIA LEPTOSTAURON	17	0.81%
CYMBELLA MICROCEPHALA	13	0.62%
SYNEDRA DELICATISSIMA VAR. ANGUSTISSIMA	13	0.62%
NITZSCHIA PALEA	13	0.62%
NAVICULA HUNGARICA	7	0.33%
FRAGILARIA INTERMEDIA	7	0.33%
AMPHORA SP.	7	0.33%
SURIRELLA OVALIS	7	0.33%
DIATOMA SP.	7	0.33%
NITZSCHIA DISSIPATA	7	0.33%
RHIZOSPHENIA CURVATA	7	0.33%
NITZSCHIA DISERTA	7	0.33%
GYROSIGMA SP.	3	0.14%
TOTAL	1008	47.95%

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TABLE 31. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 23 OCT 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHLOROPHYTA		
NON-FILAMENTOUS		
SCENEDESMUS ARCUATUS	4	0.19%
CHLAMYDOMONAS SP.	3	0.14%
STAUROSTRUM SP.	3	0.14%
DUCYSTIS PARVA	2	0.10%
ELAKATOTHRIX VIRIDIS	1	0.05%
ANKISTRODESMUS SPIRALIS	1	0.05%
ANKISTRODESMUS FALCATUS	1	0.05%
SCENEDESMUS QUADRICAUDA	1	0.05%
TOTAL	16	0.76%
CHLOROPHYTA		
FILAMENTOUS		
GEMINELLA MINOR	6	0.29%
TOTAL	6	0.29%
CYANOPHYTA		
NON-FILAMENTOUS		
COELOSPHAERIUM NAEGELIANUM	239	11.37%
APHANOCAPSA DELICATISSIMA	61	2.90%
MICROCYSTIS INCERTA	52	2.47%
APHANOTHECE CASTAGNEI	23	1.09%
APHANOTHECE CLATHRATA	22	1.05%
CHROOCOCCUS PRESCOTTII	10	0.48%
APHANOTHECE NIDULANS	8	0.38%
CHROOCOCCUS LIMNETICUS	1	0.05%
TOTAL	416	19.79%
CYANOPHYTA		
FILAMENTOUS		
ANABAENA FLOS-AQUAE	25	1.19%
OSCILLATORIA TENUIS	12	0.57%
ANABAENA SP.	12	0.57%
ANABAENA CIRCINALIS	6	0.29%
LYNGBYA CONTORTA	6	0.29%
TOTAL	61	2.90%
PYRRHOPHYTA		
GLENODINIUM SP.	1	0.05%
TOTAL	1	0.05%

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TABLE 31. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 23 OCT 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
MISCELLANEOUS		
CRYPTOMONAS OVATA	29	1.38%
RHODOMONAS MINUTA VAR. NANNOPLANCTONICA	19	0.90%
CRYPTOMONAS ERUSA	4	0.19%
CHLOMONAS SP.	3	0.14%
TOTAL	55	2.62%
TOTAL PHYTOPLANKTON	2102.	

TABLE 32: PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 26 OCT 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
CYCLOTELLA GLOMERATA	147	5.38%
STEPHANODISCUS SP.	129	4.72%
CYCLOTELLA MICHIGANIANA	62	2.27%
CYCLOTELLA OCELLATA	58	2.12%
STEPHANODISCUS ASTRAEA	53	1.94%
MELONIA ITALICA	45	1.65%
CYCLOTELLA SP.	40	1.46%
STEPHANODISCUS MINUTUS	36	1.32%
CYCLOTELLA STELLIGERA	27	0.99%
STEPHANODISCUS BINDERANUS	22	0.80%
RHIZOSOLENIA ERIENSIS	22	0.80%
MELOSIRA ISLANDICA	22	0.80%
CYCLOTELLA KUTZINGIANA	18	0.66%
RHIZOSOLENIA LONGISETA	13	0.48%
MELOSIRA GRANULATA	9	0.33%
TOTAL	703	25.72%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA PINNATA	387	14.16%
NITZSCHIA SP.	245	9.96%
SYNEDRA FILIFORMIS	183	6.70%
ASTERIONELLA FORMOSA	174	6.37%
FRAGILARIA CROTCHENSIS	125	4.57%
NITZSCHIA ACICULARIS	89	3.26%
NITZSCHIA DISERTA	80	2.93%
TABELLARIA FLOCCULOSA	53	1.94%
NITZSCHIA HOLSATICA	45	1.65%
NITZSCHIA ANGUSTATA	36	1.32%
NITZSCHIA DISSIPATA	36	1.32%
FRAGILARIA CONSTRUENS	36	1.32%
FRAGILARIA LEPTOSTAURON	22	0.80%
SURIKELLA OVATA	18	0.66%
SYNEDRA SP.	18	0.66%
COCconeis PEDICULUS	18	0.66%
NAVICULA SP.	18	0.66%
NAVICULA TRIPUNCTATA	18	0.66%
SYNEDRA FAMELICA	9	0.33%
CYMBELLA MICROCEPHALA	9	0.33%
NITZSCHIA FONTICOLA	9	0.33%
COCconeis SP.	9	0.33%
NITZSCHIA PALEA	9	0.33%
FONTICULA SP.	9	0.33%
AMPHORA SP.	9	0.33%
TOTAL	1664	60.88%

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TABLE 32 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 26 OCT 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHLOROPHYTA NON-FILAMENTOUS		
CRUCIGENIA QUADRATA	16	0.59%
CHLAMYDOMONAS SP.	4	0.15%
ANKISTRODESMUS FALCATUS	4	0.15%
ODCYSTIS PARVA	3	0.11%
ANKISTRODESMUS SPIRALIS	3	0.11%
NEPHROCYTIUM AGARDHIANUM	1	0.04%
SCENEDESMUS BIJUGA	1	0.04%
ELAKATOTHRIX VIRIDIS	< 1	0.02%
SCENEDESMUS ARCUATUS	< 1	0.02%
TOTAL	33	1.22%
CYANOPHYTA NON-FILAMENTOUS		
COELOSPHAERIUM NAEGELIANUM	119	4.35%
APHANOCAPSA DELICATISSIMA	60	2.20%
APHANOTHECE CLATHRATA	52	1.90%
APHANOTHECE CASTAGNEI	15	0.55%
APHANOCAPSA ELACHISTA	10	0.37%
CHRODOCCOCUS LIMNETICUS	8	0.29%
APHANOTHECE NIDULANS	5	0.18%
CHRODOCCOCUS PRESCOTTII	5	0.18%
TOTAL	274	10.02%
CYANOPHYTA FILAMENTOUS		
OSCILLATORIA TENUIS	30	1.10%
APHANIZOMENON FLOS-AQUAE	19	0.70%
ANABAENA SP.	6	0.22%
TOTAL	55	2.01%
MISCELLANEOUS		
CRYPTOMONAS OVATA	3	0.11%
CRYPTOMONAS SP.	1	0.04%
TOTAL	4	0.15%
TOTAL PHYTOPLANKTON	2733.	

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TABLE 33 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 23 OCT 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
MELOSIRA ITALICA	83	4.47%
STEPHANODISCUS SP.	75	4.04%
CYCLOSTELLA GLOMERATA	41	2.21%
STEPHANODISCUS ASTRAEA	24	1.29%
CYCLOSTELLA OCELLATA	24	1.29%
CYCLOSTELLA SP.	22	1.19%
STEPHANODISCUS MINUTUS	22	1.19%
CYCLOSTELLA MICHIGANIANA	19	1.02%
STEPHANODISCUS BINDERANUS	12	0.65%
RHIZOSOLENIA LONGISETA	7	0.38%
CYCLOSTELLA KUTZINGIANA	5	0.27%
STEPHANODISCUS HANTZSCHII	5	0.27%
MELOSIRA ISLANDICA	5	0.27%
MELOSIRA GRANULATA	2	0.11%
TOTAL	346	18.65%

BACILLARIOPHYTA
PENNALES

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FRAGILARIA PINNATA	211	11.37%
FRAGILARIA CROTONENSIS	114	6.14%
ASTERIONELLA FORMOSA	66	3.56%
TABELLARIA FLOCCULOSA	58	3.13%
SYNEURA FILIFORMIS	44	2.37%
FRAGILARIA CONSTRUENS	44	2.37%
NITZSCHIA SP.	44	2.37%
NITZSCHIA ACICULARIS	29	1.56%
NITZSCHIA PALEA	24	1.29%
SYNEURA FAMELICA	19	1.02%
NITZSCHIA ANGUSTATA	19	1.02%
NITZSCHIA DISERTA	15	0.81%
NAVICULA SP.	12	0.65%
NITZSCHIA DISSIPATA	5	0.27%
SYNEURA SP.	5	0.27%
ACHNANTHES CLEVEI	5	0.27%
AMPHIPLEURA PELLUCIDA	5	0.27%
CYMBELLA SP.	5	0.27%
AMPHORA SP.	5	0.27%
GYROSOMA SP.	2	0.11%
TOTAL	731	39.39%

CHLOROPHYTA
NON-FILAMENTOUS

DICTYOSPHAERIUM PULCHELLUM	11	0.59%
TETRASPIRA LAMELLOSA	11	0.59%
COELASTRUM SPHAERICUM	11	0.59%
SCENEDESMUS ARCUATUS	5	0.27%

TABLE 33 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 23 OCT 1973

	SPECIES	UNITS	OCUR-
		PER ML.	RENCE
	CHLAMYDOMONAS SP.	5	0.27%
	STAUROSTRUM SP.	5	0.27%
	SCENEDESMUS ARUNDANS	3	0.16%
	BOCYSTIS PARVA	1	0.05%
	CRUCIGENIA QUADRATA	1	0.05%
	BOCYSTIS SOLITARIA	1	0.05%
	SPONDYLOSIUM PLANUM	1	0.05%
	ELAKATUTHRIX VIRIDIS	< 1	0.04%
	TOTAL	56	3.00%
	CHLOROPHYTA		
	FILAMENTOUS		
	MOUCENTIA SP.	6	0.32%
	TOTAL	6	0.32%
	CHRYSOPHYTA		
	DINOBRYON DIVERGENS	10	0.54%
	TOTAL	10	0.54%
	CYANOPHYTA		
	NON-FILAMENTOUS		
	COELOSPHAERIUM NAEGELIANUM	512	27.59%
	APHANOCAPSA DELICATISSIMA	51	3.29%
	APHANOTHECE NIJULANS	11	0.59%
	MICROCYSTIS INCERTA	11	0.59%
	APHANOCAPSA ELACHISTA	8	0.43%
	APHANOTHECE CASTAGNEI	7	0.38%
	CHROOCOCCUS LIMNETICUS	2	0.11%
	TOTAL	612	32.98%
	CYANOPHYTA		
	FILAMENTOUS		
	ANABAENA CIRCINALIS	16	0.86%
	ANABAENA SP.	12	0.65%
	TOTAL	28	1.51%
	MISCELLANEOUS		
	CRYPTOMONAS OVATA	38	2.05%
	RHODOMONAS MINUTA VAR. NANOPLANKTONICA	14	0.75%
	RHODOMONAS MINUTA	11	0.59%
	CHROMONAS SP.	3	0.16%
	CRYPTOMONAS EROSA	1	0.05%
	TOTAL	67	3.61%
	TOTAL PHYTOPLANKTON	1856.	

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TABLE 34. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS. LOCATION E2 26 OCT 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
STEPHANODISCUS SP.	107	5.40%
STEPHANODISCUS ASTRAEA	53	2.67%
CYCLOTELLA GLOMERATA	42	2.12%
MELOSIRA ITALICA	38	1.92%
CYCLOTELLA SP.	34	1.71%
CYCLOTELLA OCELLATA	27	1.36%
STEPHANODISCUS MINUTUS	27	1.36%
MELOSIRA GRANULATA	23	1.16%
CYCLOTELLA STELLIGERA	15	0.76%
CYCLOTELLA KUTZINGIANA	8	0.40%
CYCLOTELLA BODANICA	8	0.40%
CYCLOTELLA MICHIGANIANA	8	0.40%
STEPHANODISCUS BINDERANUS	8	0.40%
RHIZOSOLENIA ERIENSIS	4	0.20%
TOTAL	402	20.28%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA PINNATA	248	12.51%
SYNEDRA FILIFORMIS	218	11.00%
NITZSCHIA SP.	214	10.79%
ASTERIONELLA FORMOSA	126	6.36%
FRAGILARIA INTERMEDIA	122	6.15%
NITZSCHIA ACICULARIS	76	3.83%
NITZSCHIA ANGUSTATA	69	3.48%
FRAGILARIA CROTCHENSIS	61	3.08%
TABELLARIA FLOCCULOSA	53	2.67%
NITZSCHIA PALEA	23	1.16%
NITZSCHIA FONTICOLA	23	1.16%
COCCONEIS PEDICULUS	15	0.76%
SYNEDRA SP.	15	0.76%
SYNEDRA FAMELICA	15	0.76%
CYMBELLA SP.	15	0.76%
CYMBELLA MICROCEPHALA	15	0.76%
NITZSCHIA DISERTA	11	0.55%
ACHNANTHES MINUTISSIMA	8	0.40%
NITZSCHIA DISSIPATA	8	0.40%
FRAGILARIA LEPTOSTAURON	8	0.40%
DIATOMA SP.	8	0.40%
NAVICULA SP.	8	0.40%
FRAGILARIA CAPUCINA	8	0.40%
ACHNANTHES CLEVEI	4	0.20%
TOTAL	1371	69.15%

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TABLE 34. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS. LOCATION E2 26 OCT 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHLOROPHYTA		
NON-FILAMENTOUS		
ANKISTRODESMUS SPIRALIS	8	0.40%
ANKISTRODESMUS FALCATUS	4	0.20%
TETRAEDRON MINIMUM	3	0.15%
ELAKATOTHRIX VIRIDIS	1	0.05%
SCENEDESMUS ARCUATUS	1	0.05%
OOCYSTIS GLOEOCYSTIFORMIS	1	0.05%
SCENEDESMUS QUADRICAUDA	1	0.05%
CLOSTERIDOPSIS LONGISSIMA VAR. TROPICA	1	0.05%
OOCYSTIS PUSILLA	1	0.05%
OOCYSTIS PARVA	< 1	0.03%
TOTAL	22	1.09%
CHRYSOPHYTA		
DINOBRYON DIVERGENS	3	0.15%
MALLONNAS PRODUCTA	1	0.05%
TOTAL	4	0.20%
CYANOPHYTA		
NON-FILAMENTOUS		
COELOSPHAERIUM NAEGELIANUM	68	3.43%
APHANOCAPSA DELICATISSIMA	27	1.36%
CHROOCOCCUS LIMNETICUS	16	0.81%
APHANOTHECE CASTAGNEI	15	0.76%
APHANOTHECE NIDULANS	10	0.50%
CHROOCOCCUS PRESCOTTII	10	0.50%
MICROCYSTIS INCERTA	7	0.35%
TOTAL	153	7.72%
CYANOPHYTA		
FILAMENTOUS		
OSCELLATORIA SP.	18	0.91%
LYNGBYA CONTORTA	8	0.40%
APHANIZOMENON FLOS-AQUAE	4	0.20%
TOTAL	30	1.51%
MISCELLANEOUS		
CRYPTOMONAS OVATA	1	0.05%
TOTAL	1	0.05%
TOTAL PHYTOPLANKTON	1983.	

TABLE 35. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 13 NOV 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
STEPHANODISCUS SP.	118	4.25%
MEIOSIRA ITALICA	54	2.31%
CYCLOTELLA OCELLATA	64	2.31%
CYCLOTELLA SP.	27	0.97%
CYCLOTELLA KUTZINGIANA	11	0.40%
CYCLOTELLA MICHIGANIANA	11	0.40%
CYCLOTELLA GLOMERATA	11	0.40%
STEPHANODISCUS ASTRAEA	11	0.40%
STEPHANODISCUS MINUTUS	11	0.40%
TOTAL	328	11.82%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA PINNATA	1458	52.53%
NITZSCHIA SP.	160	5.77%
TABELLARIA FLOCCULOSA	96	3.46%
FRAGILARIA CROTONENSIS	96	3.46%
NAVICULA SP.	59	2.13%
CYMBELLA MICROCEPHALA	43	1.55%
CYCLONEIS PEDICULUS	43	1.55%
FRAGILARIA VAUCHERIAE	43	1.55%
FRAGILARIA INTERMEDIA	43	1.55%
AMPHORA OVALIS VAR. PEDICULUS	32	1.15%
NITZSCHIA ANGUSTATA	32	1.15%
ASTERIONELLA FORMOSA	32	1.15%
NITZSCHIA FONTICOLA VAR. CAPITATA	21	0.76%
NITZSCHIA ACICULARIS	21	0.76%
NITZSCHIA DISSIPATA	21	0.76%
CYMBELLA VENTRICOSA	11	0.40%
SURIPELLA ANGUSTA	11	0.40%
SYNEDRA FILIFORMIS	11	0.40%
AMPHORA OVALIS	11	0.40%
ACHNANTHES SP.	5	0.18%
TOTAL	2249	81.03%
CHLOROPHYTA		
NON-FILAMENTOUS		
ANKISTRODESMUS SPIRALIS	7	0.25%
SCENEDESMUS ARCUATUS	5	0.18%
ANKISTRODESMUS FALCATUS	4	0.14%
STAUROSTRUM CURVATUM	3	0.11%
STAUROSTRUM SP.	3	0.11%
SCENEDESMUS ABUNDANS	1	0.04%
DICTYOSPHAERIUM PULCHELLUM	1	0.04%
CRUCIGENIA QUADRATA	1	0.04%
SCENEDESMUS DENTICULATUS	1	0.04%

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TABLE 35 . PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 19 NOV 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
ODOCYSTIS PARVA	1	0.04%
ELAKATOTHRIX VIRIDIS	< 1	0.02%
TOTAL	28	1.00%
CHRYSDOPHYTA		
DINOBRYON DIVERGENS	1	0.04%
TOTAL	1	0.04%
CYANOPHYTA		
NON-FILAMENTOUS		
APHANOCAPSA DELICATISSIMA	12	0.43%
APHANOTHECE CLATHRATA	8	0.29%
APHANOCAPSA ELACHISTA	5	0.18%
CHROOCOCCUS PRESCOTTII	5	0.18%
APHANOTHECE NIDULANS	5	0.18%
CHROOCOCCUS LIMNETICUS	< 1	0.02%
TOTAL	36	1.29%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA LIMNETICA	12	0.43%
OSCILLATORIA GEMINATA	8	0.29%
TOTAL	20	0.72%
EUGLENOPHYTA		
PHACUS CAUDATUS	1	0.04%
TOTAL	1	0.04%
MISCELLANEOUS		
RHODOMONAS MINUTA VAR. NANNOPLANCTICA	55	1.98%
CHLOMONAS SP.	40	1.44%
CRYPTOMONAS OVATA	18	0.65%
TOTAL	113	4.07%
TOTAL PHYTOPLANKTON	2775.	

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TABLE 36 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 21 NOV 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
STEPHANODISCUS SP.	134	3.41%
STEPHANODISCUS MINUTUS	53	1.35%
STEPHANODISCUS ASTRAEA	36	0.92%
CYCLOTELLA OCELLATA	36	0.92%
MELOSIRA ITALICA	27	0.69%
CYCLOTELLA KUTZINGIANA	18	0.46%
CYCLOTELLA MICHIGANIANA	18	0.46%
MELOSIRA ISLANDICA	18	0.46%
CYCLOTELLA STELLIGERA	18	0.46%
MELOSIRA GRANULATA	18	0.46%
CYCLOTELLA GLOMERATA	9	0.23%
CYCLOTELLA SP.	9	0.23%
TOTAL	334	10.03%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA PINNATA	2075	52.80%
NITZSCHIA SP.	157	4.76%
FRAGILARIA CONSTRUENS	142	3.61%
TABELLARIA FLOCCULOSA	125	3.18%
FRAGILARIA CROTONENSIS	107	2.72%
ASTERIONELLA FORMOSA	107	2.72%
FRAGILARIA INTERMEDIA	89	2.26%
COCCONEIS PEDICULUS	71	1.81%
NITZSCHIA ANGSTATA	53	1.35%
CYMBELLA MICROCEPHALA	53	1.35%
GOMPHONEMA SP.	53	1.35%
CYMBELLA VENTRICOSA	45	1.15%
DIATOMA SP.	36	0.92%
FRAGILARIA VAUCHERIAE	36	0.92%
FRAGILARIA CAPUCINA	36	0.92%
NITZSCHIA FONTICOLA VAR. CAPITATA	36	0.92%
SYNEDRA DELICATISSIMA	18	0.46%
FRAGILARIA LEPTOSTAURON	18	0.46%
NITZSCHIA ACICULARIS	18	0.46%
SYNEDRA FILIFORMIS	18	0.46%
NAVICULA CRYPTOCEPHALA	18	0.46%
NITZSCHIA DISSIPATA	18	0.46%
AMPHORA OVALIS VAR. PEDICULUS	18	0.46%
CYMBELLA SP.	18	0.46%
NAVICULA SP.	18	0.46%
ACHNANTHES SP.	9	0.23%
TOTAL	3422	87.07%

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TABLE 36. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 21 NOV 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHLOROPHYTA		
NON-FILAMENTOUS		
ANKISTRODESMUS SPIRALIS	14	0.36%
COSMARIUM DEPRESSUM	3	0.08%
ANKISTRODESMUS FALCATUS	3	0.08%
ODOCYSTIS PARVA	2	0.05%
SCENEDESMUS ACUMINATUS	1	0.03%
SCENEDESMUS QUADRICAUDA	1	0.03%
QUADRIGULA CHODATII	1	0.03%
STAUROSTRUM SP.	1	0.03%
ANKISTRODESMUS FALCATUS VAR. MIRABILIS	1	0.03%
ELAKATOTHRIX VIRIDIS	1	0.03%
SCENEDESMUS BIJUGA	1	0.03%
TOTAL	29	0.74%
CHRYSDOPHYTA		
DINOBRYON DIVERGENS	12	0.31%
DINOBRYON SOCIALE	3	0.08%
TOTAL	15	0.38%
CYANOPHYTA		
NON-FILAMENTOUS		
APHANOTHECE CLATHRATA	8	0.20%
APHANOCAPSA DELICATISSIMA	4	0.10%
APHANOCAPSA ELACHISTA	3	0.08%
CHRODOCCUS PRESCOTTII	3	0.08%
CHRODOCCUS LIMNETICUS	2	0.05%
TOTAL	20	0.51%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA GEMINATA	10	0.25%
OSCILLATORIA LIMNETICA	10	0.25%
ANABAENA FLOS-AQUAE	2	0.05%
TOTAL	22	0.56%
MISCELLANEOUS		
CHLOMONAS SP.	14	0.36%
RHODOMONAS MINUTA VAR. NANNOPLANCTICA	7	0.18%
CRYPTOMONAS OVATA	7	0.18%
TOTAL	28	0.71%
TOTAL PHYTOPLANKTON	3930.	

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SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
MELOSTRA ITALICA	194	5.20%
CYCLOTELLA GLOMERATA	47	1.26%
STEPHANODISCUS SP.	47	1.26%
STEPHANODISCUS ASTRAEA	33	0.89%
CYCLOTELLA OCELLATA	27	0.72%
STEPHANODISCUS MINUTUS	27	0.72%
CYCLOTELLA KUTZINGIANA	13	0.35%
RHIZOSOLENIA ERIENSIS	7	0.19%
TOTAL	395	10.60%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA PINNATA	2030	54.46%
FRAGILARIA CROTONENSIS	347	9.31%
NITZSCHIA SP.	174	4.67%
NAVICULA SP.	80	2.15%
TABELLARIA FLOCCULOSA	73	1.96%
ASTERIONELLA FORMOSA	67	1.80%
COCconeis PEDICULUS	60	1.61%
SYNEORA FILIFORMIS	40	1.07%
NITZSCHIA FONTICOLA	27	0.72%
FRAGILARIA LEPTOSTAURON	27	0.72%
ANDICOSPHEMIA CURVATA	27	0.72%
SURTIRELLA ANGUSTA	13	0.35%
AMPHIPLEURA PELLUCIDA	13	0.35%
SYNEORA DELICATISSIMA	13	0.35%
DIATOMA SP.	13	0.35%
CYMBELLA MICROCEPHALA	13	0.35%
FRAGILARIA VAUCHERIAE	13	0.35%
CYMBELLA VENTRICOSA	13	0.35%
FRAGILARIA INTERMEDIA	13	0.35%
NITZSCHIA DISSIPATA	13	0.35%
NAVICULA CRYPTOCEPHALA VAR. VENETA	13	0.35%
CYMBELLA TURGIDA	13	0.35%
GYROSTOMA SP.	13	0.35%
NITZSCHIA ACICULARIS	13	0.35%
CYMBELLA SP.	13	0.35%
TOTAL	3134	84.08%
CHLOROPHYTA		
NON-FILAMENTOUS		
ANKISTRODESMUS SPIRALIS	7	0.19%
ANKISTRODESMUS FALCATUS	5	0.13%
SCENEDESMUS OPOLIEENSIS	1	0.03%
NEPHROCYTIUM AGARDHIANUM	1	0.03%
SCENEDESMUS ARCUATUS	1	0.03%

TABLE 37: PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 13 NOV 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
ELAKATOTHRIX VIRIDIS	< 1	0.01%
TOTAL	15	0.41%
CHRYSDOPHYTA		
DINOBRYON SERTULARIA	1	0.03%
TOTAL	1	0.03%
CYANOPHYTA NON-FILAMENTOUS		
COELOSPHAERIUM NAEGELIANUM	85	2.28%
APHANOCAPSA DELICATISSIMA	14	0.38%
APHANOTHECE CLATHRATA	7	0.19%
CHROCOCCUS LIMNETICUS	6	0.16%
APHANOTHECE NIDULANS	3	0.08%
TOTAL	115	3.09%
CYANOPHYTA FILAMENTOUS		
OSCILLATORIA GEMINATA	6	0.16%
OSCILLATORIA TENUIS	6	0.16%
OSCILLATORIA LIMNETICA	5	0.13%
TOTAL	17	0.46%
PYRRHOPHYTA		
PERIDINIUM SP.	1	0.03%
TOTAL	1	0.03%
MISCELLANEOUS		
RHODOMONAS MINUTA VAR. NANNOPLANCTICA	27	0.72%
CRYPTOMONAS OVATA	12	0.32%
CHLOMONAS SP.	10	0.27%
TOTAL	49	1.31%
TOTAL PHYTOPLANKTON	3727.	

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TABLE 38 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS. LOCATION E2 21 NOV 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
STEPHANODISCUS SP.	166	3.87%
MELOSIRA ITALICA	92	2.14%
CYCLOTELLA MICHIGANIANA	46	1.07%
CYCLOTELLA OCELLATA	28	0.65%
CYCLOTELLA STELLIGERA	28	0.65%
MELOSIRA ISLANDICA	28	0.65%
CYCLOTELLA GLOMERATA	18	0.42%
RHIZOSOLENIA ERIENSIS	18	0.42%
STEPHANODISCUS MINUTUS	18	0.42%
CYCLOTELLA BODANICA	9	0.21%
STEPHANODISCUS ASTRAEA	9	0.21%
STEPHANODISCUS HANTZSCHII	9	0.21%
TOTAL	469	10.93%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA PINNATA	2468	57.49%
FRAGILARIA INTERMEDIA	212	4.94%
NITZSCHIA ANGUSTATA VAR. ACUTA	92	2.14%
ASTERIONELLA FORMOSA	83	1.93%
NITZSCHIA SP.	83	1.93%
ACHNANTHES SP.	74	1.72%
FRAGILARIA CROTONENSIS	74	1.72%
SYNEDRA FILIFORMIS	74	1.72%
TABELLARIA FLOCCULOSA	74	1.72%
COCconeis PEDICULUS	55	1.28%
FRAGILARIA VAUCHERIAE	55	1.28%
SYNEDRA RADIANIS	55	1.28%
CYMBELLA TURGIDA	37	0.86%
CYMBELLA MICROCEPHALA	37	0.86%
FRAGILARIA LEPTOSTAURON	37	0.86%
NAVICULA GRACILIS	37	0.86%
NAVICULA SP.	37	0.86%
NITZSCHIA ACICULARIS	37	0.86%
NITZSCHIA PALEACEA	37	0.86%
AMPHORA OVALIS VAR. PEDICULUS	18	0.42%
DENTICULA SP.	18	0.42%
NITZSCHIA AMPHIRIA	18	0.42%
AMPHIPLEURA PELLUCIDA	9	0.21%
CYMBELLA PROSTRATA	9	0.21%
TOTAL	3730	86.89%

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TABLE 38 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS. LOCATION E2 21 NOV 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHLOROPHYTA		
NON-FILAMENTOUS		
PEDIASTRUM BORYANUM	7	0.16%
SCENEDESMUS ABUNDANS	4	0.09%
BOCCYSTIS PARVA	4	0.09%
SCENEDESMUS ARCUATUS	4	0.09%
COSMARION DEPRESSUM	3	0.07%
SPONDYLIDIUM PLANUM	3	0.07%
BOCCYSTIS BERGEI	1	0.02%
BOCCYSTIS GLOBOBOCCYSTIFORMIS	1	0.02%
ANKISTRODESMUS SPIRALIS	1	0.02%
ANKISTRODESMUS FALCATUS	1	0.02%
ELAKATOTHRIX VIRIDIS	< 1	0.02%
TOTAL	30	0.69%
CHRYSDOPHYTA		
DINOBRYON SOCIALE	5	0.12%
TOTAL	5	0.12%
CYANOPHYTA		
NON-FILAMENTOUS		
APHANOCAPSA ELACHISTA	11	0.26%
APHANOTHECE CLATHRATA	5	0.12%
APHANOTHECE CASTAGNEI	3	0.07%
APHANOCAPSA DELICATISSIMA	3	0.07%
CHROOCOCCUS PRESCOTTII	3	0.07%
CHROOCOCCUS LIMNETICUS	3	0.07%
APHANOTHECE NIJULANS	2	0.05%
TOTAL	30	0.70%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA LIMNETICA	1	0.02%
TOTAL	1	0.02%
MISCELLANEOUS		
CHLOMONAS SP.	25	0.58%
RHODMONAS MINUTA VAR. NANNOPLANCTICA	3	0.07%
TOTAL	28	0.65%
TOTAL PHYTOPLANKTON	4293.	

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TABLE 39 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 18 DEC 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
MELOSIRA ITALICA	93	2.89%
STEPHANODISCUS HANTZSCHII	81	2.52%
CYCLOTELLA STELLIGERA	35	1.09%
CYCLOTELLA MICHIGANIANA	29	0.90%
CYCLOTELLA OCELLATA	23	0.72%
STEPHANODISCUS INVISITATUS	23	0.72%
STEPHANODISCUS MINUTUS	23	0.72%
STEPHANODISCUS NIAGARAE	23	0.72%
RHIZOSOLENIA LONGISETA	12	0.37%
STEPHANODISCUS ASTRAEA	12	0.37%
CYCLOTELLA SP.	12	0.37%
MELOSIRA ISLANDICA	6	0.19%
RHIZOSOLENIA ERIENSIS	6	0.19%
STEPHANODISCUS SP.	6	0.19%
CYCLOTELLA GLOMERATA	6	0.19%
TOTAL	390	12.13%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA PINNATA	1080	33.59%
ASTERIONELLA FORMOSA	255	7.93%
FRAGILARIA CROTONENSIS	232	7.22%
FRAGILARIA CAPUCINA	145	4.51%
SYNEDRA FILIFORMIS	116	3.61%
NAVICULA SP.	81	2.52%
NITZSCHIA SP.	81	2.52%
ACHNANTHES SP.	64	1.99%
CYMBELLA MICROCEPHALA	52	1.62%
AMPHORA OVALIS VAR. PEDICULUS	46	1.43%
DIATOMA TENUE VAR. ELONGATUM	46	1.43%
NITZSCHIA AMPHIBIA	46	1.43%
COCconeis PEDICULUS	41	1.28%
FRAGILARIA VAUCHERIAE	35	1.09%
NITZSCHIA ANGUSTATA VAR. ACUTA	23	0.72%
FRAGILARIA SP.	23	0.72%
DENTICULA SP.	17	0.53%
GOMPHONEMA SP.	17	0.53%
ACHNANTHES AFFINIS	12	0.37%
ACHNANTHES MICROCEPHALA	12	0.37%
NAVICULA HAMBERGII	12	0.37%
NITZSCHIA PALEACEA	12	0.37%
SURIRELLA OVATA	12	0.37%
SYNEDRA ACUS	12	0.37%
SYNEDRA DELICATISSIMA	12	0.37%
COCconeis DISCULUS	6	0.19%
CYMBELLA VENTRICOSA	6	0.19%
TABELLARIA FLOCCULOSA	6	0.19%

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TABLE 39 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 18 DEC 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
TOTAL	2502	77.82%
CHLOROPHYTA NON-FILAMENTOUS		
ANKISTRODESMUS FALCATUS	8	0.25%
ANKISTRODESMUS SPIRALIS	3	0.09%
ELAKATOTHRIX VIRIDIS	3	0.09%
SCENEDESMUS ARCUATUS	1	0.03%
STAUSTRUM PARADOXUM	1	0.03%
CLOSTERIDOPSIS LONGISSIMA	1	0.03%
TOTAL	17	0.53%
CHLOROPHYTA FILAMENTOUS		
MOUGEOTIA SP.	8	0.25%
GEMINELLA SP.	7	0.22%
TOTAL	15	0.47%
CHRYSDOPHYTA		
DINOBRYON DIVERGENS	19	0.59%
DINOBRYON SOCIALE	7	0.22%
DINOBRYON CYLINDRICUM	1	0.03%
TOTAL	27	0.84%
CYANOPHYTA NON-FILAMENTOUS		
COELOSPHAERIUM NAEGELIANUM	34	1.06%
APHANOTHECE NIGULANS	25	0.78%
APHANOCAPSA DELICATISSIMA	19	0.59%
APHANOTHECE CASTAGNEI	1	0.03%
TOTAL	79	2.46%
CYANOPHYTA FILAMENTOUS		
OSCILLATORIA TENUIS	60	1.87%
OSCILLATORIA LIMNETICA	44	1.37%
OSCILLATORIA GEMINATA	43	1.34%
LYNGBYA SP.	5	0.16%
TOTAL	152	4.73%

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TABLE 39 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 7 HOURS.

LOCATION E1 18 DEC 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
MISCELLANEOUS		
CHLOMONAS SP.	18	0.56%
RHOODONAS MINUTA VAR. NANVOPLAUCTICA	12	0.37%
CRYPTOMONAS OVATA	3	0.09%
TOTAL	33	1.03%
TOTAL PHYTOPLANKTON	3215.	

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TABLE 40: PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 21 DEC 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
MELOSIRA ITALICA	120	3.38%
STEPHANODISCUS SP.	114	3.21%
STEPHANODISCUS ASTRAEA	67	1.89%
STEPHANODISCUS MINUTUS	47	1.32%
MELOSIRA AMBIGUA	33	0.93%
STEPHANODISCUS NIAGARAE	27	0.76%
MELOSIRA ISLANDICA	20	0.56%
RHIZOSOLENIA LONGISETA	20	0.56%
CYCLOTELLA MICHIGANIANA	13	0.37%
CYCLOTELLA OCELLATA	7	0.20%
CYCLOTELLA SP.	7	0.20%
RHIZOSOLENIA ERIENSIS	7	0.20%
TOTAL	482	13.59%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA PINNATA	1149	32.38%
FRAGILARIA CROTONENSIS	835	23.53%
ASTERIONELLA FORMOSA	254	7.16%
CYMBELLA MICROCEPHALA	93	2.62%
SYNEDRA FILIFORMIS	73	2.06%
NITZSCHIA SP.	67	1.89%
AMPHORA OVALIS VAR. PEDICULUS	53	1.49%
DIATOMA TENUE VAR. ELONGATUM	53	1.49%
TABELLARIA FLOCCULOSA	40	1.13%
ACHNANTHES MINUTISSIMA	27	0.76%
COCconeis PEDICULUS	27	0.76%
CYMBELLA VENTRICOSA	27	0.76%
NITZSCHIA ACICULARIS	27	0.76%
NAVICULA SP.	20	0.56%
ACHNANTHES AFFINIS	13	0.37%
COCconeis BACILLUM	13	0.37%
DENTICULA SP.	13	0.37%
FRAGILARIA LEPTOSTAURON	13	0.37%
FRAGILARIA SP.	13	0.37%
NAVICULA CRYPTOCEPHALA VAR. VENETA	13	0.37%
NITZSCHIA DISSIPATA	13	0.37%
RHOICOSPHEMIA CURVATA	13	0.37%
ACHNANTHES SP.	7	0.20%
SYNEDRA DELICATISSIMA	7	0.20%
TOTAL	2863	80.69%

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TABLE 40 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT INTAKE AT 72 HOURS.

LOCATION E1 21 DEC 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
CHLOROPHYTA		
NON-FILAMENTOUS		
ANKISTRODESMUS SPIRALIS	14	0.39%
PEDIASTRUM DUPLEX VAR. CLATHRATUM	5	0.14%
BOCCYSTIS GLOEOCYSTIFORMIS	4	0.11%
ANKISTRODESMUS FALCATUS	3	0.08%
ANKISTRODESMUS FALCATUS VAR. MIRABILIS	3	0.08%
CYELASTRUM RETICULATUM	3	0.08%
ARTHRODESMUS SP.	3	0.08%
SCENEDESMUS ARCUATUS	1	0.03%
TETRAEDRON MINIMUM	1	0.03%
STAUROSTRUM PARADOXUM	1	0.03%
BOCCYSTIS BORGEI	1	0.03%
TOTAL	39	1.10%
CHLOROPHYTA		
FILAMENTOUS		
MOUGESOTIA SP.	13	0.37%
GEMINELLA SP.	5	0.14%
TOTAL	18	0.51%
CHRYSOPHYTA		
MONOSIGA SP.	4	0.11%
DINOBRYON DIVERGENS	3	0.08%
MALLOMONAS PSEUDOCORONATA	1	0.03%
DINOBRYON CYLINDRICUM	1	0.03%
TOTAL	9	0.25%
CYANOPHYTA		
NON-FILAMENTOUS		
APHANOCAPSA DELICATISSIMA	8	0.23%
APHANOCAPSA ELACHISTA	3	0.08%
APHANOTHECE CASTAGNEI	1	0.03%
TOTAL	12	0.34%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA GEMINATA	50	1.69%
OSCILLATORIA TENUIS	40	1.13%
OSCILLATORIA LIMNETICA	15	0.42%
LYNGBYA CONTORTA	10	0.28%
TOTAL	125	3.52%
TOTAL PHYTOPLANKTON	3548.	

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TABLE 41. PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 18 DEC 1973

	SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA			
CENTRALES			
	STEPHANODISCUS SP.	73	2.14%
	STEPHANODISCUS MINUTUS	67	1.97%
	MELOSIRA ITALICA	53	1.56%
	STEPHANODISCUS ASTRAEA	53	1.56%
	STEPHANODISCUS NIAGARAE	33	0.97%
	MELOSIRA AMBIGUA	27	0.79%
	CYCLOTELLA OCELLATA	20	0.59%
	MELOSIRA ISLANDICA	20	0.59%
	STEPHANODISCUS INVISITATUS	20	0.59%
	CYCLOTELLA GLOMERATA	13	0.38%
	RHIZOSOLENIA LONGISETA	13	0.38%
	STEPHANODISCUS HANTZSCHII	13	0.38%
	TOTAL	405	11.88%
BACILLARIOPHYTA			
PENNALES			
A-697	FRAGILARIA PINNATA	995	29.20%
	FRAGILARIA CROTONENSIS	841	24.68%
	ASTERIONELLA FORMOSA	194	5.69%
	NITZSCHIA SP.	107	3.14%
	SYNEDRA FILIFORMIS	80	2.35%
	NITZSCHIA ACICULARIS	67	1.97%
	FRAGILARIA LEPTOSTAURON	60	1.76%
	ACHNANTHES SP.	53	1.56%
	CYMBELLA MICROCEPHALA	53	1.56%
	AMPHORA OVALIS VAR. PEDICULUS	27	0.79%
	COCCONEIS PEDICULUS	27	0.79%
	DENTICULA SP.	27	0.79%
	ACHNANTHES MINUTISSIMA	20	0.59%
	NAVICULA SP.	20	0.59%
	TABELLARIA FLOCCULOSA	20	0.59%
	DIATOMA TENUE VAR. ELONGATUM	13	0.38%
	FRAGILARIA VAUCHERIAE	13	0.38%
	NITZSCHIA PALEACEA	13	0.38%
	SYNEDRA DELICATISSIMA VAR. ANGUSTISSIMA	13	0.38%
	RHOICOSPHENIA CURVATA	7	0.21%
		TOTAL	2650
CHLOROPHYTA			
NON-FILAMENTOUS			
	ANKISTRODESMUS SPIRALIS	14	0.41%
	ANKISTRODESMUS FALCATUS	11	0.32%
	PEDIASTRUM DUPLEX	5	0.15%
	STAUSTRUM NATATOR VAR. CRASSUM	3	0.09%
	JOCCYSTIS GLOEOCYSTIFORMIS	3	0.09%
	SCENEDESMUS ARCUATUS	2	0.06%

TABLE 41 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 7 HOURS.

LOCATION E2 18 DEC 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
ODCYSTIS PUSILLA	1	0.03%
ODCYSTIS PARVA	1	0.03%
TOTAL	40	1.17%
CHLOROPHYTA FILAMENTOUS		
STUCCOTIA SP.	5	0.15%
CEMINELLA SP.	3	0.09%
TOTAL	8	0.23%
CHRYSOPHYTA		
DINOBRYON SOCIALE	29	0.85%
DINOBRYON DIVERGENS	20	0.59%
TOTAL	49	1.44%
CYANOPHYTA NON-FILAMENTOUS		
COELOSPHARIUM NAEGELIANUM	130	3.81%
APHANOTHECE CASTAGNEI	8	0.23%
APHANOCAPSA DELICATISSIMA	5	0.15%
TOTAL	143	4.20%
CYANOPHYTA FILAMENTOUS		
OSCILLATORIA TENUIS	40	1.17%
OSCILLATORIA GEMINATA	17	0.50%
LYNGBYA SP.	6	0.18%
OSCILLATORIA LIMNETICA	6	0.18%
TOTAL	69	2.02%
MISCELLANEOUS		
CHLOMONAS SP.	23	0.67%
RHODMONAS MINUTA VAR. NANNOPLANCTICA	14	0.41%
CRYPTOMONAS OVATA	7	0.21%
TOTAL	44	1.29%
TOTAL PHYTOPLANKTON	3408.	

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TABLE 42 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS.

LOCATION E2 21 DEC 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
BACILLARIOPHYTA		
CENTRALES		
MELOSIRA ITALICA	105	3.27%
STEPHANODISCUS MINUTUS	70	2.18%
STEPHANODISCUS ASTRAEA	63	1.96%
CYCLOTELLA OCELLATA	56	1.74%
STEPHANODISCUS SP.	42	1.31%
STEPHANODISCUS NIAGARAE	14	0.44%
MELOSIRA ISLANDICA	7	0.22%
RHIZOSOLENIA ERIENSIS	7	0.22%
TOTAL	364	11.33%
BACILLARIOPHYTA		
PENNALES		
FRAGILARIA PINNATA	893	27.78%
FRAGILARIA CROTONEENSIS	626	19.48%
ASTERIONELLA FORMOSA	394	12.26%
SYNEDRA FILIFORMIS	134	4.17%
CYMBELLA MICROCEPHALA	77	2.40%
AMPHORA OVALIS VAR. PEDICULUS	63	1.96%
FRAGILARIA VAUCHERIAE	56	1.74%
NITZSCHIA SP.	56	1.74%
ACHNANTHES SP.	42	1.31%
COCconeis PEDICULUS	42	1.31%
DIATOMA TENUE VAR. ELONGATUM	42	1.31%
TABELLARIA FLOCCULOSA	42	1.31%
NAVICULA SP.	21	0.65%
CYMBELLA TURGIDA	14	0.44%
DENTICULA SP.	14	0.44%
FRAGILARIA LEPTOSTAURON	14	0.44%
NAVICULA GRACILIS	14	0.44%
NITZSCHIA ANGUSTATA VAR. ACUTA	14	0.44%
RHOIDOSPHENIA CURVATA	14	0.44%
SURIPELLA ANGUSTA	14	0.44%
CYMBELLA VENTRICOSA	7	0.22%
CYMBELLA SP.	7	0.22%
FRAGILARIA CONSTRUENS	7	0.22%
FRAGILARIA INTERMEDIA	7	0.22%
TOTAL	2514	81.33%
CHLOROPHYTA		
NON-FILAMENTOUS		
ANKISTRODESMUS SPIRALIS	11	0.34%
ANKISTRODESMUS FALCATUS	5	0.16%
COSMARION SP.	5	0.16%
TETRASTRUM STAUROGENIAEFORME	3	0.09%
SCENEDESMUS ARCUATUS	3	0.09%
GOCCYSTIS PARVA	3	0.09%

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TABLE 42 PHYTOPLANKTON COLLECTED IN THE KEWAUNEE NUCLEAR POWER PLANT DISCHARGE AT 72 HOURS. LOCATION E2 21 DEC 1973

SPECIES	UNITS PER ML.	OCCUR- RENCE
SCENEDESMUS DENTICULATUS	1	0.03%
STAUSTRUM PARADOXUM	1	0.03%
CLDSTERIDPSIS LONGISSIMA	1	0.03%
TETRASTRUM ELEGANS	1	0.03%
ODCYSTIS BORGEI	1	0.03%
TOTAL	35	1.09%
CHLOROPHYTA		
FILAMENTOUS		
MOUGESITIA SP.	12	0.37%
GEMINELLA SP.	4	0.12%
TOTAL	16	0.50%
CHRYSDOPHYTA		
DINOBRYON SOCIALE	8	0.25%
DINOBRYON CYLINDRICUM	1	0.03%
TOTAL	9	0.28%
CYANOPHYTA		
NON-FILAMENTOUS		
COELOSPHAERIUM NAEGELIANUM	27	0.84%
APHANOCAPSA DELICATISSIMA	10	0.31%
APHANOTHECE CASTAGNEI	3	0.09%
TOTAL	40	1.24%
CYANOPHYTA		
FILAMENTOUS		
OSCILLATORIA GEMINATA	52	1.93%
OSCILLATORIA TENUIS	54	1.68%
OSCILLATORIA LIMNETICA	16	0.50%
LYNGBYA CONTORTA	4	0.12%
TOTAL	136	4.23%
TOTAL PHYTOPLANKTON	3214.	

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APPENDIX 5-B

Physical and chemical measurements recorded from
phytoplankton physiology samples collected at the
Kewaunee Nuclear Power Plant,
March - December 1973.

Table 1 . Chemical and physical measurements taken at 7 and 72 hours after collection at Kewaunee Nuclear Power Plant, 27-30 March, 1973.

Chemical Measurements	Location E-1		Location E-2	
	7 Hrs.	72 Hrs.	7 Hrs.	72 Hrs.
Temperature C	3.8	4.7	3.8	4.2
pH	7.8	7.9	7.8	7.9
Total Alkalinity (mg/l-CaCO ₃)	118	119	118	118
Total Chlorine (mg/l)	<0.01	<0.01	<0.01	<0.01
Ammonia (mg/l-N)	<0.01	0.01	<0.01	0.01
Nitrate (mg/l-N)	0.30	0.24	0.20	0.24
Organic Nitrogen (mg/l-N)	0.30	0.21	0.32	0.21
Total Phosphorus (mg/l-P)	0.022	0.033	0.022	0.033
Soluble Orthophosphate (mg/l-P)	0.001	0.001	0.001	0.001
Silica (mg/l-SiO ₂)	0.40	0.33	0.41	0.35

Table 2. Chemical and physical measurements taken at 7 and 72 hours after collection at Kewaunee Nuclear Power Plant, 24-27 April, 1973.

Chemical Measurements	Location E-1		Location E-2	
	7 Hrs.	72 Hrs.	7 Hrs.	72 Hrs..
Temperature C	7.0	8.5	7.0	8.5
pH	7.7	7.7	7.7	7.7
Total Alkalinity (mg/l-CaCO ₃)	112	117	112	117
Total Chlorine (mg/l)	<0.01	<0.01	<0.01	<0.01
Ammonia (mg/l-N)	0.01	<0.01	<0.01	<0.01
Nitrate (mg/l-N)	0.23	0.18	0.22	0.18
Organic Nitrogen (mg/l-N)	0.15	0.21	0.17	0.21
Total Phosphorus (mg/l-P)	0.022	-a)	0.023	-a)
Soluble Orthophosphate (mg/l-P)	<0.001	0.001	<0.001	0.001
Silica (mg/l-SiO ₂)	0.56	0.58	0.57	0.58

a) Analysis not performed.

Table 3. Chemical and physical measurements taken at 7 and 72 hours after collection at Kewaunee Nuclear Power Plant, 15-18 May, 1973.

Chemical Measurements	Location E-1		Location E-2	
	7 Hrs.	72 Hrs.	7 Hrs.	72 Hrs.
Temperature C	9.8	8.9	10.0	9.2
pH	8.2	8.2	8.1	8.2
Total Alkalinity (mg/l-CaCO ₃)	112	112	112	112
Total Chlorine (mg/l)	<0.01	<0.01	<0.01	<0.01
Ammonia (mg/l-N)	0.02	<0.01	0.02	<0.01
Nitrate (mg/l-N)	0.18	0.21	0.18	0.22
Organic Nitrogen (mg/l-N) (Total)	0.24	0.27	0.29	0.28
Total Phosphorus (mg/l-P)	0.016	0.019	0.017	0.016
Soluble Orthophosphate (mg/l-P)	<0.001	0.002	0.001	0.001
Silica (mg/l-SiO ₂)	0.33	0.29	0.39	0.35

Table 4 . Chemical and physical measurements taken at 7 and 72 hours after collection at Kewaunee Nuclear Power Plant, 19-22 June, 1973.

Chemical Measurements	Location E-1		Location E-2		Location E-2 (Chlorine)	
	7 Hrs.	72 Hrs.	7 Hrs.	72 Hrs.	7 Hrs.	72 Hrs.
Temperature C	10.0	10.9	10.0	11.0	10.0	10.9
pH	7.7	8.1	7.9	8.1	7.8	7.9
Total Alkalinity (mg/l-CaCO ₃)	109	115	112	114	110	113
Total Chlorine (mg/l)	<0.01	<0.01	<0.01	<0.01	0.10	a)
Ammonia (mg/l-N)	0.02	<0.01	0.01	<0.01	0.01	<0.01
Nitrate (mg/l-N)	0.25	0.19	0.33	0.17	0.24	0.18
Organic Nitrogen (mg/l-N) (Total)	0.26	0.29	0.25	0.24	0.23	0.25
Total Phosphorus (mg/l-P)	0.037	0.043	0.035	0.037	0.034	0.026
Soluble Orthophosphate (mg/l-P)	0.002	<0.001	0.001	<0.001	0.001	0.001
Silica (mg/l-SiO ₂)	0.39	0.32	0.43	0.33	0.35	0.34

a) Analysis not performed.

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Table 5. Chemical and physical measurements taken at 7 and 72 hours after collection at Kewaunee Nuclear Power Plant, 17-20 July, 1973.

Chemical Measurements	Location E-1		Location E-2	
	7 Hrs.	72 Hrs.	7 Hrs.	72 Hrs.
Temperature C	13.0	14.5	13.0	14.5
pH	8.3	8.2	8.3	8.1
Total Alkalinity (mg/l-CaCO ₃)	109	112	110	112
Total Chlorine (mg/l)	<0.01	<0.01	<0.01	<0.01
Ammonia (mg/l-N)	0.02	0.01	0.02	0.01
Nitrate (mg/l-N)	0.27	0.25	0.29	0.25
Organic Nitrogen (mg/l-N)	0.48	0.10	0.58	0.13
Total Phosphorus (mg/l-P)	0.011	0.005	0.010	0.007
Soluble Orthophosphate (mg/l-P)	<0.001	<0.001	<0.001	<0.001
Silica (mg/l-SiO ₂)	0.52	0.46	0.51	0.48

Table 6 . Chemical and physical measurements taken at 7 and 72 hours
after collection at Kewaunee Nuclear Power Plant, 14-17
August, 1973.

Chemical Measurements	Location E-1		Location E-2	
	7 Hrs.	72 Hrs.	7 Hrs.	72 Hrs.
Temperature C	12.0	12.5	12.0	12.5
pH	8.1	8.1	8.2	8.1
Total Alkalinity (mg/l-CaCO ₃)	112	112	112	112
Total Chlorine (mg/l)	- a)	<0.01	- a)	<0.01
Ammonia (mg/l-N)	0.03	0.04	0.02	0.02
Nitrate (mg/l-N)	0.21	0.21	0.24	0.22
Organic Nitrogen (mg/l-N)	0.21	0.26	0.24	0.20
Total Phosphorus (mg/l-P)	0.015	0.012	0.0082	0.0069
Soluble Orthophosphate (mg/l-P)	<0.001	<0.001	0.001	<0.001
Silica (mg/l-SiO ₂)	0.52	0.52	0.57	0.48

a) Analysis not performed.

Table 7. Chemical and physical measurements taken at 7 and 72 hours after collection at Kewaunee Nuclear Power Plant, 4-7 September, 1973.

Chemical Measurements	Location E-1		Location E-2	
	7 Hrs.	72 Hrs.	7 Hrs.	72 Hrs.
Temperature C	8.5	8.5	8.5	8.5
pH	7.8	7.8	7.8	7.9
Total Alkalinity (mg/l-CaCO ₃)	108	115	107	98
Total Chlorine (mg/l)	<0.01	<0.01	<0.01	<0.01
Ammonia (mg/l-N)	0.02	0.02	0.01	0.02
Nitrate (mg/l-N)	0.19	0.20	0.27	0.27
Organic Nitrogen (mg/l-N)	0.27	0.25	0.35	0.20
Total Phosphorus (mg/l-P)	0.013	0.013	0.010	0.009
Soluble Orthophosphate (mg/l-P)	0.001	0.001	<0.001	<0.001
Silica (mg/l-SiO ₂)	0.94	0.86	0.60	0.60

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Table 8 . Chemical and physical measurements taken at 7 and 72 hours after collection at Kewaunee Nuclear Power Plant, 23-26 October, 1973.

Chemical Measurements	Location E-1		Location E-2	
	7 Hrs.	72 Hrs.	7 Hrs.	72 Hrs.
Temperature C	10.2	10.7	10.2	10.7
pH	8.0	8.0	8.0	8.1
Total Alkalinity (mg/l-CaCO ₃)	111	112	111	112
Total Chlorine (mg/l)	<0.01	<0.01	<0.01	<0.01
Ammonia (mg/l-N)	0.01	0.02	<0.01	<0.01
Nitrate (mg/l-N)	0.20	0.23	0.19	0.21
Organic Nitrogen (mg/l-N)	0.22	0.29	0.35	0.38
Total Phosphorus (mg/l-P)	0.014	0.018	0.015	0.015
Soluble Orthophosphate (mg/l-P)	0.002	0.001	0.001	0.002
Silica (mg/l-SiO ₂)	0.99	0.92	0.97	0.95

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Table 9. Chemical and physical measurements taken at 7 and 72 hours after collection at Kewaunee Nuclear Power Plant, 18-21 November, 1973.

Chemical Measurements	Location E-1		Location E-2	
	7 Hrs.	72 Hrs.	7 Hrs.	72 Hrs.
Temperature C	2.0	2.0	2.0	2.0
pH	8.2	8.2	8.0	8.2
Total Alkalinity (mg/l-CaCO ₃)	110	111	111	111
Total Chlorine (mg/l)	<0.01	<0.01	<0.01	<0.01
Ammonia (mg/l-N)	0.01	0.01	0.01	0.01
Nitrate (mg/l-N)	0.27	0.25	0.27	0.25
Organic Nitrogen (mg/l-N)	0.27	0.27	0.21	0.24
Total Phosphorus (mg/l-P)	0.025	0.040	0.024	0.030
Soluble Orthophosphate (mg/l-P)	<0.001	<0.001	<0.001	<0.001
Silica (mg/l-SiO ₂)	0.96	0.92	0.93	0.95

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Table 10. Chemical and physical measurements taken at 7 and 72 hours after collection at Kewaunee Nuclear Power Plant, 11-14 December, 1973.

Chemical Measurements	Location E-1		Location E-2	
	7 Hrs.	72 Hrs.	7 Hrs.	72 Hrs.
Temperature C	0.2	1.0	0.2	1.0
pH	8.0	8.0	8.0	8.0
Total Alkalinity (mg/l-CaCO ₃)	115	112	114	113
Total Chlorine (mg/l)	<0.01	<0.01	<0.01	<0.01
Ammonia (mg/l-N)	0.03	0.03	0.02	0.02
Nitrate (mg/l-N)	0.15	0.18	0.27	0.19
Organic Nitrogen (mg/l-N)	0.23	0.27	0.29	0.27
Total Phosphorus (mg/l-P)	0.014	0.012	0.022	0.013
Soluble Orthophosphate (mg/l-P)	0.012	<0.001	0.010	<0.001
Silica (mg/l-SiO ₂)	0.82	0.89	0.84	0.77

APPENDIX 6-A

Results of analyses of zooplankton physiology
samples collected from Lake Michigan at the
Kewaunee Nuclear Power Plant,
March - December 1973.

Table 1 Zooplankton survival data from intake and discharge samples analyzed at 0 and 4 hours after collection at Kewaunee Nuclear Power Plant, 27 March 1973.

Organisms	Location E1						Location E2						% differential immotility	% differential mortality
	0 hrs			4 hrs			0 hrs			4 hrs				
	motile	immotile	% immotile	live	dead	% mortality	motile	immotile	% immotile	live	dead	% mortality		
Copepoda														
nauplii	12	2	14.3	8	0	0.0	19	0	0.0	8	0	0.0	0.0	0.0
calanoid copepodites	0	0	0.0	0	0	0.0	0	0	0.0	3	0	0.0	0.0	0.0
cyclopoid copepodites	22	1	4.3	13	0	0.0	27	4	12.9	11	4	26.7	8.6	26.7
<u>Cyclops bicuspidatus thomasi</u>	37	2	5.1	45	2	4.3	18	5	21.7	43	7	14.0	16.6	9.7
<u>Diaptomus</u> spp. (female)	180	16	8.2	113	12	9.6	151	38	20.1	91	11	10.8	11.9	1.2
<u>Diaptomus ashlandi</u> (male)	46	2	4.2	59	8	11.9	38	3	7.3	51	7	12.1	3.2	0.1
<u>Diaptomus minutus</u> (male)	31	4	11.4	52	2	3.7	28	1	3.4	38	6	13.6	0.0	9.9
<u>Diaptomus oregonensis</u> (male)	3	0	0.0	2	0	0.0	1	1	50.0	2	1	33.3	50.0	33.3
<u>Diaptomus sicilis</u> (male)	14	0	0.0	14	0	0.0	3	3	50.0	13	3	18.7	50.0	18.7
<u>Limnocalanus macrurus</u>	6	0	0.0	5	0	0.0	0	1	100.0	2	3	60.0	100.0	60.0
<u>Tropocyclops prasinus</u>	3	0	0.0	1	0	0.0	3	0	0.0	0	0	0.0	0.0	0.0
Harpacticoida	1	0	0.0	3	1	25.0	2	2	50.0	0	0	0.0	50.0	0.0
Total Copepoda	355	27	7.1	315	25	7.4	290	58	16.7	262	42	13.8	9.6	6.5
Cladocera														
<u>Bosmina longirostris</u>	1	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Daphnia galeata mendotae</u>	1	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Daphnia longiremis</u>	0	1	100.0	0	0	0.0	0	0	0.0	1	0	0.0	0.0	0.0
Total Cladocera	2	1	33.3	0	0	0.0	0	0	0.0	1	0	0.0	0.0	0.0
Total Zooplankton	357	28	7.3	315	25	7.4	290	58	16.7	263	42	13.8	9.4	6.4

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Table 2 Zooplankton survival data from intake and discharge samples analyzed at 0 and 4 hours after collection at Kewaunee Nuclear Power Plant, 24 April 1973.

Organisms	Location E1						Location E2						% differential immotility	% differential mortality
	0 hrs			4 hrs			0 hrs			4 hrs				
	motile	immotile	% immotile	live	dead	% mortality	motile	immotile	% immotile	live	dead	% mortality		
Copepoda														
nauplii	114	1	0.9	52	6	10.3	168	17	9.2	76	33	30.3	8.3	19.9
calanoid copepodites	19	1	5.0	7	1	12.5	20	1	4.8	11	3	21.4	0.0	8.9
cyclopoid copepodites	78	0	0.0	27	1	3.6	80	6	7.0	47	13	21.7	7.0	18.1
<u>Cyclops bicuspidatus thomasi</u>	334	6	1.8	153	1	0.6	331	26	7.3	169	18	9.6	5.5	9.0
<u>Cyclops vernalis</u>	2	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Diaptomus</u> spp. (female)	787	17	2.1	328	13	3.8	871	102	10.5	548	37	6.3	8.4	2.5
<u>Diaptomus ashlandi</u> (male)	258	3	1.1	108	5	4.4	307	21	6.4	127	22	14.8	5.3	10.3
<u>Diaptomus minutus</u> (male)	20	3	13.0	10	2	16.7	13	0	0.0	12	0	0.0	0.0	0.0
<u>Diaptomus oregonensis</u> (male)	24	5	17.2	11	0	0.0	40	9	18.4	29	3	9.4	1.1	9.4
<u>Diaptomus sicilis</u> (male)	33	1	2.9	22	0	0.0	28	1	3.4	9	0	0.0	0.5	0.0
<u>Tropocyclops prasinus</u>	5	0	0.0	4	0	0.0	4	0	0.0	1	0	0.0	0.0	0.0
Harpacticoida	8	0	0.0	2	0	0.0	9	1	10.0	12	1	7.7	10.0	7.7
Total Copepoda	1682	37	2.2	724	29	3.9	1871	184	9.0	1041	130	11.1	6.8	7.3
Cladocera														
<u>Alona monacantha</u>	0	0	0.0	0	0	0.0	1	0	0.0	1	0	0.0	0.0	0.0
<u>Bosmina longirostris</u>	1	0	0.0	0	0	0.0	6	1	14.3	1	1	50.0	14.3	50.0
<u>Daphnia</u> spp. (immature)	0	0	0.0	0	0	0.0	2	0	0.0	2	0	0.0	0.0	0.0
<u>Daphnia galeata mendotae</u>	2	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Daphnia longiremis</u>	0	0	0.0	1	0	0.0	5	1	16.7	5	0	0.0	16.7	0.0
<u>Eubosmina coregoni</u>	2	0	0.0	0	0	0.0	1	0	0.0	0	0	0.0	0.0	0.0
Total Cladocera	5	0	0.0	1	0	0.0	15	2	11.8	9	1	10.0	11.8	10.0
Total Zooplankton	1687	37	2.1	725	29	3.8	1886	186	9.0	1050	131	11.1	6.8	7.2

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Table 3 Zooplankton survival data from intake and discharge samples analyzed at 0 and 4 hours after collection at Kewaunee Nuclear Power Plant, 15 May 1973.

Organisms	Location E1						Location E2						% differential immotility	% differential mortality
	0 hrs			4 hrs			0 hrs			4 hrs				
	motile	immotile	% immotile	live	dead	% mortality	motile	immotile	% immotile	live	dead	% mortality		
Copepoda														
nauplii	293	9	3.0	274	9	3.2	243	9	3.6	189	8	4.1	0.6	0.9
calanoid copepodites	66	3	4.3	78	0	0.0	53	5	8.6	56	4	6.7	4.3	6.7
cyclopoid copepodites	25	0	0.0	38	2	5.0	17	3	15.0	20	1	4.8	15.0	0.0
<u>Cyclops bicuspidatus thomasi</u>	50	2	3.8	36	1	2.7	41	5	10.9	56	8	12.5	7.0	9.8
<u>Diaptomus</u> spp. (female)	26	2	7.1	27	2	6.9	28	5	15.2	26	5	16.1	8.0	9.2
<u>Diaptomus ashlandi</u> (male)	13	1	7.1	5	1	16.7	12	2	14.3	9	1	10.0	7.1	0.0
<u>Diaptomus minutus</u> (male)	3	0	0.0	1	0	0.0	4	1	20.0	3	0	0.0	20.0	0.0
<u>Diaptomus oregonensis</u> (male)	0	0	0.0	0	0	0.0	0	0	0.0	1	0	0.0	0.0	0.0
<u>Eurytemora affinis</u>	0	0	0.0	4	0	0.0	2	0	0.0	0	0	0.0	0.0	0.0
<u>Tropocyclops prasinus</u>	46	1	2.1	50	1	2.0	23	1	4.2	27	0	0.0	2.0	0.0
Harpacticoida	1	1	50.0	0	0	0.0	0	0	0.0	2	0	0.0	0.0	0.0
Total Copepoda	523	19	3.5	513	16	3.0	423	31	6.8	389	27	6.5	3.3	3.5
Cladocera														
<u>Alona affinis</u>	0	0	0.0	0	0	0.0	0	0	100.0	0	0	0.0	100.0	0.0
<u>Bosmina longirostris</u>	16	0	0.0	12	0	0.0	26	2	7.1	17	1	5.6	7.1	5.6
<u>Daphnia longiremis</u>	0	0	0.0	1	0	0.0	3	0	0.0	0	0	0.0	0.0	0.0
<u>Daphnia parvula</u>	0	0	0.0	0	0	0.0	0	1	100.0	0	0	0.0	100.0	0.0
<u>Eubosmina coregoni</u>	0	1	100.0	0	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
Total Cladocera	16	1	5.9	13	0	0.0	29	4	12.1	17	1	5.6	6.2	5.6
Total Zooplankton	539	20	3.6	526	16	3.0	452	35	7.2	406	28	6.5	3.6	3.5

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Table 4 Zooplankton survival data from intake and discharge samples analyzed at 0 and 4 hours after collection at Kewaunee Nuclear Power Plant, 19 June 1973.

Organisms	Location E1						Location E2						% differential immotility	% differential mortality
	0 hrs			4 hrs			0 hrs			4 hrs				
	motile	immotile	% immotile	live	dead	% mortality	motile	immotile	% immotile	live	dead	% mortality		
Copepoda														
nauplii	43	3	6.5	38	2	5.0	56	6	9.7	49	1	2.0	3.2	0.0
calanoid copepodites	40	6	13.0	32	6	15.8	24	11	31.4	50	10	16.7	18.4	0.9
cyclopoid copepodites	202	15	6.9	187	13	6.5	232	37	13.8	174	14	7.4	6.8	0.9
<u>Cyclops bicuspidatus thomasi</u>	93	9	8.8	57	6	9.5	109	12	9.9	86	9	9.5	1.1	0.0
<u>Cyclops vernalis</u>	5	0	0.0	4	0	0.0	8	0	0.0	1	0	0.0	0.0	0.0
<u>Diaptomus</u> spp. (female)	32	4	11.1	16	3	15.8	75	7	8.5	45	14	23.7	0.0	7.9
<u>Diaptomus ashlandi</u> (male)	9	0	0.0	3	0	0.0	3	2	40.0	3	0	0.0	40.0	0.0
<u>Eurytemora affinis</u>	4	1	20.0	16	0	0.0	10	2	16.7	18	1	5.3	0.0	5.3
<u>Tropocyclops prasinus</u>	0	0	0.0	0	0	0.0	3	1	25.0	1	0	0.0	25.0	0.0
Harpacticoida	3	0	0.0	3	1	25.0	0	0	0.0	0	0	0.0	0.0	0.0
Total Copepoda	431	38	8.1	356	31	8.0	520	78	13.0	427	49	10.3	4.9	2.3
Cladocera														
<u>Alona rectangula</u>	1	0	0.0	1	0	0.0	1	0	0.0	1	0	0.0	0.0	0.0
<u>Bosmina longirostris</u>	8	0	0.0	6	0	0.0	7	3	30.0	14	0	0.0	30.0	0.0
<u>Chydorus sphaericus</u>	4	1	20.0	4	0	0.0	5	1	16.7	4	1	20.0	0.0	20.0
<u>Daphnia</u> spp. (immature)	0	0	0.0	0	0	0.0	1	0	0.0	2	0	0.0	0.0	0.0
<u>Daphnia galeata mendotae</u>	0	0	0.0	1	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Daphnia longiremis</u>	1	0	0.0	0	0	0.0	7	1	12.5	12	1	7.7	12.5	7.7
<u>Daphnia parvula</u>	0	0	0.0	0	0	0.0	1	0	0.0	0	0	0.0	0.0	0.0
Total Cladocera	14	1	6.7	12	0	0.0	22	5	18.5	33	2	5.7	11.9	5.7
Total Zooplankton	445	39	8.1	368	31	7.8	542	83	13.3	460	51	10.0	5.2	2.2

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Table 5 Zooplankton survival data from intake and chlorinated discharge samples analyzed at 0 and 4 hours after collection at Kewaunee Nuclear Plant, 19 June 1973.

Organisms	Location E1						Location E2						% differential immotility	% differential mortality
	0 hrs			4 hrs			0 hrs			4 hrs				
	motile	immotile	% immotile	live	dead	% mortality	motile	immotile	% immotile	live	dead	% mortality		
Copepoda														
nauplii	43	3	6.5	38	2	5.0	109	8	6.8	70	9	11.4	0.3	6.4
calanoid copepodites	40	6	13.0	32	6	15.8	86	11	11.3	75	13	14.8	0.0	0.0
cyclopoid copepodites	202	15	6.9	187	13	6.5	147	27	15.5	128	22	14.7	8.6	8.2
<u>Cyclops bicuspidatus thomasi</u>	93	9	8.8	57	6	9.5	53	15	22.1	42	14	25.0	13.2	15.5
<u>Cyclops vernalis</u>	5	0	0.0	4	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Diaptomus</u> spp. (female)	32	4	11.1	16	3	15.8	76	11	12.6	59	20	25.3	1.5	9.5
<u>Diaptomus ashlandi</u> (male)	9	0	0.0	3	0	0.0	4	1	20.0	3	0	0.0	20.0	0.0
<u>Diaptomus minutus</u> (male)	0	0	0.0	0	0	0.0	1	0	0.0	1	0	0.0	0.0	0.0
<u>Eurytemor affinis</u>	4	1	20.0	16	0	0.0	0	0	0.0	2	1	33.3	0.0	33.3
<u>Tropocyclops prasinus</u>	1	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
Harpacticoida	2	0	0.0	3	1	25.0	0	0	0.0	0	0	0.0	0.0	0.0
Total Copepoda	431	38	8.1	356	31	8.0	476	73	13.3	380	79	17.2	5.2	9.2
Cladocera														
<u>Alona rectangula</u>	1	0	0.0	1	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Bosmina longirostris</u>	8	0	0.0	6	0	0.0	7	3	30.0	11	2	15.4	30.0	15.4
<u>Chydorus sphaericus</u>	4	1	20.0	4	0	0.0	2	0	0.0	0	0	0.0	0.0	0.0
<u>Daphnia galeata mendotae</u>	0	0	0.0	1	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Daphnia longiremis</u>	1	0	0.0	0	0	0.0	5	1	16.7	5	2	28.6	16.7	28.6
Total Cladocera	14	1	6.7	12	0	0.0	14	4	22.2	16	4	20.0	15.6	20.0
Total Zooplankton	445	39	8.1	368	31	7.8	490	77	13.6	396	83	17.3	5.5	9.6

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Table 6 Zooplankton survival data from intake and discharge samples analyzed at 0 and 4 hours after collection at Kewaunee Nuclear Power Plant, 17 July 1973.

Organisms	Location E1						Location E2						% differential i mmotility	% differential mortality
	0 hrs			4 hrs			0 hrs			4 hrs				
	motile	immotile	% immotile	live	dead	% mortality	motile	immotile	% immotile	live	dead	% mortality		
Copepoda														
nauplii	10	1	9.1	5	0	0.0	15	0	0.0	8	2	20.0	0.0	20.0
calanoid copepodites	169	6	3.4	51	3	5.6	115	41	26.3	73	26	26.3	22.9	20.7
cyclopoid copepodites	11	2	15.4	5	1	16.7	13	4	23.5	11	5	31.2	8.1	14.6
<u>Cyclops bicuspidatus thomasi</u>	35	2	5.4	9	0	0.0	9	0	0.0	3	0	0.0	0.0	0.0
<u>Cyclops vernalis</u>	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Diaptomus</u> spp. (female)	42	3	6.7	9	1	10.0	32	3	8.6	33	1	2.9	1.9	0.0
<u>Diaptomus ashlandi</u> (male)	7	0	0.0	0	0	0.0	1	0	0.0	4	0	0.0	0.0	0.0
<u>Diaptomus oregonensis</u> (male)	0	0	0.0	0	0	0.0	0	1	100.0	0	0	0.0	100.0	0.0
<u>Paracyclops fimbriatus poppei</u>	1	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Tropocyclops prasinus</u>	3	0	0.0	3	0	0.0	1	0	0.0	0	0	0.0	0.0	0.0
Total Copepoda	278	14	4.8	82	5	5.7	186	49	20.9	132	34	20.5	16.1	14.7
Cladocera														
<u>Alona rectangula</u>	1	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Bosmina longirostris</u>	228	4	1.7	50	3	5.7	300	26	8.0	278	10	3.5	6.3	0.0
<u>Chydorus sphaericus</u>	2	0	0.0	1	0	0.0	1	0	0.0	2	0	0.0	0.0	0.0
<u>Daphnia</u> spp. (immature)	2	0	0.0	2	1	33.3	1	0	0.0	0	0	0.0	0.0	0.0
<u>Daphnia longiremis</u>	7	0	0.0	3	0	0.0	15	5	25.0	23	3	11.5	25.0	11.5
<u>Daphnia retrocurva</u>	15	0	0.0	7	0	0.0	4	2	33.3	1	0	0.0	33.3	0.0
<u>Eubosmina coregoni</u>	3	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
Total Cladocera	258	4	1.5	63	4	6.0	321	33	9.3	304	13	4.1	7.8	0.0
Total Zooplankton	536	18	3.2	145	9	5.8	507	82	13.9	436	47	9.7	10.7	3.9

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Table 7 Zooplankton survival data from intake and discharge samples analyzed at 0 and 4 hours after collection at Kewaunee Nuclear Power Plant, 14 August 1973.

Organisms	Location E1						Location E2						% differential immotility	% differential mortality
	0 hrs			4 hrs			0 hrs			4 hrs				
	motile	immotile	% immotile	live	dead	% mortality	motile	immotile	% immotile	live	dead	% mortality		
Copepoda														
nauplii	4	0	0.0	2	1	33.3	0	0	0.0	0	0	0.0	0.0	0.0
calanoid copepodites	15	3	16.7	2	4	66.7	22	6	21.4	12	4	25.0	4.8	0.0
cyclopoid copepodites	56	6	9.7	36	4	10.0	53	4	7.0	34	2	5.6	0.0	0.0
<u>Cyclops bicuspidatus thomasi</u>	44	0	0.0	22	1	4.3	32	4	11.1	16	3	15.8	11.1	11.4
<u>Diaptomus</u> spp. (female)	3	0	0.0	0	0	0.0	9	1	10.0	3	2	40.0	10.0	40.0
<u>Diaptomus ashlandi</u> (male)	1	0	0.0	0	0	0.0	3	0	0.0	1	1	50.0	0.0	50.0
<u>Diaptomus sicilis</u> (male)	0	0	0.0	0	0	0.0	0	0	0.0	1	0	0.0	0.0	0.0
Harpacticoida	0	0	0.0	0	0	0.0	0	1	100.0	0	0	0.0	100.0	0.0
Total Copepoda	123	9	6.8	62	10	13.9	119	16	11.9	67	12	15.2	5.0	1.3
Cladocera														
<u>Bosmina longirostris</u>	288	9	3.0	227	15	6.2	109	10	8.4	175	18	9.3	5.4	3.1
<u>Chydorus sphaericus</u>	0	0	0.0	0	0	0.0	1	0	0.0	0	0	0.0	0.0	0.0
<u>Daphnia</u> spp. (immature)	1	0	0.0	0	0	0.0	2	0	0.0	1	1	50.0	0.0	50.0
<u>Daphnia galeata mendotae</u>	2	0	0.0	0	0	0.0	3	0	0.0	3	1	25.0	0.0	25.0
<u>Daphnia longiremis</u>	2	0	0.0	2	0	0.0	36	5	12.2	4	1	20.0	12.2	20.0
<u>Daphnia retrocurva</u>	3	1	25.0	4	1	20.0	9	3	25.0	6	2	25.0	0.0	5.0
Total Cladocera	296	10	3.3	233	16	6.4	160	18	10.1	189	23	10.8	6.8	4.4
Total Zooplankton	419	19	4.3	295	26	8.1	279	34	10.9	256	35	12.0	6.5	3.9

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Table 8 Summary of Zooplankton survival data from intake and discharge samples analyzed at 0 and 4 hours after collection at Kewaunee Nuclear Power Plant, 4 September 1973.

Organisms	Location E1						Location E2						% differential immotility	% differential mortality
	0 hrs			4 hrs			0 hrs			4 hrs				
	motile	immotile	% immotile	live	dead	% mortality	motile	immotile	% immotile	live	dead	% mortality		
Copepoda														
nauplii	19	1	5.0	12	0	0.0	18	0	0.0	10	0	0.0	0.0	0.0
calanoid copepodites	24	3	11.1	13	10	43.5	3	1	25.0	9	3	25.0	13.9	0.0
cyclopoid copepodites	180	16	8.2	115	13	10.2	134	12	8.2	112	7	5.9	0.1	0.0
<u>Cyclops bicuspidatus thomasi</u>	44	5	10.2	33	3	8.3	63	11	14.9	73	10	12.0	4.7	3.7
<u>Diaptomus</u> spp. (female)	18	1	5.3	19	3	13.6	42	8	16.0	18	15	45.5	10.7	31.8
<u>Diaptomus ashlandi</u> (male)	0	0	0.0	1	0	0.0	0	0	0.0	2	0	0.0	0.0	0.0
<u>Diaptomus oregonensis</u> (male)	0	0	0.0	0	0	0.0	1	0	0.0	0	0	0.0	0.0	0.0
<u>Diaptomus sicilis</u> (male)	1	0	0.0	0	1	100.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Lernaea</u> spp.	0	0	0.0	1	0	0.0	1	0	0.0	0	0	0.0	0.0	0.0
<u>Mesocyclops edax</u>	2	0	0.0	0	0	0.0	1	0	0.0	1	0	0.0	0.0	0.0
Total Copepoda	288	26	8.3	194	30	13.4	263	32	10.8	225	35	13.5	2.6	0.1
Cladocera														
<u>Bosmina longirostris</u>	135	6	4.3	88	2	2.2	261	12	4.4	120	5	4.0	0.1	1.8
<u>Chydorus sphaericus</u>	13	0	0.0	4	0	0.0	5	1	16.7	5	0	0.0	16.7	0.0
<u>Daphnia</u> spp. (immature)	2	0	0.0	1	2	66.7	1	0	0.0	0	0	0.0	0.0	0.0
<u>Daphnia galeata mendotae</u>	0	0	0.0	0	0	0.0	0	0	0.0	0	1	100.0	0.0	100.0
<u>Daphnia longiremis</u>	8	1	11.1	6	2	25.0	9	1	10.0	3	0	0.0	0.0	0.0
<u>Eubosmina coregoni</u>	1	1	50.0	3	0	0.0	11	0	0.0	9	1	10.0	0.0	10.0
<u>Ilyocryptus sordidus</u>	1	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
Total Cladocera	160	8	4.8	102	6	5.6	287	14	4.7	137	7	4.9	0.0	0.0
Total Zooplankton	448	34	7.1	296	36	10.8	550	46	7.7	362	42	10.4	0.7	0.0

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Table 9 Zooplankton survival data from intake and discharge samples analyzed at 0 and 4 hours after collection at Kewaunee Nuclear Power Plant, 23 October 1973.

Organisms	Location E1						Location E2						% differential immotility	% differential mortality
	0 hrs			4 hrs			0 hrs			4 hrs				
	motile	immotile	% immotile	live	dead	% mortality	motile	immotile	% immotile	live	dead	% mortality		
Copepoda														
nauplii	0	0	0.0	0	0	0.0	1	0	0.0	1	0	0.0	0.0	0.0
calanoid copepodites	10	0	0.0	7	1	12.5	5	1	16.7	6	2	25.0	16.7	12.5
cyclopoid copepods	216	8	3.6	249	3	1.2	141	6	4.1	182	8	4.2	0.5	3.0
<u>Cyclops bicuspidatus thomasi</u>	13	1	7.1	11	0	0.0	0	0	0.0	6	0	0.0	0.0	0.0
<u>Cyclops vernalis</u>	2	0	0.0	0	0	0.0	1	0	0.0	5	0	0.0	0.0	0.0
<u>Diaptomus oreorensis</u>	0	0	0.0	1	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Epischura lacustris</u>	0	0	0.0	0	0	0.0	2	1	33.3	0	0	0.0	33.3	0.0
<u>Eurytemora affinis</u>	0	0	0.0	0	0	0.0	0	0	0.0	1	0	0.0	0.0	0.0
<u>Mesocyclops edax</u>	1	0	0.0	0	0	0.0	1	0	0.0	0	0	0.0	0.0	0.0
<u>Tropocyclops prasinus</u>	8	0	0.0	16	2	11.1	15	0	0.0	8	1	11.1	0.0	0.0
Total Copepoda	250	9	3.5	284	6	2.1	166	8	4.6	209	11	5.0	1.1	2.9
Cladocera														
<u>Bosmina longirostris</u>	62	3	4.6	148	8	5.1	141	11	7.2	142	15	9.6	2.6	4.4
<u>Chydorus sphaericus</u>	0	0	0.0	3	0	0.0	2	0	0.0	0	2	100.0	0.0	100.0
<u>Daphnia retrocurva</u>	7	0	0.0	7	0	0.0	4	2	33.3	7	2	22.2	33.3	22.2
<u>Eubosmina coregoni</u>	4	0	0.0	2	0	0.0	4	0	0.0	1	0	0.0	0.0	0.0
<u>Holopedium gibberum</u>	0	0	0.0	0	0	0.0	0	2	100.0	0	0	0.0	100.0	0.0
Total Cladocera	73	3	3.9	160	8	4.8	151	15	9.0	150	19	11.2	5.1	6.5
Total Zooplankton	323	12	3.6	444	14	3.1	317	23	6.8	359	30	7.7	3.2	4.7

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Table 10 Zooplankton survival data from intake and discharge samples analyzed at 0 and 4 hours after collection at Kewaunee Nuclear Power Plant, 18 November 1973.

Organisms	Location E1						Location E2						% differential immotility	% differential mortality
	0 hrs			4 hrs			0 hrs			4 hrs				
	motile	immotile	% immotile	live	dead	% mortality	motile	immotile	% immotile	live	dead	% mortality		
Copepoda														
nauplii	1	0	0.0	0	0	0.0	1	1	50.0	0	0	0.0	50.0	0.0
calanoid copepodites	12	0	0.0	10	0	0.0	12	2	14.3	12	2	14.3	14.3	14.3
cyclopoid copepodites	101	1	1.0	82	0	0.0	62	8	11.4	59	10	14.5	10.4	14.5
<u>Cyclops bicuspidatus thomasi</u>	14	0	0.0	13	1	7.1	9	0	0.0	8	1	11.1	0.0	4.0
<u>Diaptomus ashlandi</u>	8	1	11.1	5	2	28.6	4	0	0.0	2	0	0.0	0.0	0.0
<u>Diaptomus minutus</u>	1	0	0.0	0	0	0.0	7	2	22.2	5	1	16.7	22.2	16.7
<u>Diaptomus oregonensis</u>	24	2	7.7	18	2	10.0	37	5	11.9	40	11	21.6	4.2	11.6
<u>Diaptomus sicilis</u>	3	0	0.0	3	0	0.0	2	0	0.0	4	0	0.0	0.0	0.0
<u>Epischura lacustris</u>	0	0	0.0	1	0	0.0	1	0	0.0	0	0	0.0	0.0	0.0
<u>Eurytemora affinis</u>	1	0	0.0	0	1	100.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Tropocyclops prasinus</u>	5	1	16.7	7	0	0.0	11	0	0.0	2	1	33.3	0.0	33.3
Harpacticoida	0	0	0.0	0	0	0.0	4	0	0.0	0	0	0.0	0.0	0.0
Total Copepoda	170	5	2.9	139	6	4.1	150	18	10.7	132	26	16.5	7.9	12.3
Cladocera														
<u>Bosmina longirostris</u>	74	4	5.1	83	2	2.4	89	8	8.2	40	4	9.1	3.1	6.7
<u>Daphnia galeata mendotae</u>	13	0	0.0	11	2	15.4	18	3	14.3	9	3	25.0	14.3	9.6
<u>Daphnia retrocurva</u>	35	2	5.4	16	0	0.0	14	2	12.5	12	2	14.3	7.1	14.3
Total Cladocera	122	6	4.7	110	4	3.5	121	13	9.7	61	9	12.9	5.0	9.3
Total Zooplankton	292	11	3.6	249	10	3.9	271	31	10.3	193	35	15.4	6.6	11.5

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Table 11 Zooplankton survival data from intake and discharge samples analyzed at 0 and 4 hours after collection at Kewaunee Nuclear Power Plant, 18 December 1973.

Organisms	Location E1						Location E2						% differential immotility	% differential mortality
	0 hrs			4 hrs			0 hrs			4 hrs				
	motile	immotile	% immotile	live	dead	% mortality	motile	immotile	% immotile	live	dead	% mortality		
Copepoda														
nauplii	0	1	100.0	1	2	66.7	1	1	50.0	0	0	0.0	0.0	0.0
cyclopoid pepodites	53	2	3.6	44	2	4.3	20	4	16.7	24	7	22.6	13.0	18.2
<u>Cyclops bicuspidatus thomasi</u>	102	4	3.8	98	9	8.4	103	13	11.2	127	8	5.9	7.4	0.0
<u>Cyclops salia</u>	4	1	20.0	4	0	0.0	0	0	0.0	1	0	0.0	0.0	0.0
<u>Diaptomus ashlandi</u>	18	2	10.0	31	3	8.8	22	3	12.0	18	1	5.3	2.0	0.0
<u>Diaptomus minutus</u>	11	0	0.0	6	1	14.3	11	0	0.0	6	0	0.0	0.0	0.0
<u>Diaptomus oregonensis</u>	9	2	18.2	24	3	11.1	15	4	21.1	28	14	33.3	2.9	22.2
<u>Diaptomus sicilis</u>	5	1	16.7	8	2	20.0	3	1	25.0	0	1	100.0	8.3	80.0
<u>Epischura lacustris</u>	2	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Eurytemora affinis</u>	1	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0.0	0.0
<u>Tropocyclops prasinus</u>	7	1	12.5	11	0	0.0	2	2	50.0	4	1	20.0	37.5	20.0
Harpacticoida	2	0	0.0	3	0	0.0	3	1	25.0	2	0	0.0	25.0	0.0
Total Copepoda	214	14	6.1	230	22	8.7	180	29	13.9	210	32	13.2	7.7	4.5
Cladocera														
<u>Alona affinis</u>	0	0	0.0	0	0	0.0	0	1	100.0	1	0	0.0	100.0	0.0
<u>Bosmina longirostris</u>	15	1	6.2	10	0	0.0	23	4	14.8	8	2	20.0	8.6	20.0
<u>Chydorus sphaericus</u>	0	0	0.0	0	0	0.0	1	0	0.0	0	0	0.0	0.0	0.0
<u>Daphnia spp. (immature)</u>	0	0	0.0	0	0	0.0	3	1	25.0	5	0	0.0	25.0	0.0
<u>Daphnia galeata mendotae</u>	7	3	30.0	10	2	16.7	6	8	57.1	13	8	38.1	27.1	21.4
<u>Daphnia retrocurva</u>	0	0	0.0	0	0	0.0	1	0	0.0	1	2	66.7	0.0	66.7
<u>Eubosmina coregoni</u>	45	3	6.2	49	3	5.8	58	7	10.8	29	5	14.7	4.5	8.9
Total Cladocera	67	7	9.5	69	5	6.8	92	21	18.6	57	17	23.0	9.1	16.2
Total Zooplankton	281	21	7.0	299	27	8.3	272	50	15.5	267	49	15.5	8.6	7.2

Industrial BIO-TEST Laboratories, Inc.

APPENDIX 7-A

Results of analyses of periphyton
samples collected from Lake Michigan near
the Kewaunee Nuclear Power Plant,
May - November 1973.

Table 1. Periphytic Algal Taxa Collected from Natural Shoreline Substrates in Lake Michigan near the Kewaunee Nuclear Power Plant, May to November 1973

Baccillariophyta

Achnanthes Bory

- exigua Grunow
- hungarica Grunow
- lancedlata Brebisson
- minutissima Kuetzing

Amphora Ehrenberg

- ovalis v. pediculus Kuetzing
- perpusilla Grunow

Caloneis Cleve

- bacillum (Grunow) Mereschkowsky
- bacillum v. lanzettula (Schulz) Hustedt

Cocconeis Ehrenberg

- pediculus Ehrenberg
- placentula (Ehrenberg) Cleve
- placentula v. euglypta (Ehrenberg) Cleve

Coscinodiscus Ehrenberg

- lacustris Grunow

Cyclotella Kuetzing

- glomerata Bachman
- meneghiniana Kuetzing
- ocellata Pantocsek

Cymbella Agardh

- affinis Kuetzing
- microcephala Grunow
- prostrata (Berkley) Cleve
- turgida (Gregory) Cleve
- ventricosa Kuetzing

Diatoma De Candolle

- anceps (Ehrenberg) Grunow
- elongatum v. minor Grunow
- hiemale (Lyngbye) Heiberg
- tenue v. elongatum Lyngbye
- vulgare Bory
- vulgare v. breve Grunow
- vulgare v. grande (W. Smith) Grunow
- vulgare v. o lis (Fricke) Hustedt

Table 1. Continued.

Fragilaria Lyngbye

capucina Desmazieres
construens (Ehrenberg) Grunow
construens v. subsalina Hustedt
crotonensis Kitton
intermedia Grunow
pinnata Ehrenberg
pinnata v. lanzettula (Schumann) Hustedt
vaucheriae (Kuetzing) Peters
vaucheriae v. capitellata (Grunow) Patrick
virescens Ralfs

Gomphonema Agardh

abbreviatum Agardh? Kuetzing
bohemicum Reichelt et Fricke
lanceolatum v. insignis (Gregory) Cleve
olivaceum (Lyngbye) Kuetzing
olivaceum v. calcareo Cleve
olivaceum v. minutissima Hustedt
parvulum Kuetzing

Melosira Agardh

binderana Kuetzing
granulata (Ehrenberg) Ralfs

Meridion Agardh

circulare v. constricta (Ralfs) Van Heurck

Navicula Bory

cryptocephala Kuetzing
cryptocephala v. intermedia Grunow
cryptocephala v. veneta (Kuetzing) Grunow
graciloides A. Mayer
krasskei Hustedt
longirostris Hustedt
minima Grunow
pelliculosa (Brebisson) Hilse
schonfeldii Hustedt
tripunctata (O. F. Muller) Bory
tripunctata v. schizonemoides (Van Heurck) Patrick

Nitzschia Hassall

acicularis W. Smith
amphibia Grunow
angustata v. acuta Grunow
dissipata (Kuetzing) Grunow

Table 1. Continued.

<u>epiphytica</u>	Hustedt
<u>filiformis</u>	(W. Smith) Hustedt
<u>fonticola</u>	Grunow
<u>kutzingiana</u>	Hilse
<u>microcephala</u>	Grunow
<u>paleacea</u>	Grunow
<u>romana</u>	Grunow
<u>subcommunis</u>	Hustedt
<u>sublinearis</u>	Hustedt
<u>subpunctata</u>	
<u>Opephora</u>	Petit
<u>Martyi</u>	Heribaud
<u>Pinnularia</u>	Ehrenberg
spp.	
<u>Rhoicosphenia</u>	Grunow
<u>curvata</u>	(Kuetzing) Grunow
<u>Rhopalodia</u>	O. Muller
<u>gibba</u>	(Ehrenberg) O. Muller
<u>Stephanodiscus</u>	Ehrenberg
<u>astraea</u>	(Ehrenberg) Grunow
<u>astraea v. minutula</u>	Kuetzing
<u>invisitatus</u>	Hohn and Hellerman
<u>Synedra</u>	Ehrenberg
<u>acus v. angustissima</u>	Grunow
<u>acus v. radians</u>	(Kuetzing) Hustedt
<u>amphicephala</u>	Kuetzing
<u>demeijerae</u>	Grunow
<u>filiformis v. exilis</u>	Cleve-Eul.
<u>nana</u>	Meister
<u>rumpens</u>	Kuetzing
<u>rumpens v. familiaris</u>	Kuetzing
<u>rumpens v. fragilarioides</u>	Grunow
<u>ulna</u>	(Nitzsch) Ehrenberg
<u>Tabellaria</u>	Ehrenberg
<u>fenestrata</u>	(Lyngbye) Kuetzing
<u>flocculosa</u>	(Roth) Kuetzing
<u>Chlorophyta</u>	
<u>Cladophora</u>	Kuetzing
<u>glomerata</u>	(L.) Kuetzing
<u>Stigeoclonium</u>	Kuetzing
<u>subsecundum</u>	Kuetzing

Table 1. Continued.

Ulothrix Kuetzing

aequalis Kuetzing

variabilis Kuetzing

zonata (Weber and Mohr.) Kuetzing

Cyanophyta

Calothrix Agardh

parietana (Naeg.) Thurnet

Chamaesiphon Braun and Grunow

sp.

Lyngbya Agardh

martensiana Menghini

sp.

Oscillatoria Vaucher

amoena (Kuetzing) Gomont

tenuis C. A. Agardh

Phormidium Kuetzing

tenuis (Mengh.) Gomont

uncinatum (C. A. Agardh) Gomont

Table 2. Identification, abundance and biovolume of periphytic algal taxa collected from natural shoreline substrates at Location 1 in Lake Michigan near the Kewaunee Nuclear Power Plant, 21 May 1973.

TAXON	NUMBER OF INDIVIDUALS #/SQ.CM. REPLICATE			MEAN NUMBER OF INDIVIDUALS #/SQ.CM. % OCCUR- RENCE		MEAN TOTAL BIOVOLUME MICRO- LITERS/ SQ.CM. % OCCURRENCE	
	A	B	C				
BACILLARIOPHYTA							
GOMPHONEMA OLIVACEUM	250000	611111	1430554	763888.3	22.546	11.756	48.546
FRAGILARIA INTERMEDIA	666666	513889	236111	472222.0	13.939	3.093	12.776
FRAGILARIA VAUCHERIAE	750000	333333	222222	435185.0	12.846	1.518	6.276
FRAGILARIA CONSTRUENS	972222	138889	41667	384259.3	11.343	1.567	6.478
CYMBELLA VENTRICOSA	13389	194444	83333	97222.0	2.873	1.005	4.155
FRAGILARIA CONSTRUENS V. SUBSALINA	125000	55556	0	60185.3	1.780	0.240	0.999
FRAGILARIA PINNATA	83333	27778	0	37037.0	1.097	0.077	0.324
NAVICULA TRIPUNCTATA	55556	27778	0	27778.0	0.824	0.702	2.906
GOMPHONEMA OLIVACEUM V. CALCAREA	0	0	55556	18518.6	0.551	0.432	1.789
TABELLARIA FLOCCULOSA	27778	13889	13889	18518.6	0.551	0.397	1.644
SYNEURA RUMENS V. FAMILIARIS	27778	0	13889	13889.0	0.414	0.041	0.177
STEPHANODISCUS ASTRAEA	27778	0	0	9259.3	0.278	0.072	0.302
FRAGILARIA CAPUCINA	0	13889	13889	9259.3	0.278	0.059	0.250
DIATOMA ANCEPS	13889	13889	0	9259.3	0.278	0.036	0.162
DIATOMA HIEPALE	27778	0	0	9259.3	0.278	0.403	1.670
CYMBELLA AFFINIS	13889	0	0	4629.6	0.141	0.010	0.048
CYMBELLA TURGIDA	0	0	13889	4629.6	0.141	0.259	1.075
CYMBELLA PROSTRATA	0	13889	0	4629.6	0.141	0.194	0.807
CYCLOTELLA GLOMERATA	13889	0	0	4629.6	0.141	0.006	0.030
DIATOMA VULGARE	13889	0	0	4629.6	0.141	0.068	0.286
SYNEURA NANA	13889	0	0	4629.6	0.141	0.066	0.280
MELOSIRA GRANULATA	13889	0	0	4629.6	0.141	0.011	0.052
TOTAL	3111112	1958334	2124999	2398140.4	70.770	22.072	90.936
CYANOPHYTA							
PHORMIDIUM UNCINATUM	1874999	555555	0	810184.6	23.912	0.972	4.019
CALOTHRIX PARIETANA	541666	0	0	180555.3	5.332	1.224	5.059
TOTAL	2416665	555555	0	990739.9	29.239	2.246	9.073
TOTAL PERIPHYTON	5527777	2513889	2124999	3388880.4		24.268	

Table 3. Identification, abundance and biovolume of periphytic algal taxa collected from natural shoreline substrates at Location 9 in Lake Michigan near the Kewaunee Nuclear Power Plant, 21 May 1973.

TAXON	NUMBER OF INDIVIDUALS #/SQ.CM. REPLICATE			MEAN NUMBER OF INDIVIDUALS #/SQ.CM. % OCCUR- RENCE		MEAN TOTAL BIOVOLUME MICRO- LITERS/ SQ.DM. % OCCURRENCE	
	A	B	C				
BACILLARIOPHYTA							
GOMPHONEMA OLIVACEUM	46296	129630	361111	179012.3	17.933	2.754	8.094
FRAGILARIA CONSTRUENS	50926	55556	60185	55555.6	5.569	0.226	0.670
DIATOMA ANCEPS	27778	18519	74074	40123.6	4.023	0.164	0.489
FRAGILARIA VAUCHERIAE	13889	4630	27778	15432.3	1.550	0.053	0.163
GOMPHONEMA OLIVACEUM V. CALCAREA	9259	9259	18519	12345.6	1.241	0.288	0.851
FRAGILARIA CONSTRUENS V. SUBSALINA	0	0	37037	12345.6	1.241	0.049	0.150
TABELLARIA FLOCCULOSA	18519	4630	4630	9259.6	0.932	0.198	0.597
NAVICULA TRIPUNCTATA	0	13889	13889	9259.3	0.932	0.234	0.692
NITZSCHIA DISSIPATA	0	13889	9259	7716.0	0.777	0.024	0.077
FRAGILARIA INTERMEDIA	13889	0	4630	6173.0	0.623	0.040	0.123
FRAGILARIA CAPUCINA	4630	4630	0	3086.6	0.314	0.019	0.063
RHOICOSPHEA CURVATA	4630	0	4630	3086.6	0.314	0.056	0.169
CYMBELLA VENTRICOSA	4630	4630	0	3086.6	0.314	0.031	0.098
MELOSIRA GRANULATA	0	0	9259	3086.3	0.314	0.007	0.027
ACHNANTHES MINUTISSIMA	0	4630	0	1543.3	0.159	0.001	0.007
DIATOMA VULGARE V. BREVE	4630	0	0	1543.3	0.159	0.069	0.210
CYCLOTELLA GLOMERATA	0	4630	0	1543.3	0.159	0.002	0.011
SYNEDRA ACUS V. RADIANIS	0	4630	0	1543.3	0.159	0.015	0.049
TOTAL	199076	273152	625001	365742.5	36.635	4.289	12.453
CHLOROPHYTA							
ULOTHRIX ZONATA	462963	0	421296	294753.0	29.525	25.142	73.834
ULOTHRIX AEQUALIS	527777	69444	60185	219135.3	21.952	3.887	11.420
ULOTHRIX VARIABILIS	157407	194444	4630	118827.0	11.906	0.785	2.311
TOTAL	1148147	263888	486111	632715.3	63.374	29.865	87.556
TOTAL PERIPHYTON	1347223	537040	1111112	998457.8		34.104	

Table 4. Identification, abundance and biovolume of periphytic algal taxa collected from natural shoreline substrates at Location 18 in Lake Michigan near the Kewaunee Nuclear Power Plant, 21 May 1973.

TAXON	NUMBER OF INDIVIDUALS #/SQ.CM. REPLICATE			MEAN NUMBER OF INDIVIDUALS #/SQ.CM. % OCCUR- RENCE		MEAN TOTAL BIOVOLUME MICRO- LITERS/ SQ.DM. % OCCURRENCE	
	A	B	C				
BACILLARIOPHYTA							
GOMPHONEMA OLIVACEUM	3842588	2527775	796296	2388886.2	90.690	36.549	97.008
FRAGILARIA CONSTRUENS	13889	74074	4630	30864.3	1.176	0.125	0.339
FRAGILARIA INTERMEDIA	32407	4630	0	12345.6	0.473	0.082	0.222
GOMPHONEMA OLIVACEUM V. CALCAREA	18519	0	9259	9259.3	0.356	0.216	0.578
TABELLARIA FLOCCULOSA	13889	4630	4630	7716.3	0.297	0.165	0.444
FRAGILARIA CROTONENSIS	0	18519	0	6173.0	0.239	0.034	0.095
NITZSCHIA DISSIPATA	13889	4630	0	6173.0	0.239	0.019	0.057
NITZSCHIA ACICULARIS	0	13889	0	4629.6	0.180	0.016	0.049
MELOSIRA GRANULATA	9259	4630	0	4629.6	0.180	0.011	0.035
ACHNANTHES MINUTISSIMA	9259	4630	0	4629.6	0.180	0.003	0.012
FRAGILARIA VAUCHERIAE	0	4630	4630	3086.6	0.122	0.010	0.033
SYNEDRA ACUS V. RADIANUS	4630	0	4630	3086.6	0.122	0.030	0.084
DIATOMA ANCEPS	9259	0	0	3086.3	0.122	0.012	0.038
CYMBELLA VENTRICOSA	0	0	9259	3086.3	0.122	0.031	0.089
NAVICULA KRASSKEI	9259	0	0	3086.3	0.122	0.007	0.024
CYCLOTELLA GLOMERATA	4630	0	0	1543.3	0.063	0.002	0.010
STEPHANODISCUS INVISITATUS	4630	0	0	1543.3	0.063	0.003	0.015
STEPHANODISCUS ASTRAEA	0	4630	0	1543.3	0.063	0.012	0.036
TOTAL	3986107	2666667	833334	2495362.1	94.732	37.385	99.094
CYANOPHYTA							
OSCILLATORIA AMOENA	87963	217592	111111	138888.6	5.277	0.343	0.915
TOTAL	87963	217592	111111	138888.6	5.277	0.343	0.915
TOTAL PERIPHYTON	4074070	2884259	944445	2634250.5		37.728	

Table 5. Identification, abundance and biovolume of periphytic algal taxa collected from natural shoreline substrates at Location 1 in Lake Michigan near the Kewaunee Nuclear Power Plant, 23 July 1973.

TAXON	NUMBER OF INDIVIDUALS #/SQ.CM. REPLICATE			MEAN NUMBER OF INDIVIDUALS #/SQ.CM. % OCCUR- RENCE		MEAN TOTAL BIOVOLUME MICRO- LITERS/ SQ.CM. % OCCURRENCE	
	A	B	C				
BACILLARIOPHYTA							
NITZSCHIA KUTZINGIANA	10370	0	0	3456.6	0.145	0.003	0.007
NAVICULA TRIPUNCTATA	5185	0	0	1728.3	0.075	0.036	0.030
FRAGILARIA CONSTRUENS	5185	0	0	1728.3	0.075	0.003	0.007
NAVICULA PELLICULOSA	2593	0	0	864.3	0.040	0.000	0.005
TOTAL	23333	0	0	7777.7	0.320	0.044	0.035
CHLOROPHYTA							
ULOTHRIX ZONATA	4889623	855554	0	1915059.0	77.623	129.266	89.094
STIGECCLONIUM SUBSECUNDUM	1399998	0	0	466666.0	18.919	13.999	9.653
ULOTHRIX AEQUALIS	0	233333	0	77777.6	3.157	1.785	1.235
TOTAL	6289621	1088887	0	2459502.2	99.689	145.102	99.974
TOTAL PERIPHYTON	6312954	1088887	0	2467279.4		145.147	

Table 6. Identification, abundance and biovolume of periphytic algal taxa collected from natural shoreline substrates at Location 9 in Lake Michigan near the Kewaunee Nuclear Power Plant, 23 July 1973.

TAXON	NUMBER OF INDIVIDUALS #/SQ.CM. REPLICATE			MEAN NUMBER OF INDIVIDUALS #/SQ.CM. % OCCUR- RENCE		MEAN TOTAL BIOVOLUME MICRO- LITERS/ SQ.DM. % OCCURRENCE	
	A	B	C				
BACILLARIOPHYTA							
DIATOMA ANCEPS	93333	114074	54444	87283.6	2.469	0.294	0.045
NITZSCHIA DISSIPATA	62222	82963	23333	56172.6	1.590	0.437	0.064
FRAGILARIA CONSTRUENS	10370	51852	12963	25061.6	0.712	0.069	0.014
NAVICULA TRIPUNCTATA	31111	36296	2593	23333.3	0.663	0.795	0.114
GOMPHONEMA OLIVACEUM	10370	33704	2593	15555.6	0.444	0.053	0.012
FRAGILARIA VAUCHERIAE	15556	15556	2593	11235.0	0.322	0.018	0.007
NAVICULA CRYPTOCEPHALA	10370	10370	5185	8641.6	0.248	0.036	0.009
SYNEDRA RUMPEIS	7778	7778	0	5185.3	0.151	0.010	0.006
RHODOSPHECIA CURVATA	7778	5185	2593	5185.3	0.151	0.070	0.014
TABELLARIA FLOCCULOSA	7778	2593	5185	5185.3	0.151	0.149	0.025
ACHNANTHES MINUTISSIMA	7778	5185	2593	5185.3	0.151	0.004	0.005
FRAGILARIA PINNATA	2593	5185	5185	4321.0	0.126	0.006	0.005
FRAGILARIA INTERMEDIA	5185	2593	0	2592.6	0.078	0.025	0.008
CYMBELLA PROSTRATA	0	5185	2593	2592.6	0.078	0.170	0.028
DIATOMA VULGARE	2593	2593	0	1728.6	0.053	0.053	0.012
MELOSIRA GRANULATA	0	5185	0	1728.3	0.053	0.003	0.005
NITZSCHIA ROMANA	0	0	5185	1728.3	0.053	0.008	0.006
NITZSCHIA MICROCEPHALA	2593	0	0	864.3	0.029	0.001	0.005
CYMBELLA VENTRICOSA	0	2593	0	864.3	0.029	0.010	0.006
SYNEDRA ACUS V. ANGUSTISSIMA	0	2593	0	864.3	0.029	0.027	0.008
NAVICULA TRIPUNCTATA V. SCHIZONEMOIDES	0	2593	0	864.3	0.029	0.025	0.008
DIATOMA VULGARE V. OVALIS	0	2593	0	864.3	0.029	0.000	0.005
COCCONEIS PEDICULUS	0	2593	0	864.3	0.029	0.013	0.006
DIATOMA VULGARE V. GRANDE	0	2593	0	864.3	0.029	0.009	0.006
GOMPHONEMA ABBREVIATUM	0	2593	0	864.3	0.029	0.004	0.005
CALONEIS BACILLUM	0	2593	0	864.3	0.029	0.002	0.005
SYNEDRA ACUS V. RADIANIS	0	2593	0	864.3	0.029	0.003	0.005
NAVICULA PELLICULOSA	0	2593	0	864.3	0.029	0.001	0.005
TOTAL	277408	412227	127038	272223.6	7.689	2.359	0.321
CHLOROPHYTA							
ULOTHRIX ZONATA	3857772	4402216	1342961	3200983.4	90.368	726.238	99.618
STIGEOCLONIUM SUBSECUNDUM	0	0	116667	38889.0	1.102	0.455	0.067
TOTAL	3857772	4402216	1459628	3239872.4	91.466	726.744	99.680
CYANOPHYTA							
OSCILLATORIA TENUIS	38889	0	51852	30247.0	0.858	0.056	0.012
TOTAL	38889	0	51852	30247.0	0.858	0.056	0.012
TOTAL PERIPHYTON	4174069	4814443	1638518	3542342.1		729.108	

Table 7. Identification, abundance and biovolume of periphytic algal taxa collected from natural shoreline substrates at Location 18 in Lake Michigan near the Kewaunee Nuclear Power Plant, 23 July 1973.

TAXON	NUMBER OF INDIVIDUALS #/SQ.CM. REPLICATE			MEAN NUMBER OF INDIVIDUALS #/SQ.CM. % OCCUR- RENCE		MEAN TOTAL BIOVOLUME MICRO- LITERS/ SQ.DM. % OCCURRENCE	
	A	B	C				
BACILLARIOPHYTA							
GOMPHONEMA OLIVACEUM	814073	5185	547036	455431.3	9.143	11.094	0.827
SYNEDRA RUMPENS	401851	0	277407	226419.3	4.548	0.396	0.034
DIATOMA ANCEPS	251481	10370	119259	127036.6	2.553	0.486	0.041
FRAGILARIA VAUCHERIAE	173703	7778	85555	89012.0	1.791	0.170	0.017
GOMPHONEMA OLIVACEUM V. CALCAREA	137407	0	23333	53580.0	1.080	1.560	0.120
SYNEDRA RUMPENS V. FRAGILARIOIDES	98518	0	12963	37160.3	0.750	0.178	0.018
ACHNANTHES MINUTISSIMA	36296	0	54444	30246.6	0.611	0.024	0.006
SYNEDRA RUMPENS V. FAMILIARIS	0	0	64815	21605.0	0.438	0.145	0.015
FRAGILARIA CONSTRUENS	36296	0	15556	17284.0	0.351	0.027	0.007
FRAGILARIA INTERMEDIA	15556	0	18148	11234.6	0.230	0.089	0.011
HELOSIRA GRANULATA	15556	0	7778	7778.0	0.161	0.017	0.006
FRAGILARIA PINNATA	18148	0	5185	7777.6	0.161	0.010	0.005
SYNEDRA ACUS V. ANGUSTISSIMA	15556	0	0	5185.3	0.109	0.064	0.009
SYNEDRA FILIFORMIS V. EXILIS	0	0	15556	5185.3	0.109	0.015	0.006
DIATOMA TENUE V. ELONGATUM	0	0	15556	5185.3	0.109	0.011	0.005
NITZSCHIA DISSIPATA	10370	0	5185	5185.0	0.109	0.053	0.008
CYMBELLA VENTRICOSA	2593	0	7778	3457.0	0.074	0.039	0.007
TABELLARIA FLOCCULOSA	7778	0	2593	3457.0	0.074	0.085	0.011
FRAGILARIA CROTONENSIS	10370	0	0	3456.6	0.074	0.026	0.006
NAVICULA TRIPUNCTATA	5185	0	2593	2592.6	0.057	0.088	0.011
NAVICULA CRYPTOCEPHALA	5185	0	2593	2592.6	0.057	0.014	0.006
NITZSCHIA KUTZINGIANA	5185	0	0	1728.3	0.039	0.002	0.005
OPEPHORA MARTYI	0	0	5185	1728.3	0.039	0.003	0.005
SYNEDRA ACUS V. RADIANI	2593	0	0	864.3	0.022	0.005	0.005
FRAGILARIA VIRESCENS	2593	0	0	864.3	0.022	0.009	0.005
CYMBELLA PROSTRATA	2593	0	0	864.3	0.022	0.087	0.011
COCCONEIS PEDICULUS	2593	0	0	864.3	0.022	0.034	0.007
NITZSCHIA ACICULARIS	2593	0	0	864.3	0.022	0.006	0.005
DIATOMA VULGARE V. GRANDE	2593	0	0	864.3	0.022	0.010	0.005
NITZSCHIA SUBLINEARIS	2593	0	0	864.3	0.022	0.011	0.005
STEPHANODISCUS INVISITATUS	2593	0	0	864.3	0.022	0.004	0.005
ACHNANTHES HUNGARICA	2593	0	0	864.3	0.022	0.004	0.005
FRAGILARIA VAUCHERIAE V. CAPITELLATA	2593	0	0	864.3	0.022	0.005	0.005
GOMPHONEMA PARVULUM	2593	0	0	864.3	0.022	0.005	0.005
CYMBELLA MICROCEPHALA	2593	0	0	864.3	0.022	0.001	0.005
STEPHANODISCUS ASTRAEA	0	0	2593	864.3	0.022	0.002	0.005
DIATOMA VULGARE V. OVALIS	0	0	2593	864.3	0.022	0.000	0.005
SYNEDRA DEMERARAE	0	0	2593	864.3	0.022	0.006	0.005
CYCLotella GLOMERATA	0	0	2593	864.3	0.022	0.000	0.005
AMPHORA OVALIS V. PEDICULUS	0	0	2593	864.3	0.022	0.001	0.005
SYNEDRA AMPHICEPHALA	0	0	2593	864.3	0.022	0.006	0.005
TOTAL	2092223	23333	1304076	1139869.0	22.876	14.860	1.103
CHLOROPHYTA							
CLADOPHORA GLOMERATA	8161471	0	0	2720490.0	54.591	1305.835	96.846
ULOTHRIX ZONATA	0	0	2742959	914319.6	18.350	27.429	2.039
TOTAL	8161471	0	2742959	3634809.2	72.937	1333.314	98.880

Table 7. Continued.

TAXON	NUMBER OF INDIVIDUALS #/SQ.CM.			MEAN NUMBER OF INDIVIDUALS		MEAN TOTAL BIOVOLUME	
	A	REPLICATE B	C	#/SQ.CM.	% OCCUR- RENCE	MICRO- LITERS/ SQ.CM.	% OCCURRENCE
CYANOPHYTA							
OSCILLATORIA AMDENA	217778	202222	0	140000.0	2.814	0.146	0.015
LYNGBYA HARTENSIANA	0	150370	0	50123.3	1.010	0.135	0.015
OSCILLATORIA TENUIS	0	57037	0	19012.3	0.386	0.069	0.010
TOTAL	217778	409629	0	209135.6	4.201	0.352	0.031
TOTAL PERIPHYTON	10471475	432962	4047035	4983813.1		1348.477	

Table 8. Identification, abundance and biovolume of periphytic algal taxa collected from natural shoreline substrates at Location 1 in Lake Michigan near the Kewaunee Nuclear Power Plant, 24 September 1973.

TAXON	NUMBER OF INDIVIDUALS #/SQ.CH. REPLICATE			MEAN NUMBER OF INDIVIDUALS #/SQ.CH.	OCCUR- RENCE	MEAN TOTAL MICRO- LITERS/ SQ.DM.	% OCCUR- RENCE
	A	B	C				
SACILLARIOPHYTA							
FRAGILARIA VAUCHERIAE	749999	222222	250000	407407.0	4.290	0.651	0.064
NITZSCHIA DISSIPATA	100000	55555	27778	61111.0	0.647	0.298	0.032
CYMBELLA PROSTRATA	72222	22222	22222	38888.6	0.414	0.746	0.072
SYNEDRA RUMPENS	27778	55555	27778	37037.0	0.394	0.062	0.010
ACHNANTHES MINUTISSIMA	50000	38889	16667	35185.3	0.375	0.047	0.009
GOMPHONEMA OLIVACEUM	66667	0	0	22222.3	0.238	0.212	0.024
ACHNANTHES LANCEOLATA	50000	0	0	16666.6	0.180	0.013	0.006
AMPHORA OVALIS V. PEICULUS	44444	5555	0	16666.6	0.180	0.102	0.014
NAVICULA TRIPUNCTATA	11111	22222	5556	12963.0	0.141	0.323	0.034
NAVICULA LONGIROSTRIS	16667	0	0	5555.6	0.063	0.005	0.005
CALONEIS BACILLUM	16667	0	0	5555.6	0.063	0.029	0.007
DIATOMA ELONGATUM V. MINOR	0	5556	11111	5555.6	0.063	0.010	0.005
COCONEIS PEDICULUS	0	5556	11111	5555.6	0.063	0.025	0.007
CALONEIS BACILLUM V. LANZETTULA	11111	0	0	3703.6	0.043	0.014	0.006
RHOICOSPHEMIA CURVATA	11111	0	0	3703.6	0.043	0.037	0.038
CYCLOTELLA MENEGHINIANA	11111	0	0	3703.6	0.043	0.124	0.016
RHOIPALODIA GIBBA	11111	0	0	3703.6	0.043	0.101	0.014
SYNEORA RUMPENS V. FAMILIARIS	0	11111	0	3703.6	0.043	0.009	0.005
NITZSCHIA AMPHIBIA	5556	0	0	1852.0	0.024	0.003	0.005
TABELLARIA FENESTRATA	0	5556	0	1852.0	0.024	0.021	0.006
GOMPHONEMA BOHEMICUM	0	5556	0	1852.0	0.024	0.009	0.005
TOTAL	1255555	455555	372223	694444.2	7.309	2.902	0.263
CHLOROPHYTA							
ULOTHRIX ZONATA	0	7549988	12777757	6775914.4	71.274	1075.337	97.536
CLADOPHORA GLOMERATA	6088879	0	0	2029626.3	21.352	24.355	2.214
TOTAL	6088879	7549988	12777757	8805540.2	92.622	1099.742	99.745
CYANOPHYTA							
CHAMAESIPHON SP.	11111	0	11111	7407.3	0.082	0.005	0.005
TOTAL	11111	0	11111	7407.3	0.082	0.005	0.005
TOTAL PERIPHYTON	7355545	8005544	13161092	9507391.4		1102.551	

Table 9. Identification, abundance and biovolume of periphytic algal taxa collected from natural shoreline substrates at Location 9 in Lake Michigan near the Kewaunee Nuclear Power Plant, 24 September 1973.

TAXON	NUMBER OF INDIVIDUALS #/SQ.CM. REPLICATE			MEAN NUMBER OF INDIVIDUALS #/SQ.CM.	MEAN TOTAL BIOVOLUME MICRO- LITERS/ SQ.CM.	% OCCUR- RENCE	
	A	B	C				
SACILLARIOPHYTA							
COCCONEIS PEDICULUS	105555	394444	61111	187036.6	2.107	5.755	2.557
NITZSCHIA DISSIPATA	27778	66667	0	31481.6	0.358	0.169	0.080
FRAGILARIA VAUCHERIAE	33333	38889	16667	29629.6	0.338	0.053	0.028
RHOZOSPHEA CURVATA	5556	50000	11111	22222.3	0.254	0.180	0.084
CYMBELLA PROSTRATA	16667	16667	16667	16667.0	0.192	0.330	0.151
TABELLARIA FENESTRATA	5556	38889	0	14815.0	0.171	0.199	0.093
NAVICULA TRIPUNCTATA	0	27778	11111	12963.0	0.150	0.385	0.175
CYCLOTELLA MEVEGHINIANA	0	38889	0	12963.0	0.150	0.015	0.012
MELDORA GRANULATA	5556	5556	16667	9259.6	0.109	0.005	0.007
GOMPHONEMA OLIVACEUM	5556	16667	0	7407.6	0.088	0.027	0.017
ACHNANTHES MINUTISSIMA	11111	0	11111	7407.3	0.088	0.007	0.008
ACHNANTHES LANCEOLATA	11111	5556	0	5555.6	0.067	0.002	0.006
FRAGILARIA PINNATA V. LANZETTULA	5556	5556	0	3704.0	0.046	0.011	0.009
NAVICULA MINIMA	11111	0	0	3703.6	0.046	0.002	0.006
NITZSCHIA ANGUSTATA V. ACUTA	11111	0	0	3703.6	0.046	0.035	0.020
NAVICULA SCHONFELDII	5556	0	0	1852.0	0.025	0.002	0.005
CYCLOTELLA OCELLATA	5556	0	0	1852.0	0.025	0.006	0.008
NITZSCHIA MICROCEPHALA	5556	0	0	1852.0	0.025	0.004	0.006
NITZSCHIA KUTZINGIANA	5556	0	0	1852.0	0.025	0.003	0.006
NITZSCHIA SUBPUNCTATA	5556	0	0	1852.0	0.025	0.004	0.006
AMPHORA PERPUSILLA	5556	0	0	1852.0	0.025	0.001	0.005
RHOZALODIA GIBBA	5556	0	0	1852.0	0.025	0.019	0.013
DIATOMA ELONGATUM V. MINOR	5556	0	0	1852.0	0.025	0.001	0.005
DREPHERA MARTYI	0	5556	0	1852.0	0.025	0.008	0.008
NITZSCHIA PALEACEA	0	5556	0	1852.0	0.025	0.002	0.005
SYNEURA RUMFENS	0	5556	0	1852.0	0.025	0.002	0.005
COCCONEIS PLACENTULA V. EUGLYPTA	0	5556	0	1852.0	0.025	0.038	0.022
STEPHANODISCUS ASTRAEA V. MINUTULA	0	5556	0	1852.0	0.025	0.017	0.012
ACHNANTHES EXIGUA	0	0	5556	1852.0	0.025	0.005	0.007
COSCIINODISCUS LACUSTRIS	0	0	5556	1852.0	0.025	0.052	0.028
TOTAL	300005	733338	155557	396299.8	4.459	7.400	3.265
CHLOROPHYTA							
CLADOPHYTA GLOMERATA	2333329	9933317	13233315	9499984.1	95.550	219.109	96.744
TOTAL	2333329	9933317	13233315	8499984.1	95.550	218.159	96.744
TOTAL PERIPHYTON	2633334	10666656	13388872	8896283.5		225.460	

Table 10. Identification, abundance and biovolume of periphytic algal taxa collected from natural shoreline substrates at Location 18 in Lake Michigan near the Kewaunee Nuclear Power Plant, 24 September 1973.

TAXON	NUMBER OF INDIVIDUALS #/SQ.CM. REPLICATE			MEAN NUMBER OF INDIVIDUALS #/SQ.CM.	OCCUR- RENCE	MEAN TOTAL BIOVOLUME MICRO- LITERS/ SQ.CM.		% OCCUR- RENCE
	A	B	C					
SACILLARIOPHYTA								
FRAGILARIA VAUCHERIAE	255555	122222	61111	146296.0	5.572	0.438	0.394	
SYNEORA RUMPENS	38889	94444	33333	55555.3	2.157	0.257	0.233	
ACHNANTHES MINUTISSIMA	61111	77778	11111	50000.3	1.941	0.103	0.097	
GOMPHONEMA OLIVACEUM	77778	27778	44444	50000.3	1.941	0.566	0.507	
DIATOMA ELONGATUM V. MINOR	5556	44444	5556	18518.6	0.722	0.015	0.018	
NAVICULA CRYPTOCEPHALA V. INTERMEDIA	33333	22222	0	18518.3	0.722	0.044	0.044	
CYMBELLA PROSTRATA	16667	11111	0	9259.3	0.363	0.259	0.234	
NITZSCHIA DISSIPATA	5556	16667	0	7407.6	0.291	0.065	0.062	
NAVICULA TRIPUNCTATA	5556	5556	5556	5556.0	0.220	0.095	0.039	
CALONEIS BACILLUM V. LANZETTULA	5556	0	0	1852.0	0.076	0.005	0.009	
CALONEIS BACILLUM	5556	0	0	1852.0	0.076	0.010	0.013	
NITZSCHIA PALEACEA	0	5556	0	1852.0	0.076	0.005	0.010	
NAVICULA GRACILIOIDES	0	0	5556	1852.0	0.076	0.022	0.024	
FRAGILARIA CAPUCINA	0	0	5556	1852.0	0.076	0.011	0.015	
DIATOMA TENUE V. ELONGATUM	0	0	5556	1852.0	0.076	0.003	0.007	
TOTAL	511113	427778	177779	372223.1	14.423	1.956	1.695	
CHLOROPHYTA								
CLADOPHORA GLOMERATA	4377770	0	0	1459256.4	56.532	39.516	35.054	
ULOTHRIX ZOVATA	0	749999	250000	333333.0	12.917	65.026	57.680	
STIGODCLONIUM SUBSECUNDUM	0	749999	0	249999.6	9.689	2.029	1.805	
ULOTHRIX AEQUALIS	0	250000	0	83333.3	3.233	4.224	3.752	
TOTAL	4377770	1749998	250000	2125921.2	82.357	110.848	98.277	
CYANOPHYTA								
LYNGBYA SP.	0	0	250000	83333.3	3.233	0.041	0.041	
TOTAL	0	0	250000	83333.3	3.233	0.041	0.041	
TOTAL PERIPHYTON	4888883	2177776	677779	2581477.1		112.746		

Table 11. Identification, abundance and biovolume of periphytic algal taxa collected from natural shoreline, substrates at Location 1 in Lake Michigan near the Kewaunee Nuclear Power Plant, 7 November 1973.

TAXON	NUMBER OF INDIVIDUALS #/SQ.CM. REPLICATE			MEAN NUMBER OF INDIVIDUALS #/SQ.CM.	OCCUR- RENCE	MEAN TOTAL BIOVOLUME MICRO- LITERS/ SQ.CM.	% OCCUR- RENCE
	A	B	C				
BACILLARIOPHYTA							
CYMBELLA PROSTRATA	3495368	694444	2407406	2199072.2	14.335	127.942	5.022
FRAGILARIA VAUCHERIAE	1527777	925225	1574073	1342591.0	8.753	3.933	0.154
RHIZOSIPHENTIA CURVATA	601852	23148	69444	231481.3	1.509	4.118	0.162
FRAGILARIA INTERMEDIA	185185	0	185185	123456.6	0.305	0.977	0.038
COCconeis PEDICULUS	115741	23148	92593	77160.6	0.503	4.378	0.172
DREPHODA MARTYI	0	46295	162037	69444.3	0.453	0.247	0.010
GOMPHONEMA OLIVACEUM	23148	115741	46296	61728.3	0.402	1.440	0.057
NITZSCHIA EPIPHYTICA	185185	0	0	61728.3	0.402	0.298	0.004
NAVICULA TRIPUNCTATA	23148	23148	92593	46296.3	0.302	1.288	0.051
NITZSCHIA DISSIPATA	46296	46295	46296	46296.0	0.302	0.376	0.015
NITZSCHIA FILIFORMIS	46296	23148	69444	46296.0	0.302	0.462	0.018
NAVICULA CRYPTOCEPHALA V. VENETA	69444	23148	46296	46296.0	0.302	0.254	0.010
FRAGILARIA PINVATA	92593	23148	0	38580.3	0.252	0.070	0.003
ACHNANTHES MINUTISSIMA	69444	23148	23148	38580.3	0.252	0.034	0.001
DIATOMA ANCEPS	46296	23148	23148	30864.0	0.201	0.091	0.004
CYMBELLA MICROCEPHALA	0	23148	69444	30364.0	0.201	0.067	0.003
FRAGILARIA CONSTRUENS	46296	46295	0	30364.0	0.201	0.075	0.003
MERIDION CIRCULARE V. CONSTRICTA	46296	23148	0	23148.0	0.151	0.055	0.002
SYNEURA RUMENS	0	46295	23148	23148.0	0.151	0.024	0.001
MELOSIRA BINDERANA	69444	0	0	23148.0	0.151	0.026	0.001
TABELLARIA FENESTRATA	0	46295	0	15432.0	0.101	0.800	0.031
COCconeis PLACENTULA	0	46295	0	15432.0	0.101	0.513	0.020
NITZSCHIA FORTICOLA	23148	23148	0	15432.0	0.101	0.027	0.001
GOMPHONEMA LANCEOLATUM V. INSIGNIS	23148	0	23148	15432.0	0.101	0.787	0.031
PINNULARIA SPP.	23148	23148	0	15432.0	0.101	0.072	0.003
SYNEURA RUMENS V. FAMILIARIS	0	23148	0	7716.0	0.050	0.030	0.001
GOMPHONEMA OLIVACEUM V. CALCAREA	0	23148	0	7716.0	0.050	0.270	0.011
AMPHORA OVALIS V. PEDICULUS	0	23148	0	7716.0	0.050	0.025	0.001
NITZSCHIA SUBCOMMUNIS	0	23148	0	7716.0	0.050	0.041	0.002
MELOSIRA GRANULATA	23148	0	0	7716.0	0.050	0.057	0.002
STEPHANODISCUS ASTRAEA V. MINUTULA	23148	0	0	7716.0	0.050	0.009	0.000
CYMBELLA VENTRICOSA	23148	0	0	7716.0	0.050	0.127	0.005
SYNEURA JULA	0	23148	0	7716.0	0.050	0.166	0.007
CYMBELLA TURGIDA	0	0	23148	7716.0	0.050	0.271	0.011
TOTAL	6828697	2407402	4976947	4737644.1	30.330	149.216	5.859
CHLOROPHYTA							
CLADOPHORA GLOMERATA	21874976	0	5763896	9212749.2	60.060	2300.657	90.297
ULOTHRIX ZONATA	0	4166654	0	1388888.3	9.054	98.055	3.849
TOTAL	21874976	4166654	5763896	10601342.0	69.119	2398.762	94.150
TOTAL PERIPHYTON	29703665	6574055	10740733	15339481.0		2547.879	

Table 12. Identification, abundance and biovolume of periphytic algal taxa collected from natural shoreline substrates at Location 9 in Lake Michigan near the Kewaunee Nuclear Power Plant, 7 November 1973.

TAXON	NUMBER OF INDIVIDUALS #/SQ.CM. REPLICATE			MEAN NUMBER OF INDIVIDUALS #/SQ.CM.		MEAN TOTAL BIOVOLUME MICRO- LITERS/ SQ.CM.	
	A	B	C		OCUR- RENCE	% OCUR- RENCE	
BACILLARIOPHYTA							
COCconeis PEDICULUS	625000	254630	69444	316358.0	1.069	17.950	0.135
RHODOSPHECIA CURVATA	486111	138699	23148	216349.3	0.730	3.227	0.024
FRAGILARIA VAUCHERIAE	46296	115741	0	54012.3	0.183	0.109	0.001
NAVICULA CRYPTOCEPHALA V. VENETA	69444	0	0	23148.0	0.078	0.109	0.001
NAVICULA TRIPUNCTATA	46296	23148	0	23148.0	0.078	3.395	0.026
NITZSCHIA DISSIPATA	46296	23148	0	23148.0	0.078	0.225	0.002
NITZSCHIA FILIFORMIS	46296	23148	0	23148.0	0.078	0.208	0.002
CYMBELLA PROSTRATA	0	69444	0	23148.0	0.078	0.574	0.004
FRAGILARIA PINNATA	46296	0	0	15432.0	0.052	0.033	0.000
DIATOMA ANCEPS	23148	0	0	7716.0	0.026	0.008	0.000
CYMBELLA TURGIDA	23148	0	0	7716.0	0.026	0.185	0.001
CYMBELLA MICROCEPHALA	0	23148	0	7716.0	0.026	0.020	0.000
MELOSIRA GRANULATA	0	0	23148	7716.0	0.026	0.052	0.000
TOTAL	1458331	671296	115740	748455.6	2.534	25.151	0.201
CHLOROPHYTA							
CLADOPHYTES GLOMERATA	31249988	30208307	23518496	28325587.0	95.724	.1	99.643
ULOTHRIX ZONATA	0	1041655	0	347222.0	1.173	21.298	0.150
TOTAL	31249988	31249970	23518496	28672802.0	96.902	13252.701	99.838
CYANOPHYTA							
PHORMIDIUM TENUE	0	0	509259	169753.0	0.574	0.050	0.000
TOTAL	0	0	509259	169753.0	0.578	0.050	0.005
TOTAL PERIPHYTON	32708305	31921257	24143475	29590394.0		.1	

Table 13. Identification, abundance and biovolume of periphytic algal taxa collected from natural shoreline substrates at Location 18 in Lake Michigan near the Kewaunee Nuclear Power Plant, 7 November 1973.

TAXON	NUMBER OF INDIVIDUALS #/SQ.CM. REPLICATE			MEAN NUMBER OF INDIVIDUALS #/SQ.CM.	OCCUR- RENCE	MEAN TOTAL BIOVOLUME MICRO- LITERS/ SQ.CM.	% OCCUR- RENCE
	A	B	C				
BACILLARIOPHYTA							
FRAGILARIA VAUCHERIAE	162037	0	69444	77160.3	0.752	0.192	0.003
NISSZSCHIA DISSIPATA	69444	0	23148	30864.0	0.301	0.204	0.003
GOMPHONEMA OLIVACEUM	46296	0	23148	23148.0	0.225	0.155	0.003
SYNEURA RUPENS	0	23148	46296	23148.0	0.225	0.116	0.002
RHODOSPHECIA CURVATA	23148	0	23148	15432.0	0.150	0.276	0.005
CYARELLA TURGIDA	0	0	46296	15432.0	0.150	0.407	0.007
GOMPHONEMA OLIVACEUM V. MINUTISSIMA	23148	0	0	7716.0	0.075	0.034	0.001
STEPHANODISCUS ASTRAEA	0	23148	0	7716.0	0.075	0.066	0.001
NAVICULA TRIPUNCTATA	0	23148	0	7716.0	0.075	0.312	0.005
NAVICULA CRYPTOCEPHALA V. VENETA	0	0	23148	7716.0	0.075	0.038	0.001
TOTAL	324073	69444	254628	216048.3	2.111	1.865	0.034
CHLOROPHYTA							
CLADOPHERA GLOMERATA	11296290	16736102	0	9344128.3	91.121	6013.129	98.389
ULOTHRIX ZOVATA	0	0	2083332	694444.0	6.772	96.545	1.591
TOTAL	11296290	16736102	2083332	10033572.3	97.893	6109.670	99.975
TOTAL PERIPHYTON	11620366	16805541	2337960	10254621.0		6111.590	

APPENDIX 8-A

Results of analyses of benthos samples
collected from Lake Michigan near the
Kewaunee Nuclear Power Plant,
April - November 1973.

Table 1. Benthic organisms collected in Lake Michigan near the Kewaunee Nuclear Power Plant in 1973.

Porifera

Demospongia

Haplosclerina

Spongillidae

Spongilla fragilis Leidy

Cnidaris

Hydrazoa

Hydroida

Hydridae

Hydra sp. Linnaeus

Platyhelminthes

Turbellaria

Tricladida

Rhabdocoela

Acanthocephala

Aschelminthes

Nematoda

Tardigrada

Bryozoa

Gymndaemata

Ctenostomata

Paludicellidae

Paludicella articulata (Ehr.)

Phylactolaemata

Plumatellina

Plumatellidae

Fredericella sp. Gervis

Cristatellidae

Cristatella mucedo Cuvier

Mollusca

Gastropoda

Pulmonata

Lymnaeidae

Lymnaea sp. Lamacck

Table 1. Continued.

	<u>L. auricularia</u> (Linnaeus)
	<u>L. catascopium</u> (Say)
	<u>L. humilis</u> (Say)
Physidae	
	<u>Physa</u> sp. Draparnaud
Planorbidae	
	<u>Gyraulus parvus</u> (Say)
Ctenobranchiata	
Pleuroceridae	
	<u>Goniobasis livescens</u> (Menke)
Hydrobiidae	
	<u>Amnicola</u> sp. Gould & Haldeman
	<u>A. limosa.</u> (Say)
Valvatidae	
	<u>Valvata</u> sp. Müller
	<u>V. sincera nylander.</u> Dall
	<u>V. tricarinata</u> (Say)
	<u>V. tricarinata tricarinata</u> (Say)
Pelecypoda	
Heterodonta	
Sphaeriidae	
Annelida	
Oligochaeta	
Plesiopora	
Glossoscolecidae	
	<u>Sparganophilus</u> sp. Benham
Enchytraeidae	
Naididae	
	<u>Chaetogaster diaphanus</u> (Gruithuisen)
	<u>Nais</u> sp. Müller
	<u>N. behningi</u> Michaelson
	<u>N. bretscheri</u> Michaelson
	<u>Paranais fričì</u> (Hrabe)
	<u>P. littoralis</u> (Müller)
	<u>Piguetiella michiganensis</u> Hiltunen
	<u>Slavina appendiculata</u> (d'Udekem)
	<u>Stylaria fossularis</u> Leidy

Table 1. Continued.

S. lacustris (Linnaeus)
Uncinaiis uncinata (Orstedt)
Vejdovskyella intermedia (Boetscher)

Tubificidae

Illyodrilus templetoni (Southern)
Limnodrilus angustipenis Brinkhurst & Cook
L. clapparedianus Ratzel
L. hoffmeisteri Claparede
L. hoffmeisteri (variant) Claparede
L. profundicola (Verrill)
L. spiralis Eisen
L. udekemianus Claparede
Peloscolex freyi Brinkhurst
P. multisetosus longidentus Brinkhurst & Cook
P. multisetosus multisetosus (Smith)
P. superiorensis (Brinkhurst & Cook)
Potamothrix moldaviensis Vejdovsky & Mrazek
P. vejdoskyi (Hrabe)
Tubifex ignotus Stole
T. tubifex Muller

Prosopora

Lumbriculidae

Stylodrilus heringianus Clapacede

Branchiobdellida

Hirudinea

Rhynchobdellida

Glossiphoniidae

Glossophonia complanata (Linnaeus)
Helobdella elongata (Castle)
H. stagnalis (Linnaeus)

Piscicolidae

Piscicola geometra (Linnaeus)

Pharyngobdellida

Erpobdellidae

Dina parva Moore

Arthropoda:

Arachnida

Hydracarina

Crustacea

Ostracoda

Table 1. Continued.

Mysidacea	
Mysidae	
<u>Mysis relicta</u>	Loven.
Amphipoda	
Haustoriidae	
<u>Pontoporeia affinis</u>	Lindstrom
Talitridae	
<u>Hyallela azteca</u>	(Saussure)
Gammaridae	
<u>Gammarus pseudolimnaeus</u>	(Bousfield)
Isopoda	
Asellidae	
<u>Lirceus</u> sp.	Rafinesque
<u>Asellus</u> sp.	Geoffrey St. Hillaire
Decapoda	
Insecta	
Collembola	
Plecoptera	
Ephemeroptera	
Baetidae	
Heptageniidae	
<u>Heptagenia</u> sp.	Walsh
<u>Stenonema</u> sp.	Traver
Trichoptera	
Hydropsychidae	
<u>Cheumatopsyche</u> sp.	Wallengren
<u>Hydropsyche</u> sp.	Pictet
Phryganeidae	
<u>Banksiola smithi</u>	(Banks)
Lepidostomatidae	
<u>Lepidostoma</u> sp.	Rambur
Leptoceridae	
<u>Arthripsodes</u> sp.	Billberg
Diptera	
Psychodidae	
<u>Psychoda</u> sp.	Latreille
Chironomidae	
<u>Ablabesmyia</u> sp.	Joh.

Table 1. Continued.

Chironomus sp. (meig.)
Cladotanytarsus sp. Kieff.
Clinotanypus sp. Kieff.
Corynoneura sp. (Winn.)
Cryptochironomus sp. Kieff.
Cryptocladopelma sp. Lenz
Demicryptochironomus sp Lenz
Near Demicryptochironomus sp.
Dicrotendipes sp. Kieff.
Endochironomus sp. Kieff.
Eukiefferiella sp. Kieff.
Heterotrissocladius sp. Spook
Microcricotopus sp. (Thien. & Harn)
Micropsectra sp. Kieff.
Microtendipes sp. Kieff
Monodiamesa sp. Kieff.
Monodiamesa tuberculata spec. nov. Saether
Orthocladius sp. V.D. Wulp
Parachironomus sp. Lenz
Paracladopelma sp. Harn.
Parakiefferiella sp. Thien.
Paratanytarsus sp. Kieff.
Paratendipes sp. Kieff.
Phaenopsectra (Tribelos) sp. Townes
Polypedilum (Fallax grp.) sp. Kieff.
P. (Tripodura grp.) sp. Kieff.
Potthastia sp. Kieff.
Procladius (S.S.) sp. (Skuse)
Procladius (Psilotanypus) sp. (Kieff.)
Psectrocladius sp. Kieff.
Pseudosmittia sp. (Goetgh)
Stictochironomus sp. Kieff.
Synorthocladius sp. Thien.
Tanytarsus sp. V.D.Wulp.
Thienemanniella sp. Kieff.
Thienemannimyia group.
Trissocladius sp. Kieff.

Ceratopogonidae
Empididae

Table 2 Shannon, Brillouin and Margalef species diversity indices for benthos collected near the Kewaunee Nuclear Power Plant, 1973.

Locations	Sampling Months								
	April			May			July		
	Shannon	Brillouin	Margalef	Shannon	Brillouin	Margalef	Shannon	Brillouin	Margalef
3	2.429	2.137	4.859	2.639	2.349	5.809	2.148	1.882	3.991
6	2.378	1.912	3.840	1.591	1.479	3.937	2.335	2.096	4.584
7	2.581	2.360	4.905	2.344	1.964	4.328	1.684	1.410	2.936
8	2.300	2.045	4.764	2.289	2.147	5.112	2.470	2.321	4.978
11	2.764	2.500	5.902	1.783	1.530	3.169	0.772	0.678	1.320
12	2.681	2.438	4.977	2.597	2.393	5.085	2.103	1.866	3.922
13	2.598	2.318	4.851	1.831	1.699	3.639	1.777	1.710	3.911
16	2.332	2.073	4.317	2.342	2.120	4.337	2.458	2.292	5.022
17	2.111	1.884	3.341	2.221	2.075	4.492	2.460	2.283	5.279
Average of 10' Locations	2.571	2.206	4.871	1.687	1.504	3.553	1.528	1.387	5.904
Average of 20' Locations	2.505	2.252	4.764	2.492	2.206	4.890	2.086	1.862	3.968
Average of 30' Locations	2.336	2.082	4.319	2.114	1.974	4.319	2.236	2.105	4.723
Average of all locations combined	2.464	2.111	4.640	2.182	1.889	4.434	2.017	1.778	3.994

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Table 2 Continued.

Locations	Sampling Months						Average of All Months Shannon
	September			November			
	Shannon	Brillouin	Margalef	Shannon	Brillouin	Margalef	
3	2.580	2.433	6.801	2.602	2.491	6.552	2.4796
66	1.242	0.969	1.411	2.205	2.054	4.532	1.9502
7	2.174	2.497	4.537	2.854	2.676	5.588	2.3174
8	1.575	1.526	4.705	2.279	2.197	5.002	2.1826
11	1.496	1.359	2.244	2.459	2.122	4.358	1.8548
12	2.143	2.048	5.624	2.439	2.303	5.794	2.3926
13	1.755	1.761	6.195	2.639	2.627	6.553	2.1200
16	1.776	1.657	4.525	2.684	2.562	6.215	2.3184
17	1.950	1.903	5.877	2.319	2.033	4.482	2.2122
Average of 10' Locations	1.369	1.164	1.828	2.332	2.088	4.445	1.670
Average of 20' Locations	2.168	2.159	5.372	2.645	2.508	6.037	2.198
Average of 30' Locations	1.760	1.730	5.592	2.412	2.286	5.346	2.035
Average of all locations combined	1.855	1.778	4.658	2.498	2.333	5.453	2.026

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TABLE 3. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3 , 13 APRIL 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	15	14	1	80	4.31	82	97	13	512	28.86	97	111	14	592	16.31
HYDROZOA HYDRA SP.	4	3	0	19	1.02	0	1	0	3	0.17	4	4	0	21	0.58
PLATYHELMINTHES															
RHABDOCOELA	1	6	1	21	1.13	0	0	0	0	0.00	1	6	1	21	0.58
OLIGOCHAETA															
ENCHYTRAEIDAE	2	14	0	43	2.32	0	0	0	0	0.00	2	14	0	43	1.18
NAIDIDAE VEJDOSKYELLA INTERMEDIA	1	8	0	24	1.29	4	1	1	16	0.90	5	9	1	40	1.10
TOTAL NAIDIDAE	1	8	0	24	1.29	4	1	1	16	0.90	5	9	1	40	1.10
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	4	5	2	29	1.56	0	0	0	0	0.00	4	5	2	29	0.80
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	19	73	2	251	13.52	0	0	0	0	0.00	19	73	2	251	6.91
LIMNODRILUS HOFFMEISTERI	4	3	0	19	1.02	0	0	0	0	0.00	4	3	0	19	0.52
LIMNODRILUS HOFFMEISTERI VARIANT	1	0	0	3	0.16	0	0	0	0	0.00	1	0	0	3	0.09
LIMNODRILUS UDEKEMIANUS	0	1	0	3	0.16	0	0	0	0	0.00	0	1	0	3	0.08
PELOSCOLEX SUPERIORENSIS	0	10	0	27	1.45	0	0	0	0	0.00	0	10	0	27	0.74
POTAMOTHRIX VEJDovskyi	0	18	0	48	2.58	0	0	0	0	0.00	0	18	0	48	1.32
TOTAL TUBIFICIDAE	28	110	4	380	20.46	0	0	0	0	0.00	28	110	4	380	10.47
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	7	11	0	48	2.58	0	0	0	0	0.00	7	11	0	48	1.32
UNIDENTIFIED OLIGOCHAETA	0	1	1	5	0.27	10	24	2	96	5.41	10	25	3	101	2.78
TOTAL OLIGOCHAETA	38	144	5	500	26.93	14	25	3	112	6.31	52	169	8	612	16.86
HIRUDINEA															
HELOBDELLA STAGNALIS	1	1	1	8	0.43	0	0	0	0	0.00	1	1	1	8	0.22
TOTAL HIRUDINEA	1	1	1	8	0.43	0	0	0	0	0.00	1	1	1	8	0.22

TABLE 3. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3, 13 APRIL 1973.

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
DSTRACODA	5	5	1	29	1.56	23	15	2	107	6.03	28	20	3	136	3.75
ISOPODA															
ASELLUS SP.	0	2	1	8	0.43	0	0	0	0	0.00	0	2	1	8	0.22
LIRCEUS SP.	0	1	0	3	0.16	0	0	0	0	0.00	0	1	0	3	0.09
AMPHIPODA															
GAMMARUS PSEUDOLIMNAEUS	4	0	0	11	0.59	0	0	0	0	0.00	4	0	0	11	0.30
TOTAL AMPHIPODA	4	0	0	11	0.59	0	0	0	0	0.00	4	0	0	11	0.30
ACARINA															
UNIDENTIFIED HYDRACARINA	2	1	0	8	0.43	0	0	0	0	0.00	2	1	0	8	0.22
EPHEMEROPTERA															
HEPTAGENIIDAE															
UNIDENTIFIED HEPTAGENIIDAE	2	0	0	5	0.27	0	0	0	0	0.00	2	0	0	5	0.14
TOTAL EPHEMEROPTERA	2	0	0	5	0.27	0	0	0	0	0.00	2	0	0	5	0.14
DIPTERA															
CHIRONOMIDAE															
CLADOTANYTARSUS SP.	0	1	0	3	0.16	0	0	0	0	0.00	0	1	0	3	0.09
CRYPTOCHIRONOMUS SP.	0	1	0	3	0.16	0	0	0	0	0.00	0	1	0	3	0.08
DICTOTENDIPES SP.	0	1	0	3	0.16	0	0	0	0	0.00	0	1	0	3	0.09
HETEROTRISSOCLADIUS SP.	2	5	0	19	1.02	0	0	0	0	0.00	2	5	0	19	0.52
MICROCRICOTOPUS SP.	2	1	1	11	0.59	0	0	0	0	0.00	2	1	1	11	0.30
MICROTENDIPES SP.	4	25	0	77	4.15	0	0	0	0	0.00	4	25	0	77	2.12
ORTHOCLADIUS (SS) SP.	8	12	2	59	3.18	0	0	0	0	0.00	8	12	2	59	1.63
PARAKIEFFERIELLA SP.	39	64	8	296	15.94	0	0	0	0	0.00	39	64	8	296	8.15
POLYPEDILUM (FALLAX GROUP) SP.	65	112	4	483	26.01	0	0	0	0	0.00	65	112	4	483	13.31
PSEUDOSMITTIA SP.	9	8	1	48	2.58	0	0	0	0	0.00	9	8	1	48	1.32
STICTOCHIRONOMUS SP.	3	6	0	24	1.29	0	0	0	0	0.00	3	6	0	24	0.66
SYNORTHOCCLADIUS SP.	7	9	1	45	2.42	0	0	0	0	0.00	7	9	1	45	1.24
TANYTARSUS SP.	1	0	0	3	0.16	0	0	0	0	0.00	1	0	0	3	0.09
THIENEMANNINYIA GROUP	6	13	1	53	2.85	0	0	0	0	0.00	6	13	1	53	1.46
TRISSOCLADIUS SP.	1	0	0	3	0.16	0	0	0	0	0.00	1	0	0	3	0.09
UNIDENTIFIED CHIRONOMIDAE	2	1	1	11	0.59	161	213	16	1040	58.62	163	214	17	1051	28.95
TOTAL CHIRONOMIDAE	149	259	19	1141	61.44	161	213	16	1040	58.62	310	472	35	2181	60.08
GASTROPODA															
PHYSA SP.	0	2	0	5	0.27	0	0	0	0	0.00	0	2	0	5	0.14

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TABLE 3. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3 , 13 APRIL 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
LYMNAEA CATASCOPIUM	1	0	0	3	0.16	0	0	0	0	0.00	1	0	0	3	0.09
LYMNAEA HUMILIS	1	0	0	3	0.16	0	0	0	0	0.00	1	0	0	3	0.08
TOTAL GASTROPODA	2	2	0	11	0.59	0	0	0	0	0.00	2	2	0	11	0.30
PELECYPODA															
SPHAERIIDAE	1	4	0	13	0.70	0	0	0	0	0.00	1	4	0	13	0.36
TOTAL PELECYPODA	1	4	0	13	0.70	0	0	0	0	0.00	1	4	0	13	0.36
TOTAL BENTHOS	224	442	29	1857	100.00	280	351	34	1774	100.00	504	793	63	3630	100.00

TABLE 4. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 6 , 13 APRIL

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	1	0	2	8	2.35	4	2	14	53	16.72	5	2	16	61	9.30
HYDROZOA															
HYDRA SP	1	0	0	3	0.88	0	3	0	8	2.52	1	3	0	11	1.68
OLIGOCHAETA															
NAIDIDAE															
CHAETOGASTER SP.	0	0	1	3	0.88	0	0	0	0	0.00	0	0	1	3	0.46
STYLARIA FOSSULARIS	0	0	1	3	0.88	0	0	0	0	0.00	0	0	1	3	0.46
VEJDovskyella INTERMEDIA	0	0	0	0	0.00	0	0	2	5	1.58	0	0	2	5	0.76
TOTAL NAIDIDAE	0	0	2	6	1.76	0	0	2	5	1.58	0	0	4	11	1.68
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	0	0	1	3	0.88	0	0	0	0	0.00	0	0	1	3	0.46
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	0	0	12	32	9.41	0	0	0	0	0.00	0	0	12	32	4.88
POTAMOTHRIX VEJDovskyI	0	1	0	3	0.88	0	0	0	0	0.00	0	1	0	3	0.46
TOTAL TUBIFICIDAE	0	1	13	38	11.18	0	0	0	0	0.00	0	1	13	38	5.79
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	0	0	2	5	1.47	0	0	0	0	0.00	0	0	2	5	0.76
UNIDENTIFIED OLIGOCHAETA	0	0	1	3	0.88	1	1	9	29	9.15	1	1	10	32	4.88
TOTAL OLIGOCHAETA	0	1	18	52	15.29	1	1	11	34	10.73	1	2	29	86	13.11
OSTRACODA	2	0	2	11	3.24	5	10	10	67	21.14	7	10	12	77	11.74
ISOPODA															
ASELLUS SP.	0	0	2	5	1.47	0	0	0	0	0.00	0	0	2	5	0.76
AMPHIPODA															
GAMMARUS PSEUDOLIMNAEUS	0	1	0	3	0.88	0	0	0	0	0.00	0	1	0	3	0.46
TOTAL AMPHIPODA	0	1	0	3	0.88	0	0	0	0	0.00	0	1	0	3	0.46
ACARINA															
UNIDENTIFIED HYDRACARINA	2	0	0	5	1.47	2	0	2	11	3.47	4	0	2	16	2.44

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TABLE 4. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 6 , 13 APRIL

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
EPHEMEROPTERA															
HEPTAGENIIDAE															
HEPTAGENIA SP.	0	2	0	5	1.47	0	0	0	0	0.00	0	2	0	5	0.76
BAETIDAE															
UNIDENTIFIED BAETIDAE	0	1	0	3	0.88	0	0	0	0	0.00	0	1	0	3	0.46
TOTAL EPHEMEROPTERA	0	3	0	8	2.35	0	0	0	0	0.00	0	3	0	8	1.22
TRICHOPTERA															
HYDROPSYCHIDAE															
HYDROPSYCHE SP.	1	0	0	3	0.88	0	0	0	0	0.00	1	0	0	3	0.46
TOTAL TRICHOPTERA	1	0	0	3	0.88	0	0	0	0	0.00	1	0	0	3	0.46
DIPTERA															
CHIRONOMIDAE															
DICROTENDIPES SP.	0	0	1	3	0.88	0	0	0	0	0.00	0	0	1	3	0.46
MICROCRIOTOPUS SP.	1	2	2	13	3.82	0	0	0	0	0.00	1	2	2	13	1.99
MICROTENDIPES SP.	2	5	4	29	8.53	0	0	0	0	0.00	2	5	4	29	4.42
MONODIAMESA TUBERCULATA	0	0	1	3	0.88	0	0	0	0	0.00	0	0	1	3	0.46
ORTHOCLADIUS SP.	3	8	10	56	16.47	0	0	0	0	0.00	3	8	10	56	8.54
PARACLADEPMA SP.	0	0	1	3	0.88	0	0	0	0	0.00	0	0	1	3	0.46
PARAKIEFFERIELLA SP.	2	1	13	43	12.65	0	0	0	0	0.00	2	1	13	43	6.55
POLYPEDILUM (FALLAX GROUP) SP.	0	0	5	13	3.82	0	0	0	0	0.00	0	0	5	13	1.98
PSEUDOSMITTIA SP.	2	0	0	5	1.47	0	0	0	0	0.00	2	0	0	5	0.76
SYNPTHOCLADIUS SP.	1	9	7	45	13.24	0	0	0	0	0.00	1	9	7	45	6.86
THIENEMANNIMYIA GROUP	1	2	2	13	3.82	0	0	0	0	0.00	1	2	2	13	1.98
TRISSOCLADIUS SP.	0	0	1	3	0.88	0	0	0	0	0.00	0	0	1	3	0.46
UNIDENTIFIED CHIRONOMIDAE	0	2	0	5	1.47	14	18	22	144	45.43	14	20	22	149	22.71
TOTAL CHIRONOMIDAE	12	29	47	234	68.82	14	18	22	144	45.43	26	47	69	378	57.62
UNIDENTIFIED															
EMPIDIDAE	1	0	1	5	1.47	0	0	0	0	0.00	1	0	1	5	0.76
GASTROPODA															
GYRAULUS PARVUS	1	0	0	3	0.88	0	0	0	0	0.00	1	0	0	3	0.46
TOTAL GASTROPODA	1	0	0	3	0.88	0	0	0	0	0.00	1	0	0	3	0.46
TOTAL BENTHOS	21	34	72	340	100.00	26	34	59	317	100.00	47	68	131	656	100.00

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TABLE 5 . BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 7 , 13 APRIL

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	2	2	0	11	0.70	3	7	3	35	1.85	5	9	3	45	1.30
HYDROZOA															
HYDRA SP	10	56	11	205	13.13	0	16	3	51	2.70	10	72	14	256	7.42
PLATYHELMINTHES															
RHABDOCOELA	0	0	1	3	0.19	0	3	0	8	0.42	0	3	1	11	0.32
OLIGOCHAETA															
ENCHYTRAEIDAE	3	0	2	13	0.83	0	0	0	0	0.00	3	0	2	13	0.38
NAIDIDAE															
SLAVINA APPENDICULATA	0	0	1	3	0.19	0	0	0	0	0.00	0	0	1	3	0.09
VEJDOSKYELLA INTERMEDIA	4	0	0	11	0.70	1	3	5	24	1.27	5	3	5	35	1.01
TOTAL NAIDIDAE	4	0	1	14	0.90	1	3	5	24	1.27	5	3	6	38	1.10
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	2	0	0	5	0.32	0	0	0	0	0.00	2	0	0	5	0.14
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	7	0	5	32	2.05	0	0	0	0	0.00	7	0	5	32	0.93
LIMNODRILUS HOFFMEISTERI	1	1	0	5	0.32	0	0	0	0	0.00	1	1	0	5	0.14
POTAMOTHRIX VEJDOSKYI	1	0	1	5	0.32	0	0	0	0	0.00	1	0	1	5	0.14
TOTAL TUBIFICIDAE	11	1	6	47	3.01	0	0	0	0	0.00	11	1	6	47	1.36
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	4	3	5	32	2.05	0	0	0	0	0.00	4	3	5	32	0.93
UNIDENTIFIED OLIGOCHAETA	7	2	0	24	1.54	3	9	6	48	2.54	10	11	6	72	2.09
TOTAL OLIGOCHAETA	29	6	14	130	8.33	4	12	11	72	3.81	33	18	25	202	5.86
TARDIGRADA	0	0	0	0	0.00	0	0	1	3	0.16	0	0	1	3	0.09
OSTRACODA	20	27	39	229	14.67	41	254	202	1325	70.11	61	281	241	1555	45.07
ISOPODA															
ASELLUS SP.	2	11	11	64	4.10	0	0	0	0	0.00	2	11	11	64	1.86

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TABLE 5. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 7 , 13 APRIL

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
AMPHIPODA															
PONTOPOREIA AFFINIS	0	0	0	0	0.00	0	1	0	3	0.16	0	1	0	3	0.09
GAHMARUS PSEUDOLIMNAEUS	2	2	3	19	1.22	0	1	0	3	0.16	2	3	3	21	0.61
TOTAL AMPHIPODA	2	2	3	19	1.22	0	2	0	6	0.32	2	4	3	24	0.70
ACARINA															
UNIDENTIFIED HYDRACARINA	6	2	2	27	1.73	0	0	0	0	0.00	6	2	2	27	0.79
EPHEMEROPTERA															
HEPTAGENIIDAE															
STENONEMA SP.	1	1	0	5	0.32	0	0	0	0	0.00	1	1	0	5	0.14
TOTAL EPHEMEROPTERA	1	1	0	5	0.32	0	0	0	0	0.00	1	1	0	5	0.14
TRICHOPTERA															
HYDROPSYCHIDAE															
HYDROPSYCHE SP.	1	0	0	3	0.19	0	0	0	0	0.00	1	0	0	3	0.09
LEPTOCERIDAE															
ATHRIPSODES SP.	0	0	0	0	0.00	0	0	1	3	0.16	0	0	1	3	0.09
TOTAL TRICHOPTERA	1	0	0	3	0.19	0	0	1	3	0.16	1	0	1	6	0.17
DIPTERA															
CHIRONOMIDAE															
CLADOTANYTARSUS SP.	2	1	0	8	0.51	0	0	0	0	0.00	2	1	0	8	0.23
DICROTENDIPES SP.	1	0	0	3	0.19	0	0	0	0	0.00	1	0	0	3	0.09
HETEROTRISSOCLADIUS SP.	0	3	3	16	1.02	0	0	0	0	0.00	0	3	3	16	0.46
MICROCRICOTOPUS SP.	1	2	2	13	0.83	0	0	0	0	0.00	1	2	2	13	0.38
MICROPSECTRA SP.	0	0	1	3	0.19	0	0	0	0	0.00	0	0	1	3	0.09
MICROTENDIPES SP.	4	2	5	29	1.86	0	0	0	0	0.00	4	2	5	29	0.84
MONODIAMESA TUBERCULATA	1	0	0	3	0.19	0	0	0	0	0.00	1	0	0	3	0.09
ORTHOCLADIUS SP.	11	22	24	152	9.74	0	0	0	0	0.00	11	22	24	152	4.41
PARACLADOPELMA SP.	0	0	2	5	0.32	0	0	0	0	0.00	0	0	2	5	0.14
PARAKIEFFERIELLA SP.	10	51	71	352	22.55	0	0	0	0	0.00	10	51	71	352	10.20
PARATANYTARSUS SP.	0	1	0	3	0.19	0	0	0	0	0.00	0	1	0	3	0.09
POLYPEDILUM (FALLAX GROUP) SP.	0	0	6	16	1.02	0	0	0	0	0.00	0	0	6	16	0.46
PSEUDOSMITTIA SP.	0	8	8	43	2.75	0	0	0	0	0.00	0	8	8	43	1.25
STICTOCHIRONOMUS SP.	1	0	2	8	0.51	0	0	0	0	0.00	1	0	2	8	0.23
SYNORTHOCCLADIUS SP.	5	7	2	37	2.37	0	0	0	0	0.00	5	7	2	37	1.07
TANYTARSUS SP.	1	0	0	3	0.19	0	0	0	0	0.00	1	0	0	3	0.09
THIENEMANNIYA GROUP	4	4	5	35	2.24	0	0	0	0	0.00	4	4	5	35	1.01

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TABLE 5 BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 7 , 13 APRIL

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
TRISSOCLADUS SP.	0	2	0	5	0.32	0	0	0	0	0.00	0	2	0	5	0.14
UNIDENTIFIED CHIRONOMIDAE	0	2	2	11	0.70	46	52	33	349	18.47	46	54	35	360	10.43
TOTAL CHIRONOMIDAE	41	105	133	745	47.73	46	52	33	349	18.47	87	157	166	1094	31.71
GASTROPODA															
VALVATA SP.	0	0	0	0	0.00	0	0	1	3	0.16	0	0	1	3	0.09
PHYSA SP.	0	1	3	11	0.70	0	0	0	0	0.00	0	1	3	11	0.32
LYMNAEA HUMILIS	0	3	3	16	1.02	0	0	0	0	0.00	0	3	3	16	0.46
GYRAULUS PARVUS	0	8	13	56	3.59	0	0	1	3	0.16	0	8	14	59	1.71
TOTAL GASTROPODA	0	12	19	83	5.32	0	0	2	6	0.32	0	12	21	89	2.58
PELECYPODA															
SPHAERIIDAE	2	8	4	37	2.37	1	11	0	32	1.69	3	19	4	69	2.00
TOTAL PELECYPODA	2	8	4	37	2.37	1	11	0	32	1.69	3	19	4	69	2.00
TOTAL BENTHOS	116	232	237	1561	100.00	95	357	256	1890	100.00	211	589	493	3450	100.00

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TABLE 6. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 8 , 13 APRIL 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
NEMATODA	4	4	4	32	2.63	4	6	35	120	11.30	8	10	39	152	6.66
HYDROZOA															
HYDRA SP.	4	2	6	32	2.63	2	0	5	19	1.79	6	2	11	51	2.24
PLATYHELMINTHES															
RHABDOCOELA	0	2	5	19	1.56	0	0	1	3	0.28	0	2	6	21	0.92
OLIGOCHAETA															
ENCHYTRAEIDAE	0	0	6	16	1.31	0	0	0	0	0.00	0	0	6	16	0.70
NAIDIDAE															
PIGUETIELLA MICHIGANENSIS	1	0	0	3	0.25	0	0	0	0	0.00	1	0	0	3	0.13
VEJDOSKYELLA INTERMEDIA	1	0	1	5	0.41	0	0	8	21	1.98	1	0	9	27	1.18
TOTAL NAIDIDAE	2	0	1	8	0.66	0	0	8	21	1.98	2	0	9	30	1.32
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	0	0	4	11	0.90	0	0	0	0	0.00	0	0	4	11	0.48
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	3	2	19	64	5.25	0	0	0	0	0.00	3	2	19	64	2.81
LIMNODRILUS HOFFMEISTERI	0	2	2	11	0.90	0	0	0	0	0.00	0	2	2	11	0.48
LIMNODRILUS PROFUNDICOLA	1	0	0	3	0.25	0	0	0	0	0.00	1	0	0	3	0.13
PELOSCOLEX SUPERIORENSIS	0	1	3	11	0.90	0	0	0	0	0.00	0	1	3	11	0.48
POTAMOTHRIX VEJDOSKYI	0	0	1	3	0.25	0	0	0	0	0.00	0	0	1	3	0.13
TOTAL TUBIFICIDAE	4	5	29	103	8.45	0	0	0	0	0.00	4	5	29	103	4.52
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	1	0	16	45	3.69	0	0	0	0	0.00	1	0	16	45	1.97
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	1	4	28	88	8.29	1	4	28	88	3.86
TOTAL OLIGOCHAETA	7	5	52	172	14.11	1	4	36	109	10.26	8	9	88	282	12.36
HIRUDINEA															
GLOSSIPHONIA COMPLANATA	0	1	0	3	0.25	0	0	0	0	0.00	0	1	0	3	0.13
HELOBDELLA STAGNALIS	0	0	0	0	0.00	0	0	2	5	0.47	0	0	2	5	0.22

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TABLE 6. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 8 , 13 APRIL

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TOTAL HIRUDINEA	0	1	0	3	0.25	0	0	2	5	0.47	0	1	2	8	0.35
OSTRACODA	11	76	3	240	19.69	15	190	39	651	61.30	26	266	42	891	39.06
ISOPODA															
ASELLUS SP.	1	0	0	3	0.25	0	0	0	0	0.00	1	0	0	3	0.13
LIRCEUS SP.	0	1	0	3	0.25	0	0	0	0	0.00	0	1	0	3	0.13
AMPHIPODA															
PONTOPOREIA AFFINIS	0	0	1	3	0.25	0	0	0	0	0.00	0	0	1	3	0.13
TOTAL AMPHIPODA	0	0	1	3	0.25	0	0	0	0	0.00	0	0	1	3	0.13
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	0	1	0	3	0.25	0	0	0	0	0.00	0	1	0	3	0.13
TOTAL TRICHOPTERA	0	1	0	3	0.25	0	0	0	0	0.00	0	1	0	3	0.13
DIPTERA															
CHIRONOMIDAE															
HETEROTRISSOCLADIUS SP.	1	1	5	19	1.56	0	0	0	0	0.00	1	1	5	19	0.83
MICROCRICOTOPUS SP.	2	0	0	5	0.41	0	0	0	0	0.00	2	0	0	5	0.22
MICROTENDIPES SP.	1	3	6	27	2.21	0	0	0	0	0.00	1	3	6	27	1.18
MONODIAMESA TUBERCULATA	1	0	4	13	1.07	0	0	0	0	0.00	1	0	4	13	0.57
ORTHOCLADIUS SP.	2	1	10	35	2.87	0	0	0	0	0.00	2	1	10	35	1.53
PARACLADEPPELMA SP.	1	1	5	19	1.56	0	0	0	0	0.00	1	1	5	19	0.83
PARAKIEFFERIELLA SP.	18	5	87	293	24.04	0	0	0	0	0.00	18	5	87	293	12.85
POLYPEDILUM (FALLAX GROUP) SP.	3	0	3	16	1.31	0	0	0	0	0.00	3	0	3	16	0.70
PSEUDOSMITTIA SP.	5	16	3	64	5.25	0	0	0	0	0.00	5	16	3	64	2.81
STICTOCHIRONOMUS SP.	0	0	1	3	0.25	0	0	0	0	0.00	0	0	1	3	0.13
SYNORTHOCCLADIUS SP.	3	0	2	13	1.07	0	0	0	0	0.00	3	0	2	13	0.57
TANYTARSUS SP.	1	1	0	5	0.41	0	0	0	0	0.00	1	1	0	5	0.22
THIENEMANNIMYIA GROUP	1	1	1	8	0.66	0	0	0	0	0.00	1	1	1	8	0.35
UNIDENTIFIED CHIRONOMIDAE	1	0	1	5	0.41	3	6	49	155	14.60	4	6	50	160	7.01
TOTAL CHIRONOMIDAE	40	29	128	525	43.07	3	6	49	155	14.60	43	35	177	680	29.81
GASTROPODA															
AMNICOLA LIMOSA	0	2	0	5	0.41	0	0	0	0	0.00	0	2	0	5	0.22
VALVATA SP.	0	3	0	8	0.66	0	0	0	0	0.00	0	3	0	8	0.35
PHYSA SP.	0	13	0	35	2.87	0	0	0	0	0.00	0	13	0	35	1.53

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TABLE 6. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 8 , 13 APRIL 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
LYMNAEA HUMILIS	1	13	1	40	3.28	0	0	0	0	0.00	1	13	1	40	1.75
GYRAULUS PARVUS	1	19	1	56	4.59	0	0	0	0	0.00	1	19	1	56	2.46
TOTAL GASTROPODA	2	50	2	144	11.81	0	0	0	0	0.00	2	50	2	144	6.31
PELECYPODA															
SPHAERIIDAE	0	14	1	40	3.28	0	0	0	0	0.00	0	14	1	40	1.75
TOTAL PELECYPODA	0	14	1	40	3.28	0	0	0	0	0.00	0	14	1	40	1.75
TOTAL BENTHOS	69	185	202	1219	100.00	25	206	167	1062	100.00	94	391	369	2281	100.00

TABLE 7. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 11, 13 APRIL 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
NEMATODA	3	5	5	35	2.58	0	1	1	5	0.40	3	6	6	40	1.54
HYDROZOA															
HYDRA SP	15	10	35	160	11.78	1	3	5	24	1.94	16	13	40	184	7.10
PLATYHELMINTHES															
RHABDOCELA	1	0	0	3	0.22	0	0	0	0	0.00	1	0	0	3	0.12
OLIGOCHAETA															
ENCHYTRAEIDAE	4	1	6	29	2.14	0	0	0	0	0.00	4	1	6	29	1.12
NAIDIDAE															
NAIS BRETSCHERI	0	0	1	3	0.22	0	0	0	0	0.00	0	0	1	3	0.12
PARANAI LITORALIS	0	1	0	3	0.22	0	0	0	0	0.00	0	1	0	3	0.12
VEJDUSKYELLA INTERMEDIA	3	0	6	24	1.77	2	4	5	29	2.34	5	4	11	53	2.04
A-761 TOTAL NAIDIDAE	3	1	7	30	2.21	2	4	5	29	2.34	5	5	12	59	2.28
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	3	0	0	8	0.59	0	0	0	0	0.00	3	0	0	8	0.31
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	3	8	8	51	3.76	0	0	0	0	0.00	3	8	8	51	1.97
LIMNODRILUS HOFFMEISTERI	5	2	3	27	1.99	0	0	0	0	0.00	5	2	3	27	1.04
LIMNODRILUS SPIRALIS	1	0	0	3	0.22	0	0	0	0	0.00	1	0	0	3	0.12
LIMNODRILUS UDEKEMIANUS	0	0	1	3	0.22	0	0	0	0	0.00	0	0	1	3	0.12
PELOSCOLEX SUPERIORENSIS	0	1	0	3	0.22	0	0	0	0	0.00	0	1	0	3	0.12
POTAMOTHRIX VEJDovskyi	0	2	1	8	0.59	0	0	0	0	0.00	0	2	1	8	0.31
TUBIFEX TUBIFEX	1	0	0	3	0.22	0	0	0	0	0.00	1	0	0	3	0.12
TOTAL TUBIFICIDAE	13	13	13	106	7.81	0	0	0	0	0.00	13	13	13	106	4.09
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	2	3	13	48	3.53	0	0	0	0	0.00	2	3	13	48	1.85
UNIDENTIFIED OLIGOCHAETA	1	0	0	3	0.22	0	5	5	27	2.18	1	5	5	29	1.12
TOTAL OLIGOCHAETA	23	18	39	216	15.91	2	9	10	56	4.53	25	27	49	271	10.45
HIRUDINEA															
UNIDENTIFIED HIRUDINEA	1	0	0	3	0.22	0	0	0	0	0.00	1	0	0	3	0.12

TABLE 7. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 11, 13 APRIL 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
HELOBDELLA ELONGATA	1	0	0	3	0.22	0	0	0	0	0.00	1	0	0	3	0.12
HELOBDELLA STAGNALIS	0	1	1	5	0.37	0	0	0	0	0.00	0	1	1	5	0.19
TOTAL HIRUDINEA	2	1	1	11	0.81	0	0	0	0	0.00	2	1	1	11	0.42
OSTRACODA	11	7	30	128	9.43	69	126	173	981	79.30	80	133	203	1109	42.77
ISOPODA															
ASELLUS SP.	12	9	6	72	5.30	1	0	1	5	0.40	13	9	7	77	2.97
AMPHIPODA															
HYALELLA AZTECA	0	1	0	3	0.22	0	0	0	0	0.00	0	1	0	3	0.12
GAMMARUS PSEUDOLIMNAEUS	1	2	2	13	0.96	0	0	0	0	0.00	1	2	2	13	0.50
TOTAL AMPHIPODA	1	3	2	16	1.18	0	0	0	0	0.00	1	3	2	16	0.62
ACARINA															
UNIDENTIFIED HYDRACARINA	2	6	3	29	2.14	0	0	0	0	0.00	2	6	3	29	1.12
COLLEMBOLA															
COLLEMBOLLA	1	0	0	3	0.22	1	0	0	3	0.24	2	0	0	5	0.19
EPHEMEROPTERA															
HEPTAGENIIDAE															
STENONEMA SP.	0	0	1	3	0.22	0	0	0	0	0.00	0	0	1	3	0.12
TOTAL EPHEMEROPTERA	0	0	1	3	0.22	0	0	0	0	0.00	0	0	1	3	0.12
TRICHOPTERA															
HYDROPSYCHIDAE															
HYDROPSYCHE SP.	1	1	0	5	0.37	0	0	0	0	0.00	1	1	0	5	0.19
TOTAL TRICHOPTERA	1	1	0	5	0.37	0	0	0	0	0.00	1	1	0	5	0.19
DIPTERA															
PSYCHODIDAE															
PSYCHODA SP.	0	1	0	3	0.22	0	0	0	0	0.00	0	1	0	3	0.12
CHIRONOMIDAE															
DICROTENDIPES SP.	6	2	2	27	1.99	0	0	0	0	0.00	6	2	2	27	1.04
EUKIEFFERIELLA	0	1	2	8	0.59	0	0	0	0	0.00	0	1	2	8	0.31
HETEROTRISSOCLADIUS SP.	1	3	1	13	0.96	0	0	0	0	0.00	1	3	1	13	0.50

TABLE 7. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 11, 13 APRIL

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
MICROCRICOTOPUS SP.	0	2	0	5	0.37	0	0	0	0	0.00	0	2	0	5	0.19
MICROPSECTRA SP.	0	2	0	5	0.37	0	0	0	0	0.00	0	2	0	5	0.19
MICROTENDIPES SP.	0	5	0	35	2.58	0	0	0	0	0.00	8	5	0	35	1.35
MUNODIAM TUBERCULATA	2	0	0	5	0.37	0	0	0	0	0.00	2	0	0	5	0.19
ORTHOCLADUS SP.	43	20	8	189	13.92	0	0	0	0	0.00	43	20	8	189	7.29
PARACLAGUS SP.	2	1	0	8	0.59	0	0	0	0	0.00	2	1	0	8	0.31
PARAKIEFFERIELLA SP.	37	27	12	203	14.95	0	0	0	0	0.00	37	27	12	203	7.83
PARATANYTARSUS SP.	1	0	0	3	0.22	0	0	0	0	0.00	1	0	0	3	0.12
POLYPEDILUM (FALLAX GROUP) SP.	4	2	1	19	1.40	0	0	0	0	0.00	4	2	1	19	0.73
PSEUDOSMITTEA SP.	7	7	2	43	3.17	0	0	0	0	0.00	7	7	2	43	1.66
STICTOCHIRONOMUS SP.	3	1	2	16	1.18	0	0	0	0	0.00	3	1	2	16	0.62
SYNORTHOCCLADUS SP.	3	0	0	8	0.59	0	0	0	0	0.00	3	0	0	8	0.31
TANYTARSUS SP.	2	0	0	5	0.37	0	0	0	0	0.00	2	0	0	5	0.19
THIENEMANNIELLA GROUP	8	4	3	40	2.95	0	0	0	0	0.00	8	4	3	40	1.54
TRICHOCLADUS SP.	4	4	0	21	1.55	0	0	0	0	0.00	4	4	0	21	0.81
UNIDENTIFIED CHIRONOMIDAE	2	1	0	8	0.59	18	22	20	160	12.93	20	23	20	168	6.48
TOTAL CHIRONOMIDAE	133	82	33	661	48.67	18	22	20	160	12.93	151	104	53	821	31.65
UNIDENTIFIED															
EMPIDIDAE	2	0	0	5	0.37	0	0	0	0	0.00	2	0	0	5	0.19
COLEOPTERA															
PLECOPTERA	0	0	0	0	0.00	0	1	0	3	0.24	0	1	0	3	0.12
GASTROPODA															
VALVATA SP.	0	1	1	5	0.37	0	0	0	0	0.00	0	1	1	5	0.19
GYRAULUS PARVUS	1	0	0	3	0.22	0	0	0	0	0.00	1	0	0	3	0.12
TOTAL GASTROPODA	1	1	1	8	0.59	0	0	0	0	0.00	1	1	1	8	0.31
TOTAL BENTHOS	208	144	156	1358	100.00	92	162	210	1237	100.00	300	306	366	2593	100.00

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TABLE 8. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 13 APRIL 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	32	14	18	171	9.77	24	91	139	677	36.63	56	105	157	848	23.56
HYDROZOA HYDRA SP.	0	4	15	51	2.91	0	2	10	32	1.73	0	6	25	83	2.31
PLATYHELMINTHES															
RHABDOCOELA	0	0	0	0	0.00	1	0	1	5	0.27	1	0	1	5	0.14
OLIGOCHAETA															
ENCHYTRAEIDAE	4	2	3	24	1.37	0	0	0	0	0.00	4	2	3	24	0.67
NAIDIDAE VEJDUSKYELLA INTERMEDIA	1	2	2	13	0.74	1	2	5	21	1.14	2	4	7	35	0.97
TOTAL NAIDIDAE	1	2	2	13	0.74	1	2	5	21	1.14	2	4	7	35	0.97
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	1	4	14	51	2.91	0	0	0	0	0.00	1	4	14	51	1.42
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	8	66	93	445	25.41	0	0	0	0	0.00	8	66	93	445	12.36
LIMNODRILUS HOFFMEISTERI	0	2	3	13	0.74	0	0	0	0	0.00	0	2	3	13	0.36
LIMNODRILUS HOFFMEISTERI VARIANT	0	0	1	3	0.17	0	0	0	0	0.00	0	0	1	3	0.08
LIMNODRILUS SPIRALIS	0	1	0	3	0.17	0	0	0	0	0.00	0	1	0	3	0.09
POTAMOTHRIX MOLDAVIENSIS	0	0	1	3	0.17	0	0	0	0	0.00	0	0	1	3	0.08
POTAMOTHRIX VEJDovskyi	2	3	4	24	1.37	0	0	0	0	0.00	2	3	4	24	0.67
TUBIFEX TUBIFEX	0	0	1	3	0.17	0	0	0	0	0.00	0	0	1	3	0.08
TOTAL TUBIFICIDAE	11	76	117	545	31.13	0	0	0	0	0.00	11	76	117	545	15.14
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	27	4	2	88	5.03	0	0	0	0	0.00	27	4	2	88	2.45
UNIDENTIFIED OLIGOCHAETA	0	1	0	3	0.17	11	22	58	243	13.15	11	23	58	245	6.81
TOTAL OLIGOCHAETA	43	85	124	673	38.44	12	24	63	264	14.29	55	109	187	937	26.04
HIRUDINEA															
HELOBDELLA STAGNALIS	1	4	0	13	0.74	0	0	0	0	0.00	1	4	0	13	0.36

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TABLE 8. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 13 APRIL

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TOTAL HIRUDINEA	1	4	0	13	0.74	0	0	0	0	0.00	1	4	0	13	0.36
OSTRACODA	9	23	3	93	5.31	69	77	35	483	26.14	78	100	38	576	16.00
ISOPODA															
ASELLUS SP.	2	1	1	11	0.63	0	0	0	0	0.00	2	1	1	11	0.31
LIRCEUS SP.	1	0	0	3	0.17	0	0	0	0	0.00	1	0	0	3	0.08
AMPHIPODA															
GAMMARUS PSEUDOLIMNAEUS	0	0	8	21	1.20	0	0	0	0	0.00	0	0	8	21	0.58
TOTAL AMPHIPODA	0	0	8	21	1.20	0	0	0	0	0.00	0	0	8	21	0.58
ACARINA															
UNIDENTIFIED HYDRACARINA	0	2	1	8	0.46	0	1	2	8	0.43	0	3	3	16	0.44
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	0	1	0	3	0.17	0	0	0	0	0.00	0	1	0	3	0.08
CLADOTANYTARSUS SP.	0	0	2	5	0.29	0	0	0	0	0.00	0	0	2	5	0.14
DICTOTENDIPES SP.	0	0	1	3	0.17	0	0	0	0	0.00	0	0	1	3	0.08
HETEROTRISSOCLADIUS SP.	6	2	2	27	1.54	0	0	0	0	0.00	6	2	2	27	0.75
MICROCICOTOPUS SP.	0	0	5	13	0.74	0	0	0	0	0.00	0	0	5	13	0.36
MICROPSECTRA SP.	3	0	0	8	0.46	0	0	0	0	0.00	3	0	0	8	0.22
MICROTENDIPES SP.	0	7	5	32	1.83	0	0	0	0	0.00	0	7	5	32	0.89
MONODIAMESA TUBERCULATA	0	0	1	3	0.17	0	0	0	0	0.00	0	0	1	3	0.08
ORTHOCLADIUS SP.	7	3	25	93	5.31	0	0	0	0	0.00	7	3	25	93	2.58
PARACLADEPPELMA SP.	0	1	0	3	0.17	0	0	0	0	0.00	0	1	0	3	0.08
PARAKIEFFERIELLA SP.	21	16	25	165	9.42	0	0	0	0	0.00	21	16	25	165	4.58
PARATANYTARSUS SP.	0	1	0	3	0.17	0	0	0	0	0.00	0	1	0	3	0.08
POLYPEDILUM (FALLAX GROUP) SP.	32	3	7	112	6.40	0	0	0	0	0.00	32	3	7	112	3.11
POTTHASTIA SP.	0	0	1	3	0.17	0	0	0	0	0.00	0	0	1	3	0.08
PSEUDOSMITTIA SP.	17	3	4	64	3.66	0	0	0	0	0.00	17	3	4	64	1.78
STICTOCHIRONOMUS SP.	1	2	3	16	0.91	0	0	0	0	0.00	1	2	3	16	0.44
SYNORTHOCCLADIUS SP.	1	5	20	69	3.94	0	0	0	0	0.00	1	5	20	69	1.92
THIENEMANNIHYA GROUP	0	3	13	43	2.46	0	0	0	0	0.00	0	3	13	43	1.19
UNIDENTIFIED CHIRONOMIDAE	2	0	1	8	0.46	14	49	78	376	20.35	16	49	79	384	10.67
TOTAL CHIRONOMIDAE	90	47	115	673	38.44	14	49	78	376	20.35	104	96	193	1049	29.15
GASTROPODA															
AMNICOLA LIMOSA	1	0	0	3	0.17	0	0	0	0	0.00	1	0	0	3	0.08

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TABLE 8. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 13 APRIL 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
PHYSA SP.	2	0	0	5	0.29	0	0	0	0	0.00	2	0	0	5	0.14
LYMNAEA HUMILIS	2	0	0	5	0.29	0	0	0	0	0.00	2	0	0	5	0.14
GYRAULUS PARVUS	0	3	0	8	0.46	0	1	0	3	0.16	0	4	0	11	0.31
TOTAL GASTROPODA	5	3	0	21	1.20	0	1	0	3	0.16	5	4	0	24	0.67
PELECYPODA															
SPHAERIIDAE	4	0	1	13	0.74	0	0	0	0	0.00	4	0	1	13	0.36
TOTAL PELECYPODA	4	0	1	13	0.74	0	0	0	0	0.00	4	0	1	13	0.36
TOTAL BENTHOS	187	183	286	1751	100.00	120	245	328	1848	100.00	307	428	614	3599	100.00

TABLE 9. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13, 13 APRIL 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	29	6	2	99	6.29	237	124	24	1027	32.72	266	130	26	1125	23.89
HYDROZOA															
HYDRA SP.	0	2	0	5	0.32	0	3	0	8	0.25	0	5	0	13	0.28
PLATYHELMINTHES															
RHABDOCOELA	4	4	0	21	1.34	0	4	0	11	0.35	4	8	0	32	0.68
OLIGOCHAETA															
ENCHYTRAEIDAE	11	11	1	61	3.88	0	0	0	0	0.00	11	11	1	61	1.30
NAIDIDAE															
VEJDOSKYELLA INTERMEDIA	4	0	0	11	0.70	3	1	1	13	0.41	7	1	1	24	0.51
TOTAL NAIDIDAE	4	0	0	11	0.70	3	1	1	13	0.41	7	1	1	24	0.51
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	3	6	0	24	1.53	0	0	0	0	0.00	3	6	0	24	0.51
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	12	36	0	128	8.14	0	0	0	0	0.00	12	36	0	128	2.72
LIMNODRILUS HOFFMEISTERI	4	3	1	21	1.34	0	0	0	0	0.00	4	3	1	21	0.45
LIMNODRILUS SPIRALIS	1	0	0	3	0.19	0	0	0	0	0.00	1	0	0	3	0.06
LIMNODRILUS UDEKEMIANUS	0	3	0	8	0.51	0	0	0	0	0.00	0	3	0	8	0.17
PELOSCOLEX SUPERIORENSIS	0	4	0	11	0.70	0	0	0	0	0.00	0	4	0	11	0.23
POTAMOTHRIX MOLDAVIENSIS	1	1	0	5	0.32	0	0	0	0	0.00	1	1	0	5	0.11
POTAMOTHRIX VEJDOSKYI	9	2	1	32	2.03	0	0	0	0	0.00	9	2	1	32	0.68
TUBIFEX TUBIFEX	0	1	0	3	0.19	0	0	0	0	0.00	0	1	0	3	0.06
TOTAL TUBIFICIDAE	30	56	2	235	14.94	0	0	0	0	0.00	30	56	2	235	4.99
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	31	33	3	179	11.38	0	0	0	0	0.00	31	33	3	179	3.80
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	40	99	2	376	11.98	40	99	2	376	7.98
TOTAL OLIGOCHAETA	76	100	6	486	30.90	43	100	3	389	12.39	119	200	9	875	18.58
HIRUDINEA															
HELOBDELLA STAGNALIS	0	1	0	3	0.19	0	0	1	3	0.10	0	1	1	5	0.11

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TABLE 9. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13, 13 APRIL 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
TOTAL HIRUDINEA	0	1	0	3	0.19	0	0	1	3	0.10	0	1	1	5	0.11
OSTRACODA	16	1	1	48	3.05	34	41	12	232	7.39	50	42	13	280	5.94
ISOPODA															
ASELLUS SP.	3	2	0	13	0.83	0	0	0	0	0.00	3	2	0	13	0.28
LIRCEUS SP.	2	0	0	5	0.32	0	0	0	0	0.00	2	0	0	5	0.11
AMPHIPODA															
PUNTOPOREIA AFFINIS	0	5	0	13	0.83	0	0	1	3	0.10	0	5	1	16	0.34
TOTAL AMPHIPODA	0	5	0	13	0.83	0	0	1	3	0.10	0	5	1	16	0.34
ACARINA															
UNIDENTIFIED HYDRACARINA	0	0	0	0	0.00	1	0	1	5	0.16	1	0	1	5	0.11
DIPTERA															
CHIRONOMIDAE															
HETEROTRISSOCLADIUS SP.	18	20	0	101	6.42	0	0	0	0	0.00	18	20	0	101	2.14
MICROPSECTRA SP.	5	1	0	16	1.02	0	0	0	0	0.00	5	1	0	16	0.34
MICROTENDIPES SP.	2	1	0	8	0.51	0	0	0	0	0.00	2	1	0	8	0.17
MONODIAMESA TUBERCULATA	2	4	0	16	1.02	0	0	0	0	0.00	2	4	0	16	0.34
ORTHOCCLADIUS SP.	9	10	0	51	3.24	0	0	0	0	0.00	9	10	0	51	1.08
PARACHIRONOMUS SP.	0	0	1	3	0.19	0	0	0	0	0.00	0	0	1	3	0.06
PARACLADEPPELMA SP.	4	7	0	29	1.84	0	0	0	0	0.00	4	7	0	29	0.62
PARAKIEFFERIELLA SP.	53	60	1	304	19.33	0	0	0	0	0.00	53	60	1	304	6.45
POLYPEDILUM (FALLAX GROUP) SP.	28	18	10	149	9.47	0	0	0	0	0.00	28	18	10	149	3.16
PSEUDOSMITTIA SP.	4	10	0	37	2.35	0	0	0	0	0.00	4	10	0	37	0.79
STICTOCHIRONOMUS SP.	0	13	0	35	2.23	0	0	0	0	0.00	0	13	0	35	0.74
SYNDORTHOCLADIUS SP.	2	0	0	5	0.32	0	0	0	0	0.00	2	0	0	5	0.11
TANYTARSUS SP.	0	1	1	5	0.32	0	0	0	0	0.00	0	1	1	5	0.11
THIENEMANNIMYIA GROUP	5	0	1	16	1.02	0	0	0	0	0.00	5	0	1	16	0.34
TRISSOCLADIUS SP.	0	4	1	13	0.83	0	0	0	0	0.00	0	4	1	13	0.28
UNIDENTIFIED CHIRONOMIDAE	1	0	0	3	0.19	59	455	32	1456	46.38	60	455	32	1459	30.99
TOTAL CHIRONOMIDAE	133	149	15	791	50.29	59	455	32	1456	46.38	192	604	47	2247	47.71
CERATOPOGONIDAE															
CERATOPOGONIDAE	0	1	0	3	0.19	0	0	0	0	0.00	0	1	0	3	0.06
GASTROPODA															
PHYSA SP.	1	3	0	11	0.70	0	0	0	0	0.00	1	3	0	11	0.23

TABLE 9. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13 , 13 APRIL 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
LYMNAEA AURICULARIA	0	0	1	3	0.19	0	0	0	0	0.00	0	0	1	3	0.06
LYMNAEA HUMILIS	2	3	3	21	1.34	0	0	0	0	0.00	2	3	3	21	0.45
GYRAULUS PARVUS	0	9	1	27	1.72	0	0	0	0	0.00	0	9	1	27	0.57
TOTAL GASTROPODA	3	15	5	62	3.94	0	0	0	0	0.00	3	15	5	62	1.32
PELECYPODA															
SPHAERIIDAE	2	1	6	24	1.53	0	0	2	5	0.16	2	1	8	29	0.62
TOTAL PELECYPODA	2	1	6	24	1.53	0	0	2	5	0.16	2	1	8	29	0.62
TOTAL BENTHOS	268	287	35	1573	100.00	374	727	76	3139	100.00	642	1014	111	4710	100.00

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TABLE 10. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16, 13 APRIL 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	2	0	1	8	0.52	2	0	5	19	1.37	4	0	6	27	0.93
HYDROZOA															
HYDRA SP.	109	0	33	379	24.80	0	0	39	104	7.50	109	0	72	483	16.59
PLATYHELMINTHES															
RHABDOCOELA	0	0	0	0	0.00	0	0	1	3	0.22	0	0	1	3	0.10
OLIGOCHAETA															
ENCHYTRAEIDAE	1	1	6	21	1.37	0	0	0	0	0.00	1	1	6	21	0.72
NAIDIDAE															
SLAVINA APPENDICULATA	1	0	1	5	0.33	0	0	0	0	0.00	1	0	1	5	0.17
VEJDOSKYELLA INTERMEDIA	0	0	6	16	1.05	3	0	7	27	1.95	3	0	13	43	1.48
TOTAL NAIDIDAE	1	0	7	21	1.37	3	0	7	27	1.95	4	0	14	48	1.65
TUBIFICIDAE															
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	6	0	8	37	2.42	0	0	0	0	0.00	6	0	8	37	1.27
LIMNODRILUS HOFFMEISTERI	2	0	1	8	0.52	0	0	0	0	0.00	2	0	1	8	0.27
POTAMOTHRIX MOLDAVIENSIS	1	0	0	3	0.20	0	0	0	0	0.00	1	0	0	3	0.10
POTAMOTHRIX VEJDovskyi	3	0	0	8	0.52	0	0	0	0	0.00	3	0	0	8	0.27
TUBIFEX TUBIFEX	2	0	0	5	0.33	0	0	0	0	0.00	2	0	0	5	0.17
TOTAL TUBIFICIDAE	14	0	9	61	3.99	0	0	0	0	0.00	14	0	9	61	2.09
OLIGOCHAETA															
STYLODRILUS HERINGIANUS	10	0	3	35	2.29	0	0	0	0	0.00	10	0	3	35	1.20
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	13	1	16	80	5.77	13	1	16	80	2.75
TOTAL OLIGOCHAETA	26	1	25	138	9.03	16	1	23	107	7.72	42	2	48	245	8.41
HIRUDINEA															
HELOBDELLA STAGNALIS	2	0	0	5	0.33	0	0	0	0	0.00	2	0	0	5	0.17
TOTAL HIRUDINEA	2	0	0	5	0.33	0	0	0	0	0.00	2	0	0	5	0.17

TABLE 10. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16 , 13 APRIL

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
TARDIGRADA	0	0	1	3	0.20	0	1	0	3	0.22	0	1	1	5	0.17
OSTRACODA	4	0	21	67	4.38	108	11	170	771	55.63	112	11	191	837	28.74
ISOPODA															
ASELLUS SP.	31	0	15	123	8.05	0	0	0	0	0.00	31	0	15	123	4.22
LIRCEUS SP.	5	0	4	24	1.57	0	0	0	0	0.00	5	0	4	24	0.82
AMPHIPODA															
PONTOPOREIA AFFINIS	0	0	0	0	0.00	0	4	2	16	1.15	0	4	2	16	0.55
GAMMARUS PSEUDOLIMNAEUS	3	0	19	59	3.86	0	0	0	0	0.00	3	0	19	59	2.03
TOTAL AMPHIPODA	3	0	19	59	3.86	0	4	2	16	1.15	3	4	21	75	2.58
ACARINA															
UNIDENTIFIED HYDRACARINA	3	1	2	16	1.05	0	2	3	13	0.94	3	3	5	29	1.00
EPEHEROPTERA															
HEPTAGENIIDAE															
STENONEMA SP.	0	0	4	11	0.72	0	0	0	0	0.00	0	0	4	11	0.38
TOTAL EPEHEROPTERA	0	0	4	11	0.72	0	0	0	0	0.00	0	0	4	11	0.38
TRICHOPTERA															
HYDROPSYCHIDAE															
HYDROPSYCHE SP.	4	0	3	19	1.24	0	0	0	0	0.00	4	0	3	19	0.65
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	2	0	1	8	0.52	0	0	1	3	0.22	2	0	2	11	0.38
TOTAL TRICHOPTERA	6	0	4	27	1.77	0	0	1	3	0.22	6	0	5	30	1.03
DIPTERA															
CHIRONOMIDAE															
CLADOTANYTARSUS SP.	1	0	1	5	0.33	0	0	0	0	0.00	1	0	1	5	0.17
MICROTENDIPES SP.	2	3	2	19	1.24	0	0	0	0	0.00	2	3	2	19	0.65
MICROCRICOTOPUS SP.	3	0	4	19	1.24	0	0	0	0	0.00	3	0	4	19	0.65
MICROTENDIPES SP.	3	1	4	21	1.37	0	0	0	0	0.00	3	1	4	21	0.72
ORTHOCLADIUS SP.	43	3	23	184	12.04	0	0	0	0	0.00	43	3	23	184	6.32
PARACLADOPHELMA SP.	1	0	1	5	0.33	0	0	0	0	0.00	1	0	1	5	0.17
PARAKIEFFERIELLA SP.	50	8	31	237	15.51	0	0	0	0	0.00	50	8	31	237	8.14
POLYPEDILUM (FALLAX GROUP) SP.	0	1	2	8	0.52	0	0	0	0	0.00	0	1	2	8	0.27
PSEUDOSMITTIA SP.	7	1	2	27	1.77	0	0	0	0	0.00	7	1	2	27	0.93

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TABLE 10. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16 , 13 APRIL 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
STICTOCHIRONOMUS SP.	1	0	0	3	0.20	0	0	0	0	0.00	1	0	0	3	0.19
SYNORTHOCCLADIUS SP.	14	0	21	93	6.09	0	0	0	0	0.00	14	0	21	93	3.19
TANYTARSUS SP.	3	0	0	8	0.52	0	0	0	0	0.00	3	0	0	8	0.27
THIENEMANNIHYIA GROUP	2	2	7	29	1.90	0	0	0	0	0.00	2	2	7	29	1.00
TRISSOCLADIUS SP.	0	0	2	5	0.33	0	0	0	0	0.00	0	0	2	5	0.17
UNIDENTIFIED CHIRONOMIDAE	2	0	0	5	0.33	59	20	51	347	25.04	61	20	51	352	12.09
TOTAL CHIRONOMIDAE	132	19	100	668	43.72	59	20	51	347	25.04	191	39	151	1015	34.86
TOTAL BENTHOS	323	21	229	1528	100.00	185	39	295	1386	100.00	508	60	524	2912	100.00

TABLE 11. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 17, 13 APRIL

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	1	2	4	19	2.16	1	6	2	24	1.87	2	8	6	43	1.99
HYDROZOA															
HYDRA SP.	5	22	0	72	8.18	0	26	9	93	7.24	5	48	9	165	7.62
PLATYHELMINTHES															
RHABDOCOELA	0	0	0	0	0.00	1	0	0	3	0.23	1	0	0	3	0.14
OLIGOCHAETA															
ENCHYTRAEIDAE	1	0	0	3	0.34	0	0	0	0	0.00	1	0	0	3	0.14
NAIDIDAE															
PIGUETIELLA MICHIGANENSIS	0	1	0	3	0.34	0	0	0	0	0.00	0	1	0	3	0.14
VEJDOSKYELLA INTERMEDIA	0	0	0	0	0.00	2	2	1	13	1.01	2	2	1	13	0.60
TOTAL NAIDIDAE	0	1	0	3	0.34	2	2	1	13	1.01	2	3	1	16	0.74
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	1	1	0	5	0.57	0	0	0	0	0.00	1	1	0	5	0.23
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	5	0	1	16	1.82	0	0	0	0	0.00	5	0	1	16	0.74
LIMNODRILUS SPIRALIS	0	0	1	3	0.34	0	0	0	0	0.00	0	0	1	3	0.14
POTAMOTHRIX VEJDOSKYI	0	1	0	3	0.34	0	0	0	0	0.00	0	1	0	3	0.14
TOTAL TUBIFICIDAE	6	2	2	27	3.07	0	0	0	0	0.00	6	2	2	27	1.25
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	0	3	0	8	0.91	0	0	0	0	0.00	0	3	0	8	0.37
UNIDENTIFIED OLIGOCHAETA	5	0	0	13	1.48	4	14	1	51	3.97	9	14	1	64	2.96
TOTAL OLIGOCHAETA	12	6	2	54	6.14	6	16	2	64	4.98	18	22	4	118	5.45
OSTRACODA	31	5	8	117	13.30	82	63	30	467	36.34	113	68	38	584	26.97
ISOPODA															
ASELLUS SP.	0	1	0	3	0.34	0	0	0	0	0.00	0	1	0	3	0.14
AMPHIPODA															
GAMMARUS PSEUDOLIMNAEUS	2	1	0	8	0.91	0	0	0	0	0.00	2	1	0	8	0.37

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TABLE 11. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 17, 13 APRIL 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TOTAL AMPHIPODA	2	1	0	8	0.91	0	0	0	0	0.00	2	1	0	8	0.37
ACARINA															
UNIDENTIFIED HYDRACARINA	0	3	10	35	3.98	0	1	1	5	0.39	0	4	11	40	1.85
EPHEMEROPTERA															
HEPTAGENIIDAE															
STENDNEMA SP.	0	1	0	3	0.34	0	0	0	0	0.00	0	1	0	3	0.14
TOTAL EPHEMEROPTERA	0	1	0	3	0.34	0	0	0	0	0.00	0	1	0	3	0.14
DIPTERA															
CHIRONOMIDAE															
CRYPTOCHIRONOMUS SP.	2	0	0	5	0.57	0	0	0	0	0.00	2	0	0	5	0.23
DICROTENDIPES SP.	0	0	1	3	0.34	0	0	0	0	0.00	0	0	1	3	0.14
HETEROTRISSOCLADIUS SP.	1	1	1	8	0.91	0	0	0	0	0.00	1	1	1	8	0.37
MONODIAMESA TUBERCULATA	4	0	1	13	1.48	0	0	0	0	0.00	4	0	1	13	0.60
ORTHOCLADIUS SP.	0	11	4	40	4.55	0	0	0	0	0.00	0	11	4	40	1.85
PARACLADOPHELMA SP.	3	2	1	16	1.82	0	0	0	0	0.00	3	2	1	16	0.74
PARAKIEFFERIELLA SP.	59	31	5	253	28.75	0	0	0	0	0.00	59	31	5	253	11.69
POLYPEDILUM (TRIPODURA GROUP) SP.	4	0	0	11	1.25	0	0	0	0	0.00	4	0	0	11	0.51
POLYPEDILUM (FALLAX GROUP) SP.	38	13	9	160	18.18	0	0	0	0	0.00	38	13	9	160	7.39
PSEUDOSMITTIA SP.	0	2	0	5	0.57	0	0	0	0	0.00	0	2	0	5	0.23
STICTOCHIRONOMUS SP.	1	0	0	3	0.34	0	0	0	0	0.00	1	0	0	3	0.14
SYNGRTHOCLADIUS SP.	1	8	2	29	3.30	0	0	0	0	0.00	1	8	2	29	1.34
THIENEMANNIYIA GROUP	0	0	4	11	1.25	0	0	0	0	0.00	0	0	4	11	0.51
TRISSOCLADIUS SP.	0	1	0	3	0.34	0	0	0	0	0.00	0	1	0	3	0.14
UNIDENTIFIED CHIRONOMIDAE	1	0	0	3	0.34	109	92	35	629	48.95	110	92	35	632	29.19
TOTAL CHIRONOMIDAE	114	69	28	563	63.98	109	92	35	629	48.95	223	161	63	1192	55.06
GASTROPODA															
LYMNAEA HUMILIS	1	0	0	3	0.34	0	0	0	0	0.00	1	0	0	3	0.14
CYRAULUS PARVUS	1	0	0	3	0.34	0	0	0	0	0.00	1	0	0	3	0.14
TOTAL GASTROPODA	2	0	0	6	0.68	0	0	0	0	0.00	2	0	0	6	0.28
TOTAL BENTHOS	167	110	52	880	100.00	199	204	79	1285	100.00	366	314	131	2165	100.00

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TABLE 12. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3, 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
PORIFERA															
SPONGILLA FRAGILIS	0	0	1*	1*	0.00	0	0	0	0	0.00	0	0	1*	1*	0.00
ACANTHOCYCLIDAE	0	0	0	0	0.00	0	0	1	3	0.10	0	0	1	3	0.06
NEMATODA	1	15	8	64	3.24	18	105	97	587	18.89	19	120	105	651	12.81
HYDROZOA															
HYDRA SP.	0	10	44	144	7.28	0	0	116	309	9.94	0	10	160	453	8.91
PLATYHELMINTHES															
PHABROCOELA	0	7	6	35	1.77	0	1	10	29	0.93	0	8	16	64	1.26
BRYOZOA															
PALUDICELLA ARTICULATA	0	0	1*	1*	0.00	0	0	1*	1*	0.00	0	0	1*	1*	0.00
FREDERICELLA SP.	0	0	1*	1*	0.00	0	0	0	0	0.00	0	0	1*	1*	0.00
OLIGOCHAETA															
ENCHYTRAEIDAE	0	3	0	8	0.40	0	0	0	0	0.00	0	3	0	8	0.16
NAIDIDAE															
CHAETOCASTER SP.	0	0	0	0	0.00	0	0	1	3	0.10	0	0	1	3	0.06
PARANAIIS LITORALIS	0	0	1	3	0.15	0	0	0	0	0.00	0	0	1	3	0.06
STYLARIA LACUSTRIS	0	0	1	3	0.15	0	0	0	0	0.00	0	0	1	3	0.06
VEJUDUSKYELLA INTERMEDIA	0	8	6	37	1.87	0	9	24	88	2.83	0	17	30	125	2.46
TOTAL NAIDIDAE	0	8	8	43	2.18	0	9	25	91	2.93	0	17	33	134	2.64
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	0	8	1	24	1.21	0	0	0	0	0.00	0	8	1	24	0.47
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	1	40	13	144	7.28	0	0	0	0	0.00	1	40	13	144	2.83
LIMNORILUS ANGSTIPENIS	0	1	0	3	0.15	0	0	0	0	0.00	0	1	0	3	0.06
LIMNORILUS HOFFMEISTERI	2	15	0	45	2.28	0	0	0	0	0.00	2	15	0	45	0.89
LIMNORILUS HOFFMEISTERI VARIANT	0	1	0	3	0.15	0	0	0	0	0.00	0	1	0	3	0.06
LIMNORILUS PROFUNDICOLA	0	1	0	3	0.15	0	0	0	0	0.00	0	1	0	3	0.06
POTAMOTHRIX MULDANSKYI	0	2	0	5	0.25	0	0	0	0	0.00	0	2	0	5	0.10
POTAMOTHRIX VEJUDUSKYI	0	2	0	5	0.25	0	0	0	0	0.00	0	2	0	5	0.10
TUBIFEX TUBIFEX	0	1	0	3	0.15	0	0	0	0	0.00	0	1	0	3	0.06
TOTAL TUBIFICIDAE	3	71	14	235	11.89	0	0	0	0	0.00	3	71	14	235	4.62

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TABLE 12. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3, 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
LUMPRICULIDAE															
STYLODIPILUS PERINGIANUS	2	23	15	107	5.41	0	0	0	0	0.00	2	23	15	107	2.11
FRANCHOTUBDELLA	0	0	0	0	0.00	0	0	3	8	0.26	0	0	3	8	0.16
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	16	46	38	267	8.59	16	46	38	267	5.25
TOTAL OLIGOCHAETA	5	105	37	393	19.88	16	55	66	366	11.78	21	160	103	759	14.93
HIRUDINEA															
HELODDELLA STAGNALIS	0	1	3	11	0.56	0	0	0	0	0.00	0	1	3	11	0.22
TOTAL HIRUDINEA	0	1	3	11	0.56	0	0	0	0	0.00	0	1	3	11	0.22
TARDIGRADA	0	0	0	0	0.00	0	1	0	3	0.10	0	1	0	3	0.06
OSTRACODA	0	3	1	11	0.56	7	26	39	192	6.18	7	29	40	203	3.99
ISOPODA															
ASSELLUS SP.	0	0	6	16	0.81	0	0	0	0	0.00	0	0	6	16	0.31
LIPCEUS SP.	0	1	1	5	0.25	0	0	0	0	0.00	0	1	1	5	0.10
AMPHIPODA															
HYALIELLA AZTECA	1	3	8	32	1.62	0	0	0	0	0.00	1	3	8	32	0.63
PONTOPOREIA AFFINIS	0	0	4	11	0.56	2	0	6	21	0.68	2	0	10	32	0.63
CAMMARUS PSEUDOLIMNAEUS	0	1	6	19	0.96	0	0	1	3	0.10	0	1	7	21	0.41
TOTAL AMPHIPODA	1	4	18	62	3.14	2	0	7	24	0.77	3	4	25	85	1.67
ACARINA															
HYDRACARINA	0	2	10	32	1.62	14	4	25	115	3.70	14	6	35	147	2.89
EPHEMEROPTERA															
HEPTAGENIIDAE															
HEPTAGENIA SP.	0	0	1	3	0.15	0	0	0	0	0.00	0	0	1	3	0.06
STENDREMA SP.	0	0	3	8	0.40	0	0	0	0	0.00	0	0	3	8	0.16
TOTAL EPHEMEROPTERA	0	0	4	11	0.56	0	0	0	0	0.00	0	0	4	11	0.22

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TABLE 12. PENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3, 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TRICHOPTERA															
HYDROPSYCHIDAE															
HYDROPSYCHE SP.	0	1	4	13	0.66	0	0	0	0	0.00	0	1	4	13	0.26
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	0	0	1	3	0.15	0	0	0	0	0.00	0	0	1	3	0.06
TOTAL TRICHOPTERA	0	1	5	16	0.81	0	0	0	0	0.00	0	1	5	16	0.31
DIPTERA															
CHIRONOMIDAE															
CORYNOMERA SP.	0	2	2	11	0.56	0	0	0	0	0.00	0	2	2	11	0.22
CRYPTOCHIRONOMUS SP.	0	2	2	11	0.56	0	0	0	0	0.00	0	2	2	11	0.22
DIPTERIDIPES SP.	0	0	5	13	0.66	0	0	0	0	0.00	0	0	5	13	0.26
METOPOTRISOCCLADIUS SP.	0	1	0	3	0.15	0	0	0	0	0.00	0	0	0	3	0.06
MICROPEICOTOPUS SP.	1	11	39	136	6.88	0	0	0	0	0.00	0	1	0	3	0.06
MICROTENDIPES SP.	1	5	21	72	3.64	0	0	0	0	0.00	1	11	39	136	2.68
MUNDIAMESA SP.	0	4	0	11	0.56	0	0	0	0	0.00	1	5	21	72	1.42
ORTHOCCLADIUS SP.	0	6	24	80	4.05	0	0	0	0	0.00	0	4	0	11	0.22
PARACLAUDPELMA SP.	1	0	0	3	0.15	0	0	0	0	0.00	0	6	24	80	1.57
PARAKIFFEPIELLA SP.	1	3	13	45	2.28	0	0	0	0	0.00	1	0	0	3	0.06
PARATANYTARSUS SP.	0	0	1	3	0.15	0	0	0	0	0.00	1	3	13	45	0.89
POLYPEDILUM (TRIPODURA GROUP) SP.	0	1	0	3	0.15	0	0	0	0	0.00	0	0	1	3	0.06
POLYPEDILUM (FALLAX GROUP) SP.	4	56	34	251	12.70	0	0	0	0	0.00	0	1	0	3	0.06
PSFUNDUSMITTIA SP.	0	4	3	19	0.96	0	0	0	0	0.00	0	4	3	19	0.37
STICTOCHIRONOMUS SP.	1	15	2	48	2.43	0	0	0	0	0.00	1	15	2	48	0.94
SYNORTHOCLADIUS SP.	0	2	6	21	1.06	0	0	0	0	0.00	0	2	6	21	0.41
THIEREMANNIMYIA GROUP	2	36	111	397	20.08	0	0	0	0	0.00	2	36	111	397	7.81
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	49	151	354	1477	47.52	49	151	354	1477	29.06
TOTAL CHIRONOMIDAE	11	148	263	1127	57.01	49	151	354	1477	47.52	60	299	617	2604	51.23
UNIDENTIFIED															
EMPTIIDAE	0	1	1	5	0.25	0	0	0	0	0.00	0	1	1	5	0.10
GASTROPODA															
AMICULA LIMOSA	0	1	0	3	0.15	0	0	0	0	0.00	0	1	0	3	0.06
VALVATA SINCERA NYLANDERI	1	0	0	3	0.15	0	0	0	0	0.00	1	0	0	3	0.06
GASTROBASIS LIVESCENS	0	1	0	3	0.15	0	0	0	0	0.00	0	1	0	3	0.06
PHYSA SP.	0	3	1	11	0.56	0	0	0	0	0.00	0	3	1	11	0.22
LYMNAEA HUMILIS	1	2	1	11	0.56	0	0	0	0	0.00	1	2	1	11	0.22
GYRAULUS PARVUS	0	1	3	11	0.56	0	0	0	0	0.00	0	1	3	11	0.22
TOTAL GASTROPODA	2	8	5	42	2.12	0	0	0	0	0.00	2	8	5	42	0.83

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TABLE 12. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3 , 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
PELECYPODA															
SPHAERIIDAE	0	0	1	3	0.15	0	0	1	3	0.10	0	0	2	5	0.10
TOTAL PELECYPODA	0	0	1	3	0.15	0	0	1	3	0.10	0	0	2	5	0.10
TOTAL BENTHOS	20	306	413	1977	100.00	106	343	716	3108	100.00	126	649	1129	5083	100.00

* PRESENT

TABLE 13. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 6 , 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	20	74	41	360	11.38	242	219	736	3192	81.76	262	293	777	3552	50.25
HYDROBIA															
HYDRA SP.	0	2	0	5	0.16	1	0	10	29	0.74	1	2	10	35	0.50
PLATYHELMINTHES															
RHABDOCELA	0	0	0	0	0.00	5	0	13	48	1.23	5	0	13	48	0.68
OLIGOCHAETA															
ENCHYTRAEIDAE	2	0	1	8	0.25	0	0	0	0	0.00	2	0	1	8	0.11
NAIDIDAE															
PAPANAIIS LITORALIS	5	0	4	24	0.76	0	0	0	0	0.00	5	0	4	24	0.34
STYLARIA LACUSTRIS	0	0	1	3	0.09	0	0	0	0	0.00	0	0	1	3	0.04
VEJDovskyella INTERMEDIA	2	12	13	72	2.28	6	7	20	88	2.25	8	19	33	160	2.26
TOTAL NAIDIDAE	7	12	18	99	3.13	6	7	20	88	2.25	13	19	38	187	2.65
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	5	0	12	45	1.42	0	0	0	0	0.00	5	0	12	45	0.64
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	12	0	28	107	3.38	0	0	0	0	0.00	12	0	28	107	1.51
LIMNORILUS HOFFMEISTERI	2	0	4	16	0.51	0	0	0	0	0.00	2	0	4	16	0.23
LIMNORILUS HOFFMEISTERI VARIANT	0	0	3	8	0.25	0	0	0	0	0.00	0	0	3	8	0.11
LIMNORILUS PROFUNDICOLA	3	0	3	16	0.51	0	0	0	0	0.00	3	0	3	16	0.23
LIMNORILUS SPIRALIS	0	0	3	8	0.25	0	0	0	0	0.00	0	0	3	8	0.11
PELOSCOLEX MULTISETOSUS LONGIDENTUS	0	0	2	5	0.16	0	0	0	0	0.00	0	0	2	5	0.07
PELOSCOLEX SUPERIORENSIS	0	0	1	3	0.09	0	0	0	0	0.00	0	0	1	3	0.04
POTAMOTHRIX MOLDAVIENSIS	0	0	1	3	0.09	0	0	0	0	0.00	0	0	1	3	0.04
POTAMOTHRIX VEJDovskyi	0	0	2	5	0.16	0	0	0	0	0.00	0	0	2	5	0.07
TUBIFEX TUBIFEX	2	0	5	19	0.60	0	0	0	0	0.00	2	0	5	19	0.27
TOTAL TUBIFICIDAE	24	0	64	235	7.43	0	0	0	0	0.00	24	0	64	235	3.32
LUMBRICULIDAE															
STYLORILUS HERINGIANUS	4	0	14	48	1.52	0	0	0	0	0.00	4	0	14	48	0.68
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	4	6	5	40	1.02	4	6	5	40	0.57
TOTAL OLIGOCHAETA	37	12	97	390	12.33	10	13	25	128	3.28	47	25	122	518	7.33

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TABLE 13. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 6 , 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
HIRUDINEA															
UNIDENTIFIED HIRUDINEA	0	7	0	19	0.60	0	0	0	0	0.00	0	7	0	19	0.27
HELOPDELLA STAGNALIS	0	0	3	8	0.25	0	0	0	0	0.00	0	0	3	8	0.11
TOTAL HIRUDINEA	0	7	3	27	0.85	0	0	0	0	0.00	0	7	3	27	0.36
TARDIGRAFA	2	5	6	35	1.11	0	0	0	0	0.00	2	5	6	35	0.50
OSTRACODA	68	228	438	1957	61.87	68	1	72	376	9.63	136	229	510	2333	33.01
AMPHIPODA															
PONTOPOREIA AFFINIS	2	3	7	32	1.01	5	3	20	75	1.92	7	6	27	107	1.51
GAMMARUS PSEUDOLIMNAEUS	0	2	1	8	0.25	0	0	0	0	0.00	0	2	1	8	0.11
TOTAL AMPHIPODA	2	5	8	40	1.26	5	3	20	75	1.92	7	8	28	115	1.63
ACARINA															
HYDRACARINA	0	5	6	29	0.92	1	0	0	3	0.08	1	5	6	32	0.45
DIPTERA															
CHIRONOMIDAE															
CRYPTOCHIRONOMUS SP.	0	0	1	3	0.09	0	0	0	0	0.00	0	0	1	3	0.04
HETEROTRISOCLADIUS SP.	0	2	0	5	0.16	0	0	0	0	0.00	0	2	0	5	0.07
MICROCRICOTOPUS SP.	0	1	14	40	1.26	0	0	0	0	0.00	0	1	14	40	0.57
MICROTENDIPES SP.	0	1	2	8	0.25	0	0	0	0	0.00	0	1	2	8	0.11
MUNODIAESEA SP.	1	3	1	13	0.41	0	0	0	0	0.00	1	3	1	13	0.18
PAPAELADOPPELMA SP.	5	2	1	21	0.66	0	0	0	0	0.00	5	2	1	21	0.30
PAPAKIEFFERIELLA SP.	1	0	1	5	0.16	0	0	0	0	0.00	1	0	1	5	0.07
POLYPEDILUM (TRIPODURA GROUP) SP.	3	11	2	43	1.36	0	0	0	0	0.00	3	11	2	43	0.61
POLYPEDILUM (FALLAX GROUP) SP.	16	15	12	115	3.64	0	0	0	0	0.00	16	15	12	115	1.63
PSEUDOSMITTIA SP.	0	0	1	3	0.09	0	0	0	0	0.00	0	0	1	3	0.04
STICTOCHIRONOMUS SP.	1	0	1	5	0.16	0	0	0	0	0.00	1	0	1	5	0.07
SYNPTHOCLADIUS SP.	0	0	1	3	0.09	0	0	0	0	0.00	0	0	1	3	0.04
THIENEMANNIYA GROUP	0	2	6	21	0.66	0	0	0	0	0.00	0	2	6	21	0.30
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	6	5	9	53	1.36	6	5	9	53	0.75
TOTAL CHIRONOMIDAE	27	37	43	285	9.01	6	5	9	53	1.36	33	42	52	338	4.78
GASTROPODA															
VALVATA SP.	0	1	0	3	0.09	0	0	0	0	0.00	0	1	0	3	0.04
PHYSA SP.	1	0	0	3	0.09	0	0	0	0	0.00	1	0	0	3	0.04

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TABLE 13. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 6, 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
TOTAL GASTROPODA	1	1	0	6	0.19	0	0	0	0	0.00	1	1	0	6	0.08
PELECYPODA SPHAERIIDAE	2	1	8	29	0.92	0	0	0	0	0.00	2	1	8	29	0.41
TOTAL PELECYPODA	2	1	8	29	0.92	0	0	0	0	0.00	2	1	8	29	0.41
TOTAL BENTHOS	159	377	650	3163	100.00	338	241	885	3904	100.00	497	618	1535	7068	100.00

TABLE 14. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 7 , 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
POIKILOPODA															
SPONGILLA FRAGILIS	1*	0	0	1*	0.00	0	0	0	0	0.00	1*	0	0	1*	0.00
NEMATODA	4	2	3	24	4.73	62	17	63	379	24.23	66	19	66	403	19.48
HYDROZOA															
HYDRA SP.	1	11	19	83	16.37	22	11	22	147	9.40	23	22	41	229	11.07
PLATYHELMINTHES															
RHAEROCOELE	6	8	2	43	8.48	9	1	1	29	1.85	15	9	3	72	3.48
BRYOZOA															
FREDERICELLA SP.	1*	1*	0	1*	0.00	0	0	0	0	0.00	1*	1*	0	1*	0.00
OLIGOCHAETA															
NAIDIDAE															
PAPANAIIS LITORALIS	1	0	0	3	0.59	0	0	0	0	0.00	1	0	0	3	0.14
STYLARIA LACUSTRIS	1	1	0	5	0.99	0	0	0	0	0.00	1	1	0	5	0.24
VEJDovskyella INTERMEDIA	0	0	0	0	0.00	9	1	3	35	2.24	9	1	3	35	1.69
TOTAL NAIDIDAE	2	1	0	8	1.58	9	1	3	35	2.24	11	2	3	43	2.08
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	5	0	0	13	2.56	0	0	0	0	0.00	5	0	0	13	0.63
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	17	1	0	48	9.47	0	0	0	0	0.00	17	1	0	48	2.32
LIMNODRILUS ANGUSTIPENIS	2	0	0	5	0.99	0	0	0	0	0.00	2	0	0	5	0.24
LIMNODRILUS HOFFMEISTERI	5	0	0	13	2.56	0	0	0	0	0.00	5	0	0	13	0.63
PELOSCOLEX SUPERIUPENSIS	1	0	0	3	0.59	0	0	0	0	0.00	1	0	0	3	0.14
POTAMOTHRIX MOLDAVIENSIS	7	0	0	19	3.75	0	0	0	0	0.00	7	0	0	19	0.92
POTAMOTHRIX VEJDovskyi	5	0	0	13	2.56	0	0	0	0	0.00	5	0	0	13	0.63
TOTAL TUBIFICIDAE	42	1	0	114	22.49	0	0	0	0	0.00	42	1	0	114	5.51
LUMBRICULIDAE															
STYLODRILUS HEPINGIANUS	6	0	0	16	3.16	0	0	0	0	0.00	6	0	0	16	0.77
BRANCHIOBELLA	0	0	0	0	0.00	1	0	6	19	1.21	1	0	6	19	0.92
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	20	0	29	131	8.38	20	0	29	131	6.33

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TABLE 14. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 7 , 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TOTAL OLIGOCHAETA	50	2	0	138	27.22	30	1	38	185	11.83	80	3	38	323	15.61
HIRUDINEA															
HELORDELLA STAGNALIS	0	0	1	3	0.59	0	0	0	0	0.00	0	0	1	3	0.14
TOTAL HIRUDINEA	0	0	1	3	0.59	0	0	0	0	0.00	0	0	1	3	0.14
TARDIGRADA	0	1	0	3	0.59	0	1	0	3	0.19	0	2	0	5	0.24
OSTRACODA	3	2	1	16	3.16	15	120	17	405	25.90	18	122	18	421	20.35
ISOPODA															
ASPELUS SP.	7	0	1	21	4.14	0	0	0	0	0.00	7	0	1	21	1.01
LIPCEUS SP.	4	0	2	16	3.16	0	0	0	0	0.00	4	0	2	16	0.77
AMPHIPODA															
PONTOPOREIA AFFINIS	0	0	0	0	0.00	9	3	1	35	2.24	9	3	1	35	1.69
GAMMARUS PSEUDOLIMNAEUS	5	0	1	16	3.16	0	0	0	0	0.00	5	0	1	16	0.77
TOTAL AMPHIPODA	5	0	1	16	3.16	9	3	1	35	2.24	14	3	2	51	2.46
DECAPODA	1	0	0	3	0.59	0	0	0	0	0.00	1	0	0	3	0.14
ACARINA															
HYDRACARINA	2	0	0	5	0.99	11	4	3	48	3.07	13	4	3	53	2.56
EPEMEROPTERA															
HEPTAGENIIDAE															
HEPTAGENIA SP.	0	0	1	3	0.59	0	0	0	0	0.00	0	0	1	3	0.14
STENOPEMA SP.	1	2	3	16	3.16	0	0	0	0	0.00	1	2	3	16	0.77
TOTAL EPEMEROPTERA	1	2	4	19	3.75	0	0	0	0	0.00	1	2	4	19	0.92
TRICHOPTERA															
HYDROPSYCHIDAE															
HYDROPSYCHE SP.	0	0	1	3	0.59	0	0	0	0	0.00	0	0	1	3	0.14
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	3	0	1	11	2.17	0	0	0	0	0.00	3	0	1	11	0.53
TOTAL TRICHOPTERA	3	0	2	14	2.76	0	0	0	0	0.00	3	0	2	14	0.68

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TABLE 14. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 7 , 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
DIPTERA															
CHIRONOMIDAE															
CRYPTOCHIRONOMUS SP.	1	0	0	3	0.59	0	0	0	0	0.00	1	0	0	3	0.14
MICROCRICOTOPUS SP.	5	3	0	21	4.14	0	0	0	0	0.00	5	3	0	21	1.01
MONODIAMESA SP.	1	0	0	3	0.59	0	0	0	0	0.00	1	0	0	3	0.14
ORTHOCLEADUS SP.	0	1	0	3	0.59	0	0	0	0	0.00	0	1	0	3	0.14
PAPAKIEFFERIELLA SP.	1	1	0	5	0.99	0	0	0	0	0.00	1	1	0	5	0.24
POLYPEDILIUM (FALLAX GROUP) SP.	8	0	0	21	4.14	0	0	0	0	0.00	8	0	0	21	1.01
STICTOCHIRONOMUS SP.	3	0	0	8	1.58	0	0	0	0	0.00	3	0	0	8	0.39
SYNORTHOCLEADUS SP.	1	0	0	3	0.59	0	0	0	0	0.00	1	0	0	3	0.14
THIENEMANNIYIA GROUP	9	1	0	27	5.33	0	0	0	0	0.00	9	1	0	27	1.30
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	53	15	57	333	21.29	53	15	57	333	16.09
TOTAL CHIRONOMIDAE	29	6	0	94	18.54	53	15	57	333	21.29	82	21	57	427	20.64
GASTROPODA															
PHYSA SP.	1	0	0	3	0.59	0	0	0	0	0.00	1	0	0	3	0.14
LYMNAEA HUMILIS	0	0	1	3	0.59	0	0	0	0	0.00	0	0	1	3	0.14
TOTAL GASTROPODA	1	0	1	6	1.18	0	0	0	0	0.00	1	0	1	6	0.29
PELECYPODA															
SPHAERIIDAE	1	0	0	3	0.59	0	0	0	0	0.00	1	0	0	3	0.14
TOTAL PELECYPODA	1	0	0	3	0.59	0	0	0	0	0.00	1	0	0	3	0.14
TOTAL BENTHOS	118	34	37	507	100.00	211	173	202	1564	100.00	329	207	239	2069	100.00

* PRESENT

TABLE 15. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 8 , 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
PORIFERA															
SPONGILLA FRAGILIS	0	0	1*	1*	0.00	0	0	0	0	0.00	0	0	1*	1*	0.00
ACANTHOCEPHALA	0	0	1	3	0.06	0	0	0	0	0.00	0	0	1	3	0.04
NEMATODA	42	20	6	181	3.69	110	38	62	560	24.89	152	58	68	741	10.37
HYDROZOA															
HYDRA SP.	5	0	1	16	0.33	7	5	10	59	2.62	12	5	11	75	1.05
PLATYHELMINTHES															
RHABDOCOELA	12	1	3	43	0.88	3	2	2	19	0.84	15	3	5	61	0.85
PRYDZUA															
FREDERICELLA SP.	0	0	1*	1*	0.00	0	0	0	0	0.00	0	0	1*	1*	0.00
OLIGOCHAETA															
ENCHYTRAEIDAE	15	9	6	80	1.63	0	0	0	0	0.00	15	9	6	80	1.12
NAIDIDAE															
PAPANAIIS LITORALIS	0	1	1	5	0.10	0	0	0	0	0.00	0	1	1	5	0.07
VEJDUSKYELLA INTERMEDIA	42	11	1	144	2.94	4	37	22	168	7.47	46	48	23	312	4.36
TOTAL NAIDIDAE	42	12	2	149	3.04	4	37	22	168	7.47	46	49	24	317	4.43
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	67	12	5	224	4.57	0	0	0	0	0.00	67	12	5	224	3.13
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	307	64	76	1192	24.31	0	0	0	0	0.00	307	64	76	1192	16.67
LILYDORILUS TEMPLETONI	5	10	0	40	0.82	0	0	0	0	0.00	5	10	0	40	0.56
LIMNODRILUS ANGSTIPENIS	2	0	0	5	0.10	0	0	0	0	0.00	2	0	0	5	0.07
LIMNODRILUS HOFFMEISTERI	116	19	42	472	9.63	0	0	0	0	0.00	116	19	42	472	6.60
LIMNODRILUS HOFFMEISTERI VARIANT	0	1	0	3	0.06	0	0	0	0	0.00	0	1	0	3	0.04
LIMNODRILUS PROFUNDICOLA	0	2	2	11	0.22	0	0	0	0	0.00	0	2	2	11	0.15
LIMNODRILUS SPIRALIS	10	5	3	48	0.98	0	0	0	0	0.00	10	5	3	48	0.67
LIMNODRILUS UDEKEMIANUS	0	1	1	5	0.10	0	0	0	0	0.00	0	1	1	5	0.07
PELOSCOLEX SUPERIORENSIS	19	2	0	56	1.14	0	0	0	0	0.00	19	2	0	56	0.78
POTAMOTHRIX MULDAVIENSIS	2	1	0	8	0.16	0	0	0	0	0.00	2	1	0	8	0.11
POTAMOTHRIX VEJDUSKYI	16	5	4	67	1.37	0	0	0	0	0.00	16	5	4	67	0.94
TUBIFEX TUBIFEX	27	15	3	120	2.45	0	0	0	0	0.00	27	15	3	120	1.68
TOTAL TUBIFICIDAE	571	137	136	2251	45.91	0	0	0	0	0.00	571	137	136	2251	31.49

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TABLE 15. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 8 , 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
LUMBRICULIDAE															
STYLPORILUS HERINGIANUS	123	38	30	509	10.38	0	0	0	0	0.00	123	38	30	509	7.12
CAMBARINCOLA SP.	0	0	1	3	0.06	0	0	0	0	0.00	0	0	1	3	0.04
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	59	44	45	395	17.56	59	44	45	395	5.53
TOTAL OLIGOCHAETA	751	196	175	2992	61.02	63	81	67	563	25.02	814	277	242	3555	49.73
TARDIGRADA	0	0	1	3	0.06	18	21	2	109	4.84	18	21	3	112	1.57
DSTRACODA	35	10	4	131	2.67	67	32	37	363	16.13	102	42	41	493	6.90
ISOPODA															
ASELLUS SP.	1	0	0	3	0.06	0	0	0	0	0.00	1	0	0	3	0.04
LIRCFUS SP.	1	0	0	3	0.06	0	0	0	0	0.00	1	0	0	3	0.04
AMPHIPODA															
PONTOPPREIA AFFINIS	0	0	0	0	0.00	1	0	0	3	0.13	1	0	0	3	0.04
GAMMARUS PSEUDOLIMNAEUS	1	0	0	3	0.06	0	1	0	3	0.13	1	1	0	5	0.07
TOTAL AMPHIPODA	1	0	0	3	0.06	1	1	0	6	0.27	2	1	0	8	0.11
ACARINA															
HYDRACARINA	2	2	3	19	0.39	0	1	4	13	0.58	2	3	7	32	0.45
EPHEMEROPTERA															
HEPTAGENIIDAE															
STENONEMA SP.	0	1	0	3	0.06	0	0	0	0	0.00	0	1	0	3	0.04
TOTAL EPHEMEROPTERA	0	1	0	3	0.06	0	0	0	0	0.00	0	1	0	3	0.04
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	2	0	0	5	0.10	0	0	0	0	0.00	2	0	0	5	0.07
CRYPTOCHIRONOMUS SP.	1	0	0	3	0.06	0	0	0	0	0.00	1	0	0	3	0.04
FOKIEFFERIELLA	1	0	0	3	0.06	0	0	0	0	0.00	1	0	0	3	0.04
HETEROTRISOCLADIUS SP.	1	1	3	13	0.27	0	0	0	0	0.00	1	1	3	13	0.18
MICROSPICUTOPUS SP.	4	1	2	19	0.39	0	0	0	0	0.00	4	1	2	19	0.27
MONODIAMESA SP.	1	0	0	3	0.06	0	0	0	0	0.00	1	0	0	3	0.04

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TABLE 15. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 8 , 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
ORTHOCLADIUS SP.	0	1	0	3	0.06	0	0	0	0	0.00	0	1	0	3	0.04
PARACLAODOPPELMA SP.	0	1	0	3	0.06	0	0	0	0	0.00	0	1	0	3	0.04
PARAYIEF. BRIELLA SP.	13	14	13	107	2.18	0	0	0	0	0.00	13	14	13	107	1.50
POLYPEDILUM (TRIPUDURA GROUP) SP.	5	1	0	16	0.33	0	0	0	0	0.00	5	1	0	16	0.22
POLYPEDILUM (FALLAX GROUP) SP.	275	170	24	1251	25.51	0	0	0	0	0.00	275	170	24	1251	17.50
PSEUDOSMITTIA SP.	0	1	0	3	0.06	0	0	0	0	0.00	0	1	0	3	0.04
STICTOCHIRONOMUS SP.	2	1	0	8	0.16	0	0	0	0	0.00	2	1	0	8	0.11
SYNURTHOCLADIUS SP.	1	0	0	3	0.06	0	0	0	0	0.00	1	0	0	3	0.04
TANYTAPSUS SP.	1	2	1	11	0.22	0	0	0	0	0.00	1	2	1	11	0.15
THIEBEMANNIYA GROUP	4	4	2	27	0.55	0	0	0	0	0.00	4	4	2	27	0.38
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	54	92	62	555	24.67	54	92	62	555	7.76
TOTAL CHIRONOMIDAE	311	197	45	1478	30.14	54	92	62	555	24.67	365	289	107	2033	28.44
GASTROPODA															
LYMNAEA HUMILIS	0	1	0	3	0.06	0	0	0	0	0.00	0	1	0	3	0.04
CYRILLUS PARVUS	1	0	0	3	0.06	0	0	0	0	0.00	1	0	0	3	0.04
TOTAL GASTROPODA	1	1	0	6	0.12	0	0	0	0	0.00	1	1	0	6	0.08
PELECYPODA															
SPHAERIIDAE	2	3	2	19	0.39	0	1	0	3	0.13	2	4	2	21	0.29
TOTAL PELECYPODA	2	3	2	19	0.39	0	1	0	3	0.13	2	4	2	21	0.29
TOTAL BENTHOS	1164	431	241	4903	100.00	323	274	246	2250	100.00	1487	705	487	7149	100.00

* PRESENT

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TABLE 16. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 11, 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	5	0	1	16	2.72	14	0	1	40	6.22	19	0	2	56	4.55
HYDROZOA HYDRA SP.	11	2	0	35	5.94	32	3	1	96	14.93	43	5	1	131	10.63
PLATYHELMINTHES															
PHASDOCCELA	0	0	0	0	0.00	2	0	0	5	0.78	2	0	0	5	0.41
OLIGOCHAETA															
NAIDIDAE															
STYLARIA LACUSTRIS	1	0	0	3	0.51	0	0	0	0	0.00	1	0	0	3	0.24
VEJDUSKYELLA INTERMEDIA	1	0	0	3	0.51	5	0	0	13	2.02	6	0	0	16	1.30
TOTAL NAIDIDAE	2	0	0	6	1.02	5	0	0	13	2.02	7	0	0	19	1.54
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	2	0	0	5	0.85	0	0	0	0	0.00	2	0	0	5	0.41
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	9	10	0	51	8.66	0	0	0	0	0.00	9	10	0	51	4.14
LIMNODRILUS HUFFMEISTERI	1	0	0	3	0.51	0	0	0	0	0.00	1	0	0	3	0.24
LIMNODRILUS HUFFMEISTERI VARIANT	1	0	0	3	0.51	0	0	0	0	0.00	1	0	0	3	0.24
LIMNODRILUS SPIRALIS	1	0	0	3	0.51	0	0	0	0	0.00	1	0	0	3	0.24
PELUSCOLLEX SUPERIORENSIS	5	1	0	16	2.72	0	0	0	0	0.00	5	1	0	16	1.30
POTAMOTHRIX MOLDAVIENSIS	3	1	0	11	1.87	0	0	0	0	0.00	3	1	0	11	0.89
POTAMOTHRIX VEJDovskyi	4	2	0	16	2.72	0	0	0	0	0.00	4	2	0	16	1.30
TOTAL TUBIFICIDAE	26	14	0	108	18.34	0	0	0	0	0.00	26	14	0	108	8.77
LUMBRICULIDAE															
STYLODRILUS PERINGIANUS	18	2	0	53	9.00	0	0	0	0	0.00	18	2	0	53	4.30
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	36	4	3	115	17.88	36	4	3	115	9.33
TOTAL OLIGOCHAETA	46	16	0	167	28.35	41	4	3	128	19.91	87	20	3	295	23.94
TARDIGRADA	0	0	0	0	0.00	1	0	0	3	0.47	1	0	0	3	0.24
OSTRACODA	3	1	0	11	1.87	10	3	2	40	6.22	13	4	2	51	4.14
AMPHIPODA															
PUNTOPOREIA AFFINIS	0	0	0	0	0.00	0	0	4	11	1.71	0	0	4	11	0.89

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TABLE 16. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 11, 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
GAMMARUS PSEUDOLIMNAEUS	5	0	1	16	2.72	0	0	4	11	1.71	5	0	5	27	2.19
TOTAL AMPHIPODA	5	0	1	16	2.72	0	0	8	22	3.42	5	0	9	38	3.08
ACARINA															
HYDRACARINA	5	0	0	13	2.21	3	0	0	8	1.24	8	0	0	21	1.70
DIPTERA															
CHIRONOMIDAE															
CRYPTOCHIRONOMUS SP.	2	0	0	5	0.85	0	0	0	0	0.00	2	0	0	5	0.41
DEMICOCHIRONOMUS SP.	1	2	0	8	1.36	0	0	0	0	0.00	1	2	0	8	0.65
MICROPHICOTOPUS SP.	3	5	0	21	3.57	0	0	0	0	0.00	3	5	0	21	1.70
MICROTENDIPES SP.	21	4	0	67	11.38	0	0	0	0	0.00	21	4	0	67	5.44
ORTHOCLADEUS SP.	0	1	0	3	0.51	0	0	0	0	0.00	0	1	0	3	0.24
PARACLAUSPELMA SP.	1	2	0	8	1.36	0	0	0	0	0.00	1	2	0	8	0.65
PARAKIEFFERIELLA SP.	8	0	0	21	3.57	0	0	0	0	0.00	8	0	0	21	1.70
POLYPEDILUM (TRIPUDURA GROUP) SP.	0	0	19	51	8.66	0	0	0	0	0.00	0	0	19	51	4.14
POLYPEDILUM (FALLAX GROUP) SP.	27	14	0	109	18.51	0	0	0	0	0.00	27	14	0	109	8.85
STICTOCHIRONOMUS SP.	4	2	0	16	2.72	0	0	0	0	0.00	4	2	0	16	1.30
SYNPTHOCLADUS SP.	2	0	0	5	0.85	0	0	0	0	0.00	2	0	0	5	0.41
THIENEMANNIMYIA GROUP	2	1	0	8	1.36	0	0	0	0	0.00	2	1	0	8	0.65
UNIDENTIFIED CHIRONOMIDAE	0	1	0	3	0.51	65	21	27	301	46.81	65	22	27	304	24.68
TOTAL CHIRONOMIDAE	71	32	19	325	55.18	65	21	27	301	46.81	136	53	46	626	50.81
GASTROPODA															
LYMNAEA HUMILIS	1	0	0	3	0.51	0	0	0	0	0.00	1	0	0	3	0.24
GYRAULUS PARVUS	1	0	0	3	0.51	0	0	0	0	0.00	1	0	0	3	0.24
TOTAL GASTROPODA	2	0	0	6	1.02	0	0	0	0	0.00	2	0	0	6	0.49
TOTAL BENTHOS	148	51	21	589	100.00	168	31	42	643	100.00	316	82	63	1232	100.00

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TABLE 17. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
NEMATODA	3	5	5	35	1.72	35	15	19	184	10.41	38	20	24	219	5.76
HYDROZOA HYDRA SP.	2	25	36	168	8.26	16	20	22	155	8.77	18	45	58	323	8.50
PLATYHELMINTHES															
RHABDOCELA	1	5	0	16	0.79	2	0	0	5	0.28	3	5	0	21	0.55
BRYOZOA CRISTATELLA MUCEDO	0	0	1*	1*	0.00	0	0	0	0	0.00	0	0	1*	1*	0.00
OLIGOCHAETA															
ENCHYTRAEIDAE	1	1	3	13	0.64	0	0	0	0	0.00	1	1	3	13	0.34
NAIDIDAE															
PICOSTIELLA MICHIGANENSIS	0	1	0	3	0.15	0	0	0	0	0.00	0	1	0	3	0.08
STYLARIA LACUSTRIS	0	5	3	21	1.03	0	0	0	0	0.00	0	5	3	21	0.55
VEJDORSKYELLA INTERMEDIA	2	8	2	32	1.57	25	6	10	109	6.17	27	14	12	141	3.71
TOTAL NAIDIDAE	2	14	5	56	2.75	25	6	10	109	6.17	27	20	15	165	4.24
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	6	0	10	43	2.11	0	0	0	0	0.00	6	0	10	43	1.13
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	35	1	54	240	11.80	0	0	0	0	0.00	35	1	54	240	6.31
LIMNODRILUS HOFFMEISTERI	1	0	10	29	1.43	0	0	0	0	0.00	1	0	10	29	0.76
LIMNODRILUS HOFFMEISTERI VARIANT	1	0	0	3	0.15	0	0	0	0	0.00	1	0	0	3	0.08
LIMNODRILUS SPIRALIS	0	0	1	3	0.15	0	0	0	0	0.00	0	0	1	3	0.08
PELOSCOLEX SUPERIORENSIS	3	0	2	13	0.64	0	0	0	0	0.00	3	0	2	13	0.34
POTAMOTHRIX MOLDAVIENSIS	1	0	2	8	0.39	0	0	0	0	0.00	1	0	2	8	0.21
POTAMOTHRIX VEJDORSKYI	1	0	9	27	1.33	0	0	0	0	0.00	1	0	9	27	0.71
TOTAL TUBIFICIDAE	48	1	88	366	17.99	0	0	0	0	0.00	48	1	88	366	9.63
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	28	3	13	117	5.75	0	0	0	0	0.00	28	3	13	117	3.08
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	31	5	33	184	10.41	31	5	33	184	4.84
TOTAL OLIGOCHAETA	79	19	109	552	27.14	56	11	43	293	16.57	135	30	152	845	22.23

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TABLE 17. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
HIRUDINEA															
HELOBDELLA STAGNALIS	0	0	1	3	0.15	0	0	0	0	0.00	0	0	1	3	0.08
TOTAL HIRUDINEA	0	0	1	3	0.15	0	0	0	0	0.00	0	0	1	3	0.08
OSTRACODA	15	5	7	72	3.54	74	28	32	357	20.19	89	33	39	429	11.28
ISOPODA															
ASPELUS SP.	4	0	1	13	0.64	0	0	0	0	0.00	4	0	1	13	0.34
LIRCEUS SP.	2	0	0	5	0.25	0	0	0	0	0.00	2	0	0	5	0.13
AMPHIPODA															
CAMMARUS PSEUDOLIMNAEUS	4	2	5	29	1.43	1	0	0	3	0.17	5	2	5	32	0.84
TOTAL AMPHIPODA	4	2	5	29	1.43	1	0	0	3	0.17	5	2	5	32	0.84
ACARINA															
HYDRACARINA	2	9	4	40	1.97	5	2	1	21	1.19	7	11	5	61	1.60
EPEMEROPTERA															
HEPTAGENIIDAE															
STENONEMA SP.	4	2	3	24	1.18	0	0	1	3	0.17	4	2	4	27	0.71
TOTAL EPEMEROPTERA	4	2	3	24	1.18	0	0	1	3	0.17	4	2	4	27	0.71
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	1	0	0	3	0.15	0	0	0	0	0.00	1	0	0	3	0.08
CLINTANYPUS SP.	1	0	0	3	0.15	0	0	0	0	0.00	1	0	0	3	0.08
COPYNOMEURA SP.	0	3	0	8	0.39	0	0	0	0	0.00	0	3	0	8	0.21
CRYPTOCHIRONOMUS SP.	1	1	2	11	0.54	0	0	0	0	0.00	1	1	2	11	0.29
HETEROTRISOCLEADUS SP.	7	0	0	19	0.93	0	0	0	0	0.00	7	0	0	19	0.50
MICROCRICOTOPUS SP.	24	14	12	133	6.54	0	0	0	0	0.00	24	14	12	133	3.50
MICROTENDIPES SP.	5	0	9	37	1.82	0	0	0	0	0.00	5	0	9	37	0.97
MUNODIANESA SP.	1	0	0	3	0.15	0	0	0	0	0.00	1	0	0	3	0.08
ORTHOCLADUS SP.	0	6	4	27	1.33	0	0	0	0	0.00	0	6	4	27	0.71
PAPAKIEFFERIELLA SP.	36	5	13	144	7.08	0	0	0	0	0.00	36	5	13	144	3.79
POLYPEDILUM (FALLAX GROUP) SP.	136	16	36	501	24.63	0	0	0	0	0.00	136	16	36	501	13.16
PSEUDOSMITTIA SP.	3	0	2	13	0.64	0	0	0	0	0.00	3	0	2	13	0.34
STICTOCHIRONOMUS SP.	4	0	5	24	1.18	0	0	0	0	0.00	4	0	5	24	0.63
SYNORTHOCLADUS SP.	2	3	0	13	0.64	0	0	0	0	0.00	2	3	0	13	0.34
THIENEMANNIMYIA GROUP	21	12	7	107	5.26	0	0	0	0	0.00	21	12	7	107	2.81
UNIDENTIFIED CHIRONOMIDAE	2	0	0	5	0.25	115	79	86	747	42.25	117	79	86	752	19.78

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TABLE 17. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TOTAL CHIRONOMIDAE	244	60	90	1051	51.67	115	79	86	747	42.25	359	139	176	1798	47.29
GASTROPODA															
VALVATA SP.	2	0	0	5	0.25	0	0	0	0	0.00	2	0	0	5	0.13
PHYSA SP.	1	0	0	3	0.15	0	0	0	0	0.00	1	0	0	3	0.08
LYMNAEA HUMILIS	1	1	0	5	0.25	0	0	0	0	0.00	1	1	0	5	0.13
GYPAEILUS PARVUS	2	0	0	5	0.25	0	0	0	0	0.00	2	0	0	5	0.13
TOTAL GASTROPODA	6	1	0	18	0.88	0	0	0	0	0.00	6	1	0	18	0.47
PELECYPODA															
SPHAERIIDAE	2	1	0	8	0.39	0	0	0	0	0.00	2	1	0	8	0.21
TOTAL PELECYPODA	2	1	0	8	0.39	0	0	0	0	0.00	2	1	0	8	0.21
TOTAL BENTHOS	368	134	261	2034	100.00	304	155	204	1768	100.00	672	289	465	3802	100.00

* PRESENT

TABLE 18. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13, 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
NEMATODA	2	12	8	59	1.90	2	66	41	291	12.63	4	78	49	349	6.45
HYDROZOA HYDRA SP.	0	0	66	176	5.66	1	10	31	112	4.86	1	10	97	288	5.32
PLATYHELMINTHES															
RHABDOCELA	1	3	14	48	1.54	1	0	4	13	0.56	2	3	18	61	1.13
OLIGOCHAETA															
ENCHYTRAEIDAE	1	3	3	19	0.61	0	0	0	0	0.00	1	3	3	19	0.35
NAIDIDAE															
PIGUETIELLA MICHIGANENSIS	0	0	2	5	0.16	0	0	0	0	0.00	0	0	2	5	0.09
VEJUDUSKYELLA INTERMEDIA	0	16	22	101	3.25	1	42	36	211	9.16	1	58	58	312	5.76
TOTAL NAIDIDAE	0	16	24	106	3.41	1	42	36	211	9.16	1	58	60	317	5.86
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	0	10	0	27	0.87	0	0	0	0	0.00	0	10	0	27	0.50
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	4	53	13	187	6.01	0	0	0	0	0.00	4	53	13	187	3.46
LIMNODRILUS TEMPLETONI	0	4	0	11	0.35	0	0	0	0	0.00	0	4	0	11	0.20
LIMNODRILUS HUFFMEISTERI	1	15	4	53	1.70	0	0	0	0	0.00	1	15	4	53	0.98
LIMNODRILUS HUFFMEISTERI VARIANT	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.06
LIMNODRILUS SPIRALIS	0	1	0	3	0.10	0	0	0	0	0.00	0	1	0	3	0.06
PELUSCOLEX SUPERIORENSIS	0	3	0	8	0.26	0	0	0	0	0.00	0	3	0	8	0.15
POTAMOTHRIX VEJUDVSKYI	0	0	2	5	0.16	0	0	0	0	0.00	0	0	2	5	0.09
TUBIFEX TUBIFEX	0	6	1	19	0.61	0	0	0	0	0.00	0	6	1	19	0.35
TOTAL TUBIFICIDAE	5	92	21	316	10.16	0	0	0	0	0.00	5	92	21	316	5.84
LUMERICULIDAE															
STYLODRILUS HERINGIANUS	0	11	20	83	2.67	0	0	0	0	0.00	0	11	20	83	1.53
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	1	31	14	123	5.34	1	31	14	123	2.27
TOTAL OLIGOCHAETA	6	122	68	524	16.85	2	73	50	334	14.50	8	195	118	858	15.85
HIRUDINEA															
HELOBDELLA STAGNALIS	0	1	0	3	0.10	0	0	0	0	0.00	0	1	0	3	0.06

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TABLE 18. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13, 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TOTAL HIRUDINEA	0	1	0	3	0.10	0	0	0	0	0.00	0	1	0	3	0.06
TARDIGRADA	0	0	0	0	0.00	0	1	2	8	0.35	0	1	2	8	0.15
OSTRACODA	4	18	145	445	14.31	20	68	255	915	39.71	24	86	400	1360	25.13
ISOPODA															
ASPELUS SP.	1	0	2	8	0.26	0	0	0	0	0.00	1	0	2	8	0.15
AMPHIPODA															
GAMMARUS PSEUDOLIMNAEUS	0	0	2	5	0.16	0	0	0	0	0.00	0	0	2	5	0.09
TOTAL AMPHIPODA	0	0	2	5	0.16	0	0	0	0	0.00	0	0	2	5	0.09
ACARINA															
HYDRACARINA	0	0	12	32	1.03	1	0	1	5	0.22	1	0	13	37	0.68
EPEHEMEROPTERA															
HEPTAGENIIDAE															
STENOPEMA SP.	0	0	3	8	0.26	0	0	1	3	0.13	0	0	4	11	0.20
TOTAL EPEHEMEROPTERA	0	0	3	8	0.26	0	0	1	3	0.13	0	0	4	11	0.20
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.06
TOTAL TRICHOPTERA	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.06
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.06
CORYNONEURA SP.	0	0	3	8	0.26	0	0	0	0	0.00	0	0	3	8	0.15
CRYPTOCHIRONOMUS SP.	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.06
MICROTENDIPES SP.	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.06
HETEROTRISOCCLADIUS SP.	0	1	14	40	1.29	0	0	0	0	0.00	0	1	14	40	0.74
MICROCOPICUTOPUS SP.	0	1	29	80	2.57	0	0	0	0	0.00	0	1	29	80	1.48
MICROTENDIPES SP.	0	0	3	8	0.26	0	0	0	0	0.00	0	0	3	8	0.15
MUNODIAMESA SP.	0	1	5	16	0.51	0	0	0	0	0.00	0	1	5	16	0.30
ORTHOCCLADIUS SP.	2	0	10	32	1.03	0	0	0	0	0.00	2	0	10	32	0.59
PAPACLAUDPELMA SP.	0	0	2	5	0.16	0	0	0	0	0.00	0	0	2	5	0.09
PAPAKIEFFERIELLA SP.	10	6	34	133	4.28	0	0	0	0	0.00	10	6	34	133	2.46
POLYPEDILUM (TRIPUDURA GROUP) SP.	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.06

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TABLE 18. PENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13 , 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
POLYPEDILUM (FALLAX GROUP) SP.	36	99	338	1261	40.56	0	0	0	0	0.00	36	99	338	1261	23.30
PSEUDOSMITTIA SP.	0	0	4	11	0.35	0	0	0	0	0.00	0	0	4	11	0.20
STICTOCHIRONOMUS SP.	0	0	3	8	0.26	0	0	0	0	0.00	0	0	3	8	0.15
SYNPTHOCLADIUS SP.	0	0	10	27	0.87	0	0	0	0	0.00	0	0	10	27	0.50
TANYTARSUS SP.	0	0	3	8	0.26	0	0	0	0	0.00	0	0	3	8	0.15
THIEMANNIMYIA GROUP	0	1	49	133	4.28	0	0	0	0	0.00	0	1	49	133	2.46
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	18	86	126	613	26.61	18	86	126	613	11.33
TOTAL CHIRONOMIDAE	48	109	511	1782	57.32	18	86	126	613	26.61	66	195	637	2395	44.25
GASTROPODA															
VALVATA SP.	0	0	0	0	0.00	0	0	2	5	0.22	0	0	2	5	0.09
LYMNAEA HUMILIS	0	0	2	5	0.16	0	0	0	0	0.00	0	0	2	5	0.09
TOTAL GASTROPODA	0	0	2	5	0.16	0	0	2	5	0.22	0	0	4	10	0.18
PELECYPODA															
SPHAERTIDAE	1	0	3	11	0.35	0	2	0	5	0.22	1	2	3	16	0.30
TOTAL PELECYPODA	1	0	3	11	0.35	0	2	0	5	0.22	1	2	3	16	0.30
TOTAL BENTHOS	63	265	837	3109	100.00	45	306	513	2304	100.00	108	571	1350	5412	100.00

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TABLE 19. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16, 22 MAY 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
PORIFERA															
SPONGILLA FRAGILIS	1*	1*	0	1*	0.00	0	1*	0	1*	0.00	1*	1*	0	1*	0.00
ACANTHOCEPHALA	1	1	0	5	0.37	0	0	0	0	0.00	1	1	0	5	0.21
NEMATODA	27	30	5	165	12.05	29	12	5	123	12.76	56	42	10	288	12.34
HYDROZOA															
HYDRA SP.	8	4	1	35	2.56	0	1	0	3	0.31	8	5	1	37	1.59
PLATYHELMINTHES															
RHABDOCOELA	1	0	1	5	0.37	2	1	0	8	0.83	3	1	1	13	0.56
OLIGOCHAETA															
ENCHYTRAEIDAE	1	1	0	5	0.37	0	0	0	0	0.00	1	1	0	5	0.21
NAIDIDAE															
PIGUETIELLA MICHIGANENSIS	0	0	1	3	0.22	0	0	0	0	0.00	0	0	1	3	0.13
VEJDUSKYELLA INTERMEDIA	33	3	1	99	7.23	7	0	2	24	2.49	40	3	3	123	5.27
TOTAL NAIDIDAE	33	3	2	102	7.45	7	0	2	24	2.49	40	3	4	126	5.40
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	0	3	2	13	0.95	0	0	0	0	0.00	0	3	2	13	0.56
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	33	17	6	149	10.88	0	0	0	0	0.00	33	17	6	149	6.39
ILYODRILUS TEMPLETONI	3	2	5	27	1.97	0	0	0	0	0.00	3	2	5	27	1.16
LIMNODRILUS HOFFMEISTERI	7	11	8	69	5.04	0	0	0	0	0.00	7	11	8	69	2.96
LIMNODRILUS HOFFMEISTERI VARIANT	1	0	0	3	0.22	0	0	0	0	0.00	1	0	0	3	0.13
LIMNODRILUS SPIRALIS	2	0	3	13	0.95	0	0	0	0	0.00	2	0	3	13	0.56
PELUSCOLFX SUPERIORENSIS	0	1	1	5	0.37	0	0	0	0	0.00	0	1	1	5	0.21
POTAMOTHRIX MOLDAVIENSIS	0	0	1	3	0.22	0	0	0	0	0.00	0	0	1	3	0.13
POTAMOTHRIX VEJDovskyI	1	0	0	3	0.22	0	0	0	0	0.00	1	0	0	3	0.13
TUBIFEX TUBIFEX	5	2	3	27	1.97	0	0	0	0	0.00	5	2	3	27	1.16
TOTAL TUBIFICIDAE	52	36	29	312	22.79	0	0	0	0	0.00	52	36	29	312	13.37
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	1	0	1	5	0.37	0	0	0	0	0.00	1	0	1	5	0.21
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	5	2	0	19	1.97	5	2	0	19	0.81

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TABLE 19. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16, 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
TOTAL OLIGOCHAETA	87	40	32	424	30.97	12	2	2	43	4.46	99	42	34	467	20.02
OSTRACODA	36	11	6	141	10.30	45	6	2	141	14.63	81	17	8	283	12.13
AMPHIPODA															
PONTOPOREIA AFFINIS	1	0	1	5	0.37	1	0	0	3	0.31	2	0	1	8	0.34
CAMMARUS PSEUDOLIMNAEUS	2	0	1	8	0.58	0	0	0	0	0.00	2	0	1	8	0.34
TOTAL AMPHIPODA	3	0	2	13	0.95	1	0	0	3	0.31	4	0	2	16	0.69
ACARINA															
HYDRACARINA	10	3	0	35	2.56	3	0	0	8	0.83	13	3	0	43	1.84
EPEMEROPTERA															
HEPTAGENIIDAE															
STENONEMA SP.	0	0	1	3	0.22	0	0	0	0	0.00	0	0	1	3	0.13
TOTAL EPEMEROPTERA	0	0	1	3	0.22	0	0	0	0	0.00	0	0	1	3	0.13
DIPTERA															
CHIRONOMIDAE															
CRYPTOCHIRONOMUS SP.	0	0	1	3	0.22	0	0	0	0	0.00	0	0	1	3	0.13
HETEROTRISOCLADIUS SP.	1	0	1	5	0.37	0	0	0	0	0.00	1	0	1	5	0.21
MICROCRIOTOPUS SP.	1	1	0	5	0.37	0	0	0	0	0.00	1	1	0	5	0.21
MICROTENDIPES SP.	0	1	0	3	0.22	0	0	0	0	0.00	0	1	0	3	0.13
MONOCIAMESA SP.	1	0	0	3	0.22	0	0	0	0	0.00	1	0	0	3	0.13
PARACLAUDOPELMA SP.	0	1	0	3	0.22	0	0	0	0	0.00	0	1	0	3	0.13
PARAKIEFFERIELLA SP.	8	3	1	32	2.34	0	0	0	0	0.00	8	3	1	32	1.37
POLYPEDILUM (TRIPUDURA GROUP) SP.	32	22	23	205	14.97	0	0	0	0	0.00	32	22	23	205	8.79
POLYPEDILUM (FALLAX GROUP) SP.	58	27	16	269	19.65	0	0	0	0	0.00	58	27	16	269	11.53
THIENEMANNIMYIA GROUP	1	0	1	5	0.37	0	0	0	0	0.00	1	0	1	5	0.21
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	124	91	23	635	65.87	124	91	23	635	27.22
TOTAL CHIRONOMIDAE	102	55	43	533	38.93	124	91	23	635	65.87	226	146	66	1168	50.06
GASTROPODA															
VALVATA SP.	0	2	0	5	0.37	0	0	0	0	0.00	0	2	0	5	0.21
TOTAL GASTROPODA	0	2	0	5	0.37	0	0	0	0	0.00	0	2	0	5	0.21
PELECYPODA															
SPHAERIIDAE	2	0	0	5	0.37	0	0	0	0	0.00	2	0	0	5	0.21
TOTAL PELECYPODA	2	0	0	5	0.37	0	0	0	0	0.00	2	0	0	5	0.21

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TABLE 19. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16, 22 MAY 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TOTAL BENTHOS	277	146	91	1369	100.00	216	113	32	964	100.00	493	259	123	2333	100.00

* PRESENT

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
NEMATODA	21	5	27	141	4.58	108	4	55	445	22.21	129	9	82	587	11.99
HYDROZOA HYDRA SP.	11	5	11	72	2.34	12	8	28	128	6.39	23	13	39	200	4.09
PLATYHELMINTHES															
PHAGGOCUELA	5	1	4	27	0.88	12	0	3	40	2.00	17	1	7	67	1.37
OLIGOCHAETA															
ENCHYTRAEIDAE	0	3	13	43	1.40	0	0	0	0	0.00	0	3	13	43	0.86
NAIDIDAE															
PARANAIIS LITORALIS	0	0	2	5	0.16	0	0	0	0	0.00	0	0	2	5	0.10
STYLARIA LACUSTRIS	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.06
VEJDUSKYELLA INTERMEDIA	0	4	1	13	0.42	30	2	26	155	7.73	30	6	27	168	3.43
TOTAL NAIDIDAE	0	4	4	21	0.68	30	2	26	155	7.73	30	6	30	176	3.60
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	0	13	23	96	3.12	0	0	0	0	0.00	0	13	23	96	1.96
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	0	148	101	664	21.58	0	0	0	0	0.00	0	148	101	664	13.56
LILYDORILUS TEMPLETONI	0	3	31	91	2.96	0	0	0	0	0.00	0	3	31	91	1.86
LIMNODORILUS HOFFMEISTERI	0	29	37	176	5.72	0	0	0	0	0.00	0	29	37	176	3.60
LIMNODORILUS HOFFMEISTERI VARIANT	0	1	2	8	0.26	0	0	0	0	0.00	0	1	2	8	0.16
LIMNODORILUS PROFUNDICOLA	0	2	1	8	0.26	0	0	0	0	0.00	0	2	1	8	0.16
LIMNODORILUS SPIRALIS	0	1	3	11	0.36	0	0	0	0	0.00	0	1	3	11	0.22
PELOSCOLEX SUPERIORENSIS	0	4	4	21	0.68	0	0	0	0	0.00	0	4	4	21	0.43
POTAMOTHRIX MOLDAVIENSIS	0	1	5	16	0.52	0	0	0	0	0.00	0	1	5	16	0.33
POTAMOTHRIX VEJDovskyi	0	9	1	27	0.88	0	0	0	0	0.00	0	9	1	27	0.55
TUBIFEX TUBIFEX	0	6	7	35	1.14	0	0	0	0	0.00	0	6	7	35	0.72
TOTAL TUBIFICIDAE	0	217	215	1153	37.47	0	0	0	0	0.00	0	217	215	1153	23.55
LUMPRICULIDAE															
STYLORILUS HERINGIANUS	0	28	70	261	8.48	0	0	0	0	0.00	0	28	70	261	5.33
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	22	3	42	179	8.93	22	3	42	179	3.66
TOTAL OLIGOCHAETA	0	252	302	1478	48.03	52	5	68	334	16.67	52	257	370	1812	37.02

TABLE 20. PENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 17, 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
HIRUDINEA															
HELODUFELLA STAGNALIS	1	0	0	3	0.10	0	0	0	0	0.00	1	0	0	3	0.06
TOTAL HIRUDINEA	1	0	0	3	0.10	0	0	0	0	0.00	1	0	0	3	0.06
TARDIGRADA	0	0	1	3	0.10	0	0	1	3	0.15	0	0	2	5	0.10
OSTRACODA	83	3	33	317	10.30	70	8	123	536	26.75	153	11	156	853	17.43
ISOPODA															
ASELLUS SP.	1	0	2	8	0.26	0	0	0	0	0.00	1	0	2	8	0.16
AMPHIPODA															
PONTOPOREIA AFFINIS	0	0	0	0	0.00	0	0	1	3	0.15	0	0	1	3	0.06
TOTAL AMPHIPODA	0	0	0	0	0.00	0	0	1	3	0.15	0	0	1	3	0.06
ACARINA															
HYDRACARINA	5	0	3	21	0.68	1	0	1	5	0.25	6	0	4	27	0.55
EPEHEMEROPTERA															
HEPTAGENIIDAE															
STENONEMA SP.	0	0	0	0	0.00	0	0	1	3	0.15	0	0	1	3	0.06
TOTAL EPEHEMEROPTERA	0	0	0	0	0.00	0	0	1	3	0.15	0	0	1	3	0.06
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	0	0	2	5	0.16	0	0	0	0	0.00	0	0	2	5	0.10
TOTAL TRICHOPTERA	0	0	2	5	0.16	0	0	0	0	0.00	0	0	2	5	0.10
DIPTERA															
CHIRONOMIDAE															
CLINTANYPUS SP.	0	1	0	3	0.10	0	0	0	0	0.00	0	1	0	3	0.06
COPYNONEURA SP.	0	1	0	3	0.10	0	0	0	0	0.00	0	1	0	3	0.06
CRYPTOCHIRONOMUS SP.	0	1	1	5	0.16	0	0	0	0	0.00	0	1	1	5	0.10
HETEROTRISSOCLAUDIUS SP.	0	2	6	21	0.68	0	0	0	0	0.00	0	2	6	21	0.43
MICROCRICOTOPUS SP.	0	3	1	11	0.36	0	0	0	0	0.00	0	3	1	11	0.22
MICROTENDIPES SP.	0	2	0	5	0.16	0	0	0	0	0.00	0	2	0	5	0.10
MUNDRIAMESA SP.	0	7	2	24	0.78	0	0	0	0	0.00	0	7	2	24	0.49
ORTHOCLADIUS SP.	0	2	1	8	0.26	0	0	0	0	0.00	0	2	1	8	0.16
PARACLAADOPELMA SP.	0	1	0	3	0.10	0	0	0	0	0.00	0	1	0	3	0.06

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TABLE 20. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 17, 22 MAY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
PARAKIEFFERIELLA SP.	0	14	17	83	2.70	0	0	0	0	0.00	0	14	17	83	1.70
POLYPEDILUM (TRIPODURA GROUP) SP.	0	16	5	56	1.82	0	0	0	0	0.00	0	16	5	56	1.14
POLYPEDILUM (FALLAX GROUP) SP.	0	74	108	485	15.76	0	0	0	0	0.00	0	74	108	485	9.91
PSEUDOSHITTIA SP.	0	0	2	5	0.16	0	0	0	0	0.00	0	0	2	5	0.10
SYNDITHOCLADIUS SP.	0	1	0	3	0.10	0	0	0	0	0.00	0	1	0	3	0.06
TANYTARSUS SP.	0	2	1	8	0.26	0	0	0	0	0.00	0	2	1	8	0.16
THIENEMANNIMYIA GROUP	0	5	2	19	0.62	0	0	0	0	0.00	0	5	2	19	0.39
UNIDENTIFIED CHIRONOMIDAE	0	1	0	3	0.10	118	8	63	504	25.15	118	9	63	507	10.36
TOTAL CHIRONOMIDAE	0	133	146	745	24.21	118	8	63	504	25.15	118	141	209	1249	25.52
GASTROPODA															
VALVATA SP.	3	0	1	11	0.36	0	0	0	0	0.00	3	0	1	11	0.22
LYMNAEA HUMILIS	3	0	0	8	0.26	0	0	0	0	0.00	3	0	0	8	0.16
CYRAULUS SP.	4	0	0	11	0.36	0	0	0	0	0.00	4	0	0	11	0.22
TOTAL GASTROPODA	10	0	1	30	0.97	0	0	0	0	0.00	10	0	1	30	0.61
PELECYPODA															
SPHAERIIDAE	5	2	8	40	1.30	0	0	1	3	0.15	5	2	9	43	0.88
TOTAL PELECYPODA	5	2	8	40	1.30	0	0	1	3	0.15	5	2	9	43	0.88
TOTAL BENTHOS	142	401	540	2890	100.00	373	33	345	2004	100.00	515	434	885	4895	100.00

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TABLE 21. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3, 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
PORIFERA															
SPONGILLA FRAGILIS	0	0	1*	1*	0.00	0	0	0	0	0.00	0	0	1*	1*	0.00
NEMATODA	8	7	0	40	3.77	77	195	30	805	7.27	85	202	30	845	6.97
HYDROZOA															
HYDRA SP.	10	17	0	72	6.78	34	71	3	288	2.60	44	88	3	360	2.97
PLATYHELMINTHES															
RHABDOCELA	3	15	2	53	4.99	48	130	21	531	4.80	51	145	23	584	4.82
BRYODZA															
PALUDICELLA ARTICULATA	1*	1*	0	1*	0.00	0	0	0	0	0.00	1*	1*	0	1*	0.00
FREDERICELLA SP.	1*	1*	0	1*	0.00	0	0	0	0	0.00	1*	1*	0	1*	0.00
OLIGOCHAETA															
NAIDIDAE															
CHAETOCASTER DIAPHANUS	0	1	0	3	0.28	0	0	0	0	0.00	0	1	0	3	0.02
STYLARIA LACUSTRIS	0	7	0	19	1.79	0	3	0	8	0.07	0	10	0	27	0.22
UNCINAIIS UNCINATA	0	1	0	3	0.28	0	0	0	0	0.00	0	1	0	3	0.02
VEJDOVSKYELLA INTERMEDIA	6	13	1	53	4.99	26	112	22	427	3.86	32	125	23	480	3.95
TOTAL NAIDIDAE	6	22	1	78	7.34	26	115	22	435	3.93	32	137	23	513	4.23
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	0	8	0	21	1.98	0	0	0	0	0.00	0	8	0	21	0.17
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	0	22	0	59	5.56	0	0	0	0	0.00	0	22	0	59	0.49
LIMNODRILUS HOFFMEISTERI	0	2	0	5	0.47	0	0	0	0	0.00	0	2	0	5	0.04
LIMNODRILUS HOFFMEISTERI VARIANT	0	1	0	3	0.28	0	0	0	0	0.00	0	1	0	3	0.02
POTAMOTHRIX MOLDAVIENSIS	0	2	0	5	0.47	0	0	0	0	0.00	0	2	0	5	0.04
POTAMOTHRIX VEJDOVSKYI	0	4	0	11	1.04	0	0	0	0	0.00	0	4	0	11	0.09
TUBIFEX TUBIFEX	0	2	0	5	0.47	0	0	0	0	0.00	0	2	0	5	0.04
TOTAL TUBIFICIDAE	0	41	0	109	10.26	0	0	0	0	0.00	0	41	0	109	0.90
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	0	4	0	11	1.04	0	0	0	0	0.00	0	4	0	11	0.09
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	75	170	31	736	6.65	75	170	31	736	6.07
TOTAL OLIGOCHAETA	6	67	1	198	18.64	101	285	53	1171	10.58	107	352	54	1369	11.29

TABLE 21. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3, 24 JULY 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
TARDIGRADA	0	1	0	3	0.28	62	168	37	712	6.43	62	169	37	715	5.90
OSTRACODA	22	82	8	299	28.15	644	1649	396	7171	64.80	666	1731	404	7469	61.59
ISOPODA															
ASELLUS SP.	1	2	0	8	0.75	0	1	0	3	0.03	1	3	0	11	0.09
LIRCEUS SP.	0	0	0	0	0.00	1	1	0	5	0.05	1	1	0	5	0.04
AMPHIPODA															
HYALELLA AZTECA	0	0	1	3	0.28	0	0	0	0	0.00	0	0	1	3	0.02
GAMMARUS PSEUDOLINNAEUS	17	8	0	67	6.31	0	0	0	0	0.00	17	8	0	67	0.55
GAMMARUS SP.	0	16	0	43	4.05	8	3	0	29	0.26	8	19	0	72	0.59
TOTAL AMPHIPODA	17	24	1	113	10.64	8	3	0	29	0.26	25	27	1	142	1.17
ACARINA															
HYDRACARINA	0	3	0	9	0.75	9	19	10	101	0.91	9	22	10	109	0.90
EPEMEROPTERA															
HEPTAGENIIDAE															
STENOCEPHALUS SP.	2	0	0	5	0.47	0	0	0	0	0.00	2	0	0	5	0.04
TOTAL EPEMEROPTERA	2	0	0	5	0.47	0	0	0	0	0.00	2	0	0	5	0.04
TRICHOPTERA															
LEPTOCERIDAE															
ATHRIPODES SP.	0	1	0	3	0.28	0	0	0	0	0.00	0	1	0	3	0.02
TOTAL TRICHOPTERA	0	1	0	3	0.28	0	0	0	0	0.00	0	1	0	3	0.02
DIPTERA															
CHIRONOMIDAE															
DICROTENDIPES SP.	1	0	0	3	0.28	0	0	0	0	0.00	1	0	0	3	0.02
HETEROTRISSOCLADIUS SP.	4	7	1	32	3.01	0	0	0	0	0.00	4	7	1	32	0.25
MICROCRICOTOPUS SP.	0	1	0	3	0.28	0	0	0	0	0.00	0	1	0	3	0.02
ORTHOCCLADIUS SP.	0	1	1	5	0.47	0	0	0	0	0.00	0	1	1	5	0.04
PARACHIRONOMUS SP.	0	2	0	5	0.47	0	0	0	0	0.00	0	2	0	5	0.04
PARACLODOPPELMA SP.	0	4	0	11	1.04	0	0	0	0	0.00	0	4	0	11	0.09
PARAKIEFFERIELLA SP.	3	4	0	19	1.79	0	0	0	0	0.00	3	4	0	19	0.15
POLYPEDILUM (FALLAX GROUP) SP.	1	1	0	5	0.47	0	0	0	0	0.00	1	1	0	5	0.04
PARAKIEFFERIELLA SP. PUPA	1	1	0	5	0.47	0	0	0	0	0.00	1	1	0	5	0.04
TANYTARSUS SP.	1	1	0	5	0.47	0	0	0	0	0.00	1	1	0	5	0.04
THIENEMANNIMYIA GROUP	21	32	5	155	14.60	0	0	0	0	0.00	21	32	5	155	1.23
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	35	47	12	251	2.27	35	47	12	251	2.07

TABLE 21. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3 , 24 JULY 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TOTAL CHIRONOMIDAE	32	54	7	248	23.35	35	47	12	251	2.27	67	101	19	499	4.11
GASTROPODA															
AMNICOLA LIMOSA	0	1	0	3	0.28	0	0	0	0	0.00	0	1	0	3	0.02
PHYSA SP.	0	1	0	3	0.28	0	0	0	0	0.00	0	1	0	3	0.02
LYMNAEA HUMILIS	0	1	0	3	0.28	0	0	0	0	0.00	0	1	0	3	0.02
TOTAL GASTROPODA	0	3	0	9	0.85	0	0	0	0	0.00	0	3	0	9	0.07
PELECYPODA															
SPHAERIIDAE	0	1	0	3	0.28	0	0	0	0	0.00	0	1	0	3	0.02
TOTAL PELECYPODA	0	1	0	3	0.28	0	0	0	0	0.00	0	1	0	3	0.02
TOTAL BENTHOS	101	277	19	1062	100.00	1019	2569	562	11067	100.00	1120	2846	581	12128	100.00

* PRESENT

TABLE 22. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 6 , 24 JULY

1973.

TAXA	NO. 30 MESH SIEVE					NO. 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
PORIFERA															
SPONGILLA FRAGILIS	0	0	0	0	0.00	1*	0	0	1*	0.00	1*	0	0	1*	0.00
NEMATODA	1	1	3	13	1.18	15	40	12	179	9.05	16	41	15	192	6.24
HYDROZOA															
HYDRA SP.	3	4	0	19	1.72	25	10	8	115	5.82	28	14	8	133	4.32
PLATYHELMINTHES															
RHABDOCELA	0	1	0	3	0.27	91	26	10	339	17.15	91	27	10	341	11.05
BRYOZOA															
PALUDICELLA ARTICULATA	1*	0	0	1*	0.00	0	0	0	0	0.00	1*	0	0	1*	0.00
FREDERICELLA SP.	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
OLIGOCHAETA															
ENCHYTRAEIDAE	0	1	0	3	0.27	0	0	0	0	0.00	0	1	0	3	0.10
NAIDIDAE															
CHAETOGASTER DIAPHANUS	2	7	1	27	2.45	0	0	0	0	0.00	2	7	1	27	0.85
PIGUETIELLA MICHIGANENSIS	4	2	1	19	1.72	0	0	0	0	0.00	4	2	1	19	0.62
STYLARIA LACUSTRIS	4	1	0	13	1.18	0	0	0	0	0.00	4	1	0	13	0.42
UNCINATIS UNCINATA	12	15	3	80	7.25	0	0	0	0	0.00	12	15	3	80	2.60
VEJDICVSKYELLA INTERMEDIA	5	12	1	48	4.35	44	38	21	275	13.91	49	50	22	323	10.49
TOTAL NAIDIDAE	27	37	6	187	16.95	44	38	21	275	13.91	71	75	27	462	15.00
TUBIFICIDAE															
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	2	4	2	21	1.90	0	0	0	0	0.00	2	4	2	21	0.69
TOTAL TUBIFICIDAE	2	4	2	21	1.90	0	0	0	0	0.00	2	4	2	21	0.69
LUMBRICULIDAE															
STYLOPILUS HERINGIANUS	1	0	0	3	0.27	0	0	0	0	0.00	1	0	0	3	0.10
BRANCHIOBELLA	0	0	0	0	0.00	0	0	1	3	0.15	0	0	1	3	0.10
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	19	8	3	80	4.05	19	8	3	80	2.60

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TABLE 22. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 6 , 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TOTAL OLIGOCHAETA	30	42	8	214	19.40	63	46	25	358	18.11	93	88	33	572	18.59
OSTRACODA	44	59	26	344	31.19	84	145	37	709	35.86	128	204	63	1053	34.20
ISOPODA															
ASELLUS SP.	1	0	0	3	0.27	0	0	0	0	0.00	1	0	0	3	0.10
AMPHIPODA															
PONTOPOREIA AFFINIS	1	0	0	3	0.27	0	0	0	0	0.00	1	0	0	3	0.10
GAMMARUS PSEUDOLIMNAEUS	2	0	0	5	0.45	0	0	0	0	0.00	2	0	0	5	0.15
TOTAL AMPHIPODA	3	0	0	8	0.73	0	0	0	0	0.00	3	0	0	8	0.25
ACARINA															
HYDRACARINA	6	8	3	45	4.08	1	6	4	29	1.47	7	14	7	75	2.44
EPEHEMEROPTERA															
HEPTAGENIIDAE															
HEPTAGENIA SP.	2	0	0	5	0.45	0	0	0	0	0.00	2	0	0	5	0.15
TOTAL EPEHEMEROPTERA	2	0	0	5	0.45	0	0	0	0	0.00	2	0	0	5	0.15
DIPTERA															
CHIRONOMIDAE															
CLADOTANYTARSUS SP.	3	0	0	8	0.73	0	0	0	0	0.00	3	0	0	8	0.25
HETEROTRISSOCLADIUS SP.	3	7	6	43	3.90	0	0	0	0	0.00	3	7	6	43	1.40
MICROCRICTOPUS SP.	29	13	12	144	13.06	0	0	0	0	0.00	29	13	12	144	4.55
MICROPSECTRA SP.	1	2	1	11	1.00	0	0	0	0	0.00	1	2	1	11	0.35
MONODIAMESA SP.	0	2	0	5	0.45	0	0	0	0	0.00	0	2	0	5	0.15
MONODIAMESA TUBERCULATA	1	0	0	3	0.27	0	0	0	0	0.00	1	0	0	3	0.10
ORTHOCCLADIUS SP.	0	1	2	8	0.73	0	0	0	0	0.00	0	1	2	8	0.25
PAFACLAODELMA SP.	1	2	1	11	1.00	0	0	0	0	0.00	1	2	1	11	0.35
PARAKIEFFERIELLA SP.	0	0	1	3	0.27	0	0	0	0	0.00	0	0	1	3	0.10
PARATANYTARSUS SP.	2	3	1	15	1.45	0	0	0	0	0.00	2	3	1	16	0.52
POLYPEDILUM (TRIPODURA GROUP) SP.	0	4	0	11	1.00	0	0	0	0	0.00	0	4	0	11	0.35
POLYPEDILUM (FALLAX GROUP) SP.	1	1	1	8	0.73	0	0	0	0	0.00	1	1	1	8	0.25
PROCLADIUS (PSILOTANYPUS) SP.	1	0	0	3	0.27	0	0	0	0	0.00	1	0	0	3	0.10
CRICOTOPUS SP. PUPA	2	0	0	5	0.45	0	0	0	0	0.00	2	0	0	5	0.15
SYNDRTHOCCLADIUS SP.	0	1	0	3	0.27	0	0	0	0	0.00	0	1	0	3	0.10
TANYTARSUS SP.	0	1	1	5	0.45	0	0	0	0	0.00	0	1	1	5	0.15
THIENEMANNIMYIA GROUP	32	20	7	157	14.23	0	0	0	0	0.00	32	20	7	157	5.10
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	42	33	18	248	12.54	42	33	18	248	8.05
TOTAL CHIRONOMIDAE	76	57	33	444	40.25	42	33	18	248	12.54	118	90	51	692	22.47

TABLE 22. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 6 , 24 JULY 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
EMPIDIDAE	2	0	0	5	0.45	0	0	0	0	0.00	2	0	0	5	0.15
TOTAL BENTHOS	168	172	73	1103	100.00	321	306	114	1977	100.00	489	478	187	3079	100.00
* PRESENT															

TABLE 23. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 7 , 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
PORIFERA															
SPONGILLA FRAGILIS	1*	1*	0	1*	0.00	0	0	0	0	0.00	1*	1*	0	1*	0.00
NEMATODA	0	2	2	11	1.79	141	32	86	691	13.99	141	34	88	701	12.63
HYDROZOA															
HYDRA SP.	7	0	0	19	3.09	12	0	23	93	1.88	19	0	23	112	2.02
PLATYHELMINTHES															
RHABDOCELA	1	0	6	19	3.09	20	1	8	77	1.56	21	1	14	96	1.73
BRYOZOA															
PALUDICELLA ARTICULATA	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
FREDERICELLA SP.	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
OLIGOCHAETA															
NAIDIDAE															
STYLARIA LACUSTRIS	24	0	0	64	10.42	2	0	1	8	0.16	26	0	1	72	1.30
VEJDOVSKYELLA INTERMEDIA	0	0	0	0	0.00	41	2	18	163	3.30	41	2	18	163	2.94
TOTAL NAIDIDAE	24	0	0	64	10.42	43	2	19	171	3.46	67	2	19	235	4.23
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	1	1	0	5	0.81	0	0	0	0	0.00	1	1	0	5	0.09
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	1	3	0	11	1.79	0	0	0	0	0.00	1	3	0	11	0.20
LIMNOPILUS HUFFMEISTERI	0	1	0	3	0.49	0	0	0	0	0.00	0	1	0	3	0.05
TUBIFEX TUBIFEX	1	0	0	3	0.49	0	0	0	0	0.00	1	0	0	3	0.05
TOTAL TUBIFICIDAE	3	5	0	22	3.58	0	0	0	0	0.00	3	5	0	22	0.40
BRANCHIOBELLA	1	0	0	3	0.49	11	0	0	29	0.59	12	0	0	32	0.59
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	71	57	25	408	8.26	71	57	25	408	7.35
TOTAL OLIGOCHAETA	28	5	0	89	14.50	125	59	44	608	12.31	153	64	44	697	12.56
TARDIGRADA	0	0	0	0	0.00	27	18	11	149	3.02	27	18	11	149	2.69
OSTRACODA	61	30	11	272	44.30	652	200	259	2963	60.00	713	230	270	3235	58.29

TABLE 23. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 7 , 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
AMPHIPODA															
PONTOPOREIA AFFINIS	0	1	0	3	0.49	0	0	0	0	0.00	0	1	0	3	0.05
GAMMARUS SP.	2	0	0	5	0.81	0	0	1	3	0.06	2	0	1	3	0.14
TOTAL AMPHIPODA	2	1	0	8	1.30	0	0	1	3	0.06	2	1	1	11	0.20
DECAPODA	1	0	0	3	0.49	0	0	0	0	0.00	1	0	0	3	0.05
ACARINA															
HYDRACARINA	6	5	0	29	4.72	14	18	7	104	2.11	20	23	7	133	2.40
EPHEMEROPTERA															
HEPTAGENIIDAE															
UNIDENTIFIED HEPTAGENIIDAE	4	0	0	11	1.79	0	0	0	0	0.00	4	0	0	11	0.20
HEPTAGENIA SP.	0	0	0	0	0.00	1	1	0	5	0.10	1	1	0	5	0.09
TOTAL EPHEMEROPTERA	4	0	0	11	1.79	1	1	0	5	0.10	5	1	0	16	0.29
DIPTERA															
CHIRONOMIDAE															
CLADOTANYTARSUS SP.	0	1	0	3	0.49	0	0	0	0	0.00	0	1	0	3	0.05
HETEROTRISOCLADIUS SP.	6	0	0	16	2.61	0	0	0	0	0.00	6	0	0	16	0.29
MICROCRICOTOPIUS SP.	4	0	0	11	1.79	0	0	0	0	0.00	4	0	0	11	0.20
MICROPSECTRA SP.	1	0	0	3	0.49	0	0	0	0	0.00	1	0	0	3	0.05
ORTHOCLADIUS (SS) SP.	1	0	0	3	0.49	0	0	0	0	0.00	1	0	0	3	0.05
PARACHIRONOMUS SP.	1	0	0	3	0.49	0	0	0	0	0.00	1	0	0	3	0.05
PARACLADOPPELMA SP.	1	0	0	3	0.49	0	0	0	0	0.00	1	0	0	3	0.05
PARAKIEFFERIELLA SP.	9	0	0	24	3.91	0	0	0	0	0.00	9	0	0	24	0.43
PARATANYTARSUS SP.	1	0	0	3	0.49	0	0	0	0	0.00	1	0	0	3	0.05
POLYPEDILUM (TRIPODURA GROUP) SP.	3	0	0	8	1.30	0	0	0	0	0.00	3	0	0	8	0.14
POLYPEDILUM (FALLAX GROUP) SP.	0	1	0	3	0.49	0	0	0	0	0.00	0	1	0	3	0.05
PARAKIEFFERIELLA SP. PUPA	1	0	0	3	0.49	0	0	0	0	0.00	1	0	0	3	0.05
TANYTARSUS SP.	1	0	0	3	0.49	0	0	0	0	0.00	1	0	0	3	0.05
THIENEMANNIELLA SP.	1	0	0	3	0.49	0	0	0	0	0.00	1	0	0	3	0.05
THIENEMANNIYIA GROUP	19	5	0	64	10.42	0	0	0	0	0.00	19	5	0	64	1.15
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	32	18	42	245	4.96	32	18	42	245	4.41
TOTAL CHIRONOMIDAE	49	7	0	153	24.92	32	18	42	245	4.96	81	25	42	398	7.17
TOTAL BENTHOS	159	50	19	614	100.00	1024	347	481	4938	100.00	1193	397	500	5551	100.00

* PRESENT

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TABLE 24. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 8 , 24 JULY 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	30	15	22	179	6.27	2420	474	4048	18512	22.78	2450	489	4070	18691	22.22
HYDROZOA															
HYDRA SP.	7	8	0	40	1.40	15	21	52	235	0.29	22	29	52	275	0.33
PLATYHELMINTHES															
RHABDOCELA	13	16	20	131	4.59	13	5	13	83	0.10	26	21	33	213	0.25
BRYOZOA															
PALUDICELLA ARTICULATA	0	0	0	0	0.00	1*	0	0	1*	0.00	1*	0	0	1*	0.00
FREDERICELLA SP.	1*	0	0	1*	0.00	0	0	0	0	0.00	1*	0	0	1*	0.00
OLIGOCHAETA															
NAIDIDAE															
CHAETOGASTER DIAPHANUS	1	1	0	5	0.18	0	0	0	0	0.00	1	1	0	5	0.01
STYLARIA LACUSTRIS	2	10	1	35	1.23	0	0	0	0	0.00	2	10	1	35	0.04
VEJDOVSKYELLA INTERMEDIA	56	26	70	405	14.19	456	215	702	3661	4.51	512	241	772	4267	4.84
TOTAL NAIDIDAE	59	37	71	445	15.59	456	215	702	3661	4.51	515	252	773	4107	4.88
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	6	2	5	35	1.23	0	0	0	0	0.00	6	2	5	35	0.04
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	72	17	63	405	14.19	0	0	0	0	0.00	72	17	63	405	0.43
ILYODRILUS TEMPLETONI	1	0	0	3	0.11	0	0	0	0	0.00	1	0	0	3	0.00
LIMNODRILUS HOFFMEISTERI	11	0	10	56	1.96	0	0	0	0	0.00	11	0	10	56	0.07
LIMNODRILUS HOFFMEISTERI VARIANT	1	0	1	5	0.18	0	0	0	0	0.00	1	0	1	5	0.01
LIMNODRILUS PROFUNDICOLA	0	0	1	3	0.11	0	0	0	0	0.00	0	0	1	3	0.00
PELOSCOLEX FREYI	1	0	0	3	0.11	0	0	0	0	0.00	1	0	0	3	0.00
POTAMOTHRIX MOLDAVIENSIS	0	0	3	8	0.28	0	0	0	0	0.00	0	0	3	8	0.01
POTAMOTHRIX VEJDOVSKYI	1	1	5	19	0.67	0	0	0	0	0.00	1	1	5	19	0.02
TUBIFEX TUBIFEX	2	0	0	5	0.18	0	0	0	0	0.00	2	0	0	5	0.01
TOTAL TUBIFICIDAE	95	20	88	542	18.98	0	0	0	0	0.00	95	20	88	542	0.64
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	3	0	1	11	0.39	0	0	0	0	0.00	3	0	1	11	0.01
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	2777	1260	449	11963	14.72	2777	1260	449	11963	14.22
TOTAL OLIGOCHAETA	157	57	160	998	34.96	3233	1475	1151	15624	19.23	3390	1532	1311	16623	19.75

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TABLE 24. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 8, 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
HIRUDINEA															
GLOSSIPHONIA COMPLANATA	0	1	0	3	0.11	0	0	0	0	0.00	0	1	0	3	0.00
TOTAL HIRUDINEA	0	1	0	3	0.11	0	0	0	0	0.00	0	1	0	3	0.00
TARDIGRADA	27	7	1	93	3.26	1521	926	3558	16013	19.71	1548	933	3559	16107	19.15
DSTRACODA	110	33	115	688	24.10	3289	2682	5171	29712	36.57	3399	2715	5296	30400	36.15
MYSIDACEA															
MYSIS RELICTA	0	1	0	3	0.11	0	0	0	0	0.00	0	1	0	3	0.00
ISOPODA															
UNIDENTIFIED ASELLIOAE	0	0	0	0	0.00	1	0	2	8	0.01	1	0	2	8	0.01
ASELLUS SP.	0	1	1	5	0.18	0	0	0	0	0.00	0	1	1	5	0.01
LIRCEUS SP.	0	1	0	3	0.11	0	0	0	0	0.00	0	1	0	3	0.00
AMPHIPODA															
PONTOPOREIA AFFINIS	1	0	1	5	0.18	0	0	0	0	0.00	1	0	1	5	0.01
GAMMARUS PSEUDOLIMNAEUS	0	1	0	3	0.11	0	0	0	0	0.00	0	1	0	3	0.00
GAMMARUS SP.	0	10	4	37	1.30	0	0	0	0	0.00	0	10	4	37	0.04
TOTAL AMPHIPODA	1	11	5	45	1.58	0	0	0	0	0.00	1	11	5	45	0.05
ACARINA															
HYDRACARINA	9	10	9	75	2.63	42	43	62	392	0.48	51	53	71	467	0.55
EPHEMEROPTERA															
HEPTAGENIIDAE															
UNIDENTIFIED HEPTAGENIIDAE	0	1	0	3	0.11	0	0	1	3	0.00	0	1	1	5	0.01
TOTAL EPHEMEROPTERA	0	1	0	3	0.11	0	0	1	3	0.00	0	1	1	5	0.01
DIPTERA															
CHIRONOMIIDAE															
CHIRONOMUS SP.	0	2	1	8	0.28	0	0	0	0	0.00	0	2	1	8	0.01
HETEROTRISSECLADIUS SP.	6	13	16	93	3.26	0	0	0	0	0.00	6	13	16	93	0.11
MICROCRIOTOPUS SP.	0	1	1	5	0.18	0	0	0	0	0.00	0	1	1	5	0.01
MICKOPSECTRA SP.	1	0	1	5	0.18	0	0	0	0	0.00	1	0	1	5	0.01
MUNODIAMESA SP.	1	0	3	11	0.39	0	0	0	0	0.00	1	0	3	11	0.01
MUNODIAMESA TUBERCULATA	0	0	2	5	0.18	0	0	0	0	0.00	0	0	2	5	0.01
ORTHOCCLADIUS SP.	0	1	1	5	0.18	0	0	0	0	0.00	0	1	1	5	0.01

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TABLE 24. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 8 , 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
PARACHIRONOMUS SP.	4	0	0	11	0.39	0	0	0	0	0.00	4	0	0	11	0.01
PARACLADOPHELMA SP.	2	0	0	5	0.18	0	0	0	0	0.00	2	0	0	5	0.01
PARAKIEFFERIELLA SP.	7	5	1	35	1.23	0	0	0	0	0.00	7	5	1	35	0.04
PARATANYTARSUS SP.	1	0	0	3	0.11	0	0	0	0	0.00	1	0	0	3	0.00
POLYPEDILUM (TRIPODURA GROUP) SP.	9	1	35	120	4.20	0	0	0	0	0.00	9	1	35	120	0.14
POLYPEDILUM (FALLAX GROUP) SP.	8	4	20	85	2.98	0	0	0	0	0.00	8	4	20	85	0.10
CRICOTOPUS SP. PUPA	0	0	1	3	0.11	0	0	0	0	0.00	0	0	1	3	0.00
TANYTARSUS SP.	3	0	0	8	0.28	0	0	0	0	0.00	3	0	0	8	0.01
THIENEMANNIELLA SP.	1	6	1	21	0.74	0	0	0	0	0.00	1	6	1	21	0.02
THIENEMANNIMYIA GROUP	10	31	17	155	5.43	0	0	0	0	0.00	10	31	17	155	0.15
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	78	72	100	667	0.82	78	72	100	667	0.79
TOTAL CHIRONOMIDAE	53	64	100	579	20.25	78	72	100	667	0.82	131	136	200	1245	1.43
GASTROPODA															
PHYSA SP.	0	0	1	3	0.11	0	0	0	0	0.00	0	0	1	3	0.00
LYMNAEA HUMILIS	0	0	1	3	0.11	0	0	0	0	0.00	0	0	1	3	0.00
TOTAL GASTROPODA	0	0	2	6	0.21	0	0	0	0	0.00	0	0	2	6	0.01
PELECYPODA															
SPHAERIIDAE	0	0	2	5	0.18	0	0	0	0	0.00	0	0	2	5	0.01
TOTAL PELECYPODA	0	0	2	5	0.18	0	0	0	0	0.00	0	0	2	5	0.01
TOTAL BENTHOS	407	226	437	2855	100.00	*106	5698	*141	81249	100.00	*110	5924	*145	84104	100.00

* PRESENT

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TABLE 25. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 11, 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	0	0	0	0	0.00	14	87	80	483	57.71	14	87	80	483	51.55
HYDROZOA															
HYDRA SP.	0	0	0	0	0.00	13	0	0	35	4.18	13	0	0	35	3.74
PLATYHELMINTHES															
RHABDOCOELA	1	0	0	3	3.06	0	2	1	8	0.96	1	2	1	11	1.19
OLIGOCHAETA															
NAIDIDAE															
STYLARIA LACUSTRIS	1	0	0	3	3.06	0	0	0	0	0.00	1	0	0	3	0.32
VEJDovskyella INTERMEDIA	0	0	0	0	0.00	10	4	2	43	5.14	10	4	2	43	4.60
TOTAL NAIDIDAE	1	0	0	3	3.06	10	4	2	43	5.14	11	4	2	46	4.92
TUBIFICIDAE															
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	2	1	0	8	8.16	0	0	0	0	0.00	2	1	0	8	0.85
TOTAL TUBIFICIDAE	2	1	0	8	8.16	0	0	0	0	0.00	2	1	0	8	0.85
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	11	0	0	29	3.46	11	0	0	29	3.10
TOTAL OLIGOCHAETA	3	1	0	11	11.22	21	4	2	72	8.60	24	5	2	83	8.99
TARDIGRADA	0	0	0	0	0.00	6	1	0	19	2.27	6	1	0	19	2.03
OSTRACODA	0	0	0	0	0.00	35	6	14	147	17.56	35	6	14	147	15.72
AMPHIPODA															
PONTOPOREIA AFFINIS	1	0	0	3	3.06	0	0	0	0	0.00	1	0	0	3	0.32
GAMMARUS PSEUDOLIMNAEUS	0	1	0	3	3.06	0	0	0	0	0.00	0	1	0	3	0.32
GAMMARUS SP.	0	0	0	0	0.00	0	1	0	3	0.36	0	1	0	3	0.32
TOTAL AMPHIPODA	1	1	0	6	6.12	0	1	0	3	0.36	1	2	0	9	0.95
ACARINA															
UNIDENTIFIED HYDRACARINA	0	0	0	0	0.00	1	2	1	11	1.31	1	2	1	11	1.19

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TABLE 25. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 11, 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
DIPTERA															
CHIRONOMIDAE															
CRYPTOCHIRONOMUS SP.	4	0	0	11	11.22	0	0	0	0	0.00	4	0	0	11	1.13
MICROCRICOTOPUS SP.	1	0	0	3	3.06	0	0	0	0	0.00	1	0	0	3	0.32
PARACHIRONOMUS SP.	2	0	0	5	5.10	0	0	0	0	0.00	2	0	0	5	0.53
PARACLAODPELMA SP.	4	4	1	24	24.49	0	0	0	0	0.00	4	4	1	24	2.57
PAPAKIEFFERIELLA SP.	1	0	0	3	3.06	0	0	0	0	0.00	1	0	0	3	0.32
POLYPEDILUM (TRIPODURA GROUP) SP.	1	0	0	3	3.06	0	0	0	0	0.00	1	0	0	3	0.32
POLYPEDILUM (FALLAX GROUP) SP.	2	0	0	5	5.10	0	0	0	0	0.00	2	0	0	5	0.53
THIENEMANNIMYIA GROUP	8	0	0	21	21.43	0	0	0	0	0.00	8	0	0	21	2.25
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	13	3	6	59	7.05	13	3	6	59	6.31
TOTAL CHIRONOMIDAE	23	4	1	75	76.53	13	3	6	59	7.05	36	7	7	134	14.33
CERATOPOGONIDAE															
	1	0	0	3	3.06	0	0	0	0	0.00	1	0	0	3	0.32
TOTAL BENTHOS	29	6	1	98	100.00	103	106	104	837	100.00	132	112	105	935	100.00

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TABLE 26. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	0	1	0	3	0.31	371	48	62	1283	13.61	371	49	62	1285	12.37
HYDROZOA															
HYDRA SP.	6	4	7	45	4.67	25	16	20	163	1.73	31	20	27	208	2.00
PLATYHELMINTHES															
RHABDOCELA	2	0	0	5	0.52	193	82	2	739	7.84	195	82	2	744	7.16
BRYOZOA															
PALUDICELLA ARTICULATA	1*	1*	0	1*	0.00	0	0	0	0	0.00	1*	1*	0	1*	0.00
FREDERICELLA SP.	1*	0	0	1*	0.00	0	0	0	0	0.00	1*	0	0	1*	0.00
OLIGOCHAETA															
NAIDIDAE															
CHAETOCASTER DIAPHANUS	5	1	1	19	1.97	0	0	0	0	0.00	5	1	1	19	0.13
STYLARIA LACUSTRIS	34	9	15	155	16.10	0	0	0	0	0.00	34	9	15	155	1.49
VEJDovskyella INTERMEDIA	16	7	2	67	6.96	120	60	51	616	6.54	136	67	53	683	6.57
TOTAL NAIDIDAE	55	17	18	241	25.03	120	60	51	616	6.54	175	77	69	857	8.25
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	1	0	0	3	0.31	0	0	0	0	0.00	1	0	0	3	0.03
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	2	4	2	21	2.18	0	0	0	0	0.00	2	4	2	21	0.20
LIMNODRILUS HOFFMEISTERI VARIANT	1	0	0	3	0.31	0	0	0	0	0.00	1	0	0	3	0.03
TOTAL TUBIFICIDAE	4	4	2	27	2.80	0	0	0	0	0.00	4	4	2	27	0.26
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	1	0	0	3	0.31	0	0	0	0	0.00	1	0	0	3	0.03
BRANCHIOBELLA	0	0	0	0	0.00	1	0	0	3	0.03	1	0	0	3	0.03
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	82	23	21	336	3.56	82	23	21	336	3.23
TOTAL OLIGOCHAETA	60	21	20	271	28.14	203	83	72	955	10.13	263	104	92	1226	11.60
TARDIGRADA	0	0	0	0	0.00	83	21	12	309	3.28	83	21	12	309	2.97
OSTRACODA	84	32	6	325	33.75	932	562	613	5619	59.61	1016	594	619	5944	57.22

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TABLE 26. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
AMPHIPODA															
GAMMARUS PSEUDOLIMNAEUS	2	2	0	11	1.14	0	0	0	0	0.00	2	2	0	11	0.11
GAMMARUS SP.	9	6	0	40	4.15	0	1	0	3	0.03	9	7	0	43	0.41
TOTAL AMPHIPODA	11	8	0	51	5.30	0	1	0	3	0.03	11	9	0	54	0.52
ACARINA															
HYDRACARINA	1	1	0	5	0.52	19	3	9	83	0.88	20	4	9	89	0.95
EPHEMEROPTERA															
HEPTAGENIIDAE															
HEPTAGENIA SP.	0	0	1	3	0.31	0	0	0	0	0.00	0	0	1	3	0.03
STENOPEMA SP.	2	0	1	8	0.83	0	0	0	0	0.00	2	0	1	6	0.06
TOTAL EPHEMEROPTERA	2	0	2	11	1.14	0	0	0	0	0.00	2	0	2	11	0.11
DIPTERA															
CHIRONOMIDAE															
CORYNONEURA SP.	0	1	0	3	0.31	0	0	0	0	0.00	0	1	0	3	0.03
HETEROTRISOCLEADUS SP.	8	7	0	40	4.15	0	0	0	0	0.00	8	7	0	40	0.39
MICROCRICTOPUS SP.	1	0	0	3	0.31	0	0	0	0	0.00	1	0	0	3	0.03
MICROPSECTRA SP.	1	0	0	3	0.31	0	0	0	0	0.00	1	0	0	3	0.03
MUNODIAMESA SP.	1	0	0	3	0.31	0	0	0	0	0.00	1	0	0	3	0.03
ORTHOCLADIUS SP.	1	0	0	3	0.31	0	0	0	0	0.00	1	0	0	3	0.03
PARACHIRONOMUS SP.	1	0	0	3	0.31	0	0	0	0	0.00	1	0	0	3	0.03
PARACLODOPPELMA SP.	2	0	0	5	0.52	0	0	0	0	0.00	2	0	0	5	0.05
PARAKIEFFERIELLA SP.	6	1	4	29	3.01	0	0	0	0	0.00	6	1	4	29	0.23
POLYPEDILUM (TRIPONDURA GROUP) SP.	1	1	0	5	0.52	0	0	0	0	0.00	1	1	0	5	0.05
POLYPEDILUM (FALLAX GROUP) SP.	2	1	0	8	0.83	0	0	0	0	0.00	2	1	0	8	0.08
PARAKIEFFERIELLA SP. PUPA	2	1	0	8	0.83	0	0	0	0	0.00	2	1	0	8	0.08
POTTHASTIA SP.	0	1	0	3	0.31	0	0	0	0	0.00	0	1	0	3	0.03
CRICOTOPUS SP. PUPA	0	1	0	3	0.31	0	0	0	0	0.00	0	1	0	3	0.03
TANYTARSUS SP.	2	0	0	5	0.52	0	0	0	0	0.00	2	0	0	5	0.05
THIENEMANNIELLA SP.	1	0	1	5	0.52	0	0	0	0	0.00	1	0	1	5	0.05
THIENEMANNIMYIA GROUP	21	19	2	112	11.63	0	0	0	0	0.00	21	19	2	112	1.09
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	82	9	11	272	2.89	82	9	11	272	2.62
TOTAL CHIRONOMIDAE	50	33	7	241	25.03	82	9	11	272	2.89	132	42	18	513	4.94
GASTROPODA															
PHYSA SP.	1	0	0	3	0.31	0	0	0	0	0.00	1	0	0	3	0.03
LYMNAEA AURICULARIA	1	0	0	3	0.31	0	0	0	0	0.00	1	0	0	3	0.03
TOTAL GASTROPODA	2	0	0	6	0.62	0	0	0	0	0.00	2	0	0	6	0.06

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TABLE 26. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 24 JULY 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
TOTAL BENTHOS	218	100	42	963	100.00	1908	825	801	9426	100.00	2126	925	843	10388	100.00

* PRESENT

TABLE 27. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13, 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
PERIFERA															
SPONGILLA FRAGILIS	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
NEMATODA	27	137	72	629	10.85	2054	3353	2032	19757	31.30	2091	3490	2074	20387	29.58
HYDROZOA															
HYDRA SP.	0	0	1	3	0.05	2	1	0	8	0.01	2	1	1	11	0.02
PLATYHELMINTHES															
RHABDOCELA	7	6	3	43	0.74	1221	1499	1077	10125	16.04	1228	1505	1080	10168	14.75
BRUYZOA															
PALUDICELLA ARTICULATA	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
FREDERICELLA SP.	1*	1*	1*	1*	0.00	1*	0	0	1*	0.00	1*	1*	1*	1*	0.00
OLIGOCHAETA															
NAIDIDAE															
CHAETOGASTER DIAPHANUS	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.00
UNCINAIIS UNCINATA	0	2	6	21	0.36	0	0	0	0	0.00	0	2	6	21	0.03
VEJDovskyella INTERMEDIA	167	588	223	2608	44.99	743	607	566	5109	8.09	910	1195	789	7717	11.20
TOTAL NAIDIDAE	167	591	229	2632	45.40	743	607	566	5109	8.09	910	1198	795	7741	11.23
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	4	14	9	72	1.24	0	0	0	0	0.00	4	14	9	72	0.10
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	21	67	33	323	5.57	0	0	0	0	0.00	21	67	33	323	0.47
LIMNODRILUS HOFFMEISTERI	11	13	7	83	1.43	0	0	0	0	0.00	11	13	7	83	0.12
LIMNODRILUS HOFFMEISTERI VARIANT	2	1	2	13	0.22	0	0	0	0	0.00	2	1	2	13	0.02
LIMNODRILUS PROFUNDICOLA	1	0	0	3	0.05	0	0	0	0	0.00	1	0	0	3	0.00
LIMNODRILUS UDEKEMIANUS	1	1	0	5	0.09	0	0	0	0	0.00	1	1	0	5	0.01
PELOSCOLEX FREYI	1	0	0	3	0.05	0	0	0	0	0.00	1	0	0	3	0.00
PELOSCOLEX SUPERIORENSIS	1	0	0	3	0.05	0	0	0	0	0.00	1	0	0	3	0.00
POTAMOTHRIX MOLDAVIENSIS	1	1	0	5	0.09	0	0	0	0	0.00	1	1	0	5	0.01
POTAMOTHRIX VEJDovskyI	2	7	7	43	0.74	0	0	0	0	0.00	2	7	7	43	0.05
TUBIFEX TUBIFEX	1	1	4	16	0.28	0	0	0	0	0.00	1	1	4	16	0.02
TOTAL TUBIFICIDAE	46	105	62	569	9.82	0	0	0	0	0.00	46	105	62	569	0.53
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	1	0	1	5	0.09	0	0	0	0	0.00	1	0	1	5	0.01
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	794	57	29	2347	3.72	794	57	29	2347	3.41

TABLE 27. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13, 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TOTAL OLIGOCHAETA	21	696	292	3205	55.30	1537	664	595	7456	11.81	1751	1360	357	10662	15.47
TARDIGRADA	37	68	64	451	7.78	1192	528	384	5611	8.89	1229	596	448	6061	8.79
OSTRACODA	98	212	34	917	15.82	1770	2629	3110	20024	31.72	1868	2841	3144	20941	30.39
AMPHIPODA															
GAMMARUS SP.	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.00
TOTAL AMPHIPODA	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.00
ACARINA															
HYDRACARINA	1	5	0	15	0.28	5	2	2	24	0.04	6	7	2	40	0.05
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	2	1	0	8	0.14	0	0	0	0	0.00	2	1	0	8	0.01
ENDOCHIRONOMUS SP.	0	2	0	5	0.09	0	0	0	0	0.00	0	2	0	5	0.01
HETEROTRISOCLADIUS SP.	5	3	3	29	0.50	0	0	0	0	0.00	5	3	3	29	0.04
MICROPSECTRA SP.	4	0	1	13	0.22	0	0	0	0	0.00	4	0	1	13	0.02
MONODIAMESA SP.	0	0	1	3	0.05	0	0	0	0	0.00	0	0	1	3	0.00
ORTHOCCLADIUS SP.	1	0	1	5	0.09	0	0	0	0	0.00	1	0	1	5	0.01
PARAKIEFFERIELLA SP.	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.00
PARATENDIPES SP.	0	0	1	3	0.05	0	0	0	0	0.00	0	0	1	3	0.00
POLYPECILUM (TRIPODURA GROUP) SP.	34	49	37	320	5.52	0	0	0	0	0.00	34	49	37	320	0.45
POLYPECILUM (FALLAX GROUP) SP.	16	13	14	115	1.98	0	0	0	0	0.00	16	13	14	115	0.17
PROCLADIUS (PSILOTANYPUS) SP.	1	0	0	3	0.05	0	0	0	0	0.00	1	0	0	3	0.00
TANYTARSUS SP. PUPA	1	0	0	3	0.05	0	0	0	0	0.00	1	0	0	3	0.00
STICTOCHIRONOMUS SP.	1	0	0	3	0.05	0	0	0	0	0.00	1	0	0	3	0.00
TANYTARSUS SP.	0	1	1	5	0.09	0	0	0	0	0.00	0	1	1	5	0.01
THIENEMANNIMYIA GROUP	0	2	2	11	0.19	0	0	0	0	0.00	0	2	2	11	0.02
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	31	10	2	115	0.18	31	10	2	115	0.17
TOTAL CHIRONOMIDAE	65	72	61	529	9.13	31	10	2	115	0.18	96	82	63	644	0.93
TOTAL BENTHOS	449	1197	527	5797	100.00	7812	8686	7172	63120	100.00	8261	9883	7699	68917	100.00

* PRESENT

TABLE 28. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16, 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	5	13	12	80	3.41	213	292	336	2243	15.13	218	305	348	2323	13.53
HYDROZOA HYDRA SP.	25	47	5	205	8.74	62	81	15	421	2.84	87	128	20	627	3.65
PLATYHELMINTHES															
RHABDOCOELA	0	2	0	5	0.21	1	173	3	472	3.18	1	175	3	477	2.73
BRYOZOA PALUDICELLA ARTICULATA	1*	1*	0	1*	0.00	1*	1*	1*	1*	0.00	1*	1*	1*	1*	0.00
OLIGOCHAETA															
ENCHYTRAEIOAE	1	0	0	3	0.13	0	0	0	0	0.00	1	0	0	3	0.02
NAIDIDAE															
CHAETOGASTER DIAPHANUS	2	8	2	32	1.36	0	0	0	0	0.00	2	8	2	32	0.19
PIGUETIELLA MICHIGANENSIS	0	1	0	3	0.13	0	0	0	0	0.00	0	1	0	3	0.02
STYLARIA LACUSTRIS	5	15	3	61	2.60	0	0	0	0	0.00	5	15	3	61	0.35
UNCINAIIS UNCINATA	2	12	1	40	1.71	0	0	0	0	0.00	2	12	1	40	0.23
VEJDOVSKYELLA INTERMEDIA	5	35	33	195	8.31	82	103	100	760	5.13	87	138	133	955	5.55
TOTAL NAIDIDAE	14	71	39	331	14.11	82	103	100	760	5.13	96	174	139	1091	6.35
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	3	8	1	32	1.36	0	0	0	0	0.00	3	8	1	32	0.19
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	7	44	2	141	6.01	0	0	0	0	0.00	7	44	2	141	0.82
LIMNODRILUS HOFFMEISTERI	1	0	0	3	0.13	0	0	0	0	0.00	1	0	0	3	0.02
POTAMOTHRIX MOLDAVIENSIS	1	4	0	13	0.55	0	0	0	0	0.00	1	4	0	13	0.05
POTAMOTHRIX VEJDOVSKYI	2	29	1	85	3.62	0	0	0	0	0.00	2	29	1	85	0.50
TOTAL TUBIFICIDAE	14	85	4	274	11.68	0	0	0	0	0.00	14	85	4	274	1.50
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	3	8	0	29	1.24	0	0	0	0	0.00	3	8	0	29	0.17
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	180	274	177	1683	11.35	180	274	177	1683	9.80
TOTAL OLIGOCHAETA	32	164	43	637	27.15	262	377	277	2443	16.48	294	541	320	3080	17.94

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TABLE 28. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16, 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
HIRUDINEA															
HELOBDELLA STAGNALIS	0	1	0	3	0.13	0	0	0	0	0.00	0	1	0	3	0.02
TOTAL HIRUDINEA	0	1	0	3	0.13	0	0	0	0	0.00	0	1	0	3	0.02
TARDIGRADA	0	0	0	0	0.00	161	175	353	1837	12.39	161	175	353	1837	10.70
OSTRACODA	27	41	119	499	21.27	613	814	907	6224	41.99	640	855	1026	6723	39.15
ISOPODA															
ASELLUS SP.	4	3	0	19	0.81	4	0	0	11	0.07	8	3	0	29	0.17
AMPHIPODA															
GAMMARUS PSEUDOLIMNAEUS	0	5	1	16	0.68	0	0	0	0	0.00	0	5	1	16	0.09
GAMMARUS SP.	4	30	1	93	3.96	0	0	0	0	0.00	4	30	1	93	0.54
TOTAL AMPHIPODA	4	35	2	109	4.65	0	0	0	0	0.00	4	35	2	109	0.63
ACARINA															
HYDRACARINA	2	3	5	27	1.15	35	32	29	256	1.73	37	35	34	283	1.65
EPEMEROPTERA															
HEPTAGENIIDAE															
STENOCEMA SP.	4	3	0	19	0.81	0	0	0	0	0.00	4	3	0	19	0.11
TOTAL EPEMEROPTERA	4	3	0	19	0.81	0	0	0	0	0.00	4	3	0	19	0.11
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	0	0	1	3	0.13	0	0	0	0	0.00	0	0	1	3	0.02
CRYPTOCHIRONOMUS SP.	0	1	0	3	0.13	0	0	0	0	0.00	0	0	1	3	0.02
DICROTENDIPES SP.	0	0	1	3	0.13	0	0	0	0	0.00	0	1	0	3	0.02
HETEROTRISOCLADIUS SP.	57	29	21	285	12.15	0	0	0	0	0.00	57	29	21	285	1.66
MICROCRICOTOPUS SP.	0	3	0	8	0.34	0	0	0	0	0.00	0	3	0	8	0.05
MICROPSECTRA SP.	2	0	0	5	0.21	0	0	0	0	0.00	2	0	0	5	0.03
MONODIAMFSA SP.	2	2	3	19	0.81	0	0	0	0	0.00	2	2	3	19	0.11
ORTHOCLADIUS SP.	1	1	1	8	0.34	0	0	0	0	0.00	1	1	1	8	0.05
PARACHIRONOMUS SP.	1	0	0	3	0.13	0	0	0	0	0.00	1	0	0	3	0.02
PAPAELADOPELMA SP.	2	2	4	21	0.90	0	0	0	0	0.00	2	2	4	21	0.12
PARAKIEFFERIELLA SP.	0	6	3	24	1.02	0	0	0	0	0.00	0	6	3	24	0.14
POLYPEDILUM (TRIPODURA GROUP) SP.	3	10	1	37	1.58	0	0	0	0	0.00	3	10	1	37	0.22
POLYPEDILUM (FALLAX GROUP) SP.	5	6	3	37	1.58	0	0	0	0	0.00	5	6	3	37	0.22
PARAKIEFFERIELLA SP. PUPA	2	3	3	21	0.90	0	0	0	0	0.00	2	3	3	21	0.12

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TABLE 28. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16, 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
SYNORTHOCCLADIUS SP.	0	1	2	8	0.34	0	0	0	0	0.00	0	1	2	8	0.05
TANYTARSUS SP.	2	4	4	27	1.15	0	0	0	0	0.00	2	4	4	27	0.15
THIENEMANNIELLA SP.	1	1	0	5	0.21	0	0	0	0	0.00	1	1	0	5	0.03
THIENEMANNIMYIA GROUP	24	44	15	221	9.42	0	0	0	0	0.00	24	44	15	221	1.29
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	125	130	88	915	6.17	125	130	88	915	5.33
TOTAL CHIRONOMIDAE	102	113	62	738	31.46	125	130	88	915	6.17	227	243	150	1653	9.63
PELECYPODA															
SPHAERIIDAE	2	0	0	5	0.21	0	0	0	0	0.00	2	0	0	5	0.03
TOTAL PELECYPODA	2	0	0	5	0.21	0	0	0	0	0.00	2	0	0	5	0.03
TOTAL BENTHOS	207	425	248	2346	100.00	1476	2074	2008	14822	100.00	1683	2499	2256	17169	100.00

* PRESENT

TABLE 29. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 17, 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
PORIFERA															
SPONGILLA FRAGILIS	1*	0	0	1*	0.00	0	0	0	0	0.00	1*	0	0	1*	0.00
NEMATODA	17	3	33	141	6.58	797	310	1532	7037	25.41	814	313	1555	7179	24.05
HYDROZOA															
HYDRA SP.	21	8	3	85	3.97	76	175	652	2408	8.69	97	183	555	2493	8.35
PLATYHELMINTHES															
RHABDOCOELA	12	1	2	40	1.87	7	2	3	32	0.12	19	3	5	72	0.24
BRYOZOA															
PALUDICELLA ARTICULATA	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
FREDERICELLA SP.	0	0	1*	1*	0.00	0	0	0	0	0.00	0	0	1*	1*	0.00
OLIGOCHAETA															
NAIDIDAE															
CHAETOGASTER DIAPHANUS	1	0	3	11	0.51	0	0	0	0	0.00	1	0	3	11	0.04
PIGUETIELLA MICHIGANENSIS	2	0	0	5	0.23	0	0	0	0	0.00	2	0	0	5	0.02
STYLARIA LACUSTRIS	10	5	2	45	2.10	0	0	0	0	0.00	10	5	2	45	0.15
UNCINAIIS UNCINATA	2	0	0	5	0.23	0	0	0	0	0.00	2	0	0	5	0.02
VEJDDOVSKYELLA INTERMEDIA	94	10	81	493	23.02	269	155	456	2347	8.47	363	165	537	2940	9.52
TOTAL NAIDIDAE	109	15	86	559	26.10	269	155	456	2347	8.47	378	170	542	2906	9.74
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	9	2	3	37	1.73	0	0	0	0	0.00	9	2	3	37	0.12
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	28	2	10	107	5.00	0	0	0	0	0.00	28	2	10	107	0.35
LIMNODRILUS HOFFMEISTERI	4	0	3	19	0.89	0	0	0	0	0.00	4	0	3	19	0.05
PELUSCOLEX SUPERIORENSIS	3	0	0	9	0.37	0	0	0	0	0.00	3	0	0	9	0.03
POTAMOTHRIX MOLDAVIENSIS	2	1	2	13	0.61	0	0	0	0	0.00	2	1	2	13	0.04
POTAMOTHRIX VEJDDOVSKYI	0	0	1	3	0.14	0	0	0	0	0.00	0	0	1	3	0.01
TUBIFEX TUBIFEX	2	0	3	13	0.61	0	0	0	0	0.00	2	0	3	13	0.04
TOTAL TUBIFICIDAE	48	5	22	200	9.34	0	0	0	0	0.00	48	5	22	200	0.57
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	2	0	1	8	0.37	0	0	0	0	0.00	2	0	1	8	0.03
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	43	161	84	768	2.77	43	161	84	768	2.57

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TABLE 29. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 17, 24 JULY

1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TOTAL OLIGOCHAETA	159	20	109	767	35.81	312	316	540	3115	11.25	471	336	649	3982	13.01
TARDIGRADA	0	0	7	19	0.89	42	82	236	960	3.47	42	82	243	979	3.28
OSTRACODA	56	12	60	341	15.92	1046	1193	2846	13560	48.95	1102	1205	2906	13901	46.59
ISOPODA															
ASELLUS SP.	0	3	3	16	0.75	0	0	0	0	0.00	0	3	3	16	0.05
AMPHIPODA															
GAMMARUS PSEUDOLIMNAEUS	1	1	0	5	0.23	0	0	0	0	0.00	1	1	0	5	0.02
GAMMARUS SP.	6	6	1	35	1.63	0	0	0	0	0.00	6	6	1	35	0.12
TOTAL AMPHIPODA	7	7	1	40	1.87	0	0	0	0	0.00	7	7	1	40	0.13
ACARINA															
HYDRACARINA	9	2	1	32	1.49	11	9	11	93	0.30	20	11	12	115	0.39
EPHEMEROPTERA															
HEPTAGENIIDAE															
STENONEMA SP.	1	0	0	3	0.14	0	1	0	3	0.01	1	1	0	5	0.02
TOTAL EPHEMEROPTERA	1	0	0	3	0.14	0	1	0	3	0.01	1	1	0	5	0.02
DIPTERA															
CHIPONOMIDAE															
ABLABESMYIA SP.	0	1	0	3	0.14	0	0	0	0	0.00	0	1	0	3	0.01
CHIRONOMUS SP.	0	0	1	3	0.14	0	0	0	0	0.00	0	0	1	3	0.01
MICROTENDIPES SP.	0	1	0	3	0.14	0	0	0	0	0.00	0	1	0	3	0.01
ENDOCHIRONOMUS SP.	0	3	0	8	0.37	0	0	0	0	0.00	0	3	0	8	0.03
HETEROTRISOCLADIUS SP.	3	33	26	165	7.70	0	0	0	0	0.00	3	33	26	165	0.55
MICROCROCOTOPUS SP.	0	1	0	3	0.14	0	0	0	0	0.00	0	1	0	3	0.01
MICROPSECTRA SP.	0	6	0	16	0.75	0	0	0	0	0.00	0	6	0	16	0.05
MICROTENDIPES SP.	0	0	1	3	0.14	0	0	0	0	0.00	0	0	1	3	0.01
MUNODIAMESA TUBERCULATA	0	3	0	8	0.37	0	0	0	0	0.00	0	3	0	8	0.03
ORTHOCCLADIUS (SS) SP.	0	3	2	13	0.61	0	0	0	0	0.00	0	3	2	13	0.04
PARACHIRONOMUS SP.	2	0	0	5	0.23	0	0	0	0	0.00	2	0	0	5	0.02
PARACLODOPPELMA SP.	1	1	1	8	0.37	0	0	0	0	0.00	1	1	1	8	0.03
PAPAKIEFFERIELLA SP.	3	4	1	21	0.98	0	0	0	0	0.00	3	4	1	21	0.07
PARATENUPIES SP.	0	0	1	3	0.14	0	0	0	0	0.00	0	0	1	3	0.01
POLYPEDILUM (TRIPODURA GROUP) SP.	0	12	25	99	4.62	0	0	0	0	0.00	0	12	25	99	0.33
POLYPEDILUM (FALLAX GROUP) SP.	1	20	0	55	2.61	0	0	0	0	0.00	1	20	0	56	0.19
PSECTROCLADIUS SP.	0	1	0	3	0.14	0	0	0	0	0.00	0	1	0	3	0.01

TABLE 29. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 17, 24 JULY, 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
CRICOTEPUS SP. PUPA	0	1	0	3	0.14	0	0	0	0	0.00	0	1	0	3	0.01
TANYTARSUS SP. PUPA	0	1	0	3	0.14	0	0	0	0	0.00	0	1	0	3	0.01
SYNORTHOCCLADIUS SP.	1	0	0	3	0.14	0	0	0	0	0.00	1	0	0	3	0.01
TANYTARSUS SP.	0	1	1	5	0.23	0	0	0	0	0.00	0	1	1	5	0.02
THIENEMANNIELLA SP.	1	3	0	11	0.51	0	0	0	0	0.00	1	3	0	11	0.04
THIENEMANNIMYIA GROUP	29	33	5	179	8.36	0	0	0	0	0.00	29	33	5	179	0.60
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	71	68	49	501	1.81	71	68	49	501	1.69
TOTAL CHIRONOMIDAE	41	128	64	624	29.13	71	68	49	501	1.81	112	196	113	1125	3.77
GASTROPODA															
PHYSA SP.	2	0	0	5	0.23	0	0	0	0	0.00	2	0	0	5	0.02
TOTAL GASTROPODA	2	0	0	5	0.23	0	0	0	0	0.00	2	0	0	5	0.02
PELECYPODA															
SPHAERIIDAE	3	3	5	29	1.35	0	0	0	0	0.00	3	3	5	29	0.10
TOTAL PELECYPODA	3	3	5	29	1.35	0	0	0	0	0.00	3	3	5	29	0.10
TOTAL BENTHOS	328	187	288	2142	100.00	2362	2156	5869	27699	100.00	2690	2343	6157	29841	100.00

* PRESENT

TABLE 30. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3 , 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
PORIFERA															
SPONGILLA FRAGILIS	0	1*	0	1*	0.00	0	0	0	0	0.00	0	1*	0	1*	0.00
NEMATODA	13	134	33	480	6.86	192	252	73	1379	18.76	205	386	106	1859	12.95
HYDROZOA															
HYDRA SP.	1	0	1	5	0.07	4	4	4	32	0.44	5	4	5	37	0.25
PLATYHELMINTHES															
TRICLADIDA	4	19	3	69	0.99	6	28	7	109	1.48	10	47	10	179	1.25
RHABDOCELA	0	0	1	3	0.04	0	0	0	0	0.00	0	0	1	3	0.02
BRIDGESIA															
PALUDICELLA ARTICULATA	0	1*	0	1*	0.00	0	0	0	0	0.00	0	1*	0	1*	0.00
CRISTATELLA MUCED	0	1*	0	1*	0.00	0	0	0	0	0.00	0	1*	0	1*	0.00
FREDERICELLA SP.	0	1*	0	1*	0.00	0	0	0	0	0.00	0	1*	0	1*	0.00
OLIGOCHAETA															
ENCHYTRAEIDAE	0	2	0	5	0.07	0	0	0	0	0.00	0	2	0	5	0.03
NAIDIDAE															
CHAETOGASTER DIAPHANUS	1	1	0	5	0.07	0	0	0	0	0.00	1	1	0	5	0.03
NAIS BENHIGI	19	10	3	85	1.22	0	0	0	0	0.00	19	10	3	85	0.59
NAIS SP.	7	1	2	27	0.39	0	0	0	0	0.00	7	1	2	27	0.19
PARANAIS FRICI	0	0	1	3	0.04	0	0	0	0	0.00	0	0	1	3	0.02
PIGUETIELLA MICHIGANENSIS	2	6	3	29	0.41	0	0	0	0	0.00	2	6	3	29	0.20
STYLARIA LACUSTRIS	3	8	7	48	0.69	0	0	0	0	0.00	3	8	7	48	0.33
VEJDIVSKYELLA INTERMEDIA	66	406	129	1603	22.92	296	294	270	2293	31.20	362	700	399	3896	27.15
TOTAL NAIDIDAE	98	432	145	1800	25.73	296	294	270	2293	31.20	394	726	415	4093	28.53
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	3	123	34	427	6.10	0	0	0	0	0.00	3	123	34	427	2.93
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	24	625	151	2133	30.49	0	0	0	0	0.00	24	625	151	2133	14.87
LIMNODRILUS HOFFMEISTERI	1	2	1	11	0.16	0	0	0	0	0.00	1	2	1	11	0.08
LIMNODRILUS SPIRALIS	0	3	1	11	0.16	0	0	0	0	0.00	0	3	1	11	0.05
POTAMOTHRIX MOLDAVIENSIS	1	5	5	29	0.41	0	0	0	0	0.00	1	5	5	29	0.20
POTAMOTHRIX VEJDIVSKYI	2	10	13	67	0.96	0	0	0	0	0.00	2	10	13	67	0.47
TUBIFEX IGNOTUS	0	1	0	3	0.04	0	0	0	0	0.00	0	1	0	3	0.02
TUBIFEX TUBIFEX	0	1	1	5	0.07	0	0	0	0	0.00	0	1	1	5	0.03

TABLE 30. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3 , 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TOTAL TUBIFICIDAE	31	770	206	2686	38.40	0	0	0	0	0.00	31	770	206	2686	18.72
LUMBRICULIDAE STYLODRILUS HERINGIANUS	3	27	13	115	1.64	0	0	0	0	0.00	3	27	13	115	0.90
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	32	64	67	435	5.92	32	64	67	435	3.03
TOTAL OLIGOCHAETA	132	1231	354	4606	65.85	328	358	337	2728	37.12	460	1589	701	7334	51.13
TARDIGRADA	1	27	12	107	1.53	86	106	56	661	8.99	97	133	68	768	5.35
OSTRACODA	2	39	43	224	3.20	74	124	81	744	10.12	76	163	124	969	6.75
ISOPODA															
ASELLUS SP.	0	1	0	3	0.04	0	0	0	0	0.00	0	1	0	3	0.02
LIRCEUS SP.	0	1	0	3	0.04	0	0	0	0	0.00	0	1	0	3	0.02
AMPHIPODA															
PONTOPOREIA AFFINIS	1	1	1	9	0.11	0	0	0	0	0.00	1	1	1	9	0.05
GAMMARUS PSEUDOLIMNAEUS	3	13	15	83	1.19	0	0	0	0	0.00	3	13	15	83	0.59
GAMMARUS SP.	0	1	1	5	0.07	0	0	0	0	0.00	0	1	1	5	0.03
TOTAL AMPHIPODA	4	15	17	96	1.37	0	0	0	0	0.00	4	15	17	96	0.67
ACARINA															
HYDRACARINA	4	0	2	16	0.23	6	6	5	45	0.61	10	6	7	61	0.43
EPEMEROPTERA															
HEPTAGENIIDAE															
HEPTIGENIIDAE	1	6	0	19	0.27	0	0	0	0	0.00	1	6	0	19	0.13
STENOJENEMA SP.	0	0	2	5	0.07	0	0	0	0	0.00	0	0	2	5	0.03
TOTAL EPEMEROPTERA	1	6	2	24	0.34	0	0	0	0	0.00	1	6	2	24	0.17
TRICHOPTERA															
HYDROPSYCHIDAE															
HYDROPSYCHIDAE	0	0	1	3	0.04	0	0	0	0	0.00	0	0	1	3	0.02
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	0	1	3	11	0.16	0	0	0	0	0.00	0	1	3	11	0.09

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TABLE 30. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3, 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
TOTAL TRICHOPTERA	0	1	4	14	0.20	0	0	0	0	0.00	0	1	4	14	0.10
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	0	1	0	3	0.04	0	0	0	0	0.00	0	1	0	3	0.02
CRYPTOCHIRONOMUS SP.	3	9	6	48	0.69	0	0	0	0	0.00	3	9	6	48	0.33
MICROTENDIPES SP.	1	1	3	13	0.19	0	0	0	0	0.00	1	1	3	13	0.09
HETEROTRISOCLADIUS SP.	4	7	13	64	0.91	0	0	0	0	0.00	4	7	13	64	0.45
MICROCRICOTOPUS SP.	0	2	0	5	0.07	0	0	0	0	0.00	0	2	0	5	0.03
MICROPSECTRA SP.	0	1	1	5	0.07	0	0	0	0	0.00	0	1	1	5	0.03
MICROTENDIPES SP.	34	77	44	413	5.90	0	0	0	0	0.00	34	77	44	413	2.89
MONODIAMESA SP.	0	2	7	24	0.34	0	0	0	0	0.00	0	2	7	24	0.17
ORTHOCCLADIUS SP.	6	3	4	35	0.50	0	0	0	0	0.00	6	3	4	35	0.24
PARACHIRONOMUS SP.	0	0	1	3	0.04	0	0	0	0	0.00	0	0	1	3	0.02
PARACLAODIPELMA SP.	0	2	2	11	0.16	0	0	0	0	0.00	0	2	2	11	0.09
PARAKIEFFERIELLA SP.	1	24	27	139	1.99	0	0	0	0	0.00	1	24	27	139	0.97
POLYPEDILUM (TRIPODURA GROUP) SP.	3	45	12	160	2.29	0	0	0	0	0.00	3	45	12	160	1.12
POLYPEDILUM (FALLAX GROUP) SP.	2	23	25	133	1.90	0	0	0	0	0.00	2	23	25	133	0.93
PROCLADIUS (PSILOTANYPUS) BELLUS	0	0	1	3	0.04	0	0	0	0	0.00	0	0	1	3	0.02
PSEUDOSMITTIA SP.	0	2	1	9	0.11	0	0	0	0	0.00	0	2	1	9	0.05
STICTOCHIRONOMUS SP.	2	9	12	61	0.87	0	0	0	0	0.00	2	9	12	61	0.43
TANYTARSUS SP.	0	1	3	11	0.16	0	0	0	0	0.00	0	1	3	11	0.08
THIENEMANNIELLA SP.	1	2	4	19	0.27	0	0	0	0	0.00	1	2	4	19	0.13
THIENEMANNIMYIA GROUP	2	30	12	117	1.67	0	0	0	0	0.00	2	30	12	117	0.82
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	252	138	229	1651	22.47	252	138	229	1651	11.51
TOTAL CHIRONOMIDAE	59	241	178	1275	18.23	252	138	229	1651	22.47	311	379	407	2926	20.40
GASTROPODA															
GONIJBASIS LIVESCENS	0	1	0	3	0.04	0	0	0	0	0.00	0	1	0	3	0.02
PHYSA SP.	1	6	6	35	0.50	0	0	0	0	0.00	1	6	6	35	0.24
LYMNAEA HUMILIS	1	0	1	5	0.07	0	0	0	0	0.00	1	0	1	5	0.03
GYRAULUS PARVUS	0	1	0	3	0.04	0	0	0	0	0.00	0	1	0	3	0.02
TOTAL GASTROPODA	2	8	7	46	0.66	0	0	0	0	0.00	2	8	7	46	0.32
PELECYPODA															
SPHAERIIDAE	0	5	4	24	0.34	0	0	0	0	0.00	0	5	4	24	0.17
TOTAL PELECYPODA	0	5	4	24	0.34	0	0	0	0	0.00	0	5	4	24	0.17
TOTAL BENTHOS	223	1728	671	6995	100.00	948	1016	792	7349	100.00	1171	2744	1453	14345	100.00

TABLE 31. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 6 , 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/42	%	NO PER 1/8 M2 REPLICATES			MEAN/42	%	NO PER 1/8 M2 REPLICATES			MEAN/42	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	0	0	0	0	0.00	1224	542	567	6221	89.01	1224	542	567	6221	86.39
OLIGOCHAETA															
NAIDIDAE															
PIGUETIELLA MICHIGANENSIS	1	18	16	93	43.87	0	0	0	0	0.00	1	18	16	93	1.29
VEJDOVSKYELLA INTERMEDIA	0	0	0	0	0.00	4	2	8	37	0.53	4	2	8	37	0.51
TOTAL NAIDIDAE	1	18	16	93	43.87	4	2	8	37	0.53	5	20	24	130	1.81
TUBIFICIDAE															
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	2	6	8	43	20.28	0	0	0	0	0.00	2	6	8	43	0.60
TOTAL TUBIFICIDAE	2	6	8	43	20.28	0	0	0	0	0.00	2	6	8	43	0.60
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	59	39	49	392	5.61	59	39	49	392	5.44
TOTAL OLIGOCHAETA	3	24	24	136	64.15	63	41	57	429	6.14	66	65	91	565	7.95
TARDIGRADA	0	0	0	0	0.00	4	3	4	29	0.41	4	3	4	29	0.40
OSTRACODA	0	0	0	0	0.00	10	2	1	35	0.50	10	2	1	35	0.49
AMPHIPODA															
PONTOPOREIA AFFINIS	0	1	0	3	1.42	0	0	0	0	0.00	0	1	0	3	0.04
TOTAL AMPHIPODA	0	1	0	3	1.42	0	0	0	0	0.00	0	1	0	3	0.04
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	2	4	5	29	13.68	0	0	0	0	0.00	2	4	5	29	0.40
CRYPTOCHIRONOMUS SP.	1	0	0	3	1.42	0	0	0	0	0.00	1	0	0	3	0.04
NEAR DEMICRYPTOCHIRONOMUS B	3	2	2	19	8.96	0	0	0	0	0.00	3	2	2	19	0.25
PARACLAODPELMA SP.	3	1	3	19	8.96	0	0	0	0	0.00	3	1	3	19	0.25
POLYPEDILUM (TRIPODURA GROUP) SP.	1	0	0	3	1.42	0	0	0	0	0.00	1	0	0	3	0.04
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	40	39	24	275	3.93	40	39	24	275	3.92
TOTAL CHIRONOMIDAE	10	7	10	73	34.43	40	39	24	275	3.93	50	46	34	348	4.83
TOTAL BENTHOS	13	32	34	212	100.00	1341	627	653	6989	100.00	1354	659	697	7201	100.00

TABLE 32. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 7, 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
PORIFERA															
SPONGILLA FRAGILIS	0	1*	0	1*	0.00	0	0	0	0	0.00	0	1*	0	1*	0.00
NEMATODA	21	8	0	77	2.70	1030	487	364	5016	19.57	1051	495	364	5093	17.89
HYDROZOA															
HYDRA SP.	0	0	0	0	0.00	21	11	9	109	0.43	21	11	9	109	0.39
PLATYHELMINTHES															
TRICLADIDA	1	26	9	96	3.37	245	89	46	1013	3.95	246	115	55	1109	3.89
BRYOZOA															
PALUDICELLA ARTICULATA	0	1*	0	1*	0.00	0	0	0	0	0.00	0	1*	0	1*	0.00
FREDERICELLA SP.	0	1*	0	1*	0.00	0	0	0	0	0.00	0	1*	0	1*	0.00
OLIGOCHAETA															
NAIDIDAE															
NAIS SP.	0	1	0	3	0.11	0	0	0	0	0.00	0	1	0	3	0.01
PARANAIS FRICI	3	6	3	32	1.12	0	0	0	0	0.00	3	6	3	32	0.11
PIGUETIELLA MICHIGANENSIS	0	5	2	19	0.67	0	0	0	0	0.00	0	5	2	19	0.07
STYLARIA LACUSTRIS	0	12	1	35	1.23	0	0	0	0	0.00	0	12	1	35	0.12
UNCINAIIS UNCINATA	0	2	1	8	0.28	0	0	0	0	0.00	0	2	1	8	0.03
VEJDOVSKYELLA INTERMEDIA	105	91	33	611	21.45	620	1733	863	8576	33.45	725	1824	396	9187	32.25
TOTAL NAIDIDAE	108	117	40	709	24.85	620	1733	863	8576	33.45	728	1850	903	9284	32.59
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	0	65	4	184	6.46	0	0	0	0	0.00	0	65	4	184	0.65
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	3	309	19	883	30.99	0	0	0	0	0.00	3	309	19	883	3.10
LIMNODRILUS HOFFMEISTERI	0	1	0	3	0.11	0	0	0	0	0.00	0	1	0	3	0.01
POTAMOTHRIX MOLDAVIENSIS	0	14	0	37	1.30	0	0	0	0	0.00	0	14	0	37	0.13
POTAMOTHRIX VEJDOVSKYI	0	10	1	29	1.02	0	0	0	0	0.00	0	10	1	29	0.10
TUBIFEX TUBIFEX	0	1	0	3	0.11	0	0	0	0	0.00	0	1	0	3	0.01
TOTAL TUBIFICIDAE	3	400	24	1139	39.98	0	0	0	0	0.00	3	400	24	1139	4.00
LIMBRICULIDAE															
STYLODRILUS HERINGIANUS	0	11	0	29	1.02	0	0	0	0	0.00	0	11	0	29	0.10
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	151	455	128	1957	7.63	151	455	128	1957	6.87

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TABLE 32. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 7, 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
TOTAL OLIGOCHAETA	111	528	64	1876	65.85	771	2188	991	10533	41.09	882	2716	1055	12409	43.55
HIRUDINEA															
HELOBDELLA STAGNALIS	0	1	0	3	0.11	0	0	0	0	0.00	0	1	0	3	0.01
TOTAL HIRUDINEA	0	1	0	3	0.11	0	0	0	0	0.00	0	1	0	3	0.01
TARDIGRADA	1	21	0	59	2.07	253	911	122	3429	13.39	254	932	122	3488	12.25
OSTRACODA	16	23	1	107	3.76	320	860	196	3669	14.31	336	983	197	3776	13.25
ISOPODA															
ASELLUS SP.	0	4	0	11	0.39	0	0	0	0	0.00	0	4	0	11	0.04
AMPHIPODA															
PONTOPOREIA AFFINIS	1	0	0	3	0.11	0	0	0	0	0.00	1	0	0	3	0.01
GAMMARUS PSEUDOLIMNAEUS	0	18	0	48	1.68	0	0	0	0	0.00	0	18	0	48	0.17
GAMMARUS SP.	0	4	0	11	0.39	0	0	0	0	0.00	0	4	0	11	0.04
TOTAL AMPHIPODA	1	22	0	62	2.18	0	0	0	0	0.00	1	22	0	62	0.22
ACARINA															
HYDRACARINA	0	3	0	8	0.28	18	28	4	133	0.52	18	31	4	141	0.50
EPEMEROPTERA															
HEPTAGENIIDAE															
HEPTAGENIA SP.	0	2	0	5	0.18	0	0	0	0	0.00	0	2	0	5	0.02
STENONEMA SP.	0	4	0	11	0.39	0	0	0	0	0.00	0	4	0	11	0.04
TOTAL EPEMEROPTERA	0	6	0	16	0.56	0	0	0	0	0.00	0	6	0	16	0.05
TRICHOPTERA															
LEPTOCERIDAE															
ATHRIPSODES SP.	0	2	0	5	0.18	0	0	0	0	0.00	0	2	0	5	0.02
TOTAL TRICHOPTERA	0	2	0	5	0.18	0	0	0	0	0.00	0	2	0	5	0.02
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	1	2	0	9	0.28	0	0	0	0	0.00	1	2	0	9	0.03
CRYPTOCHIRONOMUS SP.	0	3	1	11	0.39	0	0	0	0	0.00	0	3	1	11	0.04
DICROTENDIPES SP.	0	1	1	5	0.18	0	0	0	0	0.00	0	1	1	5	0.02

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TABLE 32. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 7, 28 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
HETEROTRISOCCLADIUS SP.	2	1	0	8	0.28	0	0	0	0	0.00	2	1	0	8	0.03
MICROCICOTOPUS SP.	0	1	0	3	0.11	0	0	0	0	0.00	0	1	0	3	0.01
MICROTENDIPES SP.	2	44	0	123	4.32	0	0	0	0	0.00	2	44	0	123	0.43
MONODIAMESA SP.	11	39	9	157	5.51	0	0	0	0	0.00	11	39	9	157	0.55
ORTHOCCLADIUS SP.	0	2	0	5	0.18	0	0	0	0	0.00	0	2	0	5	0.02
PARACHIRONOMUS SP.	0	1	0	3	0.11	0	0	0	0	0.00	0	1	0	3	0.01
PARACLAODIPELMA SP.	12	11	11	91	3.19	0	0	0	0	0.00	12	11	11	91	0.32
PARAKIEFFERIELLA SP.	0	1	1	5	0.18	0	0	0	0	0.00	0	1	1	5	0.02
POLYPEDILUM (TRIPODURA GROUP) SP.	2	4	4	27	0.95	0	0	0	0	0.00	2	4	4	27	0.09
POTTHASTIA SP.	0	3	0	9	0.28	0	0	0	0	0.00	0	3	0	9	0.03
PROCLADIUS (PSILOTANYPUS) BELLUS	0	0	1	3	0.11	0	0	0	0	0.00	0	0	1	3	0.01
PSEUDOSMITTIA SP.	0	1	0	3	0.11	0	0	0	0	0.00	0	1	0	3	0.01
STICTOCHIRONOMUS SP.	0	3	2	13	0.46	0	0	0	0	0.00	0	3	2	13	0.05
TANYTARSUS SP.	0	3	0	9	0.28	0	0	0	0	0.00	0	3	0	9	0.03
THIEVEMANNIMYIA GROUP	1	10	1	32	1.12	0	0	0	0	0.00	1	10	1	32	0.11
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	0	496	154	1733	6.76	0	496	154	1733	6.08
TOTAL CHIRONOMIDAE	31	130	31	513	18.01	0	496	154	1733	6.76	31	626	185	2246	7.99
GASTROPODA															
PHYSA SP.	0	3	0	9	0.28	0	0	0	0	0.00	0	3	0	9	0.03
LYMNAEA CATASCOPIUM	0	1	0	3	0.11	0	0	0	0	0.00	0	1	0	3	0.01
TOTAL GASTROPODA	0	4	0	11	0.39	0	0	0	0	0.00	0	4	0	11	0.04
PELECYPODA															
SPHAERIIDAE	0	2	0	5	0.18	0	0	0	0	0.00	0	2	0	5	0.02
TOTAL PELECYPODA	0	2	0	5	0.18	0	0	0	0	0.00	0	2	0	5	0.02
TOTAL BENTHOS	182	780	105	2849	100.00	2658	5070	1886	25635	100.00	2840	5950	1991	28484	100.00

• PRESENT.

TABLE 33. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION B, 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
PORIFERA															
SPONGILLA FRAGILIS	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
NEMATODA	29	1134	428	4243	17.20	622	1928	1202	10005	36.16	651	3062	1630	14248	27.23
HYDROZOA															
HYDRA SP.	1	0	0	3	0.01	6	12	6	64	0.23	7	12	6	67	0.13
PLATYHELMINTHES															
TRICLADIDA	0	14	27	109	0.44	32	50	36	315	1.14	32	64	53	424	0.91
ERYDZOA															
PALUDICELLA ARTICULATA	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
FREDERICELLA SP.	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
OLIGOCHAETA															
NAIDIDAE															
PARANAIIS FRICI	1	3	7	29	0.12	0	0	0	0	0.00	1	3	7	29	0.05
PARANAIIS LITORALIS	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.01
PIGUETIELLA MICHIGANENSIS	1	1	1	3	0.03	0	0	0	0	0.00	1	1	1	3	0.02
STYLARIA LACUSTRIS	0	7	4	29	0.12	0	0	0	0	0.00	0	7	4	29	0.05
UNCINAIIS UNCINATA	0	2	5	19	0.08	0	0	0	0	0.00	0	2	5	19	0.04
VEJDOVSKYELLA INTERMEDIA	155	953	430	4101	16.63	376	1168	440	5291	19.13	531	2121	970	9392	17.95
TOTAL NAIDIDAE	157	966	448	4189	16.98	376	1168	440	5291	19.13	533	2134	998	9480	18.12
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	31	288	562	2349	9.52	0	0	0	0	0.00	31	288	562	2349	4.49
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	258	1248	896	6379	25.86	0	0	0	0	0.00	258	1248	896	6379	12.19
LIMNODRILUS HOFFMEISTERI	1	3	1	13	0.05	0	0	0	0	0.00	1	3	1	13	0.02
LIMNODRILUS SPIRALIS	0	2	0	5	0.02	0	0	0	0	0.00	0	2	0	5	0.01
LIMNODRILUS UDEKEMIANUS	0	1	2	8	0.03	0	0	0	0	0.00	0	1	2	8	0.02
POTAMOTHRIX MOLDAVIENSIS	0	9	8	45	0.18	0	0	0	0	0.00	0	9	8	45	0.09
POTAMOTHRIX VEJDOVSKYI	2	12	8	59	0.24	0	0	0	0	0.00	2	12	8	59	0.11
TUBIFEX TUBIFEX	0	6	2	21	0.09	0	0	0	0	0.00	0	6	2	21	0.04
TOTAL TUBIFICIDAE	292	1569	1469	8879	36.00	0	0	0	0	0.00	292	1569	1469	8879	16.97
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	1	1	24	69	0.28	0	0	0	0	0.00	1	1	24	69	0.13
BRANCHIODELLIDAE															
BRANCHIODELLIDAE	0	1	0	3	0.01	0	0	0	0	0.00	0	1	0	3	0.01

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TABLE 33. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 8, 23 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	170	508	510	3168	11.45	170	508	510	3168	6.05
TOTAL OLIGOCHAETA	450	2537	1941	13140	53.28	546	1676	950	8459	30.58	996	4213	2391	21599	41.29
HIRUDINEA															
GLOSSIPHONIA COMPLANATA	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.01
TOTAL HIRUDINEA	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.01
TARDIGRADA	2	320	95	1085	4.40	278	438	272	2635	9.52	280	758	357	3720	7.11
OSTRACODA	33	974	899	5056	20.50	492	894	439	4864	17.58	525	1868	1327	9920	18.96
ISOPODA															
APELLUS SP.	0	5	1	16	0.06	0	0	0	0	0.00	0	5	1	16	0.03
AMPHIPODA															
GAMMARUS PSEUDOLIMNAEUS	0	3	1	11	0.04	0	0	0	0	0.00	0	3	1	11	0.02
TOTAL AMPHIPODA	0	3	1	11	0.04	0	0	0	0	0.00	0	3	1	11	0.02
ACARINA															
HYDRACARINA	1	13	7	56	0.23	18	12	6	96	0.35	19	25	13	152	0.29
EPTHEMEROPTERA															
HEPTAGENIIDAE															
HEPTIGENIIDAE	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.01
TOTAL EPTHEMEROPTERA	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.01
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	1	15	1	45	0.18	0	0	0	0	0.00	1	15	1	45	0.09
CRYPTOCHIRONOMUS SP.	0	3	6	24	0.10	0	0	0	0	0.00	0	3	6	24	0.05
NEAR DEMICRYPTOCHIRONOMUS	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.01
MICROTENDIPES SP.	0	3	1	11	0.04	0	0	0	0	0.00	0	3	1	11	0.02
HETEROTRISSECLADIUS SP.	0	14	15	77	0.31	0	0	0	0	0.00	0	14	15	77	0.15
MICROPSECTRA SP.	0	1	1	5	0.02	0	0	0	0	0.00	0	1	1	5	0.01
MICROTENDIPES SP.	0	4	5	24	0.10	0	0	0	0	0.00	0	4	5	24	0.05
MONODIAMESA SP.	0	28	31	157	0.64	0	0	0	0	0.00	0	28	31	157	0.33

TABLE 33. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 8 , 29 SEPTEMBER 1973.

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TABLE 34. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 11, 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	1	14	0	40	4.31	267	162	278	1885	80.38	268	176	278	1925	58.81
HYDRADZOA HYDRA SP.	0	1	0	3	0.32	0	0	1	3	0.13	0	1	1	5	0.15
PLATYHELMINTHES															
TRICLADIDA	1	4	0	13	1.40	1	0	0	3	0.13	2	4	0	16	0.49
OLIGOCHAETA															
NAIDIDAE															
VEJDOVSKYELLA INTERMEDIA	57	48	1	283	30.46	12	5	8	67	2.86	69	53	9	349	10.65
TOTAL NAIDIDAE	57	48	1	283	30.46	12	5	8	67	2.86	69	53	9	349	10.65
TUBIFICIDAE															
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	0	3	7	27	2.91	0	0	0	0	0.00	0	3	7	27	0.82
TOTAL TUBIFICIDAE	0	3	7	27	2.91	0	0	0	0	0.00	0	3	7	27	0.82
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	0	1	0	3	0.32	0	0	0	0	0.00	0	1	0	3	0.09
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	1	0	3	11	0.47	1	0	3	11	0.34
TOTAL OLIGOCHAETA	57	52	8	313	33.69	13	5	11	78	3.33	70	57	19	390	11.92
TARDIGRADA	1	1	0	5	0.54	6	8	9	61	2.60	7	9	9	67	2.05
OSTRACODA	1	2	0	8	0.86	9	19	15	115	4.90	10	21	15	123	3.75
AMPHIPODA															
PONTOPOREIA AFFINIS	3	2	3	21	2.26	0	0	0	0	0.00	3	2	3	21	0.64
GAMMARUS PSEUDOLIMNAEUS	4	3	0	19	2.05	0	0	0	0	0.00	4	3	0	19	0.53
TOTAL AMPHIPODA	7	5	3	40	4.31	0	0	0	0	0.00	7	5	3	40	1.22
ACARINA															
HYDRACARINA	3	4	0	19	2.05	0	0	0	0	0.00	3	4	0	19	0.55

TABLE 34. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 11, 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
EPHEMEROPTERA															
HEPTAGENIIDAE															
HEPTIGENIIDAE	2	1	0	8	0.86	0	0	0	0	0.00	2	1	0	8	0.24
TOTAL EPHEMEROPTERA	2	1	0	8	0.86	0	0	0	0	0.00	2	1	0	8	0.24
TRICHOPTERA															
HYDROPSYCHIDAE															
HYDROPSYCHE SP.	1	0	0	3	0.32	0	0	0	0	0.00	1	0	0	3	0.09
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	1	0	0	3	0.32	0	0	0	0	0.00	1	0	0	3	0.09
TOTAL TRICHOPTERA	2	0	0	6	0.65	0	0	0	0	0.00	2	0	0	6	0.18
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	7	9	9	67	7.21	0	0	0	0	0.00	7	9	9	67	2.06
NEAR DEMICRYPTOCHIRONOMUS	41	33	34	289	31.00	0	0	0	0	0.00	41	33	34	289	8.90
MONODIAMESA SP.	1	0	2	9	0.86	0	0	0	0	0.00	1	0	2	8	0.24
PARACLAODPELMA SP.	18	9	0	72	7.75	0	0	0	0	0.00	18	9	0	72	2.20
POLYPEDILUM (TRIPODURA GROUP) SP.	1	4	0	13	1.40	0	0	0	0	0.00	1	4	0	13	0.40
POLYPEDILUM (FALLAX GROUP) SP.	1	0	0	3	0.32	0	0	0	0	0.00	1	0	0	3	0.09
THIENEHANNIMYIA GROUP	0	2	0	5	0.54	0	0	0	0	0.00	0	2	0	5	0.15
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	15	24	36	200	8.53	15	24	36	200	6.11
TOTAL CHIRONOMIDAE	69	57	45	456	49.09	15	24	36	200	8.53	84	81	72	656	20.00
GASTROPODA															
PHYSA SP.	0	2	0	5	0.54	0	0	0	0	0.00	0	2	0	5	0.15
LYMNAEA HUMILIS	0	5	0	13	1.40	0	0	0	0	0.00	0	5	0	13	0.40
TOTAL GASTROPODA	0	7	0	18	1.94	0	0	0	0	0.00	0	7	0	18	0.55
TOTAL BENTHOS	144	148	56	929	100.00	311	218	350	2345	100.00	455	366	426	3273	100.00

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TABLE 35. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 28 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
PORIFERA															
SPONGILLA FRAGILIS	1*	1*	0	1*	0.00	0	0	0	0	0.00	1*	1*	0	1*	0.00
NEMATODA	4	23	40	179	2.42	28	66	160	677	4.30	32	89	200	856	3.70
HYDROZOA															
HYDRA SP.	1	1	1	9	0.11	0	0	0	0	0.00	1	1	1	8	0.03
PLATYHELMINTHES															
TRICLADIDA	1	0	22	61	0.82	2	0	0	5	0.03	3	0	22	67	0.27
BRYOZOA															
FREDERICELLA SP.	1*	0	0	1*	0.00	0	0	0	0	0.00	1*	0	0	1*	0.00
OLIGOCHAETA															
ENCHYTRAEIDAE	1	0	3	11	0.15	0	0	0	0	0.00	1	0	3	11	0.05
NAIDIDAE															
CHAETOGASTER DIAPHANUS	0	0	1	3	0.04	0	0	0	0	0.00	0	0	1	3	0.01
NAIS BENHIGI	12	4	10	69	0.93	0	0	0	0	0.00	12	4	10	69	0.30
NAIS SP.	29	21	24	197	2.66	0	0	0	0	0.00	29	21	24	197	0.85
PARANAIS FRICI	0	6	1	19	0.26	0	0	0	0	0.00	0	6	1	19	0.03
PIGUETIELLA MICHIGANENSIS	5	28	5	101	1.36	0	0	0	0	0.00	5	28	5	101	0.44
STYLARIA LACUSTRIS	4	9	60	195	2.63	0	0	0	0	0.00	4	9	60	195	0.84
UNCINAIIS UNCINATA	3	7	0	27	0.36	0	0	0	0	0.00	3	7	0	27	0.12
VEJDovskyella INTERMEDIA	153	637	348	3035	41.01	680	1078	830	6901	43.82	833	1715	1178	9936	42.92
TOTAL NAIDIDAE	206	712	449	3646	49.26	680	1078	830	6901	43.82	886	1790	1279	10547	45.55
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	2	41	83	336	4.54	0	0	0	0	0.00	2	41	93	336	1.45
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	15	89	10	304	4.11	0	0	0	0	0.00	15	89	10	304	1.31
POTAMOTHRIX MOLDAVIEVSIS	2	10	14	69	0.93	0	0	0	0	0.00	2	10	14	69	0.30
POTAMOTHRIX VEJDovskyi	0	11	5	43	0.58	0	0	0	0	0.00	0	11	5	43	0.17
TOTAL TUBIFICIDAE	19	151	112	752	10.16	0	0	0	0	0.00	19	151	112	752	3.25
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	4	24	62	240	3.24	0	0	0	0	0.00	4	24	62	240	1.04
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	54	142	264	1227	7.79	54	142	264	1227	5.30

TABLE 35. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
TOTAL OLIGOCHAETA	230	897	626	4649	62.82	734	1220	1094	8128	51.61	964	2107	1720	12777	55.19
HIRUDINEA															
HELOBDELLA STAGNALIS	0	3	0	8	0.11	0	0	0	0	0.00	0	3	0	8	0.03
TOTAL HIRUDINEA	0	3	0	8	0.11	0	0	0	0	0.00	0	3	0	8	0.03
TARDIGRADA	0	17	14	83	1.12	112	232	462	2149	13.65	112	249	476	2232	9.64
OSTRACODA	7	192	155	944	12.76	250	242	302	2117	13.44	257	434	457	3061	13.22
ISOPODA															
LIRCEUS SP.	0	0	1	3	0.04	0	0	0	0	0.00	0	0	1	3	0.01
AMPHIPODA															
HYALELLA AZTECA	0	1	1	5	0.07	0	0	0	0	0.00	0	1	1	5	0.02
GAMMARUS PSEUDOLIMNAEUS	1	3	31	93	1.26	0	0	0	0	0.00	1	3	31	93	0.40
GAMMARUS SP.	0	6	0	16	0.22	0	0	0	0	0.00	0	6	0	16	0.07
TOTAL AMPHIPODA	1	10	32	114	1.54	0	0	0	0	0.00	1	10	32	114	0.49
ACARINA															
HYDRACARINA	3	0	5	21	0.28	8	4	20	85	0.54	11	4	25	107	0.45
EPEHEMEROPTERA															
HEPTAGENIIDAE															
HEPTAGENIA SP.	0	0	5	13	0.18	0	0	0	0	0.00	0	0	5	13	0.05
HEPTIGENIIDAE	0	1	0	3	0.04	0	0	0	0	0.00	0	1	0	3	0.01
STENOHEMA SP.	0	1	0	3	0.04	0	0	0	0	0.00	0	1	0	3	0.01
TOTAL EPEHEMEROPTERA	0	2	5	19	0.26	0	0	0	0	0.00	0	2	5	19	0.08
TRICHOPTERA															
HYDROPSYCHIDAE															
HYDROPSYCHE SP.	0	0	10	27	0.36	0	0	0	0	0.00	0	0	10	27	0.12
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	0	0	1	3	0.04	0	0	0	0	0.00	0	0	1	3	0.01
TOTAL TRICHOPTERA	0	0	11	30	0.41	0	0	0	0	0.00	0	0	11	30	0.13
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	1	0	0	3	0.04	0	0	0	0	0.00	1	0	0	3	0.01

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TABLE 35. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
CLADOTANYTARSUS SP.	0	1	0	3	0.04	0	0	0	0	0.00	0	1	0	3	0.01
CRYPTOCHIRONOMUS SP.	1	7	6	37	0.50	0	0	0	0	0.00	1	7	6	37	0.15
DICROTENDIPES SP.	1	4	7	32	0.43	0	0	0	0	0.00	1	4	7	32	0.14
HETEROTRISSOCLADIUS SP.	1	11	12	64	0.86	0	0	0	0	0.00	1	11	12	64	0.23
MICROTENDIPES SP.	12	41	74	339	4.58	0	0	0	0	0.00	12	41	74	339	1.45
MUNODIAMESA SP.	0	2	2	11	0.15	0	0	0	0	0.00	0	2	2	11	0.05
ORTHOCCLADIUS SP.	4	1	1	16	0.22	0	0	0	0	0.00	4	1	1	16	0.07
PARACHIRONOMUS SP.	1	3	3	19	0.26	0	0	0	0	0.00	1	3	3	19	0.03
PARACLAODELMA SP.	0	3	3	16	0.22	0	0	0	0	0.00	0	3	3	16	0.07
PARAKIEFFERIELLA SP.	8	30	64	272	3.68	0	0	0	0	0.00	8	30	64	272	1.17
POLYPEDILUM (TRIPODURA GROUP) SP.	0	9	13	59	0.80	0	0	0	0	0.00	0	9	13	59	0.25
POLYPEDILUM (FALLAX GROUP) SP.	0	17	9	69	0.93	0	0	0	0	0.00	0	17	9	69	0.20
POTTHASTIA SP.	0	0	1	3	0.04	0	0	0	0	0.00	0	0	1	3	0.01
PROCLADIUS (PSILODANYPUS) BELLUS	0	1	0	3	0.04	0	0	0	0	0.00	0	1	0	3	0.01
PSEUDOSMITTIA SP.	1	0	4	13	0.18	0	0	0	0	0.00	1	0	4	13	0.05
STICTOCHIRONOMUS SP.	2	33	14	131	1.77	0	0	0	0	0.00	2	33	14	131	0.57
TANYTARSUS SP.	0	6	8	37	0.50	0	0	0	0	0.00	0	6	8	37	0.15
THIENEMANNIELLA SP.	1	1	4	16	0.22	0	0	0	0	0.00	1	1	4	16	0.07
THIENEMANNIMYIA GROUP	5	8	29	112	1.51	0	0	0	0	0.00	5	8	29	112	0.43
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	138	284	548	2587	16.43	138	284	548	2587	11.17
TOTAL CHIRONOMIDAE	38	178	254	1255	16.96	138	284	548	2587	16.43	176	462	302	3842	16.60
GASTROPODA															
VALVATA SINCERA NYLANDERI	0	1	1	5	0.07	0	0	0	0	0.00	0	1	1	5	0.02
GONIOBASIS LIVESCENS	0	1	0	3	0.04	0	0	0	0	0.00	0	1	0	3	0.01
PHYSA SP.	0	0	3	9	0.11	0	0	0	0	0.00	0	0	3	9	0.03
LYMNAEA HUMILIS	1	0	0	3	0.04	0	0	0	0	0.00	1	0	0	3	0.01
TOTAL GASTROPODA	1	2	4	19	0.26	0	0	0	0	0.00	1	2	4	19	0.03
PELECYPODA															
SPHAERIIDAE	1	2	0	8	0.11	0	0	0	0	0.00	1	2	0	8	0.03
TOTAL PELECYPODA	1	2	0	8	0.11	0	0	0	0	0.00	1	2	0	8	0.03
TOTAL BENTHOS	287	1317	1170	7401	100.00	1272	2048	2586	15748	100.00	1559	3365	3756	23151	100.00

* PRESENT

TABLE 36. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13, 23 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
PORIFERA															
SPONGILLA FRAGILIS	0	1*	1*	1*	0.00	0	0	0	0	0.00	0	1*	1*	1*	0.00
ACANTHOCEPHALA	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.00
NEMATODA	69	62	148	744	3.49	1196	432	534	5765	12.66	1265	494	582	6509	9.73
HYDROZOA															
HYDRA SP.	3	8	0	29	0.14	44	4	4	139	0.31	47	12	4	168	0.25
PLATYHELMINTHES															
TRICLADIDA	17	26	99	379	1.78	288	40	18	923	2.03	305	66	117	1301	1.95
RYDZJA															
PALUDICELLA ARTICULATA	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
FRERICELLA SP.	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
OLIGOCHAETA															
ENCHYTRAEIDAE	1	1	5	19	0.09	0	0	0	0	0.00	1	1	5	19	0.03
NAIDIDAE															
CHAETOGASTER DIAPHANUS	0	3	0	8	0.04	0	0	0	0	0.00	0	3	0	8	0.01
NAIS BENIGI	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.00
NAIS SP.	1	2	0	9	0.04	0	0	0	0	0.00	1	2	0	8	0.01
PARANAIIS FRICI	1	2	0	8	0.04	0	0	0	0	0.00	1	2	0	8	0.01
PIGUEIELLA MICHIGANENSIS	36	7	6	131	0.61	0	0	0	0	0.00	36	7	6	131	0.23
STYLARIA LACUSTRIS	3	44	13	160	0.75	0	0	0	0	0.00	3	44	13	160	0.24
UNCINAIIS UNCINATA	2	2	0	11	0.05	0	0	0	0	0.00	2	2	0	11	0.02
VEJDOVSKYELLA INTERMEDIA	584	1104	1306	7984	37.40	1804	1484	2656	15851	34.82	2388	2588	3962	23835	35.65
TOTAL NAIDIDAE	627	1164	1326	8313	38.94	1804	1484	2656	15851	34.82	2431	2548	3992	24164	36.14
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	20	31	13	171	0.80	0	0	0	0	0.00	20	31	13	171	0.25
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	92	175	216	1288	6.03	0	0	0	0	0.00	92	175	216	1288	1.93
LIMNODRILUS HOFFMEISTERI	2	4	0	16	0.07	0	0	0	0	0.00	2	4	0	16	0.02
POTAMOTHRIX MOLDAVIENSIS	2	4	8	37	0.17	0	0	0	0	0.00	2	4	8	37	0.05
POTAMOTHRIX VEJDOVSKYI	1	7	5	35	0.16	0	0	0	0	0.00	1	7	5	35	0.05
TOTAL TUBIFICIDAE	117	221	242	1547	7.25	0	0	0	0	0.00	117	221	242	1547	2.31

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TABLE 36. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13, 28 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	6	7	19	85	0.40	0	0	0	0	0.00	6	7	19	85	0.13
BRANCHIOBELLIIDAE															
BRANCHIOBELLIIDAE	1	0	1	5	0.02	0	0	0	0	0.00	1	0	1	5	0.01
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	304	28	20	939	2.06	304	28	20	939	1.40
TOTAL OLIGOCHAETA	752	1393	1593	9969	46.70	2108	1512	2676	16790	36.88	2860	2905	4269	26759	40.02
HIRUDINEA															
HELOBDELLA STAGNALIS	0	1	0	3	0.01	0	0	0	0	0.00	0	1	0	3	0.00
TOTAL HIRUDINEA	0	1	0	3	0.01	0	0	0	0	0.00	0	1	0	3	0.00
TARDIGRADA	96	126	0	592	2.77	1168	708	2758	12357	27.15	1264	834	2758	12949	19.37
OSTRACODA	378	284	1961	6995	32.77	540	492	1514	6789	14.91	918	776	3475	13784	20.62
MYSIDACEA															
MYSIDACEA	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.00
ISOPODA															
ASELLUS SP.	3	5	7	40	0.19	0	0	0	0	0.00	3	5	7	40	0.05
LIRCEUS SP.	1	1	2	11	0.05	0	0	0	0	0.00	1	1	2	11	0.02
AMPHIPODA															
PONTOPOREIA AFFINIS	0	1	2	8	0.04	0	0	0	0	0.00	0	1	2	8	0.01
GAMMARUS PSEUDOLIMNAEUS	0	13	3	43	0.20	0	0	0	0	0.00	0	13	3	43	0.05
GAMMARUS SP.	1	10	8	51	0.24	0	0	0	0	0.00	1	10	8	51	0.03
TOTAL AMPHIPODA	1	24	13	102	0.48	0	0	0	0	0.00	1	24	13	102	0.15
ACARINA															
HYDRACARINA	11	7	25	115	0.54	32	28	46	283	0.62	43	35	71	397	0.59
EPHEMEROPTERA															
HEPTAGENIIDAE															
HEPTAGENIIDAE	0	0	6	16	0.07	0	0	0	0	0.00	0	0	6	16	0.02

TABLE 36. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13, 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
STENDONEA SP.	0	1	0	3	0.01	0	0	0	0	0.00	0	1	0	3	0.03
TOTAL EPHEMEROPTERA	0	1	6	19	0.09	0	0	0	0	0.00	0	1	6	19	0.03
TRICHOPTERA															
PHRYGANIIDAE															
PHRYGANIIDAE	0	1	0	3	0.01	0	0	0	0	0.00	0	1	0	3	0.03
DIPTERA															
LEPTOCERIDAE															
ATHRIPSODES SP.	1	1	0	5	0.02	0	0	0	0	0.00	1	1	0	5	0.01
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	1	5	1	19	0.09	0	0	0	0	0.00	1	5	1	19	0.03
TOTAL TRICHOPTERA	2	7	1	27	0.13	0	0	0	0	0.00	2	7	1	27	0.04
CHIRONOMIDAE															
CHIRONOMUS SP.	3	7	1	29	0.14	0	0	0	0	0.00	3	7	1	29	0.04
CRYPTOCHIRONOMUS SP.	7	4	8	51	0.24	0	0	0	0	0.00	7	4	8	51	0.23
CRYPTOCLADOPHYLA SP.	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.03
MICROTENDIPES SP.	0	0	8	21	0.10	0	0	0	0	0.00	0	0	8	21	0.03
HETEROTRISODIADUS SP.	26	8	53	232	1.09	0	0	0	0	0.00	26	8	53	232	0.35
MICROCRICOTOPUS SP.	0	0	2	5	0.02	0	0	0	0	0.00	0	0	2	5	0.01
MICROTENDIPES SP.	16	30	59	280	1.31	0	0	0	0	0.00	16	30	59	280	0.42
MONODIAMESA SP.	13	8	24	120	0.56	0	0	0	0	0.00	13	8	24	120	0.13
ORTHOCCLADUS SP.	2	0	25	72	0.34	0	0	0	0	0.00	2	0	25	72	0.11
PAPACHIRONOMUS SP.	1	0	1	5	0.02	0	0	0	0	0.00	1	0	1	5	0.01
PARACCLADOPHYLA SP.	7	5	12	64	0.30	0	0	0	0	0.00	7	5	12	64	0.10
PAPAKIEFFERIELLA SP.	29	2	227	688	3.22	0	0	0	0	0.00	29	2	227	688	1.03
PHAEOPSECTRA (TRIBELOS)	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.03
POLYPEDILUM (TRIPODURA GROUP) SP.	14	5	29	128	0.60	0	0	0	0	0.00	14	5	29	128	0.19
POLYPEDILUM (FALLAX GROUP) SP.	10	3	51	171	0.80	0	0	0	0	0.00	10	3	51	171	0.25
POTTHASTIA SP.	1	0	2	8	0.04	0	0	0	0	0.00	1	0	2	8	0.01
PROCLADUS (PSILODANYPUS) BELLUS	8	9	4	56	0.26	0	0	0	0	0.00	8	9	4	56	0.03
PROCLADUS SP.	2	1	1	11	0.05	0	0	0	0	0.00	2	1	1	11	0.02
PSEUDOSMITTIA SP.	0	0	3	8	0.04	0	0	0	0	0.00	0	0	3	8	0.01
STICTOCHIRONOMUS SP.	9	0	7	43	0.20	0	0	0	0	0.00	9	0	7	43	0.05
TANYTARSUS SP.	1	0	28	77	0.36	0	0	0	0	0.00	1	0	28	77	0.12
THIENEMANNIELLA SP.	1	2	13	43	0.20	0	0	0	0	0.00	1	2	13	43	0.05
THIENEMANNIYIA GROUP	9	6	41	149	0.70	0	0	0	0	0.00	9	6	41	149	0.22
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	164	192	572	2475	5.44	164	192	572	2475	3.70
TOTAL CHIRONOMIDAE	159	90	601	2267	10.62	164	192	572	2475	5.44	323	282	1173	4742	7.03

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TABLE 36. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13, 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
GASTROPODA															
VALVATA TRICARINATA TRICARINATA	0	1	0	3	0.01	0	0	0	0	0.00	0	1	0	3	0.01
GONIOBASIS LIVESCENS	1	0	0	3	0.01	0	0	0	0	0.00	1	0	0	3	0.01
PHYSA SP.	0	3	1	11	0.05	0	0	0	0	0.00	0	3	1	11	0.02
LYMNAEA CATASCOPIUM	1	0	0	3	0.01	0	0	0	0	0.00	1	0	0	3	0.01
LYMNAEA HUMILIS	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.01
GYRAULUS PARVUS	1	0	0	3	0.01	0	0	0	0	0.00	1	0	0	3	0.01
TOTAL GASTROPODA	3	4	2	25	0.12	0	0	0	0	0.00	3	4	2	26	0.04
PELECYPODA															
SPHAERIIDAE	1	2	3	16	0.07	0	0	0	0	0.00	1	2	3	16	0.02
AMNICOLIDAE	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.01
TOTAL PELECYPODA	1	2	4	19	0.09	0	0	0	0	0.00	1	2	4	19	0.03
TOTAL BENTHOS	1496	2041	4464	21343	100.00	5540	3408	8122	45521	100.00	7036	5449	12596	66862	100.00

* PRESENT

TABLE 37. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16, 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/42	%	NO PER 1/8 M2 REPLICATES			MEAN/42	%	NO PER 1/8 M2 REPLICATES			MEAN/42	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	8	6	1	40	1.20	394	384	36	2171	5.32	402	390	37	2211	5.01
HYDROZOA															
HYDRA SP.	0	0	0	0	0.00	2	16	0	48	0.12	2	16	0	48	0.11
PLATYHELMINTHES															
TRICLADIDA	7	22	1	80	2.41	10	36	0	123	0.30	17	58	1	203	0.45
BRYODZA															
PALUDICELLA ARTICULATA	0	1*	0	1*	0.00	0	0	0	0	0.00	0	1*	0	1*	0.00
FREDERICELLA SP.	1*	1*	0	1*	0.00	0	0	0	0	0.00	1*	1*	0	1*	0.00
OLIGOCHAETA															
NAIDIDAE															
CHAETOGASTER DIAPHANUS	1	0	0	3	0.09	0	0	0	0	0.00	1	0	0	3	0.01
NAIS BENHIGI	1	1	0	5	0.15	0	0	0	0	0.00	1	1	0	5	0.01
NAIS SP.	13	2	19	91	2.74	0	0	0	0	0.00	13	2	19	91	0.21
PARANAIS FRICI	35	6	1	112	3.37	0	0	0	0	0.00	35	6	1	112	0.25
PIGUETIELLA MICHIGANENSIS	30	51	2	221	6.65	0	0	0	0	0.00	30	51	2	221	0.50
STYLARIA LACUSTRIS	16	4	1	56	1.69	0	0	0	0	0.00	16	4	1	56	0.13
UNCINAIIS UNCINATA	10	17	2	77	2.32	0	0	0	0	0.00	10	17	2	77	0.17
VEJDovskyella INTERMEDIA	361	219	99	1781	53.61	1526	6336	592	22544	55.23	1887	6555	580	24325	55.11
TOTAL NAIDIDAE	467	300	113	2345	70.62	1526	6336	592	22544	55.23	1993	6536	705	24890	56.39
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	6	3	7	43	1.29	0	0	0	0	0.00	6	3	7	43	0.10
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	31	70	0	269	8.10	0	0	0	0	0.00	31	70	0	269	0.61
POTAMOTHRIX MOLDAVIENSIS	3	0	0	9	0.24	0	0	0	0	0.00	3	0	0	8	0.02
POTAMOTHRIX VEJDovskyi	3	3	0	15	0.48	0	0	0	0	0.00	3	3	0	16	0.04
TOTAL TUBIFICIDAE	43	76	7	336	10.11	0	0	0	0	0.00	43	76	7	336	0.75
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	2	13	0	40	1.20	0	0	0	0	0.00	2	13	0	40	0.09
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	82	84	19	491	1.20	82	84	18	491	1.11
TOTAL OLIGOCHAETA	512	389	120	2722	81.94	1608	6420	610	23035	56.44	2120	6909	730	25757	58.35

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TABLE 37. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16, 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
HIRUDINEA															
HELOBDELLA STAGNALIS	0	1	0	3	0.09	0	0	0	0	0.00	0	1	0	3	0.01
TOTAL HIRUDINEA	0	1	0	3	0.09	0	0	0	0	0.00	0	1	0	3	0.01
TARDIGRADA	2	2	1	13	0.39	976	1124	230	6213	15.22	978	1126	231	6227	14.11
OSTRACODA	6	4	0	27	0.81	232	1244	222	4529	11.09	238	1248	222	4555	10.32
AMPHIPODA															
GAMMARUS PSEUDOLIMNAEJS	0	5	4	24	0.72	0	0	0	0	0.00	0	5	4	24	0.05
GAMMARUS SP.	2	2	0	11	0.33	0	0	0	0	0.00	2	2	0	11	0.02
TOTAL AMPHIPODA	2	7	4	35	1.05	0	0	0	0	0.00	2	7	4	35	0.09
ACARINA															
HYDRACARINA	1	1	3	13	0.39	14	24	24	165	0.40	15	25	27	179	0.41
EPHEMEROPTERA															
HEPTAGENIIDAE															
HEPTIGENIIDAE	1	2	0	8	0.24	0	0	0	0	0.00	1	2	0	8	0.02
TOTAL EPHEMEROPTERA	1	2	0	8	0.24	0	0	0	0	0.00	1	2	0	8	0.02
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	1	4	0	13	0.39	0	0	0	0	0.00	1	4	0	13	0.03
CRYPTOCHIRONOMUS SP.	0	3	2	13	0.39	0	0	0	0	0.00	0	3	2	13	0.03
MICROTENDIPES SP.	0	2	0	5	0.15	0	0	0	0	0.00	0	2	0	5	0.01
HETEROTRISSOCLADIUS SP.	3	5	1	24	0.72	0	0	0	0	0.00	3	5	1	24	0.05
MICROTENDIPES SP.	4	8	19	83	2.50	0	0	0	0	0.00	4	8	19	83	0.19
MONODIAMESA SP.	1	12	1	37	1.11	0	0	0	0	0.00	1	12	1	37	0.03
ORTHOCLADIUS SP.	0	0	2	5	0.15	0	0	0	0	0.00	0	0	2	5	0.01
PARACLAODPELMA SP.	0	4	0	11	0.33	0	0	0	0	0.00	0	4	0	11	0.02
PARAKIEFFERIELLA SP.	3	5	2	27	0.81	0	0	0	0	0.00	3	5	2	27	0.05
POLYPEDILUM (TRIPODURA GROUP) SP.	7	14	0	56	1.69	0	0	0	0	0.00	7	14	0	56	0.13
POLYPEDILUM (FALLAX GROUP) SP.	2	6	0	21	0.63	0	0	0	0	0.00	2	6	0	21	0.05
POTTHASTIA SP.	0	2	0	5	0.15	0	0	0	0	0.00	0	2	0	5	0.01
STICTOCHIRONOMUS SP.	2	5	0	19	0.57	0	0	0	0	0.00	2	5	0	19	0.04
TANYTARSUS SP.	0	2	0	5	0.15	0	0	0	0	0.00	0	2	0	5	0.01
THIENEMANNIELLA SP.	0	1	0	3	0.09	0	0	0	0	0.00	0	1	0	3	0.01
THIENEMANNIMYIA GROUP	8	4	4	43	1.29	0	0	0	0	0.00	8	4	4	43	0.10
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	342	1220	138	4533	11.11	342	1220	138	4533	10.27

TABLE 37. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16, 28 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
TOTAL CHIRONOMIDAE	21	77	31	370	11.14	342	1220	138	4533	11.11	373	1297	169	4903	11.11
GASTROPODA PHYSA SP.	0	3	0	8	0.24	0	0	0	0	0.00	0	3	0	8	0.02
TOTAL GASTROPODA	0	3	0	8	0.24	0	0	0	0	0.00	0	3	0	8	0.02
PELECYPODA SPHAERIIDAE	1	0	0	3	0.09	0	0	0	0	0.00	1	0	0	3	0.01
TOTAL PELECYPODA	1	0	0	3	0.09	0	0	0	0	0.00	1	0	0	3	0.01
TOTAL BENTHOS	571	514	161	3322	100.00	3578	10468	1260	40816	100.00	4149	10982	1421	44140	100.00

* PRESENT

TABLE 38. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 17, 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
PERIFERA															
SPONGILLA FRAGILIS	0	0	1*	1*	0.00	0	0	0	0	0.00	0	0	1*	1*	0.00
NEMATODA	45	288	1658	5309	10.77	918	2584	1670	13792	18.29	963	2872	3328	19101	15.32
HYDRIZOA															
HYDRA SP.	0	3	2	13	0.03	0	42	0	112	0.15	0	45	2	125	0.10
PLATYHELMINTHES															
TRICLADIDA	0	72	56	341	0.69	38	168	304	1360	1.80	38	240	360	1701	1.35
BRYOZOA															
PALUDICELLA ARTICULATA	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
CRISTATELLA MUCEDO	0	0	1*	1*	0.00	0	0	0	0	0.00	0	0	1*	1*	0.00
FREDERICELLA SP.	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
OLIGOCHAETA															
ENCHYTRAEIDAE	0	1	1	5	0.01	0	0	0	0	0.00	0	1	1	5	0.00
NAIDIDAE															
CHAETOGASTER DIAPHANUS	0	11	6	45	0.09	0	0	0	0	0.00	0	11	6	45	0.04
NAIS BENHIGI	0	1	2	8	0.02	0	0	0	0	0.00	0	1	2	8	0.01
NAIS SP.	0	2	1	8	0.02	0	0	0	0	0.00	0	2	1	8	0.01
PARANAIS FRICI	4	22	84	293	0.59	0	0	0	0	0.00	4	22	84	293	0.24
PIGUETIELLA MICHIGANENSIS	2	20	24	123	0.25	0	0	0	0	0.00	2	20	24	123	0.10
SLAVINA APPENDICULATA	0	0	2	5	0.01	0	0	0	0	0.00	0	0	2	5	0.00
STYLARIA LACUSTRIS	0	121	11	352	0.71	0	0	0	0	0.00	0	121	11	352	0.29
UNCINAIIS UNCINATA	4	39	32	200	0.41	0	0	0	0	0.00	4	39	32	200	0.16
VEJDovskyella INTERMEDIA	139	1813	3533	14627	29.68	392	3520	2572	17291	22.94	531	5333	6105	31917	25.60
TOTAL NAIDIDAE	149	2029	3695	15661	31.78	392	3520	2572	17291	22.94	541	5549	6267	32951	26.43
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	22	145	124	776	1.57	0	0	0	0	0.00	22	145	124	776	0.62
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	86	454	584	2997	6.08	0	0	0	0	0.00	86	454	584	2997	2.40
LIMNODRILUS TEMPLETONI	0	0	3	8	0.02	0	0	0	0	0.00	0	0	3	8	0.01
LIMNODRILUS HOFFMEISTERI	8	2	23	88	0.18	0	0	0	0	0.00	8	2	23	88	0.07
LIMNODRILUS HOFFMEISTERI VARIANT	1	0	2	8	0.02	0	0	0	0	0.00	1	0	2	8	0.01
LIMNODRILUS PROFUNDICOLA	1	0	2	8	0.02	0	0	0	0	0.00	1	0	2	8	0.01
LIMNODRILUS SPIRALIS	1	0	2	8	0.02	0	0	0	0	0.00	1	0	2	8	0.01
LIMNODRILUS UDEKEMIANUS	1	0	2	8	0.02	0	0	0	0	0.00	1	0	2	8	0.01

TABLE 38. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 17, 29 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
PELOSCOLEX SUPERIORENSIS	1	0	0	3	0.01	0	0	0	0	0.00	1	0	0	3	0.01
POTAMOTHRIX MOLDAVIENSIS	2	7	9	51	0.10	0	0	0	0	0.00	3	7	9	51	0.04
POTAMOTHRIX VEJDovskyi	2	42	16	160	0.32	0	0	0	0	0.00	2	42	16	160	0.13
TUBIFEX TUBIFEX	4	1	18	61	0.12	0	0	0	0	0.00	4	1	18	61	0.05
TOTAL TUBIFICIDAE	130	651	785	4175	8.47	0	0	0	0	0.00	130	651	785	4175	3.35
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	1	30	5	96	0.19	0	0	0	0	0.00	1	30	5	96	0.09
BRANCHIOBELLELLIDAE															
BRANCHIOBELLELLIDAE	0	5	0	13	0.03	0	0	0	0	0.00	0	5	0	13	0.01
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	64	370	604	2768	3.67	64	370	604	2768	2.22
TOTAL OLIGOCHAETA	280	2716	4486	19951	40.48	456	3890	3176	20059	26.61	736	6606	7562	40009	32.09
HIRUDINEA															
HELOBDELLA STAGNALIS	0	1	0	3	0.01	0	0	0	0	0.00	0	1	0	3	0.00
TOTAL HIRUDINEA	0	1	0	3	0.01	0	0	0	0	0.00	0	1	0	3	0.00
TARDIGRADA	4	1208	2003	8573	17.40	136	6264	2694	24251	32.17	140	7472	4697	32824	26.33
OSTRACODA	175	1334	2686	11187	22.70	572	1368	2138	10875	14.43	747	2702	4824	22061	17.70
MYSIDACEA															
MYSIDA RELICTA	0	1	0	3	0.01	0	0	0	0	0.00	0	1	0	3	0.00
ISOPODA															
ASELLUS SP.	0	24	0	64	0.13	0	0	0	0	0.00	0	24	0	64	0.05
LIRCEUS SP.	0	1	0	3	0.01	0	2	0	5	0.01	0	3	0	8	0.01
AMPHIPODA															
GAMMARUS PSEUDOLIMNAEUS	0	70	0	187	0.38	0	0	0	0	0.00	0	70	0	187	0.15
GAMMARUS SP.	0	7	5	32	0.06	0	0	0	0	0.00	0	7	5	32	0.01
TOTAL AMPHIPODA	0	77	5	219	0.44	0	0	0	0	0.00	0	77	5	219	0.15

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TABLE 38. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 17, 28 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
ACARINA															
HYDRACARINA	1	43	50	251	0.51	0	64	42	293	0.38	1	107	92	533	0.43
EPEHEMEROPTERA															
HEPTAGENIIDAE															
HEPTIGENIIDAE	0	1	0	3	0.01	0	0	0	0	0.00	0	1	0	3	0.03
STENONEMA SP.	0	8	0	21	0.04	0	0	0	0	0.00	0	8	0	21	0.02
TOTAL EPEHEMEROPTERA	0	9	0	24	0.05	0	0	0	0	0.00	0	9	0	24	0.02
TRICHOPTERA															
LEPTOCERIDAE															
LEPTOCERIDAE	0	11	0	29	0.06	0	0	0	0	0.00	0	11	0	29	0.02
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	1	1	0	5	0.01	0	0	0	0	0.00	1	1	0	5	0.03
TOTAL TRICHOPTERA	1	12	0	34	0.07	0	0	0	0	0.00	1	12	0	34	0.03
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	4	6	31	109	0.22	0	0	0	0	0.00	4	6	31	109	0.29
CRYPTOCHIRONOMUS SP.	0	17	9	69	0.14	0	0	0	0	0.00	0	17	9	69	0.05
NEAR DEMICRYPTOCHIRONOMUS	1	0	0	3	0.01	0	0	0	0	0.00	1	0	0	3	0.03
MICROTENDIPES SP.	0	5	3	21	0.04	0	0	0	0	0.00	0	5	3	21	0.02
HETEROTRISODCLADUS SP.	4	55	66	333	0.68	0	0	0	0	0.00	4	55	66	333	0.27
MICROPSECTRA SP.	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.03
MICROTENDIPES SP.	2	161	12	467	0.95	0	0	0	0	0.00	2	161	12	467	0.37
MONODIAMESA SP.	10	33	62	280	0.57	0	0	0	0	0.00	10	33	62	280	0.22
ORTHODCLADUS SP.	0	19	8	72	0.15	0	0	0	0	0.00	0	19	8	72	0.05
PARACHIRONOMUS SP.	0	8	5	35	0.07	0	0	0	0	0.00	0	8	5	35	0.03
PARACLAUSPELMA SP.	2	21	21	117	0.24	0	0	0	0	0.00	2	21	21	117	0.09
PARAKIEFFERIELLA SP.	1	121	47	451	0.92	0	0	0	0	0.00	1	121	47	451	0.35
POLYPEDILUM (TRIPODURA GROUP) SP.	11	33	77	323	0.66	0	0	0	0	0.00	11	33	77	323	0.25
POLYPEDILUM (FALLAX GROUP) SP.	0	36	47	221	0.45	0	0	0	0	0.00	0	36	47	221	0.19
POTTHASTIA SP.	0	4	2	16	0.03	0	0	0	0	0.00	0	4	2	16	0.01
PROCLADUS (S.S.) SP.	6	0	10	43	0.09	0	0	0	0	0.00	6	0	10	43	0.03
PROCLADUS (PSILOSTANYPUS) BELLUS	2	9	44	147	0.30	0	0	0	0	0.00	2	9	44	147	0.12
PSEUDOSMITTIA SP.	0	7	7	37	0.08	0	0	0	0	0.00	0	7	7	37	0.03
STICTOCHIRONOMUS SP.	0	8	0	21	0.04	0	0	0	0	0.00	0	8	0	21	0.02
TANYTARSUS SP.	4	9	15	75	0.15	0	0	0	0	0.00	4	9	15	75	0.05
THIENEMANNIELLA SP.	0	14	5	51	0.10	0	0	0	0	0.00	0	14	5	51	0.04
THIENEMANNIMYIA GROUP	1	81	23	280	0.57	0	0	0	0	0.00	1	81	23	280	0.22
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	122	1094	528	4651	6.17	122	1094	528	4651	3.73

TABLE 38. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 17, 28 SEPTEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
TOTAL CHIRONOMIDAE	48	647	495	3174	6.44	122	1094	528	4651	6.17	170	1741	1023	7825	6.29
GASTROPODA															
VALVATA SP.	0	7	0	19	0.04	0	0	0	0	0.00	0	7	0	19	0.02
VALVATA TRICARINATA	0	0	1	3	0.01	0	0	0	0	0.00	0	0	1	3	0.00
PHYSA SP.	0	13	1	37	0.08	0	0	0	0	0.00	0	13	1	37	0.03
LYMNAEA HUMILIS	1	3	0	11	0.02	0	0	0	0	0.00	1	3	0	11	0.01
TOTAL GASTROPODA	1	23	2	70	0.14	0	0	0	0	0.00	1	23	2	70	0.06
PELECYPODA															
SPHAERIIDAE	5	4	14	61	0.12	0	0	0	0	0.00	5	4	14	61	0.05
TOTAL PELECYPODA	5	4	14	61	0.12	0	0	0	0	0.00	5	4	14	61	0.05
TOTAL BENTHOS	560	6463	11457	49280	100.00	2242	15476	10552	75388	100.00	2802	21939	22009	124665	100.00

* PRESENT

TABLE 39. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3, 15 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
POLYPERA															
SPONGILLA FRAGILIS	1*	1*	0	1*	0.00	0	0	0	0	0.00	1*	1*	0	1*	0.00
NEMATODA	37	26	12	200	3.21	17	158	20	520	10.79	54	184	32	720	6.52
HYDROZOA															
HYDRA SP.	0	0	0	0	0.00	0	1	0	3	0.06	0	1	0	3	0.03
PLATYHELMINTHES															
RHABDOCELA	7	10	1	48	0.77	3	9	0	32	0.66	10	19	1	80	0.72
BRYOZOA															
PALUDICELLA ARTICULATA	1*	1*	0	1*	0.00	0	0	0	0	0.00	1*	1*	0	1*	0.00
FREDERICELLA SP.	1*	1*	0	1*	0.00	0	0	0	0	0.00	1*	1*	0	1*	0.00
OLIGOCHEATA															
ENCHYTRAEIDAE	9	4	8	55	0.90	0	0	0	0	0.00	9	4	8	55	0.51
NAIDIDAE															
CHAETOGASTER DIAPHANUS	0	2	0	5	0.08	0	0	0	0	0.00	0	2	0	5	0.05
PARANAIIS FRICI	0	0	5	13	0.21	0	0	0	0	0.00	0	0	5	13	0.12
VEJDOVSKYELLA INTERMEDIA	6	5	0	29	0.47	46	121	32	531	11.01	52	126	32	560	5.07
TOTAL NAIDIDAE	6	7	5	47	0.75	46	121	32	531	11.01	52	128	37	578	5.23
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	26	4	0	80	1.28	0	0	0	0	0.00	26	4	0	80	0.72
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	171	137	75	1021	16.40	0	0	0	0	0.00	171	137	75	1021	9.24
LIMNODRILUS ANGUSTIPENIS	6	2	0	21	0.34	0	0	0	0	0.00	6	2	0	21	0.19
LIMNODRILUS CLAPAREDIANUS	0	0	1	3	0.05	0	0	0	0	0.00	0	0	1	3	0.03
LIMNODRILUS HOFFMEISTERI	0	2	0	5	0.08	0	0	0	0	0.00	0	2	0	5	0.05
LIMNODRILUS HOFFMEISTERI VARIANT	1	0	2	8	0.13	0	0	0	0	0.00	1	0	2	8	0.07
LIMNODRILUS SPIRALIS	0	0	1	3	0.05	0	0	0	0	0.00	0	0	1	3	0.03
LIMNODRILUS UDEKEMIANUS	0	0	2	5	0.08	0	0	0	0	0.00	0	0	2	5	0.05
POTAMOTHRIX MOLDAVIENSIS	16	8	2	69	1.11	0	0	0	0	0.00	16	8	2	69	0.62
POTAMOTHRIX VEJDOVSKYI	5	6	1	32	0.51	0	0	0	0	0.00	5	6	1	32	0.29
TUBIFEX TUBIFEX	0	0	1	3	0.05	0	0	0	0	0.00	0	0	1	3	0.03
TOTAL TUBIFICIDAE	225	159	85	1250	20.08	0	0	0	0	0.00	225	159	85	1250	11.31
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	37	22	31	240	3.85	0	0	0	0	0.00	37	22	31	240	2.17

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TABLE 39. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3 . 16 NOVEMBER 1973.

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TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL							
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2							
	REPLICATES	A	B	C	MEAN/M2	%	REPLICATES	A	B	C	MEAN/M2	%	REPLICATES	A	B	C	MEAN/M2	%
BRANCHIOBOELLIDAE																		
BRANCHIOBOELLIDAE		4	1	0	13	0.21		0	0	0	0	0.00		4	1	0	13	0.12
UNIDENTIFIED OLIGOCHAETA		0	0	0	0	0.00		11	112	26	397	8.23		11	112	26	397	8.59
TOTAL OLIGOCHAETA		281	193	129	1606	25.80		57	233	58	928	19.24		338	425	187	2534	22.93
HIRUDINEA																		
GLOSSIPHONIA COMPLANATA		0	2	1	8	0.13		0	0	0	0	0.00		0	2	1	8	0.07
HELOBDELLA STAGNALIS		0	1	0	3	0.05		0	0	0	0	0.00		0	1	0	3	0.03
TOTAL HIRUDINEA		0	3	1	11	0.18		0	0	0	0	0.00		0	3	1	11	0.10
TARDIGRADA		4	2	0	16	0.26		172	37	126	893	18.51		176	39	126	909	8.23
OSTRACODA		5	34	13	139	2.23		104	111	112	872	18.08		109	145	125	1011	9.15
ISOPODA																		
ASPELUS SP.		8	5	3	43	0.69		0	0	0	0	0.00		8	5	3	43	0.39
LIRCEUS SP.		1	2	2	13	0.21		0	0	0	0	0.00		1	2	2	13	0.12
AMPHIPODA																		
HYALELLA AZTECA		2	1	0	9	0.13		0	0	0	0	0.00		2	1	0	9	0.07
PONTOPOREIA AFFINIS		1	1	1	8	0.13		0	0	0	0	0.00		1	1	1	8	0.07
GAMMARUS PSEUDOLIMNAEUS		19	24	28	189	3.04		0	0	0	0	0.00		19	24	28	189	1.71
TOTAL AMPHIPODA		22	26	29	205	3.29		0	0	0	0	0.00		22	26	29	205	1.86
ACARINA																		
HYDRACARINA		0	6	4	27	0.43		7	2	4	35	0.73		7	8	8	61	0.55
EPHEMEROPTERA																		
HEPTAGENIIDAE																		
HEPTIGENIIDAE		2	0	0	5	0.08		0	0	0	0	0.00		2	0	0	5	0.05
STENOEMA SP.		2	4	0	16	0.26		0	0	0	0	0.00		2	4	0	16	0.14
TOTAL EPHEMEROPTERA		4	4	0	21	0.34		0	0	0	0	0.00		4	4	0	21	0.19
TRICHOPTERA																		
LEPTOCERIDAE																		
ATHRIPODES SP.		1	1	0	5	0.08		0	0	0	0	0.00		1	1	0	5	0.05

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TABLE 39. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3, 16 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
LEPIDOSTOMATIDAE -															
LEPIDOSTOMA SP.	1	1	2	11	0.18	0	0	0	0	0.00	1	1	2	11	0.10
TOTAL TRICHOPTERA	2	2	2	16	0.26	0	0	0	0	0.00	2	2	2	16	0.14
DIPTERA															
CHIRONOMIDAE															
CLADOTANYTARSUS SP.	2	3	0	13	0.21	0	0	0	0	0.00	2	3	0	13	0.12
CRYPTOCHIRONOMUS SP.	9	25	10	117	1.88	0	0	0	0	0.00	9	25	10	117	1.06
NEAR DEMICRYPTOCHIRONOMUS B	1	0	0	3	0.05	0	0	0	0	0.00	1	0	0	3	0.03
MICROTENDIPES SP.	8	6	7	56	0.90	0	0	0	0	0.00	8	6	7	56	0.51
HETEROTRISODCLADUS SP.	38	37	18	248	3.98	0	0	0	0	0.00	38	37	18	248	2.24
MICROPSECTRA SP.	7	2	2	29	0.47	0	0	0	0	0.00	7	2	2	29	0.25
MICROTENDIPES SP.	187	141	180	1355	21.76	0	0	0	0	0.00	187	141	180	1355	12.25
MONODIAMESA SP.	5	3	4	32	0.51	0	0	0	0	0.00	5	3	4	32	0.29
ORTHOCCLADUS SP.	3	6	0	24	0.39	0	0	0	0	0.00	3	6	0	24	0.22
PARACHIRONOMUS SP.	1	0	0	3	0.05	0	0	0	0	0.00	1	0	0	3	0.03
PARACLODOPELMA SP.	4	19	2	67	1.08	0	0	0	0	0.00	4	19	2	67	0.61
PARAKIEFFERIELLA SP.	76	239	57	992	15.93	0	0	0	0	0.00	76	239	57	992	8.95
POLYPEDILUM (TRIPODURA GROUP) SP.	2	3	1	16	0.26	0	0	0	0	0.00	2	3	1	16	0.14
POLYPEDILUM (FALLAX GROUP) SP.	9	40	2	136	2.18	0	0	0	0	0.00	9	40	2	136	1.23
POTTHASTIA SP.	1	3	0	11	0.18	0	0	0	0	0.00	1	3	0	11	0.10
PROCLADUS (S.S.) SP.	2	0	0	5	0.08	0	0	0	0	0.00	2	0	0	5	0.05
PSEUDOSMITTIA SP.	19	26	9	144	2.31	0	0	0	0	0.00	19	26	9	144	1.30
STICTOCHIRONOMUS SP.	10	10	17	99	1.59	0	0	0	0	0.00	10	10	17	99	0.90
TANYTARSUS SP.	0	6	0	16	0.26	0	0	0	0	0.00	0	6	0	16	0.14
THIENEMANNIELLA SP.	3	0	0	9	0.13	0	0	0	0	0.00	3	0	0	9	0.07
THIENEMANNIMYIA GROUP	51	66	48	440	7.07	0	0	0	0	0.00	51	66	48	440	3.98
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	129	159	290	1541	31.94	129	159	290	1541	13.95
TOTAL CHIRONOMIDAE	438	635	357	3814	61.26	129	159	290	1541	31.94	567	794	547	5355	48.47
GASTROPODA															
AMNICOLA SP.	0	0	1	3	0.05	0	0	0	0	0.00	0	0	1	3	0.03
VALVATA SP.	0	2	0	5	0.08	0	0	0	0	0.00	0	2	0	5	0.05
PHYSA SP.	8	1	0	24	0.39	0	0	0	0	0.00	8	1	0	24	0.22
LYMNAEA AURICULARIA	0	5	0	13	0.21	0	0	0	0	0.00	0	5	0	13	0.12
LYMNAEA HUMILIS	3	0	1	11	0.18	0	0	0	0	0.00	3	0	1	11	0.10
TOTAL GASTROPODA	11	8	2	56	0.90	0	0	0	0	0.00	11	8	2	56	0.51
PELECYPODA															
SPHAERIIDAE	1	3	0	11	0.18	0	0	0	0	0.00	1	3	0	11	0.10
TOTAL PELECYPODA	1	3	0	11	0.18	0	0	0	0	0.00	1	3	0	11	0.10

TABLE 39. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 3 , 16 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
TOTAL BENTHOS	821	959	555	6226	100.00	489	710	610	4824	100.00	1310	1569	1165	11049	100.00

* PRESENT

TABLE 40. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 6, 16 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	3	144	5	405	6.23	14	744	494	3339	26.61	17	888	499	3744	19.65
PLATYHELMINTHES															
RHABDOCOELA	0	11	0	29	0.45	0	12	4	43	0.34	0	23	4	72	0.39
OLIGOCHAETA															
EVCHYTRAEIDAE	0	3	0	9	0.12	0	0	0	0	0.00	0	3	0	9	0.04
NAIDIDAE															
VAIS BEHNINGI	0	12	0	32	0.49	0	0	0	0	0.00	0	12	0	32	0.17
VAIS SP.	0	182	0	485	7.46	0	0	0	0	0.00	0	182	0	485	2.55
VAIS BRETSCHERI	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.02
PAPAVAIS FRICI	0	10	0	27	0.42	0	0	0	0	0.00	0	10	0	27	0.14
PIGUETIELLA MICHIGANENSIS	0	4	0	11	0.17	0	0	0	0	0.00	0	4	0	11	0.06
SLAVINA APPENDICULATA	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.02
STYLARIA LACUSTRIS	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.02
UNCIVAIS UNCIVATA	0	2	0	5	0.08	0	0	0	0	0.00	0	2	0	5	0.03
VEJDOVSKYELLA INTERMEDIA	6	219	4	611	9.40	16	1908	69	5315	42.35	22	2127	73	5925	31.10
TOTAL NAIDIDAE	6	432	4	1180	18.15	16	1908	69	5315	42.35	22	2340	73	6494	34.09
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	3	94	31	341	5.25	0	0	0	0	0.00	3	94	31	341	1.79
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	19	279	67	973	14.97	0	0	0	0	0.00	19	279	67	973	5.11
LIMNODRILUS CLAPAREDIANUS	0	0	1	3	0.05	0	0	0	0	0.00	0	0	1	3	0.02
LIMNODRILUS HOFFMEISTERI	5	31	14	133	2.05	0	0	0	0	0.00	5	31	14	133	0.70
LIMNODRILUS HOFFMEISTERI VARIANT	0	5	0	13	0.20	0	0	0	0	0.00	0	5	0	13	0.07
LIMNODRILUS SPIRALIS	2	5	12	51	0.78	0	0	0	0	0.00	2	5	12	51	0.27
LIMNODRILUS JOEKEMIANUS	0	2	0	5	0.08	0	0	0	0	0.00	0	2	0	5	0.03
POTAMOTHRIX MOLDAVIENSIS	0	39	0	104	1.60	0	0	0	0	0.00	0	39	0	104	0.55
POTAMOTHRIX VEJDOVSKYI	0	12	0	32	0.49	0	0	0	0	0.00	0	12	0	32	0.17
TUBIFEX TUBIFEX	0	10	2	32	0.49	0	0	0	0	0.00	0	10	2	32	0.17
TOTAL TUBIFICIDAE	29	477	127	1687	25.95	0	0	0	0	0.00	29	477	127	1687	8.86
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	0	35	1	96	1.48	0	0	0	0	0.00	0	35	1	96	0.50
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	10	428	13	1203	9.59	10	428	13	1203	6.31

TABLE 40. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 6, 15 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/42	%	A	B	C	MEAN/42	%	A	B	C	MEAN/42	%
TOTAL OLIGOCHAETA	35	947	132	2971	45.70	26	2336	82	6518	51.94	61	3283	214	9489	49.81
HIRUDINEA															
GLOSSIPHENIA COMPLANATA	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.02
TOTAL HIRUDINEA	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.02
TARDIGRADA	0	22	0	59	0.91	36	316	85	1165	9.28	36	338	85	1224	6.43
OSTRACODA	4	67	3	211	3.25	18	196	55	717	5.71	22	263	58	928	4.87
ISOPODA															
ASELLUS SP.	0	4	0	11	0.17	0	0	0	0	0.00	0	4	0	11	0.06
AMPHIPODA															
HYALELLA AZTECA	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.02
PONTOPOREIA AFFINIS	0	0	2	5	0.08	0	0	0	0	0.00	0	0	2	5	0.03
GAMMARUS PSEUDOLIMNAEUS	1	12	0	35	0.54	0	0	0	0	0.00	1	12	0	35	0.19
TOTAL AMPHIPODA	1	13	2	43	0.66	0	0	0	0	0.00	1	13	2	43	0.23
ACARINA															
HYDRACARINA	0	33	0	88	1.35	0	24	3	72	0.57	0	57	3	160	0.84
EPEMEROPTERA															
HEPTAGENIIDAE	1	30	0	83	1.28	0	0	0	0	0.00	1	30	0	83	0.44
HEPTIGENIIDAE	0	6	1	19	0.29	0	0	0	0	0.00	0	6	1	19	0.10
STENOEMA SP.															
TOTAL EPEMEROPTERA	1	36	1	102	1.57	0	0	0	0	0.00	1	36	1	102	0.54
TRICHOPTERA															
HYDROPSYCHIDAE															
HYDROPSYCHE SP.	0	6	0	16	0.25	0	0	0	0	0.00	0	6	0	16	0.03
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.02
TOTAL TRICHOPTERA	0	7	0	19	0.29	0	0	0	0	0.00	0	7	0	19	0.10
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	0	2	0	5	0.08	0	0	0	0	0.00	0	2	0	5	0.03

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TABLE 40. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 6, 16 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
CLADOTANYTARSUS SP.	0	4	0	11	0.17	0	0	0	0	0.00	0	4	0	11	0.05
CRYPTOCHIRONOMUS SP.	0	1	1	5	0.08	0	0	0	0	0.00	0	1	1	5	0.03
NEAR DENTOCRYPTOCHIRONOMUS B	1	0	0	3	0.05	0	0	0	0	0.00	1	0	0	3	0.02
DICROTENDIPES SP.	0	5	0	13	0.20	0	0	0	0	0.00	0	5	0	13	0.07
HETEROTRISODCLADIUS SP.	0	6	0	15	0.25	0	0	0	0	0.00	0	6	0	15	0.03
MICROTICROTAPUS SP.	0	15	0	40	0.62	0	0	0	0	0.00	0	15	0	40	0.21
MICROPSECTRA SP.	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.02
MICROTENDIPES SP.	0	41	0	109	1.68	0	0	0	0	0.00	0	41	0	109	0.57
MONODIAMESA SP.	4	99	5	289	4.43	0	0	0	0	0.00	4	99	5	289	1.51
ORTHOCLADIUS SP.	0	24	0	64	0.98	0	0	0	0	0.00	0	24	0	64	0.34
PARACLADEPPELMA SP.	50	66	42	448	6.89	0	0	0	0	0.00	50	66	42	448	2.35
PARAKIEFFERIELLA SP.	2	251	0	675	10.38	0	0	0	0	0.00	2	251	0	675	3.54
POLYPEDILUM (TRIPODURA GROUP) SP.	2	170	4	469	7.21	0	0	0	0	0.00	2	170	4	469	2.45
POLYPEDILUM (FALLAX GROUP) SP.	1	6	0	19	0.29	0	0	0	0	0.00	1	6	0	19	0.10
POTTHASTIA SP.	0	5	0	13	0.20	0	0	0	0	0.00	0	5	0	13	0.07
PROCLADIUS (S.S.) SP.	2	2	0	11	0.17	0	0	0	0	0.00	2	2	0	11	0.05
PROCLADIUS (PSILOSTANYPUS) SP.	0	5	1	16	0.25	0	0	0	0	0.00	0	5	1	16	0.03
PSEUDOSMITTIA SP.	0	10	0	27	0.42	0	0	0	0	0.00	0	10	0	27	0.14
STICTOCHIRONOMUS SP.	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.02
SYNDORTHOCLADIUS SP.	0	3	0	8	0.12	0	0	0	0	0.00	0	3	0	8	0.04
TANYTARSUS SP.	0	18	0	48	0.74	0	0	0	0	0.00	0	18	0	48	0.25
THIENEMANNIELLA SP.	0	11	0	29	0.45	0	0	0	0	0.00	0	11	0	29	0.15
THIENEMANNIMYIA GROUP	2	72	0	197	3.03	0	0	0	0	0.00	2	72	0	197	1.03
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	26	216	19	696	5.55	26	216	19	696	3.65
TOTAL CHIRONOMIDAE	74	818	53	2520	38.76	26	216	19	696	5.55	100	1034	72	3216	16.89
EMPIDIDAE	0	11	0	29	0.45	0	0	0	0	0.00	0	11	0	29	0.15
GASTROPODA															
PHYSA SP.	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.02
TOTAL GASTROPODA	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.02
PELECYPODA															
SPHAERIIDAE	0	3	0	8	0.12	0	0	0	0	0.00	0	3	0	8	0.04
TOTAL PELECYPODA	0	3	0	8	0.12	0	0	0	0	0.00	0	3	0	8	0.04
TOTAL BENTHOS	118	2118	201	6501	100.00	120	3844	742	12550	100.00	238	5962	943	19050	100.00

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TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
NEMATODA	7	9	8	64	1.00	90	202	136	1141	8.90	97	211	144	1205	6.29
HYDROZOA															
HYDRA SP.	0	0	0	0	0.00	0	1	0	3	0.02	0	1	0	3	0.02
PLATYHELMINTHES															
RHABDOCELA	4	4	4	32	0.50	10	4	2	43	0.34	14	8	6	75	0.39
BRYOZOA															
PALUDICELLA ARTICULATA	0	1*	0	1*	0.00	0	0	0	0	0.00	0	1*	0	1*	0.00
FREDERICELLA SP.	0	1*	0	1*	0.00	0	0	0	0	0.00	0	1*	0	1*	0.00
OLIGOCHAETA															
ENCHYTRAEIDAE	0	0	2	5	0.08	0	0	0	0	0.00	0	0	2	5	0.03
NAIDIDAE															
NAIS SP.	0	1	9	27	0.42	0	0	0	0	0.00	0	1	9	27	0.14
PARANAIS FRICI	0	8	9	45	0.71	0	0	0	0	0.00	0	8	9	45	0.23
PIGUETIELLA MICHIGANENSIS	0	0	1	3	0.05	0	0	0	0	0.00	0	0	1	3	0.02
STYLARIA LACUSTRIS	0	2	0	5	0.08	0	0	0	0	0.00	0	2	0	5	0.03
VEJDovskyella INTERMEDIA	0	2	43	120	1.88	112	1128	268	4021	31.37	112	1130	311	4141	21.53
TOTAL NAIDIDAE	0	13	62	200	3.14	112	1128	268	4021	31.37	112	1141	330	4221	22.00
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	16	363	16	1053	16.53	0	0	0	0	0.00	16	363	16	1053	5.49
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	101	831	152	2891	45.38	0	0	0	0	0.00	101	831	152	2891	15.07
LILYDORILUS TEMPLETONI	0	6	0	15	0.25	0	0	0	0	0.00	0	6	0	15	0.08
LIMNODORILUS ANGUSTIPENIS	2	3	0	13	0.20	0	0	0	0	0.00	2	3	0	13	0.07
LIMNODORILUS HOFFMEISTERI	14	57	9	213	3.34	0	0	0	0	0.00	14	57	9	213	1.11
LIMNODORILUS HOFFMEISTERI VARIANT	1	2	0	8	0.13	0	0	0	0	0.00	1	2	0	8	0.04
LIMNODORILUS SPIRALIS	1	18	1	53	0.83	0	0	0	0	0.00	1	18	1	53	0.29
LIMNODORILUS UDEKEMIANUS	1	2	0	8	0.13	0	0	0	0	0.00	1	2	0	8	0.04
PELOSCOLEX MULTISETOSUS MULTISETOSUS	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.02
POTAMOTHRIX MOLDAVIENSIS	23	29	22	197	3.09	0	0	0	0	0.00	23	29	22	197	1.03
POTAMOTHRIX VEJDovskyi	0	17	20	99	1.55	0	0	0	0	0.00	0	17	20	99	0.52
TUBIFEX TUBIFEX	3	5	0	21	0.33	0	0	0	0	0.00	3	5	0	21	0.11
TOTAL TUBIFICIDAE	162	1334	220	4575	71.82	0	0	0	0	0.00	162	1334	220	4575	23.85
LUMBRICULIDAE															
STYLODORILUS HERINGIANUS	16	21	10	125	1.96	0	0	0	0	0.00	16	21	10	125	0.65

TABLE 41. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 7 , 16 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES					NO PER 1/8 M2 REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
BRANCHIOBELLELLIDAE															
BRANCHIOBELLELLIDAE	0	0	24	64	1.00	0	0	0	0	0.00	0	0	24	64	0.33
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	127	164	24	840	6.55	127	164	24	840	4.33
TOTAL OLIGOCHAETA	178	1368	318	4969	78.01	239	1292	292	4861	37.93	417	2660	510	9830	51.24
TARDIGRADA	0	0	14	37	0.58	45	124	156	867	6.76	45	124	170	904	4.71
OSTRACODA	19	4	24	125	1.96	332	931	368	4349	33.93	351	935	392	4475	23.32
ISOPODA															
ASELLUS SP.	0	1	2	8	0.13	0	0	0	0	0.00	0	1	2	8	0.04
AMPHIPODA															
HYALELLA AZTECA	1	1	0	5	0.08	0	0	0	0	0.00	1	1	0	5	0.03
PONTOPOREIA AFFINIS	0	0	5	13	0.20	0	0	0	0	0.00	0	0	5	13	0.07
GAMMARUS PSEUDOLIMNAEUS	12	7	8	72	1.13	0	0	0	0	0.00	12	7	8	72	0.33
TOTAL AMPHIPODA	13	8	13	90	1.41	0	0	0	0	0.00	13	8	13	90	0.47
DECAPODA	0	0	1	3	0.05	0	0	0	0	0.00	0	0	1	3	0.02
ACARINA															
HYDRACARINA	8	1	3	32	0.50	1	3	10	37	0.29	9	4	13	69	0.35
EPHEMEROPTERA															
HEPTAGENIIDAE															
HEPTIGENIIDAE	0	0	4	11	0.17	0	4	0	11	0.09	0	4	4	21	0.11
STENDONEMA SP.	3	1	1	13	0.20	0	0	0	0	0.00	3	1	1	13	0.07
TOTAL EPHEMEROPTERA	3	1	5	24	0.38	0	4	0	11	0.09	3	5	5	34	0.19
TRICHOPTERA															
HYDROPSYCHIDAE															
HYDROPSYCHE SP.	0	0	1	3	0.05	0	0	0	0	0.00	0	0	1	3	0.02
DIPTERA															
LEPTOCERIDAE															
ATHRIPSOIDES SP.	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.02
TOTAL TRICHOPTERA	0	1	1	6	0.09	0	0	0	0	0.00	0	1	1	6	0.03

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TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
CHIRONOMIDAE															
CHIRONOMUS SP.	0	0	1	3	0.05	0	0	0	0	0.00	0	0	1	3	0.02
CRYPTOCHIRONOMUS SP.	3	1	5	24	0.38	0	0	0	0	0.00	3	1	5	24	0.13
DIPTERODIPES SP.	0	1	4	13	0.20	0	0	0	0	0.00	0	1	4	13	0.07
HETEROTRISOCLADIUS SP.	0	4	3	40	0.63	0	0	0	0	0.00	8	4	3	40	0.21
MICROTETRA SP.	2	0	0	5	0.08	0	0	0	0	0.00	2	0	0	5	0.03
MICROTETRA SP.	19	3	23	120	1.88	0	0	0	0	0.00	19	3	23	120	0.63
MONODIAMESA SP.	33	9	10	152	2.39	0	0	0	0	0.00	33	9	10	152	0.79
ORTHOCLADIUS SP.	2	0	0	5	0.08	0	0	0	0	0.00	2	0	0	5	0.03
PARACHIRONOMUS SP.	1	0	0	3	0.05	0	0	0	0	0.00	1	0	0	3	0.02
PARACLODOPELMA SP.	5	3	2	27	0.42	0	0	0	0	0.00	5	3	2	27	0.14
PARAKIEFFERIELLA SP.	41	6	28	200	3.14	0	0	0	0	0.00	41	6	28	200	1.04
POLYPEDILUM (TRIPODURA GROUP) SP.	18	0	10	75	1.18	0	0	0	0	0.00	18	0	10	75	0.39
POLYPEDILUM (FALLAX GROUP) SP.	17	1	0	49	0.75	0	0	0	0	0.00	17	1	0	49	0.25
POTTHASTIA SP.	1	0	0	3	0.05	0	0	0	0	0.00	1	0	0	3	0.02
PROCLADIUS (S.S.) SP.	1	1	2	11	0.17	0	0	0	0	0.00	1	1	2	11	0.05
PROCLADIUS (PSILITANYPUS) SP.	1	4	0	13	0.20	0	0	0	0	0.00	1	4	0	13	0.07
PSEUDOSMITTIA SP.	0	1	4	13	0.20	0	0	0	0	0.00	0	1	4	13	0.07
STICTOCHIRONOMUS SP.	9	1	0	27	0.42	0	0	0	0	0.00	9	1	0	27	0.14
SYNDOTHOCLADIUS SP.	0	0	1	3	0.05	0	0	0	0	0.00	0	0	1	3	0.02
TANYTARSUS SP.	1	0	0	3	0.05	0	0	0	0	0.00	1	0	0	3	0.02
THIENEMANNIYIA GROUP	16	6	40	165	2.59	0	0	0	0	0.00	16	6	40	165	0.85
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	61	221	282	1504	11.74	61	221	282	1504	7.84
TOTAL CHIRONOMIDAE	183	41	133	953	14.96	61	221	282	1504	11.74	244	262	415	2457	12.81
GASTROPODA															
VALVATA SP.	1	0	0	3	0.05	0	0	0	0	0.00	1	0	0	3	0.02
PHYSA SP.	3	0	2	13	0.20	0	0	0	0	0.00	3	0	2	13	0.07
TOTAL GASTROPODA	4	0	2	16	0.25	0	0	0	0	0.00	4	0	2	16	0.03
PELECYPODA															
SPHAERIIDAE	1	3	0	11	0.17	0	0	0	0	0.00	1	3	0	11	0.05
TOTAL PELECYPODA	1	3	0	11	0.17	0	0	0	0	0.00	1	3	0	11	0.05
TOTAL BENTHOS	420	1441	528	6370	100.00	778	2782	1246	12816	100.00	1198	4223	1774	19186	100.00

* PRESENT

TABLE 42. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 8, 15 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
PORIFERA															
SPONGILLA FRAGILIS	1*	0	0	1*	0.00	0	0	0	0	0.00	1*	0	0	1*	0.00
NEMATODA	70	293	1443	4815	27.93	5208	16408	304	58453	51.97	5273	16701	1747	63269	48.73
HYDROZOA															
HYDRA SP.	0	1	0	3	0.02	16	0	0	43	0.04	16	1	0	45	0.03
PLATYHELMINTHES															
RHABDOCELA	1	3	3	19	0.11	72	196	0	715	0.64	73	199	3	733	0.57
BRYOZOA															
PALUDICELLA ARTICULATA	1*	0	0	1*	0.00	0	0	0	0	0.00	1*	0	0	1*	0.00
FREDERICELLA SP.	1*	1*	0	1*	0.00	0	0	0	0	0.00	1*	1*	0	1*	0.00
OLIGOCHEATA															
ENCHYTRAEIDAE	1	0	0	3	0.02	0	0	0	0	0.00	1	0	0	3	0.00
NAIDIDAE															
PARANAIIS FRICI	0	0	54	144	0.84	0	0	0	0	0.00	0	0	54	144	0.11
SLAVINA APPENDICULATA	0	1	0	3	0.02	0	0	0	0	0.00	0	1	0	3	0.00
VEJDovskyella INTERMEDIA	7	390	1009	3749	21.74	3724	3912	296	21152	18.81	3731	4302	1305	24901	19.20
TOTAL NAIDIDAE	7	391	1063	3896	22.59	3724	3912	296	21152	18.81	3731	4303	1359	25048	19.31
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	17	162	300	1277	7.41	0	0	0	0	0.00	17	162	300	1277	0.98
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	230	244	906	3680	21.34	0	0	0	0	0.00	230	244	906	3680	2.84
LIMNODRILUS TEMPLETONI	0	4	5	24	0.14	0	0	0	0	0.00	0	4	5	24	0.02
LIMNODRILUS ANGUSTIPENIS	1	3	0	11	0.06	0	0	0	0	0.00	1	3	0	11	0.01
LIMNODRILUS CLAPAREDIANUS	3	1	3	19	0.11	0	0	0	0	0.00	3	1	3	19	0.01
LIMNODRILUS HOFFMEISTERI	42	34	50	336	1.95	0	0	0	0	0.00	42	34	50	336	0.25
LIMNODRILUS HOFFMEISTERI VARIANT	8	7	8	61	0.35	0	0	0	0	0.00	8	7	8	61	0.05
LIMNODRILUS PROFUNDICOLA	0	0	1	3	0.02	0	0	0	0	0.00	0	0	1	3	0.00
LIMNODRILUS SPIRALIS	9	10	20	104	0.60	0	0	0	0	0.00	9	10	20	104	0.08
LIMNODRILUS UDEKEMIANUS	1	0	0	3	0.02	0	0	0	0	0.00	1	0	0	3	0.00
POTAMOTHRIX MOLDAVIENSIS	12	11	33	149	0.86	0	0	0	0	0.00	12	11	33	149	0.11
POTAMOTHRIX VEJDovskyi	3	5	15	61	0.35	0	0	0	0	0.00	3	5	15	61	0.05
TUBIFEX TUBIFEX	9	8	3	53	0.31	0	0	0	0	0.00	9	8	3	53	0.04
TOTAL TUBIFICIDAE	335	489	1344	5781	33.53	0	0	0	0	0.00	335	489	1344	5781	4.45

TABLE 42. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 8, 16 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	48	20	56	331	1.92	0	0	0	0	0.00	48	20	56	331	0.25
BRANCHIODELLIDAE															
BRANCHIODELLIDAE	1	0	0	3	0.02	0	0	0	0	0.00	1	0	0	3	0.00
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	2368	2616	192	13803	12.27	2368	2616	192	13803	10.54
TOTAL OLIGOCHAETA	392	900	2463	10014	58.08	6092	6528	483	34955	31.08	6484	7428	2951	44969	34.67
HIRUDINEA															
DINA PARVA	1	0	0	3	0.02	0	0	0	0	0.00	1	0	0	3	0.00
TOTAL HIRUDINEA	1	0	0	3	0.02	0	0	0	0	0.00	1	0	0	3	0.00
TARDIGRADA	0	14	115	344	2.00	244	1444	520	5888	5.24	244	1458	635	6232	4.80
OSTRACODA	14	92	117	595	3.45	508	1756	1544	10155	9.03	522	1848	1661	10749	8.29
AMPHIPODA															
PONTOPOREIA AFFINIS	0	6	2	21	0.12	0	0	0	0	0.00	0	6	2	21	0.02
GAMMARUS PSEUDOLIMNAEUS	1	0	0	3	0.02	0	0	0	0	0.00	1	0	0	3	0.00
TOTAL AMPHIPODA	1	6	2	24	0.14	0	0	0	0	0.00	1	6	2	24	0.02
ACARINA															
HYDRACARINA	2	2	2	15	0.09	12	0	24	96	0.09	14	2	26	112	0.09
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	1	3	9	35	0.20	0	0	0	0	0.00	1	3	9	35	0.03
CRYPTOCHIRONOMUS SP.	2	7	3	32	0.19	0	0	0	0	0.00	2	7	3	32	0.02
DICHTENDIPES SP.	0	1	0	3	0.02	0	0	0	0	0.00	0	1	0	3	0.00
HETEROTRISSOCLADIUS SP.	0	18	8	69	0.40	0	0	0	0	0.00	0	18	8	69	0.05
MICROTENDIPES SP.	0	2	3	13	0.08	0	0	0	0	0.00	0	2	3	13	0.01
MICROTENDIPES SP.	2	1	0	9	0.05	0	0	0	0	0.00	2	1	0	6	0.01
MONOTIMESA SP.	16	38	8	165	0.96	0	0	0	0	0.00	16	38	8	165	0.13
PARACLAUSPELMA SP.	0	12	4	43	0.25	0	0	0	0	0.00	0	12	4	43	0.03
PARAKIEFFERIELLA SP.	11	8	13	85	0.49	0	0	0	0	0.00	11	8	13	85	0.07

TABLE 42. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 8 , 15 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
POLYPEDILUM (TRIPODURA GROUP) SP.	0	2	2	11	0.06	0	0	0	0	0.00	0	2	2	11	0.01
POLYPEDILUM (FALLAX GROUP) SP.	0	3	5	21	0.12	0	0	0	0	0.00	0	3	5	21	0.02
POTAMASTIA SP.	1	0	1	5	0.03	0	0	0	0	0.00	1	0	1	5	0.00
PROCLADIUS (S.S.) SP.	17	61	21	264	1.53	0	0	0	0	0.00	17	61	21	264	0.20
PROCLADIUS (PSILOTANYPUS) SP.	35	119	50	544	3.15	0	0	0	0	0.00	35	119	50	544	0.42
PSEUDOSMITTIA SP.	3	1	3	19	0.11	0	0	0	0	0.00	3	1	3	19	0.01
STICTOCHIRONOMUS SP.	7	0	2	24	0.14	0	0	0	0	0.00	7	0	2	24	0.02
TANYTARSUS SP.	1	4	7	32	0.19	0	0	0	0	0.00	1	4	7	32	0.02
THIENEMANNIMYIA GROUP	7	0	0	19	0.11	0	0	0	0	0.00	7	0	0	19	0.01
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	204	408	200	2165	1.92	204	408	200	2165	1.67
TOTAL CHIRONOMIDAE	103	280	139	1392	8.07	204	408	200	2165	1.92	307	688	339	3557	2.74
GASTROPODA															
VALVATA SP.	0	1	0	3	0.02	0	0	0	0	0.00	0	1	0	3	0.00
VALVATA TRICARINATA TRICARINATA	0	1	0	3	0.02	0	0	0	0	0.00	0	1	0	3	0.00
TOTAL GASTROPODA	0	2	0	6	0.03	0	0	0	0	0.00	0	2	0	6	0.00
PELECYPODA															
SPHAERIIDAE	0	3	1	11	0.06	0	0	0	0	0.00	0	3	1	11	0.01
TOTAL PELECYPODA	0	3	1	11	0.06	0	0	0	0	0.00	0	3	1	11	0.01
TOTAL BENTHOS	584	1596	4295	17243	100.00	12356	26740	3080	112470	100.00	12940	28336	7365	129710	100.00

* PRESENT

TABLE 43. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 11, 16 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	11	14	0	67	5.49	148	72	36	683	7.58	159	86	36	749	7.32
HYDROZOA															
HYDRA SP.	0	0	0	0	0.00	0	4	2	16	0.18	0	4	2	16	0.15
PLATYHELMINTHES															
RHABDOCELA	4	2	0	15	1.31	2	0	0	5	0.06	6	2	0	21	0.21
OLIGOCHAETA															
ENCHYTRAEDIAE	0	2	0	5	0.41	0	0	0	0	0.00	0	2	0	5	0.05
NAIDIAE															
NAIS SP.	0	5	0	13	1.07	0	0	0	0	0.00	0	5	0	13	0.13
VEJDOVSKYELLA INTERMEDIA	5	0	0	13	1.07	439	526	176	3040	33.73	443	526	176	3053	29.94
TOTAL NAIDIAE	5	5	0	26	2.13	438	526	176	3040	33.73	443	531	176	3066	29.97
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	0	7	0	19	1.56	0	0	0	0	0.00	0	7	0	19	0.19
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	0	87	0	232	19.02	0	0	0	0	0.00	0	87	0	232	2.27
LIMNODRILUS CLAPAREDIANUS	0	1	0	3	0.25	0	0	0	0	0.00	0	1	0	3	0.03
LIMNODRILUS HOFFMEISTERI	0	3	0	8	0.66	0	0	0	0	0.00	0	3	0	8	0.08
LIMNODRILUS HOFFMEISTERI VARIANT	0	3	0	9	0.66	0	0	0	0	0.00	0	3	0	8	0.03
LIMNODRILUS SPIRALIS	0	2	0	5	0.41	0	0	0	0	0.00	0	2	0	5	0.05
POTAMOTHRIX MOLDAVIENSIS	0	20	0	53	4.34	0	0	0	0	0.00	0	20	0	53	0.52
POTAMOTHRIX VEJDOVSKYI	0	1	0	3	0.25	0	0	0	0	0.00	0	1	0	3	0.03
TUBIFEX TUBIFEX	0	1	0	3	0.25	0	0	0	0	0.00	0	1	0	3	0.03
TOTAL TUBIFICIDAE	0	125	0	334	27.38	0	0	0	0	0.00	0	125	0	334	3.26
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	0	4	0	11	0.90	0	0	0	0	0.00	0	4	0	11	0.11
BRANCHIOBELLIIDAE															
BRANCHIOBELLIIDAE	0	1	0	3	0.25	0	0	0	0	0.00	0	1	0	3	0.03
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	76	56	8	373	4.14	76	56	8	373	3.65

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TABLE 43. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 11, 15 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TOTAL OLIGOCHAETA	5	137	0	379	31.07	514	582	184	3413	37.87	519	719	184	3792	37.07
TARDIGRADA	0	1	0	3	0.25	126	122	86	891	9.89	126	123	86	893	8.73
OSTRACODA	1	2	1	11	0.90	268	202	158	1675	19.58	269	204	159	1685	16.47
AMPHIPODA															
PONTOPOREIA AFFINIS	0	1	0	3	0.25	0	0	0	0	0.00	0	1	0	3	0.03
GAMMARUS PSEUDOLIMNAEUS	7	2	1	27	2.21	0	0	0	0	0.00	7	2	1	27	0.25
TOTAL AMPHIPODA	7	3	1	30	2.46	0	0	0	0	0.00	7	3	1	30	0.29
ACARINA															
HYDRACARINA	1	9	0	27	2.21	8	0	0	21	0.23	9	9	0	48	0.47
EPEMEROPTERA															
HEPTAGENIIDAE	0	3	0	8	0.66	0	0	0	0	0.00	0	3	0	8	0.03
HEPTIGENIIDAE	2	0	2	11	0.90	0	0	0	0	0.00	2	0	2	11	0.11
STENONEMA SP.															
TOTAL EPEMEROPTERA	2	3	2	19	1.56	0	0	0	0	0.00	2	3	2	19	0.19
TRICHOPTERA															
HYDROPSYCHIDAE															
HYDROPSYCHE SP.	2	5	3	27	2.21	0	0	0	0	0.00	2	5	3	27	0.25
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	0	1	0	3	0.25	0	0	0	0	0.00	0	1	0	3	0.03
TOTAL TRICHOPTERA	2	6	3	30	2.46	0	0	0	0	0.00	2	6	3	30	0.29
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	1	0	0	3	0.25	0	0	0	0	0.00	1	0	0	3	0.03
CRYPTOCHIRONOMUS SP.	1	0	0	3	0.25	0	0	0	0	0.00	1	0	0	3	0.03
MICROTENDIPES SP.	3	6	0	24	1.97	0	0	0	0	0.00	3	6	0	24	0.23
HETEROTRISSOCLADIUS SP.	3	3	0	15	1.31	0	0	0	0	0.00	3	3	0	16	0.15
MICROTENDIPES SP.	26	19	1	123	10.08	0	0	0	0	0.00	26	19	1	123	1.20
MONODIAMESA SP.	15	8	2	67	5.49	0	0	0	0	0.00	15	8	2	67	0.65
PARACLAOPPELMA SP.	0	5	0	13	1.07	0	0	0	0	0.00	0	5	0	13	0.13
PARAKIEFFERIELLA SP.	18	42	0	160	13.11	0	0	0	0	0.00	18	42	0	160	1.55
POLYPELILUM (TRIPUDURA GROUP) SP.	11	17	0	75	6.15	0	0	0	0	0.00	11	17	0	75	0.73
POLYPELILUM (FALLAX GROUP) SP.	1	5	0	16	1.31	0	0	0	0	0.00	1	5	0	16	0.15

TABLE 43. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 11, 16 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
POTTHASTIA SP.	0	2	0	5	0.41	0	0	0	0	0.00	0	2	0	5	0.05
PROCLADIJS (PSILOTANYPUS) SP.	0	3	0	8	0.66	0	0	0	0	0.00	0	3	0	8	0.09
PSEUDOSMITTIA SP.	2	9	0	29	2.38	0	0	0	0	0.00	2	9	0	29	0.29
STICTOCHIRONOMUS SP.	2	1	0	9	0.66	0	0	0	0	0.00	2	1	0	9	0.09
SYNORTHOCCLADIJS SP.	0	1	0	3	0.25	0	0	0	0	0.00	0	1	0	3	0.03
THIENEMANNIMYIA GROUP	13	15	1	77	6.31	0	0	0	0	0.00	13	15	1	77	0.75
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	346	458	62	2309	25.62	346	458	62	2309	22.57
TOTAL CHIRONOMIDAE	96	136	4	630	51.64	346	458	62	2309	25.62	442	594	66	2939	28.73
EMBIIDAE	0	2	0	5	0.41	0	0	0	0	0.00	0	2	0	5	0.05
GASTROPODA															
PHYSA SP.	0	1	0	3	0.25	0	0	0	0	0.00	0	1	0	3	0.03
TOTAL GASTROPODA	0	1	0	3	0.25	0	0	0	0	0.00	0	1	0	3	0.03
TOTAL BENTHOS	129	316	11	1220	100.00	1412	1440	528	9013	100.00	1541	1756	539	10230	100.00

TABLE 43. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 15 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	13	12	15	120	3.18	102	47	26	467	4.90	120	59	41	587	4.41
HYDROZOA															
HYDRA SP.	0	2	0	5	0.13	0	0	0	0	0.00	0	2	0	5	0.04
PLATYHELMINTHES															
RHABDOCELA	12	1	4	45	1.19	0	0	2	5	0.05	12	1	6	51	0.39
OLIGOCHAETA															
ENCHYTRAEIDAE	0	0	1	3	0.08	0	0	0	0	0.00	0	0	1	3	0.02
NAIDIDAE															
NAIS BEHNIGI	0	1	0	3	0.08	0	0	0	0	0.00	0	1	0	3	0.02
NAIS SP.	0	3	0	8	0.21	0	0	0	0	0.00	0	3	0	8	0.05
VEJDOVSKYELLA INTERMEDIA	1	8	5	37	0.98	430	219	64	1901	19.94	431	227	59	1939	14.57
TOTAL NAIDIDAE	1	12	5	48	1.27	430	219	64	1901	19.94	431	231	59	1950	14.55
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	13	1	1	40	1.06	0	0	0	0	0.00	13	1	1	40	0.30
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	144	1	68	569	15.05	0	0	0	0	0.00	144	1	68	568	4.27
LIMNODRILUS ANGUSTIPENIS	1	0	2	9	0.21	0	0	0	0	0.00	1	0	2	8	0.05
LIMNODRILUS HOFFMEISTERI	3	0	4	19	0.50	0	0	0	0	0.00	3	0	4	19	0.14
LIMNODRILUS SPIRALIS	1	0	0	3	0.08	0	0	0	0	0.00	1	0	0	3	0.02
POTAMOTHRIX MOLDAVIENSIS	31	0	29	160	4.24	0	0	0	0	0.00	31	0	29	160	1.20
TOTAL TUBIFICIDAE	193	2	104	798	21.15	0	0	0	0	0.00	193	2	104	798	5.00
LUMBRICULIDAE															
STYLODRILUS HEPINGIANUS	16	2	4	59	1.56	0	0	0	0	0.00	16	2	4	59	0.44
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	78	15	16	291	3.05	78	15	16	291	2.19
TOTAL OLIGOCHAETA	210	16	114	908	24.07	508	234	80	2192	22.99	718	250	194	3101	23.30
HIRUDINEA															
HELOBDELLA STAGNALIS	4	0	0	11	0.29	0	0	0	0	0.00	4	0	0	11	0.09

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TABLE 43. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 16 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
PISCICOLA GEOMETRA	1	0	0	3	0.08	0	0	0	0	0.00	1	0	0	3	0.02
TOTAL HIRUDINEA	5	0	0	14	0.37	0	0	0	0	0.00	5	0	0	14	0.11
TARDIGRADA	0	2	2	11	0.29	218	72	58	928	9.73	218	74	60	939	7.05
OSTRACODA	15	11	59	253	6.71	256	234	214	1877	19.69	271	245	283	2131	16.01
ISOPODA															
ASELLUS SP.	1	1	0	5	0.13	0	0	0	0	0.00	1	1	0	5	0.04
LIRCEUS SP.	2	1	0	8	0.21	0	0	0	0	0.00	2	1	0	8	0.05
AMPHIPODA															
HYALELLA AZTECA	0	1	1	5	0.13	0	0	0	0	0.00	0	1	1	5	0.04
GAMMARUS PSEUDOLIMNAEUS	73	11	10	251	6.65	0	0	0	0	0.00	73	11	10	251	1.89
GAMMARUS SP.	1	0	0	3	0.08	0	0	0	0	0.00	1	0	0	3	0.02
TOTAL AMPHIPODA	74	12	11	259	6.86	0	0	0	0	0.00	74	12	11	259	1.95
A-869 ACARINA															
HYDRACARINA	5	2	1	21	0.56	8	7	2	45	0.47	13	9	3	67	0.50
EPEHEROPTERA															
HEPTAGENIIDAE															
HEPTAGENIA SP.	0	2	0	5	0.13	0	0	0	0	0.00	0	2	0	5	0.04
HEPTIGENIIDAE	9	1	1	29	0.77	0	0	0	0	0.00	9	1	1	29	0.22
STENONEMA SP.	6	4	1	29	0.77	0	0	0	0	0.00	6	4	1	29	0.22
TOTAL EPEHEROPTERA	15	7	2	63	1.67	0	0	0	0	0.00	15	7	2	63	0.47
TRICHOPTERA															
LEPTOCERIDAE															
ATHRIPSODES SP.	1	0	0	3	0.08	0	0	0	0	0.00	1	0	0	3	0.02
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	1	0	0	3	0.08	0	0	0	0	0.00	1	0	0	3	0.02
TOTAL TRICHOPTERA	2	0	0	6	0.16	0	0	0	0	0.00	2	0	0	6	0.05
DIPTERA															
CHIRONOMIDAE															
CLADOTANYTARSUS SP.	0	0	1	3	0.08	0	0	0	0	0.00	0	0	1	3	0.02
CRYPTOCHIRONOMUS SP.	4	0	6	27	0.72	0	0	0	0	0.00	4	0	6	27	0.20
NEAR DEMICRYPTOCHIRONOMUS 8	0	0	1	3	0.08	0	0	0	0	0.00	0	0	1	3	0.02

TABLE 43. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 12, 15 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
DICRITENDIPES SP.	6	3	1	27	0.72	0	0	0	0	0.00	6	3	1	27	0.20
HETEROTRISSOCLADIUS SP.	8	11	16	93	2.46	0	0	0	0	0.00	8	11	16	93	0.70
MICROPSECTRA SP.	0	0	3	8	0.21	0	0	0	0	0.00	0	0	3	8	0.05
MICRITENDIPES SP.	84	27	26	365	9.67	0	0	0	0	0.00	84	27	26	365	2.74
MONODIAMESA SP.	6	3	1	27	0.72	0	0	0	0	0.00	6	3	1	27	0.20
ORTHOCLADIUS SP.	1	3	0	11	0.29	0	0	0	0	0.00	1	3	0	11	0.08
PARACHIRONOMUS SP.	1	1	2	11	0.29	0	0	0	0	0.00	1	1	2	11	0.05
PARACLADOPELMA SP.	0	4	4	21	0.56	0	0	0	0	0.00	0	4	4	21	0.15
PARAKIEFFERIELLA SP.	52	174	123	957	25.36	0	0	0	0	0.00	52	174	123	957	7.19
POLYPEDILUM (TRIPUDURA GROUP) SP.	5	0	13	48	1.27	0	0	0	0	0.00	5	0	13	48	0.35
POLYPEDILUM (FALLAX GROUP) SP.	1	0	11	32	0.85	0	0	0	0	0.00	1	0	11	32	0.24
POTTHASTIA SP.	1	0	2	8	0.21	0	0	0	0	0.00	1	0	2	8	0.05
PROCLADIUS (PSILITANYPUS) SP.	1	1	3	13	0.34	0	0	0	0	0.00	1	1	3	13	0.10
PSEUDOSMITTIA SP.	11	8	0	51	1.35	0	0	0	0	0.00	11	8	0	51	0.38
STICTOCHIRONOMUS SP.	8	0	3	29	0.77	0	0	0	0	0.00	8	0	3	29	0.22
SYNORTHOCCLADIUS SP.	0	1	0	3	0.08	0	0	0	0	0.00	0	1	0	3	0.02
TANYTARSUS SP.	1	1	0	5	0.13	0	0	0	0	0.00	1	1	0	5	0.04
THIENEMANNIUMIA GROUP	35	47	9	243	6.44	0	0	0	0	0.00	35	47	9	243	1.83
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	752	603	152	4019	42.16	752	603	152	4019	30.20
TOTAL CHIRONOMIDAE	235	284	225	1985	52.61	752	603	152	4019	42.16	987	887	377	6004	45.11
ASTROPODA															
VALVATA SP.	1	0	0	3	0.08	0	0	0	0	0.00	1	0	0	3	0.02
PHYSA SP.	6	3	0	24	0.64	0	0	0	0	0.00	6	3	0	24	0.18
LYMNAEA SP.	12	0	1	35	0.93	0	0	0	0	0.00	12	0	1	35	0.26
TOTAL ASTROPODA	19	3	1	62	1.64	0	0	0	0	0.00	19	3	1	62	0.47
PELECYPODA															
SPHAERIIDAE	1	0	2	9	0.21	0	0	0	0	0.00	1	0	2	8	0.05
TOTAL PELECYPODA	1	0	2	9	0.21	0	0	0	0	0.00	1	0	2	8	0.05
TOTAL BENTHOS	614	354	446	3773	100.00	1844	1197	534	9533	100.00	2453	1551	980	13310	100.00

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TABLE 44. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13, 16 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	
PORIFERA															
SPONGILLA FRAGILIS	0	1*	0	1*	0.00	0	0	0	0	0.00	0	1*	0	1*	0.00
NEMATODA	504	64	22	1573	8.92	76	154	47	739	5.75	580	218	69	2312	7.53
HYDROZOA															
HYDRA SP.	0	4	0	11	0.06	8	10	2	53	0.41	8	14	2	64	0.21
PLATYHELMINTHES															
UNIDENTIFIED TURBELLARIA	1	0	0	3	0.02	0	0	0	0	0.00	1	0	0	3	0.01
RHABDOCELA	27	69	12	288	1.63	4	4	3	29	0.23	31	73	15	317	1.04
BRYOZOA															
PALUDICELLA ARTICULATA	0	1*	0	1*	0.00	0	0	0	0	0.00	0	1*	0	1*	0.00
FREDERICELLA SP.	0	1*	0	1*	0.00	0	0	0	0	0.00	0	1*	0	1*	0.00
OLIGOCHAETA															
ENCHYTRAEIDAE	16	5	2	61	0.35	0	0	0	0	0.00	16	5	2	61	0.20
NAIDIDAE															
CHAETOGASTER DIAPHANUS	1	0	0	3	0.02	0	0	0	0	0.00	1	0	0	3	0.01
NAIS BEHNINGI	1	0	0	3	0.02	0	0	0	0	0.00	1	0	0	3	0.01
NAIS SP.	11	7	0	48	0.27	0	0	0	0	0.00	11	7	0	48	0.15
PARANAIS FRICI	0	1	0	3	0.02	0	0	0	0	0.00	0	1	0	3	0.01
SLAVINA APPENDICULATA	0	1	0	3	0.02	0	0	0	0	0.00	0	1	0	3	0.01
STYLARIA LACJSTRIS	1	1	0	5	0.03	0	0	0	0	0.00	1	1	0	5	0.02
VEJDovskyella INTERMEDIA	124	113	29	709	4.02	304	362	152	2181	16.96	428	475	181	2891	9.49
TOTAL NAIDIDAE	138	123	29	774	4.39	304	362	152	2181	16.96	442	485	181	2956	9.69
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	88	48	2	368	2.09	0	0	0	0	0.00	88	48	2	368	1.21
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	655	360	98	2941	16.68	0	0	0	0	0.00	655	360	98	2941	9.65
LIMNODRILUS TEMPLETONI	1	0	0	3	0.02	0	0	0	0	0.00	1	0	0	3	0.01
LIMNODRILUS CLAPAREDIANUS	3	2	0	13	0.07	0	0	0	0	0.00	3	2	0	13	0.04
LIMNODRILUS HOFFMEISTERI	26	5	2	88	0.50	0	0	0	0	0.00	26	5	2	88	0.29
LIMNODRILUS HOFFMEISTERI VARIANT	5	0	1	15	0.09	0	0	0	0	0.00	5	0	1	15	0.05
LIMNODRILUS SPIRALIS	16	1	0	45	0.26	0	0	0	0	0.00	16	1	0	45	0.15
LIMNODRILUS UDEKEMIANUS	5	5	0	27	0.15	0	0	0	0	0.00	5	5	0	27	0.09
POTAMOTHRIX MOLDAVIENSIS	54	12	7	195	1.11	0	0	0	0	0.00	54	12	7	195	0.64

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TABLE 44. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13, 15 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
POTAMOTHRIX VEJODVSKYI	9	10	3	59	0.33	0	0	0	0	0.00	9	10	3	59	0.19
TUBIFEX TUBIFEX	7	0	1	21	0.12	0	0	0	0	0.00	7	0	1	21	0.07
TOTAL TUBIFICIDAE	869	443	104	3775	21.42	0	0	0	0	0.00	869	443	104	3775	12.39
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	53	38	25	309	1.75	0	0	0	0	0.00	53	38	25	309	1.01
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	16	38	11	173	1.34	16	38	11	173	0.57
TOTAL OLIGOCHAETA	1076	609	150	4920	27.91	320	400	163	2354	18.30	1396	1009	323	7275	23.85
HIRUDINEA															
GLOSSIPHONIA COMPLANATA	7	9	0	43	0.24	0	0	0	0	0.00	7	9	0	43	0.14
HELOBDELLA STAGNALIS	8	1	1	27	0.15	0	0	0	0	0.00	8	1	1	27	0.09
PISCICOLA GEOMETRA	1	0	0	3	0.02	0	0	0	0	0.00	1	0	0	3	0.01
TOTAL HIRUDINEA	16	10	1	73	0.41	0	0	0	0	0.00	16	10	1	73	0.24
TARDIGRADA	195	10	5	560	3.18	368	346	122	2229	17.33	563	356	127	2789	9.15
OSTRACODA	1292	239	152	4515	25.61	692	936	301	5144	39.99	1984	1175	463	9659	31.68
MYSIDACEA															
MYTIS RELICTA	0	1	0	3	0.02	0	0	0	0	0.00	0	1	0	3	0.01
ISOPODA															
ASELLUS SP.	57	46	0	275	1.56	0	0	0	0	0.00	57	46	0	275	0.90
LIRCEUS SP.	32	13	0	120	0.68	0	0	0	0	0.00	32	13	0	120	0.39
AMPHIPODA															
HYALELLA AZTECA	4	3	0	19	0.11	0	0	0	0	0.00	4	3	0	19	0.05
PONTOPOREIA AFFINIS	2	1	0	9	0.05	0	0	0	0	0.00	2	1	0	8	0.03
GAMMARUS PSEUDOLIMNAEUS	10	9	0	51	0.29	0	0	0	0	0.00	10	9	0	51	0.17
GAMMARUS SP.	6	0	0	16	0.09	0	0	0	0	0.00	6	0	0	16	0.05
TOTAL AMPHIPODA	22	13	0	94	0.53	0	0	0	0	0.00	22	13	0	94	0.31
ACARINA															
HYDRACARINA	47	23	19	237	1.34	24	12	9	120	0.93	71	35	28	357	1.17

TABLE 44. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13, 15 NOVEMBER 1973.

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TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
EPHEMEROPTERA															
HEPTAGENIIDAE															
HEPTIGENIIDAE	3	0	0	8	0.05	0	0	0	0	0.00	3	0	0	8	0.03
TOTAL EPHEMEROPTERA	3	0	0	8	0.05	0	0	0	0	0.00	3	0	0	8	0.03
TRICHOPTERA															
LEPTOCERIDAE															
ATHRIPSODES SP.	3	1	0	11	0.06	0	0	0	0	0.00	3	1	0	11	0.04
LEPIDOSTOMATIDAE															
LEPIDOSTOMA SP.	3	2	0	13	0.07	0	0	0	0	0.00	3	2	0	13	0.04
TOTAL TRICHOPTERA	6	3	0	24	0.14	0	0	0	0	0.00	6	3	0	24	0.08
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	3	0	0	8	0.05	0	0	0	0	0.00	3	0	0	8	0.03
CRYPTOCHIRONOMUS SP.	11	16	5	85	0.48	0	0	0	0	0.00	11	16	5	85	0.28
MICROTENDIPES SP.	7	4	0	29	0.16	0	0	0	0	0.00	7	4	0	29	0.10
HETEROTRISOCLADIUS SP.	110	126	72	821	4.66	0	0	0	0	0.00	110	126	72	821	2.69
MICROPSECTRA SP.	56	26	4	229	1.30	0	0	0	0	0.00	56	26	4	229	0.75
MICROTENDIPES SP.	123	45	4	459	2.60	0	0	0	0	0.00	123	45	4	459	1.51
MONODIAMESA SP.	43	17	16	203	1.15	0	0	0	0	0.00	43	17	16	203	0.67
ORTHOCCLADIUS SP.	8	3	0	29	0.16	0	0	0	0	0.00	8	3	0	29	0.10
PARACHIRONOMUS SP.	6	0	0	16	0.09	0	0	0	0	0.00	6	0	0	16	0.05
PARACLODOPPELMA SP.	38	40	29	285	1.62	0	0	0	0	0.00	38	40	29	285	0.93
PARAKIEFFERIELLA SP.	166	120	63	931	5.28	0	0	0	0	0.00	166	120	63	931	3.05
POLYPEDILUM (TRIPUDURA GROUP) SP.	5	0	3	21	0.12	0	0	0	0	0.00	5	0	3	21	0.07
POLYPEDILUM (FALLAX GROUP) SP.	29	22	28	211	1.20	0	0	0	0	0.00	29	22	28	211	0.69
POTTHASTIA SP.	4	4	0	21	0.12	0	0	0	0	0.00	4	4	0	21	0.07
PROCLADIUS (S.S.) SP.	34	12	1	125	0.71	0	0	0	0	0.00	34	12	1	125	0.41
PROCLADIUS (PSILODANYPUS) SP.	101	15	1	312	1.77	0	0	0	0	0.00	101	15	1	312	1.02
PSEUDOSMITTIA SP.	23	11	2	95	0.54	0	0	0	0	0.00	23	11	2	95	0.31
STICTOCHIRONOMUS SP.	8	13	1	59	0.33	0	0	0	0	0.00	8	13	1	59	0.19
SYNORTHOCCLADIUS SP.	2	0	0	5	0.03	0	0	0	0	0.00	2	0	0	5	0.02
TANYTARSUS SP.	29	8	5	112	0.64	0	0	0	0	0.00	29	8	5	112	0.37
THIENEMANNIELLA SP.	1	0	1	5	0.03	0	0	0	0	0.00	1	0	1	5	0.02
THIENEMANNIMYIA GROUP	138	98	15	669	3.80	0	0	0	0	0.00	138	98	15	669	2.19
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	304	336	183	2195	17.06	304	336	183	2195	7.20
TOTAL CHIRONOMIDAE	945	580	250	4731	26.84	304	336	183	2195	17.06	1249	916	433	6926	22.71
GASTROPODA															
AMNICOLA LIMOSA	1	0	0	3	0.02	0	0	0	0	0.00	1	0	0	3	0.01

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TABLE 44. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 13, 15 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
VALVATA SP.	4	0	1	13	0.07	0	0	0	0	0.00	4	0	1	13	0.04
PHYSA SP.	19	5	0	64	0.36	0	0	0	0	0.00	19	5	0	64	0.21
LYMNAEA AGRICULARIA	0	1	0	3	0.02	0	0	0	0	0.00	0	1	0	3	0.01
LYMNAEA HUMILIS	5	0	1	16	0.09	0	0	0	0	0.00	5	0	1	16	0.05
GYRAULUS PARVUS	4	0	0	11	0.06	0	0	0	0	0.00	4	0	0	11	0.04
TOTAL GASTROPODA	33	6	2	110	0.62	0	0	0	0	0.00	33	6	2	110	0.35
PELECYPODA															
SPHAERIIDAE	13	7	11	83	0.47	0	0	0	0	0.00	13	7	11	83	0.27
TOTAL PELECYPODA	13	7	11	83	0.47	0	0	0	0	0.00	13	7	11	83	0.27
TOTAL BENTHOS	4269	1697	644	17628	100.00	1796	2198	830	12863	100.00	6065	3895	1474	30492	100.00

* PRESENT

TABLE 45. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16, 15 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
PORIFERA															
SPONGILLA FRAGILIS	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
NEMATODA	52	13	32	259	4.35	152	126	139	1112	14.38	204	139	171	1371	10.01
HYDROZOA															
HYDRA SP.	9	14	12	93	1.56	4	3	4	29	0.37	13	17	16	123	0.90
PLATYHELMINTHES															
RHABDOCELA	13	19	21	141	2.37	0	21	10	93	1.07	13	40	31	224	1.64
BRYOZOA															
PALUDICELLA ARTICULATA	1*	1*	1*	1*	0.00	0	0	0	0	0.00	1*	1*	1*	1*	0.00
FREDERICELLA SP.	1*	0	1*	1*	0.00	0	0	0	0	0.00	1*	0	1*	1*	0.00
OLIGOCHAETA															
ENCHYTRAEIDAE	1	0	0	3	0.05	0	0	0	0	0.00	1	0	0	3	0.02
NAIDIDAE															
NAIS SP.	0	1	0	3	0.05	0	0	0	0	0.00	0	1	0	3	0.02
PARANAIS FRICI	52	0	26	208	3.49	0	0	0	0	0.00	52	0	26	208	1.52
PIGUETIELLA MICHIGANENSIS	1	0	1	5	0.08	0	0	0	0	0.00	1	0	1	5	0.04
VEJDovskyella INTERMEDIA	204	49	126	1011	16.97	272	352	312	2496	32.27	476	401	438	3507	25.61
TOTAL NAIDIDAE	257	50	153	1227	20.59	272	352	312	2496	32.27	529	402	465	3723	27.19
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	62	35	49	389	6.53	0	0	0	0	0.00	62	35	49	389	2.84
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	229	94	161	1291	21.66	0	0	0	0	0.00	229	94	161	1291	9.43
LILYDORILUS TEMPLETONI	1	0	1	5	0.08	0	0	0	0	0.00	1	0	1	5	0.04
LIMNODRILUS HOFFMEISTERI	15	1	8	64	1.07	0	0	0	0	0.00	15	1	8	64	0.47
LIMNODRILUS HOFFMEISTERI VARIANT	4	0	2	16	0.27	0	0	0	0	0.00	4	0	2	16	0.12
LIMNODRILUS SPIRALIS	4	0	2	16	0.27	0	0	0	0	0.00	4	0	2	16	0.12
POTAMOTHRIX MOLDAVIENSIS	15	1	8	64	1.07	0	0	0	0	0.00	15	1	8	64	0.47
POTAMOTHRIX VEJDovskyi	11	7	9	72	1.21	0	0	0	0	0.00	11	7	9	72	0.53
TUBIFEX TUBIFEX	2	1	2	13	0.22	0	0	0	0	0.00	2	1	2	13	0.09
TOTAL TUBIFICIDAE	343	139	242	1930	32.39	0	0	0	0	0.00	343	139	242	1930	14.09
LIMNORICULIDAE															
STYLORILUS HERINGIANUS	2	3	2	19	0.32	0	0	0	0	0.00	2	3	2	19	0.14

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TABLE 45. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16, 16 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	12	88	50	400	5.17	12	88	50	400	2.92
TOTAL OLIGOCHAETA	603	192	397	3179	53.35	284	440	362	2896	37.45	337	532	759	6075	44.35
TARDIGRADA	52	16	39	285	4.78	276	51	163	1307	16.90	328	67	202	1592	11.63
OSTRACODA	12	15	14	109	1.83	208	130	169	1352	17.48	220	145	193	1461	10.67
ISOPODA															
ASELLUS SP.	0	5	2	19	0.32	0	0	0	0	0.00	0	5	2	19	0.14
LIRCEUS SP.	0	1	1	5	0.08	0	0	0	0	0.00	0	1	1	5	0.04
AMPHIPODA															
GAMMARUS PSEUDOLIMNAEUS	4	15	9	75	1.26	0	0	0	0	0.00	4	15	9	75	0.55
TOTAL AMPHIPODA	4	15	9	75	1.26	0	0	0	0	0.00	4	15	9	75	0.55
ACARINA															
HYDRACARINA	1	3	2	15	0.27	4	4	4	32	0.41	5	7	6	48	0.35
EPEHEROPTERA															
HEPTAGENIIDAE															
HEPTAGENIA SP.	0	1	1	5	0.08	0	0	0	0	0.00	0	1	1	5	0.04
HEPTIGENIIDAE	0	4	2	15	0.27	0	0	0	0	0.00	0	4	2	15	0.12
STENDNEMA SP.	0	5	2	19	0.32	0	0	0	0	0.00	0	5	2	19	0.14
TOTAL EPHEMEROPTERA	0	10	5	40	0.67	0	0	0	0	0.00	0	10	5	40	0.29
DIPTERA															
CHIRONOMIDAE															
CRYPTOCHIRONOMUS SP.	2	0	1	8	0.13	0	0	0	0	0.00	2	0	1	8	0.06
HETEROTRISSECLADIUS SP.	19	26	23	181	3.04	0	0	0	0	0.00	19	26	23	181	1.32
MICROPSECTRA SP.	1	0	1	5	0.08	0	0	0	0	0.00	1	0	1	5	0.04
MICROTENDIPES SP.	0	14	7	56	0.94	0	0	0	0	0.00	0	14	7	56	0.41
MONODIAMESA SP.	20	29	24	195	3.27	0	0	0	0	0.00	20	29	24	195	1.42
ORTHOCCLADIUS (SS) SP.	1	0	1	5	0.08	0	0	0	0	0.00	1	0	1	5	0.04
PARACHIRONOMUS SP.	0	1	1	5	0.08	0	0	0	0	0.00	0	1	1	5	0.04
PARACLAODELMA SP.	12	5	8	67	1.12	0	0	0	0	0.00	12	5	8	67	0.49
PARAKIEFFERIELLA SP.	54	130	97	749	12.57	0	0	0	0	0.00	54	130	87	749	5.47
POLYPEDILUM (TRIPODURA GROUP) SP.	26	9	17	139	2.33	0	0	0	0	0.00	26	9	17	139	1.02
POLYPEDILUM (FALLAX GROUP) SP.	6	4	5	40	0.67	0	0	0	0	0.00	6	4	5	40	0.29

TABLE 45. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 16, 15 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
PROCLADIUS (S.S.) SP.	1	1	1	9	0.13	0	0	0	0	0.00	1	1	1	8	0.06
PROCLADIUS (PSILODANYPUS) SP.	1	1	1	8	0.13	0	0	0	0	0.00	1	1	1	8	0.06
PSEUDOSMITTIA SP.	3	2	3	21	0.35	0	0	0	0	0.00	3	2	3	21	0.15
SYNDORHOCLADIUS SP.	0	4	2	16	0.27	0	0	0	0	0.00	0	4	2	16	0.12
TANYTARUS SP.	5	2	3	27	0.45	0	0	0	0	0.00	5	2	3	27	0.20
THIEFEMANNIELLA SP.	0	5	2	19	0.32	0	0	0	0	0.00	0	5	2	19	0.14
THIEFEMANNIMYIA GROUP	2	43	22	179	3.00	0	0	0	0	0.00	2	43	22	179	1.31
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	120	111	115	923	11.93	120	111	115	923	6.74
TOTAL CHIRONOMIDAE	163	276	209	1728	29.00	120	111	115	923	11.93	283	387	324	2651	19.35
GASTROPODA															
VALVATA SP.	0	1	1	5	0.08	0	0	0	0	0.00	0	1	1	5	0.04
TOTAL GASTROPODA	0	1	1	5	0.08	0	0	0	0	0.00	0	1	1	5	0.04
PELECYPODA															
SPHAERIIDAE	1	0	1	5	0.08	0	0	0	0	0.00	1	0	1	5	0.04
TOTAL PELECYPODA	1	0	1	5	0.08	0	0	0	0	0.00	1	0	1	5	0.04
TOTAL BENTHOS	910	580	745	5959	100.00	1048	886	966	7734	100.00	1958	1466	1711	13694	100.00

* PRESENT

TABLE 45. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 17, 16 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
NEMATODA	2	0	74	203	7.06	584	26	259	2317	28.53	586	26	333	2520	22.92
HYDROZOA															
HYDRA SP.	0	0	0	0	0.00	0	1	3	11	0.14	0	1	3	11	0.10
PLATYHELMINTHES															
RHABDOCELA	6	1	10	45	1.57	13	1	4	48	0.59	19	2	14	93	0.65
BRYOZOA															
PALUDICELLA ARTICULATA	0	0	1*	1*	0.00	0	0	0	0	0.00	0	0	1*	1*	0.00
FREDERICELLA SP.	0	0	1*	1*	0.00	0	0	0	0	0.00	0	0	1*	1*	0.00
OLIGOCHAETA															
ENCHYTRAEIDAE	0	0	2	5	0.17	0	0	0	0	0.00	0	0	2	5	0.05
NAIDIDAE															
NAIS SP.	1	0	0	3	0.10	0	0	0	0	0.00	1	0	0	3	0.03
VEJDovskyella INTERMEDIA	1	0	1	5	0.17	426	33	94	1475	18.16	427	33	95	1480	13.46
TOTAL NAIDIDAE	2	0	1	8	0.28	426	33	94	1475	18.15	428	33	95	1483	13.49
TUBIFICIDAE															
UNIDENTIFIED IMM. WITH CAPILLIFORMS	11	0	31	112	3.90	0	0	0	0	0.00	11	0	31	112	1.02
UNIDENTIFIED IMM. WITHOUT CAPILLIFORMS	129	0	157	763	26.55	0	0	0	0	0.00	129	0	157	763	6.94
LIMNODRILUS TEMPLETONI	1	0	0	3	0.10	0	0	0	0	0.00	1	0	0	3	0.03
LIMNODRILUS ANGUSTIPENTIS	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.03
LIMNODRILUS CLAPAREDIANUS	2	0	0	5	0.17	0	0	0	0	0.00	2	0	0	5	0.05
LIMNODRILUS HOFFMEISTERI	11	0	1	32	1.11	0	0	0	0	0.00	11	0	1	32	0.29
LIMNODRILUS HOFFMEISTERI VARIANT	2	0	0	5	0.17	0	0	0	0	0.00	2	0	0	5	0.05
POTAMOTHRIX MOLDAVIENSIS	5	0	8	35	1.22	0	0	0	0	0.00	5	0	8	35	0.32
POTAMOTHRIX VEJDovskyi	0	0	2	5	0.17	0	0	0	0	0.00	0	0	2	5	0.05
TOTAL TUBIFICIDAE	161	0	200	963	33.51	0	0	0	0	0.00	161	0	200	963	8.75
LUMBRICULIDAE															
STYLODRILUS HERINGIANUS	8	0	18	69	2.40	0	0	0	0	0.00	8	0	18	69	0.63
UNIDENTIFIED OLIGOCHAETA	0	0	0	0	0.00	760	18	132	2427	29.89	760	18	132	2427	22.09

TABLE 45. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 17, 15 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%	NO PER 1/8 M2 REPLICATES			MEAN/M2	%
	A	B	C			A	B	C			A	B	C		
TOTAL OLIGOCHAETA	171	0	221	1045	36.36	1186	51	226	3902	48.05	1357	51	447	4947	45.00
HIRUDINEA															
GLOSSIPHONIA COMPLANATA	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.03
TOTAL HIRUDINEA	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.03
TARDIGRADA	0	0	0	0	0.00	61	13	64	368	4.53	51	13	64	368	3.35
OSTRACODA	6	2	28	96	3.34	154	79	161	1051	12.94	160	81	199	1147	10.43
ISOPODA															
ASELLUS SP.	1	0	9	27	0.94	0	0	0	0	0.00	1	0	9	27	0.25
LIRCEUS SP.	0	0	3	9	0.28	0	0	0	0	0.00	0	0	3	8	0.07
AMPHIPODA															
GAMMARUS PSEUDOLIMNAEUS	2	0	7	24	0.84	0	0	0	0	0.00	2	0	7	24	0.22
TOTAL AMPHIPODA	2	0	7	24	0.84	0	0	0	0	0.00	2	0	7	24	0.22
ACARINA															
HYDRACARINA	2	0	2	11	0.38	0	2	0	5	0.06	2	2	2	15	0.15
EPEHEMEROPTERA															
HEPTAGENIIDAE															
STENOPEMA SP.	0	1	1	5	0.17	0	0	0	0	0.00	0	1	1	5	0.05
TOTAL EPEHEMEROPTERA	0	1	1	5	0.17	0	0	0	0	0.00	0	1	1	5	0.05
DIPTERA															
CHIRONOMIDAE															
CHIRONOMUS SP.	0	0	5	13	0.45	0	0	0	0	0.00	0	0	5	13	0.12
CRYPTOCHIRONOMUS SP.	2	0	11	35	1.22	0	0	0	0	0.00	2	0	11	35	0.32
MICROTENDIPES SP.	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.03
HETEROTRISODCLADIUS SP.	3	0	52	147	5.11	0	0	0	0	0.00	3	0	52	147	1.34
MICROPSECTRA SP.	0	0	4	11	0.38	0	0	0	0	0.00	0	0	4	11	0.10
MICROTENDIPES SP.	1	0	83	224	7.79	0	0	0	0	0.00	1	0	83	224	2.04
MUNODIAMESA SP.	13	1	28	112	3.90	0	0	0	0	0.00	13	1	28	112	1.02
PARACHIRONOMUS SP.	1	0	0	3	0.10	0	0	0	0	0.00	1	0	0	3	0.03
PARACLODIPELMA SP.	8	0	14	59	2.05	0	0	0	0	0.00	8	0	14	59	0.54
PARAKIEFFERIELLA SP.	2	8	168	475	16.53	0	0	0	0	0.00	2	8	168	475	4.32
POLYPEDILUM (TRIPODURA GROUP) SP.	0	0	7	19	0.66	0	0	0	0	0.00	0	0	7	19	0.17

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TABLE 45. BENTHIC INVERTEBRATES COLLECTED IN LAKE MICHIGAN NEAR THE KEWAUNEE NUCLEAR POWER PLANT, LOCATION 17, 16 NOVEMBER 1973.

TAXA	NO 30 MESH SIEVE					NO 100 MESH SIEVE					TOTAL				
	NO PER 1/8 M2					NO PER 1/8 M2					NO PER 1/8 M2				
	REPLICATES					REPLICATES					REPLICATES				
	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%	A	B	C	MEAN/M2	%
POLYPEDILUM (FALLAX GROUP) SP.	1	0	35	96	3.34	0	0	0	0	0.00	1	0	35	96	0.57
PROCLADIJS (S.S.) SP.	1	0	3	11	0.38	0	0	0	0	0.00	1	0	3	11	0.10
PROCLADIJS (PSILOTANYPUS) SP.	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.03
PSEUDOSMITTIA SP.	0	1	3	11	0.38	0	0	0	0	0.00	0	1	3	11	0.10
STICTOCHIRONOMUS SP.	1	0	21	59	2.05	0	0	0	0	0.00	1	0	21	59	0.54
TANYTARSUS SP.	0	0	5	13	0.45	0	0	0	0	0.00	0	0	5	13	0.12
THIENEMANNIMYIA GROUP	7	1	28	96	3.34	0	0	0	0	0.00	7	1	28	96	0.57
UNIDENTIFIED CHIRONOMIDAE	0	0	0	0	0.00	39	73	44	416	5.12	39	73	44	416	3.75
TOTAL CHIRONOMIDAE	40	11	469	1390	48.36	39	73	44	416	5.12	79	84	513	1806	16.43
GASTROPODA															
VALVATA SP.	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.03
GONIJBASIS LIVESCENS	0	0	1	3	0.10	0	0	0	0	0.00	0	0	1	3	0.03
PHYSA SP.	0	0	3	8	0.28	0	0	0	0	0.00	0	0	3	8	0.07
TOTAL GASTROPODA	0	0	5	14	0.49	0	0	0	0	0.00	0	0	5	14	0.13
PELECYPODA															
SPHAERIIDAE	0	0	1	3	0.10	0	0	1	3	0.04	0	0	2	5	0.05
TOTAL PELECYPODA	0	0	1	3	0.10	0	0	1	3	0.04	0	0	2	5	0.05
TOTAL BENTHOS	230	15	831	2874	100.00	2037	246	762	8121	100.00	2267	261	1593	10994	100.00

* PRESENT

APPENDIX 9-A

Prediction tables for the
Kewaunee Nuclear Power Plant
thermal plume parameters.

TABLE 1. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
BOTTOM SLOPE = 1/200

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 20.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 5.000E-03
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 55.0 DEG.F
INTAKE TEMPERATURE 55.0 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 7.92
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.3082E-02
CRITICAL DEPTH 11.9 FEET
DEL RHO/RHO 2.0842E-03

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTEPLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
20.0	4.59	76	68	.10
19.0	4.36	89	71	.13
18.0	4.13	107	73	.16
17.0	3.90	129	77	.20
16.0	3.67	157	81	.25
15.0	3.44	194	87	.34
14.0	3.21	244	95	.46
13.0	2.98	311	105	.65
12.0	2.75	404	120	.96
11.0	2.52	537	141	1.50
10.0	2.29	734	171	2.49
9.0	2.07	1026	219	4.49
8.0	1.84	1523	295	8.88
7.0	1.61	2356	425	19.82
6.0	1.38	3110	712	43.75
5.0	1.15	4316	1170	99.80
4.0	.92	6194	1885	230.61
3.0	.69	8241	2664	433.56
2.0	.46	12303	4209	1022.74
1.0	.23	24222	8746	4183.28

UNBENT PLUME, DEPTH LIMITED FROM 76FT TO 2574FT
OR FROM 20.0F TO 4.0F

TABLE 2. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
BOTTOM SLOPE = 2/100

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 20.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 2.000E-02
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 55.0 DEG.F
INTAKE TEMPERATURE 55.0 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 7.92
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.3082E-02
CRITICAL DEPTH 11.9 FEET
DEL RHO/RHO 2.0842E-03

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
20.0	4.59	76	68	.10
19.0	4.36	86	71	.12
18.0	4.13	99	74	.15
17.0	3.90	115	78	.18
16.0	3.67	135	82	.22
15.0	3.44	159	88	.28
14.0	3.21	190	96	.36
13.0	2.98	230	105	.48
12.0	2.75	283	118	.66
11.0	2.52	354	135	.95
10.0	2.29	453	158	1.42
9.0	2.07	594	192	2.25
8.0	1.84	747	245	3.62
7.0	1.61	951	322	6.06
6.0	1.38	1255	438	10.87
5.0	1.15	1744	623	21.49
4.0	.92	2506	913	45.22
3.0	.69	3341	1230	81.19
2.0	.46	5007	1863	184.29
1.0	.23	9987	3756	740.86

UNBENT PLUME, DEPTH LIMITED FROM 76FT TO 643FT
OR FROM 20.0F TO 8.7F

TABLE 3. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
BOTTOM SLOPE = 1/100

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 20.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 55.0 DEG.F
INTAKE TEMPERATURE 55.0 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 7.92
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.3082E-02
CRITICAL DEPTH 11.9 FEET
DEL RHO/RHO 2.0842E-03

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
20.0	4.59	76	68	.10
19.0	4.36	88	71	.12
18.0	4.13	104	74	.15
17.0	3.90	123	77	.19
16.0	3.67	147	82	.24
15.0	3.44	178	87	.31
14.0	3.21	219	95	.41
13.0	2.98	273	105	.57
12.0	2.75	346	118	.81
11.0	2.52	448	137	1.22
10.0	2.29	595	164	1.93
9.0	2.07	814	204	3.29
8.0	1.84	1154	267	6.10
7.0	1.61	1512	385	11.53
6.0	1.38	1996	569	22.46
5.0	1.15	2772	864	47.32
4.0	.92	3982	1324	104.15
3.0	.69	5304	1827	191.40
2.0	.46	7941	2829	443.65
1.0	.23	15777	5808	1809.47

UNBENT PLUME, DEPTH LIMITED FROM 76FT TO 1287FT
OR FROM 20.0F TO 7.7F

TABLE 4. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
POINT BEACH INFLUENCE

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 18.2 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 56.8 DEG.F
INTAKE TEMPERATURE 55.0 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 8.18
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.3559E-02
CRITICAL DEPTH 12.2 FEET
DEL RHO/RHO 1.9542E-03

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
18.0	4.54	78	69	.11
17.0	4.29	93	72	.13
16.0	4.04	111	75	.17
15.0	3.78	134	79	.21
14.0	3.53	165	85	.28
13.0	3.28	205	92	.38
12.0	3.03	260	102	.53
11.0	2.77	336	116	.77
10.0	2.52	445	136	1.20
9.0	2.27	606	166	1.99
8.0	2.02	858	212	3.60
7.0	1.77	1272	288	7.24
6.0	1.51	1674	440	14.57
5.0	1.26	2317	684	31.31
4.0	1.01	3449	1112	75.78
3.0	.76	4784	1618	152.85
2.0	.50	7164	2519	356.42
1.0	.25	14252	5203	1464.32

UNBENT PLUME, DEPTH LIMITED FROM 76FT TO 1330FT
OR FROM 18.2F TO 6.9F

TABLE 5. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
SPRING

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 20.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 44.0 DEG.F
INTAKE TEMPERATURE 44.0 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 10.10
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.6947E-02
CRITICAL DEPTH 14.3 FEET
DELRHO/RHO 1.2823E-03

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
20.0	4.59	77	68	.10
19.0	4.36	89	70	.12
18.0	4.13	104	72	.15
17.0	3.90	122	76	.18
16.0	3.67	145	80	.23
15.0	3.44	173	85	.29
14.0	3.21	210	91	.38
13.0	2.98	259	100	.51
12.0	2.75	324	111	.71
11.0	2.52	413	127	1.04
10.0	2.29	539	149	1.59
9.0	2.07	724	181	2.60
8.0	1.84	1006	231	4.60
7.0	1.61	1460	311	8.98
6.0	1.38	1953	466	18.01
5.0	1.15	2650	719	37.67
4.0	.92	3724	1109	81.61
3.0	.69	4962	1559	152.76
2.0	.46	7431	2455	360.31
1.0	.23	14787	5125	1496.55

UNBENT PLUME, DEPTH LIMITED FROM 77FT TO 1644FT
OR FROM 20.0F TO 6.7F

TABLE 6. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
SUMMER

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 20.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 55.0 DEG.F
INTAKE TEMPERATURE 55.0 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 7.92
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.3082E-02
CRITICAL DEPTH 11.9 FEET
DEL RHO/RHO 2.0842E-03

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
20.0	4.59	76	68	.10
19.0	4.36	88	71	.12
18.0	4.13	104	74	.15
17.0	3.90	123	77	.19
16.0	3.67	147	82	.24
15.0	3.44	178	87	.31
14.0	3.21	219	95	.41
13.0	2.98	273	105	.57
12.0	2.75	346	118	.81
11.0	2.52	448	137	1.22
10.0	2.29	595	164	1.93
9.0	2.07	814	204	3.29
8.0	1.84	1154	267	6.10
7.0	1.61	1512	385	11.53
6.0	1.38	1996	569	22.46
5.0	1.15	2772	864	47.32
4.0	.92	3982	1324	104.15
3.0	.69	5304	1827	191.40
2.0	.46	7941	2829	443.65
1.0	.23	15777	5808	1809.47

UNBENT PLUME, DEPTH LIMITED FROM 76FT TO 1287FT
OR FROM 20.0F TO 7.7F

TABLE 7. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
WINTER, LOW FROUDE NUMBER

INPUT DATA-

DISCHARGE RATE 655.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 28.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 37.0 DEG.F
INTAKE TEMPERATURE 37.0 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 3.27 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 6.82
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.1013E-02
CRITICAL DEPTH 10.7 FEET
DEL RHO/RHO 1.4305E-03

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
28.0	3.27	74	68	.10
27.0	3.16	83	70	.12
26.0	3.04	94	72	.13
25.0	2.92	106	74	.16
24.0	2.81	120	77	.18
23.0	2.69	137	80	.22
22.0	2.57	157	84	.26
21.0	2.46	181	88	.32
20.0	2.34	211	94	.39
19.0	2.22	247	100	.49
18.0	2.11	292	109	.63
17.0	1.99	348	119	.82
16.0	1.87	420	132	1.10
15.0	1.75	512	149	1.52
14.0	1.64	633	172	2.16
13.0	1.52	796	202	3.19
12.0	1.40	1018	243	4.91
11.0	1.29	1224	312	7.55
10.0	1.17	1466	404	11.72
9.0	1.05	1788	528	18.65
8.0	.94	2232	698	30.80
7.0	.82	2871	943	53.50
6.0	.70	3838	1314	99.59
5.0	.58	4742	1660	155.52
4.0	.47	5921	2112	247.02
3.0	.35	7878	2863	445.47
2.0	.23	11768	4354	1011.90
1.0	.12	23221	8746	4010.21

UNBENT PLUME, DEPTH LIMITED FROM 74FT TO 1097FT
OR FROM 28.0F TO 11.7F

TABLE 8. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
WINTER, HIGH FROUDE NUMBER

INPUT DATA-

DISCHARGE RATE 655.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 28.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 34.0 DEG.F
INTAKE TEMPERATURE 34.0 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 3.27 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 7.87
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.2984E-02
CRITICAL DEPTH 11.9 FEET
DEL RHO/RHO 1.0754E-03

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
28.0	3.27	76	68	.10
27.0	3.16	84	70	.12
26.0	3.04	94	72	.14
25.0	2.92	106	74	.16
24.0	2.81	120	77	.18
23.0	2.69	136	80	.22
22.0	2.57	155	83	.26
21.0	2.46	178	87	.31
20.0	2.34	206	92	.38
19.0	2.22	240	99	.47
18.0	2.11	282	107	.60
17.0	1.99	335	116	.77
16.0	1.87	401	128	1.02
15.0	1.75	486	144	1.39
14.0	1.64	597	164	1.94
13.0	1.52	744	192	2.82
12.0	1.40	944	228	4.27
11.0	1.29	1222	280	6.77
10.0	1.17	1452	367	10.54
9.0	1.05	1756	483	16.76
8.0	.94	2172	641	27.51
7.0	.82	2763	866	47.27
6.0	.70	3648	1202	86.64
5.0	.58	4496	1525	135.41
4.0	.47	5614	1950	216.26
3.0	.35	7472	2657	392.15
2.0	.23	11167	4063	896.03
1.0	.12	22074	8212	3579.64

UNBENT PLUME, DEPTH LIMITED FROM 76FT TO 1278FT
OR FROM 28.0F TO 10.8F

TABLE 9. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
STRONG THERMAL STRATIFICATION

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 12.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 55.0 DEG.F
INTAKE TEMPERATURE 47.0 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 10.96
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.8382E-02
CRITICAL DEPTH 15.2 FEET
DEL RHO/RHO 1.0898E-03

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
12.0	4.59	78	67	.10
11.0	4.21	99	71	.14
10.0	3.82	129	76	.20
9.0	3.44	172	83	.29
8.0	3.06	237	95	.45
7.0	2.68	342	113	.77
6.0	2.29	522	143	1.49
5.0	1.91	861	202	3.44
4.0	1.53	1585	326	10.22
3.0	1.15	2538	663	33.25
2.0	.76	4167	1240	102.09
1.0	.38	8322	2711	445.59

UNBENT PLUME, DEPTH LIMITED FROM 78FT TO 1779FT
OR FROM 12.0F TO 3.8F

TABLE 10. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
WEAK THERMAL STRATIFICATION

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 16.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 45.0 DEG.F
INTAKE TEMPERATURE 41.0 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 11.63
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.9468E-02
CRITICAL DEPTH 15.9 FEET
DEL RHO/RHO 9.6820E-04

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
16.0	4.59	78	67	.10
15.0	4.30	93	69	.13
14.0	4.02	113	73	.16
13.0	3.73	138	77	.21
12.0	3.44	171	82	.28
11.0	3.16	216	90	.39
10.0	2.87	280	101	.56
9.0	2.58	372	116	.86
8.0	2.29	511	139	1.41
7.0	2.01	732	177	2.57
6.0	1.72	1110	240	5.28
5.0	1.43	1816	359	12.88
4.0	1.15	2599	630	32.38
3.0	.86	3824	1055	79.72
2.0	.57	5731	1717	194.36
1.0	.29	11431	3694	833.83

UNBENT PLUME, DEPTH LIMITED FROM 78FT TO 1882FT
OR FROM 16.0F TO 4.9F

TABLE 11. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
LOW AMBIENT CURRENT

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 20.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED .25 FPS
AMBIENT TEMPERATURE 55.0 DEG.F
INTAKE TEMPERATURE 55.0 DEG.F
WIND SPEED 12.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 7.92
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.3082E-02
CRITICAL DEPTH 11.9 FEET
DEL RHO/RHO 2.0842E-03

EXCESS TEMPERATURE (DEG F)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
20.0	83	51	.08
19.0	102	54	.11
18.0	126	57	.14
17.0	159	62	.20
16.0	203	68	.27
15.0	262	76	.40
14.0	346	88	.60
13.0	465	104	.97
12.0	641	129	1.64
11.0	908	166	2.99
10.0	1329	225	5.92
9.0	2024	322	12.88
8.0	2814	448	24.94
7.0	3668	606	43.89
6.0	4972	846	83.11
5.0	7102	1239	173.79
4.0	10894	1938	417.00
3.0	18390	3321	1206.29
2.0	33939	6196	4152.49
1.0	49886	9165	9028.09

BENT PLUME WHICH IS DEPTH LIMITED

TABLE 12. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
HIGH AMBIENT CURRENT

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 20.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED .40 FPS
AMBIENT TEMPERATURE 55.0 DEG.F
INTAKE TEMPERATURE 55.0 DEG.F
WIND SPEED 20.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 7.92
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.3082E-02
CRITICAL DEPTH 11.9 FEET
DEL RHO/RHO 2.0842E-03

EXCESS TEMPERATURE (DEG F)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
20.0	83	49	.08
19.0	102	51	.10
18.0	126	54	.14
17.0	159	57	.18
16.0	203	62	.25
15.0	262	69	.36
14.0	346	78	.54
13.0	465	92	.85
12.0	641	112	1.42
11.0	908	142	2.55
10.0	1329	189	4.97
9.0	2023	267	10.68
8.0	2811	382	21.22
7.0	3660	538	38.95
6.0	4952	777	76.04
5.0	7046	1164	162.05
4.0	10709	1842	389.70
3.0	17629	3126	1088.26
2.0	29942	5422	3205.88
1.0	37755	6922	5160.90

BENT PLUME WHICH IS DEPTH LIMITED

TABLE 13. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
LOW AMBIENT CURRENT, STRONG STRATIFICATION

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 12.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED .25 FPS
AMBIENT TEMPERATURE 55.0 DEG.F
INTAKE TEMPERATURE 47.0 DEG.F
WIND SPEED 12.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 10.96
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.8382E-02
CRITICAL DEPTH 15.2 FEET
DEL RHO/RHO 1.0898E-03

EXCESS TEMPERATURE (DEG F)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
12.0	83	50	.08
11.0	117	55	.13
10.0	172	62	.21
9.0	262	74	.39
8.0	421	94	.79
7.0	718	133	1.89
6.0	1330	212	5.59
5.0	2598	383	19.69
4.0	4052	633	50.65
3.0	7158	1166	164.84
2.0	15677	2629	813.87
1.0	48581	8286	7948.50

BENT PLUME WHICH IS DEPTH LIMITED

TABLE 14. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
100% POWER OUTPUT

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 20.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 55.0 DEG.F
INTAKE TEMPERATURE 55.0 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 7.92
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.3082E-02
CRITICAL DEPTH 11.9 FEET
DEL RHO/RHO 2.0842E-03

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
20.0	4.59	76	68	.10
19.0	4.36	88	71	.12
18.0	4.13	104	74	.15
17.0	3.90	123	77	.19
16.0	3.67	147	82	.24
15.0	3.44	178	87	.31
14.0	3.21	219	95	.41
13.0	2.98	273	105	.57
12.0	2.75	346	118	.81
11.0	2.52	448	137	1.22
10.0	2.29	595	164	1.93
9.0	2.07	814	204	3.29
8.0	1.84	1154	267	6.10
7.0	1.61	1512	385	11.53
6.0	1.38	1996	569	22.46
5.0	1.15	2772	864	47.32
4.0	.92	3982	1324	104.15
3.0	.69	5304	1827	191.40
2.0	.46	7941	2829	443.65
1.0	.23	15777	5808	1809.47

UNBENT PLUME, DEPTH LIMITED FROM 76FT TO 1287FT
OR FROM 20.0F TO 7.7F

TABLE 15. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
80% POWER OUTPUT

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 3.300E+09 BTU/HR.
INITIAL TEMPERATURE RISE 16.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 55.0 DEG.F
INTAKE TEMPERATURE 55.0 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 9.15
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.5302E-02
CRITICAL DEPTH 13.3 FEET
DELRHD/RHD 1.5619E-03

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
16.0	4.59	77	68	.10
15.0	4.30	92	71	.13
14.0	4.02	113	75	.17
13.0	3.73	139	79	.22
12.0	3.44	175	86	.30
11.0	3.16	225	95	.42
10.0	2.87	296	108	.63
9.0	2.58	400	126	1.00
8.0	2.29	561	155	1.73
7.0	2.01	822	202	3.29
6.0	1.72	1278	284	7.19
5.0	1.43	1819	461	16.57
4.0	1.15	2672	778	41.07
3.0	.86	4006	1273	100.76
2.0	.57	6001	2015	238.80
1.0	.29	11948	4225	997.01

UNBENT PLUME, DEPTH LIMITED FROM 77FT TO 1491FT
OR FROM 16.0F TO 5.7F

TABLE 16. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
50% POWER OUTPUT

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 2.060E+09 BTU/HR
INITIAL TEMPERATURE RISE 10.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 55.0 DEG.F
INTAKE TEMPERATURE 55.0 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 12.24
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 2.0446E-02
CRITICAL DEPTH 16.5 FEET
DFLRHD/RHD 8.7330E-04

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
10.0	4.59	79	66	.10
9.0	4.13	104	71	.15
8.0	3.67	143	77	.22
7.0	3.21	204	87	.35
6.0	2.75	308	104	.64
5.0	2.29	501	136	1.35
4.0	1.84	908	203	3.65
3.0	1.38	1954	375	14.51
2.0	.92	3513	905	62.83
1.0	.46	7012	2095	290.13

UNBENT PLUME, DEPTH LIMITED FROM 79FT TO 1976FT
OR FROM 10.0F TO 3.0F

TABLE 17. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
80% DISCHARGE FLOW RATE

INPUT DATA-

DISCHARGE RATE 734.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 3.300E+09 BTU/HR
INITIAL TEMPERATURE RISE 20.0 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 55.0 DEG.F
INTAKE TEMPERATURE 55.0 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 3.67 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 6.34
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.0069E-02
CRITICAL DEPTH 10.1 FEET
DELRHO/RHO 2.0842E-03

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
20.0	3.67	74	68	.10
19.0	3.49	87	70	.12
18.0	3.30	103	73	.15
17.0	3.12	123	77	.19
16.0	2.94	149	82	.24
15.0	2.75	183	88	.32
14.0	2.57	227	96	.44
13.0	2.39	287	107	.61
12.0	2.20	368	123	.90
11.0	2.02	484	144	1.38
10.0	1.83	653	175	2.27
9.0	1.65	909	223	4.01
8.0	1.47	1173	311	7.21
7.0	1.28	1518	443	13.29
6.0	1.10	2043	644	26.02
5.0	.92	2905	974	55.90
4.0	.73	4266	1495	126.03
3.0	.55	5681	2037	228.59
2.0	.37	8496	3115	522.77
1.0	.18	16830	6307	2096.22

UNBENT PLUME, DEPTH LIMITED FROM 74FT TO 1011FT
DP FROM 20.0F TO 8.7F

TABLE 18. KEWAUNEE NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
RECIRCULATION

INPUT DATA-

DISCHARGE RATE 918.0 CFS
DEPTH OF DISCHARGE 5.0 FEET
WIDTH OF DISCHARGE 40.0 FEET
HEAT REJECTION RATE 4.120E+09 BTU/HR
INITIAL TEMPERATURE RISE 22.5 DEG.F
DEPTH OF WATER 5.0 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED 0.00 FPS
AMBIENT TEMPERATURE 55.0 DEG.F
INTAKE TEMPERATURE 57.5 DEG.F
WIND SPEED 0.0 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 4.59 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 7.33
ASPECT RATIO .13
RATE OF VERTICAL GROWTH 1.1975E-02
CRITICAL DEPTH 11.2 FEET
DEL RHO/RHO 2.4352E-03

EXCESS TEMPERATURE (DEG F)	EXCESS SPEED (FT/S)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
22.0	4.49	80	69	.11
21.0	4.28	93	72	.13
20.0	4.08	107	74	.16
19.0	3.88	125	78	.19
18.0	3.67	148	82	.24
17.0	3.47	176	87	.30
16.0	3.26	211	94	.39
15.0	3.06	257	102	.52
14.0	2.86	317	113	.71
13.0	2.65	397	128	1.01
12.0	2.45	505	148	1.48
11.0	2.24	658	176	2.30
10.0	2.04	878	217	3.77
9.0	1.84	1177	282	6.50
8.0	1.63	1463	391	11.31
7.0	1.43	1871	547	20.24
6.0	1.22	2486	783	38.45
5.0	1.02	3479	1162	79.88
4.0	.82	4662	1615	148.73
3.0	.61	6208	2206	270.55
2.0	.41	9286	3384	620.56
1.0	.20	18403	6871	2497.03

UNBENT PLUME, DEPTH LIMITED FROM 75FT TO 1185FT
OR FROM 22.5F TO 9.1F

TABLE 19. POINT BEACH NUCLEAR POWER PLANT
THERMAL PLUME PARAMETERS
SUMMER

INPUT DATA-

DISCHARGE RATE 872.0 CFS
DEPTH OF DISCHARGE 13.8 FEET
WIDTH OF DISCHARGE 35.1 FEET
HEAT REJECTION RATE 2.580E+08 BTU/HR
INITIAL TEMPERATURE RISE 13.1 DEG.F
DEPTH OF WATER 13.8 FEET
BOTTOM SLOPE 1.000E-02
AMBIENT CURRENT SPEED .22 FPS
AMBIENT TEMPERATURE 55.4 DEG.F
INTAKE TEMPERATURE 55.4 DEG.F
WIND SPEED 3.4 MPH

CALCULATED PARAMETERS-

DISCHARGE VELOCITY 1.80 FPS
INITIAL DENSIMETRIC FROUDE NUMBER 2.42
ASPECT RATIO .39
RATE OF VERTICAL GROWTH 2.7620E-03
CRITICAL DEPTH 10.1 FEET
DELRHO/RHO 1.2464E-03

EXCESS TEMPERATURE (DEG F)	CENTERLINE DISTANCE (FT)	MAXIMUM WIDTH (FT)	ISOTHERM AREA (ACRES)
13.0	75	40	.06
12.0	103	42	.09
11.0	146	45	.13
10.0	214	49	.21
9.0	327	57	.37
8.0	524	71	.74
7.0	894	96	1.71
6.0	1653	148	4.85
5.0	2698	261	13.96
4.0	4166	472	38.88
3.0	7143	901	127.14
2.0	13855	1874	512.79
1.0	23008	3237	1471.08

BENT PLUME WHICH IS DEPTH LIMITED

