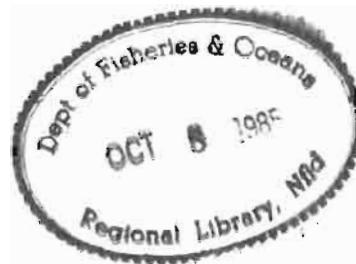


1983 Campbell River Miller Net Samples

T. J. Brown and B. A. Kask



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August 1984

**Canadian Data Report of
Fisheries and Aquatic Services
No. 471**



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Canadian Data Report of Fisheries and Aquatic Sciences

These reports provide a medium for filing and archiving data compilations where little or no analysis is included. Such compilations commonly will have been prepared in support of other journal publications or reports. The subject matter of Data Reports reflects the broad interests and policies of the Department of Fisheries and Oceans, namely, fisheries management, technology and development, ocean sciences, and aquatic environments relevant to Canada.

Numbers 1-25 in this series were issued as Fisheries and Marine Service Data Records. Numbers 26-160 were issued as Department of Fisheries and the Environment, Fisheries and Marine Service Data Reports. The current series name was changed with report number 161.

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Rapport statistique canadien des sciences halieutiques et aquatiques

Ces rapports servent de base à la compilation des données de classement et d'archives pour lesquelles il y a peu ou point d'analyse. Cette compilation aura d'ordinaire été préparée pour appuyer d'autres publications ou rapports. Les sujets des Rapports statistiques reflètent la vaste gamme des intérêts et politiques du Ministère des Pêches et des Océans, notamment gestion des pêches, techniques et développement, sciences océaniques et environnements aquatiques, au Canada.

Les numéros 1 à 25 de cette série ont été publiés à titre de Records statistiques, Service des pêches et de la mer. Les numéros 26-160 ont été publiés à titre de Rapports statistiques du Service des pêches et de la mer, Ministère des Pêches et de l'Environnement. Le nom de la série a été modifié à partir du numéro 161.

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1983 CAMPBELL RIVER MILLER NET SAMPLES

by

T. J. Brown and B. A. Kask

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ABSTRACT

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In 1983 274 zooplankton samples were collected at Campbell River and Discovery Passage using dual miller nets.

RÉSUMÉ

Brown, T. J. and B. A. Kask. 1984. 1983 Campbell River Miller Net Samples.
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En 1983, on a prélevé, au moyen de filets doubles Miller, 274 échantillons de zooplancton dans la rivière Campbell et le passage Discovery.

LIST OF TABLES

	Title	Page
Table 1	Trip Dates	3
Table 2	Station Description	4
Table 3	Table Abbreviations	5
Table 4	Estuarine Macro Net Raw Counts	7
Table 5	Transition Macro Net Raw Counts	15
Table 6	Marine Macro Net Raw Counts	19
Table 7	Estuarine Micro Net Raw Counts	23
Table 8	Transition Micro Net Raw Counts	31
Table 9	Marine Micro Net Raw Counts	35
Table 10	Estuarine Macro Net numbers m^{-3}	39
Table 11	Transition Macro Net numbers m^{-3}	47
Table 12	Marine Macro Net numbers m^{-3}	51
Table 13	Estuarine Micro Net numbers m^{-3}	55
Table 14	Transition Micro Net numbers m^{-3}	63
Table 15	Marine Micro Net numbers m^{-3}	67

LIST OF FIGURES

Fig. 1.	Marine Station Locations	71
Fig. 2.	Estuarine and Transition Station Locations	73

INTRODUCTION

The Campbell River project was initiated in 1982 to evaluate the utilization of estuarine and alternate near shore habitats by juvenile salmon. This also included the colonization and utilization of 4 new islands constructed in the Campbell River estuary when a new log pond was constructed. The estuarine dependency between wild and hatchery chinooks was also examined using hatchery chinook released at different sizes and times along with tagged chinook smolts released directly into the river, estuarine, transition and marine habitats.

The data on fish population and movements was collected using a 15 m beach seine in the estuary and Discovery passage. The 1983 fish catch data are presented in Brown et al. 1984 while the CWT data and length weight data are presented separately (Kotyk et al. 1984 and Chang et al. 1984).

MATERIALS AND METHODS

In 1983 a sampling program which involved beach seining, epibenthic sled (Sibert et al. 1977) and dual miller net sampling was carried out in the Campbell River estuary and Discovery Passage. The miller net data was collected to assess the food available to the juvenile salmon in the surface and mid-water column. This data is presented here.

The samples were collected from February to December 1983 during 16 sampling trips (Table 1). There were 4 stations in the estuary, 2 in the transition and 2 in the marine zone. (Fig. 1, 2 and Table 2).

The macro sampler had a mouth diameter of 11.3 cm and a 350 e net while the micro sampler had a mouth diameter of 3.6 cm and a 100 e net. The nets were towed for 5 to 10 minutes using a 5 m inflatable boat at a speed of 2m/s. The nets were equipped with a flow meter and when used in conjunction with tow duration a volume filtered was determined.

The samples were collected and preserved in 10% formalin and rose bengal. They were counted to major taxonomic groups in the lab using an M5 dissecting scope equipped with a rotary counter. One hundred harpacticoid and calanoid copepods were picked and placed into vials for later identification to species where possible.

The data have been arranged chronologically and sorted by station, zone and net size producing 6 tables of raw counts (Tables 4-9). The data were then corrected by the volume filtered to get counts/m³. These are presented in Tables 10-15. The first page of each table lists the date, time, station, net type, tide height, temperature, salinity and volume. The raw counts and number/m³ begin on the first page and continue onto the second page of each table.

ACKNOWLEDGMENTS

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- Kotyk, M. S., B. D. Chang, T. J. Brown, C. D. Levings, C. D. McAllister, and J. S. Macdonald. 1984. Data record on coded wire tags recovered from juvenile chinook and Campbell River estuary and Discovery Passage, 1983. Can. Data Rept. Fish. Aquat. Sci. (in press.)
- Sibert, J., B. A. Kask and T. J. Brown 1977. A diver-operated sled for sampling the epibenthos. Fisheries and Marine Service Tech. Rep. 738.

Table 1. Trip Dates Campbell
River 1983.

Trip #*	Date
2	Feb. 22-24
3	Mar. 14-17
4	Mar. 28-30
5	April 12-14
7	May 5-7
9	May 26-29
10	June 6-9
11	June 16-19
12	July 7-10
13	July 18-21
14	Aug. 2-5
15	Aug. 16-18
16	Sept. 6-8
17	Oct. 3-6
18	Nov. 7-8
19	Dec. 6-7

*Brown et al. 1984.

Table 2. Station Description Campbell River 1983.

<u>Station #</u>	<u>Description *</u>
Estuarine	
71	NBM sampled at 0-1 M.
101	Mother ramp sampled at 0-1M
102	Mother ramp sampled at 3-4M
115	Island #3 sampled at 0-1 M.
371	Log sort sampled at 0-1 M.
372	Log sort sampled at 3-4 M.
Transition	
204	Boat Ramp sampled at 0-1 M.
341	Painters channel sampled at 0-1
Marine	
271	Outer Gowlland sampled at 0-1 M.
311	Plumper Bay sampled at 0-1 M.

*Brown et al. 1984

Table 3. Table Abbreviations.

Date	Date
Time	Time PST
Stn	Station
Stype	Sample type - Macro or Micro net
Tide	Tide - ebb or flood and tide height in meters
Temp	Temperature °C
Sal	Salinity ‰
Vol	Volume filtered (m³)
Harp	Harpacticoid copepods
Cnaup	Copepod nauplii
Nema	Nematodes
Cal	Calanoid copepods
Worm	Worms
Ost	Ostracods
Acar	Acarinans
Egg	Unidentified eggs
Tuni	Tunicates
Amp	Amphipods
Gast	Gastropods
Ecto	Ectoprocts
Bnaup	Barnacle nauplii
G.egg	Gastropod eggs
Mysid	Mysids
Clad	Cladocerans
Isopo	Isopods
I.lar	Insect larvae
Bvalv	Bivalves
Chaet	Chaetognaths
Eup	Euphausiids
Cuma	Cumaceans
D.Zoe	Decapod zoea
Fish	Fish
P.cop	Parasitic copepods
Poly	Polychaetes
E.lar	Echinoderm larvae
Medus	Medusae
Deca	Decapods
B.cyp	Barnacle cypris
Tena	Ctenophores
Hydra	Hydroids
Siph	Siphonophores
C.meg	Crab megalops
Insct	Insects
Chitn	Chitons
Tanad	Tanaioaleans
Tards	Tardigrades



Table 4. Estuarine Macro Net Raw Counts.

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830223	1213	71	MAC E4.1	5.3	0.6	2.62	82	136	0	198	3	6	0	9	9	1	10	11	3	
830315	1433	71	MAC F2.3	5.6	0.2	2.73	0	0	0	11	0	0	0	0	14	0	0	0	0	0
830330	905	71	MAC E2.9	5.4	0.0	9.62	1	0	0	19	0	0	0	0	2	0	1	0	6	1
830414	844	71	MAC E2.6	7.4	0.6	10.08	7	0	0	88	0	0	4	494	0	1	1	170	0	
830506	1350	71	MAC E2.6	11.3	0.7	12.24	6	2	1	23	0	0	5	146	0	0	0	18	1	
830526	1942	71	MAC E3.7	14.9	1.0	14.45	1	8	0	85	0	0	5	630	1	3	1	6	6	
830607	1030	71	MAC F1.6	0.0	0.0	12.91	1	3	2	15	6	1	2	51	2	6	0	1	3	
830618	1233	71	MAC E2.8	11.9	0.0	12.91	40	16	0	120	0	0	8	56	0	0	0	24	0	
830708	2002	71	MAC E3.5	0.0	0.0	11.38	3	0	0	13	0	0	3	19	0	2	0	0	1	
830720	1630	71	MAC E3.8	0.0	0.0	13.06	8	0	0	60	4	8	0	48	0	140	4	0	0	
830803	1830	71	MAC F3.3	0.0	0.0	11.46	10	3	0	15	0	0	0	0	0	0	4	1	5	
830816	2000	71	MAC F3.6	0.0	0.0	11.46	1	2	0	2	0	0	1	7	0	11	0	1	0	
830907	1832	71	MAC E4.1	0.0	0.0	9.86	4	0	0	1	0	0	0	6	0	0	1	0	0	
831003	1253	71	MAC F3.5	0.0	0.0	10.66	0	0	0	2	0	0	0	0	0	0	0	0	0	
831108	1155	71	MAC E3.8	9.6	1.0	10.07	1	0	0	10	0	2	0	0	0	18	0	0	0	
831207	1322	71	MAC E3.7	5.9	0.8	7.83	0	0	0	2	0	0	0	4	0	2	0	0	0	
830223	1247	115	MAC E4.0	5.1	0.5	0.91	13	69	26	56	13	0	2	25	4	4	2	8	1	
830315	1438	115	MAC F2.5	5.6	0.0	2.50	2	1	0	13	5	5	0	16	0	0	0	0	0	
830330	849	115	MAC E3.0	5.6	2.0	10.43	1	0	0	287	0	1	0	10	1	2	2	24	1	
830414	813	115	MAC E2.9	6.9	1.0	10.70	10	4	5	599	0	4	6	485	0	3	6	674	7	
830506	1325	115	MAC E2.9	10.6	2.1	12.74	8	3	0	60	0	6	12	223	0	1	0	21	1	
830526	1925	115	MAC E3.8	12.1	2.6	6.75	7	4	0	1009	0	1	0	97	9	18	2	1	59	
830607	1302	115	MAC F2.8	0.0	0.0	9.91	0	1	0	95	0	1	1	126	3	2	0	0	5	
830618	1215	115	MAC E2.9	10.1	0.0	9.91	48	8	0	183	0	0	16	80	0	8	0	0	0	
830708	1947	115	MAC E3.5	0.0	0.0	13.06	0	0	0	104	0	0	0	36	0	8	0	0	0	
830720	1610	115	MAC E3.8	0.0	0.0	13.97	152	8	0	1464	0	0	8	72	16	1088	8	0	40	
830803	1850	115	MAC F3.4	0.0	0.0	12.15	3	1	0	99	0	0	0	2	2	7	3	4	15	
830817	1850	115	MAC E3.5	0.0	0.0	12.15	5	0	3	3	15	0	1	0	0	11	0	8	1	
830906	1817	115	MAC E4.1	0.0	0.0	10.33	10	0	0	33	0	0	1	2	0	0	0	0	1	
831003	1509	115	MAC E4.3	0.0	0.0	9.01	4	0	0	16	0	0	0	0	1	0	0	0	0	
831108	1510	115	MAC F3.4	9.4	5.6	11.27	18	7	0	44	5	0	19	1	0	13	0	0	0	
831207	1307	115	MAC E3.8	6.7	3.7	7.88	3	0	0	21	0	1	2	23	0	5	1	0	0	
830223	1132	101	MAC F4.1	5.9	2.6	2.81	32	103	3	227	0	1	4	20	0	1	0	2	4	
830315	1517	101	MAC F2.9	5.9	0.1	4.41	0	0	1	17	1	10	0	12	0	3	1	0	1	

	G.EGG	MYSID	CLAD	ISOPO	I.LAR	BVALV	CHAET	EUP	CUMA	D.ZOE	FISH	P.COP	POLY	E.LAR	MEDUS	DECA	B.CYP	TENA	SIPH	INSCT	CHITN	TARDA
1	0	28	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	8	1	1	0	0	0	0	0	0	2	0	0	0	1	3	0	0	0	0	0	0
2	0	797	4	1	0	0	2	0	0	10	0	0	0	0	0	7	0	0	0	0	0	0
1	0	172	0	1	0	0	1	0	0	1	0	0	0	0	1	3	0	0	0	0	0	0
0	0	1057	0	0	0	0	0	0	0	10	0	0	0	0	1	2	0	0	0	0	0	0
4	0	577	1	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	3880	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	284	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	1	0
4	0	672	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	2	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
1	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
0	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
0	17	3	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	19	0	0	0	0	0	0	0	0	0	0	3	1	0	2	0	0	0	0	0	0
0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	20	1	0	0	0	0	1	0	2	0	0	0	0	46	0	0	0	0	0	0	0
14	0	700	1	1	0	0	8	0	0	2	0	1	0	1	30	0	0	0	0	0	0	0
5	0	312	0	1	0	0	1	0	0	1	0	2	0	0	8	0	0	0	0	0	0	0
12	0	806	0	0	0	0	6	0	0	0	0	2	0	1	34	0	0	0	0	0	0	0
1	0	1054	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0
168	0	5048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	420	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	12	0	0
104	0	3544	0	0	16	0	0	24	8	8	0	0	16	0	0	0	0	0	0	0	0	0
35	0	19	0	0	0	1	0	0	5	1	1	1	1	22	0	0	19	0	0	3	0	0
2	0	1	3	5	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	3	0	0
3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	56	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
0	1	1	92	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	47	5	0	0	0	1	0	0	0	0	2	0	0	3	0	0	0	0	0	0	0
0	0	32	6	0	0	0	0	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830330	923	101	MAC E2.8	5.8	3.9	10.17	0	0	0	9	0	0	0	0	5	1	0	0	5	1
830413	1522	101	MAC F2.9	8.6	0.0	10.41	0	2	0	3179	6	36	3	155	2	30	53	1107	5	
830507	1320	101	MAC E3.1	0.0	0.0	9.85	6	1	0	84	0	1	13	3	0	1	1	3	1	
830526	1828	101	MAC E4.0	13.5	3.3	12.94	24	8	2	347	0	16	2	31	4	21	44	9	46	
830607	945	101	MAC F1.5	0.0	0.0	11.66	4	3	0	29	0	2	0	147	3	5	1	0	23	
830618	1320	101	MAC E2.7	12.0	0.0	11.66	16	16	0	288	0	0	0	192	0	0	0	0	16	0
830708	1851	101	MAC E3.7	0.0	0.0	10.39	0	0	0	6	0	0	2	0	0	0	0	3	0	
830720	1550	101	MAC E3.8	0.0	0.0	11.47	224	16	0	832	0	0	0	144	32	592	8	8	24	
830803	1913	101	MAC F3.5	0.0	0.0	11.26	11	1	0	38	0	0	0	6	1	3	0	12	4	
830817	1910	101	MAC E3.5	0.0	0.0	11.26	2	0	1	0	0	0	1	0	0	0	0	1	0	
830906	1728	101	MAC E4.3	0.0	0.0	11.06	1	0	0	24	0	1	0	0	0	0	0	0	1	1
831003	1654	101	MAC E4.0	0.0	0.0	9.77	1	0	0	3	0	0	0	1	0	1	0	0	0	
831108	1405	101	MAC E3.4	9.1	5.3	9.17	11	0	0	5	0	0	0	0	2	1	0	0	0	
831207	1159	101	MAC E3.9	6.3	4.1	7.98	0	0	0	2	0	0	0	1	0	2	0	0	0	
830223	1141	102	MAC F4.1	7.4	29.5	2.47	179	217	7	392	5	15	5	48	51	12	44	13	40	
830315	1526	102	MAC F2.9	7.7	28.4	3.60	6	1	0	244	0	7	0	4	9	14	0	29	39	
830330	936	102	MAC E2.6	7.8	28.5	9.61	0	0	0	33	0	0	0	8	0	0	0	7	3	
830223	1100	371	MAC F4.0	6.0	3.3	2.61	10	24	0	42	1	0	4	35	0	0	1	0	1	
830315	1456	371	MAC F2.8	5.8	0.0	2.55	0	2	0	11	0	0	0	13	0	0	0	0	0	
830329	1443	371	MAC F2.8	6.1	1.3	9.83	2	0	0	61	1	0	0	6	0	3	0	8	175	
830413	1540	371	MAC F3.1	8.9	1.6	11.29	1	0	0	179	1	3	0	53	1	0	8	68	0	
830506	1410	371	MAC E2.6	11.2	3.6	10.67	1	1	0	13	0	0	6	19	2	0	0	12	0	
830526	1848	371	MAC E3.9	14.0	3.0	10.51	24	3	0	262	0	7	1	8	1	8	0	7	38	
830607	1116	371	MAC F2.1	0.0	0.0	11.02	2	1	1	25	0	0	0	177	47	3	0	1	4	
830618	1335	371	MAC E2.6	13.5	0.4	11.02	0	4	0	20	0	0	4	28	0	0	0	0	0	
830708	1910	371	MAC E3.6	0.0	0.0	11.53	0	1	0	5	0	0	1	0	0	1	0	4	0	
830719	2210	371	MAC F3.7	0.0	0.0	14.73	140	24	24	12	0	20	0	64	0	1232	12	60	4	
830803	1930	371	MAC F3.5	16.1	5.7	12.04	0	0	1	4	1	0	0	2	0	1	0	7	3	
830906	1741	371	MAC E4.2	0.0	0.0	9.36	0	1	0	1	0	0	1	0	0	0	0	0	1	
831003	1711	371	MAC E3.9	0.0	0.0	10.27	2	0	0	0	0	0	0	0	0	0	1	0	0	
831107	2330	371	MAC E1.4	0.0	0.0	7.80	1	0	1	255	0	3	1	0	0	153	7	0	0	
831108	1445	371	MAC F3.4	9.1	5.8	14.17	0	0	0	24	0	0	0	0	0	26	0	0	0	
831207	1230	371	MAC E3.9	5.6	4.3	8.37	0	0	0	0	0	0	0	0	0	0	2	0	0	
830223	1117	372	MAC F4.0	7.4	29.1	2.94	59	697	0	682	3	14	3	697	48	5	21	4	22	
830315	1504	372	MAC F2.8	7.6	27.6	2.42	2	3	0	235	0	3	0	6	5	15	0	3	12	
830329	1456	372	MAC F3.1	7.9	27.6	8.95	2	3	0	661	0	10	0	16	15	15	7	31	5	
830413	1552	372	MAC F3.3	8.5	22.6	9.64	8	0	0	1787	3	6	0	233	1	4	85	614	19	

G.EGG	MYSID	CLAD	ISOPO	I.LAR	BVALV	CHAET	EUP	CUMA	D.ZOE	FISH	P.COP	POLY	E.LAR	MEDUS	DECA	B.CYP	TENA	SIPH	INSCT	CHITN	TARDI
0	0	10	0	0	1	0	0	0	8	0	0	0	0	3	1	0	0	0	0	0	0
6	0	180	3	0	2	1	79	1	0	8	0	3	1	22	112	0	0	0	0	0	0
8	0	43	0	0	0	0	1	0	0	1	0	0	0	0	5	0	0	0	0	0	0
0	0	176	1	0	0	0	4	0	0	0	1	0	0	0	11	0	0	0	0	0	0
18	0	730	1	0	0	0	5	0	12	0	0	1	0	0	2	0	0	0	0	0	0
80	0	6032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	0	336	0	0	0	0	0	0	32	0	0	0	0	0	24	0	0	0	0	0	0
10	0	19	0	2	0	0	0	0	1	0	0	2	1	3	0	0	4	0	0	0	0
2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0	0	12	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	55	16	0	14	0	0	0	0	0	0	48	0	2	5	0	0	0	0	0	0
0	0	21	14	0	0	0	0	0	0	0	0	1	1	1	25	0	0	0	0	0	0
0	0	4	1	3	0	0	0	0	0	12	0	0	0	0	2	1	0	0	0	0	0
0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	39	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0	0	14	0	0	0	0	0	2	0	2	0	0	0	0	8	0	0	0	0	0	0
1	0	58	0	0	0	0	11	1	0	1	0	1	0	0	12	0	0	0	0	0	0
2	0	49	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
9	0	91	0	0	0	0	2	0	0	0	0	0	0	0	1	26	0	0	0	0	0
2	0	1196	0	0	0	0	1	0	3	1	0	0	0	0	3	0	0	0	0	0	0
0	0	868	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	0	40	0	0	16	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0
3	0	12	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	66	0	0	0	1	3	32	0	0	1	0	0	0	1	0	2	1	0	0	0	0
0	0	0	1	0	0	0	2	0	2	0	0	0	0	1	0	0	0	1	0	0	0
0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	4	0	4	0	2	0	0	1	0	48	0	10	19	0	0	0	0	0	0
0	0	20	19	0	0	0	0	0	0	2	0	1	0	6	63	0	0	0	0	0	0
0	0	7	7	0	0	0	3	1	0	23	0	1	0	85	202	0	0	0	0	0	0
0	0	16	0	0	0	1	56	0	0	30	0	1	0	30	115	0	0	0	0	0	0

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830506	1425	372	MAC	E2.6	9.5	30.1	12.17	30	2	0	304	1	13	2	8	15	0	5	13	42
830526	1903	372	MAC	E3.9	10.4	29.0	6.68	6	0	1114	0	0	8	0	91	14	42	0	1	38
830607	1056	372	MAC	F1.7	0.0	0.0	11.51	23	24	3	317	0	23	0	58	211	9	4	4	73
830618	1352	372	MAC	E2.6	10.4	28.1	11.51	0	120	0	1288	0	0	0	0	198	16	8	24	192
830708	1926	372	MAC	E3.6	0.0	0.0	16.33	6	11	0	104	0	3	0	4	0	8	6	4	3
830719	2230	372	MAC	F3.8	0.0	0.0	12.45	0	0	0	58	0	0	0	104	4	30	4	0	0
830803	1945	372	MAC	F3.6	12.3	29.1	10.66	0	0	0	57	0	0	0	66	2	25	0	0	3
830906	1755	372	MAC	E4.2	0.0	0.0	8.86	2	0	0	35	0	0	0	0	0	1	1	0	1
831003	1726	372	MAC	E3.8	0.0	0.0	7.11	0	0	0	48	0	0	0	3	13	4	5	0	3
831107	2350	372	MAC	E1.2	0.0	0.0	7.82	2	0	0	752	0	40	0	0	0	76	0	0	0
831108	1430	372	MAC	E3.4	9.6	30.5	8.35	0	0	0	464	0	0	0	8	28	232	12	0	0
831207	1243	372	MAC	E3.8	8.5	30.5	8.91	0	0	0	127	0	4	0	0	0	16	8	0	0

G.EGG	MYSID	CLAD	ISOPO	I.LAR	BVALV	CHAET	EUP	CUMA	D.ZOE	FISH	P.COP	POLY	E.LAR	MEDUS	DECA	B.CYP	TENA	SIPH	INSCT	CHITN	TARDI
0	0	6	0	0	0	6	23	0	0	1	0	1	0	9	12	0	0	0	0	0	0
11	0	21	0	0	2	0	4	0	1	0	0	2	0	3	70	0	0	0	0	0	0
8	0	542	0	0	1	0	24	0	60	14	0	4	0	21	32	0	0	0	0	0	0
56	0	320	0	0	0	0	312	0	88	8	0	0	0	16	0	8	0	0	0	0	0
1	0	4	0	0	0	0	0	0	45	0	0	0	0	0	0	3	37	0	0	0	0
0	0	0	0	0	4	0	0	0	2	0	2	0	0	2	0	0	226	0	0	0	0
0	0	2	0	0	0	0	0	0	48	0	0	0	0	4	0	0	114	0	0	1	1
1	0	1	0	1	1	0	1	0	1	0	0	0	0	0	0	0	2	1	1	0	0
1	0	58	0	0	0	1	14	0	0	0	0	0	0	5	0	0	0	2	0	0	0
0	302	0	0	0	0	0	90	0	4	0	0	0	0	0	0	0	2	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0
0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0



Table 5. Transition Macro Net Raw Counts.

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830315	1619	204	MAC	F3.7	7.9	29.9	3.94	29	6	2	410	0	16	1	29	17	25	4	47	65
830507	1029	204	MAC	F2.6	9.5	27.6	11.21	80	4	0	690	0	38	0	54	12	2	0	140	12
830526	1810	204	MAC	E4.0	9.9	31.1	12.01	35	15	3	1282	0	143	0	268	5	44	4	5	77
830607	1443	204	MAC	F3.4	0.0	0.0	11.51	14	125	1	1651	0	133	0	758	85	64	33	17	681
830617	1550	204	MAC	E1.5	12.9	25.6	11.51	16	376	0	728	32	0	0	1864	168	16	8	288	104
830708	1430	204	MAC	F3.0	0.0	0.0	11.02	32	8	0	744	0	0	0	80	0	40	16	56	40
830719	1950	204	MAC	F3.4	0.0	0.0	12.27	432	40	16	88	8	128	0	544	0	3152	32	184	96
830803	1502	204	MAC	E3.4	11.5	30.4	10.10	12	6	0	268	0	0	0	82	6	24	12	36	4
830818	1335	204	MAC	F3.3	0.0	0.0	11.24	0	0	0	360	0	0	0	8	12	12	0	0	4
830907	1321	204	MAC	F1.7	0.0	0.0	7.93	56	72	32	1044	4	24	0	8	0	36	8	4	4
831003	1627	204	MAC	E4.1	0.0	0.0	10.12	9	6	0	91	1	7	0	29	3	6	6	1	12
831108	1325	204	MAC	E3.5	9.2	27.6	9.30	7	0	0	254	0	29	0	4	6	60	8	0	0
831207	1123	204	MAC	E4.0	7.9	30.8	10.58	1	0	1	95	0	13	0	0	0	13	6	0	0
830315	1634	341	MAC	F3.7	5.5	2.6	2.36	63	0	0	207	25	21	0	57	30	138	40	22	41
830329	1417	341	MAC	F2.6	6.5	19.9	4.90	9	0	45	952	0	23	90	21022	70	23	61	810	74070
830414	954	341	MAC	E2.2	7.6	4.1	9.13	50	0	8	68	0	1	6	50	1	21	16	205	1
830507	1255	341	MAC	F3.1	0.0	0.0	8.82	32	24	0	523	0	34	1	27	9	0	2	23	11
830526	1750	341	MAC	E4.1	12.6	3.8	9.05	18	5	0	2457	0	37	0	61	16	46	1	1	128
830607	1506	341	MAC	F3.4	0.0	0.0	9.63	26	18	0	614	2	25	1	124	81	16	0	14	300
830618	1252	341	MAC	E2.8	12.3	1.4	9.63	40	16	0	472	0	0	0	64	8	0	0	0	0
830708	1828	341	MAC	E3.8	0.0	0.0	10.20	4	0	0	25	0	0	1	0	0	1	0	19	1
830719	1930	341	MAC	F3.3	0.0	0.0	11.23	2512	752	384	112	32	1344	0	0	32	16	48	32	16
830803	1435	341	MAC	E3.4	15.6	5.4	10.56	5	56	0	83	0	0	2	15	12	0	2	3	29
830818	1400	341	MAC	F3.5	0.0	0.0	10.35	17	8	0	242	0	1	1	1	5	6	2	1	0
830906	1710	341	MAC	E4.3	0.0	0.0	9.88	0	0	0	306	0	11	0	0	0	3	6	2	0
831003	1527	341	MAC	E4.3	0.0	0.0	12.33	0	1	0	7	0	0	0	1	1	1	0	0	0
831108	1345	341	MAC	E3.4	9.8	5.6	8.42	22	0	2	150	0	6	0	1	2	13	12	0	0
831207	1141	341	MAC	E4.0	6.5	4.2	9.39	2	0	0	42	0	3	1	6	0	4	2	0	0

G.EGG	MYSID	CLAD	ISOPO	LAR	BVALV	CHAET	EUP	QUMA	D.ZOE	FISH	P.COP	POLY	E.LAR	MEDUS	DECA	B.CYP	TENA	SIPH	C.MEG	INSCT	CHITN
0	0	1	8	0	0	0	0	8	0	2	0	0	6	0	51	0	0	0	0	0	0
164	0	0	0	0	0	14	40	0	0	1	0	6	0	26	102	0	0	0	0	0	0
347	0	50	0	0	0	1	13	0	0	1	4	4	0	10	49	0	0	0	0	0	0
62	0	114	0	0	1	2	886	0	126	2	1	9	1	45	64	0	0	0	0	0	0
448	0	952	0	0	0	0	8	0	32	0	0	8	0	616	0	64	0	0	24	0	0
128	0	16	0	0	0	8	0	0	56	0	0	0	0	120	0	0	0	16	0	0	0
288	0	160	0	0	32	0	0	24	0	0	0	8	0	192	0	24	124	8	0	0	0
456	0	12	0	0	2	0	0	0	10	0	0	2	2	18	2	0	10	6	0	0	14
188	0	12	0	0	0	0	0	0	0	0	0	4	0	12	0	0	0	0	0	0	0
32	0	56	0	0	20	0	0	4	16	0	0	4	0	32	0	4	0	28	0	0	0
3	0	51	0	0	1	0	7	0	2	0	0	1	1	0	1	1	4	4	0	0	0
1	1	0	0	0	1	1	30	0	2	0	0	0	0	0	0	0	0	6	0	0	0
0	0	0	0	0	0	2	0	0	0	7	1	2	0	1	0	0	0	6	0	0	0
3	0	3	270	0	0	0	4	44	0	0	0	1	0	0	47	0	0	0	0	0	0
1	0	0	9	112	3	0	0	101	0	6	0	3	0	45	90	0	0	0	0	0	0
19	0	225	15	0	2	0	1	30	0	7	0	0	0	0	6	0	0	0	0	0	0
133	0	42	0	0	0	0	19	0	3	1	0	17	0	4	37	0	0	0	0	0	0
273	0	205	0	0	0	2	17	1	2	0	1	4	0	11	50	0	0	0	0	0	0
54	0	1234	0	0	0	2	150	0	32	0	1	6	0	15	15	0	0	0	0	0	0
344	0	4248	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0
125	0	41	0	0	0	0	0	1	12	0	2	0	0	0	0	0	5	0	3	0	0
224	0	48	0	32	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	1	0	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
230	0	74	1	0	0	0	0	0	9	0	1	1	0	12	0	1	0	0	0	0	0
181	0	0	0	0	0	0	41	0	4	0	0	0	0	3	0	0	13	4	0	0	0
0	0	13	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	1	0	0
2	0	0	2	0	1	0	2	10	0	0	0	0	0	0	0	2	0	7	0	0	0
0	0	13	0	1	0	1	0	745	0	0	0	0	0	1	0	0	0	1	0	0	0

Table 6. Marine Macro Net Raw Counts.

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830315	1603	271	MAC F3.4	8.0	30.6	3.93		2	1	0	346	3	6	0	22	4	7	6	25	32
830329	1348	271	MAC F2.3	8.0	30.7	10.81		5	1	0	3899	0	31	2	365	18	63	48	676	23
830413	1400	271	MAC F2.2	8.5	30.6	10.89		4	5	4	6357	0	38	0	62	14	28	88	1744	1
830507	1053	271	MAC F2.8	9.4	30.7	11.11		0	0	0	18940	0	32	0	0	128	0	32	64	0
830526	1725	271	MAC E4.1	10.1	31.3	8.59		6	3	2	1245	0	27	1	172	5	13	6	68	132
830617	1332	271	MAC E2.2	12.2	26.8	10.80		12	0	0	528	0	2	0	514	54	10	6	84	54
830708	1317	271	MAC F2.2	0.0	0.0	13.01		5	4	0	110	0	3	0	28	2	14	1	12	8
830719	1910	271	MAC F3.3	0.0	0.0	14.38		1	1	0	29	0	0	0	145	5	47	13	28	1
830803	1330	271	MAC E3.5	11.5	30.5	11.23		72	12	0	136	0	1	0	16	0	39	6	10	1
830817	1308	271	MAC F3.3	0.0	0.0	11.23		100	214	1	114	0	0	0	112	0	219	12	0	4
830907	1206	271	MAC F0.8	0.0	0.0	8.08		0	0	0	464	0	0	0	0	0	8	12	0	0
831003	1550	271	MAC E4.2	0.0	0.0	10.65		0	0	0	149	0	15	0	32	2	3	11	0	15
831108	1220	271	MAC E3.7	9.2	31.5	9.64		0	4	0	1140	0	52	0	8	0	288	44	0	0
831207	1043	271	MAC E4.1	8.5	31.6	10.55		0	1	0	470	1	111	2	4	1	55	12	0	0
830413	1015	311	MAC E2.2	8.5	30.6	10.94		1	7	0	2115	0	15	0	29	14	31	16	699	15
830506	842	311	MAC F2.8	9.1	30.8	12.44		64	0	0	12464	0	112	0	112	0	64	16	400	48
830528	937	311	MAC E1.8	10.2	31.0	13.88		19	0	0	287	0	15	1	278	4	209	2	1	37
830607	834	311	MAC E1.5	12.0	31.0	13.65		13	7	151	1633	1	67	0	330	128	73	26	10	550
830617	815	311	MAC F3.1	11.0	30.4	12.26		28	0	0	2388	0	12	0	120	128	8	20	120	88
830708	822	311	MAC E0.9	0.0	0.0	10.86		20	16	0	584	0	4	0	56	8	12	8	136	12
830720	1030	311	MAC F1.4	12.5	25.6	12.94		328	0	0	296	0	0	0	792	0	1464	5	0	0
830803	950	311	MAC F2.1	13.0	28.8	9.32		82	8	0	134	0	0	0	120	0	178	10	24	0
830817	850	311	MAC F1.7	0.0	0.0	9.32		32	1	0	15	0	0	0	61	0	26	0	0	0
830907	802	311	MAC E2.4	0.0	0.0	10.11		2	0	0	307	0	5	0	2	0	1	8	2	1
831004	800	311	MAC E1.6	9.6	31.6	8.52		1	1	0	232	0	4	0	107	11	5	35	1	11

G.EGG	CLAD	ISOPO	I.LAR	BVALV	CHAET	EUP	OJMA	D.ZOE	FISH	P.COP	POLY	E.LAR	MEDUS	DECA	B.CYP	TENA	SIPH	HYDRA	C.MEG	INSCT	CHITN
1	8	9	0	0	0	1	0	0	2	0	3	1	4	77	0	0	0	0	0	0	0
10	0	15	0	2	3	15	1	0	20	0	0	0	18	533	0	0	0	0	0	0	0
3	0	2	1	0	2	134	1	0	13	0	10	6	39	388	0	0	0	0	0	0	0
32	0	0	0	0	0	32	0	0	32	0	0	0	0	288	0	0	0	0	0	0	0
263	1	0	0	1	0	22	0	10	0	0	2	0	34	43	0	0	0	0	0	0	0
66	6	0	0	0	0	442	0	8	2	0	6	504	36	8	0	84	6	0	0	0	0
32	0	0	0	0	0	0	0	56	0	0	1	0	0	0	0	72	5	0	0	0	0
96	19	2	0	10	0	0	0	9	0	1	2	15	180	1	1	100	1	0	0	0	0
93	2	0	0	3	0	0	0	9	0	0	0	1	8	0	0	2	5	1	0	0	9
174	14	0	0	2	0	0	0	3	0	0	0	2	0	0	0	0	4	0	0	2	20
24	24	0	0	4	0	68	0	12	0	0	0	0	8	0	0	32	20	0	0	0	0
0	36	0	0	0	0	23	0	2	0	0	0	1	0	1	0	4	7	0	0	0	0
0	0	0	0	0	0	1200	0	0	0	0	4	0	0	0	0	0	8	0	0	0	0
0	0	4	0	0	9	14	0	0	0	0	32	0	0	0	0	0	8	0	0	0	0
12	1	0	0	0	0	32	0	0	13	0	0	0	14	108	0	0	0	0	0	0	0
16	0	0	0	0	4	240	0	0	5	0	0	0	1	624	0	0	0	0	0	0	0
9	9	0	13	0	0	5	0	0	7	0	8	0	4	17	0	0	0	0	0	0	0
89	32	8	1	0	3	1029	0	80	2	0	32	0	19	26	0	0	0	0	0	0	0
32	4	0	0	8	8	760	0	72	0	0	16	336	36	4	0	104	3	0	0	0	0
112	0	0	0	0	0	0	0	16	0	0	4	0	28	0	0	112	0	0	20	0	0
0	0	0	0	0	0	0	0	16	0	0	0	0	2	0	0	0	0	0	0	0	0
56	6	0	0	0	0	0	0	2	0	0	6	4	20	0	0	0	0	0	0	0	0
1	3	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	4	0	0	0	0
8	1	0	0	0	2	72	0	1	0	0	0	2	2	0	0	6	4	0	0	0	0
1	72	0	0	0	1	30	0	1	0	0	0	0	4	0	0	0	25	0	0	1	0



Table 7. Estuarine Micro Net Raw Counts.

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830223	1213	71	MIC	E4.1	5.3	0.6	0.26	9	66	2	7	0	2	0	0	0	0	0	0	0
830315	1433	71	MIC	F2.3	5.6	0.2	0.27	4	46	0	17	0	0	0	72	0	0	0	0	0
830330	905	71	MIC	E2.9	5.4	0.0	0.96	8	86	1	70	0	1	4	16	0	1	0	10	9
830414	844	71	MIC	E2.6	7.4	0.6	1.01	7	273	7	124	0	0	1	409	0	0	6	49	11
830506	1350	71	MIC	E2.6	11.3	0.7	1.22	1	107	0	167	0	2	1	73	0	0	0	0	1
830526	1942	71	MIC	E3.7	14.9	1.0	1.45	15	509	3	386	3	2	0	84	3	1	0	0	82
830607	1030	71	MIC	F1.6	0.0	0.0	1.29	6	158	0	147	2	0	1	56	0	0	0	2	4
830618	1233	71	MIC	E2.8	11.9	0.0	1.29	512	564	0	20	0	0	0	8	0	0	0	8	0
830708	2002	71	MIC	E3.5	0.0	0.0	1.14	7	30	0	30	0	0	2	1	1	0	2	1	3
830720	1630	71	MIC	E3.8	0.0	0.0	1.31	9	141	1	85	2	0	0	10	1	1	0	1	6
830803	1830	71	MIC	F3.3	0.0	0.0	1.15	11	45	0	30	0	0	0	4	0	0	2	2	4
830816	2000	71	MIC	F3.6	0.0	0.0	1.15	9	24	0	0	0	0	0	5	0	1	0	0	0
830907	1832	71	MIC	E4.1	0.0	0.0	0.99	17	52	0	84	1	0	0	19	0	0	0	5	3
831003	1253	71	MIC	F3.5	0.0	0.0	1.07	22	10	2	21	0	0	0	8	0	0	1	31	3
831108	1155	71	MIC	E3.8	9.6	1.0	1.01	6	34	1	15	1	0	0	1	0	2	0	3	0
831207	1322	71	MIC	E3.7	5.9	0.8	0.78	10	71	0	15	0	0	0	5	0	0	0	1	0
830223	1247	115	MIC	E4.0	5.1	0.5	0.09	5	59	0	28	1	1	0	39	4	0	0	2	3
830315	1438	115	MIC	F2.5	5.6	0.0	0.25	11	58	3	14	1	0	0	118	0	0	0	1	0
830330	849	115	MIC	E3.0	5.6	2.0	1.04	4	95	1	73	1	0	2	18	0	1	1	6	4
830414	813	115	MIC	E2.9	6.9	1.0	1.07	7	318	0	104	2	1	3	764	0	1	2	33	18
830506	1325	115	MIC	E2.9	10.6	2.1	1.27	4	458	11	420	0	7	5	178	2	0	0	16	2
830526	1925	115	MIC	E3.8	12.1	2.6	0.68	6	133	2	26	1	1	0	27	8	0	0	0	35
830607	1302	115	MIC	F2.8	0.0	0.0	0.99	5	295	2	169	2	0	0	50	2	0	1	0	2
830618	1215	115	MIC	E2.9	10.1	0.0	0.99	960	1168	0	172	0	0	0	28	0	0	0	8	0
830708	1947	115	MIC	E3.5	0.0	0.0	1.31	10	223	0	203	1	0	0	42	2	0	6	6	12
830720	1610	115	MIC	E3.8	0.0	0.0	1.40	4	540	0	468	0	0	0	60	16	4	4	4	48
830803	1850	115	MIC	F3.4	0.0	0.0	1.22	6	127	0	124	1	0	0	10	6	0	0	3	45
830817	1850	115	MIC	E3.5	0.0	0.0	1.22	12	58	1	65	0	0	1	24	2	1	0	4	6
830906	1817	115	MIC	E4.1	0.0	0.0	1.03	32	214	0	650	1	1	4	56	0	0	1	15	3
831003	1509	115	MIC	E4.3	0.0	0.0	0.90	19	106	1	216	0	0	1	8	28	0	0	16	5
831108	1510	115	MIC	F3.4	9.4	5.6	1.13	16	29	3	48	2	0	0	2	0	2	1	3	0
831207	1307	115	MIC	E3.8	6.7	3.7	0.79	7	198	0	106	1	0	0	12	0	1	1	7	0
830223	1132	101	MIC	F4.1	5.9	2.6	0.28	4	77	0	31	1	0	1	39	0	1	0	1	1
830315	1517	101	MIC	F2.9	5.9	0.1	0.44	24	167	2	33	3	0	1	25	0	1	1	2	5

G.EGG	MYSID	CLAD	ISOPO	I.LAR	BVALV	CHAET	EUP	CUMA	D.ZOE	FISH	P.COP	POLY	E.LAR	MEDUS	DECA	B.CYP	TENA	INSCT	CHITN	TANAD	TARDA
0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	12	0	0	0	0	0	1	0	0	0	2	0	4	2	0	0	0	0	0	0
0	0	53	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0	0	51	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1634	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
0	0	359	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
0	0	584	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	52	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
0	0	195	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
0	0	6	0	3	4	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1	0	3	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
1	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
0	0	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	39	0	0	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
0	0	646	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
0	0	2036	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	132	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0	0	348	0	4	4	0	0	0	4	0	0	12	0	0	0	0	0	0	0	0	0
1	0	3	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	76	4	1	6	0	8	0	0	0	0	2	0	0	0	0	0	0	0	2	0
0	0	42	2	0	1	0	11	0	0	0	0	1	0	0	0	0	1	0	0	0	0
0	0	19	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	120	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
0	0	9	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830330	923	101	MIC E2.8	5.8	3.9	1.01	4	58	5	58	0	0	0	0	23	0	2	1	63	5
830413	1522	101	MIC F2.9	8.6	0.0	1.04	22	685	3	693	0	1	0	0	1118	7	0	6	162	164
830507	1320	101	MIC E3.1	0.0	0.0	0.99	3	122	0	154	0	1	0	0	12	1	0	2	0	2
830526	1828	101	MIC E4.0	13.5	3.3	1.29	17	648	0	465	0	6	0	0	133	7	4	0	0	372
830607	945	101	MIC F1.5	0.0	0.0	1.17	1	69	0	52	0	5	0	0	28	7	0	3	0	9
830618	1320	101	MIC E2.7	12.0	0.0	1.17	0	956	0	944	8	0	0	0	32	0	0	0	0	0
830708	1851	101	MIC E3.7	0.0	0.0	1.04	3	7	0	34	0	0	1	0	2	0	0	0	1	1
830720	1550	101	MIC E3.8	0.0	0.0	1.15	96	1632	16	2408	16	0	0	0	152	96	88	48	16	320
830803	1913	101	MIC F3.5	0.0	0.0	1.13	5	81	0	68	0	0	1	6	1	0	2	0	35	
830817	1910	101	MIC E3.5	0.0	0.0	1.13	8	8	2	18	0	0	1	6	0	1	0	0	2	
830906	1728	101	MIC E4.3	0.0	0.0	1.11	10	44	1	169	0	0	1	3	0	0	0	10	30	7
831003	1654	101	MIC E4.0	0.0	0.0	0.98	34	37	1	73	1	0	0	3	8	0	11	12	4	
831207	1159	101	MIC E3.9	6.3	4.1	0.80	3	105	0	75	0	0	1	19	0	2	1	3	0	
830223	1141	102	MIC F4.1	7.4	29.5	0.25	25	113	0	38	2	0	3	58	10	0	18	1	8	
830315	1526	102	MIC F2.9	7.7	28.4	0.36	54	581	0	205	0	1	1	82	16	3	20	150	38	
830330	936	102	MIC E2.6	7.8	28.5	0.96	4	60	0	77	1	0	2	27	0	0	0	6	9	
830223	1100	371	MIC F4.0	6.0	3.3	0.26	0	8	3	0	0	0	0	1827	0	0	0	0	0	
830315	1456	371	MIC F2.8	5.8	0.0	0.26	10	39	3	8	5	0	2	253	0	0	0	1	1	
830329	1443	371	MIC F2.8	6.1	1.3	0.98	5	79	0	91	0	1	2	0	0	0	3	9	17	
830413	1540	371	MIC F3.1	8.9	1.6	1.13	2	132	0	286	1	2	0	470	0	0	0	8	45	14
830506	1410	371	MIC E2.6	11.2	3.6	1.07	1	102	13	76	0	0	4	207	0	0	0	4	0	
830526	1848	371	MIC E3.9	14.0	3.0	1.05	21	732	1	259	0	1	0	55	1	0	10	0	399	
830607	1116	371	MIC F2.1	0.0	0.0	1.10	4	96	0	84	0	1	0	38	0	0	0	0	0	
830618	1335	371	MIC E2.6	13.5	0.4	1.10	6	128	0	128	0	0	2	10	0	0	0	0	0	
830708	1910	371	MIC E3.6	0.0	0.0	1.15	3	14	1	19	0	0	1	1	0	0	0	0	1	
830719	2210	371	MIC F3.7	0.0	0.0	1.47	16	600	4	788	8	4	0	124	0	0	40	16	24	
830803	1930	371	MIC F3.5	16.1	5.7	1.20	2	31	0	29	0	0	0	0	0	0	0	0	0	14
830906	1741	371	MIC E4.2	0.0	0.0	0.94	23	47	0	199	0	0	0	5	0	0	0	0	12	4
831003	1711	371	MIC E3.9	0.0	0.0	1.03	14	29	0	17	0	0	2	3	3	0	3	7	0	
831107	2330	371	MIC E1.4	0.0	0.0	0.78	23	16	0	34	0	0	0	9	0	6	11	18	2	
831108	1445	371	MIC F3.4	9.1	5.8	1.42	25	31	0	47	1	0	0	0	1	2	4	0	1	
831207	1230	371	MIC E3.9	5.6	4.3	0.84	3	57	0	23	0	0	0	5	0	0	0	0	0	
830223	1117	372	MIC F4.0	7.4	29.1	0.27	7	71	0	46	0	0	2	610	6	0	3	1	0	
830315	1504	372	MIC F2.8	7.6	27.6	0.24	24	177	0	40	0	0	2	52	5	3	0	2	4	
830329	1456	372	MIC F3.1	7.9	27.6	0.90	31	454	12	374	3	4	0	340	12	3	8	38	30	
830413	1552	372	MIC F3.3	8.5	22.6	0.96	68	641	1	368	0	1	4	1015	0	0	3	146	317	

G.EGG	MYS.ID	CLAD	ISOPO	I.LAR	BVALV	CHAET	EUP	CUMA	D.ZOE	FISH	P.COP	POLY	E.LAR	MEDUS	DECA	B.CYP	TENA	INSCT	CHITN	TANAD	TARDA
1	0	7	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0
0	0	41	1	0	4	0	1	0	0	1	0	43	1	5	6	0	0	0	0	0	0
1	0	23	0	0	0	0	122	0	1	1	0	1	0	0	1	0	0	0	0	0	0
1	0	387	0	0	0	0	0	0	0	0	1	2	0	0	1	0	0	0	0	0	0
2	0	88	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1316	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	12	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	200	0	0	80	0	0	0	0	0	0	64	0	32	0	8	0	0	0	0	0
3	0	1	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	4	0	0	28	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
0	0	6	0	0	4	0	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0
0	0	33	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	8	5	0	5	0	0	0	0	0	0	11	2	0	2	0	0	0	0	0	0
0	0	14	1	0	11	0	0	0	0	0	0	5	2	1	0	0	0	0	0	0	0
0	0	15	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	16	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	152	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
0	0	391	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0
0	0	114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	72	0	0	196	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0
0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	21	0	3	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0	0	0	0	7	0	1	5	0	0	0	0	0	0
0	0	6	1	0	0	0	0	0	0	0	0	38	3	0	1	0	0	0	0	0	0
0	0	11	3	0	0	0	0	0	0	1	0	21	0	7	4	0	0	0	0	0	0
0	0	14	0	0	2	0	2	0	0	3	0	29	4	5	1	0	0	0	0	0	0

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830506	1425	372	MIC E2.6	9.5	30.1	1.22	39	659	1	209	1	0	0	181	4	0	0	3	130	
830526	1903	372	MIC E3.9	10.4	29.0	0.67	53	1271	1	791	0	3	0	1134	41	9	7	0	686	
830607	1056	372	MIC F1.7	0.0	0.0	1.15	33	465	5	206	6	1	2	102	70	1	3	0	53	
830618	1352	372	MIC E2.6	10.4	28.1	1.15	64	3440	0	3344	0	0	16	400	416	0	0	0	416	
830708	1926	372	MIC E3.6	0.0	0.0	1.63	40	540	0	492	0	0	0	68	52	4	0	12	116	
830719	2230	372	MIC F3.8	0.0	0.0	1.25	32	9056	0	4080	16	0	0	112	144	0	96	16	32	
830803	1945	372	MIC F3.6	12.3	29.1	1.07	24	8224	0	7248	0	0	0	64	48	0	96	0	48	
830906	1755	372	MIC E4.2	0.0	0.0	0.89	184	364	0	880	8	0	0	4	0	0	16	40	52	
831003	1726	372	MIC E3.8	0.0	0.0	0.71	76	496	4	764	8	0	0	52	888	0	24	28	20	
831107	2350	372	MIC E1.2	0.0	0.0	0.78	60	1208	0	2224	0	12	0	44	4	24	8	0	8	
831108	1430	372	MIC E3.4	9.6	30.5	0.84	56	692	0	600	8	0	0	44	16	0	24	0	4	
831207	1243	372	MIC E3.8	8.5	30.5	0.89	15	378	0	473	0	0	0	19	2	3	3	30	1	

G.EGG	MYSID	CLAD	ISOPO	I.LAR	BVALV	CHAET	EUP	CUMA	D.ZOE	FISH	P.COP	POLY	E.LAR	MEDUS	DECA	B.CYP	TENA	INSCT	CHITN	TANAD	TARDI
1	0	5	0	2	2	2	122	0	0	0	0	1	0	3	0	0	0	0	0	0	0
5	0	47	0	0	0	0	2	0	0	0	2	10	0	1	4	0	0	0	0	0	0
1	0	328	0	1	2	0	0	0	0	0	0	9	0	18	0	0	0	0	0	0	0
0	0	128	0	16	0	0	48	0	32	0	0	48	0	16	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	16	12	0	0	0	4	0	0	0	0
0	0	0	0	0	0	112	0	0	0	0	0	16	0	0	0	0	48	0	0	0	0
0	0	8	0	0	8	0	0	0	0	0	0	24	0	0	0	0	16	0	0	0	0
8	0	0	0	0	96	0	32	0	0	0	0	16	48	0	0	4	0	0	0	0	4
0	0	8	0	0	8	0	40	0	0	0	0	20	8	4	0	0	0	0	0	0	0
0	16	0	4	0	4	0	8	0	0	0	0	12	0	0	0	0	0	0	0	0	0
0	4	0	0	0	8	0	140	0	8	0	0	0	0	0	0	0	0	0	0	0	8
0	0	5	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0

Table 8. Transition Micro Net Raw Counts.

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830315	1619	204	MIC F3.7	7.9	29.9	0.39	60	620	2	272	12	7	0	96	27	1	18	247	54	
830507	1029	204	MIC F2.6	9.5	27.6	1.12	36	350	0	1057	0	6	0	402	9	0	0	30	241	
830526	1810	204	MIC E4.0	9.9	31.1	1.20	91	1032	1	808	0	23	3	1494	20	12	51	34	775	
830607	1443	204	MIC F3.4	0.0	0.0	1.15	64	3370	3	2237	0	51	5	443	595	5	70	123	618	
830617	1550	204	MIC E1.5	12.9	25.6	1.15	80	8736	0	6016	16	0	0	336	528	0	0	80	48	
830708	1430	204	MIC F3.0	0.0	0.0	1.10	36	888	0	1160	0	0	0	464	20	0	16	52	188	
830719	1950	204	MIC F3.4	0.0	0.0	1.23	40	3240	8	5872	0	0	0	120	112	8	112	168	440	
830803	1502	204	MIC E3.4	11.5	30.4	1.01	36	748	0	1020	0	0	4	56	72	4	56	16	304	
830818	1335	204	MIC F3.3	0.0	0.0	1.12	4	444	4	524	0	8	0	88	52	0	16	104	88	
830907	1321	204	MIC F1.7	0.0	0.0	0.79	272	720	8	3448	24	0	0	136	8	32	40	160	80	
831003	1627	204	MIC E4.1	0.0	0.0	1.01	232	316	8	960	0	36	0	104	132	4	84	196	92	
831108	1325	204	MIC E3.5	9.2	27.6	0.93	43	232	1	910	0	11	1	7	17	32	188	64	10	
831207	1123	204	MIC E4.0	7.9	30.8	1.06	24	544	0	944	0	0	0	292	8	0	32	168	12	
830315	1634	341	MIC F3.7	5.5	2.6	0.24	38	377	1	212	0	0	0	60	15	8	0	41	62	
830329	1417	341	MIC F2.6	6.5	19.9	0.49	118	549	0	598	0	0	6	136	9	2	7	175	88	
830414	954	341	MIC E2.2	7.6	4.1	0.91	15	221	10	108	1	1	1	323	0	0	4	184	5	
830507	1255	341	MIC F3.1	0.0	0.0	0.88	6	239	0	223	0	5	2	34	3	0	1	3	60	
830526	1750	341	MIC E4.1	12.6	3.8	0.91	33	1680	1	1881	0	13	0	1102	29	2	13	0	1629	
830607	1506	341	MIC F3.4	0.0	0.0	0.96	11	547	1	351	0	10	4	86	55	1	4	18	58	
830618	1252	341	MIC E2.8	12.3	1.4	0.96	664	632	0	192	0	0	0	80	0	0	0	0	0	
830708	1828	341	MIC E3.8	0.0	0.0	1.02	5	87	1	93	0	0	3	17	0	0	4	4	17	
830719	1930	341	MIC F3.3	0.0	0.0	1.12	16	1392	0	1792	16	0	0	64	64	16	48	16	176	
830803	1435	341	MIC E3.4	15.6	5.4	1.06	88	2	0	137	0	1	0	0	2	9	5	0	0	
830818	1400	341	MIC F3.5	0.0	0.0	1.04	44	508	0	392	0	0	8	152	12	4	4	16	676	
830906	1710	341	MIC E4.3	0.0	0.0	0.99	20	1060	0	3664	4	0	0	24	8	0	236	524	116	
831003	1527	341	MIC E4.3	0.0	0.0	1.23	24	90	0	264	1	1	1	7	5	0	0	42	22	
831108	1345	341	MIC E3.4	9.8	5.6	0.84	12	14	0	54	0	2	0	2	0	5	26	3	0	
831207	1141	341	MIC E4.0	6.5	4.2	0.94	24	170	0	243	2	2	0	64	3	0	8	7	1	

	G.EGG	MYSID	CLAD	ISOPO	I.LAR	BVALV	CHAET	EUP	CUMA	D.ZOE	P.COP	POLY	E.LAR	MEDUS	DECA	B.CYP	TENA	SIPH	HYDRA	CHITN
0	0	38	0	0	21	0	0	1	0	0	7	20	0	0	0	0	0	0	0	0
21	0	4	0	0	1	0	322	0	0	1	4	0	2	1	0	0	0	0	0	0
42	0	126	0	0	146	0	0	0	3	9	16	18	24	6	0	0	0	0	0	0
14	0	13	0	1	154	2	49	0	13	1	83	0	330	1	0	0	0	0	0	0
16	0	624	0	0	0	0	0	0	0	0	144	0	176	0	48	0	0	0	0	0
32	0	12	0	0	0	0	0	0	4	0	52	0	32	0	4	0	0	0	0	0
64	0	328	0	0	376	0	0	0	8	0	440	56	128	0	0	0	0	0	0	0
32	0	4	8	0	28	0	0	0	0	0	64	4	8	0	0	0	0	0	0	0
32	0	36	0	0	64	0	0	0	0	0	8	8	4	0	0	0	0	0	0	0
8	0	80	8	0	496	0	0	0	0	0	48	56	8	0	16	0	8	8	0	0
0	0	8	0	4	48	0	36	0	0	0	24	40	0	0	12	0	0	0	0	0
0	0	1	2	1	44	2	19	0	0	1	5	0	1	0	0	0	0	0	0	0
0	0	0	0	0	48	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0
0	0	3	10	0	1	0	0	4	0	0	2	7	1	3	0	0	0	0	0	0
0	0	3	0	0	1	0	0	5	0	0	6	10	4	11	0	0	0	0	0	0
1	0	36	0	0	0	0	0	2	0	0	3	0	0	0	0	0	0	0	0	0
1	0	22	0	0	0	0	11	0	0	0	2	0	0	0	0	0	0	0	0	0
27	0	295	0	1	0	0	4	0	0	3	13	0	3	1	0	0	0	0	0	0
4	0	756	0	0	8	0	1	0	0	2	18	0	11	2	0	0	0	0	0	0
16	0	1712	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0
2	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	24	0	0	264	0	0	0	8	0	144	16	24	0	0	0	0	0	0	0
407	0	2	0	0	0	0	0	0	0	0	0	0	3	1	0	2	0	0	76	1
8	0	68	4	0	8	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0
48	0	28	0	0	884	0	0	0	0	0	60	0	0	0	0	0	4	0	0	0
1	0	50	0	1	0	0	3	0	0	1	2	0	0	0	0	0	0	0	0	0
0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0	0	63	6	0	3	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0



Table 9. Marine Micro Net Raw Counts.

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830315	1603	271	MIC F3.4	8.0	30.6	0.39	58	594	1	396	0	1	1	122	10	0	3	126	53	
830329	1348	271	MIC F2.3	8.0	30.7	1.08	9	588	0	1380	0	6	24	204	24	6	18	216	222	
830413	1400	271	MIC F2.2	8.5	30.6	1.09	13	797	0	1303	0	2	0	492	5	2	5	193	314	
830507	1053	271	MIC F2.8	9.4	30.7	1.11	30	508	0	2460	0	18	0	206	2	2	20	48	258	
830526	1725	271	MIC E4.1	10.1	31.3	0.86	3	1694	0	1187	0	7	0	520	22	3	3	2	843	
830617	1332	271	MIC E2.2	12.2	26.8	1.08	240	3060	4	4700	0	12	0	516	268	4	16	108	60	
830708	1317	271	MIC F2.2	0.0	0.0	1.30	48	1224	0	1560	0	0	0	44	24	0	24	64	280	
830719	1910	271	MIC F3.3	0.0	0.0	1.44	16	2384	0	4864	0	0	0	240	32	16	112	16	208	
830803	1330	271	MIC E3.5	11.5	30.5	1.12	12	499	0	600	0	0	0	33	41	4	11	9	118	
830817	1308	271	MIC F3.3	0.0	0.0	1.12	23	726	0	635	0	0	0	94	50	5	9	44	25	
830907	1206	271	MIC F0.8	0.0	0.0	0.81	128	768	0	3216	16	16	16	192	16	0	80	160	128	
831003	1550	271	MIC E4.2	0.0	0.0	1.07	48	528	0	2048	0	8	16	128	136	0	108	256	168	
831108	1220	271	MIC E3.7	9.2	31.5	0.96	8	560	0	1380	0	12	0	56	24	44	244	72	24	
831207	1043	271	MIC E4.1	8.5	31.6	1.06	20	512	0	1664	4	28	0	192	4	4	28	136	8	
830413	1015	311	MIC E2.2	8.5	30.6	1.09	34	626	2	674	5	3	1	381	17	2	43	351	204	
830506	842	311	MIC F2.8	9.1	30.8	1.24	36	725	3	1368	19	10	3	294	33	42	1	16	273	
830528	937	311	MIC E1.8	10.2	31.0	1.39	600	1374	295	350	0	179	2	1403	55	149	70	7	318	
830607	834	311	MIC E1.5	12.0	31.0	1.37	39	3934	23	2756	0	25	0	1396	382	4	213	137	302	
830617	815	311	MIC F3.1	11.0	30.4	1.23	80	2764	0	4960	0	8	0	372	248	0	0	60	144	
830708	822	311	MIC E0.9	0.0	0.0	1.09	24	1328	8	2048	0	0	0	504	32	0	48	64	288	
830720	1030	311	MIC F1.4	12.5	25.6	1.29	160	984	0	1248	0	0	8	104	16	24	8	104	0	
830803	950	311	MIC F2.1	13.0	28.8	0.93	28	820	0	868	0	0	0	84	24	4	20	12	64	
830817	850	311	MIC F1.7	0.0	0.0	0.93	188	1104	0	552	0	0	0	64	40	4	24	48	16	
830907	802	311	MIC E2.4	0.0	0.0	1.01	32	724	0	2672	0	4	0	64	24	8	80	388	36	
831004	800	311	MIC E1.6	9.6	31.6	0.85	16	604	4	1744	8	0	0	80	416	8	72	212	48	

G.EGG	CLAD	ISOPO	I.LAR	BVALV	CHAET	EUP	CUMA	D.ZOE	FISH	P.COP	POLY	E.LAR	MEDUS	DECA	B.CYP	TENA	SIPH
0	2	1	0	2	0	0	0	0	0	0	4	15	0	4	0	0	0
0	6	6	0	0	0	0	12	0	1	0	24	42	0	36	0	0	0
3	2	0	0	0	0	1	0	0	0	0	27	0	9	17	0	0	0
14	0	0	0	24	2	4	0	2	0	0	2	4	0	6	2	0	0
19	3	0	0	0	0	3	0	0	0	0	33	0	7	8	0	0	0
12	4	0	0	0	0	156	0	4	0	0	68	192	2	0	0	16	2
40	0	8	0	0	0	0	0	8	0	0	32	0	48	0	0	0	0
16	32	0	0	688	0	0	0	0	0	0	272	32	64	0	0	16	0
4	1	1	0	27	0	0	0	0	0	0	7	3	4	0	0	0	0
0	39	0	0	15	0	0	0	0	0	0	4	4	0	0	0	0	0
16	64	0	0	384	0	48	0	0	0	0	0	64	0	0	16	0	0
0	8	0	0	96	0	84	0	0	0	0	4	56	0	0	0	0	4
0	0	0	0	80	0	60	0	0	0	0	8	4	0	0	0	0	4
0	0	4	0	68	0	0	0	0	0	0	12	0	4	0	0	0	4
1	0	0	0	18	0	3	0	0	0	0	21	22	5	4	0	0	0
16	1	0	0	1	2	65	0	0	1	0	35	0	0	42	0	0	0
11	31	135	2	69	0	1	2	1	0	3	101	9	5	1	3	0	0
11	23	3	0	467	0	34	0	7	0	0	46	331	4	0	0	0	0
4	16	0	0	0	0	228	0	0	0	0	104	224	4	4	0	0	0
8	0	0	0	0	0	0	0	0	0	0	144	0	0	0	0	8	0
0	40	0	0	24	0	0	0	0	0	0	80	0	0	0	0	0	0
0	24	0	0	24	0	0	0	0	0	0	52	24	0	0	0	0	0
0	12	0	0	8	0	0	0	0	0	0	8	36	4	0	0	0	0
12	44	0	0	340	12	40	0	0	0	0	16	132	4	0	0	0	0
0	0	8	0	32	0	72	0	0	0	0	8	56	4	0	0	0	0

Table 10. Estuarine Macro Net #'s/M³.

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAU
830223	1213	71	MAC	E4.1	5.3	0.6	2.62	31.3	51.9	0.0	75.6	1.1	2.3	0.0	3.4	3.4	0.4	3.8	4.2	1.1
830315	1433	71	MAC	F2.3	5.6	0.2	2.73	0.0	0.0	0.0	4.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0
830330	905	71	MAC	E2.9	5.4	0.0	9.62	0.1	0.0	0.0	2.0	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.6	0.1
830414	844	71	MAC	E2.6	7.4	0.6	10.08	0.7	0.0	0.0	8.7	0.0	0.0	0.4	49.0	0.0	0.1	0.1	16.9	0.0
830506	1350	71	MAC	E2.6	11.3	0.7	12.24	0.5	0.2	0.1	1.9	0.0	0.0	0.4	11.9	0.0	0.0	0.0	1.5	0.1
830526	1942	71	MAC	E3.7	14.9	1.0	14.45	0.1	0.6	0.0	5.9	0.0	0.0	0.3	43.6	0.1	0.2	0.1	0.4	0.4
830607	1030	71	MAC	F1.6	0.0	0.0	12.91	0.1	0.2	0.2	1.2	0.5	0.1	0.2	4.0	0.2	0.5	0.0	0.1	0.2
830618	1233	71	MAC	E2.8	11.9	0.0	12.91	3.1	1.2	0.0	9.3	0.0	0.0	0.6	4.3	0.0	0.0	0.0	1.9	0.0
830708	2002	71	MAC	E3.5	0.0	0.0	11.38	0.3	0.0	0.0	1.1	0.0	0.0	0.3	1.7	0.0	0.2	0.0	0.0	0.1
830720	1630	71	MAC	E3.8	0.0	0.0	13.06	0.6	0.0	0.0	4.6	0.3	0.6	0.0	3.7	0.0	10.7	0.3	0.0	0.0
830803	1830	71	MAC	F3.3	0.0	0.0	11.46	0.9	0.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.4	0.1
830816	2000	71	MAC	F3.6	0.0	0.0	11.46	0.1	0.2	0.0	0.2	0.0	0.0	0.1	0.6	0.0	1.0	0.0	0.1	0.0
830907	1832	71	MAC	E4.1	0.0	0.0	9.86	0.4	0.0	0.0	0.1	0.0	0.0	0.0	0.6	0.0	0.0	0.1	0.0	0.0
831003	1253	71	MAC	F3.5	0.0	0.0	10.66	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
831108	1155	71	MAC	E3.8	9.6	1.0	10.07	0.1	0.0	0.0	1.0	0.0	0.2	0.0	0.0	0.0	1.8	0.0	0.0	0.0
831207	1322	71	MAC	E3.7	5.9	0.8	7.83	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.3	0.0	0.0	0.0
830223	1247	115	MAC	E4.0	5.1	0.5	0.91	14.3	75.8	28.6	61.5	14.3	0.0	2.2	27.5	4.4	4.4	2.2	8.8	1.1
830315	1438	115	MAC	F2.5	5.6	0.0	2.50	0.8	0.4	0.0	5.2	2.0	2.0	0.0	6.4	0.0	0.0	0.0	0.0	0.0
830330	849	115	MAC	E3.0	5.6	2.0	10.43	0.1	0.0	0.0	27.5	0.0	0.1	0.0	1.0	0.1	0.2	0.2	2.3	0.1
830414	813	115	MAC	E2.9	6.9	1.0	10.70	0.9	0.4	0.5	56.0	0.0	0.4	0.6	45.3	0.0	0.3	0.6	63.0	0.7
830506	1325	115	MAC	E2.9	10.6	2.1	12.74	0.6	0.2	0.0	4.7	0.0	0.5	0.9	17.5	0.0	0.1	0.0	1.6	0.1
830526	1925	115	MAC	E3.8	12.1	2.6	6.75	1.0	0.6	0.0	149.5	0.0	0.1	0.0	14.4	1.3	2.7	0.3	0.1	8.7
830607	1302	115	MAC	F2.8	0.0	0.0	9.91	0.0	0.1	0.0	9.6	0.0	0.1	0.1	12.7	0.3	0.2	0.0	0.0	0.5
830618	1215	115	MAC	E2.9	10.1	0.0	9.91	4.8	0.8	0.0	18.5	0.0	0.0	1.6	8.1	0.0	0.8	0.0	0.0	0.0
830708	1947	115	MAC	E3.5	0.0	0.0	13.06	0.0	0.0	0.0	8.0	0.0	0.0	0.0	2.8	0.0	0.6	0.0	0.0	0.0
830720	1610	115	MAC	E3.8	0.0	0.0	13.97	10.9	0.6	0.0	104.8	0.0	0.0	0.6	5.2	1.1	77.9	0.6	0.0	2.9
830803	1850	115	MAC	F3.4	0.0	0.0	12.15	0.2	0.1	0.0	8.1	0.0	0.0	0.0	0.2	0.2	0.6	0.2	0.3	1.2
830817	1850	115	MAC	E3.5	0.0	0.0	12.15	0.4	0.0	0.2	0.2	1.2	0.0	0.1	0.0	0.0	0.9	0.0	0.7	0.1
830906	1817	115	MAC	E4.1	0.0	0.0	10.33	1.0	0.0	0.0	3.2	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1
831003	1509	115	MAC	E4.3	0.0	0.0	9.01	0.4	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
831108	1510	115	MAC	F3.4	9.4	5.6	11.27	1.6	0.6	0.0	3.9	0.4	0.0	1.7	0.1	0.0	1.2	0.0	0.0	0.0
831207	1307	115	MAC	E3.8	6.7	3.7	7.88	0.4	0.0	0.0	2.7	0.0	0.1	0.3	2.9	0.0	0.6	0.1	0.0	0.0
830223	1132	101	MAC	F4.1	5.9	2.6	2.81	11.4	36.7	1.1	80.8	0.0	0.4	1.4	7.1	0.0	0.4	0.0	0.7	1.4
830315	1517	101	MAC	F2.9	5.9	0.1	4.41	0.0	0.0	0.2	3.9	0.2	2.3	0.0	2.7	0.0	0.7	0.2	0.0	0.2

G.EG	MYSI	CLAD	ISOP	I.LA	BVAL	CHAE	EUP	CUMA	D.ZO	FISH	P.CO	POLY	E.LA	MEDU	DECA	B.CY	TENA	SIPH	INSC	CHIT	TARD
0.4	0.0	10.7	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.8	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0
0.2	0.0	79.1	0.4	0.1	0.0	0.0	0.2	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
0.1	0.0	14.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	73.1	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
0.3	0.0	44.7	0.1	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.2	0.0	300.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
0.3	0.0	51.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
0.0	0.0	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
0.0	1.7	0.3	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	20.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	1.1	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	1.9	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0
1.3	0.0	65.4	0.1	0.1	0.0	0.0	0.7	0.0	0.0	0.2	0.0	0.1	0.0	0.1	2.8	0.0	0.0	0.0	0.0	0.0	0.0
0.4	0.0	24.5	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
1.8	0.0	119.4	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.3	0.0	0.1	5.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	0.0	106.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
17.0	0.0	509.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.6	0.0	32.2	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
7.4	0.0	253.7	0.0	0.0	1.1	0.0	0.0	0.0	1.7	0.6	0.6	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.9	0.0	1.6	0.0	0.0	0.0	0.1	0.0	0.0	0.4	0.1	0.1	0.1	0.1	1.8	0.0	0.0	1.6	0.0	0.0	0.2	0.0
0.2	0.0	0.1	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.1	0.1	8.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	16.7	1.8	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.7	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	7.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAU
830330	923	101	MAC E2.8	5.8	3.9	10.17	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.5	0.1	0.0	0.0	0.5	0.1
830413	1522	101	MAC F2.9	8.6	0.0	10.41	0.0	0.2	0.0	305.4	0.6	3.5	0.3	14.9	0.2	2.9	5.1	106.3	0.5	
830507	1320	101	MAC E3.1	0.0	0.0	9.85	0.6	0.1	0.0	8.5	0.0	0.1	1.3	0.3	0.0	0.1	0.1	0.3	0.1	
830526	1828	101	MAC E4.0	13.5	3.3	12.94	1.9	0.6	0.2	26.8	0.0	1.2	0.2	2.4	0.3	1.6	3.4	0.7	3.6	
830607	945	101	MAC F1.5	0.0	0.0	11.66	0.3	0.3	0.0	2.5	0.0	0.2	0.0	12.6	0.3	0.4	0.1	0.0	2.0	
830618	1320	101	MAC E2.7	12.0	0.0	11.66	1.4	1.4	0.0	24.7	0.0	0.0	0.0	16.5	0.0	0.0	0.0	1.4	0.0	
830708	1851	101	MAC E3.7	0.0	0.0	10.39	0.0	0.0	0.0	0.6	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.3	0.0	
830720	1550	101	MAC E3.8	0.0	0.0	11.47	19.5	1.4	0.0	72.5	0.0	0.0	0.0	12.6	2.8	51.6	0.7	0.7	2.1	
830803	1913	101	MAC F3.5	0.0	0.0	11.26	1.0	0.1	0.0	3.4	0.0	0.0	0.0	0.5	0.1	0.3	0.0	1.1	0.4	
830817	1910	101	MAC E3.5	0.0	0.0	11.26	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	
830906	1728	101	MAC E4.3	0.0	0.0	11.06	0.1	0.0	0.0	2.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	
831003	1654	101	MAC E4.0	0.0	0.0	9.77	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	
831108	1405	101	MAC E3.4	9.1	5.3	9.17	1.2	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	
831207	1159	101	MAC E3.9	6.3	4.1	7.98	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.0	0.0	
830223	1141	102	MAC F4.1	7.4	29.5	2.47	72.5	87.9	2.8	158.7	2.0	6.1	2.0	19.4	20.6	4.9	17.8	5.3	16.2	
830315	1526	102	MAC F2.9	7.7	28.4	3.60	1.7	0.3	0.0	67.8	0.0	1.9	0.0	1.1	2.5	3.9	0.0	8.1	10.8	
830330	936	102	MAC E2.6	7.8	28.5	9.61	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.7	0.3	
830223	1100	371	MAC F4.0	6.0	3.3	2.61	3.8	9.2	0.0	16.1	0.4	0.0	1.5	13.4	0.0	0.0	0.4	0.0	0.4	
830315	1456	371	MAC F2.8	5.8	0.0	2.55	0.0	0.8	0.0	4.3	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	
830329	1443	371	MAC F2.8	6.1	1.3	9.83	0.2	0.0	0.0	6.2	0.1	0.0	0.0	0.6	0.0	0.3	0.0	0.8	17.8	
830413	1540	371	MAC F3.1	8.9	1.6	11.29	0.1	0.0	0.0	15.9	0.1	0.3	0.0	4.7	0.1	0.0	0.7	6.0	0.0	
830506	1410	371	MAC E2.6	11.2	3.6	10.67	0.1	0.1	0.0	1.2	0.0	0.0	0.6	1.8	0.2	0.0	0.0	1.1	0.0	
830526	1848	371	MAC E3.9	14.0	3.0	10.51	2.3	0.3	0.0	24.9	0.0	0.7	0.1	0.8	0.1	0.8	0.0	0.7	3.6	
830607	1116	371	MAC F2.1	0.0	0.0	11.02	0.2	0.1	0.1	2.3	0.0	0.0	0.0	16.1	4.3	0.3	0.0	0.1	0.4	
830618	1335	371	MAC E2.6	13.5	0.4	11.02	0.0	0.4	0.0	1.8	0.0	0.0	0.4	2.5	0.0	0.0	0.0	0.0	0.0	
830708	1910	371	MAC E3.6	0.0	0.0	11.53	0.0	0.1	0.0	0.4	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.3	0.0	
830719	2210	371	MAC F3.7	0.0	0.0	14.73	9.5	1.6	1.6	0.8	0.0	1.4	0.0	4.3	0.0	83.6	0.8	4.1	0.3	
830803	1930	371	MAC F3.5	16.1	5.7	12.04	0.0	0.0	0.1	0.3	0.1	0.0	0.0	0.2	0.0	0.1	0.0	0.6	0.2	
830906	1741	371	MAC E4.2	0.0	0.0	9.36	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	
831003	1711	371	MAC E3.9	0.0	0.0	10.27	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	
831107	2330	371	MAC E1.4	0.0	0.0	7.80	0.1	0.0	0.1	32.7	0.0	0.4	0.1	0.0	0.0	19.6	0.9	0.0	0.0	
831108	1445	371	MAC F3.4	9.1	5.8	14.17	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	
831207	1230	371	MAC E3.9	5.6	4.3	8.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	
830223	1117	372	MAC F4.0	7.4	29.1	2.94	20.1	237.1	0.0	232.0	1.0	4.8	1.0237.1	16.3	1.7	7.1	1.4	7.5		
830315	1504	372	MAC F2.8	7.6	27.6	2.42	0.8	1.2	0.0	97.1	0.0	1.2	0.0	2.5	2.1	6.2	0.0	1.2	5.0	
830329	1456	372	MAC F3.1	7.9	27.6	8.95	0.2	0.3	0.0	73.9	0.0	1.1	0.0	1.8	1.7	1.7	0.8	3.5	0.6	
830413	1552	372	MAC F3.3	8.5	22.6	9.64	0.8	0.0	0.0	185.4	0.3	0.6	0.0	24.2	0.1	0.4	8.8	63.7	2.0	

G.EG	MYSI	CLAD	ISOP	I.LA	BVAL	CHAE	EUP	CUMA	D.ZO	FISH	P.CO	POLY	E.LA	MEDU	DECA	B.CY	TENA	SIPH	INSC	CHIT	TARD
0.0	0.0	1.0	0.0	0.0	0.1	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.6	0.0	17.3	0.3	0.0	0.2	0.1	7.6	0.1	0.0	0.8	0.0	0.3	0.1	2.1	10.8	0.0	0.0	0.0	0.0	0.0	0.0
0.8	0.0	4.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	13.6	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
1.5	0.0	62.6	0.1	0.0	0.0	0.0	0.4	0.0	1.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
6.9	0.0	517.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.5	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13.9	0.0	29.3	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	0.0	1.7	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.1	0.3	0.0	0.0	0.4	0.0	0.0	0.0	0.0
0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.8	0.0	0.1	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	22.3	6.5	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.4	0.0	0.8	2.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	5.8	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	6.9	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.4	0.1	0.3	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	0.0	5.1	0.0	0.0	0.0	0.0	1.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
0.2	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	0.0	8.7	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.5	0.0	0.0	0.0	0.0	0.0	0.0
0.2	0.0	108.5	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	78.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.5	0.0	2.7	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
0.2	0.0	1.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
0.2	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	8.5	0.0	0.0	0.0	0.1	0.4	4.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.3	0.1	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	1.4	0.0	1.4	0.0	0.7	0.0	0.0	0.3	0.0	16.3	0.0	3.4	6.5	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	8.3	7.9	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.4	0.0	2.5	26.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.3	0.1	0.0	2.6	0.0	0.1	0.0	9.5	22.6	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	1.7	0.0	0.0	0.0	0.1	5.8	0.0	0.0	3.1	0.0	0.1	0.0	3.1	11.9	0.0	0.0	0.0	0.0	0.0	0.0

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAU
830506	1425	372	MAC	E2.6	9.5	30.1	12.17	2.5	0.2	0.0	25.0	0.1	1.1	0.2	0.7	1.2	0.0	0.4	1.1	3.5
830526	1903	372	MAC	E3.9	10.4	29.0	6.68	0.9	0.0	166.8	0.0	0.0	1.2	0.0	13.6	2.1	6.3	0.0	0.1	5.7
830607	1056	372	MAC	F1.7	0.0	0.0	11.51	2.0	2.1	0.3	27.5	0.0	2.0	0.0	5.0	18.3	0.8	0.3	0.3	6.3
830618	1352	372	MAC	E2.6	10.4	28.1	11.51	0.0	10.4	0.0	111.9	0.0	0.0	0.0	0.0	17.2	1.4	0.7	2.1	16.7
830708	1926	372	MAC	E3.6	0.0	0.0	16.33	0.4	0.7	0.0	6.4	0.0	0.2	0.0	0.2	0.0	0.5	0.4	0.2	0.2
830719	2230	372	MAC	F3.8	0.0	0.0	12.45	0.0	0.0	0.0	4.7	0.0	0.0	0.0	8.4	0.3	2.4	0.3	0.0	0.0
830803	1945	372	MAC	F3.6	12.3	29.1	10.66	0.0	0.0	0.0	5.3	0.0	0.0	0.0	6.2	0.2	2.3	0.0	0.0	0.3
830906	1755	372	MAC	E4.2	0.0	0.0	8.86	0.2	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1
831003	1726	372	MAC	E3.8	0.0	0.0	7.11	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.4	1.8	0.6	0.7	0.0	0.4
831107	2350	372	MAC	E1.2	0.0	0.0	7.82	0.3	0.0	0.0	96.2	0.0	5.1	0.0	0.0	0.0	9.7	0.0	0.0	0.0
831108	1430	372	MAC	E3.4	9.6	30.5	8.35	0.0	0.0	0.0	55.6	0.0	0.0	0.0	1.0	3.4	27.8	1.4	0.0	0.0
831207	1243	372	MAC	E3.8	8.5	30.5	8.91	0.0	0.0	0.0	14.3	0.0	0.4	0.0	0.0	0.0	1.8	0.9	0.0	0.0

G.EG	MYSI	CLAD	ISOP	I.LA	BVAL	CHAE	EUP	CUMA	D.ZO	FISH	P.CO	POLY	E.LA	MEDU	DECA	B.CY	TENA	SIPH	INSC	CHIT	TARD
0.0	0.0	0.5	0.0	0.0	0.5	1.9	0.0	0.0	0.1	0.0	0.1	0.0	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	
1.6	0.0	3.1	0.0	0.0	0.3	0.0	0.6	0.0	0.1	0.0	0.0	0.3	0.0	0.4	10.5	0.0	0.0	0.0	0.0	0.0	
0.7	0.0	47.1	0.0	0.0	0.1	0.0	2.1	0.0	5.2	1.2	0.0	0.3	0.0	1.8	2.8	0.0	0.0	0.0	0.0	0.0	
4.9	0.0	27.8	0.0	0.0	0.0	0.0	27.1	0.0	7.6	0.7	0.0	0.0	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0	
0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.3	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.0	18.2	0.0	0.0	0.0	0.0	
0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.4	0.0	0.0	10.7	0.0	0.0	0.1	0.1	
0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.0	
0.1	0.0	8.2	0.0	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0	
0.0	38.6	0.0	0.0	0.0	0.0	0.0	11.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	



Table 11. Transition Macro Net #'s/M³.

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAU	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830315	1619	204	MAC	F3.7	7.9	29.9	3.94	7.4	1.5	0.5	104.1	0.0	4.1	0.3	7.4	4.3	6.3	1.0	11.9	16.5
830507	1029	204	MAC	F2.6	9.5	27.6	11.21	7.1	0.4	0.0	61.6	0.0	3.4	0.0	4.8	1.1	0.2	0.0	12.5	1.1
830526	1810	204	MAC	E4.0	9.9	31.1	12.01	2.9	1.2	0.2	106.7	0.0	11.9	0.0	22.3	0.4	3.7	0.3	0.4	6.4
830607	1443	204	MAC	F3.4	0.0	0.0	11.51	1.2	10.9	0.1	143.4	0.0	11.6	0.0	65.9	7.4	5.6	2.9	1.5	59.2
830617	1550	204	MAC	E1.5	12.9	25.6	11.51	1.4	32.7	0.0	63.2	2.8	0.0	0.0	161.9	14.6	1.4	0.7	25.0	9.0
830708	1430	204	MAC	F3.0	0.0	0.0	11.02	2.9	0.7	0.0	67.5	0.0	0.0	0.0	7.3	0.0	3.6	1.5	5.1	3.6
830719	1950	204	MAC	F3.4	0.0	0.0	12.27	35.2	3.3	1.3	7.2	0.7	10.4	0.0	44.3	0.0	256.9	2.6	15.0	7.8
830803	1502	204	MAC	E3.4	11.5	30.4	10.10	1.2	0.6	0.0	26.5	0.0	0.0	0.0	8.1	0.6	2.4	1.2	3.6	0.4
830818	1335	204	MAC	F3.3	0.0	0.0	11.24	0.0	0.0	0.0	32.0	0.0	0.0	0.0	0.7	1.1	1.1	0.0	0.0	0.4
830907	1321	204	MAC	F1.7	0.0	0.0	7.93	7.1	9.1	4.0	131.7	0.5	3.0	0.0	1.0	0.0	4.5	1.0	0.5	0.5
831003	1627	204	MAC	E4.1	0.0	0.0	10.12	0.9	0.6	0.0	9.0	0.1	0.7	0.0	2.9	0.3	0.6	0.6	0.1	1.2
831108	1325	204	MAC	E3.5	9.2	27.6	9.30	0.8	0.0	0.0	27.3	0.0	3.1	0.0	0.4	0.6	6.5	0.9	0.0	0.0
831207	1123	204	MAC	E4.0	7.9	30.8	10.58	0.1	0.0	0.1	9.0	0.0	1.2	0.0	0.0	0.0	1.2	0.6	0.0	0.0
830315	1634	341	MAC	F3.7	5.5	2.6	2.36	26.7	0.0	0.0	87.7	10.6	8.9	0.0	24.2	12.7	58.5	16.9	9.3	17.4
830329	1417	341	MAC	F2.6	6.5	19.9	4.90	1.8	0.0	9.2	194.3	0.0	4.7	18.4	4290.2	14.3	4.7	12.4	165.3	15116.3
830414	954	341	MAC	E2.2	7.6	4.1	9.13	5.5	0.0	0.9	7.4	0.0	0.1	0.7	5.5	0.1	2.3	1.8	22.5	0.1
830507	1255	341	MAC	F3.1	0.0	0.0	8.82	3.6	2.7	0.0	59.3	0.0	3.9	0.1	3.1	1.0	0.0	0.2	2.6	1.2
830526	1750	341	MAC	E4.1	12.6	3.8	9.05	2.0	0.6	0.0	271.5	0.0	4.1	0.0	6.7	1.8	5.1	0.1	0.1	14.1
830607	1506	341	MAC	F3.4	0.0	0.0	9.63	2.7	1.9	0.0	63.8	0.2	2.6	0.1	12.9	8.4	1.7	0.0	1.5	31.2
830618	1252	341	MAC	E2.8	12.3	1.4	9.63	4.2	1.7	0.0	49.0	0.0	0.0	0.0	6.6	0.8	0.0	0.0	0.0	0.0
830708	1828	341	MAC	E3.8	0.0	0.0	10.20	0.4	0.0	0.0	2.5	0.0	0.0	0.1	0.0	0.0	0.1	0.0	1.9	0.1
830719	1930	341	MAC	F3.3	0.0	0.0	11.23	223.7	67.0	34.2	10.0	2.8	119.7	0.0	0.0	2.8	1.4	4.3	2.8	1.4
830803	1435	341	MAC	E3.4	15.6	5.4	10.56	0.5	5.3	0.0	7.9	0.0	0.0	0.2	1.4	1.1	0.0	0.2	0.3	2.7
830818	1400	341	MAC	F3.5	0.0	0.0	10.35	1.6	0.8	0.0	23.4	0.0	0.1	0.1	0.1	0.5	0.6	0.2	0.1	0.0
830906	1710	341	MAC	E4.3	0.0	0.0	9.88	0.0	0.0	0.0	31.0	0.0	1.1	0.0	0.0	0.0	0.3	0.6	0.2	0.0
831003	1527	341	MAC	E4.3	0.0	0.0	12.33	0.0	0.1	0.0	0.6	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
831108	1345	341	MAC	E3.4	9.8	5.6	8.42	2.6	0.0	0.2	17.8	0.0	0.7	0.0	0.1	0.2	1.5	1.4	0.0	0.0
831207	1141	341	MAC	E4.0	6.5	4.2	9.39	0.2	0.0	0.0	4.5	0.0	0.3	0.1	0.6	0.0	0.4	0.2	0.0	0.0

G.EG	MYSI	CLAD	ISOPO	I.LA	BVAL	CHAE	EUP	CUMA	D.ZO	FISH	P.CO	POLY	E.LA	MEDU	DECA	B.CY	TENA	SIPH	C.ME	INSC	CHIT
0.0	0.0	0.3	2.0	0.0	0.0	0.0	2.0	0.0	0.5	0.0	0.0	1.5	0.0	12.9	0.0	0.0	0.0	0.0	0.0	0.0	
14.6	0.0	0.0	0.0	0.0	0.0	1.2	3.6	0.0	0.0	0.1	0.0	0.5	0.0	2.3	9.1	0.0	0.0	0.0	0.0	0.0	
28.9	0.0	4.2	0.0	0.0	0.0	0.1	1.1	0.0	0.0	0.1	0.3	0.3	0.0	0.8	4.1	0.0	0.0	0.0	0.0	0.0	
5.4	0.0	9.9	0.0	0.0	0.1	0.2	77.0	0.0	10.9	0.2	0.1	0.8	0.1	3.9	5.6	0.0	0.0	0.0	0.0	0.0	
38.9	0.0	82.7	0.0	0.0	0.0	0.0	0.7	0.0	2.8	0.0	0.0	0.7	0.0	53.5	0.0	5.6	0.0	0.0	2.1	0.0	
11.6	0.0	1.5	0.0	0.0	0.0	0.7	0.0	0.0	5.1	0.0	0.0	0.0	0.0	10.9	0.0	0.0	0.0	1.5	0.0	0.0	
23.5	0.0	13.0	0.0	0.0	2.6	0.0	0.0	2.0	0.0	0.0	0.0	0.7	0.0	15.6	0.0	2.0	10.1	0.7	0.0	0.0	
45.1	0.0	1.2	0.0	0.0	0.2	0.0	0.0	0.0	1.0	0.0	0.0	0.2	0.2	1.8	0.2	0.0	1.0	0.6	0.0	0.0	
16.7	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	
4.0	0.0	7.1	0.0	0.0	2.5	0.0	0.0	0.5	2.0	0.0	0.0	0.5	0.0	4.0	0.0	0.5	0.0	3.5	0.0	0.0	
0.3	0.0	5.0	0.0	0.0	0.1	0.0	0.7	0.0	0.2	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.4	0.4	0.0	0.0	
0.1	0.1	0.0	0.0	0.0	0.1	0.1	3.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.7	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.6	0.0	0.0	
1.3	0.0	1.3	114.4	0.0	0.0	0.0	1.7	18.6	0.0	0.0	0.0	0.4	0.0	0.0	19.9	0.0	0.0	0.0	0.0	0.0	
0.2	0.0	0.0	1.8	22.9	0.6	0.0	0.0	20.6	0.0	1.2	0.0	0.6	0.0	9.2	18.4	0.0	0.0	0.0	0.0	0.0	
2.1	0.0	24.6	1.6	0.0	0.2	0.0	0.1	3.3	0.0	0.8	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	
15.1	0.0	4.8	0.0	0.0	0.0	0.0	2.2	0.0	0.3	0.1	0.0	1.9	0.0	0.5	4.2	0.0	0.0	0.0	0.0	0.0	
30.2	0.0	22.7	0.0	0.0	0.0	0.2	1.9	0.1	0.2	0.0	0.1	0.4	0.0	1.2	5.5	0.0	0.0	0.0	0.0	0.0	
5.6	0.0	128.1	0.0	0.0	0.0	0.2	15.6	0.0	3.3	0.0	0.1	0.6	0.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	
35.7	0.0	441.1	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12.3	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.1	1.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.3	0.0	
19.9	0.0	4.3	0.0	2.8	0.0	0.0	0.0	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1.1	0.0	0.0	0.1	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22.2	0.0	7.1	0.1	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.1	0.1	0.0	1.2	0.0	0.1	0.0	0.0	0.0	0.0	
18.3	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.4	0.0	0.0	0.0	0.0	0.3	0.0	0.0	1.3	0.4	0.0	0.0	
0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	
0.2	0.0	0.0	0.2	0.0	0.1	0.0	0.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.8	0.0	0.0	
0.0	0.0	1.4	0.0	0.1	0.0	0.1	0.0	79.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	



Table 12. Marine Macro Net #'s/M³.

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAU	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAU
830315	1603	271	MAC	F3.4	8.0	30.6	3.93	0.5	0.3	0.0	88.0	0.8	1.5	0.0	5.6	1.0	1.8	1.5	6.4	8.1
830329	1348	271	MAC	F2.3	8.0	30.7	10.81	0.5	0.1	0.0	360.7	0.0	2.9	0.2	33.8	1.7	5.8	4.4	62.5	2.1
830413	1400	271	MAC	F2.2	8.5	30.6	10.89	0.4	0.5	0.4	583.7	0.0	3.5	0.0	5.7	1.3	2.6	8.1	160.1	0.1
830507	1053	271	MAC	F2.8	9.4	30.7	11.11	0.0	0.0	0.0	1704.8	0.0	2.9	0.0	0.0	11.5	0.0	2.9	5.8	0.0
830526	1725	271	MAC	E4.1	10.1	31.3	8.59	0.7	0.3	0.2	144.9	0.0	3.1	0.1	20.0	0.6	1.5	0.7	7.9	15.4
830617	1332	271	MAC	E2.2	12.2	26.8	10.80	1.1	0.0	0.0	48.9	0.0	0.2	0.0	47.6	5.0	0.9	0.6	7.8	5.0
830708	1317	271	MAC	F2.2	0.0	0.0	13.01	0.4	0.3	0.0	8.5	0.0	0.2	0.0	2.2	0.2	1.1	0.1	0.9	0.6
830719	1910	271	MAC	F3.3	0.0	0.0	14.38	0.1	0.1	0.0	2.0	0.0	0.0	0.0	10.1	0.3	3.3	0.9	1.9	0.1
830803	1330	271	MAC	E3.5	11.5	30.5	11.23	6.4	1.1	0.0	12.1	0.0	0.1	0.0	1.4	0.0	3.5	0.5	0.9	0.1
830817	1308	271	MAC	F3.3	0.0	0.0	11.23	8.9	19.1	0.1	10.2	0.0	0.0	0.0	10.0	0.0	19.5	1.1	0.0	0.4
830907	1206	271	MAC	F0.8	0.0	0.0	8.08	0.0	0.0	0.0	57.4	0.0	0.0	0.0	0.0	0.0	1.0	1.5	0.0	0.0
831003	1550	271	MAC	E4.2	0.0	0.0	10.65	0.0	0.0	0.0	14.0	0.0	1.4	0.0	3.0	0.2	0.3	1.0	0.0	1.4
831108	1220	271	MAC	E3.7	9.2	31.5	9.64	0.0	0.4	0.0	118.3	0.0	5.4	0.0	0.8	0.0	29.9	4.6	0.0	0.0
831207	1043	271	MAC	E4.1	8.5	31.6	10.55	0.0	0.1	0.0	44.5	0.1	10.5	0.2	0.4	0.1	5.2	1.1	0.0	0.0
830413	1015	311	MAC	E2.2	8.5	30.6	10.94	0.1	0.6	0.0	193.3	0.0	1.4	0.0	2.7	1.3	2.8	1.5	63.9	1.4
830506	842	311	MAC	F2.8	9.1	30.8	12.44	5.1	0.0	0.0	1001.9	0.0	9.0	0.0	9.0	0.0	5.1	1.3	32.2	3.9
830528	937	311	MAC	E1.8	10.2	31.0	13.88	1.4	0.0	0.0	20.7	0.0	1.1	0.1	20.0	0.3	15.1	0.1	0.1	2.7
830607	834	311	MAC	E1.5	12.0	31.0	13.65	1.0	0.5	11.1	119.6	0.1	4.9	0.0	24.2	9.4	5.3	1.9	0.7	40.3
830617	815	311	MAC	F3.1	11.0	30.4	12.26	2.3	0.0	0.0	194.8	0.0	1.0	0.0	9.8	10.4	0.7	1.6	9.8	7.2
830708	822	311	MAC	E0.9	0.0	0.0	10.86	1.8	1.5	0.0	53.8	0.0	0.4	0.0	5.2	0.7	1.1	0.7	12.5	1.1
830720	1030	311	MAC	F1.4	12.5	25.6	12.94	25.3	0.0	0.0	22.9	0.0	0.0	0.0	61.2	0.0	113.1	0.4	0.0	0.0
830803	950	311	MAC	F2.1	13.0	28.8	9.32	8.8	0.9	0.0	14.4	0.0	0.0	0.0	12.9	0.0	19.1	1.1	2.6	0.0
830817	850	311	MAC	F1.7	0.0	0.0	9.32	3.4	0.1	0.0	1.6	0.0	0.0	0.0	6.5	0.0	2.8	0.0	0.0	0.0
830907	802	311	MAC	E2.4	0.0	0.0	10.11	0.2	0.0	0.0	30.4	0.0	0.5	0.0	0.2	0.0	0.1	0.8	0.2	0.1
831004	800	311	MAC	E1.6	9.6	31.6	8.52	0.1	0.1	0.0	27.2	0.0	0.5	0.0	12.6	1.3	0.6	4.1	0.1	1.3

G.EG	CLAD	ISOP	I.LA	BVAL	CHAE	EUP	CUMA	D.ZO	FISH	P.CO	POLY	E.LA	MEDU	DECA	B.CY	TENA	SIPH	HYDR	C.ME	INSC	CHIT
0.3	2.0	2.3	0.0	0.0	0.0	0.3	0.0	0.0	0.5	0.0	0.8	0.3	1.0	19.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	0.0	1.4	0.0	0.2	0.3	1.4	0.1	0.0	1.9	0.0	0.0	0.0	1.7	49.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.3	0.0	0.2	0.1	0.0	0.2	12.3	0.1	0.0	1.2	0.0	0.9	0.6	3.6	35.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.9	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	2.9	0.0	0.0	0.0	0.0	25.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.6	0.1	0.0	0.0	0.1	0.0	2.6	0.0	1.2	0.0	0.0	0.2	0.0	4.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.1	0.6	0.0	0.0	0.0	0.0	40.9	0.0	0.7	0.2	0.0	0.6	46.7	3.3	0.7	0.0	7.8	0.6	0.0	0.0	0.0	0.0
2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.1	0.0	0.0	0.0	5.5	0.4	0.0	0.0	0.0	0.0	0.0
6.7	1.3	0.1	0.0	0.7	0.0	0.0	0.0	0.6	0.0	0.1	0.1	1.0	12.5	0.1	0.1	7.0	0.1	0.0	0.0	0.0	0.0
8.3	0.2	0.0	0.0	0.3	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.1	0.7	0.0	0.0	0.2	0.4	0.1	0.0	0.0	0.8
15.5	1.2	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4	0.0	0.0	0.2	1.8	1
3.0	3.0	0.0	0.0	0.5	0.0	8.4	0.0	1.5	0.0	0.0	0.0	0.0	1.0	0.0	0.0	4.0	2.5	0.0	0.0	0.0	0.0
0.0	3.4	0.0	0.0	0.0	0.0	2.2	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.4	0.7	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	124.5	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.4	0.0	0.0	0.9	1.3	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
1.1	0.1	0.0	0.0	0.0	0.0	2.9	0.0	0.0	1.2	0.0	0.0	0.0	1.3	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.3	0.0	0.0	0.0	0.0	0.3	19.3	0.0	0.0	0.4	0.0	0.0	0.0	0.1	50.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.6	0.6	0.0	0.9	0.0	0.0	0.4	0.0	0.0	0.5	0.0	0.6	0.0	0.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.5	2.3	0.6	0.1	0.0	0.2	75.4	0.0	5.9	0.1	0.0	2.3	0.0	1.4	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.6	0.3	0.0	0.0	0.7	0.7	62.0	0.0	5.9	0.0	0.0	1.3	27.4	2.9	0.3	0.0	8.5	0.2	0.0	0.0	0.0	0.0
10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.4	0.0	2.6	0.0	0.0	10.3	0.0	0.0	1.8	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.6	0.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
0.8	0.1	0.0	0.0	0.0	0.2	7.1	0.0	0.1	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.6	0.4	0.0	0.0	0.0	0.0
0.1	8.5	0.0	0.0	0.0	0.1	3.5	0.0	0.1	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	2.9	0.0	0.0	0.1	0.0

Table 13. Estuarine Micro Net #'s/M³.

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830223	1213	71	MIC E4.1	5.3	0.6	0.26	34.6	253.8	7.7	26.9	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
830315	1433	71	MIC F2.3	5.6	0.2	0.27	14.8	170.4	0.0	63.0	0.0	0.0	0.0	266.7	0.0	0.0	0.0	0.0	0.0	0.0
830330	905	71	MIC E2.9	5.4	0.0	0.96	8.3	89.6	1.0	72.9	0.0	1.0	4.2	16.7	0.0	1.0	0.0	10.4	9.4	
830414	844	71	MIC E2.6	7.4	0.6	1.01	6.9	270.3	6.9	122.8	0.0	0.0	1.0	405.0	0.0	0.0	5.9	48.5	10.9	
830506	1350	71	MIC E2.6	11.3	0.7	1.22	0.8	87.7	0.0	136.9	0.0	1.6	0.8	59.8	0.0	0.0	0.0	0.0	0.0	0.8
830526	1942	71	MIC E3.7	14.9	1.0	1.45	10.3	351.0	2.1	266.2	2.1	1.4	0.0	57.9	2.1	0.7	0.0	0.0	0.0	56.6
830607	1030	71	MIC F1.6	0.0	0.0	1.29	4.7	122.5	0.0	114.0	1.6	0.0	0.8	43.4	0.0	0.0	0.0	1.6	3.1	
830618	1233	71	MIC E2.8	11.9	0.0	1.29	396.9	437.2	0.0	15.5	0.0	0.0	0.0	6.2	0.0	0.0	0.0	6.2	0.0	
830708	2002	71	MIC E3.5	0.0	0.0	1.14	6.1	26.3	0.0	26.3	0.0	0.0	1.8	0.9	0.9	0.0	1.8	0.9	2.6	
830720	1630	71	MIC E3.8	0.0	0.0	1.31	6.9	107.6	0.8	64.9	1.5	0.0	0.0	7.6	0.8	0.8	0.0	0.8	4.6	
830803	1830	71	MIC F3.3	0.0	0.0	1.15	9.6	39.1	0.0	26.1	0.0	0.0	0.0	3.5	0.0	0.0	1.7	1.7	3.5	
830816	2000	71	MIC F3.6	0.0	0.0	1.15	7.8	20.9	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.9	0.0	0.0	0.0	
830907	1832	71	MIC E4.1	0.0	0.0	0.99	17.2	52.5	0.0	84.8	1.0	0.0	0.0	19.2	0.0	0.0	0.0	5.1	3.0	
831003	1253	71	MIC F3.5	0.0	0.0	1.07	20.6	9.3	1.9	19.6	0.0	0.0	0.0	7.5	0.0	0.0	0.9	29.0	2.8	
831108	1155	71	MIC E3.8	9.6	1.0	1.01	5.9	33.7	1.0	14.9	1.0	0.0	0.0	1.0	0.0	2.0	0.0	3.0	0.0	
831207	1322	71	MIC E3.7	5.9	0.8	0.78	12.8	91.0	0.0	19.2	0.0	0.0	0.0	6.4	0.0	0.0	0.0	1.3	0.0	
830223	1247	115	MIC E4.0	5.1	0.5	0.09	55.6	655.6	0.0	311.1	11.1	11.1	0.0	433.3	44.4	0.0	0.0	22.2	33.3	
830315	1438	115	MIC F2.5	5.6	0.0	0.25	44.0	232.0	12.0	56.0	4.0	0.0	0.0	472.0	0.0	0.0	0.0	4.0	0.0	
830330	849	115	MIC E3.0	5.6	2.0	1.04	3.8	91.3	1.0	70.2	1.0	0.0	1.9	17.3	0.0	1.0	1.0	5.8	3.8	
830414	813	115	MIC E2.9	6.9	1.0	1.07	6.5	297.2	0.0	97.2	1.9	0.9	2.8	714.0	0.0	0.9	1.9	30.8	16.8	
830506	1325	115	MIC E2.9	10.6	2.1	1.27	3.1	360.6	8.7	330.7	0.0	5.5	3.9	140.2	1.6	0.0	0.0	12.6	1.6	
830526	1925	115	MIC E3.8	12.1	2.6	0.68	8.8	195.6	2.9	38.2	1.5	1.5	0.0	39.7	11.8	0.0	0.0	0.0	51.5	
830607	1302	115	MIC F2.8	0.0	0.0	0.99	5.1	298.0	2.0	170.7	2.0	0.0	0.0	50.5	2.0	0.0	1.0	0.0	2.0	
830618	1215	115	MIC E2.9	10.1	0.0	0.99	969.7	1179.8	0.0	173.7	0.0	0.0	0.0	28.3	0.0	0.0	0.0	8.1	0.0	
830708	1947	115	MIC E3.5	0.0	0.0	1.31	7.6	170.2	0.0	155.0	0.8	0.0	0.0	32.1	1.5	0.0	4.6	4.6	9.2	
830720	1610	115	MIC E3.8	0.0	0.0	1.40	2.9	385.7	0.0	334.3	0.0	0.0	0.0	42.9	11.4	2.9	2.9	2.9	34.3	
830803	1850	115	MIC F3.4	0.0	0.0	1.22	4.9	104.1	0.0	101.6	0.8	0.0	0.0	8.2	4.9	0.0	0.0	2.5	36.9	
830817	1850	115	MIC E3.5	0.0	0.0	1.22	9.8	47.5	0.8	53.3	0.0	0.0	0.8	19.7	1.6	0.8	0.0	3.3	4.9	
830906	1817	115	MIC E4.1	0.0	0.0	1.03	31.1	207.8	0.0	631.1	1.0	1.0	3.9	54.4	0.0	0.0	1.0	14.6	2.9	
831003	1509	115	MIC E4.3	0.0	0.0	0.90	21.1	117.8	1.1	240.0	0.0	0.0	1.1	8.9	31.1	0.0	0.0	17.8	5.6	
831108	1510	115	MIC F3.4	9.4	5.6	1.13	14.2	25.7	2.7	42.5	1.8	0.0	0.0	1.8	0.0	1.8	0.9	2.7	0.0	
831207	1307	115	MIC E3.8	6.7	3.7	0.79	8.9	250.6	0.0	134.2	1.3	0.0	0.0	15.2	0.0	1.3	1.3	8.9	0.0	
830223	1132	101	MIC F4.1	5.9	2.6	0.28	14.3	275.0	0.0	110.7	3.6	0.0	3.6	139.3	0.0	3.6	0.0	3.6	3.6	
830315	1517	101	MIC F2.9	5.9	0.1	0.44	54.5	379.5	4.5	75.0	6.8	0.0	2.3	56.8	0.0	2.3	2.3	4.5	11.4	

G.EG	MYSI	CLAD	ISOP	I.LA	BVALV	CHAE	EUP	CUMA	D.ZO	FISH	P.CO	POLY	E.LAR	MEDU	DECA	B.CY	TENA	INSC	CHIT	TANA	TARD
0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	48.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	2.1	0.0	4.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	52.5	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	41.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	1126.9	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	278.3	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	452.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	45.6	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	148.9	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	1.7	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.9	0.9	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	6.1	0.0	3.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	31.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
1.0	0.0	3.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1
0.0	0.0	28.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	0.0	30.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0
0.0	0.0	126.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	57.4	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0
0.0	0.0	652.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	2056.6	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	100.8	0.0	0.8	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	248.6	0.0	2.9	2.9	0.0	0.0	0.0	2.9	0.0	0.0	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.8	0.0	2.5	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
4.1	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.0	0.0	73.8	3.9	1.0	5.8	0.0	7.8	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0
0.0	0.0	46.7	2.2	0.0	1.1	0.0	12.2	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	16.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
0.0	0.0	151.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.6	0.0	21.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	20.5	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830330	923	101	MIC	E2.8	5.8	3.9	1.01	4.0	57.4	5.0	57.4	0.0	0.0	0.0	22.8	0.0	2.0	1.0	62.4	5.0
830413	1522	101	MIC	F2.9	8.6	0.0	1.04	21.2	658.7	2.9	666.3	0.0	1.0	0.0	1075.0	6.7	0.0	5.8	155.8	157.7
830507	1320	101	MIC	E3.1	0.0	0.0	0.99	3.0	123.2	0.0	155.6	0.0	1.0	0.0	12.1	1.0	0.0	2.0	0.0	2.0
830526	1828	101	MIC	E4.0	13.5	3.3	1.29	13.2	502.3	0.0	360.5	0.0	4.7	0.0	103.1	5.4	3.1	0.0	0.0	288.4
830607	945	101	MIC	F1.5	0.0	0.0	1.17	0.9	59.0	0.0	44.4	0.0	4.3	0.0	23.9	6.0	0.0	2.6	0.0	7.7
830618	1320	101	MIC	E2.7	12.0	0.0	1.17	0.0	817.1	0.0	806.8	6.8	0.0	0.0	27.4	0.0	0.0	0.0	0.0	0.0
830708	1851	101	MIC	E3.7	0.0	0.0	1.04	2.9	6.7	0.0	32.7	0.0	0.0	1.0	1.9	0.0	0.0	0.0	1.0	1.0
830720	1550	101	MIC	E3.8	0.0	0.0	1.15	83.5	1419.1	13.9	2093.9	13.9	0.0	0.0	132.2	83.5	76.5	41.7	13.9	278.3
830803	1913	101	MIC	F3.5	0.0	0.0	1.13	4.4	71.7	0.0	60.2	0.0	0.0	0.9	5.3	0.9	0.0	1.8	0.0	31.0
830817	1910	101	MIC	E3.5	0.0	0.0	1.13	7.1	7.1	1.8	15.9	0.0	0.0	0.9	5.3	0.0	0.9	0.0	0.0	1.8
830906	1728	101	MIC	E4.3	0.0	0.0	1.11	9.0	39.6	0.9	152.3	0.0	0.0	0.9	2.7	0.0	0.0	9.0	27.0	6.3
831003	1654	101	MIC	E4.0	0.0	0.0	0.98	34.7	37.8	1.0	74.5	1.0	0.0	0.0	3.1	8.2	0.0	11.2	12.2	4.1
831207	1159	101	MIC	E3.9	6.3	4.1	0.80	3.8	131.3	0.0	93.8	0.0	0.0	1.3	23.8	0.0	2.5	1.3	3.8	0.0
830223	1141	102	MIC	F4.1	7.4	29.5	0.25	100.0	452.0	0.0	152.0	8.0	0.0	12.0	232.0	40.0	0.0	72.0	4.0	32.0
830315	1526	102	MIC	F2.9	7.7	28.4	0.36	150.0	1613.9	0.0	569.4	0.0	2.8	2.8	227.8	44.4	8.3	55.6	416.7	105.6
830330	936	102	MIC	E2.6	7.8	28.5	0.96	4.2	62.5	0.0	80.2	1.0	0.0	2.1	28.1	0.0	0.0	0.0	6.3	9.4
830223	1100	371	MIC	F4.0	6.0	3.3	0.26	0.0	30.8	11.5	0.0	0.0	0.0	0.0	7026.9	0.0	0.0	0.0	0.0	0.0
830315	1456	371	MIC	F2.8	5.8	0.0	0.26	38.5	150.0	11.5	30.8	19.2	0.0	7.7	973.1	0.0	0.0	0.0	3.8	3.8
830329	1443	371	MIC	F2.8	6.1	1.3	0.98	5.1	80.6	0.0	92.9	0.0	1.0	2.0	0.0	0.0	0.0	3.1	9.2	17.3
830413	1540	371	MIC	F3.1	8.9	1.6	1.13	1.8	116.8	0.0	253.1	0.9	1.8	0.0	415.9	0.0	0.0	7.1	39.8	12.4
830506	1420	371	MIC	E2.6	11.2	3.6	1.07	0.9	95.3	12.1	71.0	0.0	0.0	3.7	193.5	0.0	0.0	0.0	3.7	0.0
830526	1848	371	MIC	E3.9	14.0	3.0	1.05	20.0	697.1	1.0	246.7	0.0	1.0	0.0	52.4	1.0	0.0	9.5	0.0	380.0
830607	1116	371	MIC	F2.1	0.0	0.0	1.10	3.6	87.3	0.0	76.4	0.0	0.9	0.0	34.5	0.0	0.0	0.0	0.0	0.0
830618	1335	371	MIC	E2.6	13.5	0.4	1.10	5.5	116.4	0.0	116.4	0.0	0.0	1.8	9.1	0.0	0.0	0.0	0.0	0.0
830708	1910	371	MIC	E3.6	0.0	0.0	1.15	2.6	12.2	0.9	16.5	0.0	0.0	0.9	0.9	0.0	0.0	0.0	0.0	0.9
830719	2210	371	MIC	F3.7	0.0	0.0	1.47	10.9	408.2	2.7	536.1	5.4	2.7	0.0	84.4	0.0	0.0	27.2	10.9	16.3
830803	1930	371	MIC	F3.5	16.1	5.7	1.20	1.7	25.8	0.0	24.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7
830906	1741	371	MIC	E4.2	0.0	0.0	0.94	24.5	50.0	0.0	211.7	0.0	0.0	0.0	5.3	0.0	0.0	0.0	12.8	4.3
831003	1711	371	MIC	E3.9	0.0	0.0	1.03	13.6	28.2	0.0	16.5	0.0	0.0	1.9	2.9	2.9	0.0	2.9	6.8	0.0
831107	2330	371	MIC	E1.4	0.0	0.0	0.78	29.5	20.5	0.0	43.6	0.0	0.0	0.0	11.5	0.0	7.7	14.1	23.1	2.6
831108	1445	371	MIC	F3.4	9.1	5.8	1.42	17.6	21.8	0.0	33.1	0.7	0.0	0.0	0.0	0.7	1.4	2.8	0.0	0.7
831207	1230	371	MIC	E3.9	5.6	4.3	0.84	3.6	67.9	0.0	27.4	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0
830223	1117	372	MIC	F4.0	7.4	29.1	0.27	25.9	263.0	0.0	170.4	0.0	0.0	7.4	2259.3	22.2	0.0	11.1	3.7	0.0
830315	1504	372	MIC	F2.8	7.6	27.6	0.24	100.0	737.5	0.0	166.7	0.0	0.0	8.3	216.7	20.8	12.5	0.0	8.3	16.7
830329	1456	372	MIC	F3.1	7.9	27.6	0.90	34.4	504.4	13.3	415.6	3.3	4.4	0.0	377.8	13.3	3.3	8.9	42.2	33.3
830413	1552	372	MIC	F3.3	8.5	22.6	0.96	70.8	667.7	1.0	383.3	0.0	1.0	4.2	1057.3	0.0	0.0	3.1	152.1	330.2

G	E	G	MYSI	CLAD	ISOP	I.LA	BVALV	CHAE	EUP	CUMA	D.ZO	FISH	P.CO	POLY	E.LAR	MEDU	DECA	B.CY	TENA	INSC	CHIT	TANA	TARD
1.0	0.0	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	39.4	1.0	0.0	3.8	0.0	1.0	0.0	0.0	1.0	0.0	41.3	1.0	4.8	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.0	0.0	23.2	0.0	0.0	0.0	0.0	123.2	0.0	1.0	1.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
0.8	0.0	300.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.6	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.7	0.0	75.2	0.0	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	1124.8	0.0	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	11.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	173.9	0.0	0.0	69.6	0.0	0.0	0.0	0.0	0.0	0.0	55.7	0.0	27.8	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.7	0.0	0.9	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	1.8	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.8	0.0	3.6	0.0	0.0	25.2	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	6.1	0.0	0.0	4.1	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
0.0	0.0	41.3	0.0	0.0	2.5	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	32.0	20.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	44.0	8.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	38.9	2.8	0.0	30.6	0.0	0.0	0.0	0.0	0.0	0.0	13.9	5.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	15.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	42.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	14.2	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	26.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	144.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	355.5	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	103.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.2	0.0	49.0	0.0	0.0	133.3	0.0	0.0	0.0	0.0	0.0	0.0	27.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	3.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	22.3	0.0	3.2	3.2	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	1.9	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0
0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.9	0.0	3.7	18.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	25.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	158.3	12.5	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	12.2	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	23.3	0.0	7.8	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	14.6	0.0	0.0	2.1	0.0	2.1	0.0	0.0	3.1	0.0	30.2	4.2	5.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830506	1425	372	MIC	E2.6	9.5	30.1	1.22	32.0	540.2	0.8	171.3	0.8	0.0	0.0	148.4	3.3	0.0	0.0	2.5	106.6
830526	1903	372	MIC	E3.9	10.4	29.0	0.67	79.1	1897.0	1.5	1180.6	0.0	4.5	0.0	1692.5	61.2	13.4	10.4	0.0	1023.9
830607	1056	372	MIC	F1.7	0.0	0.0	1.15	28.7	404.3	4.3	179.1	5.2	0.9	1.7	88.7	60.9	0.9	2.6	0.0	46.1
830618	1352	372	MIC	E2.6	10.4	28.1	1.15	55.7	2991.3	0.0	2907.8	0.0	0.0	13.9	347.8	361.7	0.0	0.0	0.0	361.7
830708	1926	372	MIC	E3.6	0.0	0.0	1.63	24.5	331.3	0.0	301.8	0.0	0.0	0.0	41.7	31.9	2.5	0.0	7.4	71.2
830719	2230	372	MIC	F3.8	0.0	0.0	1.25	25.6	7244.8	0.0	3264.0	12.8	0.0	0.0	89.6	115.2	0.0	76.8	12.8	25.6
830803	1945	372	MIC	F3.6	12.3	29.1	1.07	22.4	7686.0	0.0	6773.8	0.0	0.0	0.0	59.8	44.9	0.0	89.7	0.0	44.9
830906	1755	372	MIC	E4.2	0.0	0.0	0.89	206.7	409.0	0.0	988.8	9.0	0.0	0.0	4.5	0.0	0.0	18.0	44.9	58.4
831003	1726	372	MIC	E3.8	0.0	0.0	0.71	107.0	698.6	5.6	1076.1	11.3	0.0	0.0	73.2	1250.7	0.0	33.8	39.4	28.2
831107	2350	372	MIC	E1.2	0.0	0.0	0.78	76.9	1548.7	0.0	2851.3	0.0	15.4	0.0	56.4	5.1	30.8	10.3	0.0	10.3
831108	1430	372	MIC	E3.4	9.6	30.5	0.84	66.7	823.8	0.0	714.3	9.5	0.0	0.0	52.4	19.0	0.0	28.6	0.0	4.8
831207	1243	372	MIC	E3.8	8.5	30.5	0.89	16.9	424.7	0.0	531.5	0.0	0.0	0.0	21.3	2.2	3.4	3.4	33.7	1.1

G.EG MYSI CLAD ISOP I.LA BVALV CHAE EUP CUMA D.ZO FISH P.CO POLY E.LAR MEDU DECA B.CY TENA INSC CHIT TANA TARD

0.8	0.0	4.1	0.0	1.6	1.6	1.6	100.0	0.0	0.0	0.0	0.0	0.8	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5	0.0	70.1	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	3.0	14.9	0.0	1.5	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.9	0.0	285.2	0.0	0.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0	7.8	0.0	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	111.3	0.0	13.9	0.0	0.0	41.7	0.0	27.8	0.0	0.0	41.7	0.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8	7.4	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	89.6	0.0	0.0	0.0	0.0	0.0	0.0	12.8	0.0	0.0	0.0	0.0	38.4	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	7.5	0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	22.4	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0
9.0	0.0	0.0	0.0	0.0	107.9	0.0	36.0	0.0	0.0	0.0	0.0	18.0	53.9	0.0	0.0	4.5	0.0	0.0	0.0	4.5	0.0		
0.0	0.0	11.3	0.0	0.0	11.3	0.0	56.3	0.0	0.0	0.0	0.0	28.2	11.3	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	20.5	0.0	5.1	0.0	5.1	0.0	10.3	0.0	0.0	0.0	0.0	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	4.8	0.0	0.0	0.0	9.5	0.0	166.7	0.0	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5
0.0	0.0	5.6	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

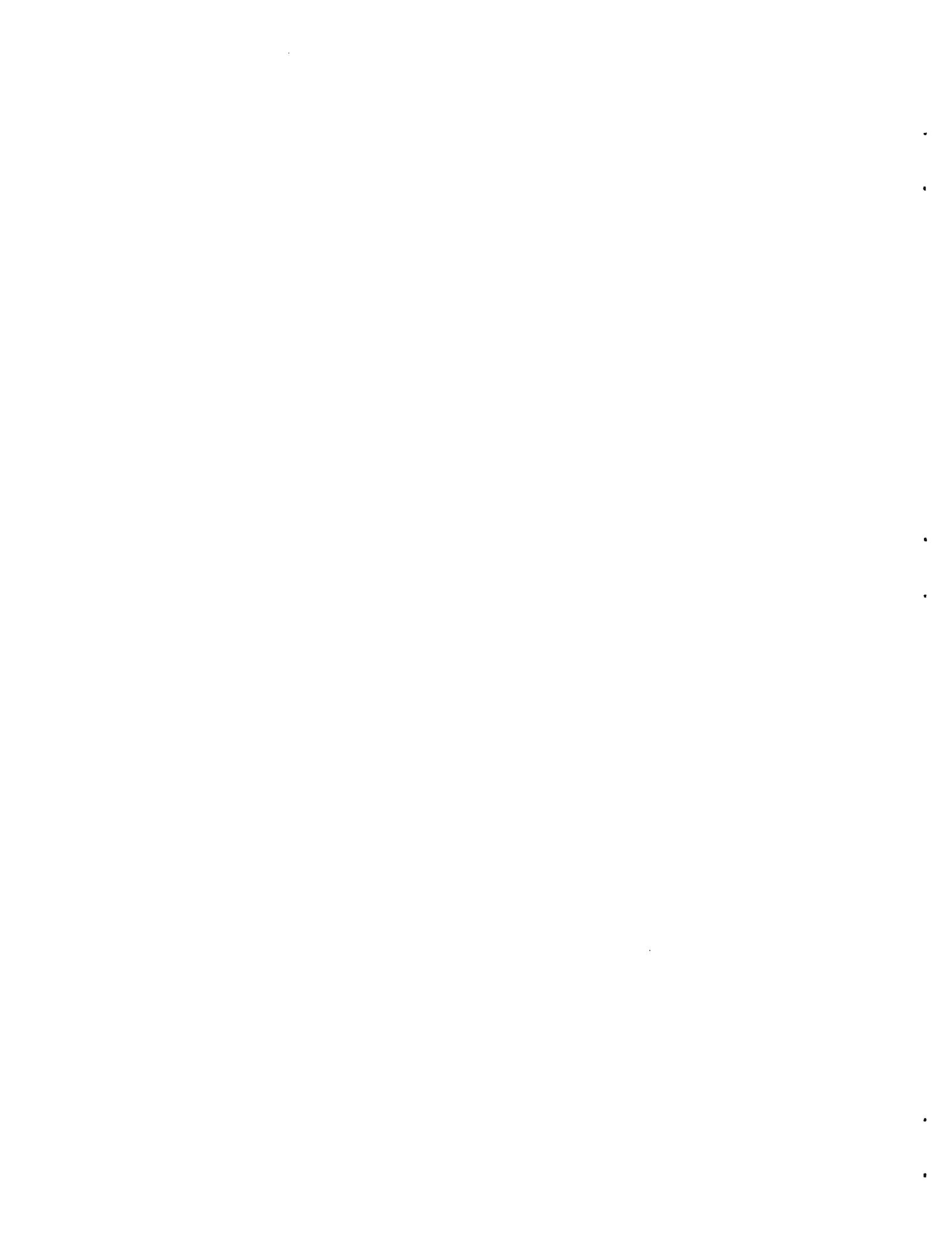


Table 14. Transition Micro Net #'s/M³.

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830315	1619	204	MIC	F3.7	7.9	29.9	0.39	153.8	1589.7	5.1	697.4	30.8	17.9	0.0	246.2	69.2	2.6	46.2	633.3	138.5
830507	1029	204	MIC	F2.6	9.5	27.6	1.12	32.1	312.5	0.0	943.8	0.0	5.4	0.0	358.9	8.0	0.0	0.0	26.8	215.2
830526	1810	204	MIC	E4.0	9.9	31.1	1.20	75.8	860.0	0.8	673.3	0.0	19.2	2.5	1245.0	16.7	10.0	42.5	28.3	645.8
830607	1443	204	MIC	F3.4	0.0	0.0	1.15	55.7	2930.4	2.6	1945.2	0.0	44.3	4.3	385.2	517.4	4.3	60.9	107.0	537.4
830617	1550	204	MIC	E1.5	12.9	25.6	1.15	69.6	7596.5	0.0	5231.3	13.9	0.0	0.0	292.2	459.1	0.0	0.0	69.6	41.7
830708	1430	204	MIC	F3.0	0.0	0.0	1.10	32.7	807.3	0.0	1054.5	0.0	0.0	0.0	421.8	18.2	0.0	14.5	47.3	170.9
830719	1950	204	MIC	F3.4	0.0	0.0	1.23	32.5	2634.1	6.5	4774.0	0.0	0.0	0.0	97.6	91.1	6.5	91.1	136.6	357.7
830803	1502	204	MIC	E3.4	11.5	30.4	1.01	35.6	740.6	0.0	1009.9	0.0	0.0	4.0	55.4	71.3	4.0	55.4	15.8	301.0
830818	1335	204	MIC	F3.3	0.0	0.0	1.12	3.6	396.4	3.6	467.9	0.0	7.1	0.0	78.6	46.4	0.0	14.3	92.9	78.6
830907	1321	204	MIC	F1.7	0.0	0.0	0.79	344.3	911.4	10.1	4364.6	30.4	0.0	0.0	172.2	10.1	40.5	50.6	202.5	101.3
831003	1627	204	MIC	E4.1	0.0	0.0	1.01	229.7	312.9	7.9	950.5	0.0	35.6	0.0	103.0	130.7	4.0	83.2	194.1	91.1
831108	1325	204	MIC	E3.5	9.2	27.6	0.93	46.2	249.5	1.1	978.5	0.0	11.8	1.1	7.5	18.3	34.4	202.2	68.8	10.8
831207	1123	204	MIC	E4.0	7.9	30.8	1.06	22.6	513.2	0.0	890.6	0.0	0.0	0.0	275.5	7.5	0.0	30.2	158.5	11.3
830315	1634	341	MIC	F3.7	5.5	2.6	0.24	158.3	1570.8	4.2	883.3	0.0	0.0	0.0	250.0	62.5	33.3	0.0	170.8	258.3
830329	1417	341	MIC	F2.6	6.5	19.9	0.49	240.8	1120.4	0.0	1220.4	0.0	0.0	12.2	277.6	18.4	4.1	14.3	357.1	179.6
830414	954	341	MIC	E2.2	7.6	4.1	0.91	16.5	242.9	11.0	118.7	1.1	1.1	1.1	354.9	0.0	0.0	4.4	202.2	5.5
830507	1255	341	MIC	F3.1	0.0	0.0	0.88	6.8	271.6	0.0	253.4	0.0	5.7	2.3	38.6	3.4	0.0	1.1	3.4	68.2
830526	1750	341	MIC	E4.1	12.6	3.8	0.91	36.3	1846.2	1.1	2067.0	0.0	14.3	0.0	1211.0	31.9	2.2	14.3	0.0	1790.1
830607	1506	341	MIC	F3.4	0.0	0.0	0.96	11.5	569.8	1.0	365.6	0.0	10.4	4.2	89.6	57.3	1.0	4.2	18.8	60.4
830618	1252	341	MIC	E2.8	12.3	1.4	0.96	691.7	658.3	0.0	200.0	0.0	0.0	0.0	83.3	0.0	0.0	0.0	0.0	0.0
830708	1828	341	MIC	E3.8	0.0	0.0	1.02	4.9	85.3	1.0	91.2	0.0	0.0	2.9	16.7	0.0	0.0	3.9	3.9	16.7
830719	1930	341	MIC	F3.3	0.0	0.0	1.12	14.3	1242.9	0.0	1600.0	14.3	0.0	0.0	57.1	57.1	14.3	42.9	14.3	157.1
830803	1435	341	MIC	E3.4	15.6	5.4	1.06	83.0	1.9	0.0	129.2	0.0	0.9	0.0	0.0	1.9	8.5	4.7	0.0	0.0
830818	1400	341	MIC	F3.5	0.0	0.0	1.04	42.3	488.5	0.0	376.9	0.0	0.0	7.7	146.2	11.5	3.8	3.8	15.4	650.0
830906	1710	341	MIC	E4.3	0.0	0.0	0.99	20.2	1070.7	0.0	3701.0	4.0	0.0	0.0	24.2	8.1	0.0	238.4	529.3	117.2
831003	1527	341	MIC	E4.3	0.0	0.0	1.23	19.5	73.2	0.0	214.6	0.8	0.8	0.8	5.7	4.1	0.0	0.0	34.1	17.9
831108	1345	341	MIC	E3.4	9.8	5.6	0.84	14.3	16.7	0.0	64.3	0.0	2.4	0.0	2.4	0.0	6.0	31.0	3.6	0.0
831207	1141	341	MIC	E4.0	6.5	4.2	0.94	25.5	180.9	0.0	258.5	2.1	2.1	0.0	68.1	3.2	0.0	8.5	7.4	1.1

G.EGG	MYSI	CLAD	ISOP	I.LA	BVALV	CHAE	EUP	CUMA	D.ZO	P.CO	POLY	E.LA	MEDUS	DECA	B.CY	TENA	SIPH	HYDR	CHIT
0.0	0.0	97.4	0.0	0.0	53.8	0.0	0.0	2.6	0.0	0.0	17.9	51.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.8	0.0	3.6	0.0	0.0	0.9	0.0	287.5	0.0	0.0	0.9	3.6	0.0	1.8	0.9	0.0	0.0	0.0	0.0	0.0
35.0	0.0	105.0	0.0	0.0	121.7	0.0	0.0	0.0	2.5	7.5	13.3	15.0	20.0	5.0	0.0	0.0	0.0	0.0	0.0
12.2	0.0	11.3	0.0	0.9	133.9	1.7	42.6	0.0	11.3	0.9	72.2	0.0	287.0	0.9	0.0	0.0	0.0	0.0	0.0
13.9	0.0	542.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	125.2	0.0	153.0	0.0	41.7	0.0	0.0	0.0	0.0
29.1	0.0	10.9	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	47.3	0.0	29.1	0.0	3.6	0.0	0.0	0.0	0.0
52.0	0.0	266.7	0.0	0.0	305.7	0.0	0.0	0.0	6.5	0.0	357.7	45.5	104.1	0.0	0.0	0.0	0.0	0.0	0.0
31.7	0.0	4.0	7.9	0.0	27.7	0.0	0.0	0.0	0.0	0.0	63.4	4.0	7.9	0.0	0.0	0.0	0.0	0.0	0.0
28.6	0.0	32.1	0.0	0.0	57.1	0.0	0.0	0.0	0.0	0.0	7.1	7.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0
10.1	0.0	101.3	10.1	0.0	627.8	0.0	0.0	0.0	0.0	0.0	60.8	70.9	10.1	0.0	20.3	0.0	10.1	10.1	0.0
0.0	0.0	7.9	0.0	4.0	47.5	0.0	35.6	0.0	0.0	0.0	23.8	39.6	0.0	0.0	11.9	0.0	0.0	0.0	0.0
0.0	0.0	1.1	2.2	1.1	47.3	2.2	20.4	0.0	0.0	1.1	5.4	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	45.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0
0.0	0.0	12.5	41.7	0.0	4.2	0.0	0.0	16.7	0.0	0.0	8.3	29.2	4.2	12.5	0.0	0.0	0.0	0.0	0.0
0.0	0.0	6.1	0.0	0.0	2.0	0.0	0.0	10.2	0.0	0.0	12.2	20.4	8.2	22.4	0.0	0.0	0.0	0.0	0.0
1.1	0.0	39.6	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.1	0.0	25.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29.7	0.0	324.2	0.0	1.1	0.0	0.0	4.4	0.0	0.0	3.3	14.3	0.0	3.3	1.1	0.0	0.0	0.0	0.0	0.0
4.2	0.0	787.5	0.0	0.0	8.3	0.0	1.0	0.0	0.0	2.1	18.8	0.0	11.5	2.1	0.0	0.0	0.0	0.0	0.0
16.7	0.0	1783.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.0	0.0	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	21.4	0.0	0.0	235.7	0.0	0.0	0.0	7.1	0.0	128.6	14.3	21.4	0.0	0.0	0.0	0.0	0.0	0.0
384.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.9	0.0	1.9	0.0	0.0	71.7
7.7	0.0	65.4	3.8	0.0	7.7	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48.5	0.0	28.3	0.0	0.0	892.9	0.0	0.0	0.0	0.0	0.0	60.6	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
0.8	0.0	40.7	0.0	0.8	0.0	0.0	2.4	0.0	0.0	0.8	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	1.2	0.0	1.2	0.0	1.2	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	67.0	6.4	0.0	3.2	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

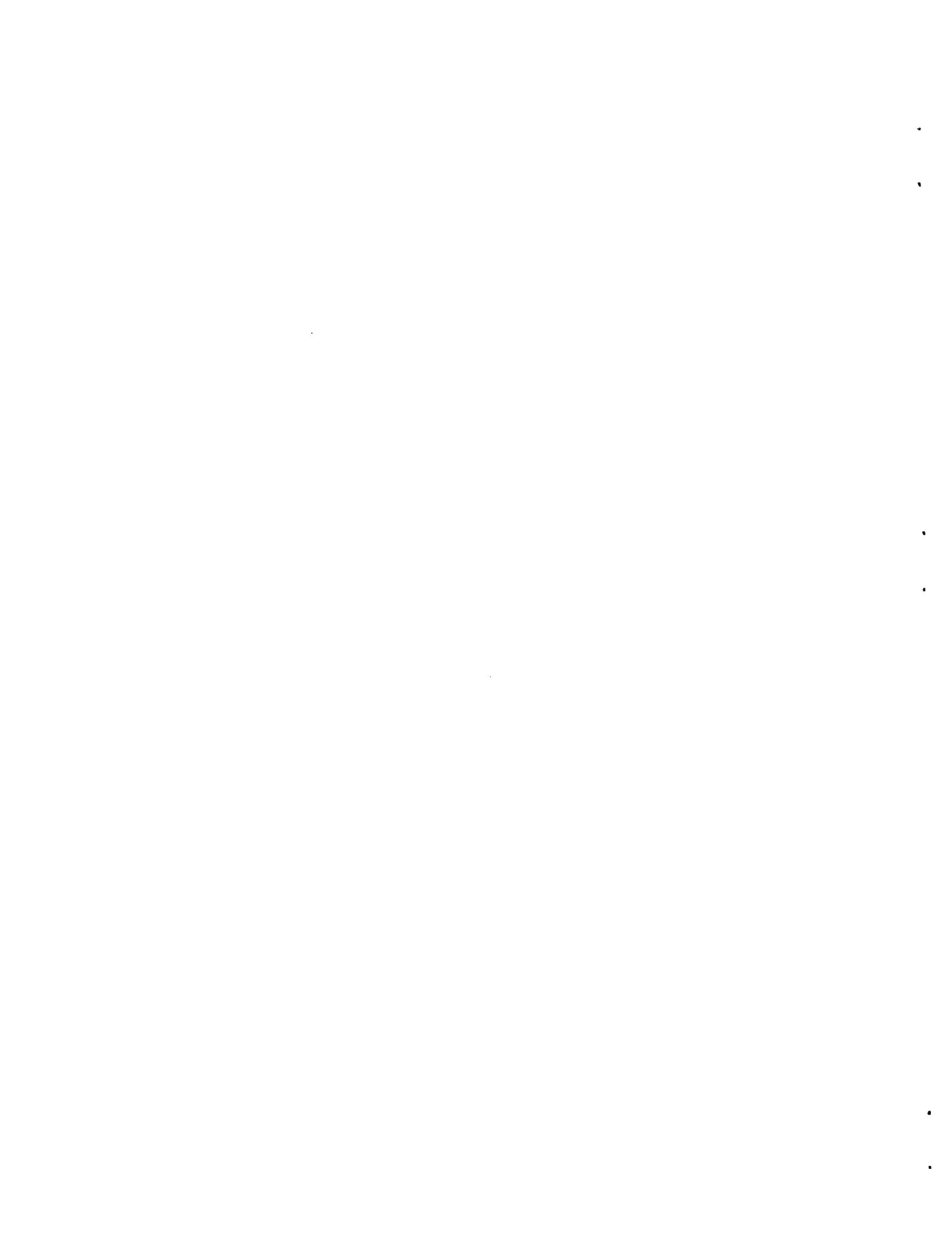


Table 15. Marine Micro Net #'s/M³.

DATE	TIME	STN	STYPE	TIDE	TEMP	SAL	VOL	HARP	CNAUP	NEMA	CAL	WORM	OST	ACAR	EGG	TUNI	AMP	GAST	ECTO	BNAUP
830315	1603	271	MIC	F3.4	8.0	30.6	0.39	148.7	1523.1	2.6	1015.4	0.0	2.6	2.6	312.8	25.6	0.0	7.7	323.1	135.9
830329	1348	271	MIC	F2.3	8.0	30.7	1.08	8.3	544.4	0.0	1277.8	0.0	5.6	22.2	188.9	22.2	5.6	16.7	200.0	205.6
830413	1400	271	MIC	F2.2	8.5	30.6	1.09	11.9	731.2	0.0	1195.4	0.0	1.8	0.0	451.4	4.6	1.8	4.6	177.1	288.1
830507	1053	271	MIC	F2.8	9.4	30.7	1.11	27.0	457.7	0.0	2216.2	0.0	16.2	0.0	185.6	1.8	1.8	18.0	43.2	232.4
830526	1725	271	MIC	E4.1	10.1	31.3	0.86	3.5	1969.8	0.0	1380.2	0.0	8.1	0.0	604.7	25.6	3.5	3.5	2.3	980.2
830617	1332	271	MIC	E2.2	12.2	26.8	1.08	222.2	2833.3	3.7	4351.9	0.0	11.1	0.0	477.8	248.1	3.7	14.8	100.0	55.6
830708	1317	271	MIC	F2.2	0.0	0.0	1.30	36.9	941.5	0.0	1200.0	0.0	0.0	0.0	33.8	18.5	0.0	18.5	49.2	215.4
830719	1910	271	MIC	F3.3	0.0	0.0	1.44	11.1	1655.6	0.0	3377.8	0.0	0.0	0.0	166.7	22.2	11.1	77.8	11.1	144.4
830803	1330	271	MIC	E3.5	11.5	30.5	1.12	10.7	445.5	0.0	535.7	0.0	0.0	0.0	29.5	36.6	3.6	9.8	8.0	105.4
830817	1308	271	MIC	F3.3	0.0	0.0	1.12	20.5	648.2	0.0	567.0	0.0	0.0	0.0	83.9	44.6	4.5	8.0	39.3	22.3
830907	1206	271	MIC	F0.8	0.0	0.0	0.81	158.0	948.1	0.0	3970.4	19.8	19.8	19.8	237.0	19.8	0.0	98.8	197.5	158.0
831003	1550	271	MIC	E4.2	0.0	0.0	1.07	44.9	493.5	0.0	1914.0	0.0	7.5	15.0	119.6	127.1	0.0	100.9	239.3	157.0
831108	1220	271	MIC	E3.7	9.2	31.5	0.96	8.3	583.3	0.0	1437.5	0.0	12.5	0.0	58.3	25.0	45.8	254.2	75.0	25.0
831207	1043	271	MIC	E4.1	8.5	31.6	1.06	18.9	483.0	0.0	1569.8	3.8	26.4	0.0	181.1	3.8	3.8	26.4	128.3	7.5
830413	1015	311	MIC	E2.2	8.5	30.6	1.09	31.2	574.3	1.8	618.3	4.6	2.8	0.9	349.5	15.6	1.8	39.4	322.0	187.2
830506	842	311	MIC	F2.8	9.1	30.8	1.24	29.0	584.7	2.4	1103.2	15.3	8.1	2.4	237.1	26.6	33.9	0.8	12.9	220.2
830528	937	311	MIC	E1.8	10.2	31.0	1.39	431.7	988.5	212.2	251.8	0.0	128.8	1.4	1009.4	39.6	107.2	50.4	5.0	228.8
830607	834	311	MIC	E1.5	12.0	31.0	1.37	28.5	2871.5	16.8	2011.7	0.0	18.2	0.0	1019.0	278.8	2.9	155.5	100.0	220.4
830617	815	311	MIC	F3.1	11.0	30.4	1.23	65.0	2247.2	0.0	4032.5	0.0	6.5	0.0	302.4	201.6	0.0	0.0	48.8	117.1
830708	822	311	MIC	E0.9	0.0	0.0	1.09	22.0	1218.3	7.3	1878.9	0.0	0.0	0.0	462.4	29.4	0.0	44.0	58.7	264.2
830720	1030	311	MIC	F1.4	12.5	25.6	1.29	124.0	762.8	0.0	967.4	0.0	0.0	6.2	80.6	12.4	18.6	6.2	80.6	0.0
830803	950	311	MIC	F2.1	13.0	28.8	0.93	30.1	881.7	0.0	933.3	0.0	0.0	0.0	90.3	25.8	4.3	21.5	12.9	68.8
830817	850	311	MIC	F1.7	0.0	0.0	0.93	202.2	1187.1	0.0	593.5	0.0	0.0	0.0	68.8	43.0	4.3	25.8	51.6	17.2
830907	802	311	MIC	E2.4	0.0	0.0	1.01	31.7	716.8	0.0	2645.5	0.0	4.0	0.0	63.4	23.8	7.9	79.2	384.2	35.6
831004	800	311	MIC	E1.6	9.6	31.6	0.85	18.8	710.6	4.7	2051.8	9.4	0.0	0.0	94.1	489.4	9.4	84.7	249.4	56.5

G.EG	CLAD	ISOP	I.LA	BVALV	CHAE	EUP	CUMA	D.ZO	FISH	P.CO	POLY	E.LAR	MEDU	DECA	B.CY	TENA	SIPH
0.0	5.1	2.6	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	10.3	38.5	0.0	10.3	0.0	0.0	0.0
0.0	5.6	5.6	0.0	0.0	0.0	0.0	11.1	0.0	0.9	0.0	22.2	38.9	0.0	33.3	0.0	0.0	0.0
2.8	1.8	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	24.8	0.0	8.3	15.6	0.0	0.0	0.0
12.6	0.0	0.0	0.0	21.6	1.8	3.6	0.0	1.8	0.0	0.0	1.8	3.6	0.0	5.4	1.8	0.0	0.0
22.1	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	38.4	0.0	8.1	9.3	0.0	0.0	0.0
11.1	3.7	0.0	0.0	0.0	0.0	144.4	0.0	3.7	0.0	0.0	63.0	177.8	1.9	0.0	0.0	14.8	1.9
30.8	0.0	6.2	0.0	0.0	0.0	0.0	0.0	6.2	0.0	0.0	24.6	0.0	36.9	0.0	0.0	0.0	0.0
11.1	22.2	0.0	0.0	477.8	0.0	0.0	0.0	0.0	0.0	0.0	188.9	22.2	44.4	0.0	0.0	11.1	0.0
3.6	0.9	0.9	0.0	24.1	0.0	0.0	0.0	0.0	0.0	0.0	6.3	2.7	3.6	0.0	0.0	0.0	0.0
0.0	34.8	0.0	0.0	13.4	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6	0.0	0.0	0.0	0.0	0.0
19.8	79.0	0.0	0.0	474.1	0.0	59.3	0.0	0.0	0.0	0.0	79.0	0.0	0.0	19.8	0.0	0.0	0.0
0.0	7.5	0.0	0.0	89.7	0.0	78.5	0.0	0.0	0.0	0.0	3.7	52.3	0.0	0.0	0.0	0.0	3.7
0.0	0.0	0.0	0.0	83.3	0.0	62.5	0.0	0.0	0.0	0.0	8.3	4.2	0.0	0.0	0.0	0.0	4.2
0.0	0.0	3.8	0.0	64.2	0.0	0.0	0.0	0.0	0.0	0.0	11.3	0.0	3.8	0.0	0.0	0.0	3.8
0.9	0.0	0.0	0.0	16.5	0.0	2.8	0.0	0.0	0.0	0.0	19.3	20.2	4.6	3.7	0.0	0.0	0.0
12.9	0.8	0.0	0.0	0.8	1.6	52.4	0.0	0.0	0.8	0.0	28.2	0.0	0.0	33.9	0.0	0.0	0.0
7.9	22.3	97.1	1.4	49.6	0.0	0.7	1.4	0.7	0.0	2.2	72.7	6.5	3.6	0.7	2.2	0.0	0.0
8.0	16.8	2.2	0.0	340.9	0.0	24.8	0.0	5.1	0.0	0.0	33.6	241.6	2.9	0.0	0.0	0.0	0.0
3.3	13.0	0.0	0.0	0.0	0.0	185.4	0.0	0.0	0.0	0.0	84.6	182.1	3.3	3.3	0.0	0.0	0.0
7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	132.1	0.0	0.0	0.0	0.0	7.3	0.0
0.0	31.0	0.0	0.0	18.6	0.0	0.0	0.0	0.0	0.0	0.0	62.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	25.8	0.0	0.0	25.8	0.0	0.0	0.0	0.0	0.0	0.0	55.9	25.8	0.0	0.0	0.0	0.0	0.0
0.0	12.9	0.0	0.0	8.6	0.0	0.0	0.0	0.0	0.0	0.0	8.6	38.7	4.3	0.0	0.0	0.0	0.0
11.9	43.6	0.0	0.0	336.6	11.9	39.6	0.0	0.0	0.0	0.0	15.8	130.7	4.0	0.0	0.0	0.0	0.0
0.0	0.0	9.4	0.0	37.6	0.0	84.7	0.0	0.0	0.0	0.0	9.4	65.9	4.7	0.0	0.0	0.0	0.0



FIGURES

Fig. 1. Marine Station Locations.

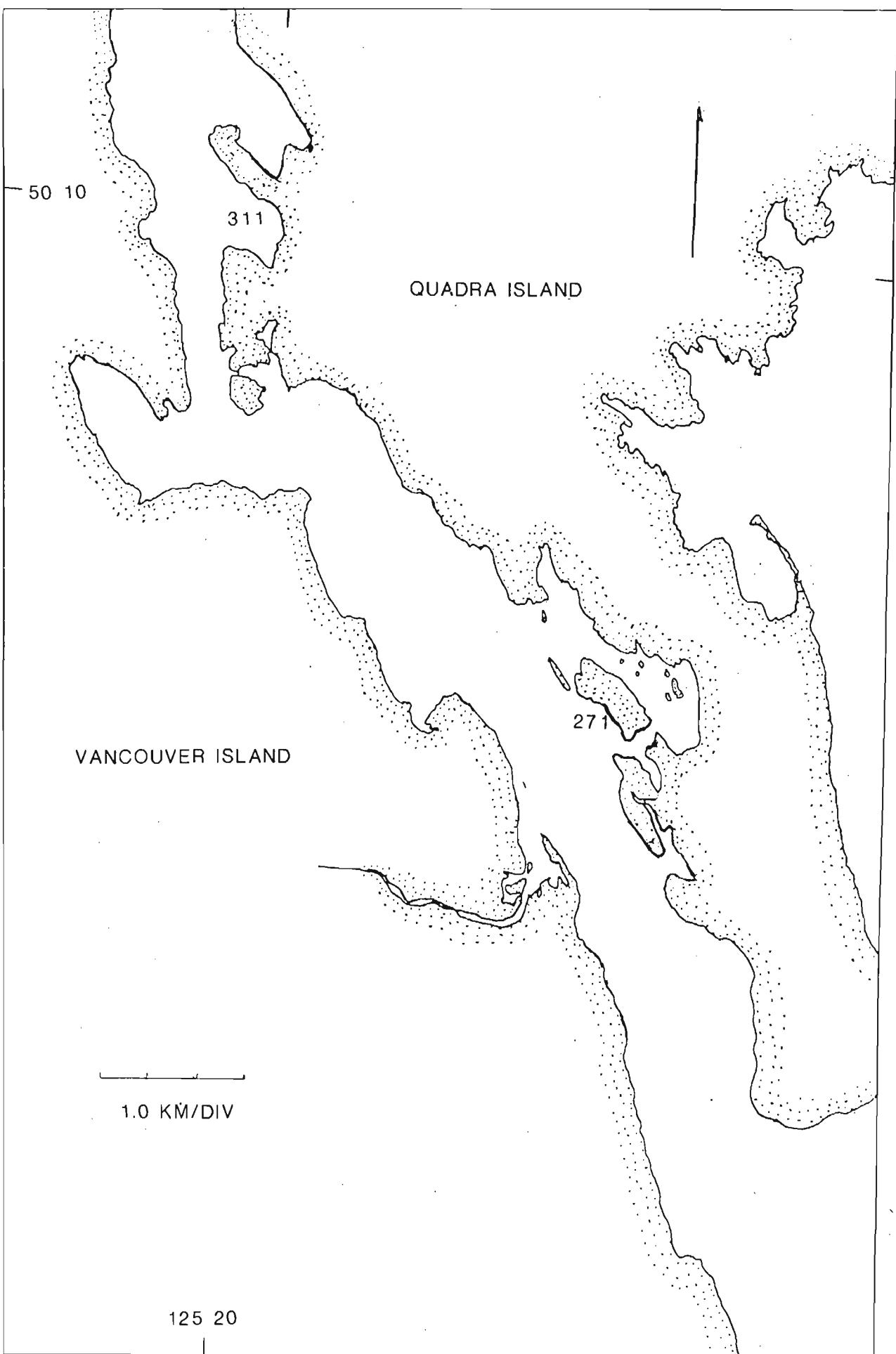


Fig. 2. Estuarine and Transition Station Locations.

