APPENDIX A

WATER QUALITY VARIABLES MEASURED DURING BIOLOGICAL SAMPLING IN THE NANTICOKE RIVER BETWEEN JULY 1988 AND OCTOBER 1989 BY DATE, STATION, TIDE, AND DEPTH

Date	Station	Tide	Depth (m)	Temperature (C)	DO (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)
14JUL88	1C	High Slack	0.0	28.43	6.90	7.61	17.50	10.1
14JUL88	1C	High Slack	2.0	28.41	6.80	7.58	17.50	10.1
14JUL88	1C	High Slack	5.5	28.37	6.80	7.55	17.50	10.1
14JUL88	1C	Low Slack	0.0	27.61	5.60	7.20	14.40	8.0
14JUL88	1C	Low Slack	2.0	27.44	5.80	7.20	14.80	8.4
14JUL88	1C	Low Slack	5.3	27.53	6.20	7.28	15.60	8.8
14JUL88	2C	High Slack	0.0	27.93	5.70	7.24	14.67	8.2
14JUL88	2C	High Slack	3.0	27.92	5.70	7.22	14.68	8.2
14JUL88	2C	High Slack	6.0	27.91	5.70	7.21	14.68	8.2
14JUL88	2C	Low Slack	0.0	27.66	5.70	7.13	10.72	5.8
14JUL88	2C	Low Slack	2.0	27.49	5.40	7.09	10.77	5.8
14JUL88	2C	Low Slack	4.0	27.46	5.30	7.08	10.86	5.8
14JUL88	2C	Low Slack	6.0	27.45	5.50	7.10	10.91	5.9
14JUL88	3C	High Slack	0.0	28.24	6.30	7.24	10.61	5.7
14JUL88	3C	High Slack	3.0	28.07	6.10	7.20	12.00	6.4
14JUL88	3C	High Slack	6.0	28.08	6.10	7.20	12.05	6.6
14JUL88	3C	High Slack	9.0	28.06	6.00	7.19	12.08	6.6
14JUL88	3C	High Slack	12.4	28.05	6.00	7.20	12.10	6.6
14JUL88	3C	Low Slack	0.0	27.60	5.75	7.07	8.62	4.5
14JUL88	3C	Low Slack	2.0	27.46	5.30	7.04	8.62	4.5
14JUL88	3C	Low Slack	5.0	27.48	5.28	7.04	8.71	4.5
14JUL88	3C	Low Slack	8.0	27.49	5.31	7.04	8.72	4.5
14JUL88	3C	Low Slack	11.0	27.49	5.33	7.08	8.74	4.5
14JUL88	4C	High Slack	0.0	28.21	6.09	7.16	9.08	4.7
14JUL88	4C	High Slack	2.0	28.19	6.16	7.15	9.05	4.7
14JUL88	4C	High Slack	5.0	28.14	5.99	7.13	9.11	4.8
14JUL88	4C	High Slack	8.0	28.12	6.09	7.14	9.05	4.8
14JUL88	4C	Low Slack	0.0	27.58	5.49	6.96	5.58	2.6
14JUL88	4C	Low Slack	2.0	27.55	5.47	6.96	5.64	2.7
14JUL88	4C	Low Slack	4.0	27.55	5.47	6.96	5.64	2.7
14JUL88	4C	Low Slack	6.0	27.56	5.51	6.97	5.69	2.7
14JUL88	4C	Low Slack	8.0	27.55	5.43	7.03	5.72	2.7
14JUL88	5C	High Slack	0.0	28.44	6.88	7.16	5.64	2.7
14JUL88	5C	High Slack	3.0	28.24	6.21	7.08	5.92	2.8
14JUL88	5C	High Slack	5.0	28.17	6.03	7.10	5.92	2.8
14JUL88	5C	Low Slack	0.0	27.77	5.98	6.93	2.88	1.0
14JUL88	5C	Low Slack	2.0	27.62	5.75	6.91	3.03	1.1
14JUL88	5C	Low Slack	4.0	27.62	5.79	6.92	3.13	1.2
14JUL88	5C	Low Slack	6.0	27.62	5.87	6.94	3.17	1.2
28JUL88	1C	Flood	0.0	27.55	5.66	7.22	14.61	8.2
28JUL88	1C	Flood	13.0	27.48	5.65	7.22	14.74	8.3
28JUL88	2C	Flood	0.0	27.58	6.42	7.14	9.73	5.1
28JUL88	2C	Flood	4.2	27.43	5.54	7.05	10.04	5.3
28JUL88	3C	Low Slack	0.0	27.53	6.27	7.18	6.90	3.4
28JUL88	3C	Low Slack	5.0	27.45	5.79	7.06	7.31	3.8
28JUL88	4C	Low Slack	0.0	27.44	5.79	7.03	4.23	1.8
28JUL88	4C	Low Slack	7.1	27.44	5.67	6.98	4.30	1.9
28JUL88	5C	Ebb	0.0	27.58	6.06	6.94	2.03	0.5
28JUL88	5C	Ebb	7.5	27.57	5.91	6.95	2.17	0.7
08AUG88	1C	High Slack	0.0	30.40	7.80	7.80	15.70	8.9
08AUG88	1C	High Slack	5.0	29.80	6.20	7.40	16.00	9.1
08AUG88	1C	High Slack	10.0	29.70	6.10	7.40	16.20	9.3
08AUG88	1C	High Slack	15.0	29.60	5.90	7.40	16.40	9.5
08AUG88	2C	Flood	0.0	30.30	6.30	7.30	13.00	7.2

Date	Station	Tide	Depth (m)	Temperature (C)	DO (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)
08AUG88	2C	Flood	3.0	30.20	6.30	7.30	13.20	7.3
08AUG88	2C	Flood	6.2	29.80	5.50	7.20	13.80	7.7
08AUG88	3C	Flood	0.0	30.90	6.70	7.30	9.60	4.9
08AUG88	3C	Flood	3.0	30.00	5.60	7.10	9.90	5.2
08AUG88	3C	Flood	7.0	29.80	5.40	7.20	10.30	5.5
08AUG88	3C	Flood	11.6	29.80	5.40	7.10	10.52	5.6
08AUG88	4C	Flood	0.0	30.00	6.30	7.10	6.77	3.3
08AUG88	4C	Flood	4.0	29.90	5.90	7.10	6.85	3.4
08AUG88	4C	Flood	8.7	29.80	5.70	7.00	6.96	3.5
08AUG88	5C	Flood	0.0	30.00	7.00	7.10	2.66	0.9
08AUG88	5C	Flood	3.0	29.80	5.50	7.00	2.77	1.0
08AUG88	5C	Flood	7.5	29.60	5.20	7.00	2.88	1.0
23AUG88	1C	Ebb	0.0	25.76	7.31	7.82	17.30	10.0
23AUG88	1C	Ebb	3.0	25.32	6.43	7.66	18.50	10.7
23AUG88	1C	Ebb	6.0	25.16	6.33	7.61	18.70	10.9
23AUG88	1C	Ebb	9.0	25.15	5.90	7.59	19.00	11.1
23AUG88	1C	Ebb	12.7	25.15	5.97	7.57	19.10	11.1
23AUG88	2C	High Slack	0.0	26.00	6.71	7.60	14.02	7.8
23AUG88	2C	High Slack	3.0	25.66	6.09	7.46	16.00	9.1
23AUG88	2C	High Slack	6.3	25.59	5.56	7.42	16.10	9.2
23AUG88	3C	Flood	0.0	25.86	5.56	7.41	11.94	6.3
23AUG88	3C	Flood	3.0	25.66	5.35	7.37	12.36	6.8
23AUG88	3C	Flood	7.0	25.66	5.40	7.37	12.37	6.8
23AUG88	3C	Flood	10.8	25.64	5.35	7.35	12.35	6.8
23AUG88	4C	Flood	0.0	25.72	5.93	7.36	8.60	4.5
23AUG88	4C	Flood	2.0	25.69	5.89	7.35	8.65	4.5
23AUG88	4C	Flood	5.0	25.69	5.85	7.34	8.69	4.5
23AUG88	4C	Flood	8.2	25.69	5.83	7.33	8.67	4.5
23AUG88	5C	Flood	0.0	26.03	6.28	7.37	4.64	2.1
23AUG88	5C	Flood	2.0	26.00	6.02	7.36	4.65	2.1
23AUG88	5C	Flood	5.3	25.91	5.58	7.35	4.76	2.2
20OCT88	1C	Flood	0.0	14.05	8.43	7.74	18.60	10.8
20OCT88	1C	Flood	2.0	14.09	8.46	7.74	18.60	10.9
20OCT88	1C	Flood	5.0	14.14	8.59	7.72	18.30	10.8
20OCT88	2C	Flood	0.0	14.26	8.65	7.68	17.00	9.7
20OCT88	2C	Flood	3.0	14.13	8.58	7.65	17.20	9.9
20OCT88	2C	Flood	7.0	14.12	8.81	7.62	17.20	9.9
20OCT88	3C	Flood	0.0	14.35	8.43	7.56	13.72	7.6
20OCT88	3C	Flood	3.0	14.22	8.39	7.55	14.12	7.9
20OCT88	3C	Flood	6.0	14.19	8.47	7.55	14.28	8.0
20OCT88	3C	Flood	9.0	14.13	8.53	7.53	14.38	8.1
20OCT88	3C	Flood	12.6	14.15	8.81	7.51	14.34	8.0
20OCT88	4C	High Slack	0.0	14.35	8.42	7.74	11.37	6.2
20OCT88	4C	High Slack	3.0	14.29	8.40	7.46	11.45	6.2
20OCT88	4C	High Slack	6.0	14.24	8.39	7.44	11.67	6.3
20OCT88	4C	High Slack	9.7	14.17	8.64	7.42	11.81	6.4
20OCT88	5C	High Slack	0.0	14.60	8.60	7.35	7.56	3.8
20OCT88	5C	High Slack	5.0	14.47	8.48	7.34	7.77	4.0
20OCT88	5C	High Slack	8.0	14.42	8.46	7.33	8.00	4.1
15MAR89	5C	High Slack	0.0	6.04	12.35	7.65	0.52	0.0
15MAR89	5C	High Slack	3.0	5.72	12.49	7.60	0.69	0.0
15MAR89	5C	High Slack	6.0	5.69	12.80	7.56	0.73	0.0
16MAR89	1C	Flood	0.0	5.84	11.85	7.62	13.36	7.5
16MAR89	1C	Flood	6.0	5.79	11.78	7.47	13.84	7.7

Date	Station	Tide	Depth (m)	Temperature (C)	DO (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)
16MAR89	1C	Flood	12.0	5.80	11.97	7.19	13.850	7.7
16MAR89	2C	Flood	0.0	6.00	12.10	7.23	7.470	3.8
16MAR89	2C	Flood	4.4	5.91	12.39	6.99	8.390	4.3
16MAR89	3C	Flood	0.0	6.52	12.00	7.20	3.730	1.5
16MAR89	3C	Flood	5.0	6.25	12.10	7.09	4.130	1.8
16MAR89	3C	Flood	10.7	6.18	12.52	6.82	4.240	1.8
16MAR89	4C	Flood	0.0	6.78	12.19	7.03	1.450	0.2
16MAR89	4C	Flood	3.5	6.63	12.24	6.96	1.560	0.3
16MAR89	4C	Flood	7.6	6.59	12.57	6.81	1.560	0.3
04APR89	1C	Ebb	0.0	14.07	9.44	7.73	7.480	3.8
04APR89	1C	Ebb	6.0	14.11	9.43	7.69	7.550	3.8
04APR89	1C	Ebb	12.0	13.96	9.44	7.62	7.710	3.9
04APR89	2C	Ebb	0.0	14.25	9.34	7.32	4.050	1.7
04APR89	2C	Ebb	3.0	14.17	9.39	7.25	4.120	1.8
04APR89	2C	Ebb	5.9	14.17	9.64	7.04	4.200	1.8
04APR89	3C	High Slack	0.0	14.52	9.35	7.23	0.641	0.0
04APR89	3C	High Slack	5.0	14.48	9.35	7.16	0.666	0.0
04APR89	3C	High Slack	11.3	14.47	9.63	7.01	0.681	0.0
04APR89	4C	Flood	0.0	15.08	8.72	6.82	0.171	0.0
04APR89	4C	Flood	4.0	15.07	8.79	6.76	0.171	0.0
04APR89	4C	Flood	9.6	15.09	9.12	6.66	0.168	0.0
04APR89	5C	Flood	0.0	15.03	8.28	6.77	0.132	0.0
04APR89	5C	Flood	4.0	15.04	8.29	6.76	0.132	0.0
04APR89	5C	Flood	7.3	15.01	8.62	6.70	0.130	0.0
18APR89	1C	Low Slack	0.0	14.33	8.82	7.14	1.670	0.4
18APR89	1C	Low Slack	7.5	14.16	8.86	7.12	1.940	0.5
18APR89	1C	Low Slack	15.0	14.17	8.91	7.03	2.000	0.6
18APR89	2C	Flood	0.0	14.92	8.68	6.93	0.301	0.0
18APR89	2C	Flood	2.0	14.70	8.63	6.85	0.307	0.0
18APR89	2C	Flood	4.0	14.51	8.67	6.68	0.316	0.0
18APR89	3C	Flood	0.0	15.02	8.52	6.98	0.271	0.0
18APR89	3C	Flood	5.0	14.72	8.45	6.97	0.251	0.0
18APR89	3C	Flood	10.0	14.73	8.42	6.95	0.236	0.0
18APR89	4C	Flood	0.0	15.12	8.38	6.84	0.215	0.0
18APR89	4C	Flood	4.0	15.13	8.38	6.83	0.216	0.0
18APR89	4C	Flood	9.0	15.10	8.39	6.81	0.217	0.0
18APR89	5C	Flood	0.0	15.35	8.87	6.76	0.145	0.0
18APR89	5C	Flood	4.0	15.17	8.43	6.82	0.144	0.0
18APR89	5C	Flood	7.0	15.18	8.53	6.79	0.144	0.0
03MAY89	1C	Flood	0.0	18.12	8.42	7.09	3.300	1.3
03MAY89	1C	Flood	7.0	17.89	8.43	7.09	3.860	1.6
03MAY89	1C	Flood	15.0	17.81	8.43	7.09	4.150	1.8
03MAY89	2C	Flood	0.0	18.25	8.34	6.85	1.300	0.1
03MAY89	2C	Flood	3.5	18.23	8.45	6.85	1.358	0.2
03MAY89	2C	Flood	7.0	18.20	8.77	6.90	1.311	0.2
03MAY89	3C	High Slack	0.0	18.45	8.11	6.71	0.368	0.0
03MAY89	3C	High Slack	5.5	18.37	8.29	6.71	0.403	0.0
03MAY89	3C	High Slack	11.0	18.17	8.23	6.76	0.576	0.0
03MAY89	4C	Ebb	0.0	17.78	7.36	6.64	0.134	0.0
03MAY89	4C	Ebb	4.0	17.78	7.27	6.61	0.133	0.0
03MAY89	4C	Ebb	8.2	17.75	7.28	6.68	0.133	0.0
03MAY89	5C	Flood	0.0	17.73	7.59	6.44	0.177	0.0
03MAY89	5C	Flood	4.0	17.59	7.55	6.40	0.108	0.0
03MAY89	5C	Flood	8.0	17.07	6.99	6.35	0.108	0.0

Date	Station	Tide	Depth (m)	Temperature (C)	DO (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)
17MAY89	1C	Flood	0.0	17.81	7.32	6.83	2.620	0.9
17MAY89	1C	Flood	5.5	17.81	7.35	6.88	2.640	0.9
17MAY89	1C	Flood	11.0	17.81	7.42	6.81	2.590	0.9
18MAY89	2C	Ebb	0.0	17.87	6.91	6.85	1.028	0.0
18MAY89	2C	Ebb	3.0	17.84	6.92	6.83	1.044	0.0
18MAY89	2C	Ebb	5.8	17.85	7.01	6.75	1.121	0.0
18MAY89	3C	Ebb	0.0	18.00	6.83	6.76	0.224	0.0
18MAY89	3C	Ebb	5.0	17.96	6.84	6.72	0.224	0.0
18MAY89	3C	Ebb	10.0	17.95	6.95	6.66	0.224	0.0
18MAY89	4C	Flood	0.0	18.54	6.65	6.69	0.166	0.0
18MAY89	4C	Flood	5.0	18.32	6.62	6.69	0.165	0.0
18MAY89	4C	Flood	9.8	18.26	6.66	6.63	0.164	0.0
18MAY89	5C	Low Slack	0.0	18.31	6.51	6.58	0.116	0.0
18MAY89	5C	Low Slack	3.5	18.05	6.50	6.60	0.117	0.0
18MAY89	5C	Low Slack	7.8	17.88	6.59	6.61	0.116	0.0
07JUN89	1C	Ebb	0.0	25.85	6.11	6.96	8.740	4.6
07JUN89	1C	Ebb	7.0	25.83	6.05	6.94	8.950	4.7
07JUN89	1C	Ebb	15.3	25.81	6.12	6.92	8.930	4.6
07JUN89	2C	Ebb	0.0	25.94	5.78	6.78	4.170	1.8
07JUN89	2C	Ebb	3.0	25.93	5.74	6.80	4.220	1.8
07JUN89	2C	Ebb	6.1	25.92	5.82	6.88	4.280	1.9
07JUN89	3C	Ebb	0.0	26.21	6.14	6.75	2.080	0.6
07JUN89	3C	Ebb	5.0	25.97	5.76	6.80	1.990	0.5
07JUN89	3C	Ebb	10.4	25.98	5.87	6.95	2.000	0.6
08JUN89	4C	High Slack	0.0	25.59	5.61	6.59	1.650	0.3
08JUN89	4C	High Slack	4.0	25.58	5.64	6.58	1.690	0.4
08JUN89	4C	High Slack	8.5	25.57	5.75	6.58	1.690	0.4
08JUN89	5C	High Slack	0.0	25.54	5.22	6.49	0.478	0.0
08JUN89	5C	High Slack	4.0	25.53	5.20	6.50	0.494	0.0
08JUN89	5C	High Slack	8.5	25.53	5.33	6.53	0.556	0.0
10JUL89	1C	High Slack	0.0	28.12	6.62	7.26	5.590	2.7
10JUL89	1C	High Slack	8.0	27.54	5.76	7.18	6.980	3.5
10JUL89	1C	High Slack	15.9	27.50	5.66	7.16	7.280	3.7
10JUL89	2C	High Slack	0.0	28.06	5.58	6.88	2.860	1.0
10JUL89	2C	High Slack	2.5	27.62	5.13	6.85	2.990	1.1
10JUL89	2C	High Slack	5.3	27.64	5.35	6.85	3.090	1.2
10JUL89	3C	Ebb	0.0	28.20	5.75	6.75	1.120	0.1
10JUL89	3C	Ebb	5.0	27.80	5.24	6.69	1.250	0.1
10JUL89	3C	Ebb	10.5	27.82	5.34	6.73	1.250	0.1
10JUL89	4C	Ebb	0.0	28.31	6.29	6.60	0.389	0.0
10JUL89	4C	Ebb	4.5	28.05	5.88	6.59	0.395	0.0
10JUL89	4C	Ebb	9.3	28.02	5.90	6.60	0.397	0.0
10JUL89	5C	Ebb	0.0	27.95	6.66	6.53	0.166	0.0
10JUL89	5C	Ebb	3.5	27.78	6.37	6.52	0.166	0.0
10JUL89	5C	Ebb	7.0	27.77	6.39	6.57	0.170	0.0
25JUL89	1C	Flood	0.0	28.98	5.76	6.93	5.590	2.7
25JUL89	1C	Flood	7.5	28.99	5.61	6.94	6.660	3.3
25JUL89	1C	Flood	15.0	29.03	5.67	6.90	6.890	3.4
25JUL89	2C	High Slack	0.0	28.98	5.33	6.69	2.620	0.9
25JUL89	2C	High Slack	2.5	28.85	4.85	6.67	3.320	1.3
25JUL89	2C	High Slack	5.0	28.88	5.07	6.67	3.510	1.4
25JUL89	3C	High Slack	0.0	29.86	6.67	6.71	1.650	0.3
25JUL89	3C	High Slack	6.0	28.66	4.83	6.60	1.780	0.4
25JUL89	3C	High Slack	12.1	28.64	4.81	6.62	1.780	0.4

Date	Station	Tide	Depth (m)	Temperature (C)	DO (ppm)	pH	Conductivity (mmhos/cm)	Salinity (ppt)
25JUL89	4C	Ebb	0.0	29.01	6.75	6.69	0.638	0.0
25JUL89	4C	Ebb	5.0	28.70	6.27	6.65	0.671	0.0
25JUL89	4C	Ebb	10.0	28.67	6.19	6.75	0.680	0.0
25JUL89	5C	Ebb	0.0	29.04	9.64	6.88	0.205	0.0
25JUL89	5C	Ebb	3.5	28.54	8.18	6.82	0.209	0.0
25JUL89	5C	Ebb	7.6	28.50	8.01	6.92	0.210	0.0
08AUG89	1C	High Slack	0.0	26.68	5.77	6.74	2.620	0.9
08AUG89	1C	High Slack	8.0	26.63	5.43	6.69	3.410	1.3
08AUG89	1C	High Slack	16.0	26.63	5.58	6.62	3.570	1.5
08AUG89	2C	Ebb	0.0	26.96	5.48	6.59	0.981	0.0
08AUG89	2C	Ebb	2.5	26.74	4.90	6.58	1.013	0.0
08AUG89	2C	Ebb	5.0	26.69	4.98	6.61	1.015	0.0
08AUG89	3C	Ebb	0.0	26.93	7.37	6.70	0.245	0.0
08AUG89	3C	Ebb	5.0	26.69	6.42	6.72	0.244	0.0
08AUG89	3C	Ebb	10.5	26.73	6.59	6.93	0.246	0.0
08AUG89	4C	Ebb	0.0	26.76	7.55	6.58	0.144	0.0
08AUG89	4C	Ebb	4.0	26.48	6.59	6.60	0.143	0.0
08AUG89	4C	Ebb	8.3	26.48	6.53	6.77	0.142	0.0
09AUG89	5C	Flood	0.0	25.61	6.33	6.37	0.128	0.0
09AUG89	5C	Flood	3.5	25.60	6.43	6.39	0.128	0.0
09AUG89	5C	Flood	7.3	25.56	6.52	6.43	0.126	0.0
22AUG89	1C	Ebb	0.0	25.17	5.48	6.81	2.420	0.8
22AUG89	1C	Ebb	4.5	25.07	5.39	6.84	2.550	0.9
22AUG89	1C	Ebb	9.2	25.06	5.53	6.90	2.740	1.0
22AUG89	2C	Ebb	0.0	24.94	4.98	6.59	0.813	0.0
22AUG89	2C	Ebb	2.5	24.84	4.91	6.58	0.813	0.0
22AUG89	2C	Ebb	5.8	24.81	4.92	6.66	0.796	0.0
22AUG89	3C	Ebb	0.0	24.79	4.92	6.47	0.219	0.0
22AUG89	3C	Ebb	4.5	24.74	4.93	6.48	0.236	0.0
22AUG89	3C	Ebb	9.2	24.69	4.93	6.55	0.251	0.0
22AUG89	4C	Ebb	0.0	24.54	4.74	6.32	0.128	0.0
22AUG89	4C	Ebb	4.0	24.53	4.66	6.30	0.128	0.0
22AUG89	4C	Ebb	8.8	24.55	4.78	6.51	0.127	0.0
22AUG89	5C	Ebb	0.0	24.41	4.68	6.30	0.114	0.0
22AUG89	5C	Ebb	4.0	24.38	4.69	6.30	0.114	0.0
22AUG89	5C	Ebb	8.5	24.38	4.72	6.30	0.114	0.0
18OCT89	1C	Flood	0.0	19.01	7.70	7.10	5.870	2.8
18OCT89	1C	Flood	5.5	19.03	7.74	7.07	5.820	2.8
18OCT89	1C	Flood	11.0	19.10	8.40	7.73	5.820	2.8
18OCT89	2C	Flood	0.0	18.91	7.96	6.98	2.330	0.7
18OCT89	2C	Flood	3.0	18.93	7.90	6.97	2.400	0.8
18OCT89	2C	Flood	6.0	18.95	8.39	6.96	2.660	0.9
18OCT89	3C	Flood	0.0	18.89	7.64	6.88	0.666	0.0
18OCT89	3C	Flood	5.5	18.89	7.66	6.90	0.795	0.0
18OCT89	3C	Flood	11.0	18.91	7.77	6.89	1.320	0.2
18OCT89	4C	High Slack	0.0	18.76	7.16	6.73	0.236	0.0
18OCT89	4C	High Slack	3.5	18.77	7.12	6.73	0.243	0.0
18OCT89	4C	High Slack	7.0	18.76	7.40	6.84	0.285	0.0
18OCT89	5C	Ebb	0.0	18.73	6.93	6.60	0.145	0.0
18OCT89	5C	Ebb	3.0	18.73	6.83	6.59	0.146	0.0
18OCT89	5C	Ebb	5.8	18.73	6.86	6.63	0.145	0.0

APPENDIX B

DENSITY (#/100 M^3) OF ICHTHYOPLANKTON COLLECTED IN THE NANTICOKE RIVER BETWEEN JULY 1988 AND AUGUST 1989 BY STATION AND DATE

Station 1

********** 1988 **********

TAXA	14JUL	28JUL	9AUG	23AUG
Anchoa mitchilli larv.	7.9	7.7	5.3	1.9
Gobiosoma bosci larv./juv.	834.0	763.8	274.5	41.6
Total density	841.9	771.5	279.8	43.5

********** 1989 **********

	4APR	18APR	3MAY	18MAY	7JUN	13JUL	25JUL	8AUG	22AUG
Alosa sp. larv.	-	-	3.9	-	-	-	-	-	-
Anchoa mitchilli larv.	-	-	-	-	-	7.6	118.8	6.7	-
Anchoa mitchilli juv.	-	-	-	-	-	5.0	-	-	-
Brevoortia tyrannus juv.	-	3.8	-	3.2	1.7	-	-	-	-
Gobiosoma bosci larv./juv.	-	-	-	-	2264.3	3921.9	1848.3	763.1	1.2
Menidia larv.	-	-	1.9	0.6	-	-	-	-	-
Morone americana larv.	-	5.6	-	-	-	-	-	-	-
Morone americana larv./juv.	-	-	13.6	-	-	-	-	-	-
Morone americana juv.	-	-	-	-	-	-	-	1.3	1.2
Perca flavescens larv.	-	7.5	-	-	-	-	-	-	-
Syngnathus fuscus juv.	-	-	-	-	10.4	-	-	-	-
Unid. fish larv.	-	-	3.9	-	3.5	-	-	-	-
Total density	-	16.9	23.3	3.8	2279.9	3934.5	1967.1	771.1	2.4

'-' indicates no density

Station 2

********** 1988 **********

TAXA	14JUL	28JUL	9AUG	23AUG
Anchoa mitchilli larv.	18.8	8.6	3.0	6.8
Gobiosoma bosci larv./juv.	209.4	871.1	495.2	579.6
Total density	228.2	879.7	498.2	586.4

********** 1989 **********

	4APR	18APR	3MAY	18MAY	7JUN	13JUL	25JUL	8AUG	22AUG
Alosa sp. larv.	-	-	16.9	-	2.4	-	-	-	-
Anchoa mitchilli larv.	-	-	-	-	-	21.2	18.1	3.2	-
Anchoa mitchilli juv.	-	-	-	-	-	1.4	-	-	-
Brevoortia tyrannus juv.	1.5	-	-	-	-	-	-	-	-
Gobiosoma bosci larv./juv.	-	-	-	-	3318.0	138.5	487.7	25.6	1.6
Morone americana larv.	15.2	676.5	-	-	-	-	-	-	-
Morone americana larv./juv.	-	-	491.6	93.0	-	-	-	-	-
Morone saxatilis eggs	-	2.1	-	-	-	-	-	-	-
Morone saxatilis larv.	-	2.1	-	-	-	-	-	-	-
Morone saxatilis larv./juv.	-	-	257.4	4.8	-	-	-	-	-
Morone sp. larv./juv.	-	-	6.3	26.2	-	-	-	-	-
Perca flavescens larv.	-	27.4	-	-	-	-	-	-	-
Trinectes maculatus juv.	-	-	-	-	-	-	-	-	3.2
Unid. fish larv.	22.7	-	-	-	-	-	-	-	-
Total density	39.4	708.1	772.2	124.0	3320.4	161.1	505.8	28.8	4.8

'-' indicates no density

Station 3

********** 1988 **********

TAXA	14JUL	28JUL	9AUG	23AUG
Anchoa mitchilli larv.	6.0	14.9	8.7	4.6
Gobiosoma bosci larv./juv.	301.1	150.6	437.1	65.4
Trinectes maculatus juv.	-	-	-	1.1
Total density	307.1	165.5	445.8	71.1

********** 1989 **********

	4APR	18APR	3MAY	18MAY	7JUN	13JUL	25JUL	8AUG	22AUG
Alosa sp. larv.	-	42.7	3.9	0.8	-	-	-	-	-
Anchoa mitchilli larv.	-	-	-	-	-	6.4	3.8	1.6	1.3
Anchoa mitchilli juv.	-	-	-	-	-	-	1.3	-	-
Brevoortia tyrannus juv.	0.9	-	-	-	-	-	-	-	-
Gobiosoma bosci larv./juv.	-	-	-	-	50.2	172.3	32.7	3.1	-
Ictalurus catus juv.	-	-	-	-	-	4.8	-	3.1	6.5
Morone americana larv.	1278.8	432.1	-	-	-	-	-	-	-
Morone americana larv./juv.	-	-	1575.2	266.5	-	-	-	-	-
Morone americana juv.	-	-	-	-	-	1.6	-	-	-
Morone saxatilis eggs	-	358.7	-	-	-	-	-	-	-
Morone saxatilis larv./juv.	-	-	892.3	30.2	-	-	-	-	-
Morone sp. larv./juv.	-	-	44.6	52.2	-	-	-	-	-
Perca flavescens larv.	26.5	-	-	-	-	-	-	-	-
Unid. fish eggs	7.3	-	-	-	-	-	-	-	-
Unid. fish larv.	115.2	1.7	205.6	0.8	-	-	-	-	-
Total density	1428.7	835.2	2721.6	350.5	50.2	185.1	37.8	7.8	7.8

'-' indicates no density

Station 4

********** 1988 **********

TAXA	14JUL	28JUL	9AUG	23AUG
Anchoa mitchilli larv.	46.1	9.1	1.4	1.1
Gobiosoma bosci larv./juv.	823.5	245.6	207.3	31.7
Syngnathus fuscus juv.	0.6	1.2	-	-
Total density	870.2	255.9	208.7	32.8

********** 1989 **********

	4APR	18APR	3MAY	18MAY	7JUN	13JUL	25JUL	8AUG	22AUG
Alosa aestivalis larv.	-	-	-	-	7.1	-	-	-	-
Alosa sp. larv.	20.2	94.6	75.9	-	-	-	-	-	-
Anchoa mitchilli larv.	-	-	-	-	-	-	-	1.7	1.3
Clupeidae larv.	-	-	-	-	12.9	-	-	-	-
Dorosoma cepedianum larv.	-	-	-	-	-	2.7	-	-	-
Etheostoma sp. larv.	-	-	3.4	-	-	-	-	-	-
Gobiosoma bosci larv./juv.	-	-	-	-	14.1	21.7	2.8	-	-
Ictalurus catus juv.	-	-	-	-	-	2.7	-	-	1.3
Lepomis sp. larv.	-	-	-	-	1.2	-	-	-	-
Morone americana larv.	198.2	2602.0	-	-	-	-	-	-	-
Morone americana larv./juv.	-	-	178.9	160.8	31.8	-	-	-	-
Morone saxatilis eggs	-	463.9	-	-	-	-	-	-	-
Morone saxatilis larv.	-	4.7	-	-	-	-	-	-	-
Morone saxatilis larv./juv.	-	-	6.8	7.9	-	-	-	-	-
Morone sp. larv./juv.	-	-	-	34.8	-	-	-	-	-
Perca flavescens larv.	60.6	1.6	-	-	-	-	-	-	-
Unid. fish eggs	1.8	-	-	-	-	-	-	-	-
Unid. fish larv.	-	-	6.8	-	4.7	-	-	-	-
Total density	280.8	3166.8	271.8	203.5	71.8	27.1	2.8	1.7	2.6

'-' indicates no density

Station 5

********** 1988 **********

TAXA	14JUL	28JUL	9AUG	23AUG
Anchoa mitchilli larv.	5.3	2.1	1.4	1.6
Gobiosoma bosci larv./juv.	369.5	15.5	8.8	4.1
Total density	374.8	17.6	10.2	5.7

********** 1989 **********

	4APR	18APR	3MAY	18MAY	7JUN	13JUL	25JUL	8AUG	22AUG
Alosa aestivalis larv.	-	-	-	13.4	-	-	-	-	-
Alosa pseudoharengus larv.	-	-	-	42.8	-	-	-	-	-
Alosa sapidissima larv.	-	-	-	23.4	-	-	-	-	-
Alosa sp. larv.	10.5	-	64.6	50.1	197.5	-	1.5	-	-
Anchoa mitchilli larv.	-	-	-	-	-	-	-	2.9	-
Brevoortia tyrannus juv.	-	-	-	-	5.3	-	-	-	-
Etheostoma sp. larv.	-	-	3.6	-	-	-	-	-	-
Gobiosoma bosci larv./juv.	-	-	-	-	44.0	1.5	-	-	-
Ictalurus catus juv.	-	-	-	-	-	1.5	6.0	-	-
Morone americana larv.	-	318.8	-	-	-	-	-	-	-
Morone americana larv./juv.	-	-	608.1	4.0	-	-	-	-	-
Morone saxatilis eggs	-	76.5	-	-	-	-	-	-	-
Morone saxatilis larv.	-	5.5	-	-	-	-	-	-	-
Notropis hudsonius larv.	-	-	3.6	-	-	-	-	-	-
Perca flavescens larv.	162.4	-	-	-	-	-	-	-	-
Unid. fish larv.	35.3	-	-	-	-	-	-	-	-
Total density	208.2	400.8	679.9	133.7	246.8	3.0	7.5	2.9	-

'-' indicates no density

APPENDIX C

DENSITY (#/M^3) OF ZOOPLANKTON COLLECTED IN THE NANTICOKE RIVER BETWEEN JULY 1988 AND OCTOBER 1989 BY STATION AND DATE

Values in parentheses indicate percent composition.

Date: 14JUL88

Taxa	Stations 1C		2C		3C		4C		5C	
AMPHIPODA										
Amphipoda	-		-		0.9	(<.01)	-		-	
Corophium lacustre	9.1	(0.12)	12.1	(0.03)	1.6	(0.01)	8.7	(0.19)	0.6	(<.01)
Monoculodes sp.	3.1	(0.04)	-		-		0.2	(0.01)	-	
Gammarus fasciatus	19.5	(0.25)	8.7	(0.02)	4.7	(0.02)	50.6	(1.14)	488.7	(1.26)
ANNELIDA										
Polychaete larvae	-		177.0	(0.39)	209.5	(0.87)	731.7	(16.47)	-	
CALANOID COPEPODA										
Eurytemora affinis	-		-		-		34.1	(0.77)	4541.9	(11.71)
Acartia tonsa	3360.0	(43.29)	1209.8	(2.68)	985.3	(4.08)	2609.8	(58.73)	26735.5	(68.93)
CLADOCERANS										
Alonella sp.	-		-		-		-		30.4	(0.08)
Bosmina longirostris	-		-		-		-		1445.2	(3.73)
Diaphanosoma sp.	-		-		-		-		2580.6	(6.65)
Moina micrura	-		1.9	(<.01)	-		-		30.4	(0.08)
CYCLOPOID COPEPODS										
Oithona colcarva	-		3.3	(0.01)	-		-		-	
Halicyclops magniceps	-		-		-		24.4	(0.55)	1393.5	(3.59)
Saphirella sp.	43.6	(0.56)	-		-		-		-	
OTHER SPECIES										
Palaemonetes sp.	1.3	(0.02)	1.0	(<.01)	1.4	(0.01)	1.0	(0.02)	1.3	(<.01)
Harpacticoida	-		6.6	(0.01)	4.6	(0.02)	4.9	(0.11)	51.6	(0.13)
Bivalvia	-		-		0.3	(<.01)	5.5	(0.12)	2.9	(0.01)
Cyathura polita	-		0.8	(<.01)	0.3	(<.01)	0.9	(0.02)	-	
Isopoda	3.8	(0.05)	1.0	(<.01)	0.3	(<.01)	2.0	(0.04)	-	
Copepod nauplii	58.2	(0.75)	36.1	(0.08)	15.5	(0.06)	39.0	(0.88)	464.5	(1.20)
Mysid	1554.2	(20.02)	170.8	(0.38)	69.8	(0.29)	-		12.3	(0.03)
Ostracoda	-		-		23.3	(0.10)	29.3	(0.66)	51.6	(0.13)
Hydrobiidae	2618.2	(33.73)	43377.0	(96.05)	22344.8	(92.46)	-		-	
Brachyurian megalops	3.1	(0.04)	0.8	(<.01)	-		0.1	(<.01)	-	
Brachyurian zoea	42.5	(0.55)	47.9	(0.11)	272.6	(1.13)	49.1	(1.11)	19.7	(0.05)
Barnacle nauplii	-		62.3	(0.14)	23.3	(0.10)	800.0	(18.00)	825.8	(2.13)
Hydromedusae	42.5	(0.55)	41.0	(0.09)	196.0	(0.81)	42.8	(0.96)	3.2	(0.01)
PARASITIC COPEPODS										
Argulus sp.	0.2	(<.01)	0.2	(<.01)	-		0.1	(<.01)	0.3	(<.01)
Ergasilus sp.	-		-		4.6	(0.02)	9.8	(0.22)	103.2	(0.27)
FISH										
Unid. fish larvae	2.2	(0.03)	3.1	(0.01)	7.6	(0.03)	-		3.5	(0.01)
Total density	7761.5		45161.4		24166.4		4444.0		38786.7	
Number of taxa	15		19		19		20		21	

'-' indicates no density

Date: 08AUG88

Taxa	Stations 1C		2C		3C		4C		5C	
AMPHIPODA										
Leptocheirus plumulosus	-		-		-		0.1	(<.01)	-	
Corophium lacustre	-		-		1.3	(<.01)	5.8	(0.01)	2.6	(<.01)
Monoculodes sp.	-		4.0	(0.01)	0.8	(<.01)	0.4	(<.01)	0.2	(<.01)
Gammarus fasciatus	-		2.0	(<.01)	9.0	(0.01)	17.8	(0.04)	8.0	(0.01)
ANNELIDA										
Polychaete larvae	-		150.0	(0.23)	400.0	(0.42)	1215.4	(2.54)	19.2	(0.03)
CALANOID COPEPODA										
Eurytemora affinis	-		-		31.3	(0.03)	384.6	(0.80)	738.5	(1.10)
Acartia tonsa	15578.9	(93.00)	59450.0	(91.73)	37250.0	(39.21)	40061.5	(83.73)	6769.2	(10.04)
CLADOCERANS										
Bosmina longirostris	-		-		-		569.2	(1.19)	16923.1	(25.11)
Diaphanosoma sp.	-		-		50.0	(0.05)	676.9	(1.41)	7046.2	(10.45)
CYCLOPOID COPEPODS										
Cyclops bicuspidatus	-		-		-		9.6	(0.02)	461.5	(0.68)
Saphirella sp.	-		-		-		30.8	(0.06)	-	
OTHER SPECIES										
Palaemonetes sp.	4.2	(0.03)	34.0	(0.05)	14.5	(0.02)	5.2	(0.01)	0.2	(<.01)
Harpacticoida	-		-		31.3	(0.03)	30.8	(0.06)	-	
Bivalvia	-		2.0	(<.01)	0.3	(<.01)	-		-	
Chaoborus sp.	-		-		-		0.2	(<.01)	2.4	(<.01)
Cyathura polita	-		-		1.5	(<.01)	1.6	(<.01)	0.6	(<.01)
Isopoda	-		2.0	(<.01)	1.0	(<.01)	0.5	(<.01)	-	
Copepod nauplii	-		100.0	(0.15)	650.0	(0.68)	46.2	(0.10)	9.6	(0.01)
Chironomid larvae	-		-		-		0.1	(<.01)	-	
Mysid	15.8	(0.09)	46.0	(0.07)	56.5	(0.06)	14.2	(0.03)	-	
Ostracoda	26.3	(0.16)	31.3	(0.05)	100.0	(0.11)	369.2	(0.77)	-	
Hydrobiidae	789.5	(4.71)	4500.0	(6.94)	56000.0	(58.95)	1076.9	(2.25)	35384.6	(52.50)
Brachyurian megalops	-		-		0.3	(<.01)	0.2	(<.01)	0.3	(<.01)
Brachyurian zoea	208.4	(1.24)	262.0	(0.40)	73.3	(0.08)	137.2	(0.29)	7.1	(0.01)
Barnacle nauplii	105.3	(0.63)	31.3	(0.05)	250.0	(0.26)	3076.9	(6.43)	-	
Hydromedusae	7.4	(0.04)	188.0	(0.29)	72.3	(0.08)	5.9	(0.01)	-	
PARASITIC COPEPODS										
Argulus sp.	1.1	(0.01)	2.0	(<.01)	-		0.5	(<.01)	0.5	(<.01)
Ergasilus sp.	-		-		-		107.7	(0.23)	30.8	(0.05)
FISH										
Unid. fish eggs	2.1	(0.01)	-		-		-		-	
Unid. fish larvae	12.6	(0.08)	6.0	(0.01)	2.5	(<.01)	0.8	(<.01)	-	
Total density	16751.6		64810.6		94995.9		47846.2		67404.6	
Number of taxa	11		16		21		28		18	

'-' indicates no density

Date: 20OCT88

Taxa	Stations 1C		2C		3C		4C		5C	
AMPHIPODA										
Corophium lacustre	–		0.2	(0.01)	–		0.1	(<.01)	–	
Monoculodes sp.	0.1	(0.01)	–		0.1	(<.01)	–		0.4	(0.01)
Gammarus fasciatus	–		–		–		0.2	(<.01)	0.4	(0.01)
ANNELIDA										
Polychaete larvae	1.3	(0.12)	6.7	(0.44)	19.4	(0.40)	1305.7	(10.95)	70.6	(2.08)
CALANOID COPEPODA										
Eurytemora affinis	2.2	(0.21)	–		–		33.3	(0.28)	423.5	(12.45)
Acartia tonsa	995.6	(93.59)	1483.1	(95.80)	4833.3	(98.21)	9020.7	(75.67)	2864.7	(84.23)
Pseudodiaptomus coronatus	–		2.8	(0.18)	1.7	(0.04)	–		–	
CYCLOPOID COPEPODS										
Oithona colcarva	1.3	(0.12)	–		–		–		–	
OTHER SPECIES										
Harpacticoida	–		–		–		9.2	(0.08)	–	
Bivalvia	–		0.1	(0.01)	–		–		0.1	(<.01)
Copepod nauplii	17.8	(1.67)	33.7	(2.18)	47.2	(0.96)	1489.7	(12.50)	29.4	(0.86)
Mysid	0.6	(0.05)	0.4	(0.03)	5.4	(0.11)	33.9	(0.28)	11.6	(0.34)
Brachyurian zoea	0.1	(0.01)	0.1	(0.01)	–		0.3	(<.01)	–	
Barnacle nauplii	44.4	(4.18)	20.2	(1.31)	13.9	(0.28)	27.6	(0.23)	–	
Hydromedusae	–		0.4	(0.03)	–		–		–	
PARASITIC COPEPODS										
Argulus sp.	–		–		–		0.1	(<.01)	–	
FISH										
Unid. fish larvae	0.3	(0.03)	0.2	(0.01)	–		–		–	
Total density	1063.7		1547.9		4921.0		11920.8		3400.7	
Number of taxa	10		11		7		11		8	

'–' indicates no density

Date: 16MAR89

Taxa	Stations 1C		2C		3C		4C		5C	
AMPHIPODA										
Leptocheirus plumulosus	-		0.1	(<.01)	-		-		-	
Melita nitida	0.2	(<.01)	-		-		-		-	
Corophium lacustre	0.2	(<.01)	-		0.2	(<.01)	0.6	(<.01)	0.5	(<.01)
Monoculodes sp.	0.2	(<.01)	-		-		-		-	
Gammarus fasciatus	1.0	(<.01)	0.2	(<.01)	0.3	(0.01)	-		0.1	(<.01)
ANNELIDA										
Hirudinea	0.2	(<.01)	-		-		-		-	
CALANOID COPEPODA										
Eurytemora affinis	19523.8	(98.89)	22635.8	(87.03)	4402.1	(74.60)	23831.6	(80.87)	9464.3	(56.50)
Acartia tonsa	114.3	(0.58)	34.7	(0.13)	10.3	(0.17)	-		163.9	(0.98)
Acartia hudsonica	19.0	(0.10)	-		-		-		-	
Diaptomus sp.	-		7.2	(0.03)	6.1	(0.10)	-		17.9	(0.11)
CLADOCERANS										
Bosmina longirostris	-		34.7	(0.13)	216.5	(3.67)	610.5	(2.07)	1285.7	(7.68)
Chydorus sp.	-		-		-		21.1	(0.07)	160.7	(0.96)
Daphnia retrocurva	-		-		6.1	(0.10)	21.1	(0.07)	17.9	(0.11)
Ilyocryptus spinifer	-		-		-		-		17.9	(0.11)
Alona sp.	-		-		-		42.1	(0.14)	10.5	(0.06)
Ceriodaphnia quadrangula	-		-		-		42.1	(0.14)	10.5	(0.06)
CYCLOPOID COPEPODS										
Eucyclops agilis	-		7.2	(0.03)	-		-		17.9	(0.11)
Mesocyclops edax	-		-		-		21.1	(0.07)	-	
Cyclops bicuspidatus	-		11.6	(0.04)	247.4	(4.19)	610.5	(2.07)	839.3	(5.01)
Halicyclops magniceps	-		-		-		-		28.4	(0.17)
Saphirella sp.	-		23.1	(0.09)	10.3	(0.17)	-		-	
OTHER SPECIES										
Harpacticoida	-		11.6	(0.04)	41.2	(0.70)	42.1	(0.14)	178.6	(1.07)
Asellus isopoda	-		-		-		-		0.1	(<.01)
Bivalvia	5.7	(0.03)	0.7	(<.01)	0.1	(<.01)	-		-	
Copepod nauplii	-		3237.0	(12.45)	886.6	(15.03)	4210.5	(14.29)	4535.7	(27.08)
Chironomid larvae	-		-		-		-		0.1	(<.01)
Mysid	77.9	(0.39)	4.2	(0.02)	32.4	(0.55)	2.2	(0.01)	-	
Ostracoda	-		-		41.2	(0.70)	13.2	(0.04)	-	
FISH										
Unid. fish larvae	-		0.4	(<.01)	-		-		-	
Total density	19742.5		26008.5		5900.8		29468.7		16750.0	
Number of taxa	10		14		14		13		18	

'-' indicates no density

Date: 18APR89

Taxa	Stations 1C		2C		3C		4C		5C	
AMPHIPODA										
Gammarus sp.	11.3	(0.08)	-		-		-		-	
Corophium lacustre	4.4	(0.03)	1.2	(0.02)	0.4	(<.01)	7.7	(0.04)	0.4	(<.01)
Monoculodes sp.	0.9	(0.01)	-		-		-		-	
Gammarus fasciatus	52.4	(0.37)	62.2	(1.01)	14.6	(0.10)	2.3	(0.01)	1.3	(0.01)
ANNELIDA										
Polychaete larvae	9.2	(0.06)	-		-		-		22.3	(0.10)
Oligochaeta	-		2.4	(0.04)	-		-		-	
CALANOID COPEPODA										
Eurytemora affinis	11250.0	(78.73)	2138.5	(34.88)	11958.3	(78.20)	473.1	(2.50)	196.4	(0.87)
Acartia tonsa	-		4.9	(0.08)	-		-		-	
Diaptomus sp.	-		-		-		28.2	(0.15)	-	
CLADOCERANS										
Bosmina longirostris	573.5	(4.01)	1259.2	(20.54)	354.2	(2.32)	15483.9	(81.75)	20178.6	(89.80)
Chydorus sp.	-		-		20.8	(0.14)	10.8	(0.06)	-	
Daphnia retrocurva			28.9	(0.47)	24.5	(0.16)	10.8	(0.06)	11.2	(0.05)
Ilyocryptus spinifer	-		-		-		10.8	(0.06)	89.3	(0.40)
Leydigia quadrangularis	-		-		-		6.7	(0.04)	11.2	(0.05)
Alona sp.	-		-		20.8	(0.14)	10.8	(0.06)	53.6	(0.24)
CYCLOPOID COPEPODS										
Cyclopoida	323.5	(2.26)	74.3	(1.21)	229.2	(1.50)	-		-	
Eucyclops agilis	9.2	(0.06)	-		20.8	(0.14)	-		11.2	(0.05)
Cyclops vernalis	691.2	(4.84)	1837.2	(29.97)	-		2709.7	(14.31)	1732.1	(7.71)
Mesocyclops edax	-		-		-		10.8	(0.06)	-	
Cyclops bicuspidatus	323.5	(2.26)	528.4	(8.62)	145.8	(0.95)	10.8	(0.06)	22.3	(0.10)
Halicyclops magniceps	-		4.1	(0.07)	-		-		-	
OTHER SPECIES										
Harpacticoida	29.4	(0.21)	12.4	(0.20)	62.5	(0.41)	32.3	(0.17)	89.3	(0.40)
Chaoborus sp.	-		-		-		0.5	(<.01)	0.4	(<.01)
Isopoda	0.3	(<.01)	-		-		-		-	
Copepod nauplii	911.8	(6.38)	115.6	(1.89)	2375.0	(15.53)	10.8	(0.06)	-	
Chironomid larvae	-		-		-		0.6	(<.01)	0.9	(<.01)
Mysid	14.7	(0.10)	-		-		-		-	
Ostracoda	14.7	(0.10)	-		12.3	(0.08)	-		17.9	(0.08)
PARASITIC COPEPODS										
Ergasilus sp.	58.8	(0.41)	49.5	(0.81)	-		96.8	(0.51)	17.9	(0.08)
FISH										
Unid. fish eggs	6.9	(0.05)	3.8	(0.06)	27.7	(0.18)	9.9	(0.05)	7.7	(0.03)
Unid. fish larvae	3.1	(0.02)	8.3	(0.14)	24.2	(0.16)	14.0	(0.07)	6.8	(0.03)
Total density	14288.8		6130.9		15291.1		18941.3		22470.8	
Number of taxa	19		16		15		20		19	

'-' indicates no density

Date: 18MAY89

Taxa	Stations 1C		2C		3C		4C		5C	
AMPHIPODA										
Gammarus sp.	1.8	(0.01)	-		-		19.6	(0.06)	0.9	(<.01)
Corophium lacustre	0.3	(<.01)	0.4	(<.01)	0.2	(<.01)	0.2	(<.01)	-	
Monoculodes sp.	10.1	(0.03)	11.6	(0.03)	6.4	(0.05)	0.4	(<.01)	-	
Gammarus fasciatus	9.1	(0.03)	24.8	(0.07)	40.7	(0.31)	60.7	(0.18)	-	
ANNELIDA										
Polychaete larvae	-		-		-		-		10.4	(0.05)
CALANOID COPEPODA										
Eurytemora affinis	24527.5	(83.93)	24480.0	(64.38)	2982.1	(22.36)	1192.7	(3.51)	701.7	(3.30)
Acartia tonsa	1912.1	(6.54)	23.5	(0.06)	17.9	(0.13)	-		-	
CLADOCERANS										
Bosmina longirostris	351.6	(1.20)	10640.0	(27.98)	6875.0	(51.55)	28899.1	(85.10)	18784.5	(88.23)
Chydorus sp.	-		-		17.9	(0.13)	14.3	(0.04)	27.6	(0.13)
Daphnia retrocurva	22.0	(0.08)	-		-		-		-	
Diaphanosoma sp.	-		-		-		14.3	(0.04)	-	
Leptodora kindtii	-		-		-		3.0	(0.01)	12.0	(0.06)
Leydigia quadrangularis	-		-		-		-		16.6	(0.08)
Alona sp.	-		-		17.9	(0.13)	14.3	(0.04)	71.8	(0.34)
CYCLOPOID COPEPODS										
Cyclopoida	87.9	(0.30)	80.0	(0.21)	17.9	(0.13)	-		-	
Cyclops vernalis	87.9	(0.30)	-		2428.6	(18.21)	3302.8	(9.73)	1607.7	(7.55)
Mesocyclops edax	-		-		31.5	(0.24)	14.3	(0.04)	14.5	(0.07)
Cyclops bicuspidatus	-	(<.01)	680.0	(1.79)	-		-		3.5	(0.02)
Paracyclops fimbriatus poppei	-		-		-		-		17.3	(0.08)
Halicyclops magniceps	417.6	(1.43)	840.0	(2.21)	35.7	(0.27)	28.7	(0.08)	-	
OTHER SPECIES										
Palaemonetes sp.	0.1	(<.01)	-		-		-		-	
Harpacticoida	131.9	(0.45)	200.0	(0.53)	35.7	(0.27)	45.9	(0.14)	-	
Chaoborus sp.	-		0.8	(<.01)	0.5	(<.01)	0.3	(<.01)	0.4	(<.01)
Isopoda	0.1	(<.01)	0.4	(<.01)	-		-		-	
Copepod nauplii	1582.4	(5.41)	1040.0	(2.74)	714.3	(5.36)	275.2	(0.81)	-	
Chironomid larvae	-		0.4	(<.01)	0.2	(<.01)	-		-	
Mysid	15.4	(0.05)	-		-		-		-	
Ostracoda	-		-		-		-		11.0	(0.05)
Caprellidae	-		-		-		-		0.1	(<.01)
PARASITIC COPEPODS										
Ergasilus sp.	65.9	(0.23)	-		107.1	(0.80)	68.8	(0.20)	5.5	(0.03)
FISH										
Unid. fish eggs	-		-		-		-		0.1	(<.01)
Unid. fish larvae	-		0.4	(<.01)	5.9	(0.04)	3.6	(0.01)	5.9	(0.03)
Total density	29223.7		38022.3		13335.5		33958.2		21291.5	
Number of taxa	17		15		18		18		18	

'-' indicates no density

Date: 07JUN89

Taxa	Stations 1C		2C		3C		4C		5C	
AMPHIPODA										
Gammarus sp.	7.1	(0.01)	1.0	(<.01)	3.0	(0.01)	9.8	(0.04)	-	
Corophium lacustre	0.9	(<.01)	1.0	(<.01)	0.1	(<.01)	-		-	
Monoculodes sp.	53.7	(0.10)	13.2	(0.03)	9.3	(0.04)	7.8	(0.03)	-	
Gammarus fasciatus	10.0	(0.02)	1.0	(<.01)	14.2	(0.06)	76.1	(0.33)	3.4	(0.04)
ANNELIDA										
Polychaete larvae	35.7	(0.07)	-		26.3	(0.10)	28.7	(0.13)	3.5	(0.04)
CALANOID COPEPODA										
Eurytemora affinis	2142.9	(4.17)	5414.6	(14.26)	19736.8	(76.87)	5317.1	(23.26)	2949.7	(32.65)
Acartia tonsa	43542.9	(84.73)	29122.0	(76.69)	1157.9	(4.51)	-		-	
Diaptomus sp.	-		-		-		28.7	(0.13)	-	
CLADOCERANS										
Bosmina longirostris	-		48.8	(0.13)	3631.6	(14.14)	15122.0	(66.15)	4804.5	(53.19)
Chydorus sp.	-		-		-		28.7	(0.13)	3.5	(0.04)
Diaphanosoma sp.	-		-		-		-		83.8	(0.93)
Leptodora kindtii	-		-		0.1	(<.01)	7.8	(0.03)	212.5	(2.35)
Leydigia quadrangularis	-		-		-		-		3.5	(0.04)
Alona sp.	-		-		-		48.8	(0.21)	11.2	(0.12)
CYCLOPOID COPEPODS										
Eucyclops agilis	-		-		-		-		27.9	(0.31)
Cyclops vernalis	17.9	(0.03)	-		157.9	(0.61)	1219.5	(5.33)	754.2	(8.35)
Mesocyclops edax	-		24.4	(0.06)	-		28.7	(0.13)	27.9	(0.31)
Cyclops bicuspidatus	-		-		26.3	(0.10)	-		-	
Paracyclops fimbriatus poppei	-		-		-		-		5.6	(0.06)
Halicyclops magniceps	28.6	(0.06)	48.8	(0.13)	526.3	(2.05)	487.8	(2.13)	89.4	(0.99)
Cyclops varicans rubellus	-		-		-		-		5.6	(0.06)
OTHER SPECIES										
Palaemonetes sp.	2.6	(0.01)	2.4	(0.01)	-		-		-	
Harpacticoida	-		-		52.6	(0.20)	57.4	(0.25)	5.6	(0.06)
Chaoborus sp.	-		-		0.9	(<.01)	-		2.0	(0.02)
Cyathura polita	0.9	(<.01)	-		0.3	(<.01)	-		-	
Isopoda	0.9	(<.01)	0.5	(<.01)	0.1	(<.01)	-		-	
Copepod nauplii	114.3	(0.22)	292.7	(0.77)	289.5	(1.13)	195.1	(0.85)	-	
Chironomid larvae	-		-		0.1	(<.01)	-		0.2	(<.01)
Mysid	193.7	(0.38)	14.1	(0.04)	-		-		-	
Ostracoda	-		-		15.5	(0.06)	48.8	(0.21)	11.2	(0.12)
Chironomidae pupae	-		-		0.5	(<.01)	-		-	
Hydrobiidae	5142.9	(10.01)	2878.0	(7.58)	-		97.6	(0.43)	-	
Brachyurian zoea	36.9	(0.07)	21.0	(0.06)	-		-		-	
Barnacle nauplii	35.7	(0.07)	-		-		-		-	
Caprellidae	0.3	(<.01)	0.5	(<.01)	-		-		-	

Date: 07JUN89

Taxa	Stations 1C		2C		3C		4C		5C	
PARASITIC COPEPODS										
Argulus sp.	-		-		0.1	(<.01)	-		-	
Ergasilus sp.	-		48.8	(0.13)	26.3	(0.10)	48.8	(0.21)	22.3	(0.25)
FISH										
Unid. fish eggs	0.6	(<.01)	-		-		-		-	
Unid. fish larvae	21.4	(0.04)	41.5	(0.11)	-		-		6.0	(0.07)
Total density	51389.9		37974.3		25675.7		22859.2		9033.5	
Number of taxa	20		18		22		18		21	

'-' indicates no density

Date: 13JUL89

Taxa	Stations 1C		2C		3C		4C		5C	
AMPHIPODA										
Gammarus sp.	7.1	(0.01)	17.5	(0.15)	-		-		-	
Leptocheirus plumulosus	0.2	(<.01)	-		-		-		-	
Corophium lacustre	10.4	(0.02)	5.6	(0.05)	6.9	(0.02)	-		-	
Monoculodes sp.	11.0	(0.02)	3.8	(0.03)	6.4	(0.02)	1.7	(0.01)	-	
Gammarus fasciatus	64.8	(0.10)	61.0	(0.51)	600.5	(2.11)	302.5	(1.43)	27.4	(0.23)
CALANOID COPEPODA										
Eurytemora affinis	1218.3	(1.81)	2189.9	(18.44)	8049.4	(28.26)	2424.2	(11.47)	2800.0	(23.56)
Acartia tonsa	38781.7	(57.57)	3000.0	(25.26)	296.3	(1.04)	-		-	
Pseudodiaptomus coronatus	20.3	(0.03)	-		-		-		-	
Diaptomus sp.	-		-		-		-		6.1	(0.05)
CLADOCERANS										
Bosmina longirostris	-		417.7	(3.52)	2098.8	(7.37)	8606.1	(40.70)	2581.8	(21.73)
Diaphanosoma sp.	6010.2	(8.92)	5000.0	(42.10)	15432.1	(54.19)	7878.8	(37.26)	3454.5	(29.07)
Ilyocryptus spinifer	-		12.7	(0.11)	-		-		12.1	(0.10)
Leptodora kindtii	-		-		-		0.5	(<.01)	4.6	(0.04)
Alona sp.	-		-		-		7.6	(0.04)	3.8	(0.03)
CYCLOPOID COPEPODS										
Cyclopoida	-		-		-		12.1	(0.06)	-	
Cyclops vernalis	-		25.3	(0.21)	123.5	(0.43)	400.0	(1.89)	242.4	(2.04)
Mesocyclops edax	142.1	(0.21)	12.7	(0.11)	543.2	(1.91)	703.0	(3.33)	2666.7	(22.44)
Halicyclops magniceps	81.2	(0.12)	32.8	(0.28)	642.0	(2.25)	581.8	(2.75)	6.1	(0.05)
Macrocyclops albidus	-		-		-		15.2	(0.07)	-	
Tropocyclops prasinus	-		-		-		-		6.1	(0.05)
OTHER SPECIES										
Palaemonetes sp.	7.7	(0.01)	-		-		-		-	
Harpacticoida	-		14.9	(0.13)	24.7	(0.09)	-		-	
Chaoborus sp.	6.7	(0.01)	2.8	(0.02)	8.9	(0.03)	27.2	(0.13)	33.7	(0.28)
Cyathura polita	0.2	(<.01)	-		-		-		-	
Isopoda	0.2	(<.01)	-		-		-		-	
Copepod nauplii	60.9	(0.09)	50.6	(0.43)	172.8	(0.61)	60.6	(0.29)	12.1	(0.10)
Chironomid larvae	-		-		-		0.5	(<.01)	-	
Mysid	108.2	(0.16)	0.5	(<.01)	-		-		-	
Ostracoda	-		-		-		24.2	(0.11)	12.1	(0.10)
Chironomidae pupae	0.2	(<.01)	0.3	(<.01)	2.5	(0.01)	0.2	(<.01)	0.2	(<.01)
Hydrobiidae	19898.5	(29.54)	936.7	(7.89)	444.4	(1.56)	60.6	(0.29)	6.1	(0.05)
Brachyurian megalops	-		0.5	(<.01)	-		-		-	
Brachyurian zoea	751.3	(1.12)	1.3	(0.01)	-	(<.01)	-		-	
Barnacle nauplii	-		-		-		-		3.8	(0.03)
PARASITIC COPEPODS										
Ergasilus sp.	40.6	(0.06)	88.6	(0.75)	24.7	(0.09)	36.4	(0.17)	3.8	(0.03)
FISH										
Unid. fish larvae	142.5	(0.21)	1.8	(0.01)	3.0	(0.01)	-		-	
Total density	67364.3		11877.0		28480.1		21143.2		11883.4	
Number of taxa	22		22		17		19		19	

'-' indicates no density

Date: 08AUG89

Taxa	Stations 1C		2C		3C		4C		5C	
AMPHIPODA										
Gammarus sp.	23.4	(0.19)	-		-		-		-	
Corophium lacustre	1.6	(0.01)	2.4	(0.01)	-		-		-	
Monoculodes sp.	5.9	(0.05)	19.2	(0.07)	-		-		-	
Gammarus fasciatus	60.9	(0.49)	514.6	(1.87)	85.5	(0.38)	85.5	(0.31)	20.0	(0.04)
ANNELIDA										
Polychaete larvae	-		-		-		-		49.0	(0.09)
CALANOID COPEPODA										
Eurytemora affinis	1421.3	(11.37)	756.3	(2.74)	510.0	(2.29)	1689.7	(6.20)	2750.0	(5.26)
Acartia tonsa	7461.9	(59.72)	50.4	(0.18)	20.0	(0.09)	56.0	(0.21)	-	
Diaptomus sp.	-		-		6.3	(0.03)	34.5	(0.13)	-	
CLADOCERANS										
Alonella sp.	-		-		-		172.4	(0.63)	-	
Bosmina longirostris	1309.6	(10.48)	14117.6	(51.22)	19300.0	(86.66)	21724.1	(79.77)	35833.3	(68.59)
Daphnia retrocurva	-		-		-		21.6	(0.08)	-	
Diaphanosoma sp.	1309.6	(10.48)	823.5	(2.99)	380.0	(1.71)	793.1	(2.91)	2500.0	(4.79)
Ilyocryptus spinifer	10.2	(0.08)	16.8	(0.06)	30.0	(0.13)	103.4	(0.38)	166.7	(0.32)
Leptodora kindtii	-		-		-		11.7	(0.04)	18.3	(0.04)
Moina micrura	20.3	(0.16)	-		-		-		-	
Leydigia quadrangularis	-		-		6.3	(0.03)	34.5	(0.13)	-	
Alona sp.	-		16.8	(0.06)	-	(<.01)	344.8	(1.27)	3166.7	(6.06)
CYCLOPOID COPEPODS										
Cyclopoida	-		-		-		172.4	(0.63)	-	
Eucyclops agilis	-		-		-		21.6	(0.08)	-	
Cyclops vernalis	10.2	(0.08)	16.8	(0.06)	180.0	(0.81)	344.8	(1.27)	1333.3	(2.55)
Mesocyclops edax	187.8	(1.50)	2571.4	(9.33)	540.0	(2.42)	689.7	(2.53)	2083.3	(3.99)
Cyclops bicuspidatus	-		-		80.0	(0.36)	137.9	(0.51)	-	
Halicyclops magniceps	132.0	(1.06)	7546.2	(27.38)	420.0	(1.89)	69.0	(0.25)	-	
Tropocyclops prasinus	-		16.8	(0.06)	-		-		-	
OTHER SPECIES										
Palaemonetes sp.	1.2	(0.01)	-		-		-		-	
Harpacticoida	-		100.8	(0.37)	30.0	(0.13)	-		83.3	(0.16)
Chaoborus sp.	1.4	(0.01)	2.4	(0.01)	11.0	(0.05)	33.1	(0.12)	143.3	(0.27)
Cyathura polita	0.6	(<.01)	1.0	(<.01)	-		-		-	
Copepod nauplii	40.6	(0.32)	823.5	(2.99)	640.0	(2.87)	689.7	(2.53)	4000.0	(7.66)
Chironomid larvae	-		-		0.5	(<.01)	3.4	(0.01)	-	
Mysid	1.0	(0.01)	-		-		-		-	
Ostracoda	5.1	(0.04)	-		-		-		-	
Hydrobiidae	274.1	(2.19)	16.8	(0.06)	10.0	(0.04)	-		-	
Brachyurian megalops	0.2	(<.01)	-		-		-		-	
Brachyurian zoea	187.8	(1.50)	67.2	(0.24)	10.0	(0.04)	-		-	
Barnacle nauplii	5.1	(0.04)	-		-		-		-	

Date: 08AUG89

Taxa	Stations 1C		2C		3C		4C	5C	
PARASITIC COPEPODS									
Argulus sp.	0.6	(<.01)	-		-		-	-	
Ergasilus sp.	20.3	(0.16)	84.0	(0.30)	10.0	(0.04)	-	98.0	(0.19)
FISH									
Unid. fish larvae	2.8	(0.02)	-		2.5	(0.01)	-	-	
Total density	12495.5		27564.5		22272.1		27232.9	52245.2	
Number of taxa	26		20		20		21	14	

'-' indicates no density

Date: 18OCT89

Taxa	Stations 1C		2C		3C		4C		5C	
AMPHIPODA										
Gammarus sp.	1.2	(0.01)	4.4	(0.05)	3.2	(0.02)	2.1	(0.03)	-	
Corophium lacustre	0.1	(<.01)	0.8	(0.01)	-		-		-	
Monoculodes sp.	1.2	(0.01)	3.6	(0.04)	2.0	(0.01)	-		0.3	(<.01)
Gammarus fasciatus	16.1	(0.09)	31.4	(0.38)	16.3	(0.11)	5.4	(0.08)	1.3	(0.01)
ANNELIDA										
Polychaete larvae	16.0	(0.09)	-		11.4	(0.08)	-		33.3	(0.16)
CALANOID COPEPODA										
Eurytemora affinis	901.3	(5.25)	2150.0	(26.36)	4090.9	(28.64)	1989.7	(30.33)	7433.3	(36.42)
Acartia tonsa	10186.7	(59.33)	266.7	(3.27)	11.4	(0.08)	-		-	
Diaptomus sp.	-		-		-		-		19.6	(0.10)
CLADOCERANS										
Alonella sp.	-		50.0	(0.61)	284.1	(1.99)	728.2	(11.10)	533.3	(2.61)
Bosmina longirostris	32.0	(0.19)	233.3	(2.86)	6420.5	(44.94)	2461.5	(37.52)	9666.7	(47.36)
Ilyocryptus spinifer	-		-		-		-		19.6	(0.10)
Leptodora kindtii	-		-		-		0.3	(<.01)	0.7	(<.01)
Leydigia quadrangularis	-		-		6.7	(0.05)	-		-	
Alona sp.	-		-		6.7	(0.05)	-		433.3	(2.12)
CYCLOPOID COPEPODS										
Cyclopoida	-		-		-		138.5	(2.11)	-	
Cyclops vernalis	-		19.6	(0.24)	159.1	(1.11)	69.9	(1.07)	333.3	(1.63)
Mesocyclops edax	32.0	(0.19)	-		193.2	(1.35)	10.3	(0.16)	66.7	(0.33)
Cyclops bicuspidatus	-		-		-		56.4	(0.86)	-	
Halicyclops magniceps	1194.7	(6.96)	3450.0	(42.31)	2886.4	(20.20)	102.6	(1.56)	-	
OTHER SPECIES										
Palaemonetes sp.	0.1	(<.01)	0.3	(<.01)	-		-		-	
Harpacticoida	133.3	(0.78)	166.7	(2.04)	181.8	(1.27)	20.5	(0.31)	-	
Chaoborus sp.	-		-		-		0.3	(<.01)	-	
Copepod nauplii	4640.0	(27.02)	1766.7	(21.66)	-	(<.01)	964.1	(14.70)	1866.7	(9.15)
Chironomid larvae	-		-		-		-		1.0	(<.01)
Mysid	6.3	(0.04)	1.7	(0.02)	0.5	(<.01)	-		-	
Gastropod larvae	-		-		11.4	(0.08)	-		-	
Ostracoda	-		-		-		10.3	(0.16)	-	
Hydrobiidae	3.3	(0.02)	-		-		-		-	
PARASITIC COPEPODS										
Argulus sp.	-		-		0.2	(<.01)	-		-	
Ergasilus sp.	5.3	(0.03)	9.8	(0.12)	-		-		-	
Total density	17169.6		8155.0		14285.8		6560.1		20409.1	
Number of taxa	16		15		17		15		14	

'-' indicates no density

APPENDIX D

CONCENTRATION (CELLS/ML) OF PHYTOPLANKTON COLLECTED IN THE NANTICOKE RIVER BETWEEN JULY 1988 AND OCTOBER 1989 BY STATION AND DATE

Values in parentheses indicate percent composition.

Date: 16MAR89

Taxa	Stations 2C		Stations 4C	
DIATOMS				
Melosira granulata	-		39.3	(0.20)
Cyclotella sp.	88.4	(0.63)	1610.0	(8.28)
Asterionella formosa	-		3.0	(0.02)
Synedra sp.	0.5	(<.01)	-	
Gyrosigma sp.	2.0	(0.01)	19.0	(0.10)
Navicula sp.	1.0	(0.01)	1.0	(0.01)
Surirella sp.	0.5	(<.01)	-	
Skeletonema costatum	44.2	(0.31)	117.8	(0.61)
Coscinodiscus sp.	0.5	(<.01)	-	
Melosira distans	162.0	(1.15)	608.6	(3.13)
Skeletonema potamos	-		39.3	(0.20)
Eucampia zodiacus	3.0	(0.02)	-	
Rhizosolenia calcar avis	0.5	(<.01)	-	
Diatom, centric (0-10 microns)	381.1	(2.70)	831.5	(4.28)
Diatom, centric (11-20 microns)	117.8	(0.84)	415.8	(2.14)
Diatom, pennate (11-20 microns)	127.0	(0.90)	415.8	(2.14)
Diatom, pennate (21-30 microns)	58.9	(0.42)	98.2	(0.50)
Diatom, pennate (31-40 microns)	44.2	(0.31)	19.6	(0.10)
Diatom, pennate (51-75 microns)	2.5	(0.02)	1.0	(0.01)
Total	1034.0	(7.32)	4219.8	(21.72)
CHLOROPHYCEANS				
Scenedesmus quadricauda	-		157.1	(0.81)
Scenedesmus sp.	88.4	(0.63)	4.0	(0.02)
Chlorophyta	191.4	(1.36)	981.7	(5.05)
Ankistrodesmus sp.	353.4	(2.51)	216.0	(1.11)
Total	633.2	(4.50)	1358.8	(6.99)
CYANOBACTERIA				
Anacystis sp.	1779.0	(12.62)	844.2	(4.34)
Total	1779.0	(12.62)	844.2	(4.34)
DINOFLAGELLATES				
Katodinium rotundatum	206.2	(1.46)	-	
Dinoflagellatae	29.5	(0.21)	-	
Total	235.7	(1.67)	-	
OTHER FORMS				
Cryptophyta	127.0	(0.90)	138.6	(0.71)
Monads, unid	8258.0	(58.57)	10530.0	(54.15)
Flagellates, unid	2033.0	(14.42)	2356.0	(12.11)
Total	10418.0	(73.89)	13024.6	(66.97)
Total concentration	14099.8		19447.4	
Number of taxa	25		22	

'-' indicates no concentration

Date: 18APR89

Taxa	Stations 2C		4C	
DIATOMS				
Melosira granulata	362.5	(1.72)	77.5	(0.65)
Melosira sp.	22.7	(0.11)	108.5	(0.90)
Cyclotella sp.	181.2	(0.86)	325.5	(2.71)
Asterionella formosa	2.0	(0.01)	-	
Gyrosigma sp.	4.0	(0.02)	3.0	(0.03)
Navicula sp.	6.5	(0.03)	5.0	(0.04)
Surirella sp.	1.5	(0.01)	1.5	(0.01)
Melosira distans	883.5	(4.20)	527.0	(4.39)
Skeletonema potamos	-		7.0	(0.06)
Diatom, centric (0-10 microns)	152.5	(0.72)	228.7	(1.91)
Diatom, centric (11-20 microns)	-		76.2	(0.64)
Diatom, centric (21-30 microns)	181.2	(0.86)	-	
Diatom, centric (31-40 microns)	22.7	(0.11)	-	
Diatom, centric (41-50 microns)	1.0	(<.01)	4.0	(0.03)
Diatom, pennate (11-20 microns)	492.3	(2.34)	304.9	(2.54)
Diatom, pennate (21-30 microns)	657.0	(3.12)	899.0	(7.49)
Diatom, pennate (31-40 microns)	113.3	(0.54)	108.5	(0.90)
Diatom, pennate (51-75 microns)	2.0	(0.01)	0.5	(<.01)
Diatom, pennate (76-100 microns)	-		1.0	(0.01)
Diatom, pennate (101-150 microns)	1.0	(<.01)	-	
Total	3086.8	(14.66)	2677.8	(22.31)
CHLOROPHYCEANS				
Chlamydomonas sp.	-		76.2	(0.64)
Pandorina sp.	16.0	(0.08)	16.0	(0.13)
Scenedesmus quadricauda	611.7	(2.91)	248.0	(2.07)
Scenedesmus sp.	181.2	(0.86)	-	
Closterium sp.	-		1.0	(0.01)
Chlorophyta	906.2	(4.30)	93.0	(0.78)
Ankistrodesmus sp.	22.7	(0.11)	-	
Tetraedron sp.	22.7	(0.11)	-	
Micratinium sp.	-		449.5	(3.75)
Mougeotia sp.	-		1.0	(0.01)
Total	1760.4	(8.37)	884.7	(7.39)
CYANOBACTERIA				
Cyanophyta - trichomes	-		201.5	(1.68)
Anacystis sp.	6555.0	(31.14)	77.5	(0.65)
Total	6555.0	(31.14)	279.0	(2.33)
EUGLENOIDS				
Euglena sp.	45.3	(0.22)	-	
Total	45.3	(0.22)	-	
OTHER FORMS				
Cryptophyta	609.8	(2.90)	381.1	(3.18)
Monads, unid	7927.0	(37.66)	6555.0	(54.64)
Flagellates, unid	1067.0	(5.07)	1220.0	(10.17)
Total	9603.8	(45.63)	8156.1	(67.99)
Total concentration	21051.3		11997.7	
Number of taxa	28		28	

'-' indicates no concentration

Date: 18MAY89

Taxa	Stations 2C		Stations 4C	
DIATOMS				
Melosira granulata	13.5	(0.09)	53.5	(0.31)
Cyclotella sp.	162.0	(1.03)	132.5	(0.77)
Gyrosigma sp.	0.5	(<.01)	4.5	(0.03)
Navicula sp.	1.0	(0.01)	1.0	(0.01)
Surirella sp.	-		0.5	(<.01)
Chaetoceros sp.	14.7	(0.09)	-	
Coscinodiscus sp.	0.5	(<.01)	-	
Melosira distans	220.9	(1.41)	-	
Skeletonema potamos	44.2	(0.28)	795.2	(4.65)
Skeletonema sp.	-		29.5	(0.17)
Asterionella sp.	-		3.5	(0.02)
Diatom, centric (0-10 microns)	635.2	(4.05)	415.8	(2.43)
Diatom, centric (11-20 microns)	381.1	(2.43)	138.6	(0.81)
Diatom, centric (21-30 microns)	58.9	(0.38)	117.8	(0.69)
Diatom, centric (41-50 microns)	1.0	(0.01)	-	
Diatom, pennate (11-20 microns)	381.1	(2.43)	138.6	(0.81)
Diatom, pennate (21-30 microns)	176.7	(1.13)	294.5	(1.72)
Diatom, pennate (31-40 microns)	29.5	(0.19)	103.1	(0.60)
Diatom, pennate (41-50 microns)	-		14.7	(0.09)
Diatom, pennate (51-75 microns)	0.5	(<.01)	-	
Total	2121.3	(13.53)	2243.3	(13.11)
CHLOROPHYCEANS				
Pandorina sp.	-		117.8	(0.69)
Scenedesmus quadricauda	412.3	(2.63)	309.2	(1.81)
Scenedesmus sp.	162.0	(1.03)	58.9	(0.34)
Chlorophyta	324.0	(2.07)	147.3	(0.86)
Crucigenia sp.	58.9	(0.38)	-	
Ankistrodesmus sp.	73.6	(0.47)	132.5	(0.77)
Total	1030.8	(6.58)	765.7	(4.47)
CYANOBACTERIA				
Agmenellum sp.	235.6	(1.50)	-	
Anacystis sp.	485.9	(3.10)	162.0	(0.95)
Total	721.5	(4.60)	162.0	(0.95)
DINOFLAGELLATES				
Glenodinium sp.	-		14.7	(0.09)
Total	-		14.7	(0.09)
PRASINOPHYCEAE				
Tetraselmis sp.	117.8	(0.75)	58.9	(0.34)
Total	117.8	(0.75)	58.9	(0.34)
OTHER FORMS				
Cryptophyta	127.0	(0.81)	277.2	(1.62)
Monads, unid	10040.0	(64.02)	12060.0	(70.50)
Flagellates, unid	1525.0	(9.72)	1525.0	(8.91)
Total	11692.0	(74.55)	13862.2	(81.03)
Total concentration	15683.4		17106.8	
Number of taxa	27		26	

'-' indicates no concentration

Date: 07JUN89

Taxa	Stations 2C		Stations 4C	
DINOFLAGELLATES				
Gymnodinium sp.	29.5	(0.07)	-	
Total	29.5	(0.07)	-	
EUGLENOIDS				
Eutreptia lanowii	29.5	(0.07)	-	
Total	29.5	(0.07)	-	
PRASINOPHYCEAE				
Tetraselmis sp.	-		561.0	(2.57)
Total	-		561.0	(2.57)
OTHER FORMS				
Cryptophyta	1525.0	(3.88)	304.9	(1.40)
Monads, unid	21340.0	(54.29)	13420.0	(61.41)
Flagellates, unid	2134.0	(5.43)	609.8	(2.79)
Total	24999.0	(63.60)	14334.7	(65.60)
Total concentration	39305.1		21854.8	
Number of taxa	28		31	

'-' indicates no concentration

Date: 13JUL89

Taxa	Stations 2C		Stations 4C	
DIATOMS				
Melosira granulata	58.9	(0.14)	2209.0	(4.22)
Cyclotella sp.	265.1	(0.63)	117.8	(0.23)
Synedra sp.	-		1.0	(<.01)
Gyrosigma sp.	2.0	(<.01)	1.5	(<.01)
Navicula sp.	-		2.5	(<.01)
Surirella sp.	-		1.5	(<.01)
Skeletonema costatum	21.0	(0.05)	-	
Chaetoceros sp.	29.5	(0.07)	-	
Melosira distans	-		235.6	(0.45)
Skeletonema potamos	1090.0	(2.59)	412.3	(0.79)
Rhizosolenia eriensis	-		29.5	(0.06)
Diatom, centric (0-10 microns)	3201.0	(7.60)	2134.0	(4.08)
Diatom, centric (11-20 microns)	-		1525.0	(2.92)
Diatom, centric (21-30 microns)	382.9	(0.91)	559.6	(1.07)
Diatom, centric (31-40 microns)	-		58.9	(0.11)
Diatom, pennate (11-20 microns)	2591.9	(6.15)	-	
Diatom, pennate (21-30 microns)	-		88.4	(0.17)
Diatom, pennate (31-40 microns)	58.9	(0.14)	176.7	(0.34)
Diatom, pennate (41-50 microns)	-		29.5	(0.06)
Diatom, pennate (76-100 microns)	-		0.5	(<.01)
Total	7701.2	(18.28)	7583.2	(14.50)
CHLOROPHYCEANS				
Oocystis sp.	-		2.0	(<.01)
Scenedesmus quadricauda	1001.0	(2.38)	294.5	(0.56)
Scenedesmus sp.	117.8	(0.28)	412.3	(0.79)
Pediastrum duplex	14.0	(0.03)	30.5	(0.06)
Chlorophyta	176.7	(0.42)	29.5	(0.06)
Crucigenia sp.	206.2	(0.49)	-	
Ankistrodesmus sp.	265.1	(0.63)	176.7	(0.34)
Actinastrum sp.	-		2.0	(<.01)
Total	1780.8	(4.23)	947.5	(1.81)
CYANOBACTERIA				
Agmenellum sp.	3711.0	(8.81)	235.6	(0.45)
Cyanophyta - trichomes	1738.0	(4.12)	471.2	(0.90)
Anacystis sp.	2287.0	(5.43)	22878.0	(43.75)
Anacystis aeruginosa	-		16.0	(0.03)
Total	7736.0	(18.36)	23600.8	(45.13)
PRASINOPHYCEAE				
Tetraselmis sp.	235.6	(0.56)	353.4	(0.68)
Total	235.6	(0.56)	353.4	(0.68)
OTHER FORMS				
Cryptophyta	152.5	(0.36)	914.7	(1.75)
Monads, unid	23320.0	(55.33)	16460.0	(31.47)
Flagellates, unid	1220.0	(2.89)	2439.0	(4.66)
Total	24692.5	(58.58)	19813.7	(37.88)
Total concentration	42146.1		52298.5	
Number of taxa	23		32	

'-' indicates no concentration

Date: 08AUG89

Taxa	Stations 2C	4C	
DIATOMS			
Melosira granulata	.	6214.0	(20.32)
Melosira sp.	.	29.5	(0.10)
Cyclotella sp.	.	29.5	(0.10)
Fragilaria sp.	.	8.0	(0.03)
Gyrosigma sp.	.	3.0	(0.01)
Surirella sp.	.	61.0	(0.20)
Melosira distans	.	117.8	(0.39)
Skeletonema potamos	.	294.5	(0.96)
Asterionella sp.	.	6.5	(0.02)
Rhizosolenia eriensis	.	29.5	(0.10)
Diatom, centric (0-10 microns)	.	609.8	(1.99)
Diatom, centric (11-20 microns)	.	304.9	(1.00)
Diatom, centric (21-30 microns)	.	206.2	(0.67)
Diatom, pennate (31-40 microns)	.	117.8	(0.39)
Diatom, pennate (41-50 microns)	.	58.9	(0.19)
Total	.	8090.7	(26.47)
CHLOROPHYCEANS			
Pandorina sp.	.	24.0	(0.08)
Scenedesmus quadricauda	.	736.3	(2.41)
Scenedesmus sp.	.	147.3	(0.48)
Pediastrum duplex	.	48.0	(0.16)
Chlorophyta	.	147.3	(0.48)
Ankistrodesmus sp.	.	117.8	(0.39)
Total	.	1220.7	(4.00)
CYANOBACTERIA			
Agmenellum sp.	.	471.2	(1.54)
Anabaena sp.	.	29.5	(0.10)
Cyanophyta - trichomes	.	2744.0	(8.97)
Anacystis sp.	.	2209.0	(7.22)
Anacystis aeruginosa	.	113.0	(0.37)
Total	.	5566.7	(18.20)
OTHER FORMS			
Cryptophyta	.	1372.0	(4.49)
Monads, unid	.	12650.0	(41.37)
Flagellates, unid	.	1677.0	(5.48)
Total	.	15699.0	(51.34)
Total concentration	.	30577.1	
Number of taxa	.	29	

'.' damaged sample

Date: 18OCT89

Taxa	Stations 2C		Stations 4C	
DIATOMS				
Melosira granulata	765.7	(1.62)	2179.0	(8.95)
Melosira sp.	-		235.6	(0.97)
Cyclotella sp.	29.5	(0.06)	58.9	(0.24)
Synedra sp.	-		1.5	(0.01)
Gyrosigma sp.	0.5	(<.01)	8.5	(0.03)
Navicula sp.	0.5	(<.01)	4.0	(0.02)
Surirella sp.	1.0	(<.01)	8.5	(0.03)
Skeletonema costatum	647.9	(1.37)	-	
Leptocylindrus minimus	10600.0	(22.39)	29.5	(0.12)
Melosira distans	58.9	(0.12)	-	
Skeletonema potamos	2209.0	(4.67)	3446.0	(14.16)
Skeletonema sp.	382.9	(0.81)	-	
Bacillaria paxillifer	-		2.0	(0.01)
Melosira islandica	-		2.5	(0.01)
Cylindrotheca closterium	29.5	(0.06)	0.5	(<.01)
Diatom, centric (0-10 microns)	1982.0	(4.19)	1829.0	(7.52)
Diatom, centric (11-20 microns)	914.7	(1.93)	-	
Diatom, centric (21-30 microns)	265.1	(0.56)	353.4	(1.45)
Diatom, centric (31-40 microns)	-		88.4	(0.36)
Diatom, centric (41-50 microns)	2.5	(0.01)	1.5	(0.01)
Diatom, centric (51-75 microns)	4.0	(0.01)	-	
Diatom, pennate (11-20 microns)	152.5	(0.32)	457.4	(1.88)
Diatom, pennate (21-30 microns)	176.7	(0.37)	235.6	(0.97)
Diatom, pennate (31-40 microns)	176.7	(0.37)	176.7	(0.73)
Diatom, pennate (51-75 microns)	2.0	(<.01)	-	
Total	18401.5	(38.86)	9118.4	(37.47)
CHLOROPHYCEANS				
Scenedesmus quadricauda	647.9	(1.37)	117.8	(0.48)
Scenedesmus sp.	117.8	(0.25)	-	
Closterium sp.	-		0.5	(<.01)
Chlorophyta	-		88.4	(0.36)
Ankistrodesmus sp.	235.6	(0.50)	29.5	(0.12)
Total	1001.3	(2.12)	236.1	(0.96)
CYANOBACTERIA				
Cyanophyta - trichomes	1443.0	(3.05)	457.4	(1.88)
Anacystis sp.	6098.0	(12.88)	-	
Anacystis aeruginosa	-		35.0	(0.14)
Total	7541.0	(15.93)	492.4	(2.02)

Date: 18OCT89

Taxa	Stations 2C		Stations 4C	
DINOFLAGELLATES				
Glenodinium sp.	-		29.5	(0.12)
Total	-		29.5	(0.12)
SILICOFLAGELLATES				
Dinobryan sp.	-		13.0	(0.05)
Total	-		13.0	(0.05)
PRASINOPHYCEAE				
Tetraselmis sp.	117.8	(0.25)	117.8	(0.48)
Total	117.8	(0.25)	117.8	(0.48)
OTHER FORMS				
Cryptophyta	304.9	(0.64)	1067.0	(4.38)
Monads, unid	18450.0	(38.97)	11430.0	(46.97)
Flagellates, unid	1525.0	(3.22)	1829.0	(7.52)
Total	20279.9	(42.83)	14326.0	(58.87)
Total concentration	47341.5		24333.2	
Number of taxa	29		31	

'-' indicates no concentration

Date: 13JUL88

Taxa	Stations 2C		Stations 4C	
DIATOMS				
Melosira granulata	-		871.0	(1.89)
Cyclotella sp.	72.6	(0.44)	436.0	(0.94)
Asterionella formosa	-		145.0	(0.31)
Navicula sp.	145.0	(0.87)	145.0	(0.31)
Nitzschia sp.	218.0	(1.31)	145.0	(0.31)
Skeletonema costatum	1230.0	(7.40)	3490.0	(7.56)
Leptocylindrus minimus	799.0	(4.81)	2610.0	(5.65)
Chaetoceros sp.	218.0	(1.31)	145.0	(0.31)
Chaetoceros subtilis	218.0	(1.31)	145.0	(0.31)
Skeletonema potamos	290.0	(1.75)	726.0	(1.57)
Diatom, centric (0-10 microns)	1380.0	(8.30)	3490.0	(7.56)
Diatom, centric (11-20 microns)	-		145.0	(0.31)
Total	4570.6	(27.50)	12493.0	(27.03)
CHLOROPHYCEANS				
Oocystis sp.	508.0	(3.06)	871.0	(1.89)
Scenedesmus sp.	290.0	(1.75)	1450.0	(3.14)
Chlorophyta	2901.0	(17.46)	3480.0	(7.54)
Crucigenia sp.	290.0	(1.75)	436.0	(0.94)
Ankistrodesmus sp.	145.0	(0.87)	145.0	(0.31)
Chodatella sp.	944.0	(5.68)	871.0	(1.89)
Pyramimonas sp.	508.0	(3.06)	1020.0	(2.21)
Tetrastrum staurogeniaefrome	-		581.0	(1.26)
Coelastrum sp.	-		581.0	(1.26)
Total	5586.0	(33.63)	9435.0	(20.44)
CYANOBACTERIA				
Anabaena sp.	72.6	(0.44)	-	
Cyanophyta - trichomes	72.6	(0.44)	145.0	(0.31)
Agmenellum quadruplicatum	871.0	(5.24)	2610.0	(5.65)
Total	1016.2	(6.12)	2755.0	(5.96)
DINOFLAGELLATES				
Katodinium rotundatum	-		290.0	(0.63)
Total	-		290.0	(0.63)
SILICOFLAGELLATES				
Calycomonas ovalis	363.0	(2.18)	290.0	(0.63)
Total	363.0	(2.18)	290.0	(0.63)
OTHER FORMS				
Cryptophyta	1380.0	(8.30)	2320.0	(5.03)
Monads, unid	1310.0	(7.88)	8420.0	(18.24)
Colony, unid	2030.0	(12.22)	9580.0	(20.75)
Flagellates, unid	363.0	(2.18)	581.0	(1.26)
Total	5083.0	(30.58)	20901.0	(45.28)
Total concentration	16618.8		46164.0	
Number of taxa	24		29	

'-' indicates no concentration

Date: 08AUG88

Taxa	Stations 2C		4C	
DIATOMS				
Cyclotella sp.	871.0	(1.50)	775.0	(1.54)
Navicula sp.	-		581.0	(1.16)
Nitzschia sp.	-		968.0	(1.93)
Skeletonema costatum	2900.0	(4.99)	2520.0	(5.02)
Leptocylindrus minimus	2030.0	(3.50)	2520.0	(5.02)
Chaetoceros sp.	1450.0	(2.50)	-	
Chaetoceros subtilis	1160.0	(2.00)	-	
Skeletonema potamos	1450.0	(2.50)	3680.0	(7.33)
Diatom, centric (0-10 microns)	2900.0	(4.99)	7360.0	(14.67)
Diatom, centric (11-20 microns)	-		194.0	(0.39)
Diatom, pennate (0-10 microns)	290.0	(0.50)	194.0	(0.39)
Diatom, pennate (11-20 microns)	290.0	(0.50)	-	
Total	13341.0	(22.98)	18792.0	(37.45)
CHLOROPHYCEANS				
Oocystis sp.	290.0	(0.50)	387.0	(0.77)
Scenedesmus sp.	1450.0	(2.50)	5810.0	(11.58)
Chlorophyta	7550.0	(13.00)	3875.0	(7.72)
Crucigenia sp.	-		1360.0	(2.71)
Selenastrum sp.	290.0	(0.50)	-	
Ankistrodesmus sp.	1160.0	(2.00)	581.0	(1.16)
Chodatella sp.	871.0	(1.50)	387.0	(0.77)
Pyramimonas sp.	1740.0	(3.00)	1740.0	(3.47)
Total	13351.0	(23.00)	14140.0	(28.18)
CYANOBACTERIA				
Oscillatoria sp.	-		194.0	(0.39)
Cyanophyta - trichomes	290.0	(0.50)	387.0	(0.77)
Agmenellum quadruplicatum	3780.0	(6.51)	3490.0	(6.96)
Total	4070.0	(7.01)	4071.0	(8.12)
DINOFLAGELLATES				
Katodinium rotundatum	581.0	(1.00)	-	
Total	581.0	(1.00)	-	
SILICOFLAGELLATES				
Calycomonas ovalis	581.0	(1.00)	194.0	(0.39)
Total	581.0	(1.00)	194.0	(0.39)
OTHER FORMS				
Cryptophyta	2610.0	(4.50)	3490.0	(6.96)
Monads, unid	11300.0	(19.46)	2320.0	(4.62)
Colony, unid	10200.0	(17.57)	6780.0	(13.51)
Flagellates, unid	2030.0	(3.50)	387.0	(0.77)
Total	26140.0	(45.03)	12977.0	(25.86)
Total concentration	58064.0		50174.0	
Number of taxa	24		24	

'-' indicates no concentration

Date: 19OCT88

Taxa	Stations 2C		Stations 4C	
DIATOMS				
Cyclotella sp.	96.8	(0.48)	-	
Navicula sp.	194.0	(0.96)	-	
Nitzschia sp.	96.8	(0.48)	-	
Leptocylindrus minimus	194.0	(0.96)	15400.0	(28.67)
Chaetoceros sp.	96.8	(0.48)	-	
Chaetoceros subtilis	-		871.0	(1.62)
Skeletonema potamos	194.0	(0.96)	-	
Grammatophora sp.	194.0	(0.96)	-	
Diatom, centric (0-10 microns)	678.0	(3.35)	1450.0	(2.70)
Total	1744.4	(8.63)	17721.0	(32.99)
CHLOROPHYCEANS				
Chlamydomonas sp.	-		290.0	(0.54)
Oocystis sp.	-		1160.0	(2.16)
Scenedesmus sp.	678.0	(3.35)	3780.0	(7.04)
Chlorophyta	2906.0	(14.36)	9580.0	(17.83)
Crucigenia sp.	-		2900.0	(5.40)
Selenastrum sp.	194.0	(0.96)	581.0	(1.08)
Ankistrodesmus sp.	581.0	(2.87)	290.0	(0.54)
Chodatella sp.	194.0	(0.96)	290.0	(0.54)
Pyramimonas sp.	775.0	(3.83)	-	
Total	5328.0	(26.33)	18871.0	(35.13)
CYANOBACTERIA				
Agmenellum quadruplicatum	581.0	(2.87)	3190.0	(5.94)
Total	581.0	(2.87)	3190.0	(5.94)
DINOFLAGELLATES				
Peridinium sp.	96.8	(0.48)	-	
Katodinium rotundatum	96.8	(0.48)	-	
Total	193.6	(0.96)	-	
SILICOFLAGELLATES				
Calycomonas ovalis	96.8	(0.48)	-	
Total	96.8	(0.48)	-	
OTHER FORMS				
Cryptophyta	2610.0	(12.90)	2320.0	(4.32)
Monads, unid	4740.0	(23.43)	4940.0	(9.20)
Colony, unid	3390.0	(16.75)	4650.0	(8.66)
Flagellates, unid	1550.0	(7.66)	2030.0	(3.78)
Total	12290.0	(60.74)	13940.0	(25.96)
Total concentration	20233.8		53722.0	
Number of taxa	22		16	

'-' indicates no concentration

APPENDIX E

DENSITY (#/M^2) OF BENTHIC ORGANISMS COLLECTED IN THE NANTICOKE RIVER BETWEEN JULY 1988 AND OCTOBER 1989 BY DATE, STATION, AND LOCATION (EAST, WEST, OR CHANNEL)

Station 1 1988

Species	July West	July Channel	July East	October West	October Channel	October East
POLYCHAETA						
Eteone heteropoda	40	0	40	0	40	40
Glycinde solitaria	0	0	0	80	0	0
Heteromastus filiformis	120	40	40	320	1360	0
Laeonereis culveri	40	0	0	0	0	0
Nereis succinea	0	0	40	0	40	2000
Polydora cornuta	0	0	0	0	0	0
Marenzelleria viridis	80	80	40	40	80	0
Streblospio benedicti	40	40	80	160	0	280
Hobsonia florida	0	0	0	0	0	0
Boccardiella hamata	0	0	0	0	40	8040
MOLLUSCA						
Mytilopsis leucophaeta	0	0	0	0	0	0
Ischadium recurvum	0	0	0	0	0	0
Macoma balthica	0	560	0	0	40	0
Macoma mitchelli	40	120	40	240	400	240
Mulinia lateralis	0	0	0	40	0	0
Mya arenaria	0	0	0	40	0	0
Rangia cuneata	0	0	80	0	0	0
Sayella chesapeakea	0	0	0	160	0	0
Hydrobiidae	0	0	0	0	0	0
CRUSTACEA						
Rhithropanopeus harrisii	80	520	80	0	0	0
Neomysis americana	0	200	0	0	0	0
Gammarus sp.	0	0	0	0	0	0
Leptocheirus plumulosus	80	120	160	40	0	0
Melita nitida	0	0	0	0	0	0
Leucon americanus	40	0	120	40	40	240
Chiridotea coeca	0	0	0	0	0	0
Cyathura polita	120	160	200	280	240	440
Edotea triloba	0	40	0	0	40	160
Chiridotea almyra	0	0	0	0	320	0
Corophium lacustre	0	0	0	0	0	40
Gammarus daiberi	0	0	0	0	0	0
Monoculodes sp.	0	40	0	0	0	0
OLIGOCHAETA						
Oligochaeta	40	200	320	0	0	0
Tubificoides sp.	160	720	920	40	160	120
OTHER						
Nemertina	0	0	0	0	0	0
Hydracarina	0	0	0	0	0	0
Chaoborus sp.	0	0	0	0	0	0
Diadumene leucolena	0	0	0	0	40	0
Ceratopogonidae	0	0	0	0	0	40
Hirudinea	0	0	0	0	0	0
Chironomid larvae	0	0	0	0	0	0
Platyhelminthes	0	0	0	0	0	0
Chironomidae pupae	0	0	0	0	0	0
Carinoma tremaphoros	0	200	120	200	560	280

Station 1 1989

Species	March West	March Channel	March East	May West	May Channnel	May East	July West	July Channel	July East	October West	October Channel	October East
POLYCHAETA												
Eteone heteropoda	0	0	40	0	0	0	0	0	0	0	0	0
Glycinde solitaria	120	0	0	0	0	0	0	0	0	0	0	0
Heteromastus filiformis	240	240	160	80	0	120	120	0	40	360	0	40
Laeonereis culveri	0	0	0	0	0	0	0	0	0	40	0	0
Nereis succinea	0	160	240	0	40	40	40	0	0	0	0	0
Polydora cornuta	0	0	0	0	0	0	0	0	0	40	0	0
Marenzelleria viridis	0	120	240	160	80	40	80	320	80	40	80	0
Streblospio benedicti	120	160	80	0	0	0	0	0	0	0	0	0
Hobsonia florida	0	0	0	0	0	0	0	0	0	0	0	0
Boccardiella hamata	0	0	0	0	0	0	0	0	0	0	0	400
MOLLUSCA												
Mytilopsis leucophaeta	0	0	0	0	0	0	0	0	0	0	0	0
Ischadium recurvum	0	0	0	0	0	0	0	0	0	0	0	0
Macoma balthica	3600	3400	2360	360	2560	1720	40	80	40	0	0	0
Macoma mitchelli	120	40	0	160	0	0	40	0	0	40	40	40
Mulinia lateralis	0	0	40	0	0	0	0	0	0	0	0	0
Mya arenaria	0	0	0	0	0	0	0	0	0	0	0	0
Rangia cuneata	40	40	0	0	0	0	40	0	0	360	0	0
Sayella chesapeakea	0	40	0	0	0	0	0	0	0	0	0	0
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTACEA												
Rhithropanopeus harrisii	0	0	0	0	0	0	40	0	0	0	0	0
Neomysis americana	0	320	80	0	120	0	0	0	80	0	40	0
Gammarus sp.	0	40	40	160	920	200	0	1040	480	1280	40	40
Leptocheirus plumulosus	120	0	280	1000	0	160	80	160	1400	160	40	80
Melita nitida	0	0	160	0	0	0	0	0	160	0	0	0
Leucon americanus	0	0	0	0	0	0	0	0	0	0	0	0
Chiridotea coeca	0	0	0	0	0	0	0	0	0	0	0	0
Cyathura polita	80	440	200	80	160	120	160	320	200	200	40	120
Edotea triloba	0	0	1080	80	80	80	0	0	120	0	200	0
Chiridotea almyra	0	40	0	0	0	40	0	0	0	0	0	0
Corophium lacustre	80	80	600	40	0	0	40	0	0	0	0	0
Gammarus daiberi	0	0	0	0	0	0	0	480	0	0	0	0
Monoculodes sp.	0	80	40	120	240	40	0	160	360	80	280	40
OLIGOCHAETA												
Oligochaeta	0	80	80	0	0	0	280	1080	1800	0	0	40
Tubificoides sp.	240	4440	2080	160	2840	480	1120	120	1080	640	1080	480
OTHER												
Nemertina	0	0	40	0	0	0	0	0	0	0	0	0
Hydracarina	0	0	0	0	0	0	0	0	0	0	0	0
Chaoborus sp.	0	0	0	0	0	0	0	0	40	0	120	0
Diadumene leucolena	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0
Hirudinea	0	0	40	0	0	0	0	0	0	0	0	0
Chironomid larvae	0	0	0	0	0	0	0	40	0	80	40	40
Platyhelminthes	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae pupae	0	0	0	0	0	0	0	0	0	0	0	0
Carinoma tremaphoros	40	480	240	80	120	40	0	80	40	160	0	0

Station 2 1988

Species	July West	July Channel	July East	October West	October Channel	October East
POLYCHAETA						
Eteone heteropoda	0	0	0	0	0	0
Glycinde solitaria	0	0	0	0	40	0
Heteromastus filiformis	40	40	0	280	80	40
Laeonereis culveri	40	0	0	0	0	0
Nereis succinea	40	0	40	0	0	80
Polydora cornuta	0	0	0	0	0	0
Marenzelleria viridis	120	120	120	0	0	0
Streblospio benedicti	40	0	0	0	0	0
Hobsonia florida	0	0	0	0	0	0
Boccardiella hamata	0	0	0	0	0	1200
MOLLUSCA						
Mytilopsis leucophaeta	0	0	0	0	0	0
Ischadium recurvum	0	0	0	0	0	0
Macoma balthica	80	40	0	0	0	0
Macoma mitchelli	40	0	0	80	280	0
Mulinia lateralis	0	0	0	0	0	0
Mya arenaria	0	0	0	0	0	0
Rangia cuneata	80	0	360	0	40	40
Sayella chesapeakea	0	0	0	0	0	0
Hydrobiidae	0	0	40	0	0	40
CRUSTACEA						
Rhithropanopeus harrisii	0	40	0	0	0	0
Neomysis americana	0	360	0	0	0	0
Gammarus sp.	0	0	40	0	40	0
Leptocheirus plumulosus	0	400	120	240	80	0
Melita nitida	0	0	0	0	0	0
Leucon americanus	40	40	0	40	120	120
Chiridotea coeca	0	0	0	0	0	0
Cyathura polita	120	240	240	80	160	160
Edotea triloba	0	40	40	0	80	0
Chiridotea almyra	0	0	0	0	0	0
Corophium lacustre	0	0	0	0	0	0
Gammarus daiberi	0	0	0	0	0	0
Monoculodes sp.	0	0	0	0	0	0
OLIGOCHAETA						
Oligochaeta	0	0	0	0	0	0
Tubificoides sp.	800	4560	200	320	280	80
OTHER						
Nemertina	0	0	0	0	0	0
Hydracarina	0	0	0	0	0	0
Chaoborus sp.	0	0	0	0	0	0
Diadumene leucolena	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0
Hirudinea	0	0	0	0	0	0
Chironomid larvae	0	0	40	0	40	0
Platyhelminthes	0	0	0	0	0	0
Chironomidae pupae	0	0	0	0	0	0
Carinoma tremaphoros	0	0	40	240	360	120

Station 2 1989

Species	March West	March Channel	March East	May West	May Channnel	May East	July West	July Channel	July East	October West	October Channel	October East
POLYCHAETA												
Eteone heteropoda	0	0	0	0	0	0	0	0	0	0	0	0
Glycinde solitaria	0	0	0	0	0	0	0	0	0	0	0	0
Heteromastus filiformis	160	40	0	0	0	40	0	0	0	0	40	0
Laeonereis culveri	120	40	0	40	0	0	0	0	0	0	0	0
Nereis succinea	80	40	0	0	40	40	0	0	0	0	0	0
Polydora cornuta	0	0	0	0	0	0	0	0	0	0	0	0
Marenzelleria viridis	80	0	40	40	0	40	40	40	120	120	80	40
Streblospio benedicti	0	0	0	0	0	0	0	0	0	0	0	0
Hobsonia florida	0	0	0	0	0	0	0	0	0	0	0	0
Boccardiella hamata	0	0	0	0	0	0	0	0	40	0	0	0
MOLLUSCA												
Mytilopsis leucophaeta	0	0	0	0	0	0	0	0	0	0	0	0
Ischadium recurvum	0	0	0	0	0	0	0	0	0	0	0	0
Macoma balthica	3120	320	3320	80	0	80	0	0	0	0	0	0
Macoma mitchelli	80	0	0	80	0	0	80	0	80	0	0	0
Mulinia lateralis	0	0	0	0	0	0	0	0	0	0	0	0
Mya arenaria	0	0	0	0	0	0	0	0	0	0	0	0
Rangia cuneata	0	0	40	0	0	0	0	0	360	280	40	40
Sayella chesapeakea	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTACEA												
Rhithropanopeus harrisii	0	0	0	0	0	0	0	0	40	0	0	0
Neomysis americana	200	40	0	0	0	0	0	0	0	0	0	0
Gammarus sp.	240	160	0	400	40	40	0	840	640	80	2440	4920
Leptocheirus plumulosus	440	0	80	400	0	120	320	40	200	0	0	0
Melita nitida	0	0	0	120	0	0	0	0	80	0	0	0
Leucon americanus	0	0	0	0	0	0	0	0	0	0	0	0
Chiridotea coeca	0	0	0	0	0	0	0	0	0	0	0	0
Cyathura polita	200	40	40	40	40	40	40	40	160	0	0	0
Edotea triloba	160	120	0	0	0	0	0	0	0	0	0	0
Chiridotea almyra	0	0	0	0	80	0	0	0	0	0	0	0
Corophium lacustre	40	1440	0	0	0	0	0	0	40	0	0	0
Gammarus daiberi	0	0	0	0	0	0	760	0	0	0	200	0
Monoculodes sp.	0	0	40	40	80	80	40	400	40	0	40	0
OLIGOCHAETA												
Oligochaeta	0	0	0	0	0	0	0	0	0	0	0	0
Tubificoides sp.	400	1600	200	1160	280	800	1000	920	400	600	1600	200
OTHER												
Nemertina	120	0	0	0	0	0	0	0	0	0	0	0
Hydracarina	0	0	0	0	0	0	0	0	0	0	0	0
Chaoborus sp.	0	0	0	0	0	0	0	40	80	0	400	0
Diadumene leucolena	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0
Hirudinea	0	0	0	40	0	0	0	0	0	0	0	0
Chironomid larvae	40	0	0	240	0	240	200	0	0	160	200	40
Platyhelminthes	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae pupae	0	0	0	0	0	0	0	80	0	0	0	0
Carinoma tremaphoros	80	0	40	0	80	80	0	40	0	0	0	0

Station 3 1988

Species	July West	July Channel	July East	October West	October Channel	October East
POLYCHAETA						
Eteone heteropoda	0	0	0	40	0	0
Glycinde solitaria	0	0	0	0	0	0
Heteromastus filiformis	0	40	0	0	0	40
Laeonereis culveri	0	0	160	0	0	0
Nereis succinea	0	0	0	0	0	0
Polydora cornuta	0	0	0	0	0	0
Marenzelleria viridis	0	80	80	0	0	0
Streblospio benedicti	0	0	0	0	0	0
Hobsonia florida	0	0	0	0	0	0
Boccardiella hamata	0	0	0	0	0	0
MOLLUSCA						
Mytilopsis leucophaeta	0	0	0	0	0	0
Ischadium recurvum	0	0	0	0	0	0
Macoma balthica	40	0	0	0	0	0
Macoma mitchelli	0	0	0	120	0	0
Mulinia lateralis	0	0	120	0	0	0
Mya arenaria	0	0	0	0	0	0
Rangia cuneata	80	0	160	0	0	0
Sayella chesapeakea	0	0	0	0	0	0
Hydrobiidae	0	0	0	0	0	0
CRUSTACEA						
Rhithropanopeus harrisii	0	40	0	0	40	0
Neomysis americana	0	200	0	0	40	40
Gammarus sp.	0	800	0	80	0	480
Leptocheirus plumulosus	200	0	120	40	0	0
Melita nitida	0	0	0	0	0	0
Leucon americanus	40	0	0	0	0	0
Chiridotea coeca	0	0	0	0	0	0
Cyathura polita	0	80	80	0	80	0
Edotea triloba	40	0	80	0	0	0
Chiridotea almyra	0	0	0	0	0	160
Corophium lacustre	0	0	0	0	1240	40
Gammarus daiberi	0	0	0	0	40	0
Monoculodes sp.	0	40	40	40	240	240
OLIGOCHAETA						
Oligochaeta	80	80	40	0	0	0
Tubificoides sp.	400	360	560	800	120	80
OTHER						
Nemertina	0	0	0	0	0	0
Hydracarina	0	0	0	0	0	0
Chaoborus sp.	0	0	0	40	0	0
Diadumene leucolena	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0
Hirudinea	0	0	0	0	0	0
Chironomid larvae	120	0	0	40	0	0
Platyhelminthes	0	0	0	0	0	0
Chironomidae pupae	0	0	0	0	0	0
Carinoma tremaphoros	0	40	40	0	0	200

Station 3 1989

Species	March West	March Channel	March East	May West	May Channnel	May East	July West	July Channel	July East	October West	October Channel	October East
POLYCHAETA												
Eteone heteropoda	0	0	0	0	0	0	0	0	0	0	0	0
Glycinde solitaria	0	0	0	0	0	0	0	0	0	0	0	0
Heteromastus filiformis	0	0	0	0	0	0	0	0	0	0	0	0
Laeonereis culveri	0	0	0	0	0	40	0	0	0	0	0	0
Nereis succinea	0	600	0	0	0	0	0	0	0	0	0	0
Polydora cornuta	0	0	0	0	0	0	0	0	0	0	0	0
Marenzelleria viridis	120	240	120	0	0	0	120	80	240	40	40	80
Streblospio benedicti	0	0	0	0	0	0	0	0	0	0	0	0
Hobsonia florida	0	0	0	0	0	0	0	0	0	0	0	0
Boccardiella hamata	0	0	0	0	0	0	0	0	40	0	40	0
MOLLUSCA												
Mytilopsis leucophaeta	0	0	0	0	0	0	0	0	0	0	0	0
Ischadium recurvum	0	80	0	0	0	0	0	0	0	0	0	0
Macoma balthica	200	80	320	0	0	0	0	0	0	0	0	0
Macoma mitchelli	200	0	120	120	0	80	0	0	0	0	0	0
Mulinia lateralis	0	0	0	0	0	0	0	0	0	0	0	0
Mya arenaria	0	0	0	0	0	0	0	0	0	0	0	0
Rangia cuneata	0	40	0	0	0	0	80	40	0	160	0	0
Sayella chesapeakea	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	40	0
CRUSTACEA												
Rhithropanopeus harrisii	0	400	0	0	0	0	40	0	0	0	0	0
Neomysis americana	0	0	0	0	0	0	0	0	0	0	0	0
Gammarus sp.	80	2360	360	0	240	40	240	3680	160	120	40	200
Leptocheirus plumulosus	0	80	0	0	0	0	160	0	0	0	0	80
Melita nitida	0	320	0	0	0	0	0	0	0	0	0	0
Leucon americanus	0	0	0	0	0	0	0	0	0	0	0	0
Chiridotea coeca	0	0	0	0	0	0	0	0	0	0	0	0
Cyathura polita	0	880	200	40	40	40	0	40	1200	0	0	0
Edotea triloba	0	40	0	0	0	0	0	0	0	40	40	0
Chiridotea almyra	0	0	0	0	0	0	0	0	40	0	0	0
Corophium lacustre	40	21840	0	0	0	0	0	40	0	0	0	0
Gammarus daiberi	0	0	0	0	0	0	280	0	40	0	0	0
Monoculodes sp.	0	0	0	0	40	0	40	40	320	80	40	0
OLIGOCHAETA												
Oligochaeta	0	0	0	0	0	0	0	0	0	120	0	200
Tubificoides sp.	680	360	800	40	40	720	0	0	280	360	320	0
OTHER												
Nemertina	0	0	0	0	0	0	0	0	0	0	0	0
Hydracarina	0	0	0	0	0	0	0	0	0	0	0	0
Chaoborus sp.	0	0	0	0	0	0	120	40	0	40	0	0
Diadumene leucolena	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	40	0	0	0	0	0	0
Hirudinea	0	0	0	0	0	0	0	0	0	0	0	0
Chironomid larvae	0	0	80	280	0	160	0	0	120	160	40	80
Platyhelminthes	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae pupae	0	0	0	0	0	0	0	0	0	0	0	0
Carinoma tremaphoros	80	120	40	40	0	0	0	0	0	0	0	0

Station 4 1988

Species	July West	July Channel	July East	October West	October Channel	October East
POLYCHAETA						
Eteone heteropoda	0	0	0	0	0	0
Glycinde solitaria	0	0	0	0	0	0
Heteromastus filiformis	0	0	0	0	0	0
Laeonereis culveri	0	0	0	120	0	0
Nereis succinea	0	0	0	0	0	0
Polydora cornuta	0	0	0	0	0	0
Marenzelleria viridis	40	320	80	40	80	0
Streblospio benedicti	0	0	0	0	0	0
Hobsonia florida	0	0	40	0	0	0
Boccardiella hamata	0	200	80	0	40	960
MOLLUSCA						
Mytilopsis leucophaeta	0	0	0	0	0	0
Ischadium recurvum	0	0	0	0	0	0
Macoma balthica	0	0	0	0	0	0
Macoma mitchelli	0	0	40	160	0	0
Mulinia lateralis	40	0	0	0	0	0
Mya arenaria	0	0	0	0	0	0
Rangia cuneata	0	0	200	0	280	0
Sayella chesapeakea	0	0	0	0	0	0
Hydrobiidae	0	0	120	0	0	0
CRUSTACEA						
Rhithropanopeus harrisii	0	40	80	0	0	0
Neomysis americana	0	160	0	0	40	0
Gammarus sp.	0	160	40	0	40	0
Leptocheirus plumulosus	240	40	880	240	0	0
Melita nitida	0	0	0	0	0	0
Leucon americanus	0	0	0	0	0	0
Chiridotea coeca	0	0	0	0	360	0
Cyathura polita	0	120	120	40	80	320
Edotea triloba	40	0	280	0	0	0
Chiridotea almyra	0	0	0	0	0	0
Corophium lacustre	80	40	0	0	80	1760
Gammarus daiberi	0	0	0	40	0	0
Monoculodes sp.	0	0	0	0	80	0
OLIGOCHAETA						
Oligochaeta	0	0	0	0	0	0
Tubificoides sp.	200	120	120	560	200	240
OTHER						
Nemertina	0	0	0	0	0	0
Hydracarina	0	0	0	0	0	0
Chaoborus sp.	0	0	0	0	0	0
Diadumene leucolena	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0
Hirudinea	0	0	0	0	0	0
Chironomid larvae	200	560	400	0	0	40
Platyhelminthes	0	0	0	0	0	0
Chironomidae pupae	0	0	0	0	0	0
Carinoma tremaphoros	40	40	0	120	80	200

Station 4 1989

Species	March West	March Channel	March East	May West	May Channnel	May East	July West	July Channel	July East	October West	October Channel	October East
POLYCHAETA												
Eteone heteropoda	0	0	0	0	0	0	0	0	0	0	0	0
Glycinde solitaria	0	0	0	0	0	0	0	0	0	0	0	0
Heteromastus filiformis	0	0	0	0	0	0	0	0	0	0	0	0
Laeonereis culveri	80	0	0	0	0	0	0	0	0	0	0	0
Nereis succinea	0	0	0	0	0	0	0	0	0	0	0	0
Polydora cornuta	0	0	0	0	0	0	0	0	0	0	0	0
Marenzelleria viridis	120	2080	1840	200	1160	800	0	920	160	0	80	0
Streblospio benedicti	0	0	0	0	0	0	0	0	0	0	0	0
Hobsonia florida	0	0	0	0	0	40	0	0	0	0	0	0
Boccardiella hamata	0	0	0	0	0	0	0	0	0	0	0	0
MOLLUSCA												
Mytilopsis leucophaeta	0	40	0	0	0	0	0	0	0	0	0	0
Ischadium recurvum	0	0	0	0	0	0	0	0	0	0	0	0
Macoma balthica	40	40	40	0	0	0	0	0	0	0	0	0
Macoma mitchelli	80	0	0	40	0	0	0	40	0	0	0	0
Mulinia lateralis	0	0	0	0	0	0	0	0	0	0	0	0
Mya arenaria	0	0	0	0	0	0	0	0	0	0	0	0
Rangia cuneata	0	40	200	0	120	760	40	0	2440	0	40	40
Sayella chesapeakea	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobiidae	0	0	40	0	40	0	40	120	0	0	0	280
CRUSTACEA												
Rhithropanopeus harrisii	0	0	0	0	0	0	0	0	40	0	0	0
Neomysis americana	40	40	40	0	0	0	0	0	0	0	0	0
Gammarus sp.	0	0	0	40	480	200	120	7520	40	0	400	160
Leptocheirus plumulosus	80	0	0	0	80	0	80	0	0	0	0	0
Melita nitida	0	0	0	0	0	0	40	0	0	0	0	0
Leucon americanus	0	0	0	0	0	0	0	0	0	0	0	0
Chiridotea coeca	0	0	0	0	0	0	0	0	0	0	0	0
Cyathura polita	40	120	40	0	40	80	80	0	200	0	0	0
Edotea triloba	0	0	0	0	0	0	0	0	0	0	0	0
Chiridotea almyra	0	0	0	0	0	0	0	680	0	0	0	0
Corophium lacustre	0	80	40	0	0	0	0	0	0	0	0	0
Gammarus daiberi	40	0	0	0	0	0	0	800	0	0	0	0
Monoculodes sp.	0	0	0	0	0	40	80	160	40	0	200	0
OLIGOCHAETA												
Oligochaeta	0	80	0	0	80	0	0	0	0	440	0	200
Tubificoides sp.	560	40	1040	40	0	80	720	360	400	0	1320	40
OTHER												
Nemertina	0	0	0	0	0	0	0	0	0	0	0	0
Hydracarina	0	0	0	0	0	0	0	0	0	0	0	0
Chaoborus sp.	40	0	0	0	80	0	5480	0	200	480	0	0
Diadumene leucolena	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0
Hirudinea	0	0	0	0	0	0	0	0	0	0	0	0
Chironomid larvae	0	160	0	120	320	120	40	280	0	120	240	400
Platyhelminthes	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae pupae	0	0	0	0	0	0	80	0	40	0	0	0
Carinoma tremaphoros	0	40	0	0	0	0	0	0	0	0	0	0

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Species	July West	July Channel	July East	October West	October Channel	October East
POLYCHAETA						
Eteone heteropoda	0	0	0	0	0	0
Glycinde solitaria	0	0	0	0	0	0
Heteromastus filiformis	0	0	0	0	0	0
Laeonereis culveri	0	0	0	0	0	0
Nereis succinea	0	0	0	0	0	0
Polydora cornuta	0	0	0	0	0	0
Marenzelleria viridis	160	40	80	0	40	40
Streblospio benedicti	0	0	0	0	40	0
Hobsonia florida	0	0	0	0	0	0
Boccardiella hamata	80	0	0	0	0	0
MOLLUSCA						
Mytilopsis leucophaeta	0	0	0	0	0	0
Ischadium recurvum	0	0	0	0	0	0
Macoma balthica	0	0	0	0	0	0
Macoma mitchelli	0	0	0	0	0	0
Mulinia lateralis	0	0	0	0	0	0
Mya arenaria	0	0	0	0	0	0
Rangia cuneata	0	40	0	0	0	0
Sayella chesapeakea	0	0	0	0	0	0
Hydrobiidae	120	40	40	0	0	0
CRUSTACEA						
Rhithropanopeus harrisii	0	0	0	0	0	0
Neomysis americana	0	0	0	0	0	0
Gammarus sp.	0	280	0	0	80	240
Leptocheirus plumulosus	240	240	80	0	0	0
Melita nitida	0	0	0	0	0	0
Leucon americanus	0	0	0	0	0	0
Chiridotea coeca	0	0	0	0	0	0
Cyathura polita	2440	0	0	0	0	0
Edotea triloba	0	40	0	0	80	0
Chiridotea almyra	0	0	0	0	0	0
Corophium lacustre	40	0	0	0	40	0
Gammarus daiberi	0	0	0	0	0	40
Monoculodes sp.	0	40	0	0	40	0
OLIGOCHAETA						
Oligochaeta	40	2080	0	240	6760	0
Tubificoides sp.	400	0	240	40	240	480
OTHER						
Nemertina	0	0	0	0	0	0
Hydracarina	0	0	0	0	0	0
Chaoborus sp.	0	0	0	120	0	40
Diadumene leucolena	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0
Hirudinea	0	0	0	0	0	0
Chironomid larvae	200	0	280	40	40	40
Platyhelminthes	0	0	0	0	0	0
Chironomidae pupae	0	0	40	0	0	0
Carinoma tremaphoros	0	0	0	0	120	0

Station 5 1989

Species	March West	March Channel	March East	May West	May Channnel	May East	July West	July Channel	July East	October West	October Channel	October East
POLYCHAETA												
Eteone heteropoda	0	0	0	0	0	0	0	0	0	0	0	0
Glycinde solitaria	0	0	0	0	0	0	0	0	0	0	0	0
Heteromastus filiformis	0	0	0	0	0	0	0	0	0	0	0	0
Laeonereis culveri	0	0	0	0	0	0	0	0	0	0	0	0
Nereis succinea	0	0	0	0	0	0	0	0	0	0	0	0
Polydora cornuta	0	0	0	0	0	0	0	0	0	0	0	0
Marenzelleria viridis	240	200	40	40	0	0	40	0	0	0	0	0
Streblospio benedicti	0	0	0	0	0	0	0	0	0	0	0	0
Hobsonia florida	0	0	0	0	0	0	0	0	0	0	0	0
Boccardiella hamata	0	0	0	0	0	0	0	0	0	0	0	0
MOLLUSCA												
Mytilopsis leucophaeta	0	0	0	0	0	0	0	0	0	0	0	0
Ischadium recurvum	0	0	0	0	0	0	0	0	0	0	0	0
Macoma balthica	0	0	0	0	0	0	0	0	0	0	0	0
Macoma mitchelli	0	0	0	0	0	0	0	0	0	0	0	0
Mulinia lateralis	0	0	0	0	0	0	0	0	0	0	0	0
Mya arenaria	0	0	0	0	0	0	0	0	0	0	0	0
Rangia cuneata	0	0	0	0	0	0	0	0	0	0	0	0
Sayella chesapeakea	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobiidae	0	0	0	0	0	40	40	0	0	40	0	0
CRUSTACEA												
Rhithropanopeus harrisii	0	0	0	0	0	0	0	0	0	0	0	0
Neomysis americana	0	0	0	0	40	0	0	0	0	0	0	0
Gammarus sp.	0	0	0	40	120	0	0	560	0	200	160	0
Leptocheirus plumulosus	0	0	0	0	0	0	0	0	40	0	0	0
Melita nitida	0	0	0	0	0	0	40	0	0	0	0	0
Leucon americanus	0	0	0	0	0	0	0	0	0	0	0	0
Chiridotea coeca	0	0	0	0	0	0	0	0	0	0	0	0
Cyathura polita	0	0	0	0	0	0	0	0	0	0	0	40
Edotea triloba	0	0	0	0	0	0	0	0	0	0	0	0
Chiridotea almyra	0	0	0	0	0	0	0	0	0	0	40	0
Corophium lacustre	0	0	40	0	0	0	0	0	0	0	0	0
Gammarus daiberi	0	0	0	0	0	0	0	40	0	0	0	0
Monoculodes sp.	0	0	0	0	0	0	0	0	0	40	40	0
OLIGOCHAETA												
Oligochaeta	80	1640	160	0	1360	40	640	1320	400	2320	1600	1360
Tubificoides sp.	880	400	0	1080	0	120	960	0	0	40	0	40
OTHER												
Nemertina	0	0	0	0	0	0	0	0	0	0	0	0
Hydracarina	0	0	0	0	0	0	0	0	0	0	0	40
Chaoborus sp.	440	40	0	0	80	0	80	200	1440	80	160	200
Diadumene leucolena	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	80	0	0	0	0	0	40	0	40
Hirudinea	0	0	0	0	0	0	0	0	0	0	0	0
Chironomid larvae	120	0	0	440	0	200	320	40	40	40	240	400
Platyhelminthes	40	0	0	0	0	0	0	0	0	0	0	0
Chironomidae pupae	0	0	0	0	0	40	0	40	0	0	0	0
Carinoma tremaphoros	40	0	0	0	0	0	0	0	0	0	0	0

APPENDIX F

MEAN DENSITY (#/M^2) OF BENTHIC ORGANISMS COLLECTED IN THE NANTICOKE RIVER BETWEEN JULY 1988 AND OCTOBER 1989 BY STATION AND DATE

Station 1

Species	1988 July	1988 October	1989 March	1989 May	1989 July	1989 October
POLYCHAETA						
Eteone heteropoda	26.6	26.6	13.3	0.0	0.0	0.0
Glycinde solitaria	0.0	26.6	40.0	0.0	0.0	0.0
Heteromastus filiformis	66.6	560.0	213.3	66.6	53.3	133.3
Laeonereis culveri	13.3	0.0	0.0	0.0	0.0	13.3
Nereis succinea	13.3	680.0	133.3	26.6	13.3	0.0
Polydora cornuta	0.0	0.0	0.0	0.0	0.0	13.3
Marenzelleria viridis	66.6	40.0	120.0	93.3	160.0	40.0
Streblospio benedicti	53.3	146.6	120.0	0.0	0.0	0.0
Boccardiella hamata	0.0	2693.3	0.0	0.0	0.0	133.3
MOLLUSCA						
Macoma balthica	186.6	13.3	3120.0	1546.6	53.3	0.0
Macoma mitchelli	66.6	293.3	53.3	53.3	13.3	40.0
Mulinia lateralis	0.0	13.3	13.3	0.0	0.0	0.0
Mya arenaria	0.0	13.3	0.0	0.0	0.0	0.0
Rangia cuneata	26.6	0.0	26.6	0.0	13.3	120.0
Sayella chesapeakea	0.0	53.3	13.3	0.0	0.0	0.0
CRUSTACEA						
Rhithropanopeus harrisii	226.6	0.0	0.0	0.0	13.3	0.0
Neomysis americana	66.6	0.0	133.3	40.0	26.6	13.3
Gammarus sp.	0.0	0.0	26.6	426.6	506.6	453.3
Leptocheirus plumulosus	120.0	13.3	133.3	386.6	546.6	93.3
Melita nitida	0.0	0.0	53.3	0.0	53.3	0.0
Leucon americanus	53.3	106.6	0.0	0.0	0.0	0.0
Cyathura polita	160.0	320.0	240.0	120.0	226.6	120.0
Edotea triloba	13.3	66.6	360.0	80.0	40.0	66.6
Chiridotea almyra	0.0	106.6	13.3	13.3	0.0	0.0
Corophium lacustre	0.0	13.3	253.3	13.3	13.3	0.0
Gammarus daiberi	0.0	0.0	0.0	0.0	160.0	0.0
Monoculodes sp.	13.3	0.0	40.0	133.3	173.3	133.3
OLIGOCHAETA						
Oligochaeta	186.6	0.0	53.3	0.0	1053.3	13.3
Tubificoides sp.	600.0	106.6	2253.3	1160.0	773.3	733.3
OTHER						
Nemertina	0.0	0.0	13.3	0.0	0.0	0.0
Chaoborus sp.	0.0	0.0	0.0	0.0	13.3	40.0
Diadumene leucolena	0.0	13.3	0.0	0.0	0.0	0.0
Ceratopogonidae	0.0	13.3	0.0	0.0	0.0	0.0
Hirudinea	0.0	0.0	13.3	0.0	0.0	0.0
Chironomid larvae	0.0	0.0	0.0	0.0	13.3	53.3
Carinoma tremaphoros	106.6	346.6	253.3	80.0	40.0	53.3
TOTAL NUMBER OF TAXA	19	22	25	15	21	18

Station 2

Species	1988 July	1988 October	1989 March	1989 May	1989 July	1989 October
POLYCHAETA						
Glycinde solitaria	0.0	13.3	0.0	0.0	0.0	0.0
Heteromastus filiformis	26.6	133.3	66.6	13.3	0.0	13.3
Laeonereis culveri	13.3	0.0	53.3	13.3	0.0	0.0
Nereis succinea	26.6	26.6	40.0	26.6	0.0	0.0
Marenzelleria viridis	120.0	0.0	40.0	26.6	66.6	80.0
Streblospio benedicti	13.3	0.0	0.0	0.0	0.0	0.0
Boccardiella hamata	0.0	400.0	0.0	0.0	13.3	0.0
MOLLUSCA						
Macoma balthica	40.0	0.0	2253.3	53.3	0.0	0.0
Macoma mitchelli	13.3	120.0	26.6	26.6	53.3	0.0
Rangia cuneata	146.6	26.6	13.3	0.0	120.0	120.0
Hydrobiidae	13.3	13.3	0.0	0.0	0.0	0.0
CRUSTACEA						
Rhithropanopeus harrisii	13.3	0.0	0.0	0.0	13.3	0.0
Neomysis americana	120.0	0.0	80.0	0.0	0.0	0.0
Gammarus sp.	13.3	13.3	133.3	160.0	493.3	2480.0
Leptocheirus plumulosus	173.3	106.6	173.3	173.3	186.6	0.0
Melita nitida	0.0	0.0	0.0	40.0	26.6	0.0
Leucon americanus	26.6	93.3	0.0	0.0	0.0	0.0
Cyathura polita	200.0	133.3	93.3	40.0	80.0	0.0
Edotea triloba	26.6	26.6	93.3	0.0	0.0	0.0
Chiridotea almyra	0.0	0.0	0.0	26.6	0.0	0.0
Corophium lacustre	0.0	0.0	493.3	0.0	13.3	0.0
Gammarus daiberi	0.0	0.0	0.0	0.0	253.3	66.6
Monoculodes sp.	0.0	0.0	13.3	66.6	160.0	13.3
OLIGOCHAETA						
Tubificoides sp.	1853.3	226.6	733.3	746.6	773.3	800.0
OTHER						
Nemertina	0.0	0.0	40.0	0.0	0.0	0.0
Chaoborus sp.	0.0	0.0	0.0	0.0	40.0	133.3
Hirudinea	0.0	0.0	0.0	13.3	0.0	0.0
Chironomid larvae	13.3	13.3	13.3	160.0	66.6	133.3
Chironomidae pupae	0.0	0.0	0.0	0.0	26.6	0.0
Carinoma tremaphoros	13.3	240.0	40.0	53.3	13.3	0.0
TOTAL NUMBER OF TAXA	19	15	18	16	17	9

Station 3

Species	1988 July	1988 October	1989 March	1989 May	1989 July	1989 October
POLYCHAETA						
Eteone heteropoda	0.0	13.3	0.0	0.0	0.0	0.0
Heteromastus filiformis	13.3	13.3	0.0	0.0	0.0	0.0
Laeonereis culveri	53.3	0.0	0.0	13.3	0.0	0.0
Nereis succinea	0.0	0.0	200.0	0.0	0.0	0.0
Marenzelleria viridis	53.3	0.0	160.0	0.0	146.6	53.3
Boccardiella hamata	0.0	0.0	0.0	0.0	13.3	13.3
MOLLUSCA						
Ischadium recurvum	0.0	0.0	26.6	0.0	0.0	0.0
Macoma balthica	13.3	0.0	200.0	0.0	0.0	0.0
Macoma mitchelli	0.0	40.0	106.6	66.6	0.0	0.0
Mulinia lateralis	40.0	0.0	0.0	0.0	0.0	0.0
Rangia cuneata	80.0	0.0	13.3	0.0	40.0	53.3
Hydrobiidae	0.0	0.0	0.0	0.0	0.0	13.3
CRUSTACEA						
Rhithropanopeus harrisii	13.3	13.3	133.3	0.0	13.3	0.0
Neomysis americana	66.6	26.6	0.0	0.0	0.0	0.0
Gammarus sp.	266.6	186.6	933.3	93.3	1360.0	120.0
Leptocheirus plumulosus	106.6	13.3	26.6	0.0	53.3	26.6
Melita nitida	0.0	0.0	106.6	0.0	0.0	0.0
Leucon americanus	13.3	0.0	0.0	0.0	0.0	0.0
Cyathura polita	53.3	26.6	360.0	40.0	413.3	0.0
Edotea triloba	40.0	0.0	13.3	0.0	0.0	26.6
Chiridotea almyra	0.0	53.3	0.0	0.0	13.3	0.0
Corophium lacustre	0.0	426.6	7293.3	0.0	13.3	0.0
Gammarus daiberi	0.0	13.3	0.0	0.0	106.6	0.0
Monoculodes sp.	26.6	173.3	0.0	13.3	133.3	40.0
OLIGOCHAETA						
Oligochaeta	66.6	0.0	0.0	0.0	0.0	106.6
Tubificoides sp.	440.0	333.3	613.3	266.6	93.3	226.6
OTHER						
Chaoborus sp.	0.0	13.3	0.0	0.0	53.3	13.3
Ceratopogonidae	0.0	0.0	0.0	13.3	0.0	0.0
Chironomid larvae	40.0	13.3	26.6	146.6	40.0	93.3
Carinoma tremaphoros	26.6	66.6	80.0	13.3	0.0	0.0
TOTAL NUMBER OF TAXA	18	16	16	9	14	12

Station 4

Species	1988 July	1988 October	1989 March	1989 May	1989 July	1989 October
POLYCHAETA						
Laeonereis culveri	0.0	40.0	26.6	0.0	0.0	0.0
Marenzelleria viridis	146.6	40.0	1346.6	720.0	360.0	26.6
Hobsonia florida	13.3	0.0	0.0	13.3	0.0	0.0
Boccardiella hamata	93.3	333.3	0.0	0.0	0.0	0.0
MOLLUSCA						
Mytilopsis leucophaeta	0.0	0.0	13.3	0.0	0.0	0.0
Macoma balthica	0.0	0.0	40.0	0.0	0.0	0.0
Macoma mitchelli	13.3	53.3	26.6	13.3	13.3	0.0
Mulinia lateralis	13.3	0.0	0.0	0.0	0.0	0.0
Rangia cuneata	66.6	93.3	80.0	293.3	826.6	26.6
Hydrobiidae	40.0	0.0	13.3	13.3	53.3	93.3
CRUSTACEA						
Rhithropanopeus harrisii	40.0	0.0	0.0	0.0	13.3	0.0
Neomysis americana	53.3	13.3	40.0	0.0	0.0	0.0
Gammarus sp.	66.6	13.3	0.0	240.0	2560.0	186.6
Leptocheirus plumulosus	386.6	80.0	26.6	26.6	26.6	0.0
Melita nitida	0.0	0.0	0.0	0.0	13.3	0.0
Chiridotea coeca	0.0	120.0	0.0	0.0	0.0	0.0
Cyathura polita	80.0	146.6	66.6	40.0	93.3	0.0
Edotea triloba	106.6	0.0	0.0	0.0	0.0	0.0
Chiridotea almyra	0.0	0.0	0.0	0.0	226.6	0.0
Corophium lacustre	40.0	613.3	40.0	0.0	0.0	0.0
Gammarus daiberi	0.0	13.3	13.3	0.0	266.6	0.0
Monoculodes sp.	0.0	26.6	0.0	13.3	93.3	66.6
OLIGOCHAETA						
Oligochaeta	0.0	0.0	26.6	26.6	0.0	213.3
Tubificoides sp.	146.6	333.3	546.6	40.0	493.3	453.3
OTHER						
Chaoborus sp.	0.0	0.0	13.3	26.6	1893.3	160.0
Chironomid larvae	386.6	13.3	53.3	186.6	106.6	253.3
Chironomidae pupae	0.0	0.0	0.0	0.0	40.0	0.0
Carinoma tremaphoros	26.6	133.3	13.3	0.0	0.0	0.0
TOTAL NUMBER OF TAXA	17	16	17	13	16	9

Station 5

Species	1988 July	1988 October	1989 March	1989 May	1989 July	1989 October
POLYCHAETA						
Marenzelleria viridis	93.3	26.6	160.0	13.3	13.3	0.0
Streblospio benedicti	0.0	13.3	0.0	0.0	0.0	0.0
Boccardiella hamata	26.6	0.0	0.0	0.0	0.0	0.0
MOLLUSCA						
Rangia cuneata	13.3	0.0	0.0	0.0	0.0	0.0
Hydrobiidae	66.6	0.0	0.0	13.3	13.3	13.3
CRUSTACEA						
Neomysis americana	0.0	0.0	0.0	13.3	0.0	0.0
Gammarus sp.	93.3	106.6	0.0	53.3	186.6	120.0
Leptocheirus plumulosus	186.6	0.0	0.0	0.0	13.3	0.0
Melita nitida	0.0	0.0	0.0	0.0	13.3	0.0
Cyathura polita	813.3	0.0	0.0	0.0	0.0	13.3
Edotea triloba	13.3	26.6	0.0	0.0	0.0	0.0
Chiridotea almyra	0.0	0.0	0.0	0.0	0.0	13.3
Corophium lacustre	13.3	13.3	13.3	0.0	0.0	0.0
Gammarus daiberi	0.0	13.3	0.0	0.0	13.3	0.0
Monoculodes sp.	13.3	13.3	0.0	0.0	0.0	26.6
OLIGOCHAETA						
Oligochaeta	706.6	2333.3	626.6	466.6	786.6	1760.0
Tubificoides sp.	213.3	253.3	426.6	400.0	320.0	26.6
OTHER						
Hydracarina	0.0	0.0	0.0	0.0	0.0	13.3
Chaoborus sp.	0.0	53.3	160.0	26.6	573.3	146.6
Ceratopogonidae	0.0	0.0	0.0	26.6	0.0	26.6
Chironomid larvae	160.0	40.0	40.0	213.3	133.3	226.6
Platyhelminthes	0.0	0.0	13.3	0.0	0.0	0.0
Chironomidae pupae	13.3	0.0	0.0	13.3	13.3	0.0
Carinoma tremaphoros	0.0	40.0	13.3	0.0	0.0	0.0
TOTAL NUMBER OF TAXA	14	12	8	10	11	11

APPENDIX G

NUMBER OF FISH CAPTURED IN THE NANTICOKE RIVER FROM JULY 1988 TO OCTOBER 1989 BY STATION, DATE, AND SAMPLING GEAR

STATION 1

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
SPECIES	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
ALOSA AESTIVALIS										1							
ALOSA PSEUDOHARENGUS							3		1				15		1		
ANCHOA MITCHILLI		4			38		42			1			26			39	
ANGUILLA ROSTRATA		1							1								
BREVOORTIA TYRANNUS	18				7				1			1	1		3	1	
CALLINECTES SAPIDUS	10	32	5			4			18		2	12	4	7	6		5
CYNOSCION REGALIS		4											2			3	
DOROSOMA CEPEDIANUM									11			1			2		
FUNDULUS HETEROCLITUS	8			30					2			8			1		
FUNDULUS MAJALIS	1								1			1					
ICTALURUS CATUS	1					1	1		1	1					1		
ICTALURUS PUNCTATUS				1		4						1		2		1	1
LEIOSTOMUS XANTHURUS	177	136		102						2		4		13		1	
LEPISOSTEUS OSSEUS														1			
LEPOMIS MACROCHIRUS									1								
MICROPOGON UNDULATUS															2	120	
MORONE AMERICANA	5	5		15		1	9	5	54	4		2		1	59	8	4
MORONE SAXATILIS									1						1		
OPSANUS TAU					2												
POMATOMUS SALTATRIX												1					
PRIONOTUS CAROLINUS			1														

(CONTINUED)

STATION 1

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
SPECIES																	
TRINECTES MACULATUS	31	29	1		78	3	36			12	8	14			3	23	5
TOTAL NUMBER OF TAXA	8	7	3	4	4	5	5	1	11	6	2	10	5	5	10	8	4

STATION 2

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
SPECIES																	
ALOSA PSEUDOHARENGUS		1					1						4			1	
ANCHOA MITCHILLI		1			66		530			3			1			8	
ANGUILLA ROSTRATA		2															
BREVOORTIA TYRANNUS	19	1		26	11							905	5				
CALLINECTES SAPIDUS	5	24	10	2	1	2			6	2		32	1	5	1		3
CYNOSCION REGALIS		3			4											1	
CYPRINUS CARPIO									1						1		
DOROSOMA CEPEDIANUM	2			11			3		3						1		
FUNDULUS HETEROCLITUS	5			13													
GOBIOSOMA BOSCI													1				
ICTALURUS CATUS	1	2	3			1			1	6							
ICTALURUS PUNCTATUS						2				1		1				15	
LEIOSTOMUS XANTHURUS	5	410	3	70	4					3		1			4		6
MICROPOGON UNDULATUS																53	
MORONE AMERICANA	6	25	1	15	2		7	1	35	7		13	3		15	5	3
MORONE SAXATILIS															1	1	
PERCA FLAVESCENS															1		
POMATOMUS SALTATRIX													1				
TRINECTES MACULATUS	1	93			125	1	7	2		43		14				6	1
TOTAL NUMBER OF TAXA	8	10	4	6	7	4	5	2	5	7	0	6	7	1	7	8	4

STATION 3

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
SPECIES																	
ALOSA PSEUDOHARENGUS		8			2												
ANCHOA MITCHILLI					80		11									17	
ANGUILLA ROSTRATA												1			1		
BREVOORTIA TYRANNUS	2687			366	8							1165					
CALLINECTES SAPIDUS	5	3	14	1	1	3			3		1	3	2	2	2	1	
CYNOSCION REGALIS					4												
CYPRINUS CARPIO									1								
DOROSOMA CEPEDIANUM	1			12					1			15			4		
FUNDULUS HETEROCLITUS	2			1					12			2			1		
ICTALURUS CATUS			8	1				1		2	1						
ICTALURUS PUNCTATUS	1		4			1					1	1	5		1	9	
LEIOSTOMUS XANTHURUS	8	19		99	3							3					1
LEPISOSTEUS OSSEUS														1			
LEPOMIS MACROCHIRUS									1						1		
MICROPOGON UNDULATUS																11	
MORONE AMERICANA	6	1	19	21	2	1	1	1	24		4	37	18	2	15	4	3
MORONE SAXATILIS				1									1				
NOTROPIS HUDSONIUS									1								
PERCA FLAVESCENS									1			1					
POMATOMUS SALTATRIX	1											1					
TRINECTES MACULATUS	1				23	22		1		5		3	1			1	2

(CONTINUED)

STATION 3

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
SPECIES																	
TOTAL NUMBER OF TAXA	9	4	4	8	8	4	2	3	8	2	4	11	5	3	7	6	3

STATION 4

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
SPECIES																	
ALOSA PSEUDOHARENGUS	1	3											71				
ANGUILLA ROSTRATA		2			15												
BREVOORTIA TYRANNUS	44	4			2	2											
CALLINECTES SAPIDUS	1	1	2	1	2	1			5	1		1		5	4		
DOROSOMA CEPEDIANUM	7			15			1		3						2		
FUNDULUS DIAPHANUS	1																
FUNDULUS HETEROCLITUS	1			2					1			3			1		
ICTALURUS CATUS		5				1	7			5	2						
ICTALURUS PUNCTATUS		1			4	2					4		9	1		10	
LEIOSTOMUS XANTHURUS	3	71		34	11	9									1		
LEPOMIS MACROCHIRUS									2								
MICROPOGON UNDULATUS																760	
MORONE AMERICANA	38	18		23		3	20		53	1		9	13		32	4	1
MORONE SAXATILIS				2											1	1	
NOTROPIS SPP.									1								
PERCA FLAVESCENS	1								2								
PRIONOTUS CAROLINUS						1											
TRINECTES MACULATUS		7			29	5	11			1	1	2				82	
TOTAL NUMBER OF TAXA	9	9	1	6	6	8	4	0	7	4	3	4	3	2	6	5	1

STATION 5

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
SPECIES																	
ALOSA PSEUDOHARENGUS		20			1								85				
ANCHOA MITCHILLI		5														133	
ANGUILLA ROSTRATA					1												
BREVOORTIA TYRANNUS	1161	3		42	22								27				
CALLINECTES SAPIDUS	7	1	4		1				1			2		2	1		
CYNOSCION REGALIS					10								1				
DOROSOMA CEPEDIANUM				2			3		1								
ETHEOSTOMA OLMSTEDI												1			1		
FUNDULUS DIAPHANUS									4								
FUNDULUS HETEROCLITUS	1								1			1			1		
FUNDULUS MAJALIS												4					
ICTALURUS CATUS	3		1		8	24	2			1			1				
ICTALURUS PUNCTATUS					3	22		1			1						2
LEIOSTOMUS XANTHURUS	18	5	1	5	38	2											
LEPISOSTEUS OSSEUS	1													1			
LEPOMIS GIBBOSUS															2		
LEPOMIS MACROCHIRUS															1		
MICROPOGON UNDULATUS																3	
MORONE AMERICANA	18	2	2	5		10	1		59		2	62	16	4	66	2	
MORONE SAXATILIS																1	
NOTEMIGONUS CRYSOLEUCAS									10								

(CONTINUED)

STATION 5

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
SPECIES																	
NOTROPIS HUDSONIUS												1					
NOTROPIS SPP.									3								
PERCA FLAVESCENS	1								3			1					
TRINECTES MACULATUS	11				40	3	1	7		26						20	
TOTAL NUMBER OF TAXA	9	6	4	4	9	5	4	2	8	2	2	7	5	3	6	5	1

APPENDIX H

MEAN LENGTH (MM) OF FISH CAPTURED IN THE NANTICOKE RIVER FROM JULY 1988 TO OCTOBER 1989 BY STATION, DATE, AND SAMPLING GEAR

STATION 1

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
SPECIES	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
ALOSA AESTIVALIS										236							
ALOSA PSEUDOHARENGUS							76		112				67		98		
ANCHOA MITCHILLI		74			38		44			70			37			52	
ANGUILLA ROSTRATA		295															
BREVOORTIA TYRANNUS	77				88				122			85	97		117	126	
CALLINECTES SAPIDUS	64	95	132			146			55		126	55	81	120	48		114
CYNOSCION REGALIS		25											26			120	
DOROSOMA CEPEDIANUM									143			202			193		
FUNDULUS HETEROCLITUS	84			65					77			75			94		
FUNDULUS MAJALIS	111								88			76					
ICTALURUS CATUS	179					354	290		312	145					336		
ICTALURUS PUNCTATUS				452		291						461		376		116	
LEIOSTOMUS XANTHURUS	89	73		82						25		103		129		149	
LEPISOSTEUS OSSEUS														895			
LEPOMIS MACROCHIRUS									113								
MICROPOGON UNDULATUS															46	45	
MORONE AMERICANA	165	149		147		250	140	183	108	195		201		154	111	96	184
MORONE SAXATILIS									126						142		
OPSANUS TAU					183												
POMATOMUS SALTATRIX												100					
PRIONOTUS CAROLINUS			162														

(CONTINUED)

STATION 1

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
SPECIES																	
TRINECTES MACULATUS	57	67	110		97	112	85			78	106	53			63	89	135

STATION 2

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
SPECIES																	
ALOSA PSEUDOHARENGUS		69					80						69			95	
ANCHOA MITCHILLI		87			41		50			56			37			45	
ANGUILLA ROSTRATA		248															
BREVOORTIA TYRANNUS	72	74		87	88							75	73				
CALLINECTES SAPIDUS	51	98	119	20	100	106			47	18		61	99	95	53		123
CYNOSCION REGALIS		21			72											100	
CYPRINUS CARPIO									680						602		
DOROSOMA CEPEDIANUM	213			148			134		143	42					185		
FUNDULUS HETEROCLITUS	82			84													
GOBIOSOMA BOSCI													21				
ICTALURUS CATUS	93	134	252			298			345	147							
ICTALURUS PUNCTATUS						253				232		470				88	
LEIOSTOMUS XANTHURUS	80	75	116	82	95					34		98			136		145
MICROPOGON UNDULATUS																44	
MORONE AMERICANA	119	147	180	136	144		93	231	105	105		126	97		121	113	156
MORONE SAXATILIS															111	80	
PERCA FLAVESCENS															141		
POMATOMUS SALTATRIX													117				
TRINECTES MACULATUS	52	68			89	88	70	81		41		57				68	

STATION 3

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
SPECIES																	
ALOSA PSEUDOHARENGUS		72			100												
ANCHOA MITCHILLI					40		51									55	
ANGUILLA ROSTRATA												640			556		
BREVOORTIA TYRANNUS	72			30	33							74					
CALLINECTES SAPIDUS	69	105	113	84	195	126			55		114	52	102	109	62	110	
CYNOSCION REGALIS					40												
CYPRINUS CARPIO									590								
DOROSOMA CEPEDIANUM	265			161					157			206			160		
FUNDULUS HETEROCLITUS	76			71					85			80			81		
ICTALURUS CATUS			269	475				237		119	409						
ICTALURUS PUNCTATUS	448		347			334					341	455	43		384	88	
LEIOSTOMUS XANTHURUS	94	69		82	86							111					148
LEPISOSTEUS OSSEUS														962			
LEPOMIS MACROCHIRUS									81						121		
MICROPOGON UNDULATUS																33	
MORONE AMERICANA	125	156	235	129	133		71	195	114		227	122	48		121	117	178
MORONE SAXATILIS				86									30				
NOTROPIS HUDSONIUS									111								
PERCA FLAVESCENS									245			242					
POMATOMUS SALTATRIX	135											129					
TRINECTES MACULATUS	58				78	89		81		31		51	40			76	87

STATION 4

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
SPECIES																	
ALOSA PSEUDOHARENGUS	88	70											62				
ANGUILLA ROSTRATA		405			315												
BREVOORTIA TYRANNUS	75	82			84	235											
CALLINECTES SAPIDUS	37	180	103	32	66	150			48	10		40		106	35		
DOROSOMA CEPEDIANUM	238			132			151		136						253		
FUNDULUS DIAPHANUS	83																
FUNDULUS HETEROCLITUS	66			89					84			80			84		
ICTALURUS CATUS		101				470	136			87	222						
ICTALURUS PUNCTATUS		180			219	249					325		39			76	
LEIOSTOMUS XANTHURUS	76	72		75	134	123									159		
LEPOMIS MACROCHIRUS									124								
MICROPOGON UNDULATUS																28	
MORONE AMERICANA	101	111		119		128	70		101	130		93	41		109	77	141
MORONE SAXATILIS				139											111	76	
NOTROPIS SPP.									123								
PERCA FLAVESCENS	146								160								
PRIONOTUS CAROLINUS						210											
TRINECTES MACULATUS		64			84	117	74			27	84	51				55	

STATION 5

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
SPECIES	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
ALOSA PSEUDOHARENGUS		47											48				
ANCHOA MITCHILLI		30														48	
ANGUILLA ROSTRATA					103												
BREVOORTIA TYRANNUS	69	66		86	85								61				
CALLINECTES SAPIDUS	60	73	108		112				40			66		94	27		
CYNOSCION REGALIS					69								26				
DOROSOMA CEPEDIANUM				152			144		137								
ETHEOSTOMA OLMSTEDI												40			82		
FUNDULUS DIAPHANUS									84								
FUNDULUS HETEROCLITUS	57								85			92			83		
FUNDULUS MAJALIS												67					
ICTALURUS CATUS	93		371		137	259	112			132			31				
ICTALURUS PUNCTATUS					184	302		393			338						297
LEIOSTOMUS XANTHURUS	83	75	120	75	102	128											
LEPISOSTEUS OSSEUS	875													798			
LEPOMIS GIBBOSUS															124		
LEPOMIS MACROCHIRUS															124		
MICROPOGON UNDULATUS																37	
MORONE AMERICANA	122	45	237	93		233	57		115		194	102	37	227	106	85	
MORONE SAXATILIS																83	
NOTEMIGONUS CRYSOLEUCAS									142								

(CONTINUED)

STATION 5

	DATE																
	JUL88			OCT88			MAR89		MAY89			JUL89			OCT89		
	GEAR			GEAR			GEAR		GEAR			GEAR			GEAR		
	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.	SEINE	TRAWL	GILL.
SPECIES																	
NOTROPIS HUDSONIUS												107					
NOTROPIS SPP.									116								
PERCA FLAVESCENS	132								140			149					
TRINECTES MACULATUS	59				86	81	60	83		36						74	

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