

FOURTH QUARTERLY PROGRESS REPORT
CRYSTAL RIVER STUDIES
JULY 2, 1984

Contractor

Stone & Webster Engineering Corporation

Subcontractor

Mote Marine Laboratory

8407240499 840716
PDR ADOCK 05000302
R PDR

Prepared for
Florida Power Corporation
P.O. Box 14042
St. Petersburg, FL 33733

TABLE OF CONTENTS

- 1.0 INTRODUCTION
- 2.0 SUMMARY OF PROGRESS
 - 2.1 Field Collections
 - 2.2 Laboratory Analyses
 - 2.3 Data Computerization
 - 2.3.1 Input
 - 2.3.2 Processing
 - 2.4 Physical Modeling
- 3.0 DATA TABLES
 - 3.1 Introduction
 - 3.2 Benthos
 - 3.3 Impingement and Entrainment
 - 3.4 Fisheries
 - 3.5 Physical Data

1.0 INTRODUCTION

In response to the requirements of Part III-H, NPDES Permit No. FL0000159 dated July 9, 1979 for Crystal River Units 1, 2, and 3, Florida Power Corporation prepared an ecological monitoring program for the area adjacent to the Crystal River power plant site. The ecological monitoring program is designed to address the objectives of a 316 demonstration as set forth in: Interagency 316(a) Technical Guidance Manual and "Guide for Thermal Effects Sections of Nuclear Power Facilities Environmental Impact Statements" and "Guidance for Evaluating the Adverse Impact of Cooling Water Intake Structures on the Aquatic Environment: Section 316(b) P.L. 92-500."

Comparisons of data (control versus effected areas) will be made within the proposed study and with previous studies, where appropriate. The coastal area west of the power plant is characterized by salt marsh dominated by Juncus roemarianus with narrow bands of Spartina alterniflora near the water's edge. The bottom in the adjacent coastal marine area is comprised of sand, mud, shell hash (oyster bars), and exposed lime rock with scattered patches of seagrass, attached benthic algae, and attached benthic invertebrates.

The sampling program was designed primarily to address the following impacts:

1. Thermal impacts from the operation of the power plant (316 (a)).
2. Intake effects in the form of egg and larval entrainment and adult impingement (316 (b)).

Other elements of the program relate to the distribution and movement of surface sediments in the discharge area and to the effects of spoil banks along the intake canal on blue crab migration.

The Crystal River monitoring program is summarized in Table 1-1. This table indicates the types of sampling, number of sampling stations, number of replicates, frequency of sampling, total number of samples, and the overall duration of sampling. Each element of the program falls under one of four major headings: Benthos, Impingement and Entrainment, Fisheries, and Physical Studies.

TABLE 1-1

SUMMARY OF ECOLOGICAL PROGRAM
CRYSTAL RIVER STUDIES

<u>Study Component</u>	<u>No. of Stations</u>	<u>No. of Rep.</u>	<u>Frequency</u>	<u>Total No. Samples</u>	<u>Study Period</u>
I. Benthos					
A. Benthic core	20	6(+2)	Quarterly	600	15 mos
	20	6(+2)	6 wks	1200	15 mos
B. Macrophyte mapping	50	10	Quarterly + 1 Preliminary	3000	15 mos
	9(intens.)	10	6 wks	900	15 mos
	9(intens.)	5	6 wks	450	15 mos
	9(intens.)	3	6 wks	270	15 mos
C. Aerial photographs	1	1	3 times	3	15 mos
D. Oyster reef	9	90	Monthly & Bimonthly	14580	12 mos
E. Salt marsh program	8	24	6 wks	1920	15 mos
F. Physical					
a. Chlorophyll 'a'	8	2 depths	Weekly	1040	15 mos
b. Sediment	40	3	Quarterly	1200	15 mos
c. Photometry	40	1 profile	Weekly	2600	15 mos
d. Turbidity, D.O., pH, Salinity, Temperature	40	multiple depth	Weekly	5200	15 mos
e. Sediment Temp- erature, Eh	40	1 depth	Quarterly	200	15 mos
	20	1 depth	6 wks	200	15 mos

TABLE 1-1 (Cont)

<u>Study Component</u>	<u>No. of Stations</u>	<u>No. of Rep.</u>	<u>Frequency</u>	<u>Total No. Samples</u>	<u>Study Period</u>
II. Impingement and Entrainment					
A. Impingement	3	4	Weekly + 3 times	660	12 mos
B. Entrainment	15	3	Biweekly day/night	2880	15 mos
III. Fisheries					
A. Trawl	9	7	Monthly (night)	756	12 mos
B. Seines	4	2	Monthly	96	12 mos
C. Drop net	2	2	Monthly	48	12 mos
D. Creek trawls	4	7	Monthly (day)	336	12 mos
E. Crab traps	120	1	17 times	2040	4 mos
F. Crab impingement	1	1	17 times	17	4 mos
IV. Physical Studies					
A. Suspended loads	40	4 analyses	Biweekly	5120	15 mos
B. Bathymetry	-	-	-	1 survey	-
C. Short-term	16	1	-	Variable	2 mos
D. Long-Term	51	1 or 2	Continuous	Variable	12 mos
E. Meteorology	1	1	Continuous	Variable	15 mos
F. Temperature profiles	Variable	2	Variable	Variable	2 mos

2.0 SUMMARY OF PROGRESS

2.1 FIELD COLLECTIONS

All field collections were made according to schedule. No major problems were encountered. A summary of the field collections made during the first four quarters is shown in Table 2-1. Sampling for impingement and fisheries and thermograph deployments have been completed.

2.2 LABORATORY ANALYSES

Laboratory analyses of samples collected in the various components of the program are progressing smoothly. Analysis of benthos samples currently lags by several weeks, but all other components are progressing according to schedule. A summary of the status of laboratory analysis is shown in Table 2-2.

2.3 DATA COMPUTERIZATION

2.3.1 Input

Data have been entered (to date) for the following samples:

- a. Benthic core samples from the June, July, September, October, and November, January and February samplings.
- b. Oyster reef samples from the July through May.
- c. Salt marsh samples from the June, July, September, October, December, January and March samplings.
- d. Macrophyte samples from the June through March samplings.
- e. Photometry, temperature, salinity, and pH measurements from June through May.
- f. Turbidity and chlorophyll "a" samples through May.
- g. Impingement samples from June through May.
- h. Entrainment samples from June through May.
- i. Fisheries samples from June through May.
- j. Suspended solids samples through May.
- k. Crab tagging data from September through December.

2.3.2 Processing

Data files are received by SWEC on diskettes, logged in, and read into the SWEC computer. Data sets have been received for all program elements for which data were collected in the fourth quarter. Because laboratory analysis and data handling lag field collection, data for some elements are not

yet complete. The fourth quarterly benthic core sampling is available but the April interim sampling is not. Salt marsh data from May has not yet been input and processed. Macrophyte data from April and May are not yet available.

The data files received by SWEC were checked for completeness and accuracy with the aid of a computerized summary and variable range review. Where necessary, corrections are made and the data are then incorporated into the verified data file. Summary data tables are generated from this file.

2.4 PHYSICAL MODELING

The processing of the January 1984 current meter and tide gauge data is complete. The data retrieved from both the August 1983 and January 1984 surveys are deemed sufficient to accomplish the tasks of calibration and verification of the circulation and dispersion models, CAFE and DISPER.

Model calibration from the August 1983 survey is complete and verification from the January 1984 survey is in progress. Calibration required some additional grid refinements and an improved boundary simulation procedure for DISPER. The primary objective, however, was the adjustment of bottom friction factors and oyster bar coefficients for CAFE and the assignment of dispersion coefficients for DISPER.

The period simulated for calibration is August 6 and 7, 1983, characterized by mixed tide conditions. The boundary conditions specified for CAFE, chosen after examination of the field data, were tide height as a function of time along the western boundary and current flux as a function of time along the north and south boundaries. All available data were critically reviewed, and all questionable values were discarded. Where boundary data were incomplete, information was extrapolated using data from neighboring stations and other independent measurements. Tide height was all referenced to a common datum, an average sea state, by averaging the tide data over a few tide cycles.

The comparisons made in calibrating CAFE were primarily derived from Stations 8, 12, 15, and 16 for tide height and from Station 10 for current flux. DISPER was calibrated with salinity data, judged to be a better discriminator of transport than temperature at this site. The comparisons were derived primarily from Stations 11, 15, and 16 and several of the locations occupied during the plume delineation survey.

The period being simulated for verification is January 9, 1984, characterized by semidiurnal tide conditions.

TABLE 2-1
FIELD COLLECTIONS MADE TO DATE (6/01/84)
CRYSTAL RIVER STUDIES

Task	Collection Dates	No. of Stations Sampled	No. of Samples Collected	Comments
I.A. Benthic Core	6/13-14/83	40	320	No problems
	7/25/83	20	160	No problems
	9/7-8/83	40	320	No problems
	10/13/83	20	160	No problems
	11/22-23/83	40	320	No problems
	1/4/84	20	160	No problems
	2/22-23/84	40	320	No problems
	4/16/84	20	160	No problems
I.B. Oyster Reef				
1. Oysters	7/11-15/83	9	5,670	Deployed
	8/8-9/83	9	810	Deployed
	8/8-9/83	9	810	Retrieved
	9/15-16/83	9	810	Deployed
	9/15-16/83	9	1,620	Retrieved
	10/11-12/83	9	810	Deployed
	10/11-12/83	9	810	Retrieved
	11/8-9/83	9	810	Deployed
	11/8-9/83	9	1,620	Retrieved
	12/14-15/83	9	810	Deployed
	12/14-15/83	9	810	Retrieved
	1/10-11/84	9	810	Deployed
	1/10-11/84	9	1,620	Retrieved
	2/8-10/84	9	810	Deployed
	2/8-10/84	9	810	Retrieved
	3/6-8/84	9	810	Deployed
	3/6-8/84	9	1,620	Retrieved
	4/2-4/84	9	810	Deployed
	4/2-4/84	9	810	Retrieved
	5/8-10/84	9	810	Deployed
	5/8-10/84	9	1440	Retrieved
				(sta. 2 and 9 lost)
2. Associated Fauna	8/8-9/83	9	27	Collected
	9/15-16/83	9	27	Collected
	10/11-12/83	9	27	Collected
	11/8-9/83	9	27	Collected
	12/14-15/83	9	27	Collected
	1/10-11/84	9	27	Collected
	2/8-10/84	9	27	Collected
	3/6-8/84	9	27	Collected
	4/2-4/84	9	27	Collected
	5/8-10/84	9	27	Collected

CRYSTAL RIVER STUDIES (Cont'd)

Task	Collection Dates	No. of Stations Sampled	No. of Samples Collected	Comments
I.C. Salt Marsh	6/13-17/83	8	192	No problems
	7/24-29/83	8	192	No problems
	9/8-14/83	8	192	No problems
	10/24-28/83	8	192	No problems
	12/8-12/83	8	192	No problems
	1/23-26/84	8	192	No problems
	3/5-8/84	8	192	No problems
	5/1-4/84	8	192	No problems
I.D. Macrophytes				
1. Ground truthing	6/20-24/83	50	500	No problems
	9/14-16/83	50	500	No problems
	12/5-8/83	50	500	No problems
	3/6-9/84	50	500	No problems
	5/29-31/84	51	510	No problems
2. Intensive monitoring (Clips)	6/27-30/83	8	40	Unable to find 3 seagrassbed stations in thermal area.
	8/1-5/83	9	45	No problems
	9/14-16/83	9	45	No problems
	10/25-26/83	9	45	No problems
	12/6/83	9	45	No problems
	1/17-18/84	9	45	No problems
	3/6-9/84	9	45	No problems
	4/10-11/84	9	45	No problems
	5/29-31/84	9	45	No problems
3. Intensive monitoring (Quadrats)	6/20-24/83	8	80	Unable to find 3 stations in thermal area.
	8/1-5/83	9	90	No problems
	9/14-16/83	9	90	No problems
	10/25-26/83	9	90	No problems
	12/6/83	9	90	No problems
	1/17-18/84	9	90	No problems
	3/6-9/84	9	90	No problems
	4/10-11/84	9	90	No problems
	5/29-31/84	9	90	No problems
4. Seagrass growth	6/27-30/83	8	24	Clipped
	7/11-15/83	8	24	Retrieved
	8/1-5/83	9	27	Clipped
	8/15-19/83	8	24	Retrieved
				(1 sta. lost)
	9/14-16/83	9	27	Clipped
	9/29/83	9	27	Retrieved
	10/25-26/83	9	27	Clipped
	11/8-10/83	9	27	Retrieved
	12/6/83	9	27	Clipped

CRYSTAL RIVER STUDIES (Cont'd)

Task	Collection Dates	No. of Stations Sampled	No. of Samples Collected	Comments
	12/19/83	9	27	Retrieved
	1/17-18/84	9	27	Clipped
	2/3/84	9	27	Retrieved
	3/6-9/84	9	27	Clipped
	3/23/84	9	25	Retrieved (2 sta. lost)
	4/10-11/84	9	27	Clipped
	4/23-26/84	9	27	Retrieved
	5/29-31/84	9	27	Clipped
I.E. Aerial Photography	8/27/83	1	1	No photography during May-July because of ground haze
	10/26-27/83	1	1	No problems
	2/8/84	1	1	No problems
	4/25/84	1	1	No problems
I.F. Photometry				
1. Light, temp., sal., pH	6/9/93	39	-	7 sta. out of T-C window
	6/15/83	40	-	5 sta. out of T-C window
	6/22/83	40	-	18 sta. out of T-C window
	6/30/83	40	-	1 sta. out of T-C window
	7/7/83	40	-	2 sta. out of T-C window
	7/12/83	40	-	3 sta. out of T-C window
	7/20/83	40	-	1 sta. out of T-C window
	7/26/83	40	-	Window met
	8/3/83	40	-	Window met
	8/10/83	40	-	Window met
	8/19/83	40	-	Window met
	8/24/83	40	-	1 sta. out of T-C window
	8/30/83	40	-	Window met
	9/6/83	40	-	1 sta. out of T-C window
	9/12/83	40	-	2 sta. out of T-C window
	9/19/83	40	-	2 sta. out of T-C window
	9/27/83	40	-	8 sta. out of T-C window
	10/5/83	40	-	1 sta. out of T-C window

CRYSTAL RIVER STUDIES (Cont'd)

Task	Collection Dates	No. of Stations Sampled	No. of Samples Collected	Comments
	10/10/83	40	-	10 sta. out of T-C window
	10/18/83	40	-	1 sta. out of T-C window
	10/26/83	40	-	6 sta. out of T-C window. No light data for sta. 1-10.
	11/2/83	40	-	Window met
	11/9/83	40	-	6 sta. out of T-C window
	11/16/83	40	-	Window met
	11/21/83	40	-	5 sta. out of T-C window
	12/2/83	40	-	Window met
	12/7/83	39	-	8 sta. out of T-C window
	12/16/83	40	-	Window met
	12/21/83	40	-	8 sta. out of T-C window
	12/28/83	40	-	1 sta. out of T-C window
	1/5/84	40	-	7 sta. out of T-C window
	1/12/84	39	-	1 sta. out of T-C window
	1/16/84	40	-	Window met
	1/23/84	40	-	6 sta. out of T-C window
	1/30/84	40	-	Window met
	2/7/84	40	-	5 sta. out of T-C window
	2/14/84	40	-	Window met
	2/21/84	40	-	7 sta. out of T-C window
	2/27/84	36 (T,S) 28 (light) 32 (pH)	-	Bad storm
	3/5/84	40	-	3 sta. out of T-C window
	3/15/84	40	-	Window met
	3/19/84	40	-	2 sta. out of T-C window
	3/27/84	40	-	Window met
	4/5/84	40	-	1 sta. out of T-C window
	4/12/84	40	-	Window met
	4/18/84	40	-	2 sta. out of T-C window
	4/24/84	40	-	Window met

CRYSTAL RIVER STUDIES (Cont'd)

Task	Collection Dates	No. of Stations Sampled	No. of Samples Collected	Comments
	5/2/84	40	-	1 sta. out of T-C window
	5/7/84	40	-	1 sta. out of T-C window
	5/14/84	40	-	Window met
	5/21/84	40	-	Window met
	5/29/84	40	-	Window met
2. Turbidity	6/9/83	40	73	No problems
	6/15/83	40	73	No problems
	6/22/83	40	78	No problems
	6/30/83	40	71	No problems
	7/7/83	40	78	No problems
	7/12/83	40	74	No problems
	7/20/83	40	81	No problems
	7/26/83	40	76	No problems
	8/3/83	40	77	No problems
	8/10/83	40	75	No problems
	8/19/83	40	85	No problems
	8/24/83	40	93	No problems
	8/30/83	40	66	No problems
	9/6/83	40	74	No problems
	9/12/83	40	67	No problems
	9/19/83	40	79	No problems
	9/27/83	40	61	No problems
	10/5/83	40	77	No problems
	10/10/83	40	62	No problems
	10/18/83	40	78	No problems
	10/26/83	40	59	No problems
	11/2/83	40	77	1 Lost in transit
	11/9/83	40	67	No problems
	11/16/83	40	76	No problems
	11/21/83	40	67	No problems
	12/2/83	40	77	No problems
	12/7/83	40	61	No problems
	12/16/83	40	67	1 Sample Lost
	12/21/83	40	58	No problems
	12/28/83	40	78	No problems
	1/5/84	40	64	No problems
	1/12/84	40	68	No problems
	1/16/84	40	75	No problems
	1/23/84	40	61	No problems
	1/30/84	40	71	No problems
	2/7/84	40	65	No problems
	2/14/84	40	75	No problems
	2/21/84	40	64	No problems
	2/27/84	32	64	Bad storm
	3/5/84	40	84	No problems
	3/15/84	40	81	No problems
	3/19/84	40	84	No problems

CRYSTAL RIVER STUDIES (Cont'd)

Task	Collection Dates	No. of Stations Sampled	No. of Samples Collected	Comments
	3/27/84	40	84	No problems
	4/5/84	40	84	No problems
	4/12/84	40	84	No problems
	4/18/84	40	84	No problems
	4/24/84	40	84	No problems
	5/2/84	40	84	No problems
	5/7/84	40	84	No problems
	5/14/84	40	84	No problems
	5/21/84	40	84	No problems
	5/29/84	40	84	No problems
3. Chlorophyll 'a'	6/9/83	8	15	No problems
	6/15/83	8	17	No problems
	6/22/83	8	16	No problems
	6/30/83	8	15	No problems
	7/7/83	8	15	No problems
	7/12/83	8	16	No problems
	7/20/83	8	15	No problems
	7/26/83	8	17	No problems
	8/3/83	8	15	No problems
	8/10/83	8	16	No problems
	8/19/83	8	20	No problems
	8/24/83	8	14	No problems
	8/30/83	8	16	No problems
	9/6/83	5.5	11	3 samples lost
	9/12/83	10	17	No problems
	9/19/83	8	16	No problems
	9/27/83	8	12	No problems
	10/5/83	7	13	Tech. error 1 sta. missed
	10/10/83	9	15	No problems
	10/18/83	8	15	No problems
	10/26/83	8	11	No problems
	11/2/83	8	16	No problems
	11/9/83	8	13	No problems
	11/16/83	8	15	No problems
	11/21/83	8	14	No problems
	12/2/83	8	15	No problems
	12/7/83	8	14	No problems
	12/16/83	8	12	No problems
	12/21/83	8	12	No problems
	12/28/83	8	17	No problems
	1/5/84	8	14	No problems
	1/12/84	8	14	No problems
	1/16/84	8	15	No problems
	1/23/84	8	11	No problems
	1/30/84	8	15	No problems
	2/7/84	8	12	No problems
	2/14/84	8	13	No problems
	2/21/84	8	12	No problems
	2/27/84	8	16	No problems

CRYSTAL RIVER STUDIES (Cont'd)

Task	Collection Dates	No. of Stations Sampled	No. of Samples Collected	Comments
	3/5/84	8	17	No problems
	3/15/84	8	16	No problems
	3/19/84	8	17	No problems
	3/27/84	8	17	No problems
	4/5/84	8	17	No problems
	4/12/84	8	17	No problems
	4/18/84	8	17	No problems
	4/24/84	8	17	No problems
	5/2/84	8	17	No problems
	5/7/84	8	17	No problems
	5/14/84	8	17	No problems
	5/21/84	8	17	No problems
	5/29/84	8	17	No problems
I.G. Sediments				
1. TOC & granulometry	6/13-17/83	40	120	No problems
	9/5-9/83	40	120	No problems
	11/22-23/83	40	120	No problems
	2/22-23/84	40	120	No problems
2. Sulfides	6/13-21/83	40	120	No problems
	8/29-9/2/83	40	120	No problems
	11/14-18/83	40	120	No problems
	2/20-27/84	40	120	No problems
	5/28-31/84	40	120	No problems
3. Temp., Eh	6/13-14/83	40	40	No problems
	7/25/83	20	20	No problems
	9/7-8/83	40	40	No problems
	10/13/83	20	20	No problems
	11/22-23/83	40	40	No problems
	1/4/84	20	20	No problems
	2/22-23/84	40	40	No problems
	4/16/84	20	20	No problems
II.A. Impingement				
*Crabs collected	6/6-7/83	2	8	No problems
held, tagged,	6/13-14/83	2	8	No problems
and released	6/23-24/83	1	4	Basket broke
	7/1-2/83	2	8	No problems
	7/5-6/83	2	8	No problems
	7/14-15/83	2	8	No problems
	7/19-20/83	3	10	Basket broke
	7/25-26/83	3	12	No problems
	8/4-5/83	3	12	No problems
	8/9-10/83	3	10	Operator error
	8/15-16/83	3	12	No problems
	8/25-26/83	3	12	No problems
	9/1-2/83	3	12	No problems
	*9/7-8/83	3	12	No problems
	*9/17-18/83	3	12	No problems
	*9/21-22/83	2	8	No problems

CRYSTAL RIVER STUDIES (Cont'd)

Task	Collection Dates	No. of Stations Sampled	No. of Samples Collected	Comments
	*9/28-29/83	2	8	No problems
	*10/3-4/83	3	12	No problems
	*10/11-12/83	3	12	No problems
	*10/21-22/83	2	8	No problems
	*10/24-25/83	3	12	No problems
	*11/2-3/83	3	11	Unit 1 offline 0300
	*11/12-13/83	3	7	Operator error at Unit 1, Unit 2 offline.
	*11/17-18/83	3	11	Basket broke Unit 2 0300
	*11/23-24/83	3	12	No problems
	*12/3-4/83	3	12	No problems
	*12/9-10/83	3	12	No problems
	*12/16-17/83	3	12	No problems
	*12/20-21/83	3	12	No problems
	*12/29-30/83	3	12	Many dead fish on screens
	1/4-5/84	3	12	No problems
	1/10-11/84	3	12	No problems
	1/17-18/84	3	12	No problems
	1/26-27/84	3	12	No problems
	1/30-31/84	3	12	No problems
	2/7-8/84	3	12	No problems
	2/14-15/84	3	12	No problems
	2/25-26/84	3	12	No problems
	2/29-3/1/84	3	12	No problems
	3/9-10/84	3	12	No problems
	3/12-13/84	2	8	Unit 2 offline
	3/21-22/84	2	8	Unit 2 offline
	3/27-28/84	2	8	Unit 2 offline
	4/3-4/84	2	8	Unit 2 offline
	4/14-15/84	2	6	Unit 1 offline Unit 3 partial
	4/16-17/84	2	8	Unit 1 offline
	4/24-25/84	2	8	Unit 1 offline
	5/5-6/84	3	12	No problems
	5/11-12/84	3	12	No problems
	5/16-17/84	2	5	Unit 2 offline, basket broke
	5/24-25/84	3	12	No problems
	5/30-31/84	3	12	No problems
Impingement (3 mm)	7/1/83	2	2	No problems
	7/25/83	3	3	No problems
	8/26/83	3	3	No problems
	9/28/83	2	2	No problems
	10/24-25/83	3	3	No problems
	11/23-24/83	3	3	No problems
	12/20-21/83	3	3	No problems

CRYSTAL RIVER STUDIES (Cont'd)

Task	Collection Dates	No. of Stations Sampled	No. of Samples Collected	Comments
	1/26-27/84	3	3	No problems
	2/25-26/84	3	3	No problems
	3/21-22/84	2	2	Unit 2 offline
	4/24-25/84	2	2	Unit 1 offline
	5/30-31/84	3	3	No problems
II.B. Entrainment	6/23-25/83	15	120	No problems
	7/6-8/83	15	120	No problems
	7/21-22/83	15	120	No problems
	8/1-2/83	15	120	No problems
	8/15-17/83	15	120	No problems
	8/31-9/1/83	15	120	No problems
	9/14-15/83	15	120	No problems
	9/27-29/83	15	120	No problems
	10/11-13/83	15	120	No problems
	10/24-28/83	15	120	Sta. L. re- located (grass- bed)
	11/8-10/83	15	120	No problems
	11/21-23/83	15	120	No problems
	12/7-8/83	15	120	No problems
	12/19-20/83	15	120	No problems
	1/3-4/84	15	120	No problems
	1/17-19/84	15	120	No problems
	1/31-2/1/84	15	120	No problems
	2/15-16/84	15	120	No problems
	2/29-3/1/84	15	120	No problems
	3/13-14/84	15	120	No problems
	3/28-30/84	15	120	No problems
	4/9-10/84	15	120	No problems
	4/25-26/84	15	120	No problems
	5/8-9/84	15	120	No problems
	5/21-22/84	15	120	No problems
III. Fisheries				
1. Trawl	6/27-30/83	9	63	No problems
	7/26-27/83	9	63	No problems
	8/23-24/83	9	63	No problems
	9/19-20/83	9	63	No problems
	10/17-18/83	9	63	No problems
	11/14-15/83	9	63	No problems
	12/12/83	9	63	No problems
	1/23/84	9	63	No problems
	2/20/84	9	63	No problems
	3/19/84	9	63	No problems
	4/17/84	9	63	No problems
	5/14/84	9	63	No problems
2. Seines	6/28-7/7/83	4	8	No problems
	7/26-28/83	4	8	No problems
	8/22-23/83	4	8	No problems

CRYSTAL RIVER STUDIES (Cont'd)

Task	Collection Dates	No. of Stations Sampled	No. of Samples Collected	Comments
	9/21-22/83	4	8	No problems
	10/18-19/83	4	8	No problems
	11/15-17/83	4	8	No problems
	12/12-14/83	4	8	No problems
	1/24-25/84	4	8	No problems
	2/22-23/84	4	8	No problems
	3/20-22/84	4	8	No problems
	4/16-17/84	4	8	No problems
	5/15-16/84	4	8	No problems
3. Drop net	7/5-6/83	2	4	No problems
	7/27-28/83	2	4	No problems
	8/22-23/83	2	4	No problems
	9/22-23/83	2	4	No problems
	10/18-19/83	2	4	No problems
	11/15-17/83	2	4	No problems
	12/13-14/83	2	4	No problems
	1/24-25/84	2	4	No problems
	2/20-23/84	2	4	No problems
	3/20-22/84	2	4	No problems
	4/16-17/84	2	4	No problems
	5/15-16/84	2	4	No problems
4. Creek trawls	7/26-27/83	4	28	No problems
	8/22-24/83	4	28	No problems
	9/21-22/83	4	28	No problems
	10/18-19/83	4	28	No problems
	11/15-16/83	4	28	No problems
	12/12-14/83	4	28	No problems
	1/23-26/84	4	28	No problems
	2/22-23/84	4	28	No problems
	3/20-22/84	4	28	No problems
	4/16-17/84	4	28	No problems
	5/15-16/84	4	28	No problems
5. Crab tagging	9/5-6/83	24	120	Deployed
	9/12-13/83	24	115/120	91 tagged
	9/19-20/83	24	118/120	88 tagged
	9/26-27/83	24	116/120	102 tagged
	10/3-4/83	24	120/120	95 tagged
	10/10-11/83	24	120/120	119 tagged
	10/17-18/83	24	119/120	120 tagged
	10/24-25/83	24	118/120	151 tagged
	10/31-11/83	24	120/120	91 tagged
	11/7-8/83	24	120/120	211 tagged
	11/14-15/83	24	120/120	353 tagged
	11/21-22/83	24	120/120	642 tagged
	11/28-30/83	24	120/120	576 tagged
	12/5-6/83	24	119/120	720 tagged
	12/12-13/83	24	119/120	716 tagged
	12/19-20/83	24	120/120	729 tagged

CRYSTAL RIVER STUDIES (Cont'd)

Task	Collection Dates	No. of Stations Sampled	No. of Samples Collected	Comments
	12/26-27/83	24	120/120	742 tagged
	12/31-1/1/84	24	120/120	194 tagged
IV.A.1. Bathymetry	6/6-7/83	1 survey	--	Weather problems
	6/13-14/83	1 survey	--	Half complete
	6/28-30/83	1 survey	--	All complete
	11/21/83	1 survey	--	3 transects
IV.A.2. Short Term				
1. Tide Gauges	8/1-30/83	16	16	75% data recovery
2. Current Meters	8/1-30/83	16	16	95% data recovery
3. Vertical profiles	8/1-30/83	64	64	No problems
	1/10-13/84	64	64	No problems
4. Stream cross-sections	8/4/83	4	4	No problems
IV.A.3. Long Term	6/6-17/83	51	72	Deployed
	7/4-8/83	49	69	Retrieved (3 lost)
	7/4-8/83	51	72	Deployed
	8/1-5/83	43	60	Retrieved (12 lost)
	8/1-5-83	43	60	Deployed
	8/8-12/83	5	7	Deployed
	8/15-16/83	3	5	Deployed
	9/1-2/83	39	57	Retrieved (15 lost)
	9/1-2/83	39	57	Deployed
	9/5-9/83	12	15	Deployed
	9/25-30/83	44	58	Retrieved
	9/26-30/83	51	72	Deployed
	10/10-11/83	49	69	3 thermographs lost; mid-month check
	10/10-11/83	51	72	Deployed
	10/24-26/83	47	66	Retrieved
	10/24-26/83	51	72	Deployed
	11/28-30/83	49	70	Retrieved
	11/28-30/83	51	72	Deployed
	12/19/83	50	70	Retrieved
	12/19/83	51	72	Deployed
	1/17-19/84	49	69	Retrieved
	1/17-19/84	51	72	Deployed
	2/13-16/84	51	69	Retrieved
	2/13-16/84	51	72	Deployed
	3/12-15/84	49	66	Retrieved

CRYSTAL RIVER STUDIES (Cont'd)

Task	Collection Dates	No. of Stations Sampled	No. of Samples Collected	Comments
	3/12-15/84	51	72	Deployed
	4/9-12/84	51	67	Retrieved
	4/9-12/84	51	72	Deployed
	5/16-18/84	48	64	Retrieved
	5/16-18/84	51	72	Deployed
IV.B. Suspended Load	6/9/83	40	74	No problems
	6/22/83	40	79	No problems
	7/7/83	40	80	No problems
	7/20/83	40	83	No problems
	8/3/83	40	77	No problems
	8/19/83	40	85	No problems
	8/30/83	40	70	No problems
	9/12/83	40	68	No problems
	9/27/83	40	61	No problems
	10/10/83	40	62	No problems
	10/26/83	40	59	No problems
	11/9/83	40	67	No problems
	11/21/83	40	67	No problems
	12/7/83	40	61	No problems
	12/21/83	40	58	No problems
	1/5/84	40	64	No problems
	1/16/84	40	75	No problems
	1/30/84	40	71	No problems
	2/14/84	40	75	No problems
	2/27/84	32	63	Bad storm
	3/15/84	40	81	No problems
	3/27/84	40	84	No problems
	4/12/84	40	84	No problems
	4/24/84	40	84	No problems
	5/7/84	40	84	No problems
	5/21/84	40	84	No problems

IV.C. Meteorology

Station fully operational except for the period 8/5-25/83 when lightning struck and damaged the system and from 5-26-6/18/84 when an electrical surge damaged the unit.

TABLE 2-2
STATUS OF LABORATORY ANALYSES TO DATE (6/29/84)
CRYSTAL RIVER STUDIES

Task		Samples Collected to Date	Samples to be Analyzed	Samples Analyzed to Date	Comments
I.A.	Benthic Core				
	1. Rough sorting	2,240	1,680	1,548	No problems
	2. Identifications	2,240	1,680	1,350	No problems
I.B.	Oyster Reef				
	1. Oysters	14,580	14,580	14,580	No problems
	2. Associated fauna	297	297	243	(clumps)
I.C.	Salt Marsh	1,728	1,728	1,536	No problems
I.D.	Macrophytes				
	1. Ground truthing	2,510	2,510	2,510	No problems
	2. Intensive monitoring	400	400	400	No problems
	3. Seagrass growth	260	260	260	No problems
I.E.	Photometry				
	1. Turbidity	4,217	4,217	4,217	No problems
	2. Chlorophyll 'a'	855	855	855	No problems
I.F.	Sediments				
	1. TOC & granulometry	600	600	516	No problems
	2. Sulfides	600	600	600	No problems
II.A.	Impingement				
	1. Regular	536	536	536	No problems
	2. 3 mm	32	32	32	No problems
II.B.	Entrainment				
	1. Rough sorting	3,240	2,430	2,385	No problems
	2. Identification	3,240	2,430	2,340	No problems
III.	Fisheries				
	1. Trawl	756	756	756	No problems
	2. Seines	96	96	96	No problems
	3. Drop net	48	48	48	No problems
	4. Creek trawls	308	308	308	No problems
IV.B.	Suspended Solids				
	1. TSS	2,068	2,068	2,068	No problems
	2. VSS	2,068	2,068	2,068	No problems

3.0 DATA TABLES

3.1 INTRODUCTION

Summary data tables, primarily for the fourth quarter of the program, are displayed in subsequent sections. They are identical in format and method of derivation to previously submitted tables.

3.2 BENTHOS

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER

JANUARY 1984

SPECIES NAME	1	2	3	4	5	6	7	8	9	10
NEMERTINA SP. -RHYNCHOCOELE										
NEMATODA				32	21		459		501	
POLYDORID GENUS D				0	0		384		405	
POLYDORID GENUS B				0	0		0		11	
PHYLLOCOCE ARENAE				0	0		0		11	
EULALIA SANGUINEA				11	0		0		0	
GYPTIS BREVI PALPA				0	0		32		11	
PARACALIA AMERICANA				0	0		11		0	
EXOGYRUS DISPAR				75	32		0		0	
SPHAEROSYLLIS TAYLORI				0	0		0		11	
SPHAEROSYLLIS LONGICAUDA				0	0		107		11	
STREPTOSYLLIS PETTIBONEAE				0	0		21		0	
NEREIDAE SP				11	0		149		0	
LAFONEREIS CULVERI				0	0		11		0	
GLYCERA AMERICANA				21	0		0		0	
GLYCINDE SOLITARIA				0	0		32		32	
KINERGMOPHIS SIMONI				0	0		85		75	
MOOREOPHIS NEBULOSA				0	0		907		0	
LUMBRINERIS VERRILLI				0	0		11		0	
HAPLOSCOLOPUS FOLIOSUS				11	11		43		64	
HAPLOSCOLOPUS FRAGILIS				683	1163		1429		3093	
SCOLOPUS RUERA				75	224		11		11	
ARICIDEA PHILBINAE				21	725		149		32	
ARICIDEA TAYLORI				0	0		611		0	
CIRROPHORUS LYRA				0	0		299		139	
POLYDORA SOCIALIS				0	0		53		21	
POLYDORA WEBSTERI				0	0		149		0	
PRIONOSPID HETERORRANCHIA				0	0		0		21	
PARAPRIONOSPID PINNATA				43	107		11		0	
STREBLOSPIID BENEDICTI				1813	3285		1045		907	
SCOLELEPTIS TEXANA				32	64		7168		939	
SCOLELEPTIS SOUMATA				0	0		0		299	
MINUSPID CIRRIFERA				0	0		352		0	
CARAZIELLA HOBSONAE				0	21		0		75	
MAGELOIA PETTIBONEAE				0	32		0		0	
SPIOCHAETOPTERUS C. OCULATUS				0	0		11		0	
THARYX CF. DORSORRANCHIALIS				0	0		171		480	
CAPITELLA CAPITATA				139	0		437		661	
PETEROMASTUS FILIFORMIS				448	171		11		0	
MEDIOMASTUS AMBIESEA				0	0		11		0	
MEDIOMASTUS CALIFORNIENSIS				821	1248		96		768	
MEDIOMASTUS SP				0	0		11		0	
ASYCHIS ELOMGATA				0	0		1312		0	
CLYMEHELLA TORQUATA				0	0		0		21	
AXIOHELLA MUCOSA				11	0		0		11	
OWENIA FUSIFORMIS				0	0		11		11	
MIRIOCHELE OCULATA				11	0		11		32	
PECTINARIA GOULDII				0	0		0		341	
AMPHARETE SP				11	0		53		43	
PISTA CRISTATA				0	0		0		0	
POLYCIORUS SP				0	0		21		21	
MEGALOMMA BIOCCULATUM				0	0		11		0	
FABRICIA SABIELLA				0	0		11		0	

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER

JANUARY 1984

SPECIES NAME	1	2	3	4	5	6	7	8	9	10
BIGLUA ENIGMATIC				0	0		0		11	
DILGONCHATE				363	896		395		320	
CYCLOSTREMIUS PENTAGONUS				0	0		0		21	
CYCLARIONUS SHIMMERI				0	11		11		0	
CAECUM PULCHELLUM				11	0		0		11	
DIATOMA VARIUM				0	0		11		0	
CREPIDULA MACULOSA				0	0		21		0	
MITRELLA LUNATA				0	0		11		0	
ANACHIS SP.				0	0		0		11	
NASSARIUS VIREX				0	0		0		0	
OLIVELLA SP. A				0	0		11		0	
GRANULINA OVULIFORMIS				0	0		11		0	
ODOSTOMIA SP.				0	0		53		0	
ODOSTOMIA BISUTURALIS				85	128		75		43	
TURBONILLA DALLI				0	0		32		0	
EPLIMASTOMA CF. CANALICULATA				0	0		53		0	
ACTEON PUNCTOSTRIATUS				96	21		11		0	
ACTEON CANALICULATA				11	0		53		0	
HAMINOE SUCCINEA				0	0		149		85	
BIVALVIA SP.				0	0		11		11	
LUMINERIS SP.				0	0		0		11	
MUCULA PROXIMA				0	0		11		0	
MUCULANA ACUTA				0	0		21		0	
BRACHIDONITES EXUSTUS				0	0		0		21	
MYSELLA PLANULATA				0	0		11		0	
NEAEROWYA FLORIDANA				0	0		11		43	
MULINTIA LATERALIS				0	0		0		32	
TELLINA SP.				0	0		0		11	
POLYMERIS CAROLINIANA				53	107		0		53	
LYONSIA HYALINA FLORIDANA				0	0		0		11	
MYDODOPA SP.				0	0		11		0	
HAPLOCYTHERIDA SETIPUNCTATA				0	0		128		43	
CALANDID COPEPODA				43	11		0		11	
HARPACTICOID COPEPODA				107	0		139		139	
DAYROSTYLIS SMITHI				0	0		43		0	
CYCLASPIDIS SP. A				53	11		11		0	
HALMYRAPSUS CF. CURAMENSIS				53	0		213		21	
KENANTHURA BREVITELSON				11	0		0		0	
EDOTEA TRILOBIA				11	0		0		0	
AMPELISCA HOLMISI				11	0		21		0	
AMPELISCA ABOTI				53	11		0		0	
ACUMINODONTOPUS MAGLEI				21	0		0		0	
CONOPHEUM ACHERUSICUM				0	0		0		0	
ERICHTHONIUUS BRASILIENSIS				0	0		0		11	
LISTRILLA CF. BARNARDI				0	0		11		0	
POLOCERUS SP.				0	0		53		0	
PARACAPRELLA TENUIIS				0	0		11		11	
DGYRIDIS ALPHENOSTRIS				0	0		21		11	
PINNOTHERIDAE SP.				11	11		0		11	
PHASCOLION SP.				0	0		11		0	
PHYGONIS ARCHITECTA				0	0		117		53	
AMPHIROIDE SP.				0	0		21		21	
				0	0		43		21	

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER

JANUARY 1984

SPECIES NAME	STATION									
	1	2	3	4	5	6	7	8	9	10
TOTAL DENSITY				5472	8309		17728		10101	
TOTAL NUMBER OF SPECIES				35	22		73		56	

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER

JANUARY 1984

SPECIES NAME	11	12	13	14	15	16	17	18	19	20
PORIFERA SP.		11	11				0	0		0
HYDROZOA SP.		0	0		11		0	11		0
ATHENARIA		64	0		0		11	11		299
THEMNA SP.		288	0		0		0	0		0
STYLIDHUS SP.		11	0		43		0	0		0
NEURTERIA SP. - RHYNCHOCODEL		160	416		853		64	341		917
NEMATODA		4768	224		544		427	693		1803
PHYLLODICE ARENAE		0	0		11		0	0		21
EULALIA SANGUINEA		11	11		11		0	0		0
GYPTIS BREVIPALPA		0	0		11		0	0		11
PARADALIA AMERICANA		11	0		0		0	0		0
TYPOSYLLIS CF. LUTEA		0	128		0		0	0		0
EXOGONE DISPAR		395	11		11		0	11		0
EXOGONE LOUREI		11	0		0		0	11		0
SPHAEROSYLLIS TAYLORI		395	224		0		0	0		0
SPHAEROSYLLIS LONGICAUDA		96	0		21		53	203		907
SPHAEROSYLLIS GLAUCULATA		107	0		0		0	0		43
BRANIA WELFLEETENSIS		11	0		0		0	0		0
BRANIA CLAVATA		43	128		0		0	0		0
EHLERSIA CORNUATA		11	21		0		0	0		0
HAPLOSYLLIS SPONGICOLA		11	0		0		0	0		0
STREPTOSYLLIS PETTIBONEAE		21	43		96		0	0		0
PARAPIONOSYLLIS LONGICIRRATA		64	0		0		0	0		0
CERATONEREIS IRRITABILIS		256	0		0		0	0		0
NEANTHES MICROMMA		352	0		0		0	0		0
NEANTHES SUCCINEA		0	11		0		0	0		0
LAONEREIS CULVERI		0	96		0		1173	21		0
NEPHTYS CF. BUCERA		0	11		0		0	0		0
GLYCERA AMERICANA		117	11		21		11	0		43
GLYCINE SOLITARIA		0	0		85		0	0		53
GONIAIDES CAROLINAE		245	0		0		0	0		0
ONUPHIDAE SP.		277	0		21		0	0		0
KINERGMOPHIS SIMONI		0	11		0		0	0		11
MOOREONUPHIS NEBULOSA		0	11		0		0	0		0
MARPHISIA SANGUINEA		117	11		11		11	0		896
LUMERINERIS VERRILLI		0	0		0		0	0		0
LUMERINERIS SP. D		21	0		0		0	0		11
DRILONEREIS LONGA		43	0		0		0	0		0
PETTIBONEA SP. A		96	363		1771		651	53		768
HAPLOSOCOLOPLOS FOLIOSUS		0	0		21		0	0		96
HAPLOSOCOLOPLOS FRAGILIS		0	53		0		0	0		0
NAINERIS SP.		85	32		43		11	0		437
SOCOLOPLOS RUBRA		21	1131		107		10571	107		352
ARTICIDEA PHILIBINAE		139	32		352		1344	53		2336
ARTICIDEA TAYLORI		405	0		0		0	0		0
ARTICIDEA CATHERINAE		245	0		107		0	0		149
CIRROPHORUS LYRA		43	0		96		0	0		11
SPIONIDAE SP.		0	693		0		213	0		0
POLYDORA SOCIALIS		0	21		0		11	32		0
POLYDORA WEBSTERI		0	0		0		0	0		0
PRIONOSPION HETEROBANCHIA		853	21		0		0	0		0
PRIONOSPION CRISTATA		661	21		0		0	0		0
SALIC PETTIBONEA					0		0	0		0

BENTHOS ABUNDANCE BY STATION AND SPECIES

2

NUMBER PER SQUARE METER

JANUARY 1984

SPECIES NAME	11	12	13	14	15	16	17	18	19	20
PARAPRIONOSPION PINNATA		11	0		1856		11	64		651
STREBLOSPIO BENEDICTI		75	2965		7733		1397	7509		3061
SCOLELEPIS TEXANA		21	192		320		437	32		704
MINUSPIO CIRRIFERA		32	0		0		0	0		0
CARAZIELLA HGBSONAE		21	0		85		0	0		11
MAGELONIDAE		0	11		0		0	0		0
MAGELONA PETTIBONEAE		0	0		11		11	0		21
SPIOCHAETOPTERUS C. OCULATUS		0	0		160		0	0		43
CAULIERIELLA SP.		480	0		0		0	0		0
THARYX CF. DORSOBRANCHIALIS		405	352		341		181	53		415
ARMANDIA MACULATA		64	0		0		0	0		0
CAPITELLA CAPITATA		0	128		0		277	288		0
HETEROMASTUS FILIFORMIS		0	11		11		171	0		0
MEDIOMASTUS AMBULATA		181	0		139		0	1141		75
MEDIOMASTUS CALIFORNIENSIS		64	181		0		555	0		0
MEDIOMASTUS SP.		917	0		843		0	0		1013
ASYCHIS ELONGATA		0	0		0		0	32		43
AXIOTHELLA MUCOSA		128	309		0		21	43		0
MYRIOCHELE OCULATA		117	11		0		32	32		11
AMPHARETIDAE SP.		11	0		0		0	0		0
ISOLDA PULCHELLA		0	0		0		11	0		0
TERESIIDAE UNID. SP.		0	0		11		0	0		11
PISTA CRISTATA		32	43		32		0	21		0
PISTA SP.		0	0		0		11	0		0
POLYCIRRUS SP.		0	0		64		0	0		11
AKAEANA TRILOBATA		53	0		0		0	0		0
CHONE AMERICANA		181	139		53		32	75		85
MEGALOMMA BILOCULATUM		11	0		0		0	0		0
FABRICIA SABELLA		459	2251		0		11	0		0
OLIGOCHAETE		1088	491		501		459	331		427
GASTROPODA SP.		11	0		0		0	0		0
SOLARIOBIS SHIMERI		0	0		0		0	11		0
CAECUM PULCHELLUM		0	21		11		0	0		0
MELANELLA CONOIDEA		11	0		0		0	0		0
CALYPTRAEA CENTRALIS		11	0		0		0	0		0
CREPIDULA SP.		0	0		11		0	0		0
CREPIDULA PLANA		21	21		0		0	0		0
MITRELLA LUNATA		0	32		0		0	21		32
NASSARIUS VIBEX		0	0		0		0	0		21
OLIVELLA SP. B		288	0		0		0	0		0
OLIVELLA MINUTA		0	0		11		0	0		0
GRANULINA OVULIFORMIS		21	11		0		0	0		11
MARGINELLA APICINA		0	0		11		0	0		0
MANGELIA MELANITICA		11	0		0		0	0		0
ODOSTOMIA SP.		0	0		21		75	0		75
TURBONILLA DALLI		0	11		43		0	0		0
ACTEON PUNCTOSTRIATUS		0	11		64		0	0		96
ACTEOCINA CANALICULATA		11	405		11		373	651		2720
PHILINE INFUNDIBULUM		21	0		0		0	0		0
HAMINOE SUCCINEA		0	21		0		32	11		224
APLYSIIDAE SP.		0	11		0		0	0		11
NUCULA PROXIMA		128	0		21		0	0		11
NUCULANA ACUTA		53	0		21		0	0		0

BENTHOS ABUNDANCE BY STATION AND SPECIES

3

NUMBER PER SQUARE METER
JANUARY 1984

SPECIES NAME	11	12	13	14	15	16	17	18	19	20
DIPLODONTA PUNCTATA		53	0		0		0	0		0
MYSELLA PLANULATA		32	0		0		11	0		0
CRASSINELLA LUNULATA		32	0		0		0	0		0
TELLINA VERSICOLOR		11	0		11		0	0		0
TAGELUS DIVISUS		11	0		0		0	0		0
SEMELE BELLA TRIATA		43	0		0		0	0		0
ABRA AEQUALIS		437	0		0		0	0		0
POLYMESODA CAROLINIANA		11	0		0		0	0		0
MERCENARIA CAMPECHIENSIS		11	0		0		0	0		0
PARASTARTE TRIQUERTA		0	11		0		0	0		0
LYONSIA HYALINA FLORIDANA		21	32		11		0	0		0
ASTHENOTHAERUS HEMPHILLI		11	0		0		0	0		0
ANOPLDACTYLUS PETIOLATUS		11	0		0		0	0		0
MYODOCOPA SP.		405	75		117		0	0		32
PARASTEROPE POLLEX		53	0		11		0	0		0
PODOCOPA SPP.		11	0		0		0	0		0
HAPLOCYTHERIDA SETIPUNCTATA		0	0		0		96	0		0
CALANOID COPEPODA		395	181		160		683	245		416
HARPACTICOID COPEPODA		811	43		21		235	139		192
CYCLOPOID COPEPODA		11	11		0		0	0		0
BALANUS IMPROVISUS		0	0		11		0	0		0
MYSIDOPSIS BIGELOWI		0	0		0		0	0		11
OXYUROSTYLIS SMITHI		21	11		0		0	0		0
CUMELLA SP. B		21	0		0		0	0		0
CYCLASPIS SP. B		11	0		0		0	0		0
CYCLASPIS SP. D		11	0		0		0	0		0
CYCLASPIS SP. A		0	21		117		0	0		0
KALLIAPSEUDES SP. A		21	0		0		0	0		0
APANTHURA MAGNIFICA		107	11		0		0	0		11
XENANTHURA BREVITELSON		0	64		0		469	0		0
PARACERCEIS CAUDATA		11	0		0		0	0		0
SEROLIS MGRAYI		32	0		0		0	0		0
EDOTEA TRILOBA		0	21		11		0	0		0
AMPELISCA HOLMESI		0	512		0		21	0		11
AMPELISCA SP. C		0	43		0		0	0		0
AMPELISCA ABDITA		363	11		0		0	0		0
CYMA DUSA COMPTA		0	21		0		0	0		0
LEMBOS SMITHI		32	0		0		0	0		0
LEMBOS BRUNNEOMACULATUS MACKINNEYI		43	0		0		0	0		0
MICRODEUTOPUS MYERSI		149	0		0		0	11		0
ACUMINODEUTOPUS NAGLEI		192	0		0		0	0		0
BATEA CF. CATHARINENSIS		0	0		96		0	0		0
COLOMASTIX HALICHONDRIAE		11	0		0		0	0		0
COLOMASTIX SP.		11	0		0		0	0		0
CERAPUS SP. A		11	0		0		0	0		0
COROPHIUM LOUISANUM		0	0		0		0	11		0
COROPHIUM ACHERUSICUM		0	64		0		11	0		0
COROPHIUM TUBERCULATUM		0	0		11		0	0		0
GRANDIDIERELLA BONNIEROIDES		21	395		0		32	629		0
MAERA CF WILLIAMSI		0	0		11		0	0		0
PHOTIS MELANICUS		160	0		0		0	0		0
LISTRIELLA CF. BARNARDI		21	11		0		0	0		0
MONOCULODES NYEI		11	0		0		0	0		0

BENTHOS ABUNDANCE BY STATION AND SPECIES

4

NUMBER PER SQUARE METER

JANUARY 1984

SPECIES NAME	STATION									
	11	12	13	14	15	16	17	18	19	20
EUDEVENOPUS HONDURANUS	.	11	0	.	0	.	0	0	.	0
TIRON TRIOCELLATUS	.	32	0	.	0	.	0	0	.	0
PARACAPRELLA TENUIS	.	0	11	.	0	.	0	0	.	0
OGYRIDES ALPHAEROSTRIS	.	0	0	.	21	.	0	0	.	11
PAGURIDAE SP.	.	75	0	.	0	.	0	0	.	0
PAGURISTES HUMMI	.	21	0	.	0	.	0	0	.	0
PAGURUS CAROLINENSIS	.	21	0	.	0	.	0	0	.	0
PAGURUS POLLICARIS	.	11	0	.	0	.	0	0	.	0
ILIACANTHA LIODACTYLUS	.	11	0	.	0	.	0	0	.	0
PINNOTHERIDAE SP.	.	32	0	.	0	.	0	0	.	0
PINNIXA PEARSEI	.	0	11	.	11	.	0	0	.	0
PHASCOLION SP.	.	43	0	.	32	.	75	11	.	11
PHORONIS ARCHITECTA	.	0	0	.	21	.	0	0	.	0
BRYOZOA SP.=ECTOPROCTA	.	11	0	.	0	.	0	0	.	0
AMPHIURIDAE SP.	.	181	0	.	21	.	0	0	.	11
MICROPHOLIS GRACILLIMA	.	11	0	.	0	.	0	0	.	0
HOLOTHUROIDEA SP.	.	11	0	.	0	.	0	0	.	0
ASCIDIACEA SP.	.	0	32	.	0	.	0	11	.	0
BRANCHIOSTOMA SP.	.	96	0	.	0	.	0	0	.	0
TOTAL DENSITY	.	20256	12939	.	17323	.	20277	13152	.	19659
TOTAL NUMBER OF SPECIES	.	121	68	.	63	.	40	38	.	53

BENTHOS ABUNDANCE BY STATION AND SPECIES

1

NUMBER PER SQUARE METER

JANUARY 1984

SPECIES NAME	21	22	23	24	25	26	27	28	29	30
ANEMONE SP.		0			11	0	11		0	0
PORIFERA SP.		0			11	0	0		11	0
HYDROZOA SP.		0			0	21	0		0	11
ACTINARIA SP.		11			0	0	0		0	0
ATHENARIA		11			0	11	0		21	11
STYLOCHUS SP.		0			21	0	0		32	0
NEMERTINA SP. = RHYNCHOCOEL		309			149	117	437		1323	992
NEMATODA		501			2123	555	821		896	587
LEPIDONOTUS VARIABILIS		0			0	32	0		0	0
POLYNOID GENUS D		0			43	0	0		0	0
STHENELAIS OBLIQUIS		0			64	0	0		0	0
PARAMPHINOME SP. B		0			53	0	0		0	0
PHYLLODOCE CASTANEA		11			21	0	0		0	0
PHYLLODOCE ARENAE		0			0	0	0		0	11
ETEONE HETEROPODA		11			0	0	0		21	21
EULALIA SANGUINEA		85			75	11	64		0	11
PARANAITIS SPECIOSA		0			0	0	0		75	64
GYPTIS BREVIPALPA		11			11	0	0		11	0
ANCISTROSYLLIS HARTMANAE		0			11	11	0		32	32
PARANDALIA AMERICANA		11			0	0	0		0	0
SYLLIDAE SP.		0			0	0	0		0	0
AUTOLYTUS DENTALIUS		0			0	0	0		32	0
TYPOSYLLIS PROLIFERA		0			0	0	0		11	0
TYPOSYLLIS CF. LUTEA		11			0	0	0		64	0
EXOgone DISPAR		245			149	267	75		533	11
EXOgone LOUREI		0			0	75	0		85	939
EXOgone ATLANTICA		0			0	21	0		0	75
SPHAEROSYLLIS TAYLORI		501			320	32	640		0	0
SPHAEROSYLLIS LONGICAUDA		32			64	139	53		1568	160
BRANIA WELLFLEETENSIS		0			43	0	0		203	85
BRANIA CLAVATA		0			0	43	0		0	0
EHLERSIA CORNUTA		0			0	21	75		21	0
HAPLOSYLLIS SPONGICOLA		0			0	373	0		53	32
ODONTOSYLLIS ENOPLA		11			0	0	0		0	0
STREPTOSYLLIS PETTIBONEAE		11			43	75	43		0	0
PARAPIONOSYLLIS LONGICIRRATA		0			50	32	0		0	0
NEREIDAE SP.		11			0	21	0		0	32
CERATONEREIS IRRITABILIS		0			299	0	0		64	11
NEANTHES MICROMMA		0			192	21	0		0	0
NEANTHES SUCCINEA		0			0	0	0		32	21
NEREIS SP.		0			0	0	0		0	11
NEREIS LAMELLOSA		0			0	0	0		11	0
NEREIS PELAGICA		0			0	0	0		117	0
LAEONEREIS CULVERI		0			0	0	0		43	0
NEPHYTIDAE SP.		0			0	11	0		0	0
NEPHYS CF. BUCERA		0			32	11	0		0	0
GLYCERA AMERICANA		0			0	0	0		0	0
GLYCERA SP. C		43			64	0	11		64	75
GLYCERA SP.		0			0	53	0		11	0
GLYCERA CAPITATA		0			0	11	0		0	0
GLYCINDE SOLITARIA		203			0	11	21		53	75
GONIADIDES CAROLINAE		0			672	64	0		0	0
ONUPHIDAE SP.		0			0	0	0		75	0

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER

JANUARY 1984

SPECIES NAME	21	22	23	24	25	26	27	28	29	30
DIOPATRA CUPREA		11			0	0	0		0	0
KINBERGONUPHIS SIMONI		0			0	0	0		160	768
MOOREONUPHIS NEBULOSA		608			128	0	0		0	11
LUMBRINERIS VERRILLI		981			331	85	75		832	501
LUMBRINERIS TESTUDINUM		0			0	21	0		0	0
DRILONEREIS LONGA		0			0	0	0		0	11
DORVILLEA SP.		0			0	0	0		11	0
SCHISTOMERINGOS RUDOLPHI		21			0	0	0		0	0
ORGINIIDAE SP.		0			0	0	0		0	0
HAPLOSCOLOPLOS FOLIOSUS		203			203	0	939		32	0
HAPLOSCOLOPLOS FRAGILIS		0			0	0	11		32	11
HAPLOSCOLOPLOS SP.		0			0	0	0		0	0
NAINERIS DENDRITICA		0			0	21	0		0	0
SCOLOPLOS RUBRA		53			43	11	0		53	0
ARICIDEA PHILBINAE		21			107	21	32		160	53
ARICIDEA TAYLORI		139			192	128	1131		21	469
ARICIDEA SP.		0			0	11	11		245	96
ARICIDEA SP. C		0			0	11	0		0	0
ARICIDEA CATHERINAE		21			0	21	0		0	0
ARICIDEA FRAGILIS		0			11	11	0		0	11
CIRROPHORUS LYRA		85			395	32	64		181	53
LAONICE CIRRATA		0			11	0	0		0	0
POLYDORA SOCIALIS		0			235	0	0		0	0
POLYDORA WEBSTERI		75			0	469	21		43	43
POLYDORA SP.		0			0	0	32		491	0
PRIONOSPPIO HETEROBRANCHIA		96			0	0	0		0	0
PRIONOSPPIO CRISTATA		11			171	309	43		245	21
PRIONOSPPIO SP.		0			0	0	11		0	11
SPIO PETTIBONEAE		21			53	267	0		11	0
SPIO PHANES BOMBYX		0			11	11	0		11	53
POLYDORID SP.		0			0	0	0		0	11
PARAPRIONOSPPIO PINNATA		96			21	0	0		128	0
STREBLOSPPIO BENEDICTI		213			0	11	0		75	11
SCOLELEPIS TEXANA		608			85	0	2709		395	21
APOPRIONOSPPIO PYGMAEA		21			32	11	704		267	576
MINUSPIO CIRRIFERA		0			203	21	0		11	32
BOCCARDIELLA HAMATA		0			0	0	0		64	11
CARAZIELLA HOBSONAE		0			491	0	0		139	0
MAGELONA PETTIBONEAE		21			0	0	0		0	32
POECILOCHAEIUS JOHNSONI		0			11	0	0		64	0
SPIOCHAETOPTERUS C. OCULATUS		53			11	21	11		0	0
CIRRATULIDAE SP.		0			0	0	0		96	0
CAULLERIELLA SP.		53			213	11	11		0	0
THARYX CF. DORSOBRAACHIALIS		1163			192	107	288		533	32
ARMANDIA MACULATA		0			11	149	0		0	53
CAPITELLA CAPITATA		0			0	0	171		0	0
MEDIOMASTIUS AMBIVSETA		0			1301	32	11		0	0
MEDIOMASTIUS CALIFORNIENSIS		2411			0	736	0		395	619
MEDIOMASTIUS SP.		0			0	0	0		971	107
ARENICOLA CRISTATA		0			0	0	11		3819	1973
MALDANIDAE		0			0	0	0		0	0
ASYCHIS ELONGATA		128			0	0	0		21	0
CLYMENELLA TORQUATA		0			21	0	0		405	0

BENTHOS ABUNDANCE BY STATION AND SPECIES

3

NUMBER PER SQUARE METER

JANUARY 1984

SPECIES NAME	21	22	23	24	STATION					
AXIOHELLA MUCOSA		75			25	26	27	28	29	30
OWENIA FUSIFORMIS		0			320	21	1963		224	2795
MYRIOCHELE OCULATA		0			11	0	0		0	96
SABELLARIA VULGARIS		128			949	75	0		75	1301
PECTINARIA GOULDII		21			11	107	0		11	21
AMPHARETE ACUTIFRONS		53			0	0	0		21	64
TEREBELLIDAE UNID. SP.		0			0	11	0		0	0
PISTA CRISTATA		0			0	43	107		11	0
POLYCIRRUS SP.		224			43	11	0		75	107
AMAEANA TRILOBATA		21			64	0	0		0	53
STREBLOSOMA HARTMANAE		277			43	0	2624		0	0
TEREBELLIDES STROEMI		11			0	32	0		75	0
SABELLIDAE		0			96	0	0		0	0
CHONE AMERICANA		0			0	0	0		235	0
MEGALOMMA BIOCCULATUM		160			245	245	203		117	11
POTAMILLA SP.		0			64	0	0		11	11
SABELLA MICROPHTHALMA		0			0	43	0		0	0
FABRICIA SABELLA		0			0	0	11		0	11
HYPsicOMUS PHAEOtaENIA		587			533	352	523		864	7136
SERPULIDAE SP.		0			0	0	0		32	0
SPIRORBIS SPIRILLUM		11			0	0	0		21	0
HYDROIDES DIANTHUS		0			0	0	107		0	0
POMATOCEROS AMERICANUS		11			0	0	0		32	11
BOGUEA ENIGMATICA		11			0	0	0		0	0
OLIGOCHAETE		64			0	0	0		0	1013
GASTROPODA SP.		352			448	171	757		779	309
RISSOINA CATESBYANA		0			11	11	0		0	0
SOLARIORBIS SHIMERI		0			0	11	0		0	0
CAECUM PULLHELLUM		11			0	0	0		43	0
CAECUM STRIGOSUM		288			0	0	0		213	469
DIASTOMA VARIUM		21			11	0	0		32	0
CERITHIOPSIS EMERSONI		21			0	0	11		0	11
CREPIDULA PLANA		0			0	0	0		43	0
POLINICES DUPLICATUS		64			11	117	0		64	32
MITRELLA LUNATA		0			11	0	0		0	0
ANACHIS OBESA OSTREICOLA		245			85	32	53		0	85
CANTHARUS CANCELLARIUS		0			0	0	0		43	0
NASSARIUS VIBEX		0			11	11	0		0	0
OLIVELLA SP. B		0			0	0	0		21	32
OLIVELLA MINUTA		11			64	224	0		0	11
GRANULINA OVULIFORMIS		0			0	0	21		0	0
MARGINELLA APICINA		0			0	0	139		0	21
MARGINELLA LAVALLEEANA		0			11	0	0		0	43
HYALINA SP.		0			0	0	0		0	43
COLUMBELLIDAE		0			0	0	0		0	11
MANGELIA MELANITICA		0			0	11	0		0	0
CONUS JASPEDEUS STEARNSI		0			0	11	11		0	0
ODOSTOMIA SP.		0			0	0	0		0	11
ODOSTOMIA BISUTURALIS		0			0	0	11		11	0
TURBONILLA CONRADI		0			0	0	32		0	0
TURBONILLA DALLI		43			11	0	21		0	160
ACTEON PUNCTOSTRIATUS		43			0	0	53		0	0
ACTEPCINA CANALICULATA		11			0	0	0		21	11
		672			32	0	299		1280	981

BENTHOS ABUNDANCE BY STATION AND SPECIES

4

NUMBER PER SQUARE METER
JANUARY 1984

SPECIES NAME	21	22	23	24	25	26	27	28	29	30
PHILINE INFUNDIBULUM	.	0	.	.	0	0	11	.	0	11
HAMINOE SUCCINEA	.	0	.	.	0	0	64	.	0	0
NUDIBRANCHIA SP.	.	0	.	.	0	11	0	.	0	0
APLACOPHORA SP. A	.	0	.	.	11	0	0	.	0	0
NUCULA PROXIMA	.	128	.	.	117	75	0	.	21	203
NUCULANA ACUTA	.	0	.	.	235	85	0	.	0	11
GLYCYMERIS PECTINATA	.	0	.	.	0	11	0	.	0	0
MUSCULUS LATERALIS	.	32	.	.	0	21	0	.	0	75
BRACHIDONTES EXUSTUS	.	0	.	.	0	0	0	.	0	32
AMYGDALUM PAPHIUM	.	0	.	.	11	0	0	.	0	0
CRASSOSTREA VIRGINICA	.	0	.	.	0	0	0	.	11	0
LUCINA NASSULA	.	0	.	.	0	0	11	.	0	11
LUCINA SP.	.	0	.	.	11	0	0	.	0	0
CODAKIA ORBICULATA	.	0	.	.	0	0	0	.	11	0
DIPLODONTA PUNCTATA	.	11	.	.	277	32	0	.	0	11
MYSELLA PLANULATA	.	107	.	.	85	0	53	.	11	43
CRASSINELLA LUNULATA	.	0	.	.	32	0	0	.	0	0
LAEVICARDIUM MORTONI	.	11	.	.	0	11	0	.	0	21
TRACHYCARDIUM MURICATUM	.	0	.	.	0	21	0	.	0	0
TELLINA SP.	.	53	.	.	0	32	0	.	0	0
TELLINA VERSICOLOR	.	43	.	.	53	53	0	.	0	0
SEMELE BELLASTRIATA	.	0	.	.	21	32	0	.	0	0
ABRA AEQUALIS	.	11	.	.	544	405	0	.	0	0
TRANSENNELLA CONRADINA	.	0	.	.	0	0	0	.	0	11
MERCENARIA CAMPECHIENSIS	.	0	.	.	43	0	0	.	0	0
CHIONE GRUS	.	0	.	.	0	11	0	.	0	0
CORBULA CONTRACTA	.	0	.	.	21	0	0	.	0	21
LYONSIA HYALINA FLORIDANA	.	0	.	.	0	11	0	.	0	64
HYDRACARINA SP.	.	0	.	.	0	11	0	.	0	0
ANOPILODACTYLUS PYGMAEUS	.	0	.	.	11	0	0	.	0	0
MYODOCOPA SP.	.	117	.	.	395	203	181	.	21	149
PARASTEROPE POLLEX	.	0	.	.	11	11	0	.	0	0
PODOCOPA SPP.	.	43	.	.	0	0	0	.	0	21
CALANOID COPEPODA	.	192	.	.	341	96	85	.	160	160
HARPACTICOID COPEPODA	.	75	.	.	224	11	43	.	85	11
BALANUS IMPROVISUS	.	21	.	.	0	0	0	.	0	0
OXYUROSTYLIS SMITHI	.	0	.	.	53	96	0	.	0	0
CUMELLA SP. B	.	0	.	.	43	0	0	.	0	0
CUMELLA SP. A	.	0	.	.	11	0	0	.	0	0
CYCLASPIS SP. B	.	0	.	.	64	53	0	.	0	0
CYCLASPIS SP. A	.	0	.	.	0	11	0	.	0	11
VAUNTHOMPSONIA SP.	.	0	.	.	0	0	0	.	0	21
KALLIAPSEUDES SP. A	.	0	.	.	53	21	32	.	0	0
HARGERIA RAPAX	.	0	.	.	11	11	0	.	0	0
APANTHURA MAGNIFICA	.	0	.	.	0	11	0	.	11	11
APANTHURA CF. SIGNATA	.	0	.	.	64	149	0	.	0	11
PANANTHURA FORMOSA	.	0	.	.	0	0	0	.	43	0
PARACERCEIS CAUDATA	.	0	.	.	0	0	0	.	0	21
CYMODOCCE FAXONI	.	11	.	.	0	0	0	.	0	0
ERICHSONELLA CF. ATTENUATA	.	11	.	.	0	0	0	.	0	0
EDOTEA TRILOBA	.	11	.	.	0	0	0	.	0	11
MUNNA CF. HAYESI	.	0	.	.	128	21	0	.	0	0
AMPELISCA HOLMESI	.	0	.	.	107	11	43	.	0	32

BENTHOS ABUNDANCE BY STATION AND SPECIES

5

NUMBER PER SQUARE METER

JANUARY 1984

SPECIES NAME	21	22	23	24	25	26	27	28	29	30
AMPELISCA ABDITA		53			96	181	11		0	43
AMPELISCA SP. G		0			11	0	0		0	0
GITANOPSIS SP.		11			11	2	0		0	0
CYMAUSA COMPTA		224			0	0	85		0	0
LEMBOS SMITHI		0			0	0	0		96	53
LEMBOS BRUNNEOMACULATUS MACKINNEYI		0			203	117	0		0	0
MICRODEUTOPUS MYERSI		21			128	128	21		53	53
ACUMINODEUTOPUS NAGLEI		21			149	64	53		21	107
RILDARDANIUS LAMINOSA		0			0	32	0		0	0
ARGISSA HAMATIPES		0			0	11	0		0	0
BATEA CF. CATHARINENSIS		245			11	32	32		0	75
COLOMASTIX SP.		0			0	0	0		0	11
CERAPUS SP. A		96			21	11	0		0	0
COROPHIUM ACHERUSICUM		75			11	64	11		309	171
COROPHIUM LACUSTRE		0			203	0	0		0	0
ERICTHONIUS BRASILIENSIS		213			75	203	53		11	107
GRANDIDIERELLA BONNIERIDES		75			21	53	21		139	43
ELASMOPUS LEVIS		21			0	0	0		213	11
MAERA CF. WILLIAMSI		0			0	21	0		85	0
MELITA ELONGATA		0			0	0	11		64	0
MELITA APPENDICULATA		21			0	0	0		0	0
PHOTIS MELANICUS		11			96	21	0		0	0
PHOTIS PUGNATOR		0			0	43	0		0	0
MEGAMPHOPUS SP.		0			0	11	0		0	0
LEUCOTHOE CF. SPINICARPA		0			0	11	0		0	0
LISTRIELLA CF. BARNARDI		32			85	0	21		0	85
MONOCULODES NYEI		0			0	21	0		0	11
SYNCHELIDIUM CF. AMERICANUM		0			0	21	0		0	11
EOBOLGUS SPINOSUS		0			0	11	0		0	21
STENDTHOE CF. MINUTA		11			0	0	0		0	32
TIRON TRIOCCELLATUS		0			75	11	0		0	43
PARACAPRELLA TENUIS		75			43	11	21		0	267
LUCONACIA INCERTA		0			0	0	0		0	43
SICYONIA LAEVIGATA		0			0	11	0		0	0
LEPTOCHELA SERRATORBITA		0			0	11	0		0	0
HIPPOLYTE PLEURACANTHA		64			0	0	0		0	0
PAGURIDAE SP.		21			32	64	0		11	32
BRACHYURA SP. (JUV.)		0			11	0	0		0	0
ILIACANTHA LIODACTYLUS		0			0	11	0		0	0
HETEROCRYPTA GRANULATA		0			0	21	0		0	0
PELIA MUTICA		0			0	85	0		0	0
XANTHIDAE SP.		0			0	0	0		21	0
PINNOTHERIDAE SP.		0			21	21	21		0	11
PINNIXA PEARSEI		0			21	0	0		0	0
CHIRONOMIDAE		0			0	0	0		0	11
SIPUNCULA SP.		0			11	21	0		11	0
PHASCOLION SP.		0			0	0	171		0	0
BRYOZOA SP. = ECTOPROCTA		21			0	0	0		43	0
GLOTTIDIA PYRAMIDATA		0			0	0	0		0	11
AMPHIURIDAE SP.		21			96	0	11		32	128
MICROPHOLIS GRACILLIMA		0			53	11	0		0	0
OPHIOPHRAGMUS SP.		0			0	21	11		0	0
AMPHIOPLUS ABDITUS		0			11	0	11		0	0

BENTHOS ABUNDANCE BY STATION AND SPECIES

6

NUMBER PER SQUARE METER
JANUARY 1984

SPECIES NAME	21	22	23	24	STATION		27	28	29	30
MICROPHOLIS ATRA		0			25	26	0		0	0
AXIOGNATHUS SQUAMATUS		0			11	0	0		0	0
AMPHICHILUS INCISUS		0			43	0	0		0	0
HOLOTHUROIDEA SP.		0			11	0	0		0	0
HEMICHORDATA		0			21	11	0		0	0
ASCIDIACEA SP.		11			0	0	0		0	0
MOLGULIDAE SP.		0			0	0	11		11	0
BRANCHIOSTOMA SP.		0			0	0	21		0	0
		0			0	64	0		0	0
TOTAL DENSITY		14795			16640	9088	16747		21237	26112
TOTAL NUMBER OF SPECIES		105			125	130	78		107	122

BENTHOS ABUNDANCE BY STATION AND SPECIES

1

NUMBER PER SQUARE METER

JANUARY 1984

SPECIES NAME	31	32	33	34	STATION 35	36	37	38	39	40
ANEMONE SP.	0		11		11		0			
PORIFERA SP.	11		0		0		0			
HYDROZOA SP.	0		0		0		11			
ATHENARIA	0		21		11		64			
STYLOCHUS SP.	0		0		11		0			
NEMERTINA SP. = RHYNCHOCOEL	139		565		512		107			
NEMATODA	1077		5557		2219		725			
POLYNOID SP.	0		0		11		0			
LEPIDONOTUS SUBLEVIS	0		0		0		21			
LEPIDONOTUS VARIABILIS	0		0		11		0			
POLYNOID GENUS D	0		0		11		11			
STHENELAIS OBLIQUIS	0		0		0		64			
PARAMPHINOME SP. B	0		0		85		0			
PHYLLODOCE ARENAE	0		11		53		11			
PHYLLODOCE SP.	0		0		32		0			
EULALIA SANGUINEA	11		0		53		0			
PARANAITIS POLYNOIDES	0		0		0		21			
HESIONIDAE SP.	0		0		11		0			
GYPTIS BREVIPALPA	0		11		0		0			
PODARKE OBSCURA	0		0		96		0			
SYLLIDAE SP.	0		0		363		0			
AUTOLYTUS DENTALIUS	0		0		43		0			
TYPOSYLLIS CF. LUTEA	0		32		0		0			
EXOgone DISPAR	21		1269		2048		277			
EXOgone LOUREI	0		0		21		0			
SPHAEROSYLLIS TAYLORI	149		565		288		245			
SPHAEROSYLLIS LONGICAUDA	21		160		192		149			
SPHAEROSYLLIS GLANDULATA	0		0		85		0			
BRANIA WELLFLEETENSIS	0		0		0		11			
BRANIA CLAVATA	0		0		32		11			
EHLERSIA CORNUTA	11		43		0		0			
EHLERSIA FERRUGINA	0		0		21		0			
ODONTOSYLLIS ENOPLA	0		11		21		32			
STREPTOSYLLIS PETTIBONEAE	0		7		0		11			
PARAPIONOSYLLIS LONGICIRRATA	0		0		75		11			
NEREIDAE SP.	21		0		0		0			
CERATONEREIS IRRITABILIS	0		32		11		96			
NEANTHES MICROMMA	0		96		32		0			
NEANTHES ACUMINATA	11		0		0		0			
NEREIS SP.	0		0		0		11			
NEREIS RIISEI	0		21		0		0			
NEREIS LAMELLOSA	0		11		11		0			
LAONEREIS CULVERI	11		21		0		0			
NEPHTYS SP.	0		0		0		21			
GLYCERA SP. C	32		75		11		75			
GLYCERA SP.	0		0		21		0			
HEMIPODUS ROSEUS	0		0		160		11			
GLYCIDAE SOLITARIA	64		245		21		11			
GONIADIDES CAROLINAE	0		0		757		21			
ONUPHIDAE SP.	0		0		75		0			
KINBERGONUPHIS SIMONI	128		523		117		0			
MOOREONUPHIS NEBULOSA	0		21		0		21			
LUMBRINERIS VERRILLI	75		2859		43		555			

BENTHOS ABUNDANCE BY STATION AND SPECIES

2

NUMBER PER SQUARE METER
JANUARY 1984

SPECIES NAME	31	32	33	34	STATION 35	36	37	38	39	40
LUMBRINERIS SP. D	0		0		11		0			
LUMBRINERIS TENUIS	0		11		0		0			
HAPLOSCOLOPLOS FOLIOSUS	245		32		21		128			
SCOLOPLOS RUBRA	235		32		0		0			
SCOLOPLOS SP.	0		0		0		85			
ORBINIA RISERI	0		0		11		11			
ARICIDEA PHILBINA	971		1173		32		149			
ARICIDEA TAYLORI	149		75		11		43			
ARICIDEA FRAGILIS	0		0		0		21			
CIRROPHORUS LYRA	32		11		213		32			
SPIONIDAE SP.	0		0		11		0			
POLYDORA WEBSTERI	0		53		53		341			
POLYDORA SP.	11		0		75		0			
PRIONOSPION HETEROBRANCHIA	75		43		11		0			
PRIONOSPION CRISTATA	0		0		171		53			
SPIO PETTIBONEAE	0		32		491		53			
SPIOPHANES BOMBYX	0		0		11		21			
PARAPRIONOSPION PINNATA	352		309		0		21			
STREBLOSPION BENEDICTI	21		21		11		0			
SCOLELEPIS TEXANA	299		1067		0		32			
APOPRIONOSPION PYGMAEA	0		0		0		85			
MINUSPION CIRRIFERA	11		21		11		0			
CARAZIELLA HOBSONAE	32		117		0		0			
MAGELONA PETTIBONEAE	139		64		0		0			
POECILOCHAETUS JOHNSONI	0		11		43		0			
SPIOCHAETOPTERUS C. OCULATUS	11		149		11		64			
CIRRATULIDAE SP.	0		0		11		0			
CAULLERIELLA SP.	0		75		0		85			
THARYX CF. DORSOBRANCHIALIS	384		555		11		64			
HYBOSCOLEX LONGISETA	0		0		11		0			
ARMANDIA MACULATA	0		0		0		53			
CAPITELLIDAE SP.	0		11		21		0			
NOTOMASTUS LATERICEUS	0		0		0		11			
MEDIOMASTUS AMBISETA	1931		2944		21		139			
MEDIOMASTUS CALIFORNIENSIS	0		11		427		1312			
SCYPHOPROCTUS SPP.	0		0		21		0			
ASYCHIS ELONGATA	53		160		11		0			
CLYMENELLA TORQUATA	0		11		0		0			
AXIOTHELLA MUCOSA	96		1408		5536		267			
OWENIA FUSIFORMIS	0		0		11		11			
MYRIOCHELE OCULATA	0		1696		181		267			
SABELLARIA VULGARIS	0		75		117		21			
PECTINARIA GOULDII	0		75		0		0			
MELINNA MACULATA	11		0		0		0			
ISOLDA PULCHELLA	0		0		11		0			
TEREBELLIDAE UNID. SP.	53		405		11		64			
POLYCIRRUS SP.	0		0		0		96			
AMAEANA TRILOBATA	0		85		43		21			
TEREBELLIDES STROEMI	0		96		0		149			
CHONE AMERICANA	64		32		277		213			
MEGALOMMA BIOCULATUM	0		32		0		0			
FABRICIA SABELLA	75		2432		17845		1131			
HYPSICOMUS PHAEOTAENIA	0		0		11		0			

BENTHOS ABUNDANCE BY STATION AND SPECIES

3

NUMBER PER SQUARE METER
JANUARY 1984

SPECIES NAME	31	32	33	34	STATION 35	36	37	38	39	40
SPIRORBIS SPIRILLUM	0		11		0		0			
HYDROIDES DIANTHUS	0		0		11		0			
BOGUEA ENIGMATICA	0		1899		43		139			
POLYGORDIUS SP.	0		0		11		0			
OLIGOCHAETE	6037		2261		683		43			
GASTROPODA SP.	0		0		11		32			
RISSOINA CATESBYANA	11		0		0		0			
CYCLOSTREMISCUS PENTAGONUS	0		11		0		0			
SOLARIOBIS SHIMERI	11		0		0		0			
CAECUM PULCHELLUM	21		0		0		0			
CAECUM STRIGOSUM	0		0		277		11			
CAECUM IMBRICATUM	0		0		43		11			
DIASTOMA VARIUM	21		0		21		0			
EPITONIUM NOVANGLIAE	0		0		0		128			
SCHWENGELIA FLORIDANA	0		11		0		0			
SCHWENGELIA SP.	0		0		0		11			
MELANELLA INTERMEDIA	0		0		11		0			
MELANELLA CONOIDEA	0		21		0		53			
STROMBIFORMIS HEMPHILLI	0		0		0		21			
CALYPTRAEA CENTRALIS	0		0		0		53			
CREPIDULA PLANA	0		0		21		0			
CREPIDULA MACULOSA	11		0		437		21			
NATICA PUSILLA	0		11		0		0			
POLINICES DUPLICATUS	0		0		11		21			
MITRELLA LUNATA	0		0		11		0			
ANACHIS OBESA	32		32		107		21			
CANTHARUS CANCELLARIUS	0		0		11		224			
NASSARIUS VIBEX	0		0		0		21			
OLIVELLA SP. A	21		21		0		0			
OLIVELLA SP. B	0		0		0		32			
OLIVELLA PERPLEXA	11		416		0		128			
OLIVELLA MINUTA	0		0		0		11			
GRANULINA OVULIFORMIS	11		0		0		0			
MARGINELLA APICINA	213		96		0		0			
MARGINELLA AUREOCINCTA	0		43		11		32			
MARGINELLA LAVALLEEANA	0		21		0		0			
CRYOTURRIS CERINELLA	0		267		0		0			
ODOSTOMIA SP.	0		11		0		0			
ODOSTOMIA IMPRESSA	0		107		0		32			
ODOSTOMIA BISUTURALIS	21		0		0		0			
TURBONILLA CONRADI	0		0		0		11			
TURBONILLA INTERRUPTA	96		331		0		0			
TURBONILLA DALLI	0		53		11		0			
ACTEON PUNCTOSTRIATUS	0		11		0		11			
ACTEON CANALICULATA	0		32		0		0			
PHILINE INFUNDIBULUM	800		576		0		21			
HAMINOE SUCCINEA	0		0		0		11			
NUDIBRANCHIA SP.	160		363		0		21			
POLYPLACOPHORA SP.	11		11		0		0			
APLACOPHORA SP. A	0		11		64		0			
BIVALVIA SP.	0		0		11		0			
LUMBRINERIS SP.	0		0		21		32			
NUCULA PROXIMA	0		0		32		0			
	0		139		0		96			

BENTHOS ABUNDANCE BY STATION AND SPECIES

4

NUMBER PER SQUARE METER
JANUARY 1984

SPECIES NAME	31	32	33	34	STATION 35	36	37	38	39	40
NUCULANA ACUTA	0		21		11		352			
ANADARA TRANSVERSA	0		0		0		11			
MUSCULUS LATERALIS	0		53		107		0			
BRACHIDONTES EXIUSTUS	21		0		107		0			
AMYGDALUM PAPHIUM	0		11		0		0			
LIOBERUS CASTANEUS	0		0		43		11			
LUCINA NASSULA	11		0		0		0			
DIPLODONTA PUNCTATA	0		0		11		64			
MYSELLA PLANULATA	96		64		11		11			
CARDITAMERA FLORIDANA	0		11		0		0			
CRASSINELLA LUNULATA	0		0		53		11			
LAEVICARDIUM MORTONI	0		43		43		0			
TRACHYCARDIUM MURICATUM	0		0		11		11			
TELLINA SP.	11		0		0		11			
TELLINA VERSICOLOR	0		32		0		384			
TELLINA TEXANA	0		0		21		0			
TAGELUS PLEBIUS	0		0		11		0			
TAGELUS DIVISUS	0		0		0		11			
SEMELE BELLASTRIATA	0		0		11		64			
SEMELE SP. (JUV.)	0		21		0		0			
ABRA AEQUALIS	0		85		43		1077			
DOSINIA DISCUS	0		0		0		11			
MERCENARIA CAMPECHIENSIS	0		0		32		32			
CHIONE CANCELLATA	0		0		11		0			
CORBULA CONTRACTA	0		0		43		11			
PHOLADIDAE SP.	0		0		21		64			
LYONSIA HYALINA FLORIDANA	0		11		117		43			
ASTHENOTHAERUS HEMPHILLI	0		0		0		53			
CARDIOMYA GEMMA	0		0		0		32			
HYDRACARINA SP.	0		0		21		32			
ANOPILODACTYLUS PETIOLATUS	0		0		11		0			
MYODOCOPA SP.	75		416		395		544			
PARASTEROPE POLLEX	32		576		0		96			
HAPLOCYTHERIDA SETIPUNCTATA	0		0		32		0			
CALANOID COPEPODA	181		203		288		75			
HARPACTICOID COPEPODA	203		64		405		128			
BALANUS VENUSTUS	0		0		32		0			
OXYUROSTYLIS SMITHI	32		0		43		267			
CUMELLA SP. B	0		309		85		0			
CUMELLA SP. A.	0		32		203		0			
CYCLASPIS SP. B	0		11		96		96			
CYCLASPIS SP. A	21		0		11		21			
APSEUDES PROPINQUUS	0		0		11		0			
HALMYRAPSEUDES CF. CUBANENSIS	0		43		0		0			
KALLIAPSEUDES SP. A	0		21		117		53			
HARGERIA RAPAX	11		0		43		0			
APANTHURA MAGNIFICA	0		11		21		21			
APANTHURA CF. SIGNATA	0		0		160		96			
HOPLOANTHURA IRPEX	0		0		21		0			
PANANTHURA FORMOSA	0		0		11		0			
PARACERCEIS CAUDATA	0		64		0		0			
SEROLIS MGRAYI	0		0		0		11			
MUNNA CF. HAYESI	0		0		53		320			

BENTHOS ABUNDANCE BY STATION AND SPECIES

5

NUMBER PER SQUARE METER
JANUARY 1984

SPECIES NAME	31	32	33	34	STATION 35	36	37	38	39	40
AMPELISCA HOLMESI	0		21		0		139			
AMPELISCA SP. C	0		0		0		11			
AMPELISCA SP. B	0		0		0		11			
AMPELISCA ABDITA	0		53		32		96			
GITANOPSIS SP.	0		0		117		0			
CYADUSA COMPTA	64		128		0		0			
LEMBOS SMITHI	0		117		437		128			
MICRODEUTOPUS MYERSI	0		21		523		192			
ACUMINODEUTOPUS NAGLEI	11		96		43		117			
BATEA CF. CATHARINENSIS	0		85		32		0			
COLOMASTIX SP.	0		0		0		11			
CERAPUS SP. A	0		11		85		0			
COROPHIUM ACHERUSICUM	0		96		0		0			
COROPHIUM TUBERCULATUM	0		0		864		11			
ERICTHONIUS BRASILIENSIS	0		11		373		85			
GRANDIDIERELLA BONNIERIDES	21		85		160		21			
ELASMOPUS LEVIS	11		0		0		0			
MAERA CF. WILLIAMSII	0		0		2283		0			
PHOTIS MELANICUS	0		11		43		53			
LISTRIELLA CF. BARNARDI	11		107		53		75			
MONOCULODES NYEI	0		43		0		21			
SYNCHELIDIUM CF. AMERICANUM	0		0		0		11			
EUDEVENOPUS HONDURANUS	0		0		0		32			
STENOTHOE CF. MINUTA	0		0		11		11			
TIRON TRIOCCELLATUS	0		0		149		0			
PARACAPRELLA TENUIS	0		128		53		0			
LUCONACIA INCERTA	0		32		11		0			
LEPTOCHELA SERRATORBITA	0		0		0		11			
PAGURIDAE SP.	11		11		53		11			
PAGURUS BREVIDACTYLUS	0		11		0		0			
PAGURUS CAROLINENSIS	0		0		0		11			
HETEROCRYPTA GRANULATA	0		0		11		0			
PELIA MUTICA	0		11		0		0			
PORTUNUS GIBBESII	0		0		11		0			
PANOPEUS HERBSTII	0		0		0		11			
PANOPEUS HERBSTII F. SIMPSONI	0		11		0		0			
PINNOTHERIDAE SP.	0		21		32		0			
PINNIXA CHAETOPTERANA	0		0		0		11			
SIPUNCULA SP.	0		32		0		0			
PHASCOLION SP.	363		533		21		85			
GLOTTIDIA PYRAMIDATA	0		0		75		11			
AMPHIURIDAE SP.	11		437		96		245			
AMPHIODIA PULCHELLA	0		0		0		11			
AMPHIOPUS ABDITUS	0		11		0		0			
HOLOTHUROIDEA SP.	0		11		0		0			
MOLGULIDAE SP.	0		11		0		0			
BRANCHIOSTOMA SP.	0		0		21		11			
TOTAL DENSITY	15712		36491		43552		14357			
TOTAL NUMBER OF SPECIES	72		129		155		143			

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER

FEBRUARY 1984

SPECIES NAME	1	2	3	4	5	6	7	8	9	10
ANEMONE SP.	0	32	0	0	0	11	0	0	0	0
HYDROZOA SP.	0	11	11	0	0	0	0	0	0	0
ATHENARIA	0	11	32	0	0	0	11	0	0	0
THENARIA SP.	0	0	11	0	0	0	0	0	0	0
STYLOCHUS SP.	0	21	0	0	0	0	32	0	0	0
EUPLANA GRACILIS	0	0	32	0	0	0	0	0	0	0
NEMERTINA SP. = RHYNCHOCELE	75	203	640	11	149	117	149	75	11	85
NEMATODA	864	0	149	0	0	0	0	0	0	43
POLYNOID SP. C	0	0	0	0	0	0	0	0	0	11
POLYNOID GENUS D	0	0	0	0	0	0	0	0	0	0
POLYNOID GENUS B	0	0	0	0	0	0	0	0	32	96
STHENELAIS OBLIQUIS	0	0	0	0	0	0	0	0	0	64
PARAMPHINOME SP. B	0	0	0	0	0	0	0	0	0	11
PHYLLODOCE CASTANEA	0	0	0	0	0	0	0	0	0	43
PHYLLODOCE ARENAE	0	0	11	0	0	0	0	0	0	0
PHYLLODOCE SP.	11	0	0	0	11	0	0	0	0	0
ETEONE HETEROPODA	0	0	11	0	0	0	0	0	0	0
EULALIA SANGUINEA	0	0	11	0	11	0	0	0	0	0
PARANAITIS SPECIOSA	0	0	53	0	0	0	64	11	43	11
GYPTIS BREVIPALPA	0	0	0	0	0	0	0	21	0	0
PODARKE OBSCURA	0	0	0	0	0	0	21	0	21	11
SIGAMBRA BASSI	0	0	11	0	0	0	0	0	0	0
PARANDALIA AMERICANA	0	0	0	11	0	0	0	0	0	0
EXOGONE DISPAR	64	11	0	128	53	21	0	0	0	0
SPHAEROSYLLIS SPP.	0	0	501	0	0	0	0	0	0	0
SPHAEROSYLLIS TAYLORI	0	11	245	0	0	0	0	0	11	0
SPHAEROSYLLIS LONGICAUDA	0	0	96	0	11	0	96	0	11	0
BRANIA CLAVATA	0	21	21	0	0	0	0	0	0	0
EHLERSIA CORNUTA	0	0	43	0	0	0	11	0	0	0
HAPLOSYLIS SPONGICOLA	0	0	0	0	11	0	0	0	0	0
STREPTOSYLLIS PETTIBONEAE	0	0	21	21	0	11	32	0	0	0
PARAPIONOSYLLIS LONGICIRRATA	0	0	75	0	0	0	0	0	0	0
PARAPIONOSYLLIS SP.	0	0	11	0	0	0	0	0	0	0
NEREIDAE SP.	0	0	32	0	0	0	0	0	0	0
CERATONEREIS IRRITABILIS	0	0	11	0	0	0	0	0	0	0
NEANTHES MICROMMA	0	0	0	0	0	0	0	0	0	0
NEANTHES SUCCINEA	0	0	53	0	0	0	0	0	0	0
PLATYNEREIS DUMERILII	11	320	53	21	21	11	53	0	0	0
LAONEREIS CULVERI	0	0	21	0	0	0	0	0	0	0
NEPHTYS CF. BUCERA	128	43	0	0	0	0	0	0	0	0
GLYCERA AMERICANA	0	0	32	0	0	0	0	0	0	11
GLYCERA SP. C	0	21	32	0	21	11	11	32	11	11
GLYCINDE SOLITARIA	0	107	21	0	11	11	21	53	11	0
GONIADIDES CAROLINAE	0	0	0	0	0	0	0	0	0	11
DIOPATRA CUPREA	0	64	21	0	0	0	11	0	0	0
KINBERGONUPHIS SIMONI	0	107	971	0	0	0	0	0	0	0
MOOREONUPHIS NEBULOSA	0	779	0	0	0	0	427	0	0	32
MARPHISA SANGUINEA	0	0	0	11	0	0	0	0	0	0
LUMBRINERIS VERRILLI	0	21	85	0	0	0	53	0	0	192
DRILONEREIS LONGA	0	0	0	0	0	0	0	0	0	0
PETTIBONEIA SP. A	0	0	11	0	0	0	0	0	11	0
HAPLOSOCOLOPLOS FOLIOSUS	864	341	160	576	949	448	235	3360	3477	2176
HAPLOSOCOLOPLOS FRAGILIS	0	0	21	480	1013	864	11	1003	629	341

BENTHOS ABUNDANCE BY STATION AND SPECIES

2

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	1	2	3	4	5	6	7	8	9	10
HAPLOSCOLOPLOS SP.	0	0	32	0	0	0	0	0	0	0
NAINERIS SP.	0	0	32	0	0	0	0	0	0	0
SCOLOPLOS RUBRA	0	53	32	32	11	0	0	0	0	0
PARAONIDAE	0	0	21	0	0	0	107	0	11	21
ARICIDEA PHILBINA	11	917	11	480	1483	768	704	64	0	0
ARICIDEA TAYLORI	21	1120	171	0	11	11	256	117	85	64
ARICIDEA SP. C	0	0	11	0	0	0	0	0	0	21
CIRROPHORUS LYRA	0	0	32	0	11	0	43	0	0	0
SPIONIDAE SP.	11	0	32	0	0	0	0	0	0	0
POLYDORA LIGNI	373	192	21	21	0	128	11	0	0	0
POLYDORA SOCIALIS	0	0	11	0	0	0	128	0	11	11
POLYDORA WEBSTERI	0	0	0	0	0	0	0	0	0	11
PRIONOSPION HETEROBRANCHIA	0	0	11	0	0	0	0	0	0	0
PRIONOSPION CRISTATA	0	0	11	0	0	0	0	0	0	0
SPIO PETTIBONEAE	0	0	21	0	0	0	0	11	0	0
SPIOPHANES BOMBYX	0	64	309	11	0	0	0	0	0	0
POLYDORID SP.	11	0	43	0	0	0	43	11	32	85
PARAPRIONOSPION PINNATA	0	117	0	64	107	64	11	1387	725	149
STREBLOSPION BENEDICTI	1621	1419	245	6357	7136	7808	2208	3925	1099	11
SCOLELEPIS TEXANA	11	427	85	139	128	21	768	96	128	21
APOPRIONOSPION PYGMAEA	0	0	107	0	11	0	0	0	0	0
MINUSPION CIRRIFERA	0	0	11	0	11	0	0	11	192	384
CARAZIELLA HOBSONAE	0	0	21	0	0	0	21	0	32	309
MAGELONA PETTIBONEAE	0	555	107	0	0	0	32	0	0	0
SPIOCHAETOPTERUS C. Oculatus	0	117	75	0	0	11	21	85	192	267
CIRRATULIDAE SP.	0	0	32	0	0	0	0	0	0	0
CAULLERIELLA SP.	0	0	0	0	0	0	0	0	0	11
THARYX C. DORSOBRANCHIALIS	11	267	64	0	11	11	341	21	256	832
THARYX SP.	11	0	21	0	0	0	0	0	0	11
CHAETOZONE SP.	0	0	0	0	0	0	0	0	0	32
CAPITELLA CAPITATA	75	320	32	768	352	117	0	0	0	0
HETEROMASTUS FILIFORMIS	181	32	0	0	0	0	0	0	0	0
NOTOMASTUS LATERICEUS	0	0	0	0	0	0	0	0	0	64
MEDIOMASTUS AMBISETA	96	885	2155	1205	2037	405	1237	11	373	96
MEDIOMASTUS CALIFORNIENSIS	0	0	32	0	0	0	0	11	0	0
MEDIOMASTUS SP.	85	0	0	0	0	0	0	427	0	0
MALDANIDAE	0	0	43	0	0	0	0	0	0	0
ASYCHIS ELONGATA	0	0	0	0	0	0	0	0	0	0
CLYMENELLA TORQUATA	0	0	43	0	0	0	21	0	11	107
MALDANE SARSI	0	0	0	0	0	0	0	0	0	21
AXIOTHELLA MUCOSA	0	0	43	0	0	0	32	0	21	0
OWENIA FUSIFORMIS	11	0	11	0	0	0	0	0	0	21
MYRIOCHELE Oculata	11	0	160	0	0	0	0	0	43	1397
PECTINARIA GOULDII	0	0	11	0	0	0	21	0	21	32
AMPHARETIDAE SP.	0	0	0	32	0	11	0	0	0	0
AMPHICTEIS GUNNERI	21	0	0	32	0	0	0	0	0	0
MELINNA MACULATA	0	0	11	0	0	0	0	0	0	0
TEREBELLIDAE UNID. SP.	0	0	11	0	0	0	0	0	11	0
PISTA CRISTATA	0	32	96	0	0	0	53	0	0	0
POLYCIRRUS SP.	0	0	11	0	0	0	0	0	0	0
AMAEANA TRILOBATA	0	0	32	0	0	0	0	0	0	11
SABELLIDAE	0	0	11	0	0	0	0	0	0	0
CHONE AMERICANA	0	32	32	21	11	0	117	43	0	0

NUMBER PER SQUARE METER

FEBRUARY 1984

SPECIES NAME	1	2	3	4	5	6	7	8	9	10
MEGALOMMA BIOCLUTUM	0	0	0	0	0	0	0	0	0	0
FABRICIA SABELLA	0	0	133	0	11	0	160	0	11	0
BOGLEA ENIGMATICA	0	0	0	0	0	0	0	0	0	0
OLIGOCHAETE	149	299	832	160	533	203	629	64	171	96
GASTROPODA SP.	11	0	0	0	0	0	0	0	0	0
SAYELLA FUSCA	11	0	0	0	0	0	0	0	0	0
SAYELLA HEMPHILLI	0	53	0	0	0	0	0	0	0	0
SOLARIOBIS SHIMERI	0	0	0	0	0	0	0	0	0	0
CAECUM PULCHELLUM	0	0	0	32	11	53	0	11	0	0
CAECUM STRIGOSUM	0	0	651	0	0	0	0	0	0	0
DIATOMA VARIUM	0	0	0	0	0	0	0	0	21	0
CREPIDULA PLANA	0	96	75	0	0	0	0	0	43	0
CREPIDULA MACULOSA	0	43	43	0	0	0	11	32	43	11
NATICA PUSILLA	0	43	21	0	0	0	0	0	0	0
MITRELLA LUNATA	0	0	0	0	0	0	0	0	0	0
ANACHIS SEMPLICATA	11	117	448	0	0	0	0	0	11	0
ANACHIS OBESA OSTREICOLA	0	0	11	0	0	0	0	0	0	0
NASSARIUS VIBEX	0	0	11	0	0	0	0	0	0	0
OLIVELLA SP. B	0	0	32	0	0	0	11	0	0	0
OLIVELLA MINUTA	0	0	0	0	0	0	0	0	0	0
GRANULINA OVULIFORMIS	0	0	11	0	0	0	11	0	11	0
MARGINELLA APICINA	0	0	0	0	0	0	21	0	0	0
ODOSTOMIA SP.	0	0	43	0	0	0	11	0	0	0
ODOSTOMIA IMPRESSA	64	53	21	203	715	395	0	480	427	11
ODOSTOMIA BISUTURALIS	11	0	0	0	0	0	0	0	0	11
TURBONILLA SP.	0	43	0	0	0	0	32	0	0	0
TURBONILLA CONRADI	11	0	0	0	0	0	0	0	53	11
TURBONILLA INTERRUPTA	0	0	0	0	0	0	0	0	0	0
TURBONILLA DALLI	0	0	21	0	0	0	0	21	0	0
ACTEON PUNCTOSTRIATUS	0	43	11	0	0	0	0	11	0	0
ACTEON PUNCTOSTRIATUS	0	11	11	21	0	0	0	11	0	0
ACTEON CANALICULATA	32	181	64	11	64	96	11	21	64	32
BULLA STRIATA	0	96	0	0	0	32	0	0	64	21
HAMINOE SUCCINEA	0	0	0	0	0	0	0	32	0	0
CYLINDROBULLA BEAUII	0	0	21	0	0	0	0	0	0	0
APLYSIIDAE SP.	0	11	11	0	0	0	0	0	0	0
NUDIBRANCHIA SP.	0	32	75	0	0	0	0	0	0	0
BIVALVIA SP.	0	0	32	0	0	0	0	0	0	21
NUCULA PROXIMA	0	0	11	0	0	0	0	11	11	32
NUCULANA ACUTA	0	0	32	0	0	0	0	0	0	0
MUSCULUS LATERALIS	0	0	160	0	0	0	0	0	0	0
BRACHIDONTES EXUSTUS	0	128	597	0	0	11	0	11	11	0
AMYGDALUM PAPHIUM	0	320	32	0	0	0	32	0	11	0
LIOBERUS CASTANEUS	75	0	0	0	0	0	0	0	0	0
DIPLODONTA PUNCTATA	11	0	0	0	0	0	0	0	0	0
MYSELLA PLANULATA	0	0	0	0	0	0	0	0	0	43
NEAROMYA FLORIDANA	0	704	267	11	32	11	128	11	128	160
ENSITELLOPS SP.	0	0	0	0	0	0	0	0	0	341
LAEVICARDIUM MORTONI	0	43	0	0	0	0	0	0	0	0
MULINIA LATERALIS	0	0	11	0	0	0	0	0	0	0
ENSIS MINOR	0	11	11	21	21	0	0	32	43	21
MACOMA TENTA	0	0	85	11	0	0	0	0	0	0
TELLINA SP.	11	149	11	0	181	0	11	75	75	341
TELLINA VERSICOLOR	0	0	0	0	0	0	0	0	32	21

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	1	2	3	4	5	6	7	8	9	10
TELLINA TEXANA	85	0	0	128	0	320	0	21	0	0
TAGELUS PLEBIUS	4917	11	0	11	0	0	0	0	0	0
TAGELUS SP.	0	0	0	0	11	0	0	0	0	0
MERCENARIA CAMPECHIENSIS	0	0	21	0	0	0	0	0	11	0
PARASTARTE TRIQUERTA	373	0	0	0	0	11	0	0	0	0
CORBULA CONTRACTA	0	0	0	0	0	0	0	0	0	0
LYONSIA HYALINA FLORIDANA	0	0	0	0	0	0	0	0	11	0
ANOPLODACTYLUS PETIOLATUS	0	0	0	0	0	0	11	0	0	0
MYODOCOPA SP.	0	0	0	0	0	0	0	0	0	0
PARASTEROPE POLLEX	0	11	0	0	11	0	0	11	11	0
PDODCOPA SPP.	0	0	0	0	0	0	0	0	11	64
HAPLOCYTHERIDA SETIPUNCTATA	0	21	0	0	0	0	0	11	0	75
CALANOID COPEPODA	171	0	0	0	64	21	0	0	32	21
HARPACTICOID COPEPODA	0	11	21	11	11	11	0	0	0	0
BALANUS IMPROVISUS	0	11	0	21	0	0	0	0	0	0
BALANUS VENUSTUS	0	0	256	0	0	0	352	0	0	11
MYSIDOPSIS BIGELOWI	0	11	0	0	0	0	0	0	0	0
LEUCON SP. A	0	0	0	21	0	11	11	11	0	0
OXYUROSTYLIS SMITHI	0	0	0	0	0	0	0	0	0	0
CYCLASPIS SP. A	11	512	725	21	11	21	128	0	21	64
HALMYRAPSEUDES CF. CUBANENSIS	0	53	363	544	192	309	128	0	21	11
KALLIAPSEUDES SP. A	6869	0	0	288	0	11	0	75	267	0
TANAIS CAVOLINII	0	0	11	0	0	0	0	0	0	0
HARGERIA RAPAX	0	0	0	0	11	0	0	0	0	0
CYATHURA POLITA	32	171	32	0	0	0	11	0	0	0
APANTHURA MAGNIFICA	149	0	0	0	0	0	0	0	0	0
XENANTHURA BREVITELSON	0	0	0	0	0	0	0	0	0	0
PARACERCEIS CAUDATA	2176	0	0	11	0	0	32	0	0	0
CYMODOCCE FAXONI	0	0	21	0	0	0	0	0	0	0
ERICHSONELLA CF. ATTENUATA	0	11	21	0	0	0	0	0	0	0
EDOTEA TRILOBA	0	85	85	0	0	0	0	0	0	0
AMPELISCA HOLMESI	11	43	0	0	0	0	64	0	0	0
AMPELISCA SP. B	21	373	43	11	0	0	21	0	0	0
AMPELISCA ABDITA	21	0	0	0	0	0	0	0	0	0
CYMAUDUSA COMPTA	32	448	235	597	32	11	0	0	0	0
MICRODEUTOPUS MYERSI	0	469	3125	11	43	0	107	11	32	53
ACUMINODEUTOPUS NAGLEI	11	0	11	0	0	0	0	0	0	0
BATEA CF. CATHARINENSIS	0	0	11	0	0	0	0	0	0	0
CERAPUS SP. A	0	0	0	0	11	11	0	0	0	0
COROPHIUM ACHERSUCUM	32	75	597	0	0	64	0	0	11	11
COROPHIUM LACUSTRE	0	0	0	11	0	0	11	0	11	32
COROPHIUM TUBERCULATUM	0	0	0	0	395	0	0	0	0	0
ERICHTHONIUS BRASILIENSIS	11	11	128	21	160	21	11	32	75	96
GRANDIDIERELLA BONNIEROIDES	0	43	43	0	0	0	11	0	0	0
ELASMOPUS LEVIS	0	555	75	0	11	0	11	0	0	0
GAMMARUS MUCRONATUS	0	0	0	11	0	0	0	0	0	0
MAERA CF. WILLIAMSII	0	11	0	0	0	0	0	0	0	0
MELITA ELONGATA	0	0	0	43	32	11	0	0	0	0
PHOTIS MELANICUS	0	0	0	0	0	0	0	0	0	0
LISTRIELLA CF. BARNARDI	0	0	0	0	0	0	0	0	0	11
MONOCULODES NYEI	21	0	0	11	11	0	0	0	21	11
PDODCERUS SP.	11	11	0	0	0	0	0	0	0	0
STENOITHOE CF. MINUTA	0	0	0	0	11	0	0	0	0	21

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER

FEBRUARY 1984

SPECIES NAME	1	2	3	4	5	6	7	8	9	10
PARACAPRELLA TENUIIS	0	11	149	11	0	0	64	0	11	0
LUCONACIA INCERTA	0	0	11	0	0	0	0	0	0	0
LEPTOCHELA SERRATORIS	0	11	0	0	0	0	0	0	0	0
PALAEOMETES INTERMEDIUS	0	11	0	0	0	0	0	0	0	0
OGYRIDES ALPHAEOSTRIS	0	0	0	64	43	21	0	11	0	11
PAGURIDAE SP.	0	0	11	11	0	0	0	0	0	0
PAGURUS MACLAUGHLINAE	0	0	11	0	0	0	0	0	0	0
PAGURUS CAROLINENSIS	0	0	11	0	0	0	0	0	0	0
XANTHIDAE SP.	0	21	0	0	0	0	0	0	0	0
PANOEUS HERBSTII	0	0	32	0	0	0	0	0	0	0
PINNOPTERIDAE SP.	0	0	11	0	0	11	0	0	21	0
PINNIXA PEARSEI	0	0	0	0	0	0	0	0	0	32
PINNIXA RETINENS	0	0	0	0	0	0	0	0	0	11
CHIRONOMIDAE	21	0	0	0	0	0	0	0	0	0
PHASCOLION SP.	0	11	21	0	0	0	0	0	0	0
ECHIURA SP.	0	0	0	0	0	0	0	0	0	21
PHORONIS ARCHITECTA	0	64	53	0	0	0	0	0	11	21
BRYOZOA SP.=ECTOPROCTA	0	0	21	0	0	0	213	0	0	21
GLOTTIDIA PYRAMIDATA	0	0	53	0	0	0	0	11	0	0
AMPHIURIDAE SP.	0	0	0	0	0	0	0	0	0	0
AMPHIODIA PULCHELLA	0	0	0	0	0	0	21	0	53	0
MICROPHOLIS GRACILLIMA	0	0	0	0	0	0	0	0	32	0
OPHIOPHRAGMUS FILOGRANEUS	0	21	0	0	0	0	0	0	43	160
HOLOTHUROIDEA SP.	0	0	0	0	21	0	0	11	0	0
ENTEROPNEUSTA SP.	0	0	117	0	0	0	0	0	11	0
MYRUPHI, PUNCTATUS	0	0	0	0	0	11	0	0	0	32
TOTAL DENSITY	19947	14240	19115	12747	16224	12533	9717	11787	9547	9141
TOTAL NUMBER OF SPECIES	53	81	138	48	50	43	67	44	73	80

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	11	12	13	14	15	16	17	18	19	20
ANEMONE SP.	0	0	0	0	0	0	0	0	0	0
PORIFERA SP.	0	0	11	0	0	0	0	0	11	11
LISSODENDORYX ISODICTYALIS	11	0	0	0	0	0	0	0	0	0
HYDROZOA SP.	11	0	0	0	0	0	0	0	0	0
ATHENARIA	32	0	11	11	0	0	0	0	0	0
NEMERTINA SP. = RHYNCHOCOEL	309	171	331	32	75	235	64	395	192	747
NEMATODA	715	4160	683	0	43	917	128	608	171	1472
LEPIDONOTUS SUBLEVIS	21	0	0	0	0	0	0	0	0	0
LEPIDONOTUS VARIABILIS	0	0	11	0	0	0	0	0	0	0
LEPIDASTHENIA VARIUS	11	0	0	0	0	0	0	0	0	0
POLYDONTES LUPINA	0	11	0	0	0	0	0	0	0	0
STHENELAIS OBLIQUIS	0	11	0	0	0	0	0	0	0	0
STHENELAIS BOA	43	0	0	0	0	0	0	0	0	0
PALEANOTUS HETEROSETA	0	75	0	0	0	0	0	0	0	0
PARAMPHINOME SP. B	21	224	0	0	0	0	0	0	0	0
PHYLLODOCE CASTANEA	21	11	0	0	11	0	0	0	0	0
PHYLLODOCE ARENAE	21	11	0	0	0	11	0	0	0	0
ETEONE SP.	0	0	11	0	0	0	0	0	0	0
EULALIA SANGUINEA	213	299	53	21	139	53	0	85	85	96
GYPTIS BREVIPALPA	43	21	0	0	32	32	0	0	0	0
ANCISTROSYLLIS HARTMANAE	0	43	0	0	0	0	0	0	0	0
PARANDALIA AMERICANA	0	0	0	0	11	0	0	0	0	0
AUTOLYTUS DENTALIUS	32	0	11	0	0	0	0	0	0	0
TYPOSYLLIS PROLIFERA	0	0	0	0	0	0	0	0	0	0
TYPOSYLLIS CF. LUTEA	0	0	427	0	0	0	0	0	128	0
EXOgone DISPAR	331	107	0	0	11	0	21	139	960	32
EXOgone LOUREI	32	43	0	0	11	11	0	0	11	0
SPHAEROSYLLIS SPP.	0	0	0	0	11	0	0	0	0	21
SPHAEROSYLLIS TAYLORI	117	523	672	117	53	149	43	1515	693	2155
SPHAEROSYLLIS LONGICAUDA	75	32	0	11	0	11	32	11	96	0
SPHAEROSYLLIS PIRIFEROPSIS	0	43	0	0	0	0	0	0	0	0
BRANIA WELFLEETENSIS	21	32	0	0	0	11	0	0	0	0
BRANIA CLAVATA	75	0	1205	0	32	11	0	0	53	0
EHLERSIA CORNUJA	43	0	32	0	0	21	0	0	0	0
EHLERSIA FERRUGINA	11	0	0	0	0	0	0	0	0	0
HAPLOSYLLIS SPONGICOLA	5067	0	0	0	0	0	0	0	0	0
ODONTOSYLLIS ENOPLA	11	0	32	0	85	0	0	0	0	0
SYLLIDES FLORIDANUS	11	0	0	0	0	0	0	0	21	0
SYLLIDES SP.	0	11	0	0	0	0	0	0	0	0
STREPTOSYLLIS PETTIBONEAE	0	11	107	32	0	75	21	32	21	11
PARAPONOSYLLIS LONGICIRRATA	11	53	0	0	0	0	0	0	0	0
CERATONEREIS IRRITABILIS	43	128	0	0	0	11	0	0	0	0
NEANTHES MICROMMA	117	32	0	0	0	43	0	0	0	0
NEANTHES SUCCINEA	160	0	43	0	32	0	11	0	75	0
NEREIS FALSA	0	0	0	0	0	0	0	0	32	0
LAONEREIS CULVERI	21	0	149	11	0	0	885	32	0	0
NEPHYTIDAE SP.	21	0	0	0	0	0	0	0	0	0
NEPHYTYS CF. BUCERA	0	21	0	0	0	21	0	0	0	0
GLYCERA AMERICANA	53	43	0	11	32	32	0	21	21	32
GLYCERA SP.	11	0	0	0	0	0	0	0	0	0
GLYCERA SP. A	0	11	0	0	0	0	0	0	0	0
GLYCINDE SOLITARIA	0	0	21	11	21	11	11	0	32	64
GONTADIDES CAROLINAE	149	3253	0	0	0	11	0	0	0	0

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	11	12	13	14	15	16	17	18	19	20
ONUPHIDAE SP.	21	0	0	213	0	0	0	0	0	0
KINBERGONUPHIS SIMONI	267	0	0	75	11	0	0	0	0	0
MOOREONUPHIS NEBULOSA	75	75	64	64	0	149	0	0	0	64
EUNICIDAE SP.	0	0	0	0	0	0	11	0	0	0
MARPHISA SANGUINEA	0	0	11	0	0	0	21	11	0	0
LYSIDICE SP. A	0	0	32	0	0	0	0	0	0	0
LUMBRINERIS VERRILLI	309	117	11	64	11	245	0	213	85	640
LUMBRINERIS SP. D	11	11	0	0	0	64	0	32	0	32
LUMBRINERIS TENUIIS	0	0	21	0	0	0	0	0	0	11
DRILONEREIS LONGA	0	43	0	0	0	11	0	0	0	0
SCHISTOMERINGOS RUDOLPHI	0	0	0	0	0	0	0	0	0	0
PETITBONEIA SP. A	0	11	0	0	0	43	0	0	0	11
HAPLOSOCLOPLOS FOLIOSUS	224	128	373	565	160	416	1664	1664	75	480
HAPLOSOCLOPLOS FRAGILIS	11	11	0	181	32	0	0	32	11	32
NAINERIS SP.	0	0	576	0	107	0	0	32	117	75
SOCLOPLOS RUBRA	11	21	0	21	11	107	0	0	21	21
ORBINIA RISERI	0	11	0	0	0	0	0	0	0	0
ARICIDEA PHILBINAE	53	0	2923	587	43	736	8085	395	64	213
ARICIDEA TAYLORI	21	203	117	256	53	395	992	64	235	363
ARICIDEA SP. C	0	0	0	0	21	96	0	0	0	0
ARICIDEA CATHERINAE	21	213	0	0	0	0	0	0	0	0
ARICIDEA FRAGILIS	0	0	0	0	0	11	0	0	0	0
GIRROPHORUS LYRA	43	395	0	0	11	149	0	0	11	11
SPIONIDAE SP.	21	0	21	0	0	0	0	0	0	0
LAONICE CIRRATA	0	32	0	0	0	0	0	0	0	0
POLYDORA LIGNI	0	0	21	64	21	0	53	53	0	0
POLYDORA SOCIALIS	128	117	501	21	0	96	53	11	21	0
POLYDORA WEBSTERI	181	0	896	0	0	0	43	96	800	0
POLYDORA SP.	0	0	0	0	0	0	0	0	0	21
PRIONOSPION HETERODERANCHIA	11	0	43	11	128	0	11	75	171	53
PRIONOSPION CRISTATA	32	235	0	0	0	0	0	0	11	0
SPION PETTIBONEAE	139	555	0	0	0	0	0	0	21	0
SPIOPHANES BOMBYX	1269	693	0	0	0	0	0	11	21	0
PARAPRIONOSPION PINNATA	53	32	11	235	96	373	32	11	21	11
STREBLOSPIO BENEDICTI	21	32	1280	5365	8459	85	32	53	11	171
SCOLELEPIS TEXANA	160	11	107	480	53	1131	1120	232	213	1333
APOPRIONOSPION PYGMAEA	501	0	0	0	0	128	192	128	21	75
MINUSPIO CIRRIFFERA	0	0	0	0	0	21	0	0	0	0
BOCCARDIELLA HAMATA	0	0	1131	0	0	0	0	0	0	0
CARAZIELLA HOBSONAE	96	53	0	0	53	0	0	0	1589	0
MAGELONA PETTIBONEAE	11	0	0	0	117	107	0	0	0	0
POECILOCHAETUS JOHNSONI	11	11	0	0	11	11	21	0	0	11
SPIOCHAETOPTERUS C. OCULATUS	32	43	0	11	0	139	0	0	0	0
CIRRATULIDAE SP.	0	0	0	0	32	0	0	0	0	0
CAULLERIELLA SP.	32	576	0	0	0	0	0	0	0	0
THARYX CF. DORSOBRANCHIALIS	32	43	992	1792	203	363	597	288	1472	42.5
THARYX SP.	32	0	0	0	0	0	0	0	0	0
CHAETOZONE SP.	32	0	0	0	0	0	0	0	0	0
HYBOSCOLEX LONGISETA	64	0	0	0	0	0	0	0	0	0
ARMANDIA MACULATA	0	0	0	0	0	0	0	0	11	0
CAPITELLA CAPITATA	11	32	0	0	0	0	0	0	0	0
HETEROMASTUS FILIFORMIS	0	0	448	75	75	0	213	384	75	32
NOTOMASTUS LATICEUS	0	0	0	0	0	0	683	43	0	0

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER

FEBRUARY 1984

SPECIES NAME	11	12	13	14	15	16	17	18	19	20
NOTOMASTUS SP.	11	11	0	0	0	11	0	0	0	0
MEDIOMASTUS AMBISETA	363	1792	139	107	213	1749	0	21	373	1952
MEDIOMASTUS CALIFORNIENSIS	117	11	0	0	53	0	53	32	32	181
MEDIOMASTUS SP.	981	0	0	373	149	0	1013	821	11	0
LEIOCHRIDES PALLIDIOR	11	0	0	0	0	0	0	0	0	0
ARENICOLA CRISTATA	0	0	11	0	0	0	0	0	0	0
ASYCHIS ELONGATA	0	0	0	0	21	53	0	0	0	0
CLYMENELLA TORQUATA	299	21	11	0	0	384	43	11	21	75
AXIOHELLA MUCOSA	683	555	277	32	0	0	0	0	11	0
MACROCLYMENE SP.	0	0	0	0	0	0	11	0	0	0
OWENIA FUSIFORMIS	21	0	0	0	0	32	0	0	0	0
MYRTOCHELE OCULATA	491	224	0	0	0	512	11	32	11	64
SABELLARIA VULGARIS	117	0	11	0	11	11	0	0	21	53
PECTINARIA GOULDII	21	0	0	0	0	21	0	0	11	11
AMPHARETIDAE SP.	0	0	0	0	0	0	0	0	0	11
AMPHICTEIS GUNNERI	11	0	11	0	0	0	64	0	0	0
MELINNA MACULATA	0	0	0	0	11	0	0	0	0	0
TEREBELLIDAE UNID. SP.	11	0	0	0	0	0	21	11	0	0
PISTA CRISTATA	85	32	11	0	107	43	43	32	32	160
PISTA SP.	96	0	0	0	0	0	0	0	0	0
PISTA PALMATA	0	0	0	0	0	0	0	0	11	0
POLYCIRRUS SP.	11	213	11	0	0	53	0	0	0	0
LOIMIA MEDUSA	11	0	0	0	0	21	0	0	0	0
AMAEANA TRILOBATA	160	128	11	0	21	21	0	0	0	0
STREBLOSOMA HARTMANAE	0	0	75	0	11	0	0	0	0	0
TEREBELLIDES STROEMI	0	11	0	0	0	0	0	0	0	11
CHONE AMERICANA	85	491	288	245	53	53	75	107	171	331
MEGALOMMA BIOCATUM	75	11	0	0	0	0	0	0	0	0
POTAMILLA RENIFORMIS	43	0	21	0	0	0	0	0	0	0
POTAMILLA SP.	0	0	11	0	0	0	0	0	0	0
SABELLA MICROPHTHALMA	32	0	0	0	0	0	0	0	0	0
FABRICIA SABELLA	1429	1003	2144	0	0	405	0	0	21	0
HYPsicOMUS PHAEOAENIA	0	0	11	0	0	0	11	0	0	181
HYDROIDES DIANTHUS	0	0	32	0	0	0	0	0	11	0
FILOGRANA IMPLEXA	0	0	523	0	0	0	0	0	21	0
BOGUEA ENIGMATICA	107	11	0	0	0	224	0	0	53	320
OLIGOCHAETE	299	725	608	75	1013	341	437	1963	277	373
GASTROPODA SP.	11	0	0	0	0	0	0	0	0	0
HYDROBIIIDAE SP.	11	0	0	0	0	0	0	0	0	0
SOLARIOBIS SHIMERI	0	0	21	0	21	0	0	0	0	0
CAECUM PULCHELLUM	0	0	85	0	608	0	43	32	43	0
CAECUM STRIGOSUM	21	32	0	0	11	0	0	0	352	11
DIASTOMA VARIUM	0	11	11	0	1632	11	0	0	0	0
CERITHIUM MUSCARUM	0	0	32	0	0	0	0	0	0	0
MELANELLA INTERMEDIA	21	0	0	0	0	0	0	0	0	0
CALYPTRAEA CENTRALIS	85	11	0	0	32	0	0	0	0	0
CREPIDULA PLANA	0	0	0	0	117	0	0	0	11	0
CREPIDULA MACULOSA	0	11	0	0	0	43	0	11	0	0
NATICIDAE	43	0	0	0	0	0	0	0	0	0
NATICA PUSILLA	139	0	43	0	309	0	0	21	11	32
MITRELLA LUNATA	0	11	0	0	0	0	0	0	0	0
ANACHIS OBESA	11	0	0	0	0	0	0	0	0	0
ANACHIS FLORIDANA	0	0	0	0	0	0	0	0	0	0

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER

FEBRUARY 1984

SPECIES NAME	11	12	13	14	15	16	17	18	19	20
ANACHIS OBESA OSTREICOLA	0	0	0	0	11	0	0	0	0	0
CANTHARUS CANCELLARIUS	53	21	0	0	0	0	0	0	0	0
NASSARIUS VIBEX	0	0	21	0	0	11	11	0	11	0
OLIVELLA SP. B	53	43	0	0	0	0	0	0	0	0
OLIVELLA MINUTA	0	11	0	0	0	0	0	0	0	0
MARGINELLA APICINA	32	0	0	0	0	11	0	0	0	0
PYRGOCYTHARA PLICOSA	0	0	11	0	0	0	0	0	0	0
ODOSTOMIA SP.	11	0	0	117	0	0	11	11	0	0
ODOSTOMIA IMPRESSA	0	0	0	0	96	0	0	0	0	11
TURBONILLA CONRADI	11	11	0	0	0	53	0	0	0	0
TURBONILLA DALLI	0	11	0	11	0	11	0	0	0	0
ACTEODINA CANALICULATA	0	0	213	373	75	181	320	1301	661	2421
PHILINE INFUNDIBULUM	0	11	0	0	0	0	0	0	0	0
BULLA STRIATA	0	11	0	43	0	0	0	0	0	0
HAMINOE SUCCINEA	0	11	0	0	0	0	11	0	0	0
APLYSIIIDAE SP.	0	0	0	11	0	0	0	85	0	11
NUDIBRANCHIA SP.	0	0	0	11	0	11	0	96	85	43
BIVALVIA SP.	0	11	0	0	0	32	0	0	0	0
LUMBRINERIS SP.	0	11	0	0	11	32	0	0	0	0
NUCULA PROXIMA	43	43	0	0	0	0	0	0	0	0
NUCULANA ACUTA	469	693	0	0	0	43	0	0	0	32
MUSCULUS LATERALIS	149	0	0	0	21	32	0	0	0	0
BRACHIDONTES EXUSTUS	21	0	0	0	405	0	0	0	32	11
LIOPERUS CASTANEUS	0	11	0	0	0	0	0	0	0	0
CODAKIA ORBICULATA	0	0	0	0	11	0	0	0	0	0
DIPLODONTA PUNCTATA	96	43	0	0	0	0	0	0	0	0
MYSELLA PLANULATA	117	85	21	0	480	64	75	0	32	53
ALIGENA TEXASIANA	0	0	0	0	0	21	11	0	0	0
NEAEROMYA FLORIDANA	0	0	0	0	0	21	0	0	0	0
CRASSINELLA LUNULATA	0	53	0	0	0	0	0	0	0	0
MULINIA LATERALIS	43	32	0	0	0	0	0	0	0	0
ENSIS MINOR	288	53	11	0	0	85	0	11	11	0
MACOMA TENTA	0	11	0	0	0	0	0	0	0	0
TELLINA SP.	75	0	0	11	53	32	0	0	0	0
TELLINA VERSICOLOR	0	21	0	0	0	0	0	0	0	0
TAGELUS SP.	0	11	0	0	0	0	0	0	0	0
SEMELE BELLASTRIATA	11	21	0	0	0	0	0	0	0	0
ABRA AEQUALIS	139	491	0	0	0	0	0	0	0	0
DOSINIA DISCUS	0	0	11	0	0	11	0	0	0	0
CORBULA CONTRACTA	21	0	0	0	0	21	0	0	0	0
PHOLIDIDAE SP.	21	0	0	0	0	0	0	0	0	0
LYONSIA HYALINA FLORIDANA	21	0	0	0	0	0	0	0	0	0
DENTALIUM LAQUEATUM	75	64	21	0	0	0	0	0	0	11
HYDRACARINA SP.	0	11	0	0	0	0	0	0	0	0
ANOPLODACTYLUS PETIOLATUS	11	0	0	0	0	0	0	0	0	0
MYODOCOPA SP.	203	448	53	21	53	117	0	32	11	43
PODOCOPA SPP.	0	11	0	0	0	0	0	0	0	0
NAPLOCYTHERIDA SETIPUNCTATA	0	11	0	0	0	0	0	0	0	0
CALANOID COPEPODA	0	53	21	0	0	11	11	21	11	0
HARPACTICOID COPEPODA	0	64	0	0	11	32	0	256	75	11
CYCLOPOID COPEPODA	0	21	0	0	0	0	0	0	0	0
BALANUS IMPROVISUS	0	0	0	0	0	0	0	21	96	0
MYSIDOPSIS BIGELOWI	0	0	0	0	0	11	0	11	0	0

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	11	12	13	14	15	16	17	18	19	20
OXYUROSTYLIS SMITHI	160	619	53	11	64	43	0	0	0	0
CUMELLA SP. B	43	11	0	0	11	11	0	0	0	0
CYCLASPIS SP. B	0	32	0	0	0	0	0	0	0	0
CYCLASPIS SP. A	0	0	53	11	64	32	11	0	0	0
HALMYRAPSEUDES CF. CUBANENSIS	21	32	0	0	11	0	0	0	11	0
KALLIAPSEUDES SP. A	21	277	0	0	0	11	0	0	0	0
ANNAIS CAVOLINII	0	0	0	0	0	0	11	0	0	0
HARGERIA RAPAX	448	0	0	0	0	0	0	0	0	0
APANTHURA MAGNIFICA	0	21	0	0	0	0	0	0	0	0
APANTHURA CF. SIGNATA	43	11	0	0	0	0	0	0	0	0
XENANTHURA BREVITELSON	0	11	107	0	0	0	256	11	0	0
HALIOPHARMA VALERIAE	0	11	0	0	0	0	0	0	0	0
EURYDICE LITTORALIS	11	0	0	0	0	0	0	0	0	0
CYMODOCE FAXONI	0	0	0	11	43	0	0	0	0	0
ERICHSONELLA CF. ATTENUATA	0	0	0	11	160	0	0	0	0	0
EDOTEA TRILOBA	0	0	11	0	0	43	0	0	0	11
MUNNA CF. HAYESI	11	85	0	0	0	0	0	0	0	0
AMPELISCA HOLMESI	107	203	139	117	0	64	32	11	0	11
AMPELISCA SP. B	0	11	11	0	0	0	0	0	0	0
AMPELISCA ABDITA	85	117	11	11	32	32	11	0	0	0
GITANOOPSIS SP.	21	0	0	0	53	0	0	0	0	0
CYADUSA COMPTA	21	0	149	32	1408	0	21	181	352	85
LEMBOUS SMITHI	32	0	0	0	0	0	0	0	0	0
LEMBOUS SETOSUS	0	0	0	0	11	0	0	0	0	0
LEMBOUS BRUNNEOMACULATUS MACKINNEYI	0	117	0	0	0	0	0	0	0	0
MICRODEUTOPUS MYERSI	53	128	0	0	0	0	0	0	0	0
ACUMINODEUTOPUS NAGLEI	32	21	0	0	21	11	0	0	11	0
BATEA CF. CATHARINENSIS	21	0	0	0	0	0	0	0	0	0
CERAPUS SP. A	0	0	0	0	0	11	0	0	0	0
COROPHIUM ACHERUSICUM	2773	64	0	0	21	0	0	128	373	32
COROPHIUM LACUSTRE	0	0	213	0	235	0	53	0	64	0
ERICHTHONIUS BRASILIENSIS	6443	32	0	0	971	11	0	0	32	0
GRANDIDIERELLA BONNIEROIDES	0	43	256	11	117	0	171	1237	1013	75
ELASMOPOUS LEVIS	416	0	0	0	21	0	0	0	64	11
GAMMARUS MUCRONATUS	0	0	0	0	11	0	0	0	0	0
MELITA ELONGATA	0	0	53	0	11	0	85	21	320	0
MELITA APPENDICULATA	64	0	0	0	0	0	0	0	0	0
PHOTIS MELANICUS	0	21	0	0	11	0	0	0	0	0
PHOTIS PUGNATOR	117	11	0	0	0	0	0	0	0	0
LEUCOTHOE CF. SPINICARPA	53	0	0	0	0	0	0	21	0	0
LISTRIELLA CF. BARNARDI	64	53	43	0	0	0	0	0	0	0
LYSIANDOPSIS CF. ALBA	0	11	0	0	0	0	0	0	0	0
MONOCULODES NYEI	0	11	0	0	0	0	11	0	0	0
EUDEVENOPUS HONDURATUS	85	43	0	0	0	0	0	0	0	0
EOBOLGUS SPINOSUS	21	0	0	0	0	0	0	0	0	0
PODOCERUS SP.	0	0	11	0	0	0	0	0	0	0
STENOITHOE CF. MINUTA	448	11	0	0	0	21	0	11	0	0
STENOITHOE CF. GALLENIS	0	0	0	0	0	21	0	0	0	0
TIRON TRIOCCELLATUS	53	53	0	0	0	11	0	0	0	0
CAPRELLA PENANTIS	0	0	0	0	0	11	0	0	0	0
CAPRELLA EQUILIBRA	0	0	0	0	0	0	0	0	64	0
PARACAPRELLA TENUIS	256	0	32	0	85	85	0	43	64	459
LEPTOCHELA SERRATORBITA	0	11	0	0	11	0	0	0	0	0

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	11	12	13	14	15	16	17	18	19	20
PALAEONETES PUGIO	0	0	0	0	21	0	0	0	0	0
ALPHEUS NORMANNI	32	0	0	0	0	0	0	0	0	0
OGYRIDES ALPHEOSTRIS	0	11	0	0	0	0	0	0	0	0
HIPPOLYTE PLEURACANTHA	0	0	0	0	21	0	0	0	0	0
PAGURIDAE SP.	75	0	0	0	21	0	0	0	0	0
PAGURUS BREVIDACTYLUS	21	0	0	0	0	0	0	0	0	0
PAGURUS CAROLINENSIS	11	0	0	0	11	0	0	11	21	0
PETROLISTHES ARMATUS	64	0	0	0	0	0	0	0	0	0
XANTHIDAE SP.	53	0	0	0	11	0	0	0	0	0
PANOPEUS HERBSTII	0	0	0	0	0	0	11	0	0	0
MENIPPE MERCENARIA	11	0	0	0	0	0	0	0	64	0
PILUMNUS SAYI	75	0	0	0	0	0	0	0	0	0
PINNOTHERIDAE SP.	11	21	11	0	0	0	0	0	0	0
PINNIXA PEARSEI	0	0	11	0	0	0	0	0	0	11
PINNIXA RETINENS	11	11	0	0	0	32	0	0	0	0
SIPUNCULA SP.	0	21	0	11	0	11	0	11	0	0
PHASCOLION SP.	11	64	0	0	43	85	21	0	0	21
PHASCOLION CRYPTUS	0	11	0	0	0	64	0	0	0	0
PHORONIS ARCHITECTA	11	0	0	0	21	0	0	0	0	0
BRYOZOA SP. = ECTOPROCTA	0	0	0	0	0	0	0	0	0	0
GLOTTIDIA PYRAMIDATA	0	21	0	0	0	0	0	0	0	11
OPHIOLEPIS ELEGANS	11	0	0	0	0	0	0	0	0	0
HEMIPHOLIS ELONGATA	11	0	0	0	0	0	0	0	0	0
AMPHIURIDAE SP.	43	32	0	21	21	32	0	0	11	11
MICROPHOLIS GRACILLIMA	11	53	0	0	0	11	0	0	0	0
OPHIOPHRAGMUS FILOGRANEUS	0	0	0	0	0	11	0	0	0	0
AMPHIOPLUS ABDITUS	0	11	0	0	0	0	0	0	0	0
AXIOGNATHUS SQUAMATUS	0	11	0	0	0	0	0	0	0	0
HOLOTHUROIDEA SP.	0	11	0	11	0	11	11	11	0	75
ENTEROPNEUSTA SP.	0	0	0	0	0	21	0	0	0	11
ASCIDIACEA SP.	0	11	0	0	0	21	0	0	0	0
MOLGULIDAE SP.	0	0	0	21	0	0	0	0	0	32
BRANCHIOSTOMA SP.	21	64	0	0	0	0	0	0	0	0
UROPHYCIS FLORIDANUS	0	0	11	0	0	0	0	0	0	0
TOTAL DENSITY	32021	23200	19339	12043	19456	12075	18027	17152	12619	19851
TOTAL NUMBER OF SPECIES	163	144	86	52	93	104	59	65	80	72

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER

FEBRUARY 1984

SPECIES NAME	21	22	23	24	25	26	27	28	29	30
ANEMONE SP.	0	0	0	0	11	0	0	0	0	0
PORIFERA SP.	11	0	0	0	0	11	0	0	0	0
HYDROZOA SP.	0	0	0	0	0	0	0	0	0	0
ATHENARIA	0	0	0	0	0	21	32	0	11	0
THENARIA SP.	0	11	0	0	0	0	0	0	43	21
PLATYHELMINTHES SP.	0	11	11	0	0	0	0	0	0	0
STYLOCHUS SP.	0	0	0	0	0	0	0	11	0	0
NEMERTINA SP. = RYNCHOCOEL	139	736	85	85	171	267	21	0	0	11
NEMATODA	267	1003	11	64	320	2304	3616	1333	1835	480
LEPIDOMOTUS SUBLEVIS	0	0	0	0	0	0	0	1013	1237	4267
LEPIDOMOTUS VARIABILIS	0	0	0	0	0	0	0	0	0	11
PSEUDOHALOSYDNA SP. A	0	0	0	0	0	32	0	0	0	0
POLYNOID SP. C	0	0	0	0	0	0	0	0	0	11
POLYNOID GENUS D	0	0	11	0	0	0	0	0	0	0
STHENELAIS OBLIQUIS	0	0	299	64	107	21	0	0	0	0
STHENELAIS BOA	0	0	11	0	21	11	0	0	0	0
PALEANOTUS HETEROSETA	0	0	0	0	0	11	0	0	0	0
PARAMPHINOME SP. B	0	21	0	0	139	53	0	0	0	0
PHYLLODOCE ARENAE	0	53	32	0	0	0	0	0	0	0
EULALIA SANGUINEA	0	11	11	11	0	11	0	11	0	0
GYPTIS BREVIPALPA	32	149	11	21	11	85	0	373	75	32
ANCISTROSYLLIS HARTMANAE	0	107	11	0	32	0	11	11	139	53
AUTOLYTUS DENTALIUS	0	0	0	0	11	11	0	0	0	0
TYPOSYLLIS PROLIFERA	0	0	0	0	0	0	32	0	0	21
TYPOSYLLIS CF. LUTEA	0	0	0	0	0	0	0	0	0	0
EXOGENE DISPAR	11	0	0	0	0	0	0	0	32	0
EXOGENE LOUREI	11	1781	0	0	21	597	235	363	128	43
SPHAEROSYLLIS SPP.	0	0	0	0	0	181	11	1099	192	2912
SPHAEROSYLLIS TAYLORI	651	2229	11	32	96	64	0	53	0	896
SPHAEROSYLLIS LONGICAUDA	11	117	0	0	0	64	437	3360	2624	1984
SPHAEROSYLLIS PIRIFEROPSIS	0	0	0	0	0	107	117	181	384	928
SPHAEROSYLLIS RISERI	0	0	0	0	0	0	0	96	0	0
BRANIA WELFLEETENSIS	0	0	0	11	11	0	21	0	0	149
BRANIA CLAVATA	11	11	0	0	0	0	0	0	0	0
EHLEERSIA CORNUTA	11	11	11	0	0	75	267	32	0	309
HAPLOSYLLIS SPONGICOLA	96	0	0	0	0	0	384	632	96	416
GDONTOSYLLIS ENOPLA	0	0	0	0	0	2645	0	0	0	0
SYLLIDES SP.	0	21	0	0	0	11	0	0	11	139
STREPTOSYLLIS PETTIBONEAE	0	0	0	0	0	0	0	0	0	0
PARAPIONOSYLLIS LONGICIRRATA	0	0	0	32	11	32	0	75	0	0
BRANCHIOSYLLIS EXILIS	0	0	0	43	21	96	0	0	0	11
BRANCHIOSYLLIS OCULATA	0	0	0	0	0	21	0	0	0	21
NEREIDAE SP.	0	0	0	0	0	64	0	0	0	0
CERATONEREIS IRRITABILIS	0	0	0	0	21	32	0	11	0	0
NEANTHES MICROMMA	0	53	11	11	64	0	0	11	85	75
NEANTHES ACUMINATA	0	0	0	0	0	0	352	0	0	32
NEANTHES SUCCINEA	0	11	0	0	0	0	11	0	75	11
PLATYNEREIS DUMERILII	0	0	0	0	0	0	0	0	0	43
LAONEREIS CULVERI	0	0	0	0	0	0	32	0	0	0
NEPTYS CF. BUCERA	0	0	11	21	32	0	0	0	0	0
GLYCERA AMERICANA	21	21	0	11	11	11	0	0	21	0
GLYCERA SP. C	0	0	0	0	0	64	0	0	0	0
HEMIPODUS ROSEUS	0	0	0	0	0	11	0	0	0	0

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	21	22	23	24	25	26	27	28	29	30
GL/CINDE SOLITARIA	21	43	53	32	11	0	0	75	29	30
GONIADIDES CAROLINAE	0	32	0	0	53	1280	0	0	64	0
KIMBERGONUPHIS SIMONI	0	192	0	21	0	0	0	0	32	11
MOOREONUPHIS NEBULOSA	128	256	0	21	21	0	0	341	171	0
LUMBRINERIS VERRILLI	555	405	149	320	128	96	21	416	21	0
LUMBRINERIS SP. D	0	32	11	0	0	11	0	1259	469	117
DRILONEIREIS LONGA	0	0	0	0	11	0	0	0	11	0
DRILONEIREIS SP. F	11	0	0	0	0	0	0	0	0	0
ARABELLA MUTANS	11	0	0	0	0	11	0	0	0	0
DORVILLEA SP.	0	0	0	0	0	0	0	11	0	11
SCHISTOMERINGOS RUDOLPHI	0	0	0	0	0	0	0	11	0	0
PETITIBONEIA SP. A	0	32	11	0	32	0	0	0	0	0
ORBINIIDAE SP.	0	0	0	0	53	0	0	0	0	32
HAPLOSCOLOPLOS FOLIOSUS	2752	416	949	75	75	75	1312	672	11	0
HAPLOSCOLOPLOS FRAGILIS	715	0	139	43	0	11	0	0	181	11
HAPLOSCOLOPLOS SP.	0	0	0	0	0	0	0	0	0	0
NAINERIS DENDRITICA	0	0	0	0	0	0	53	0	0	21
NAINERIS SP.	0	0	0	0	0	0	0	0	0	0
SCOLOPLOS RUBRA	64	64	0	0	32	0	0	256	11	0
ORGANIA RISERI	0	0	0	0	0	0	11	405	53	53
PROSCOLOPLUS SP.	0	0	0	0	0	11	0	0	0	0
ORBINIIDAE GENUS A	0	0	0	0	0	0	0	0	0	32
ARICIDEA PHILBINAE	171	53	11	160	32	0	0	0	107	0
ARICIDEA TAYLORI	2037	1067	96	32	96	85	736	373	149	160
ARICIDEA SP. C	0	0	21	160	53	0	11	128	1259	53
ARICIDEA FRAGILIS	0	0	0	0	11	0	0	0	32	0
CIRROPHORUS LYRA	0	309	11	43	171	160	0	651	213	3
CIRROPHORUS CF. FORTICIRRATUS	0	11	0	0	11	0	0	0	0	0
SPIONIDAE SP.	0	0	0	0	0	0	0	11	0	0
POLYDORA LIGNI	0	0	0	0	0	0	0	0	0	0
POLYDORA SOCIALIS	0	21	43	139	171	64	0	96	107	32
POLYDORA WEBSTERI	0	0	0	0	0	43	0	0	92	0
PRIONOSPION HETEROBANCHIA	0	0	0	0	0	0	21	0	0	0
PRIONOSPION CRISTATA	0	11	0	0	21	267	491	160	181	405
SPIO PETTIBONEAE	0	11	0	21	0	373	11	11	32	213
SPIO PHANES BOMBYX	32	53	117	352	405	875	0	32	85	53
RHYNCHOSPION SP.	0	0	0	0	0	0	0	0	0	11
PARAPRIONOSPION PINNATA	384	75	256	43	128	0	0	0	32	0
STREBLOSPION BENEDICTI	2677	533	139	64	0	11	533	1088	107	11
SCOLELEPIS TEXANA	203	107	21	1504	21	0	85	224	160	0
APOPRIONOSPION PYGMAEA	0	0	0	341	21	11	11	0	11	0
MINUSPION CIRRIFFERA	21	0	651	11	16	11	0	0	0	85
BOCCARDIELLA HAMATA	0	0	0	0	0	0	0	0	43	0
CARAZIELLA HOBSONAE	64	405	235	0	405	0	0	0	0	224
MAGELONA PETTIBONEAE	0	11	0	0	0	0	0	11	96	11
POECILOCHAETUS JOHNSONI	0	0	0	11	0	21	0	0	0	0
SPIOCHAETOPTERUS C. OCULATUS	53	53	139	32	21	21	0	0	0	11
CIRRATULIDAE SP.	0	0	0	0	0	0	0	0	0	43
CAULLERIELLA SP.	0	21	0	0	0	32	11	11	0	0
THARYX CF. DORSOBANCHIALIS	1163	1344	2336	171	277	32	789	2720	2389	523
THARYX SP. A	0	0	0	0	32	43	0	0	0	0
CHAETOZONE SP.	0	0	0	11	11	21	0	0	0	0
ACROCIRRUS FRONTIFILIS	0	0	0	0	0	11	0	0	0	0

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	21	22	23	24	25	26	27	28	29	30
HYBOSCOLEX LONGISETA	0	11	0	0	0	0	0	0	0	30
ARMANDIA MACULATA	0	0	0	0	0	0	0	0	0	11
TRAVISIA HOBSONAE	0	0	0	0	0	64	0	0	0	0
CAPITELLA CAPITATA	32	0	0	0	0	11	0	0	0	0
HETEROMASTUS FILIFORMIS	11	0	0	0	0	11	235	0	0	0
NOTOMASTUS LATERICEUS	11	0	43	0	0	0	0	107	0	0
NOTOMASTUS SP.	0	0	11	0	64	0	0	0	0	0
NOTOMASTUS LCBATUS	0	0	0	0	0	0	0	0	0	0
MEDIOMASTUS AMBISETA	896	1269	0	0	11	0	0	0	0	0
MEDIOMASTUS CALIFORNIENSIS	0	427	213	619	331	0	0	245	949	459
MEDIOMASTUS SP.	0	96	0	11	32	1205	0	43	853	1408
SCYPHOPROCTUS SP. A	0	0	0	629	0	0	0	107	2229	1419
ARENICOLA CRISTATA	0	0	0	0	0	0	0	0	0	53
MALDANIDAE	0	0	0	0	0	0	11	0	0	0
ASYCHIS ELONGATA	0	0	43	0	0	0	0	117	0	0
CLYMENELLA TORQUATA	75	85	11	0	0	0	0	117	0	0
MALDANE SARSI	53	619	416	565	736	32	0	405	480	11
AXIOHELLA MUCOSA	0	0	32	0	0	0	0	0	11	0
MACROCLYMENE SP.	0	21	11	0	0	75	693	3328	117	235
OWENIA FUSIFORMIS	0	0	0	53	0	0	0	0	0	0
MYRIOCHELE OCULATA	0	32	11	21	21	0	0	0	0	0
SABELLARIA VULGARIS	117	960	597	256	1035	139	0	128	149	640
PECTINARIA GOULDII	0	0	0	0	0	64	0	0	0	52
AMPHARETE ACUTIFRONS	0	0	21	11	0	11	0	32	0	53
AMPHARETE AMERICANA	0	0	0	0	0	0	0	0	0	0
MELINNA MACULATA	0	11	0	0	11	0	0	0	0	0
TEREBELLIDAE UNID. SP.	0	0	0	0	0	0	0	0	0	0
PISTA CRISTATA	43	416	21	53	64	53	64	43	0	11
PISTA SP.	0	0	0	11	75	53	11	128	117	117
POLYCIRRUS SP.	0	0	0	0	0	0	11	0	0	0
AMAEANA TRILOBATA	0	0	11	11	107	53	0	11	0	43
STREBLOSOMA HARTMANAE	0	11	0	21	21	75	2965	704	0	86
TEREBELLIDAE STROEMI	0	0	0	0	0	32	0	0	11	213
SABELLIDAE	0	0	11	0	288	0	0	0	43	64
CHONE AMERICANA	0	0	0	0	0	21	0	21	0	0
CHONE SP. B	469	96	0	21	96	395	523	587	437	53
MEGALOMMA BIOCLUTUM	0	11	0	0	0	0	0	0	0	0
FABRICIA SABELLA	0	0	11	11	21	11	0	0	0	0
SPIROBIS CORRUGATIS	21	555	21	43	53	3349	661	4725	1920	16704
HYDROIDES DIANTHUS	0	0	0	0	0	0	85	0	21	0
FILOGRANA IMPLEXA	0	0	0	0	0	0	0	0	213	0
BOGUEA ENIGMATICA	0	32	75	256	53	21	0	11	0	32
MAGELONA CF. CINCTA	0	0	0	0	11	0	0	0	0	0
OLIGOCHAETE	299	1472	107	427	224	171	768	1216	1248	1024
GASTROPODA SP.	0	0	0	0	0	0	0	0	0	11
RISSOINA CATESBYANA	0	0	0	0	0	0	0	11	0	11
SOLARIORRIS SHIMMERI	0	0	0	11	0	0	0	0	21	0
CIRCULUS SUPPRESSUS	0	0	0	0	0	0	0	0	0	11
TURRITELLA SP. (JUV.)	0	0	0	0	0	0	0	0	0	0
CAECUM PULCHELLUM	11	53	0	43	0	213	384	2304	544	3477
CAECUM STRIGOSUM	0	1237	0	21	0	32	0	469	11	0
DIASTOMA VARIUM	0	0	0	0	0	0	800	21	0	437

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	21	22	23	24	25	26	27	28	29	30
CERITHIOPSIS EMERSONI	0	0	0	0	0	21	0	0	0	0
CERITHIOPSIS SP.	0	0	0	0	0	0	0	11	0	0
STROMBIFORMIS HEMPHILLI	0	0	0	0	0	1	0	0	0	0
CREPIDULA PLANA	0	11	0	0	0	149	0	32	0	64
CREPIDULA MACULOSA	0	21	0	32	11	1	85	0	0	0
NATICA PUSILLA	0	21	0	0	11	1	0	0	0	0
POLINICES DUPLICATUS	11	0	0	0	0	0	0	0	0	0
MITRELLA LUNATA	11	21	0	0	11	0	75	32	11	149
ANACHIS UGESA	0	0	21	21	96	0	0	0	11	0
ANACHIS UGESA OSTREICOLA	0	0	0	0	0	0	0	0	0	0
CANTHARUS CANCELLARIUS	1	0	0	0	21	2	0	0	32	0
NASSARIUS VIREX	0	21	0	0	0	0	0	0	0	0
CLIVELLA SP. 1	0	0	1	0	0	107	0	53	0	0
CLIVELLA SP. 2	0	0	0	0	32	0	0	0	0	0
GRANULINA OVULIFORMIS	0	0	0	0	0	21	21	21	0	0
MARGINELLA APICINA	0	0	0	0	0	0	64	128	0	0
HYALINA SP.	0	0	0	0	0	0	0	0	0	0
MANGELIA MELANITICA	0	0	0	0	0	11	0	0	0	0
PYRGOCYTHARA PLICOSA	0	0	0	0	0	0	11	43	0	0
ODOSTOMIA SP.	26	0	43	0	0	0	0	0	0	0
ODOSTOMIA IMPRESSA	0	0	0	0	0	0	75	0	0	0
ODOSTOMIA BESUTURALIS	53	0	0	21	0	0	0	53	0	11
ODOSTOMIA CONGIDEA	0	0	0	0	0	0	0	0	0	0
TURBONILLA SP.	0	0	0	0	0	11	0	0	0	11
TURBONILLA CONRADI	11	32	64	11	1	1	0	256	0	21
TURBONILLA DALLI	11	21	0	0	11	0	21	0	11	0
PYRAMIDELLA RESTICOLA	0	0	0	0	0	0	0	0	0	0
ACTEON PUNCTOSERIATUS	11	0	0	0	0	0	0	0	0	32
ACTEON CANALICULATA	2816	395	405	75	32	0	224	1941	1056	0
PHILINE INFUNDIBULUM	0	0	0	0	0	0	11	0	0	53
BULLA STRIATA	53	0	0	0	0	0	11	0	0	0
HAMINOE SUCCINEA	0	0	0	11	11	0	0	11	0	0
APLYSIDAE SP.	0	0	0	0	0	0	0	0	0	0
NUDIBRANCHIA SP.	11	11	0	0	0	0	0	64	13	0
POLYPLACOPHORA SP.	0	0	0	0	0	0	0	0	0	21
APLACOPHORA SP. A	0	0	0	0	0	11	0	0	0	0
BIVALVIA SP.	0	0	21	0	11	139	0	11	0	85
NUCULA PROXIMA	11	64	11	64	75	139	11	107	11	107
NUCULANA ACUTA	0	0	11	117	416	523	0	0	0	0
MUSCULUS LATERALIS	0	0	0	0	0	21	0	0	0	64
BRACHIDONTES EXOSTUS	0	0	0	0	0	0	0	11	21	384
LIBERUS CASTANEUS	0	0	0	0	0	21	0	0	0	0
LUCINA SP.	0	0	0	0	21	11	11	0	0	0
CODAKIA ORBICULATA	0	0	0	0	0	0	0	0	11	21
DIPLODONTA PUNCTATA	107	64	53	192	128	139	0	0	0	21
MYSELLA PLANULATA	11	395	277	21	64	43	32	32	0	53
ALIGENA TEXASIANA	0	0	0	64	512	0	0	0	149	0
NEAEROMYA FLORIDANA	0	21	0	0	0	0	0	0	0	0
CARDITAMERA FLORIDANA	0	0	0	0	0	11	0	0	0	0
CRASSINELLA LUNULATA	0	0	0	0	0	11	0	0	0	0
TRACHYCARDIUM MURICATUM	0	0	0	0	0	11	0	0	0	0
MULINIA LATERALIS	0	0	53	21	0	11	0	0	0	0
ENSIS MINOR	53	43	0	117	11	96	0	0	0	0

BENTHOS ABUNDANCE BY STATION AND SPECIES

5

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	21	22	23	24	25	26	27	28	29	30
TELLINA SP.	21	0	0	43	0	0	0	0	0	30
TELLINA VERSICOLOR	11	0	139	75	139	21	0	0	0	0
DONAX VARIABILIS	0	0	0	0	0	11	0	0	0	11
SEMELE BELLA STRIATA	0	0	0	0	0	85	0	0	0	0
SEMELE PROFICUA	0	0	0	0	0	0	0	0	0	0
ABRA AEQUALIS	0	0	11	21	267	149	0	0	0	11
TRANSENELLA CONRADINA	0	0	0	0	0	0	11	21	0	0
MERCENARIA CAMPECHIENSIS	0	0	0	11	0	0	0	0	0	0
CHIONE CANCELLATA	0	0	0	0	0	0	0	0	0	0
CHIONE GRUS	0	0	0	0	0	0	0	0	0	0
LYONSIA HYALINA FLORIDANA	11	32	0	11	21	43	0	0	0	11
ASTHENOTHAERUS HEMPHILLI	0	0	0	0	11	0	0	0	0	21
DENTALIUM LAQUEATUM	0	0	0	0	11	0	0	0	11	11
HYDRACARINA SP.	0	0	0	0	11	0	0	0	0	0
ANDPLODACTYLUS PETIOLATUS	0	11	0	0	0	11	0	0	0	0
MYDOCOPA SP.	64	21	53	11	149	384	235	160	21	352
PARASTEROPE POLLEX	43	0	64	0	21	0	0	0	0	0
PODOCOPA SPP.	0	0	0	0	0	0	11	0	0	0
HAPLOCYTHERIDA SETIPUNCTATA	32	0	0	0	0	0	0	0	0	0
CALANOID COPEPODA	0	11	0	0	11	0	21	43	21	43
HARPACTICOID COPEPODA	43	11	11	11	11	21	11	53	11	213
CYCLOPOID COPEPODA	0	0	0	0	0	11	0	0	0	11
BALANUS IMPROVISUS	0	11	0	0	0	0	0	0	0	0
BALANUS VENUSTUS	0	0	0	0	0	0	0	0	0	0
MYSIDOPSIS BIGELOWI	11	21	0	0	0	0	0	0	0	43
BOWMANIELLA PORTORICENSIS COMPLEX	0	0	0	0	0	0	0	0	0	0
LEUCON SP. A	0	0	11	0	0	0	0	11	0	0
OXYUROSTYLIS SMITHI	11	11	0	43	32	171	0	0	0	0
CUMELLA SP. A.	0	0	0	11	0	0	0	0	0	0
CYCLASPIS SP. B	0	0	0	0	0	11	0	0	0	0
CYCLASPIS SP. A	21	0	0	0	0	0	0	0	0	0
HALMYRAPSEIDES CF. CUBANENSIS	0	0	0	0	0	0	11	0	0	11
KALLIAPSEIDES SP. A	0	0	0	32	21	256	21	0	0	0
HARGERIA RAPAX	0	0	0	0	0	32	0	0	0	0
APANTHURA MAGNIFICA	11	0	0	0	0	0	0	0	0	0
APANTHURA CF. SIGNATA	0	11	0	0	0	0	0	0	0	53
PANANTHURA FORMOSA	0	21	0	0	0	256	0	0	0	0
EURYDICE LITTORALIS	0	0	0	0	0	11	0	0	32	21
PARACERCEIS CAUDATA	0	0	0	0	11	0	0	0	0	0
ERICHSONELLA CF. ATTENUATA	0	11	0	0	0	0	32	0	0	0
EDOTEA TRILOBA	0	11	0	0	0	0	0	21	0	21
MUNNA CF. HAYESI	0	11	0	0	0	11	0	0	0	0
BOPYRIDAE SP.	0	0	0	0	0	0	11	0	0	0
AMPELISCA HOLMESI	11	0	21	107	128	21	11	21	11	0
AMPELISCA SP. B	0	0	11	0	0	11	0	11	0	0
AMPELISCA ABDITA	0	0	0	0	21	128	21	53	21	235
GITANOPSIS SP.	0	0	0	0	0	11	0	395	128	256
CYMAUSA COMPTA	0	32	11	11	0	11	1387	0	0	0
LEMBOS SMITHI	0	0	0	0	0	11	0	0	0	0
LEMBOS SETOSUS	0	0	0	0	0	11	0	0	0	0
LEMBOS UNIFASCIATUS	0	0	0	0	0	11	0	0	11	0
MICRODEUTOPUS MYERSI	0	21	0	21	0	192	11	0	117	11
ACUMINODEUTOPUS NAGLEI	0	75	11	0	0	11	32	43	32	277

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	21	22	23	24	25	26	27	28	29	30
RILDARDANUS LAMINOSA	0	0	0	0	0	53	0	0	0	0
BATEA CF. CATHARINENSIS	11	0	0	0	0	0	0	160	11	64
COLOMASTIX HALICONDRIAE	0	0	0	0	0	11	0	0	0	0
CERAPUS SP. A	0	0	0	0	0	0	0	0	0	96
COROPHIUM ACHERUSIUM	1995	64	32	32	0	96	0	0	0	747
COROPHIUM LACUSTRE	11	0	0	0	0	0	181	107	21	11
COROPHIUM TUBERCULATUM	0	0	0	0	43	0	0	0	0	0
ERICHTHONIUS BRASILIENSIS	235	11	0	0	11	149	427	0	64	693
GRANDIDIERELLA BONNIEROIDES	32	75	11	0	0	11	107	149	160	373
ELASMOPUS LEVIS	0	21	11	0	0	0	0	107	11	32
GAMMARUS MUCRONATUS	11	0	0	0	0	0	0	0	0	0
MAERA CF. CAROLINIANA	0	0	0	0	0	32	0	0	11	0
MELITA ELONGATA	32	0	0	0	0	0	11	11	53	0
PHOTIS MELANICUS	11	0	0	0	0	21	0	0	0	0
PHOTIS PUGNATOR	0	0	0	0	0	53	0	0	21	0
MEGAMPHOPUS SP.	0	0	0	0	0	11	0	0	0	0
LISTRIELLA CF. BARNARDI	21	53	11	11	32	21	21	0	11	128
MONOCULODES NYEI	0	0	21	11	11	11	0	0	0	0
SYNCHELIDIUM CF. AMERICANUM	0	0	0	0	0	11	0	0	0	0
HETEROPHLIAS SECLUSUS	0	0	0	0	0	0	139	0	0	0
EUDEVENOPUS HONDURANUS	0	0	0	21	0	11	0	0	0	0
EOBOLGUS SPINOSUS	11	0	0	0	0	0	64	11	0	11
PODOCERUS SP.	0	21	0	0	0	0	0	0	0	0
STENOCHOE CF. MINUTA	43	0	0	0	0	0	0	0	0	0
STENOCHOE CF. GALLENSIS	0	32	0	0	0	0	0	0	0	0
CAPRELLA PENANTIS	0	11	0	0	0	0	11	0	0	11
CAPRELLA EQUILIBRA	0	0	0	0	0	0	0	0	0	0
PARACAPRELLA TENUI	64	277	53	11	11	11	139	299	331	1163
LUCONACIA INCERTA	0	0	0	0	0	0	0	21	0	43
LEPTOCHELA SERRATORBITA	0	0	0	0	0	0	11	0	0	0
PERICLIMENES AMERICANUS	32	0	0	0	0	0	0	0	0	0
ALPHEUS HETEROCHAEIS	11	0	0	0	0	0	0	0	0	0
OGYRIDES ALPHAEOSTRIS	11	0	0	0	0	0	0	0	0	0
HIPPOLYTE PLEURACANTHA	0	0	0	0	0	0	0	0	0	0
PAGURIDAE SP.	0	0	0	0	0	0	43	11	0	11
PAGURUS BREVIDACTYLUS	0	0	0	0	0	43	0	21	0	128
PAGURUS CAROLINENSIS	0	11	0	0	0	0	0	53	11	11
PAGURUS POLLICARIS	0	0	0	0	0	21	0	0	0	11
PETROLISTHES ARMATUS	0	0	0	0	0	11	0	0	0	0
EBALIA CARIOSA	53	0	0	0	0	0	0	0	0	0
HETEROCRYPTA GRANULATA	0	0	0	0	0	11	0	0	0	0
PELIA MUTICA	0	0	0	0	0	32	0	11	0	0
XANTHIDAE SP.	0	0	0	0	0	11	0	0	0	11
NEOPANOPE TEXANA TEXANA	0	0	0	0	0	0	11	0	0	0
PANOPEUS HERBSTII	11	0	0	0	0	21	0	0	0	0
PINNOTHERIDAE SP.	0	0	11	0	0	11	0	11	0	21
PINNIXA PEARSEI	0	21	0	0	11	11	0	11	11	11
PINNIXA RETINENS	0	21	0	11	0	0	0	0	0	11
ARTHOPODA SP.	0	0	0	0	0	0	11	0	0	0
SIPUNCULA SP.	11	0	0	0	0	0	0	0	0	0
PHASCOLION SP.	0	0	11	32	43	53	53	75	0	11
PHORONIS ARCHITECTA	0	0	0	21	0	0	0	0	0	0
BRYOZOA SP. - ECTOPROCTIA	0	0	0	0	0	0	0	0	21	0

BENTHOS ABUNDANCE BY STATION AND SPECIES

7

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	STATION									
	21	22	23	24	25	26	27	28	29	30
GLOTTIDIA PYRAMIDATA	0	0	0	0	11	11	0	0	0	0
OPHIOLEPIS ELEGANS	0	0	0	0	0	11	0	0	0	0
HEMIPHOLIS ELONGATA	0	0	0	0	11	0	0	0	0	11
AMPHIURIDAE SP.	43	32	11	32	320	75	0	139	32	11
MICROPHOLIS GRACILLIMA	0	0	395	64	171	0	0	0	0	0
OPHIOPHRAGMUS FILOGRANEUS	0	0	0	21	0	11	0	0	0	0
OPHIOPHRAGMUS SEPTUS	0	0	0	0	0	11	0	0	0	0
AMPHIOPLUS THROMBOIDES	0	0	0	0	0	21	0	0	0	0
AXIOGNATHUS SQUAMATUS	0	0	0	0	0	0	0	43	0	0
HOLOTHUROIDEA SP.	416	0	75	32	0	21	0	235	0	0
ENTEROPNEUSTA SP.	0	0	43	53	0	0	0	0	0	0
MOLGULIDAE SP.	0	11	0	0	0	0	11	32	43	75
BRANCHIOSTOMA SP.	0	0	0	0	0	43	0	0	0	0
MYROPHIS PUNCTATUS	11	0	0	0	0	0	0	0	0	0
TOTAL DENSITY	21003	21461	9600	8661	9888	20885	20939	37877	25013	48203
TOTAL NUMBER OF SPECIES	90	107	85	95	110	153	86	110	100	133

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	31	32	33	34	STATION	36	37	38	39	40
PORIFERA SP.	0	0	0	0	35	11	0	11	0	0
HYDROZOA SP.	0	0	0	21	0	0	0	0	0	0
ATHENARIA	0	0	32	11	0	0	0	0	11	0
THENARIA SP.	0	0	21	0	0	0	0	0	0	0
PLATYHELMINTHES SP.	0	0	11	0	32	11	11	0	21	11
POLYCLADIDA SP.	0	0	0	0	11	0	0	0	0	0
STYLOCHUS SP.	0	0	0	0	43	0	0	0	0	0
NEMERTINA SP. = RHYNCHOCOEL	139	96	501	192	0	160	181	11	53	11
NEMATODA	117	1483	5867	341	779	7531	800	96	853	235
LEPIDONOTUS SUBLEVIS	0	0	0	11	6976	0	0	309	0	725
LEPIDONOTUS VARIABILIS	0	0	0	0	0	0	0	0	0	11
LEPIDASTHENIA VARIUS	0	0	21	0	0	0	11	0	0	0
POLYNOID SP. C	0	0	0	0	0	11	0	0	0	0
POLYNOID GENUS D	0	0	0	0	0	11	0	0	0	0
STHENELOIS OBLIQUIS	21	0	11	11	11	0	0	0	0	0
PALEANOTUS HETEROSETA	0	0	0	11	0	0	32	0	43	32
PARAMPHINOME SP. B	0	0	0	0	11	0	0	0	0	128
PHYLLODOCE CASTANEA	0	0	0	0	480	21	96	0	0	32
PHYLLODOCE ARENAE	0	0	0	0	21	11	0	0	0	0
ETEONE HETEROPODA	11	0	0	0	11	11	0	0	0	11
ETEONE LACTEA	0	11	0	21	0	0	11	0	0	0
EULALIA SANGUINEA	0	0	0	0	11	21	0	0	0	0
GYPTIS GREVIPALPA	0	53	53	43	96	107	53	0	0	0
PODARKE OBSCURA	11	21	53	53	21	11	21	0	21	0
ANCISTROSYLLIS HARTMANAE	0	0	0	0	128	0	0	0	43	235
ANCISTROSYLLIS JONESI	0	0	0	0	11	11	0	0	0	11
PILARGIS SP. A	0	0	0	0	11	0	0	0	0	0
SYLLIDAE SP.	0	0	0	0	0	0	0	0	0	11
AUTOLYTUS DENTALIUS	0	0	0	0	75	21	0	0	0	0
TYPOSYLLIS SP.	0	0	0	0	11	0	0	0	0	0
TYPOSYLLIS CF. LUTEA	0	0	11	0	0	0	0	0	0	0
EXOGENE DISPAR	0	139	96	0	0	0	0	0	0	0
EXOGENE LOUREI	0	565	843	565	1845	523	139	117	341	43
EXOGENE ATLANTICA	0	43	512	32	11	0	139	11	0	0
SPHAEROSYLLIS TAYLORI	75	0	0	0	11	0	53	0	0	0
SPHAEROSYLLIS LONGICAUDA	11	1888	1376	320	811	2155	267	501	224	224
SPHAEROSYLLIS GLANDULATA	0	587	757	21	533	597	128	0	11	75
SPHAEROSYLLIS PIRIFEROPSIS	0	0	0	0	64	75	0	0	0	0
SPHAEROSYLLIS RISERI	0	0	0	0	0	0	21	0	0	0
BRANIA WELFLEETENSIS	0	0	32	0	0	96	0	0	0	0
BRANIA CLAVATA	0	0	0	0	0	43	0	0	0	0
EHLEERSIA CORNUATA	0	171	224	32	32	43	0	0	0	0
EHLEERSIA FERRUGINA	0	85	96	32	11	21	43	0	0	0
ODONTOSYLLIS ENOPLA	0	11	0	0	21	0	11	0	0	21
STREPTOSYLLIS PETTIBONEAE	0	0	0	21	11	11	0	0	11	11
PARAPIONOSYLLIS LONGICIRRATA	0	0	0	0	0	21	53	53	0	0
BRANCHIOSYLLIS EXILIS	0	43	11	0	128	64	11	0	0	0
NEREIDAE SP.	0	0	0	0	0	0	0	11	0	0
CERATONEREIS IRRITABILIS	0	0	0	0	0	0	0	0	0	0
NEANTHES MICROMMA	0	0	43	0	11	256	128	11	0	11
NEANTHES ACUMINATA	0	43	107	181	0	149	53	0	53	64
NEANTHES SUCCINEA	0	0	11	21	0	0	0	0	21	0
NEREIS SP.	0	0	0	0	0	11	0	0	0	0

BENTHOS ABUNDANCE BY STATION AND SPECIES

3

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	31	32	33	34	35	36	37	38	39	40
POLYDORID SP.	0	0	0	0	0	21	0	0	0	0
PARAPRIONOSPIO PINNATA	459	64	32	96	0	11	11	0	213	96
STREBLOSPIO BENEDICTI	533	0	11	11	21	11	11	11	11	0
SCOLELEPIS TEXANA	149	32	331	128	0	0	21	0	181	0
APOPRIONOSPIO PYGMAEA	0	0	11	43	11	11	75	0	0	64
MINUSPIO CIRRIFERA	11	0	32	64	0	21	0	0	21	331
CARAZIELLA HOBSONAE	128	64	0	43	0	640	21	0	11	85
MAGELONA PETTIBONEAE	96	21	32	0	0	0	11	11	96	0
POECILOCHAETUS JOHNSONI	0	0	11	0	43	53	0	0	0	21
SPIOCHAETOPTERUS C. OCOLATUS	96	0	43	128	21	0	21	11	299	117
CIRRATULIDAE SP.	0	11	0	0	0	0	0	0	0	0
CAULLERIELLA SP.	0	21	85	0	0	21	32	0	21	11
THARYX CF. DORSOBRANCHIALIS	320	192	405	224	11	43	32	704	181	235
CHAETOZONE SP.	0	0	0	0	21	0	75	0	0	11
ACROCIRRUS FRONTIFILIS	0	0	0	0	43	11	0	0	0	0
ARMANDIA MACULATA	0	0	0	0	0	0	21	0	0	0
TRAVISIA HOBSONAE	0	11	0	0	0	0	0	0	0	0
CAPITELLA CAPITATA	11	11	0	0	0	0	0	0	0	0
HETEROMASTUS FILIFORMIS	43	0	0	0	0	0	0	267	0	11
NOTOMASTUS LATERICEUS	0	0	32	21	0	0	0	0	0	11
NOTOMASTUS SP.	0	0	0	0	0	11	0	0	53	224
NOTOMASTUS LOBATUS	0	0	0	0	0	21	0	0	0	0
MEDIOMASTUS AMBISETA	629	651	3659	1024	0	544	3040	0	416	704
MEDIOMASTUS CALIFORNIENSIS	0	0	0	0	395	352	117	21	0	0
MEDIOMASTUS SP.	917	768	0	0	640	384	0	0	832	0
SCYPHOPROCTUS SP. A	0	21	32	0	0	43	0	0	11	0
MALDANIDAE	0	21	0	0	0	224	0	0	341	0
ASYCHIS ELONGATA	75	0	96	0	0	0	0	0	608	0
CLYMENELLA TORQUATA	21	0	459	853	0	181	213	0	843	2859
MALDANE SARSI	0	0	0	11	0	0	0	0	11	0
AXIOTHELLA MUCOSA	117	309	661	149	8448	864	75	11	149	767
EUCLYMENE SP.	0	0	0	0	0	0	0	0	0	181
MACROCLYMENE SP.	0	0	0	0	0	0	0	0	32	0
OWENIA FUSIFORMIS	0	0	0	0	0	0	21	0	0	11
MYRIOCHELE OCOLATA	75	32	1312	1600	139	832	352	0	448	2699
SABELLARIA VULGARIS	0	21	192	75	53	139	96	0	21	0
PECTINARIA GOULDII	21	11	32	43	0	0	0	0	11	0
AMPHARETIDAE SP.	0	0	11	0	0	0	0	0	0	0
MELINNA MACULATA	0	43	0	0	0	0	0	0	0	0
ISOLDA PULCHELLA	0	0	0	11	0	0	11	0	11	0
TEREBELLIDAE UNID. SP.	11	43	0	11	53	64	64	0	107	0
PISTA CRISTATA	0	11	117	32	43	21	96	0	32	11
PISTA SP.	0	0	0	0	0	32	0	0	0	0
PISTA PALMATA	0	0	0	0	11	0	0	0	0	0
POLYCIRRUS SP.	0	0	32	0	0	85	160	0	0	32
LOIMIA MEDUSA	0	0	0	0	0	0	0	0	0	11
ANAEANA TRILOBATA	11	75	149	43	203	299	117	32	11	43
STREBLOSOMA HARTMANAE	0	0	11	0	0	0	0	0	0	0
TEREBELLIDES STROEMI	0	0	75	11	0	96	128	0	245	1045
SABELLIDAE	0	0	0	0	0	21	11	0	0	11
CHONE AMERICANA	107	267	64	21	235	256	128	21	288	32
MEGALOMMA BIOCOLATUM	0	0	11	11	0	21	21	0	11	64
POTAMILLA RENIFORMIS	0	0	11	0	0	0	0	0	0	0

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	31	32	33	34	35	36	37	38	39	40
FABRICIA SABELLA		651	8373	2155	37184	13493	981	53	1365	1813
HYPISICOMUS PHAETAENIA	0	11	0	0	0	0	75	0	0	0
SPIROBIS SPIRILLUM	0	0	11	0	0	0	0	0	0	0
HYDROIDES DIANTHUS	0	0	11	0	0	32	0	0	0	0
HYDROIDES UNCINATUS	0	0	0	0	0	0	53	0	0	0
QUESTA CAUDICIRRA	0	0	0	0	32	0	0	0	0	0
BOGUEA ENIGMATICA	32	21	3776	384	117	107	107	0	267	693
MAGELONA CF CINCTA	0	0	0	0	0	0	0	0	0	21
POLYGORDIUS SP.	0	0	0	0	0	0	0	0	0	0
OLIGOCHAETE	725	5749	1664	203	1877	1643	192	1653	1045	789
RISSOINA CATESBYANA	0	11	11	0	0	0	0	0	0	0
SAYELLA HEMPHILLI	21	0	0	0	0	0	0	0	0	0
VITRINELLIDAE SP.	0	0	0	0	0	21	0	0	0	0
CYCLOSTREMISCUS PENTAGONIUS	32	0	0	0	0	0	0	0	0	0
SOLARIOBIS SHIMERI	0	0	0	21	0	0	0	21	0	0
TURRITELLA SP. (JUV.)	0	0	0	21	0	0	0	0	0	0
CAECUM PULCHELLUM	21	544	21	21	299	11	0	128	32	11
CAECUM STRIGOSUM	0	0	0	0	32	75	0	0	0	0
CAECUM NITIDUM	0	0	11	0	0	0	0	0	0	0
CAECUM IMBRICATUM	0	0	0	0	32	0	21	0	0	0
DIASTOMA VARIUM	0	0	0	0	0	0	0	0	0	0
FINELLA ADAMSI	0	0	0	0	0	0	0	0	0	0
CERITHIUM EBURNEUM	0	11	0	0	0	11	0	0	0	0
MELANELLA CONOIDEA	0	0	0	0	0	0	0	0	0	0
STROMBEIFORMIS HEMPHILLI	0	0	0	0	0	21	11	0	21	11
CREPIDULA PLANA	0	21	0	117	43	32	0	0	11	0
CREPIDULA MACULOSA	0	85	0	0	0	0	0	75	32	0
NATICA PUSILLA	0	0	0	0	0	11	11	0	0	11
MUREX SP.	0	0	0	11	0	0	0	0	0	0
MITRELLA LUNATA	64	53	53	11	11	11	75	43	299	107
ANACHIS OBESA	0	0	0	0	0	0	64	0	0	96
ANACHIS SEMPLICATA	0	0	0	0	11	0	0	0	0	0
ANACHIS OBESA OSTREICOLA	0	0	0	11	0	0	0	0	0	0
CANTHARUS CANCELLARIUS	11	0	0	11	0	0	0	0	0	0
NASSARIUS VIBEX	11	43	11	0	11	0	21	11	21	0
OLIVELLA SP. A	0	0	0	0	0	0	0	0	0	0
OLIVELLA SP. B	11	0	491	107	0	0	11	0	0	0
OLIVELLA MINUTA	0	75	0	0	0	21	32	0	32	85
GRANULINA OVULIFORMIS	32	43	32	0	0	0	0	11	11	0
MARGINELLA APICINA	0	43	21	11	0	11	0	11	171	0
MARGINELLA AUREOCINCTA	0	32	11	0	0	0	0	0	11	0
MARGINELLA LAVALLEANA	0	43	299	11	0	0	0	0	0	0
HYALINA SP.	0	21	11	0	0	0	0	0	0	0
TURRIDAE SP.	0	0	0	0	0	0	0	11	0	0
PYRGOCYTHARA PLICOSA	11	0	0	0	0	0	0	0	0	0
CRASSISPIRA TRIMARIANA	0	0	11	0	0	0	0	0	0	0
ODOSTOMIA SP.	43	0	0	43	0	0	0	0	256	64
ODOSTOMIA IMPRESSA	11	0	0	0	0	0	0	43	0	0
ODOSTOMIA BISUTURALIS	160	0	0	0	0	0	32	0	0	0
ODOSTOMIA CONOIDEA	21	0	0	0	32	0	0	0	0	0
TURBONILLA SP.	0	181	53	0	0	0	0	0	0	0
TURBONILLA CONRADI	0	32	117	128	32	32	11	0	1109	213
TURBONILLA INTERRUPTA	0	0	0	75	0	0	0	0	0	0

BENTHOS ABUNDANCE BY STATION AND SPECIES

5

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	31	32	33	34	35	36	37	38	39	40
TURBONILLA DALLI	0	11	11	0	0	11	11	0	0	0
TURBONILLA CF STYLIFORMIS	0	0	0	0	0	11	0	0	0	0
PYRAMIDELLA RESTICULA	0	0	0	0	0	0	0	0	0	0
ACTEON PUNCTOSTRIATUS	0	0	0	0	0	0	0	0	11	11
ACTEON CANALICULATA	2165	309	779	512	11	11	32	32	1493	85
BULLA STRIATA	224	64	0	21	0	0	0	0	0	0
HAMINOE SUCCINEA	0	0	0	0	0	0	11	0	171	139
CYLINDROBULLA BEAUTII	0	11	0	11	0	0	0	0	0	0
APLYSIIIDAE SP.	0	11	0	0	0	0	0	0	0	0
NUDIBRANCHIA SP.	0	0	0	0	0	0	11	0	0	0
POLYPLACOPHORA SP.	0	0	0	0	0	0	0	0	0	0
APLACOPHORA SP. A	0	43	11	0	32	21	0	0	64	0
APLACOPHORA SP. E	0	0	0	0	43	75	32	0	0	0
BIVALVIA SP.	0	0	0	0	11	0	0	0	0	0
NUCULA PROXIMA	0	0	213	32	32	128	11	11	43	0
NUCULANA ACUTA	0	11	107	85	11	107	149	0	32	43
ANADARA TRANSVERSA	0	0	0	117	32	192	395	0	21	64
MUSCULUS LATERALIS	0	0	0	0	0	11	11	0	0	11
BRACHIDONTES EXUSTUS	0	0	0	0	11	0	0	0	53	21
LIBERUS CASTANEUS	21	32	11	21	171	11	0	11	85	11
CRASSOSTREA VIRGINICA	0	0	0	0	11	0	0	0	0	0
DIPLODONTA PUNCTATA	0	0	0	11	32	192	85	0	0	11
ERYCINA SP.	0	0	0	0	0	11	0	0	0	0
MYSELLA PLANULATA	1760	267	405	459	117	96	96	139	277	117
ALIGENA TEXASIANA	0	0	0	0	0	0	0	0	0	43
CRASSINELLA LUNULATA	0	0	0	0	32	32	0	0	0	0
CARDIIDAE SP.	0	0	21	0	0	0	0	0	0	0
LAEVICARDIUM MORTONI	0	0	0	0	21	0	0	0	0	0
ENSIS MINOR	11	11	0	53	85	213	43	0	64	11
TELLINA SP.	75	0	75	0	0	0	0	0	11	0
TELLINA VERSICOLOR	0	256	0	43	0	75	149	11	64	171
TELLINA TEXANA	11	53	0	0	0	0	0	21	0	0
TAGELUS DIVISUS	0	0	0	0	0	0	0	0	11	0
SEMELE BELLA STRIATA	0	0	0	0	0	21	0	0	0	0
ABRA AEQUALIS	0	0	0	0	11	32	0	0	0	0
POLYMESODA CAROLINIANA	0	0	0	21	11	43	160	0	11	96
DOSINIA DISCUS	0	0	0	11	11	0	0	0	0	0
MERCENARIA CAMPECHIENSIS	0	0	0	11	32	0	0	0	32	53
CHIONE CANCELLATA	0	0	11	0	0	0	0	0	0	0
CORBULA CONTRACTA	0	0	0	0	53	11	0	0	0	0
PHOLIDIDAE SP.	0	0	0	0	0	11	64	0	0	0
PANDORA SP. (JUV.)	0	0	0	0	0	11	11	0	0	0
LYONSIA HYALINA FLORIDANA	96	0	21	32	107	245	32	32	64	0
ASTHENOTHAERUS HEMPHILLI	0	0	0	0	11	0	53	0	0	75
DENTALIUM LAQUEATUM	0	0	0	11	0	0	0	0	0	0
HYDRACARINA SP.	0	11	0	0	21	32	0	0	0	0
ANOPLDACTYLUS PETIOLATUS	0	11	0	0	0	21	0	0	0	0
ANCPLODACTYLUS PYGMAEUS	0	0	0	0	0	11	0	0	0	0
MYODOCOPA SP.	203	576	309	235	309	1429	277	43	267	981
PARASTEROPE POLLEX	373	21	32	11	0	11	64	64	981	277
PODOCOPA SPP.	0	0	11	11	43	43	64	0	0	11
HAPLUCYTHERIDA SETIPUNCTATA	75	0	0	32	11	0	0	0	0	501
CALANOID COPEPODA	0	0	11	0	0	0	21	11	0	21

BENTHOS ABUNDANCE BY STATION AND SPECIES

6

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	31	32	33	34	35	36	37	38	39	40
HARPACTICOID COPEPODA	0	149	85	43	75	96	0	53	32	107
CYCLOPOID COPEPODA	11	0	0	0	21	11	11	0	11	11
BALANUS IMPROVISUS	0	0	0	53	0	0	0	0	0	0
BALANUS VENUSTUS	0	0	0	11	107	0	0	0	0	0
MYSIDOPSIS BIGELOWI	0	0	11	0	0	0	11	0	0	0
LEUCON SP. A	0	0	0	0	0	0	0	0	0	11
OXYUROSTYLIS SMITHI	64	96	11	0	11	75	192	448	139	288
CUMELLA SP. B	0	0	0	75	96	160	0	0	0	32
CUMELLA SP. A	0	0	107	11	64	75	11	0	0	32
CYCLASPIS SP. B	0	0	53	0	11	0	0	0	0	0
CYCLASPIS SP. D	0	0	0	0	11	0	0	0	0	0
CYCLASPIS SP. A	352	107	0	0	21	53	0	213	203	0
..PSEUDES PROPINQUUS	0	0	75	0	32	0	0	0	0	0
HALMYRAPSEUDES CF. CUBANENSIS	0	0	0	0	43	0	0	0	0	0
KALLIAPSEUDES SP. A	0	0	64	0	32	96	0	0	0	256
TANAIS CAVOLINII	0	0	11	0	0	0	0	0	0	0
HARGERIA RAPAX	0	11	11	0	11	21	11	21	0	0
APANTHURA MAGNIFICA	0	0	11	0	64	32	0	0	21	0
APANTHURA CF. SIGNATA	0	0	43	0	160	64	128	0	0	53
XENANTHURA BREVITELSON	0	0	0	0	11	0	0	0	0	0
HOROLOANTHURA IRPEX	0	0	0	0	21	0	0	0	0	0
PANANTHURA FORMOSA	0	0	21	11	43	0	0	0	0	0
PARACERCEIS CAUDATA	0	0	21	0	0	11	0	0	0	0
CASSIDINIDEA LUNIFRONS	0	0	0	0	11	0	0	0	0	0
ERICHSONELLA CF. ATTENUATA	0	75	11	0	0	0	0	0	0	0
EDOTEA TRILOBA	0	11	0	0	0	0	0	0	11	0
MUNNA CF. HAYESI	0	0	0	0	0	85	53	0	0	43
AMPELISCA HOLMESI	21	11	0	21	0	117	85	43	117	117
AMPELISCA SP. B	0	0	11	0	0	0	0	0	0	0
AMPELISCA ABDITA	32	32	43	21	96	171	117	0	11	32
GITANOPSIS SP.	0	0	0	0	43	11	0	11	0	0
CYMA DUSA COMPTA	32	715	320	11	11	0	11	64	213	160
LEMBOS SMITHI	0	0	0	21	128	53	0	21	0	0
LEMBOS SETOSUS	0	0	0	0	0	0	0	0	21	213
LEMBOS RECTANGULATUS	0	0	117	0	0	0	32	0	0	0
MICRODEUTOPUS MYERSI	0	32	96	0	75	299	203	0	11	75
ACUMINODEUTOPUS NAGLEI	0	373	117	21	0	43	43	0	85	192
RILDARDANUS LAMINOSA	0	0	0	0	0	192	0	0	0	0
ARGISSA HAMATIPES	0	0	0	0	0	0	11	0	0	0
BATEA CF. CATHARINENSIS	11	21	43	0	0	0	0	0	181	0
CERAPUS SP. A	0	0	11	0	21	160	32	0	0	32
COROPHIUM ACHERUSICUM	11	53	53	171	0	651	0	21	0	0
COROPHIUM LACUSTRE	0	43	0	0	0	0	0	0	117	0
COROPHIUM TUBERCULATUM	0	0	0	0	661	0	139	0	0	85
ERICHTHONIUS BRASILIENSIS	0	75	21	21	21	235	192	0	53	203
GRANDIDIERELLA BONNIEROIDES	11	11	43	11	0	21	11	11	0	181
ELASMOPUS LEVIS	0	43	21	0	11	0	0	0	21	0
MAERA CF. WILLIAMSII	0	0	0	0	0	0	11	0	0	0
MAERA CF. CAROLINIANA	0	0	0	0	736	235	0	0	0	0
MELITA ELONGATA	11	0	0	0	0	0	0	11	0	0
PHOTIS MELANICUS	0	0	0	0	11	203	0	0	0	11
PHOTIS PUGNATOR	0	21	11	0	53	139	32	0	0	32
LISTRIELLA CF. BARNARDI	11	0	64	0	21	181	96	0	32	128

BENTHOS ABUNDANCE BY STATION AND SPECIES

NUMBER PER SQUARE METER
FEBRUARY 1984

SPECIES NAME	31	32	33	34	35	36	37	38	39	40
LYSIANDOPSIS CF ALBA	0	0	0	0	11	0	0	0	0	0
MONOCULODES NYEI	0	0	21	11	0	53	21	128	11	53
SYNCHELIDIUM CF. AMERICANUM	0	11	0	0	0	0	0	0	11	0
HETEROPHILIAS SECLUSUS	0	43	0	0	0	0	0	0	0	0
EUDEVENOPUS HONDURANUS	0	0	0	0	0	0	11	0	0	0
EOBROLGUS SPINOSUS	0	21	0	0	0	0	0	0	0	0
PODOCERUS SP.	0	0	11	0	0	0	0	0	0	0
STENOTHOE CF. MINUTA	0	0	0	0	0	0	11	0	0	0
STENOTHOE CF. GALLENSIS	0	21	0	0	0	0	0	0	0	0
TIRON TRIODCELLATUS	0	0	0	0	64	85	0	11	0	0
CAPRELLA PENANTIS	0	11	0	0	0	0	0	0	0	0
CAPRELLA EQUILIBRA	0	0	0	0	0	11	0	0	21	0
PARACAPRELLA TENUIS	21	21	181	11	64	32	21	0	0	11
LUCONACIA INCERTA	0	0	128	11	0	11	32	0	43	64
OGYRIDES ALPHAEROSTRIS	11	0	0	0	0	0	0	0	21	32
HIPPOLYTE PLEURACANTHA	0	32	0	0	0	0	0	0	0	0
CALLIANASSA ATLANTICA	0	0	0	0	0	0	0	0	0	0
PAGURIDAE SP.	0	43	0	0	11	53	32	0	0	11
PAGURUS BREVIDACTYLUS	0	32	32	0	0	0	0	11	0	0
PAGURUS CAROLINENSIS	0	11	0	11	0	0	11	21	32	0
HETEROCRYPTA GRANULATA	0	0	0	0	0	11	0	0	0	0
PELIA MUTICA	0	0	11	0	0	11	0	0	0	0
XANTHIDAE SP.	0	0	0	0	11	0	0	0	0	0
PANOPEUS HERBSTII	0	0	0	11	0	0	0	0	0	0
PILUMNUS SAYI	0	11	0	0	0	0	0	0	0	0
PINNOTHERIDAE SP.	0	11	11	0	11	85	21	11	21	11
PINNIXA PEARSEI	0	0	0	0	0	0	0	0	11	0
PINNIXA RETINENS	0	0	0	0	21	43	0	0	0	11
SIPUNCULA SP.	0	0	32	0	0	75	0	0	11	0
PHASCOLION SP.	181	256	544	11	0	0	32	11	384	21
ECHINURA SP.	0	0	0	0	0	11	0	0	0	0
PHORONIS ARCHITECTA	0	0	0	277	0	0	0	0	0	11
BRYOZOA SP.=ECTOPROCTA	0	0	0	11	0	11	0	0	0	0
GLOTTIDIA PYRAMIDATA	0	0	0	0	75	11	0	0	0	0
OPHIOLEPIS ELEGANS	0	0	0	0	0	0	21	0	0	0
AMPHIURIDAE SP.	128	11	203	96	32	107	128	0	320	96
MICROPHOLIS GRACILLIMA	0	0	0	11	0	0	0	0	0	0
OPHIOPHRAGMUS FILOGRANEUS	11	0	0	0	0	0	0	0	11	0
OPHIOPHRAGMUS SEPTUS	0	0	0	0	11	0	0	0	0	0
AMPHIOPLUS ABDITUS	0	0	0	0	0	0	0	0	0	21
AMPHIOPLUS THROMBOIDES	0	0	21	11	0	0	0	0	0	21
AXIOGNATHUS SQUAMATUS	0	0	0	0	43	21	0	0	0	85
HOLOTHUROIDEA SP.	2272	32	11	11	11	0	64	32	171	64
ENTEROPNEUSTA SP.	0	21	11	0	32	0	0	0	21	0
MOLGULIDAE SP.	0	0	43	384	117	1696	0	0	32	11
BRANCHIOSTOMA SP.	0	0	0	0	11	21	0	0	0	0
MYROPHIS PUNCTATUS	11	0	0	0	0	0	0	0	0	11
MICROGOBIOUS GULOSUS	11	0	0	0	0	0	0	0	0	0

TOTAL DENSITY

15467 21653 41141 15168 71968 47904 16181 7477 20245 24971

TOTAL NUMBER OF SPECIES

86 121 149 126 155 179 140 66 133 136

ANEMONE SP.

PORIFERA SP.

DESMOSPONGIAE (ENCRUSTING)

LISSODENDORYX ISODICTYALIS

CLIONA SP.

HYDROZOA SP.

ANTHOZOA SP.

ACTINARIA SP.

ATHENARIA

THENARIA SP.

PLATYHELMINTHES SP.

POLYCLADIDA SP.

STYLOCHUS SP.

EUPLANA GRACILIS

TRICLADIDA SP.

PLATYHELMINTHES SP. B

PLATYHELMINTHES SP. A

NEMERTINA SP. = RHYNCHOCOEL

NEMATODA

POLYCHAETA SP.

POLYNOID SP.

LEPIDONOTUS SUBLEVIS
LEPIDONOTUS VARIABILIS
LEPIDASTHENIA VARIUS
LEPIDAMETRIA COMMENSALIS
POLYNOID SP. C
PSEUDOHALOSYDNA SP. A
POLYNOID GENUS D
POLYNOID GENUS B

POLYODONTIDAE

POLYODONTES LUPINA

EULEPETHIDAE

SIGALIONIDAE

PHOLOE SP.
STHENELAIS SP.
STHENELAIS BOA
STHENELAIS OBLIQUIS
SIGALION ARENICOLA
EHLERSILEANIRA INCISA
FIMBRIOSTHENELAIS SP.
FIMBRIOSTHENELAIS MINOR

CHRYSOPELIDAE

PALEANOTUS HETEROSETA
PALAENOTUS SP. A

AMPHINOMIDAE

PARAMPHINOME SP. B

PHYLLODOCIDAE SP.

PHYLLODOCE SP.
 PHYLLODOCE ARENAE
 PHYLLODOCE CASTANEA
 ETEONE SP.
 ETEONE HETEROPODA
 ETEONE LACTEA
 EULALIA SANGUINEA
 PARANAITIS SPECIOSA
 PARANAITIS POLYNOIDES
 PARANAITIS SP. A
 HESIONURA ELONGATA

HESIONIDAE SP.

GYPTIS BREVIPALPA
 GYPTIS VITTATA
 AMPHIDUROS SP. A
 PARAHESSIONE LUTEOLA
 PODARKE OBSCURA

PILARGIDAE

ANCISTROSYLLIS SP.
 ANCISTROSYLLIS CF. HAMATA
 ANCISTROSYLLIS HARTMANAE
 ANCISTROSYLLIS CF. JONESI
 ANCISTROSYLLIS JONESI
 ANCISTROSYLLIS GROENLANDICA
 ANCISTROSYLLIS SP. A
 SIGAMBRA TENTACULATA
 SIGAMBRA BASSI
 PILARGIS SP. A
 CABIRA INCERTA
 PARANDALIA AMERICANA

SYLLIDAE SP.

AUTOLYTUS DENTALIUS
 PIONOSYLLIS SP.
 TRYPANOSYLLIS COELIACA
 TYPOSYLLIS SP.
 TYPOSYLLIS PROLIFERA
 TYPOSYLLIS CF. LUTEA
 TYPOSYLLIS CF. ARMILLARIS
 TYPOSYLLIS CF. AMICA
 EUSYLLIS LAMELLIGERA
 EXOGONE DISPAR

EXOGONE LOUREI
 EXOGONE ATLANTICA
 SPHAEROSYLLIS SPP.
 SPHAEROSYLLIS GLANDULATA
 SPHAEROSYLLIS TAYLORI
 SPHAEROSYLLIS LONGICAUDA
 SPHAEROSYLLIS PIRIFEROPSIS
 SPHAEROSYLLIS RISERI
 BRANIA SP.
 BRANIA CLAVATA
 BRANIA WELLFLEETENSIS
 BRANIA SP. A
 EHLERSIA CORNUTA
 EHLERSIA FERRUGINA
 HAPLOSYLLIS SPONGICOLA
 ODONTOSYLLIS ENOPLA
 SYLLIDES SP.
 SYLLIDES FLORIDANUS
 SYLLIDES FULVUS
 STREPTOSYLLIS SP. JUV.
 STREPTOSYLLIS PETTIBONEAE
 PARAPIONOSYLLIS SP.
 PARAPIONOSYLLIS LONGICIRRATA
 PARAPIONOSYLLIS SP. B
 BRANCHIOSYLLIS EXILIS
 BRANCHIOSYLLIS OCLATA

NEREIDAE SP.

CERATONEREIS IRRITABILIS
 NEANTHES SP. (JUV.)
 NEANTHES ACUMINATA
 NEANTHES MICROMMA
 NEREIS SP.
 NEREIS PELAGICA
 NEANTHES SUCCINEA
 NEREIS FALSA
 NEREIS RIISEI
 NEREIS LAMELLOSA
 PLATYNEREIS DUMERILII
 LAEONEREIS CULVERI

NEPHTYIDAE SP.

NEPHTYS SP.
 NEPHTYS CF. BUCERA
 NEPHTYS INCISA
 NEPHTYS PICTA
 NEPHTYS SQUAMOSA
 AGLAOPHAMUS VERRILLI
 INERMONEPHTYS INERMIS

SPHAERODORIDAE SP.

SPHAERODOROPSIS SP.

GLYCERIDAE SP.

GLYCERA SP.
GLYCERA CAPITATA
GLYCERA AMERICANA
GLYCERA DIBRANCHIATA
GLYCERA ROBUSTA
GLYCERA SP. C
GLYCERA SP. A
HEMIPODUS ROSEUS

GONIADIDAE

GLYCIDAE SOLITARIA
GLYCIDAE NORDMANNI
GONIADA TERES
GONIADIDES CAROLINAE

ONUPHIDAE SP.

DIOPATRA CUPREA
KINBERGONUPHIS SIMONI
MOOREONUPHIS NEBULOSA

EUNICIDAE SP.

EUNICE TENUIS
MARPHYSA SANGUINEA
MARPHYSA DISJUNCTA
LYSIDICE NINETTA
LYSIDICE SP. A
LUMBRINERIS SP. B

LUMBRINERIDAE SP.

LUMBRINERIS LATREILLI
LUMBRINERIS TENUIS
LUMBRINERIS VERRILLI
LUMBRINERIS TESTUDINUM
LUMBRINERIS ERNESTI
LUMBRINERIS SP. D

ARABELLIDAE

DRILONEREIS LONGA
DRILONERIES SP. F
ARABELLA IRICOLOR
ARABELLA MUTANS
ARABELLA SP.

DORVILLEIDAE

DORVILLEA SP.
DORVILLEA SOCIABILIS
SCHISTOMERINGOS RUDOLPHI
SCHISTOMERINGOS SP. B
PETTIBONEIA SP. A

ORBINIIDAE SP.

HAPLOSCOLOPLOS SP.
HAPLOSCOLOPLOS FOLIOSUS
HAPLOSCOLOPLOS FRAGILIS
NAINERIS SP.
NAINERIS DENDRITICA
NAINERIS LAEVIGATA
NAINERIS BICORNIS
SCOLOPLOS SP.
SCOLOPLOS RUBRA
SCOLOPLOS TEXANA
PHYLO FELIX
ORBINIA RISERI
ORBINIA AMERICANA
PROSCOLOPLUS SP.
ORBINIIDAE GENUS A

PARAONIDAE

ARICIDEA SP.
ARICIDEA CATHERINAE
ARICIDEA FRAGILIS
ARICIDEA TAYLORI
ARICIDEA PHILBINAE
ARICIDEA SP. C
CIRROPHORUS LYRA
CIRROPHORUS CF. FORTICIRRATUS
CIRROPHORUS FURCATUS

SPIONIDAE SP.

LAONICE CIRRATA
POLYDORA SP.
POLYDORA SOCIALIS
POLYDORA LIGNI
POLYDORA WEBSTERI
POLYDORA CF WEBSTERI
POLYDORA PLANA
PRIONOSPIO SP.
PRIONOSPIO HETEROBRANCHIA
PRIONOSPIO CRISTATA
PRIONOSPIO EHLERSIA
SPIO PETTIBONEAE
SPIOPHANES BOMBYX
SPIOPHANES WIGLEYI
POLYDORID SP.
RHYNCHOSPIO SP.
RHYNCHOSPIO GLUTAEUS
PARAPRIONOSPIO PINNATA

STREBLOSPID BENEDICTI
 SCOLELEPIS SQUAMATA
 SCOLELEPIS TEXANA
 APOPRIONOSPID PYGMAEA
 MINUSPID SP.
 MINUSPID CIRRIFERA
 MINUSPID CIRROBRANCHIATA
 BOCCARDIELLA HAMATA
 CARAZIELLA HOBSONAE

MAGELONIDAE

MAGELONA PACIFICA
 MAGELONA PETTIBONEAE

POECILOCHAETIDAE

POECILOCHAETUS JOHNSONI

CHAETOPTERIDAE

SPIOCHAETOPTERUS C. OCLATUS

CIRRATULIDAE SP.

CAULLERIELLA SP.
 THARYX SP.
 THARYX CF. DORSOBRANCHIALIS
 THARYX SP. A
 CHAETOZONE SP.
 CHAETOZONE SETOSA
 CIRRATULID SP. A

ACROCIRRIDAE

ACROCIRRUS FRONTIFILIS

FLABELLIGERIDAE

PIROMIS ROBERTI

SCALIBREGMIDAE

HYBOSCOLFX LONGISETA

OPHELIIDAE

ARMANDIA AGILIS
 ARMANDIA MACULATA
 TRAVISIA HOBSONAE

CAPITELLIDAE SP.

CAPITELLA CAPITATA
 HETEROMASTUS FILIFORMIS
 NOTOMASTUS SP.
 NOTOMASTUS LATERICEUS
 NOTOMASTUS LOBATUS
 MEDIOMASTUS SP.
 MEDIOMASTUS AMBISETA
 MEDIOMASTUS CALIFORNIENSIS
 LEIOCHRIDES PALLIDIOR
 SCYPHOPROCTUS SPP.
 SCYPHOPROCTUS SP. A

ARENICOLIDAE

ARENICOLA CRISTATA

MALDANIDAE

ASYCHIS ELONGATA
 CLYMENELLA TORQUATA
 MALDANE SARSI
 MALDANE GLEBIFEX
 PETALOPROCTUS SP.
 AXIOTHELLA MUCOSA
 EUCLYMENE SP.
 EUCLYMENE SP. Z
 EUCLYMENE CF. SP. B
 MACROCLYMENE SP.

OWENIIDAE

OWENIA FUSIFORMIS
 MYRIDOCHELE OCVLATA

SABELLARIIDAE

SABELLARIA SP.
 SABELLARIA VULGARIS

PECTINARIIDAE

PECTINARIA GOULDII

AMPHARETIDAE SP.

AMPHARETE SP.
 AMPHARETE ACUTIFRONS
 AMPHARETE AMERICANA
 AMPHARETE PARVIDENTATA
 AMPHICTEIS GUNNERI

MELINNA MACULATA
ISOLDA PULCHELLA

9

TEREBELLIDAE UNID. SP.

PISTA SP.
PISTA CRISTATA
PISTA PALMATA
POLYCIRRUS SP.
LOIMIA MEDUSA
LOIMIA VIRIDIS
TEREBELLA RUBRA
AMAEANA SP.
AMAEANA TRILOBATA
STREBLOSOMA HARTMANAE

TRICHOBRANCHIDAE

TEREBELLIDES STROEMI

SABELLIDAE

CHONE AMERICANA
CHONE SP. B
MEGALOMMA BIOCVLATUM
POTAMILLA SP.
POTAMILLA RENIFORMIS
SABELLA MICROPHTHALMA
SABELLA SP. A
FABRICIA SABELLA
HYPsicOMUS PHAEDAENIA

SERPULIDAE SP.

SPIRORBIS SP.
SPIRORBIS CORRUGATIS
SPIRORBIS SPIRILLUM
HYDROIDES SP.
HYDROIDES DIANTHUS
HYDROIDES PROTULICOLA
HYDROIDES UNCINATUS
FILOGRANA IMPLEXA
POMATOCEROS SP.
POMATOCEROS AMERICANUS
VERMILIOPSIS SP.

QUESTA CAUDICIRRA

BOGUEIDAE SP.

BOGUEA ENIGMATICA
BOGUEA SP. A

MAGELONA CF CINCTA

POLYGORDIIDAE

POLYGORDIUS SP.

OLIGOCHAETE

GASTROPODA SP.

HYDROBIIDAE SP.

RISSOINIDAE

RISSOINA CATESBYANA
SAYELLA FUSCA
SAYELLA HEMPHILLI
SAYELLA CROSSEANA

VITRINELLIDAE SP.

CYCLOSTREMISCUS PENTAGONUS
SOLARIOBIS SHIMERI
CIRCULUS SUPPRESSUS
COCHLIOLEPIS PARASITICA

TURRITELLIDAE

TURRITELLA SP. (JUV.)

CAECIDAE

CAECUM SP.
CAECUM PULCHELLUM
CAECUM IMBRICATUM
CAECUM STRIGOSUM
CAECUM PLICATUM
CAECUM NITIDUM

DIASTOMIDAE

DIASTOMA VARTUM

CERITHIIDAE

CERITHIOPSIS SP.
CERITHIOPSIS GREENI
CERITHIOPSIS EMERSONI
TRIPHORA NIGROCINCTA
SEILA ADAMSI
FINELLA ADAMSI
CERITHIUM MUSCARUM
CERITHIUM EBURNEUM

EPITONIIDAE

EPITONIUM SP.
EPITONIUM NOVANGLIAE
EPITONIUM FOLIACEICOSTUM

ACLIDIDAE

SCHWENGELIA SP.
SCHWENGELIA FLORIDANA

EULIMIDAE

MELANELLA SP.
MELANELLA INTERMEDIA
MELANELLA CONOIDEA
STROMBIFORMIS HEMPHILLI
STROMBIFORMIS SP. A

CAPULIDAE

CAPULUS UNGARICUS

CALYPTRAEIDAE

CALYPTRAEA CENTRALIS
CREPIDULA SP.
CREPIDULA CONVEXA
CREPIDULA PLANA
CREPIDULA MACULOSA

NATICIDAE

NATICA PUSILLA
POLINICES DUPLICATUS

MURICIDAE

MUREX SP.

PYRENIDAE

MITRELLA LUNATA
ANACHIS SP.
ANACHIS AVARA
ANACHIS OBESA
ANACHIS OBESA OSTREICOLA
ANACHIS SEMIPLICATA
ANACHIS FLORIDANA

BUCCINIDAE

CANTHARUS CANCELLARIUS

NASSARIIDAE

NASSARIUS VIBEX

OLIVIDAE

OLIVELLA SP.
OLIVELLA MINUTA
OLIVELLA PERPLEXA
OLIVELLA SP. B
OLIVELLA SP. A
OLIVA SAYANA

MARGINELLIDAE

GRANULINA OVULIFORMIS
MARGINELLA APICINA
MARGINELLA AUREOCINCTA
MARGINELLA LAVALLEEANA
HYALINA SP.

COLUMBELLIDAE

TURRIDAE SP.

MANGELIA MELANITICA
CRYOTURRIS CERINELLA
PYRGOCYTHARA PLICOSA
CRASSISPIRA TRIMARIANA

CONIDAE

CONUS JASPEDEUS STEARNSI

TEREBRIDAE

PYRAMIDELLIDAE

ODOSTOMIA SP.
ODOSTOMIA BISUTURALIS
ODOSTOMIA IMPRESSA
ODOSTOMIA SEMINUDA
ODOSTOMIA CONOIDEA
TURBONILLA SP.
TURBONILLA INTERRUPTA
TURBONILLA CONRADI
TURBONILLA DALLI
TURBONILLA CF STYLIFORMIS
PYRAMIDELLA RESTICULA
CYCLOSTREMELLA HUMILIS
EULIMASTOMA CF. CANALICULATA
EULIMASTOMA SP. A

ACTEONIDAE SP.

ACTEON PUNCTOSTRIATUS

SCAPHANDRIDAE

ACTEONINA CANALICULATA

PHILINIDAE

PHILINE INFUNDIBULUM

BULLIDAE

BULLA STRIATA

HAMINOEIDAE

HAMINOE SUCCINEA
ATYS CARIBAEA

CYLINDROBULLIDAE

CYLINDROBULLA BEAUII

ELLOBIIDAE

MELAMPUS BIDENTATUS
MELAMPUS COFFEUS

SACOGLOSSA SP.

STILIGERIDAE

STILIGER (ERCOLANIA) SP.
STILIGER SP. B

APLYSIIDAE SP.

NUDIBRANCHIA SP.

DORIDIDAE

AEOLIDIIDAE

BERGHIA SP. A

POLYPLACOPHORA SP.

CHAETOPLEURIDAE

CHAETOPLEURA APICULATA

APLACOPHORA SP. E

APLACOPHORA SP. A

BIVALVIA SP.

LUMBRINERIS SP.

NUCULIDAE

NUCULA PROXIMA

NUCULANIDAE

NUCULANA ACUTA

ARCIDAE

ANADARA TRANSVERSA
BARBATIA CANDIDA

GLYCYMERIDIDAE

GLYCYMERIS PECTINATA

MYTILIDAE

MUSCULUS LATERALIS
MODIOLUS AMERICANUS
BRACHIDONTES EXOSTUS
AMYGDALUM PAPHIUM
LIOBERUS CASTANEUS
ISCHADIUM RECURVUM

PECTINIDAE

ARGOPECTEN GIBBUS

ANOMITIDAE

ANOMIA SIMPLEX

LIMIDAE

LIMA SP.

OSTREIDAE

CRASSOSTREA VIRGINICA

LUCINIDAE SP.

LUCINA SP.
LUCINA NASSULA
LINGA AMIANTUS
CODAKIA ORBICULATA

UNGULINIDAE

DIPLODONIA PUNCTATA

LASAEIDAE SP.

ERYCINA SP.

MONTACUTIDAE

MYSELLA PLAMULATA
ALIGENA TEXASIANA
NEAEROMYA FLORIDANA

SPORTELLIDAE

ENSITELLOPS SP.

CALYPTIDAE

CARDITAMERA FLORIDANA

CRASSATELLIDAE

CRASSINELLA LUNULATA

CARDIIDAE SP.

LAEVICARDIUM MORTONI
BRACHICARDIUM MURICATUM
TRACHICARDIUM NAZARUM

MACTRIDAE

MULINIA LATERALIS
MACTRA FRAGILIS

SCOLINIDAE

ENSIS MINOR

TELLINIDAE

MACOMA TENTA
MACOMA BREVIROSTRIS
TELLINA SP.
TELLINA AEQUISTRATA
TELLINA VESICOLOR
TELLINA TEXANA
TELLINA TAMPAENSIS

DONAX VARIABILIS

PSAMMODIIDAE

TAGELUS SP.
TAGELUS PLEBIUS
TAGELUS DIVISUS

SEMEIIDAE

- SEMELE SP. (JUV.)
- SEMELE BELLASTRIATA
- SEMELE PROFICUA
- SEMELE PURPURASCENS
- SEMELE MUCULOIDES
- ABRA AEQUALIS
- CUMINGIA TELLINOIDES VANHYNINGI
- CUMINGIA COARCTATA

CORBICULINAE

- POLYMESODA CAROLINIANA

DOSINIINAE SP. (VENERIDAE)

- TRANSENNELLA COMPADINA
- DOSINIA DISCUS
- CYCLINELLA TENUIIS?
- MERCENARIA CAMPECHIENSIS
- CHIONE SP.
- CHIONE GRUS
- CHIONE CANCELLATA
- PARASTARTE TRIQUERTA

MYIDAE

- SPHENIA ANTILLENIS

CORBULIDAE

- CORBULA CONTRACTA

PHOLADIDAE SP.

PANDORIDAE

- PANDORA SP. (JUV.)

LYONSIIDAE

- LYONSIA HYALINA FLORIDANA

THRACIIDAE

- ASTHENJTHAERUS MEMPHILLI

CUSPIDARIIDAE

CARDIOMYA GEMMA

DENTALIIDAE

DENTALIUM LAQUEATUM

ARACHNIDA

HYDRACARINA SP.

PHOXECHILIDIIDAE

ANOPLODACTYLUS PYGMAEUS
ANOPLODACTYLUS PETIOLATUS

CRUSTACEA

MYODOCOPA SP.

CYLINDROLEBERIDIAE

PARASTEROPE POLLEX

MYODOCOPA SPP.

HAPLOCYTHERIDA SETIPUNCTATA

COPEPODA

CALANOID COPEPODA

HARPACTICOID COPEPODA

CYCLOPOID COPEPODA

ARGULIDAE

ARGULUS SP.

CHTHAMALIDAE

CHTHAMALUS FRAGILIS

BALANIDAE

BALANUS SP.
SEMIBALANUS BALANOIDES
BALANUS AMPHITRITE
BALANUS EBURNEUS
BALANUS IMPROVISUS
BALANUS VENUSTUS

NEBALIIDAE

NEBALIA SP.

MYSIDAE

MYSIDOPSIS BIGELOWI
MYSIDOPSIS BAHIA
MYSIDOPSIS ALMYRA
MYSIDOPSIS FURCA
BOWMANIELLA SP.
BOWMANIELLA FLORIDANUS
BOWMANIELLA PORTORICENSIS COMPLEX
TAPHROMYSIS BOWMANI

LEUCONIDAE

LEUCON SP. A

DIASTYLIDAE

OXYUROSTYLIS SMITHI

NANNASTACIDAE

CUMELLA SP. B
ALMYRACUMA SP.
CUMELLA SP. A.

BODOTRIIDAE

CYCLASPIS CF. VARIANS
CYCLASPIS SP. D
CYCLASPIS SP. C
CYCLASPIS SP. B
CYCLASPIS SP. A
VAUNTHOMPSONIA SP.

TANAIDACEA SP.

APSEUDIDAE

APSEUDES PROPINQUUS
HALMYRAPSEUDES CF. CUBANENSIS
HALMYRAPSEUDES BAHAMENSIS
CALOZODION WADEI

KALLIAPSEUDIDAE

KALLIAPSEUDES SP. A

TANAIDAE

TANAIS CAVOLINII

PARATANAIDAE

HARGERIA RAPAX

ISOPODA

ANTHURIDAE

ANTHURIDAE SP. A
CYATHURA POLITA
APANTHURA MAGNIFICA
APANTHURA CF. SIGNATA
XENANTHURA SP.
XENANTHURA BREVITELSON
HOROLOANTHURA IRPEX
PANANTHURA FORMOSA
HALIOPHASMA VALERIAE

CIROLANIDAE

CIROLANA SP.
CIROLANA PARVA
CIROLANA CF. GRACILIS
CIROLANA SP. A
EURYDICE LITTORALIS

SPHAEROMATIDAE

PARACERCEIS CAUDATA
CASSIDINIDEA LUNIFRONS
CYMODOCE FAXONI

SEROLIDAE SP. (JUV.)

SEROLIS MGRAYI

AEGIDAE

ROCINELA SIGNATA

EXCORALLANIDAE

EXCORALLANA TRICORNIS

IDOTEIDAE

ERICHSONELLA CF. ATTENUATA
ERICHSONELLA FILIFORMIS
EDOTEA MONTOSA
EDOTEA TRILOBA

MUNNIDAE

MUNNA CF. HAYESI

BOPYRIDAE SP.

AMPELISCIDAE

AMPELISCA ABDITA
AMPELISCA VADORUM
AMPELISCA AGASSIZI
AMPELISCA HOLMESI
AMPELISCA SP. H.
AMPELISCA SP. G
AMPELISCA SP. C
AMPELISCA SP. B
AMPELISCA SP. A

AMPHILOCHIDAE SP.

GITANOPSIS SP.

AMPITHOE LONGIMANA
CYMADUSA COMPTA

AORIDAE

LEMBOS SP.
LEMBOS SMITHI
LEMBOS UNICORNIS
LEMBOS SETOSUS
LEMBOS KUNKELAE
LEMBOS BRUNNEOMACULATUS MACKINNEYI
LEMBOS RECTANGULATUS
LEMBOS UNIFASCIATUS
MICRODEUTOPUS MYERSI
ACUMINODEUTOPUS SP.
ACUMINODEUTOPUS NAGLEI
RILDARDANUS LAMINOSA

ARGISSIDAE

ARGISSA HAMATIPES

BATEIDAE

BATEA CF. CATHARINENSIS
CARINOBATEA SP.

COLOMASTIGIDAE

COLOMASTIX SP.
COLOMASTIX HALICHONDRIAE

COROPHIIDAE

CERAPUS SP. A
COROPHIUM SP.
COROPHIUM ACHERUSICUM
COROPHIUM LACUSTRE
COROPHIUM TUBERCULATUM
COROPHIUM LOUISANUM
COROPHIUM SP. A
ERICTHONIUS SP.
ERICTHONIUS BRASILIENSIS
UNCIOLA SERRATA
GRANDIDIERELLA BONNIEROIDES

GAMMARIDAE

ELASMOPUS LEVIS
GAMMARUS MUCRONATUS
MAERA CF WILLIAMSI

MAERA CF. CAROLINIANA
MELITA SP.
MELITA CF. NITIDA
MELITA APPENDICULATA
MELITA ELONGATA
MELITA LONGISETOSA
MELITA CF. LONGISETOSA
GAMMARIDAE SP. B
GAMMARIDAE SP. A

HYALIDAE

HYALE SP. B = CF. PLUMOSA
HYALE SP. A

PHOTIDAE

PHOTIS SP.
PHOTIS MELANICUS
PHOTIS PUGNATOR
PHOTIS MACROMANUS
MICROPROTOPUS RANEYI
MEGAMPHOPUS SP.

LEUCOTHOIDAE

LEUCOTHOE CF. SPINICARPA

LILJEBORGIIDAE

LISTRIELLA CF. BARNARDI

LYSIANASSIDAE

LYSIANOPSIS CF. ALBA

OEDICEROTIDAE

MONOCULODES SP.
MONOCULODES NYEI
MONOCULODES SP. A
SYNCHELIDIUM CF. AMERICANUM

HETEROPHLIAS SECLUSUS

PHOXOCEPHALIDAE

PARAPHOXUS SP.
PLATYISCHOPUS SP.
EUDEVENOPUS HONDURANUS

PODOCERIDAE

PODOCERUS SP.

STENOTHOIDAE

STENOTHOE SP.
STENOTHOE CF. GALLENSIS
STENOTHOE CF. MINUTA

SYNOPIIDAE

TIRON TROPAKIS
TIRON TRIOCELLATUS

TALITRIDAE

ORCHESTIA CF. PLATENSIS
ORCHESTIA UHLERI

CAPRELLIDAE

CAPRELLA EQUILIBRA
CAPRELLA PENANTIS
PARACAPRELLA TENUIS
PARACAPRELLA PUSILLA
LUCONACIA INCERTA
HEMIAEGINA MINUTA

PENAEIDAE

PENAEUS SP.
TRACHYPENAEUS CONSTRICTUS
SICYONIA LAEVIGATA

SERGESTIDAE

LUCIFER FAXONI

CARIDEA SP

PASIPHAEIDAE

LEPTOCHELA SERRATORBITA

PALAEMONIDAE

PALAEMONETES INTEREDIUS
PALAEMONETES PUGIO
PERICLIMENES LONGICAUDATUS
PERICLIMENES AMERICANUS
PALAEMON FLORIDANUS

ALPHEIDAE

ALPHEUS SP.
ALPHEUS HETEROCHAEUS
ALPHEUS NORMANNI
ALPHEUS FLORIDANUS
ALPHEUS ARMILLATUS
AUTOMATE CF EVERMANNI

OGYRIDIDAE

OGYRIDES ALPHAEOSTRIS
OGYRIDES LIMICOLA

HIPPOLYTIDAE

HIPPOLYTE PLEURACANTHA
LATREUTES PARVULUS
THOR SP.

PROCESSIDAE

PROCESSA SP. (JUV.)

CALLIANASSIDAE

UPOGEBIA AFFINIS
CALLIANASSA SP.
CALLIANASSA ATLANTICA

PAGURIDAE SP.

PAGURISTES HUMMI
PAGURUS SP.
PAGURUS LONGICARPUS
PAGURUS POLLICARIS
PAGURUS BULLISI
PAGURUS BREVIDACTYLUS
PAGURUS MACLAUGHLINAE
PAGURUS GYMNOACTYLUS
PAGURUS CAROLINENSIS
PAGURUS STIMPSONI
PAGURUS CRINITICORNIS

PORCELLANIDAE

PETROLISTHES ARMATUS
EUCERAMUS PRAELONGUS

BRACHYURA SP. (JUV.)

DROMIIDAE

HYPOCONCHA SABULOSA

CALAPPIDAE

OSACHILA SP.

LEUCOSIIDAE

ILIACANTHA SP.
ILIACANTHA LIODACTYLUS
EBALIA SP.
EBALIA CARLOSA

MAJIDAE SP. (JUV.)

LIBINIA EMARGINATA
HETEROCRYPTA GRANULATA
PELIA MUTICA

PARTHENOPIIDAE SP.

PORTUNIDAE

PORTUNUS GIBBESII
PORTUNUS VENTRALIS

XANTHIDAE SP.

EURYPANOPEUS DEPRESSUS
NEOPANOPE TEXANA TEXANA
PANOPEUS HERBSTII
PANOPEUS HERBSTII F. SIMPSONI
RHITHROPANOPEUS HARRISII
MICROPANOPE NUTTINGI
MENIPPE MERCENARIA
PILUMNUS FLORIDANUS
PILUMNUS SAYI

GONEPLACIDAE

EURYPLAX NITIDA

PINNOTHERIDAE SP.

PINNIXA SP.
PINNIXA CHAETOPTERANA
PINNIXA RETINENS
PINNIXA SAYANA
PINNIXA PEARSEI

GRAPSIDAE

SESARMA CINEREUM

SQUILLIDAE

SQUILLA EMPUSA

INSECTA

PODURIDAE

ANURIDA MARTIMA

ISOTOMIDAE

THYSANOPTERA

CHIRONOMIDAE

ARTHROPODA SP.

SIPUNCULA SP.

GOLFINGIIDAE

PHASCOLION SP.
PHASCOLION CRYPTUS

ECHIURA SP.

PHORONIDAE

PHORONIS ARCHITECTA

BRYOZOA SP. = ECTOPROCTA

MEMBRANIPORIDAE

MEMBRANIPORA SP.

LINGULIDAE

GLOTTIDIA PYRAMIDATA

OPHIUROIDEA SP.

OPHIURIDAE

OPHIOLEPIS ELEGANS

OPHIODERMATIDAE

OPHIODERMA SP.

OPHIACTIDAE

HEMIPHOLIS ELONGATA

AMPHIURIDAE SP.

AMPHIODIA TRYCHNA
 AMPHIODIA PULCHELLA
 MICROPHOLIS GRACILLIMA
 OPHIOPHRAGMUS SP.
 OPHIOPHRAGMUS FILOGRANEUS
 OPHIOPHRAGMUS WURDEMANI
 OPHIOPHRAGMUS SEPTUS
 AMPHIOPUS ABDITUS
 AMPHIOPUS CONIORTODES
 AMPHIOPUS THROMBOIDES
 AMPHIOPUS CUNEATUS
 AMPHIURA STIMPSONI
 MICROPHOLIS ATRA
 AXIOGNATHUS SQUAMATUS
 AMPHICHILUS VERRILLI
 AMPHICHILUS INCISUS

OPHIOTHRICIDAE

OPHIOTHRIX ANGULATA

HOLOTHUROIDEA SP.

HOLOTHUROIDEA SP. A

HOLOTHURIIDAE SP.

HEMICHORDATA

ENTEROPNEUSTA SP.

ASCIDIACEA SP.

CLAVELINIDAE

DISTAPLIA BERMUDENSIS
POLYCITORINAE

STYELIDAE

STYELA PARTITA
POLYANDROCARPA SP.

MOLGULIDAE SP.

BRANCHIOSTOMIDAE

BRANCHIOSTOMA SP.
BRANCHIOSTOMA CARIBAEUM
BRANCHIOSTOMA FLORIDAE

OSTEICHTHYES

OPHICHTHIDAE

MYROPHIS PUNCTATUS

BATRACHOIDIDAE

OPSANUS BETA

GOBIESOCIDAE

GOBIESOX STRUMOSUS

GADIDAE

UROPHYCIS FLORIDANUS

MENIDIA BERYLLINA

SYNGNATHIDAE

SYNGNATHUS LOUISIANAE

HIPPOCAMPUS ERECTUS

HIPPOCAMPUS ZOSTERAE

BLENNIIDAE

HYPSOBLENNIUS HENTZI

CHASMODES SABURRAE

GOBIIDAE

GOBIOSOMA ROBUSTUM

MICROGOBIUS GULOSUS

CYNOGLOSSIDAE

SYMPHURUS PLAGIUSA

BENTHOS

JUNCUS MARSH DENSITY, BIOMASS, AND HEIGHT

JANUARY 1984

STATION

LOCATIONS	UPPER SALT CREEK	LOWER SALT CREEK	CONTROL	MIDWAY	THERMAL	THUMB ISLAND	FENCE	DAVIS ISLAND
1								
LIVE HEIGHT								
LIVE WEIGHT	214.067	119.727	346.467	150.543	182.500	166.067	326.967	240.433
LIVE DENSITY	65.000	74.333	129.000	64.000	66.000	76.000	79.333	84.333
DEAD WEIGHT	138.360	50.010	145.200	78.010	69.740	83.630	97.813	128.333
2								
LIVE HEIGHT								
LIVE WEIGHT	185.800	249.533	245.927	347.900	76.113	257.067	325.667	143.800
LIVE DENSITY	114.333	82.333	83.667	123.667	45.333	88.333	90.333	59.000
DEAD WEIGHT	183.233	115.820	168.000	166.867	24.340	100.637	117.987	158.170
3								
LIVE HEIGHT								
LIVE WEIGHT	189.000	215.467	270.000	308.800	108.877	204.233	232.233	81.527
LIVE DENSITY	75.667	84.000	78.333	119.667	48.000	65.000	84.667	47.333
DEAD WEIGHT	142.400	125.960	177.567	152.267	10.753	103.757	160.133	25.040
4								
LIVE HEIGHT								
LIVE WEIGHT	183.967	195.300	141.033	216.233	166.833	317.067	287.867	175.400
LIVE DENSITY	85.333	74.333	50.000	83.000	103.000	93.000	68.333	55.000
DEAD WEIGHT	179.933	140.467	74.627	75.260	42.207	128.923	115.233	83.713

BENTHOS

JUNCUS MARSH DENSITY, BIOMASS, AND HEIGHT

MARCH 1984

STATION

LOCATIONS	UPPER SALT CREEK	LOWER SALT CREEK	CONTROL	MIDWAY	THERMAL	THUMB ISLAND	FENCE	DAVIS ISLAND
1								
LIVE HEIGHT								
LIVE WEIGHT	302.300	322.300	275.033	212.167	64.700	179.967	301.300	280.000
LIVE DENSITY	103.667	144.333	96.333	85.333	43.333	80.000	80.000	86.333
DEAD WEIGHT	207.400	150.533	137.067	143.600	66.123	96.833	127.800	161.233
2								
LIVE HEIGHT								
LIVE WEIGHT	181.533	269.800	274.967	242.000	231.067	222.333	217.700	240.233
LIVE DENSITY	117.667	93.000	86.000	108.000	136.333	81.667	78.000	103.333
DEAD WEIGHT	144.400	143.467	89.183	116.530	135.547	94.920	136.333	126.660
3								
LIVE HEIGHT								
LIVE WEIGHT	156.700	216.233	278.400	213.370	254.800	175.533	282.600	175.033
LIVE DENSITY	65.667	88.333	80.000	114.667	152.667	62.333	89.667	90.000
DEAD WEIGHT	87.840	150.453	117.493	184.767	114.100	87.597	153.300	83.843
4								
LIVE HEIGHT								
LIVE WEIGHT	252.033	211.200	186.933	254.933	140.033	301.733	389.800	195.367
LIVE DENSITY	121.667	83.000	61.000	102.333	84.333	92.667	104.333	66.333
DEAD WEIGHT	145.300	114.300	125.710	150.533	78.593	100.967	232.067	80.080

BENTHOS

SPARTINA MARSH DENSITY, BIOMASS, AND HEIGHT

JANUARY 1984

STATION

LOCATIONS	UPPER SALT CREEK	LOWER SALT CREEK	CONTROL	MIDWAY	THERMAL	THUMB ISLAND	FENCE	DAVIS ISLAND
1								
LIVE HEIGHT								
LIVE WEIGHT	29.327	19.173	26.483	28.703	53.633	27.767	34.690	11.273
LIVE DENSITY	35.333	19.667	40.000	27.000	69.000	25.000	31.333	8.000
DEAD WEIGHT	293.633	94.333	161.100	237.400	207.400	214.667	183.733	99.637
2								
LIVE HEIGHT								
LIVE WEIGHT	24.007	23.100	20.780	25.330	53.320	32.533	39.267	4.157
LIVE DENSITY	18.667	31.333	11.667	14.667	52.333	36.333	42.333	4.333
DEAD WEIGHT	175.000	126.397	57.487	253.733	130.000	276.167	187.833	10.765
3								
LIVE HEIGHT								
LIVE WEIGHT	21.777	33.173	32.617	17.890	29.507	27.550	33.343	23.457
LIVE DENSITY	35.333	29.333	15.000	16.333	40.000	20.000	37.667	11.000
DEAD WEIGHT	135.367	218.633	204.000	225.433	202.400	263.967	205.567	159.900
4								
LIVE HEIGHT								
LIVE WEIGHT	33.130	19.547	40.273	29.563	36.343	25.267	31.593	5.467
LIVE DENSITY	31.000	24.000	23.333	23.333	44.333	26.000	43.000	3.667
DEAD WEIGHT	182.067	129.163	94.190	129.867	173.400	250.267	220.433	25.655

BENTHOS

SPARTINA MARSH DENSITY, BIOMASS, AND HEIGHT

MARCH 1984

STATION

LOCATIONS	UPPER SALT CREEK	LOWER SALT CREEK	CONTROL	MIDWAY	THERMAL	THUMB ISLAND	FENCE	DAVIS ISLAND
1								
LIVE HEIGHT								
LIVE WEIGHT	62.733	26.360	42.997	54.397	52.843	48.033	64.980	26.140
LIVE DENSITY	46.667	30.000	46.333	42.667	44.667	40.667	46.333	32.333
DEAD WEIGHT	224.700	63.605	106.100	205.733	103.080	200.633	166.300	26.213
2								
LIVE HEIGHT								
LIVE WEIGHT	42.403	26.627	27.530	40.363	85.573	51.150	53.293	9.870
LIVE DENSITY	32.000	29.000	14.667	18.667	55.667	37.667	54.667	16.667
DEAD WEIGHT	151.200	153.367	28.680	96.300	106.600	144.067	209.933	12.467
3								
LIVE HEIGHT								
LIVE WEIGHT	30.753	26.840	30.203	32.530	47.310	50.123	54.037	25.627
LIVE DENSITY	36.333	25.667	16.667	23.667	54.333	38.000	51.667	19.667
DEAD WEIGHT	132.667	148.733	155.333	126.000	152.233	184.033	198.267	27.370
4								
LIVE HEIGHT								
LIVE WEIGHT	49.107	22.920	38.293	41.793	29.890	51.490	51.080	18.187
LIVE DENSITY	33.667	22.667	23.667	34.333	41.000	36.333	46.000	12.667
DEAD WEIGHT	187.833	59.260	128.450	161.133	112.333	239.433	207.167	11.960

MACROPHYTE GROUND TRUTHING - PERCENT COVER BY SPECIES

1

JANUARY 1984

STATION	HALODULE WRIGHTII	THALLASSIA TESTUDINUM	SYRINGODIUM FILIFORME	HALOPHILA DECIPIENS	HALOPHILA ENGELMANNI	RUPPIA MARTIMA	ATTACHED ALGAE	DRIFT ALGAE
A	0.0	0.0	0.0	0.0	0.0	69.0	0.0	0.0
B	0.0	19.0	60.5	0.0	0.0	0.0	8.5	0.6
C	0.0	9.4	2.8	0.0	0.0	0.0	4.4	0.6
D	24.3	0.0	0.0	0.0	0.0	0.0	0.0	1.8
E	5.1	4.5	30.4	0.0	6.6	0.0	1.3	0.8
F	1.9	21.2	6.1	0.0	2.4	0.0	0.0	0.2
G	6.0	0.0	0.0	0.0	0.5	1.4	0.0	11.9
H	0.1	27.2	9.8	0.0	0.0	0.0	0.0	1.3
I	10.0	35.3	0.0	0.0	0.0	0.0	0.0	7.6

NOTE: ATTACHED ALGAE ARE ALL OTHER SPECIES COMBINED THEREFORE AVERAGE PERCENT COVER CAN EXCEED 100 PERCENT
 ALSO SUMS ACROSS STATIONS CAN EXCEED 100 PERCENT DUE TO SPECIES LAYERING AND OVERLAP

MACROPHYTE GROUND TRUTHING - PERCENT COVER BY SPECIES

2

MARCH 1984

STATION	HALODULE WRIGHTII	THALASSIA TESTUDINUM	SYRINGODIUM FILIFORME	HALOPHILA DECIPIENS	HALOPHILA ENGELMANNI	RUPPIA MARTINA	ATTACHED ALGAE	DRIFT ALGAE
1	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	12.4	0.0	0.4
3	1.8	0.0	0.0	0.0	0.7	5.4	0.0	1.6
4	0.0	6.0	0.0	0.0	0.0	2.3	0.8	1.1
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
6	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.5
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
9	0.0	2.1	0.4	0.0	0.0	1.2	0.0	4.5
10	0.1	19.5	0.0	0.0	8.2	0.0	0.1	12.4
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.9	0.0	10.7
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
15	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.2
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	37.9	18.5
18	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.6
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0
23	0.0	0.0	3.9	0.0	0.3	0.0	61.8	47.7
24	0.0	0.0	0.0	0.0	0.0	0.0	3.9	1.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
26	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
28	10.1	0.0	9.2	0.0	0.0	0.0	27.6	5.7
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
30	3.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
32	7.6	0.0	0.0	0.0	0.0	0.0	2.6	28.8
33	8.9	0.8	15.2	0.0	10.4	0.0	4.8	2.4
34	0.0	0.0	0.0	0.0	0.0	0.0	16.1	3.4
35	0.0	0.0	5.2	0.0	0.4	0.0	13.4	40.5
36	10.2	0.0	11.0	0.0	0.4	0.0	9.9	6.0
37	0.1	0.0	0.0	0.0	0.3	0.0	3.8	0.7
38	0.0	0.0	18.9	0.0	0.2	0.0	77.1	19.5
39	0.0	0.0	0.0	0.0	0.6	0.0	13.4	53.6
40	0.2	0.0	0.0	0.0	0.0	68.7	0.0	1.4
41	6.5	0.0	18.1	0.0	0.0	0.0	3.0	0.3
42	0.0	0.0	0.0	0.0	0.0	0.0	6.3	3.8
43	0.0	0.0	6.8	0.0	0.0	0.0	37.2	18.5
44	0.0	0.0	5.2	0.0	0.0	31.0	70.2	0.7
45	0.0	0.0	0.0	0.0	0.0	0.0	62.3	0.0
46	0.0	11.8	41.0	0.0	0.0	0.0	3.2	2.8
47	0.8	35.7	54.1	0.0	0.0	0.0	17.1	10.4
48	0.0	0.0	22.9	0.0	0.3	0.0	64.0	1.3
49	0.0	0.0	2.7	0.0	0.2	11.6	7.7	49.6
50	0.0	0.0	0.0	0.0	0.0	17.0	0.0	29.5

NOTE: ATTACHED ALGAE ARE ALL OTHER SPECIES COMBINED THEREFORE AVERAGE PERCENT COVER CAN EXCEED 100 PERCENT
 ALSO SUMS ACROSS STATIONS CAN EXCEED 100 PERCENT DUE TO SPECIES LAYERING AND OVERLAP

MACROPHYTE INTENSIVE SAMPLING

JANUARY 1984

STATION	DOMINANT SPECIES	AVERAGE BIOMASS	AVERAGE DENSITY	AVERAGE GROWTH
A	HALODULE WRIGHTII	0.9	842.9	0.04
B	SYRINGODIUM FILIFORME	17.6	875.0	0.06
C	THALLASSIA TESTUDINUM	13.3	812.5	0.07
D	HALODULE WRIGHTII	1.1	557.1	
E	SYRINGODIUM FILIFORME	1.7	537.5	0.03
F	THALLASSIA TESTUDINUM	0.6	387.5	0.03
G	HALODULE WRIGHTII	0.3	728.6	0.00
H	SYRINGODIUM FILIFORME	1.2	637.5	0.02
I	THALLASSIA TESTUDINUM	0.6	487.5	0.05

NOTES: AVERAGE BIOMASS IN GRAMS DRY WEIGHT PER SQUARE METER
 AVERAGE DENSITY IN BLADES PER SQUARE METER
 AVERAGE GROWTH IN DRY WEIGHT GRAMS PER SQUARE METER PER DAY

MACROPHYTE INTENSIVE SAMPLING

MARCH 1984

STATION	DOMINANT SPECIES	AVERAGE BIOMASS	AVERAGE DENSITY	AVERAGE GROWTH
A	HALODULE WRIGHTII		985.7	0.08
B	SYRINGODIUM FILIFORME	19.3	1300	0.16
C	THALLASSIA TESTUDINUM	9.4	775.0	0.09
D	HALODULE WRIGHTII	0.5	142.9	0.03
E	SYRINGODIUM FILIFORME	1.2	375.0	0.01
F	THALLASSIA TESTUDINUM	0.9	375.0	0.07
G	HALODULE WRIGHTII		400.0	0.03
H	SYRINGODIUM FILIFORME	1.2	462.5	0.04
I	THALLASSIA TESTUDINUM	0.7	462.5	0.04

NOTES: AVERAGE BIOMASS IN GRAMS DRY WEIGHT PER SQUARE METER
 AVERAGE DENSITY IN BLADES PER SQUARE METER
 AVERAGE GROWTH IN DRY WEIGHT GRAMS PER SQUARE METER PER DAY

BENTHOS

OYSTER MORTALITY - MONTHLY EXPOSURE

STATIONS	MONTH OF SAMPLING	
	MARCH	
	LIVE	DEAD
	NUMBER OF OYSTERS	NUMBER OF OYSTERS
1	85	5
2	82	5
3	80	9
4	73	17
5	79	10
6	82	8
7	82	8
8	87	3
9	80	10

OYSTER MORTALITY EIGHT MONTH EXPOSURE

	MONTH OF SAMPLING	
	MARCH	
	LIVE	DEAD
	NUMBER OF OYSTERS	NUMBER OF OYSTERS
STATIONS		
1	29	61
2	20	70
3	15	75
4	4	86
5	1	89
6	2	88
7	10	80
8	4	86
9	33	57

BENTHOS

OYSTER MORTALITY - MONTHLY EXPOSURE

	MONTH OF SAMPLING	
	APRIL	
	LIVE	DEAD
	NUMBER OF OYSTERS	NUMBER OF OYSTERS
STATIONS		
1	75	15
2	62	27
3	79	11
4	61	27
5	70	20
6	56	29
7	77	13
8	84	6
9	77	12

BENTHOS

OYSTER MORTALITY - MONTHLY EXPOSURE

	MONTH OF SAMPLING	
	MAY	
	LIVE	DEAD
	NUMBER OF OYSTERS	NUMBER OF OYSTERS
STATIONS		
1	70	20
2	70	13
3	79	5
4	70	20
5	68	18
6	70	15
7	72	15
8	71	16
9	83	5

OYSTER MORTALITY TEN MONTH EXPOSURE

STATIONS	MONTH OF SAMPLING	
	MAY	
	LIVE	DEAD
	NUMBER OF OYSTERS	NUMBER OF OYSTERS
1	27	63
2	lost	lost
3	12	78
4	8	82
5	0	90
6	6	84
7	-	-
8	6	84
9	23	67

SURFACE AND BOTTOM TEMPERATURES (DEGREES C) BY STATION AND WEEK OF
FEBRUARY 1984

STATION	FEBRUARY 7, 1984		FEBRUARY 14, 1984		FEBRUARY 21, 1984		FEBRUARY 27, 1984	
	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM
1	13.3	13.7*	17.8	17.2*	21.3	21.3*	19.2	19.1*
2	10.9	10.3*	17.2	16.7*	20.3	20.7*	18.1	18.1*
3	9.7	9.6	16.5	16.1*	20.1	19.6*	17.3	17.3*
4	12.0	13.1*	19.0	18.2	21.3	22.6*	21.3	21.2
5	12.2	13.3*	19.3	13.2	21.5	22.0*	19.3	20.4
6	12.2	12.3*	19.9	19.2	21.6	21.6*	19.6	19.7
7	10.7	12.9	18.2	18.2	21.0	21.0	17.9	17.9
8	10.8	12.9	17.7	17.7	21.0	21.0	17.4	17.4
9	10.8	10.3	17.4	16.3	20.8	20.7	17.3	17.3
10	10.3	11.3	15.6	14.7	20.3	20.0	17.4	17.4
11	10.3	10.5	14.6	14.3	20.8	19.5		*
12	11.0	11.0	14.3	14.0	20.1	18.3		*
13	11.9	12.0*	21.1	21.1	21.4	22.1*	19.1	19.0
14	12.6	12.8	19.4	19.6	21.6	23.3*	18.1	18.1*
15	11.3	12.4	18.6	18.5	21.9	22.4	17.7	17.6
16	11.2	11.2	15.9	15.8	21.7	21.5	17.8	17.8
17	19.3	19.5*	23.8	23.8	21.6	21.6*	21.2	21.3
18	11.1	11.5	20.6	20.5	21.7	22.1	19.1	19.2
19	13.6	13.7	20.1	20.1	22.4	22.4	18.4	18.4
20	13.0	18.7	19.1	19.2	22.3	22.3	17.6	17.6
21	15.7	16.4	19.1	18.8	21.9	22.2	17.5	17.5
22	13.0	14.7	17.1	17.1	22.4	22.4	17.7	17.4*
23	13.0	14.1	15.5	15.4			17.9	17.8
24	11.7	11.7	14.8	14.5	21.6	19.2	17.1	17.1
25	11.3	11.7	14.5	13.9	19.4	18.4		*
26	11.5	11.3	14.1	13.8	18.8	18.2		*
27	12.8	12.7*	19.4	18.6	21.7	21.7*	19.5	19.5
28	11.2	11.2	19.8	19.0	21.7	22.7	17.8	17.8
29	15.4	15.6	18.8	18.6	22.4	22.2	17.5	17.5
30	12.9	13.9	16.9	16.8	22.5	22.5	17.5	17.5
31	10.8	10.7*	16.9	16.8*	20.4	20.0	17.6	17.6*
32	11.4	11.2*	16.7	16.8*	20.4	20.3	17.7	17.6*
33	11.1	11.1*	16.1	15.6*	19.9	19.1	17.8	17.7*
34	10.8	10.8*	14.8	14.8*	19.8	19.1*	17.8	17.8*
35	11.9	12.0*	14.3	14.3*	19.1	19.0	17.5	17.5*
36	12.2	12.0*	14.1	14.1*	18.2	18.2*	17.5	17.3*
37	12.1	11.9	14.0	13.9*	18.2	18.0*	17.1	17.1*
38	13.7	13.7*	16.8	16.7*	20.5	20.5*	17.7	17.8*
39	11.7	10.7*	15.9	15.9*	19.9	19.8*	17.5	17.5*
40	11.1	11.1*	14.4	14.4*	18.6	17.9*	17.6	17.6*

* OUTSIDE TIDE WINDOW

SURFACE AND BOTTOM TEMPERATURES (DEGREES C) BY STATION AND WEEK OF
MARCH 1984

STATION	MARCH 5, 1984		MARCH 15, 1984		MARCH 19, 1984		MARCH 27, 1984	
	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM
1	17.9	17.6*	19.1	18.7*	22.9	22.7*	20.1	20.2*
2	16.5	16.2*	18.0	17.7*	21.8	21.8*	20.1	20.1*
3	15.3	15.2*	17.7	17.6*	21.6	20.9*	19.9	20.0*
4	16.5	17.7	21.4	21.2	21.3	22.9	20.9	21.7
5	16.9	16.4	20.8	21.0	21.2	22.9	20.8	21.1
6	16.5	16.5	20.1	19.1	21.6	21.6	21.2	21.2
7	17.6	17.3	19.1	18.1	22.1	21.7	21.0	21.0
8	17.3	17.2	19.1	18.1	22.4	22.2	20.7	20.7
9	15.9	15.1	18.3	18.0		*	20.5	20.5
10	15.2	14.9	18.5	17.6	21.3	21.3	20.1	20.1
11	15.1	14.5	18.0	17.2	21.1	21.1	19.6	19.6
12	14.0	13.8	17.3	17.0	20.0	19.9	19.5	19.5
13	19.4	20.5*	22.3	22.2	24.1	24.1*	24.5	24.4
14	19.0	18.9	20.1	20.0	22.5	22.6	23.5	23.5
15	17.6	17.4	18.4	18.5	22.5	21.8	21.6	21.5
16	16.7	16.8	18.8	18.6	22.5	22.5	20.7	19.8
17	22.4	22.4*	23.2	23.2	29.4	29.4*	26.8	26.9
18	19.5	19.3	22.0	21.9	24.8	24.8	24.8	24.8
19	19.5	19.5	22.6	22.4	24.8	24.8	24.2	24.3
20	18.9	19.0	20.5	19.3	23.9	24.0	22.1	21.8
21	18.8	19.0	20.5	19.8	23.6	24.0	22.1	21.7
22	18.6	18.3	19.6	18.1	24.2	23.6	20.6	20.6
23	18.2	14.4	18.3		24.3	22.0	20.2	20.2
24	15.5	15.0	18.2	17.4	21.5	21.1	19.7	19.7
25	14.0	13.8	18.0	17.1	20.0	19.9	19.5	19.5*
26	14.0	13.9	17.6	17.0	19.9	19.7	19.5	19.5
27	18.8	18.6*	21.0	21.0	22.0	22.0	21.4	21.4
28	17.9	17.9	20.3	20.3	22.7	22.7	23.2	23.5
29	19.8	19.8	20.8	19.6	26.1	26.2	21.9	21.8
30	18.1	15.3	18.7	18.2	25.4	25.5	20.4	20.4
31	16.8	16.8*	18.9	18.9*	21.6	21.5*	20.0	19.9*
32	16.2	16.2*	18.4	18.4*	21.5	21.4*	20.0	20.0*
33	16.3	15.7*	18.2	18.1*		*	20.0	20.0
34	15.1	15.1*	17.9	17.9*	21.2	21.0*	19.9	19.9*
35	14.4	14.4*	17.5	17.4*	22.2	21.8*	19.9	19.8*
36	14.4	14.4*	17.1	17.1*	20.1	20.1*	19.7	19.7*
37	14.0	14.0*	17.1	16.8*	20.0	19.9*	19.6	19.6*
38	16.8	16.8	18.7	18.7*	21.6	21.6	20.1	20.3*
39	15.8		18.1	18.1*	21.2	20.9	20.2	20.1*
40	14.4	14.3*	17.7	17.6*	20.5	20.2*	20.2	20.2*

* OUTSIDE TIDE WINDOW

SURFACE AND BOTTOM TEMPERATURES (DEGREES C) BY STATION AND WEEK OF
APRIL 1984

STATION	APRIL 5, 1984		APRIL 12, 1984		APRIL 18, 1984		APRIL 24, 1984	
	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM
1	19.7	19.4*	20.5	20.2*	20.1	20.1*	22.6	21.8*
2	18.7	18.7*	20.6	20.0*	19.0	18.5*	22.8	21.4*
3	18.4	18.3	20.1	18.8*	18.6	18.6*	22.9	22.2
4	18.0	18.1	21.9	21.8	17.5	17.3	21.5	22.2
5	18.1	18.1	21.6	21.5	18.4	17.7	21.1	21.6
6	18.0	18.0	22.2	20.7	18.2	18.1	21.2	21.2
7	18.0	18.2	22.1	20.2	18.1	18.1	21.5	21.2
8	18.0	18.6	21.5	20.2	18.2	18.1	22.0	23.0
9	18.2	18.4	22.2	19.9	18.7	18.3	22.1	21.3
10	18.4	18.4	20.7	20.5	18.3	18.3	22.3	21.3
11	18.5	18.5	20.6	20.3	18.5	18.4	22.2	21.4
12	18.6	18.5	20.5	20.1	18.8	18.7	22.1	21.5
13	19.1	18.9	25.2	24.8	19.2	19.2*	22.2	22.2
14	19.1	19.1	22.3	21.8	17.9	17.8	22.2	22.2
15	18.0	18.2	21.6	20.5	18.0	18.0	21.8	21.2
16	18.9	18.9	20.9	20.6	18.2	18.2	21.6	21.4
17	20.4	20.4*	28.7	28.7	20.3	20.3*	25.8	25.5
18	18.8	18.8	24.6	23.8	17.2	17.2	24.4	21.6
19	20.4	20.8	24.1	23.6	18.0	18.1	22.9	22.9
20	19.5	19.9	24.2	21.5	18.2	18.1	21.5	22.9
21	19.5	20.0	22.7	21.4	18.4	18.4	21.6	22.4
22	20.1	20.3	23.1	20.8	19.0	18.8	21.8	21.9
23	21.4	21.4	20.7	20.2	18.7	18.6	23.9	21.8
24	19.3	19.4	20.8	19.9	18.6	18.5	21.9	21.4
25	19.2	18.9	22.2	20.0	18.9	18.9	22.3	21.4
26	18.7	18.7	20.6	20.0	19.0	19.1	22.6	21.5
27	18.7	18.7	23.3	23.3	17.3	17.4	21.2	21.1
28	18.8	18.8	23.0	24.6	18.5	17.5	23.2	24.3
29	23.4	23.3	22.9	21.6	18.9	19.3	21.8	23.4
30	22.2	22.3	22.5	20.6	18.8	18.7	21.9	22.7
31	19.1	19.1*	20.0	19.9*	18.4	18.2*	21.5	21.4
32	19.3	19.3*	20.1	20.0*	18.5	18.5*	21.3	21.5
33	19.1	19.1*	20.4	20.3*	18.3	18.2*	21.7	21.3
34	19.0	19.0*	20.2	20.0*	19.7	19.4*	22.8	22.3*
35	19.0	19.0*	19.9	19.9*	19.5	19.5*	22.6	22.0*
36	18.9	19.0*	19.9	19.8*	19.6	19.6*	21.6	21.6*
37	19.0	19.0*	22.2	20.0	19.9	19.5*	22.5	21.4*
38	19.0	19.0	20.3	20.1*	18.8	18.8*	22.1	21.5*
39	18.9	18.4*	20.1	20.0*	18.4	18.0	21.6	21.7*
40	18.8	18.6*	21.2	20.0*	19.2	19.0*	22.8	22.2*

* OUTSIDE TIDE WINDOW

SURFACE AND BOTTOM TEMPERATURES (DEGREES C) BY STATION AND WEEK OF
MAY 1984

STATION	MAY 2, 1984		MAY 7, 1984		MAY 14, 1984		MAY 21, 1984		MAY 29, 1984	
	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM
1	26.8	26.9*	27.9	27.8	26.5	26.5*	27.9	27.5*	27.4	27.2*
2	26.8	26.7*	28.4	27.9*	26.3	26.2*	26.6	26.6	27.4	27.7*
3	26.8	26.3*	29.0	27.5*	26.6	26.5*	27.6	26.5	27.4	27.5*
4	26.2	26.8	29.2	29.5	28.8	28.4	27.8	28.0	28.3	28.4
5	26.1	27.0	29.3	29.8	28.6	29.0	27.5	27.3	28.3	28.2*
6	26.3	26.5	29.5	29.2	27.7	28.3	27.8	27.2	28.2	28.0*
7	26.9	26.8	29.4	28.6	28.3	27.3	27.7	27.2	28.4	28.1
8	26.9	26.9*	30.1	28.0	28.3	27.3	28.1	27.0	28.3	27.9
9	27.0	26.8*	30.5	28.5	27.9	27.0	27.5	26.4	28.1	28.0
10	26.8	26.8	29.1	27.4	27.1	26.7	27.2	25.9	27.9	27.5
11	26.8	26.0	28.3	27.0	27.6	26.8	27.0	25.6	27.9	27.7
12			28.3	27.1	27.2	27.0	26.5	25.7	27.7	27.6
13	29.2	29.2*	29.6	30.8*	30.5	30.5	29.2	28.9	31.5	31.7
14	27.8	28.1	30.7	30.8	28.6	29.1	28.2	29.2	29.2	29.2
15	27.8	27.3	30.2	28.5	28.1	27.9	28.9	27.5	28.7	28.0
16	27.8	27.6	30.4	27.7	27.5	26.9	27.7	26.5	27.7	27.3
17	30.4	30.4	32.3	32.1	34.1	34.2	32.1	31.2	34.9	34.9
18	31.4	30.7	33.6	32.7	30.6	30.7	32.8	30.5	30.6	30.4
19	29.7	29.8	33.5	33.0	30.1	31.0	31.3	31.3	30.8	30.1
20	29.5	30.0	31.9	29.3	28.1	29.3	30.0	29.6	29.9	28.7
21	30.0	29.8	30.6	28.1	28.7	28.7	29.2	29.5	28.6	28.4
22	29.5	28.4	32.3	27.4	28.4	27.0	29.6	26.4	27.9	27.7
23	29.4	27.2	29.3	26.7	28.3	27.0	29.1	26.1	27.8	27.4
24	26.5	26.5	27.7	26.7	27.2	26.8	26.4	25.4	28.0	27.7
25	26.0	26.0	27.6	26.7	27.4	26.7	26.5	25.3	27.8	27.4
26	25.8	25.8	28.3	26.9	27.3	27.0	26.7	25.6	27.7	27.6*
27	27.5	27.5	29.1	29.0	30.8	29.9	27.2	27.0	28.2	28.6
28	28.0	28.0	30.1	30.3	30.1	29.6	29.7	27.7	30.9	29.5
29	32.2	31.0	32.0	30.7	28.5	28.4	30.1	28.1	27.9	27.9
30	29.4	29.4	31.9	29.5	28.0	27.5	29.7	26.1	27.8	27.4
31	26.9	26.9*	28.6	27.6*	26.6	26.5*	26.3	25.8*	26.6	26.6*
32	26.8	26.8*	28.3	27.7*	26.5	26.5*	25.9	25.8*	26.6	26.6*
33	26.6	26.5*	28.6	27.8	26.5	26.5*	26.0	25.6*	26.1	27.0*
34	26.7	26.7*	27.8	26.1*	26.5	25.9*	25.5	25.2*	26.8	26.9*
35	26.3	26.3*	27.4	26.7*	26.8	26.2*	25.2	25.2*	26.7	26.8*
36	26.1	26.1*	27.3	26.6*	26.5	26.3*	25.3	25.2*	27.1	27.1*
37	25.9	25.9*	26.9	26.7*	26.8	26.3*	25.4	25.3*	27.0	27.3*
38	26.9	26.9*	27.9	27.4*	26.4	26.4*	25.5	25.5*	26.1	26.4*
39	26.9	26.5*	27.6	27.2*	26.3	26.1*	25.3	25.4*	26.6	27.0*
40	26.5	26.3*	27.0	26.9*	26.5	26.0*	25.6	25.1*	27.0	27.0*

* OUTSIDE TIDE WINDOW

SURFACE AND BOTTOM CONDUCTIVITY (MMHOS/CM) BY STATION AND WEEK OF
FEBRUARY 1984

STATION	FEBRUARY 7, 1984		FEBRUARY 14, 1984		FEBRUARY 21, 1984		FEBRUARY 27, 1984	
	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM
1	2.9	2.6*	16.4	21.5*	6.7	8.6*	26.0	26.0*
2	9.5	14.3*	22.8	23.6*	25.8	26.7*	28.0	27.9*
3	16.3	16.3	28.9	30.5*	24.4	28.9*	32.3	32.4*
4	11.5	15.3*	25.2	29.0	18.4	31.2*	31.3	31.3
5	11.9	19.3*	25.6	27.7	14.6	21.5*	27.6	29.8
6	8.9	13.9*	27.4	28.9	21.8	23.0*	27.2	27.2
7	10.3	19.9	30.9	31.0	25.0	30.9	29.8	29.9
8	10.4	19.2	31.7	32.7	26.7	32.2	31.5	31.5
9	10.9	13.5	31.4	32.2	24.5	31.6	31.4	31.4
10	16.0	24.5	31.8	31.8	26.8	34.0	32.8	32.8
11	20.0	21.2	33.1	33.3	30.0	34.6		*
12	22.3	26.0	34.7	34.2	32.4	34.7		*
13	21.8	22.0*	35.0	35.0	26.9	32.5*	29.3	29.3
14	18.8	18.8	30.1	30.4	26.3	33.2*	30.5	30.6*
15	15.2	19.2	32.2	33.1	25.6	32.2	31.5	31.6
16	15.3	15.5	31.8	31.7	28.0	30.3	32.2	32.2
17	33.1	33.2*	37.1	37.2	36.7	36.9*	29.5	30.1
18	21.9	23.3	34.7	34.8	33.3	37.2	29.1	29.1
19	25.5	25.7	33.8	34.0	34.2	34.4	29.6	29.5
20	22.8	31.6	31.5	32.3	30.3	35.2	31.0	31.2
21	24.5	28.6	32.4	33.5	27.9	35.9	31.0	31.4
22	18.8	24.1	32.0	32.1	32.2	34.2	30.8	30.8*
23	21.3	24.5	31.8	31.6	33.2	22.6	31.8	32.2
24	18.2	18.2	32.5	32.3	33.4	35.0	34.0	34.0
25	18.2	24.0	34.0	34.0	34.2	35.6		*
26	21.0	22.7	34.6	34.5	34.8	35.4		*
27	21.8	22.2*	33.3	33.4	34.7	34.7*	27.0	27.1
28	22.8	23.0	33.5	33.8	33.8	36.0	30.4	30.5
29	25.7	25.8	33.8	33.6	34.1	34.6	30.8	30.6
30	18.6	22.8	32.2	32.6	34.2	34.1	31.4	31.3
31	22.9	23.0*	25.8	25.8*	29.5	34.1	26.0	26.0*
32	23.2	23.2*	27.2	27.0*	29.6	29.5	27.3	27.4*
33	26.0	26.1*	29.0	29.4*	31.4	35.7	29.5	29.7*
34	26.3	26.2*	30.5	30.3*	32.2	34.9*	31.1	31.1*
35	26.1	26.0*	32.0	32.0*	35.5	35.6	33.5	33.5*
36	22.6	24.6*	32.8	32.3*	36.7	36.7*	33.5	33.6*
37	23.0	25.2	33.2	33.0*	36.1	36.3*	35.2	35.2*
38	8.9	8.9*	21.2	22.0*	23.3	23.2*	25.3	25.3*
39	15.4	19.1*	26.8	26.8*	30.1	30.3*	28.5	28.6*
40	25.2	26.5*	31.3	30.4*	35.0	37.7*	33.1	33.1*

* OUTSIDE TIDE WINDOW

SURFACE AND BOTTOM CONDUCTIVITY (MMHOS/CM) BY STATION AND WEEK OF
MARCH 1984

STATION	MARCH 5, 1984		MARCH 15, 1984		MARCH 19, 1984		MARCH 27, 1984	
	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM
1	8.4	9.7*	15.5	17.5*	11.6	11.8*	18.5	20.0*
2	16.0	16.2*	20.3	21.1*	19.4	25.5*	23.9	27.8*
3	23.3	23.3*	24.4	23.7*	22.3	25.5*	31.3	30.5*
4	16.2	21.1	24.5	25.6	16.9	25.9	22.6	26.0
5	15.5	15.4	24.4	24.7	15.1	22.9	19.6	20.1
6	15.1	15.2	24.6	24.4	18.9	17.9	23.5	23.5
7	21.1	21.3	25.4	26.9	23.0	26.7	27.4	27.4
8	23.0	21.8	26.8	27.6	24.1	24.3	27.8	27.9
9	23.9	24.8	28.1	29.1		*	29.7	29.7
10	23.7	24.4	29.9	31.5	26.7	26.7	32.4	32.6
11	26.3	26.7	33.0	33.5	30.7	30.8	35.1	35.1
12	29.2	29.5	35.3	34.9	33.1	33.2	36.3	36.3
13	26.7	29.8*	31.0	31.0	30.5	30.6*	32.6	32.6
14	24.7	24.8	27.1	27.3	23.6	23.7	30.0	30.0
15	21.1	24.1	26.4	28.6	26.5	29.1	28.8	28.9
16	24.3	24.3	30.8	30.8	30.1	30.1	31.0	33.2
17	31.4	31.4*	32.4	32.4	39.1	39.1*	36.2	36.2
18	29.1	29.1	31.4	31.5	35.0	35.1	32.9	32.9
19	28.1	28.2	32.1	32.2	32.9	33.2	31.8	31.8
20	27.3	27.4	30.8	31.2	31.7	32.3	30.3	30.4
21	26.5	27.1	31.0	31.5	30.4	32.1	29.9	30.2
22	26.5	26.5	31.7	31.7	32.6	32.4	31.8	31.9
23	25.9	27.6	31.1	31.3	33.7	33.7	32.4	32.5
24	26.2	26.4	33.1	33.0	32.7	32.5	34.1	34.0
25	28.9	29.1	34.8	33.9	35.2	35.2	35.5	35.5*
26	30.3	30.3	35.6	35.6	35.1	35.3	35.9	36.0
27	25.2	25.4*	30.0	29.6	31.2	31.2	29.0	29.2
28	25.2	25.3	29.5	30.8	32.1	32.1	31.0	31.4
29	28.4	28.3	31.9	30.8	36.5	36.6	31.1	31.2
30	26.4	27.4	31.7	31.5	35.3	35.3	32.5	32.6
31	19.2	19.3*	25.7	25.5*	24.0	24.5*	25.7	26.0*
32	22.3	22.2*	26.7	26.5*	27.6	27.6*	26.8	26.7*
33	22.2	23.8*	28.6	28.8*		*	29.2	29.4
34	24.4	24.4*	27.0	27.1*	32.3	32.0*	31.7	31.8*
35	26.8	26.8*	30.8	30.7*	32.6	32.7*	34.2	34.2*
36	28.4	28.4*	31.1	31.9*	36.8	36.8*	34.4	34.6*
37	30.2	30.1*	33.5	33.4*	37.3	37.3*	35.0	35.0*
38	14.4	14.3	20.7	20.6*	19.4	19.9	22.1	22.3*
39	19.7	20.2	24.6	24.5*	25.0	25.3	28.0	28.0*
40	25.4	25.9*	28.2	29.3*	36.4	36.7*	33.5	34.0*

* OUTSIDE TIDE WINDOW

SURFACE AND BOTTOM CONDUCTIVITY (MMHOS/CM) BY STATION AND WEEK OF
APRIL 1984

STATION	APRIL 5, 1984		APRIL 12, 1984		APRIL 18, 1984		APRIL 24, 1984	
	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM
1	7.2	7.1*	18.6	18.9*	5.3	5.3*	4.9	11.0*
2	10.3	10.4*	21.1	23.9*	10.7	11.4*	11.1	15.6*
3	19.0	18.9	26.3	26.8*	15.9	16.3*	21.4	23.1
4	17.1	17.2	21.3	24.0	5.3	6.6	5.8	12.8
5	15.2	16.4	21.1	22.7	4.7	5.8	7.9	16.0
6	15.0	15.3	21.5	21.5	7.5	7.9	8.4	13.4
7	17.8	18.0	22.9	25.2	9.0	12.2	14.3	19.8
8	15.7	23.4	24.4	25.5	8.9	15.7	16.0	21.7
9	16.5	21.3	27.3	26.8	13.8	19.6	20.1	23.9
10	21.9	26.1	27.3	29.2	15.5	17.9	24.8	27.1
11	26.7	26.6	30.1	30.8	18.0	23.2	27.4	29.1
12	27.5	28.3	32.7	32.6	21.3	26.8	30.7	30.8
13	22.6	22.9	28.8	28.4	13.2	13.3*	20.3	23.5
14	18.6	18.7	22.9	24.1	8.3	8.5	9.4	22.5
15	18.6	20.6	24.5	25.8	9.0	11.5	14.9	20.1
16	22.6	22.7	27.8	27.7	13.0	16.5	26.0	26.4
17	25.8	25.9*	32.5	32.5	19.9	19.8*	27.2	27.1
18	25.0	25.1	27.5	27.1	13.5	13.7	23.3	24.6
19	26.8	27.1	27.1	26.8	15.2	15.3	19.5	19.9
20	24.6	25.2	28.4	27.9	12.7	12.9	17.4	23.7
21	25.2	26.7	27.8	28.6	13.1	14.0	15.1	23.5
22	27.0	27.3	29.5	29.2	16.3	19.5	16.8	22.9
23	28.2	28.3	28.0	28.0	16.9	19.8	25.4	25.8
24	26.6	27.4	30.1	30.2	17.5	21.5	22.6	28.2
25	28.1	28.1	32.8	32.2	22.1	22.3	29.0	30.1
26	28.9	29.0	32.2	33.1	23.6	25.7	30.8	30.5
27	23.2	23.2	26.6	27.5	23.6	23.9	24.0	20.4
28	24.9	24.9	26.0	29.2	20.9	22.9	26.6	23.1
29	29.4	29.6	28.2	28.1	16.9	21.5	17.2	24.0
30	29.3	29.3	30.0	29.2	16.6	18.5	22.2	25.0
31	19.5	21.4*	22.0	20.1*	16.8	21.7*	17.4	17.3
32	22.0	22.8*	23.1	23.7*	20.5	20.7*	17.7	19.3
33	25.0	25.1*	26.7	26.8*	23.5	23.4*	25.1	24.3
34	27.7	27.5*	26.9	27.0*	25.8	25.8*	30.3	30.3*
35	27.9	27.6*	30.1	30.1*	28.3	28.3*	29.4	30.2*
36	28.4	28.3*	31.1	31.1*	28.2	28.3*	29.0	29.0*
37	29.8	27.5*	32.1	32.6	27.1	27.8*	29.4	31.2*
38	16.3	16.3	17.2	17.3*	11.3	12.2*	15.7	17.9*
39	18.2	20.6*	22.9	23.0*	15.0	18.0	21.9	22.6*
40	28.8	28.8*	28.5	30.7*	27.2	27.3*	31.3	31.4*

* OUTSIDE TIDE WINDOW

SURFACE AND BOTTOM CONDUCTIVITY (MMHOS/CM) BY STATION AND WEEK OF
MAY 1984

STATION	MAY 2, 1984		MAY 7, 1984		MAY 14, 1984		MAY 21, 1984		MAY 29, 1984	
	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM
1	11.6	11.6*	11.6	13.7	10.1	10.1*	8.0	13.5*	27.2	27.3*
2	16.7	18.8*	16.7	27.8*	16.2	16.7*	23.7	28.7	29.9	33.9*
3	20.8	26.0*	24.4	32.1*	21.8	22.2*	30.0	32.1	34.1	40.1*
4	13.8	20.0	14.2	25.0	21.6	26.5	22.0	25.2	30.7	33.5
5	13.6	22.9	13.9	25.5	20.3	28.2	21.7	27.1	30.8	32.7*
6	16.1	17.8	13.6	26.5	21.0	26.1	21.5	30.0	33.5	33.9*
7	19.9	20.1	18.2	30.2	24.1	26.6	27.1	31.8	36.5	37.4
8	21.2	21.6*	20.5	31.5	25.1	26.4	30.3	32.0	37.6	38.0
9	23.7	24.7*	29.4	30.3	28.8	30.0	32.9	35.0	39.6	39.8
10	25.7	28.2	32.8	35.2	29.7	32.2	33.2	35.5	42.0	43.0
11	29.7	31.7	34.7	39.5	35.2	35.7	36.1	38.6	46.4	46.9
12			37.3	42.3	38.5	38.4	39.5	41.4	48.9	48.1
13	29.0	29.0*	25.0	31.8*	32.6	32.7	36.8	37.0	43.0	42.9
14	23.8	25.8	21.6	29.5	23.9	29.1	26.8	36.6	39.8	39.8
15	25.2	28.8	21.8	30.6	27.3	28.8	34.5	34.1	38.3	38.4
16	28.2	28.4	32.7	33.7	31.5	32.6	34.8	34.9	42.0	42.0
17	33.3	33.3	32.9	32.8	37.8	37.8	41.0	41.0	47.1	47.1
18	33.5	33.3	34.1	33.4	32.6	33.3	41.1	40.2	42.4	42.2
19	30.5	30.6	33.6	33.2	31.5	34.1	40.7	40.7	42.5	42.0
20	29.5	30.5	32.9	32.0	28.2	32.3	36.1	36.7	40.6	40.2
21	30.5	30.5	29.8	31.5	27.7	32.0	34.7	37.0	40.2	40.2
22	31.2	30.8	32.5	32.2	31.0	32.5	36.4	36.0	41.0	41.1
23	30.9	31.2	32.0	33.1	31.3	33.5	36.2	35.3	41.4	41.6
24	31.2	31.8	33.0	37.4	35.1	35.4	37.1	36.9	49.5	48.9
25	33.8	33.8	38.9	40.5	36.5	37.6	39.1	39.4	47.6	47.3
26	34.8	34.9	40.2	42.4	39.8	39.8	40.2	41.3	48.7	48.7*
27	28.6	28.6	29.1	29.6	34.2	33.3	33.3	33.6	36.8	38.0
28	29.5	29.2	30.9	30.3	33.5	32.8	37.6	35.1	41.1	39.9
29	33.3	32.6	32.7	31.6	31.3	32.0	37.3	36.1	40.6	40.6
30	30.9	30.9	32.4	31.9	32.0	33.1	37.5	36.1	41.4	41.3
31	20.4	20.4*	16.1	20.7*	25.8	26.1*	24.8	26.4*	29.5	30.1*
32	22.8	23.7*	18.2	22.5*	26.0	26.1*	27.7	27.8*	29.7	30.2*
33	23.3	26.4*	21.6	25.1	29.8	30.0*	28.6	30.3*	31.9	35.0*
34	31.3	31.3*	27.0	34.9*	29.4	30.4*	32.1	34.9*	35.0	37.7*
35	34.8	34.8*	32.4	37.0*	33.3	34.3*	36.0	37.6*	37.3	41.5*
36	36.1	36.1*	38.0	38.4*	36.2	36.2*	38.2	39.3*	44.5	44.6*
37	36.7	36.7*	38.6	41.9*	37.7	37.9*	38.9	40.4*	44.7	46.3*
38	16.8	16.5*	16.0	24.3*	15.1	15.1*	23.6	24.3*	13.8	20.2*
39	22.5	25.8*	25.1	31.0*	25.1	25.3*	30.2	33.3*	29.9	33.9*
40	33.7	33.6*	33.1	39.0*	32.8	34.0*	37.4	38.1*	40.9	41.3*

* OUTSIDE TIDE WINDOW

TABLE

TIDAL STAGE AND TIME OF TIDE WINDOW FOR
WEEKLY TEMPERATURE AND CONDUCTIVITY

<u>Date</u>	<u>Tidal Stage</u>	<u>Open Tide Window</u>	<u>Close Tide Window</u>	<u>Tide Height (Ft)</u>
June 9, 1983	H	1209	1339	4.0
June 15, 1983	L	1122	1252	2.0
June 22, 1983	H	1134	1304	3.8
June 30, 1983	L	1135	1305	1.9
July 7, 1983	H	1051	1221	3.9
July 12, 1983	L	941	1111	1.9
July 20, 1983	H	1007	1137	3.7
July 26, 1983	L	925	1055	1.8
August 3, 1983	H	807	937	3.6
August 10, 1983	H	938	1108	1.4
August 19, 1983	H	1046	1216	3.6
August 24, 1983	L	912	1042	1.4
August 30, 1983	L	1308	1438	-0.8
September 6, 1983	H	1314	1444	4.4

<u>Date</u>	<u>Stage</u>	<u>Tide Window</u>	<u>Tide Window</u>	<u>Height (Ft)</u>
September 12, 1983	L	1220	1350	0.5
September 19, 1983	H	1225	1355	3.8
September 27, 1983	L	1143	1313	0.3
October 5, 1983	H	1315	1445	4.2
October 10, 1983	L	1105	1235	0.0
October 18, 1983	H	1209	1339	3.5
October 26, 1983	L	1122	1252	-0.1
November 2, 1983	H	1124	1254	3.7
November 9, 1983	L	1022	1152	0.0
November 16, 1983	H	1044	1214	3.1
November 21, 1983	L	813	943	-0.7
December 2, 1983	H	1216	1346	3.2
December 7, 1983	L	928	1058	-0.5
December 16, 1983	H	1113	1243	2.7
December 21, 1983	L	844	1014	-1.2
December 28, 1983	H	848	1018	2.3
January 5, 1984	L	918	1048	-0.6
January 12, 1984	H	821	951	1.9
January 16, 1984	H	1254	1424	2.6

<u>Date</u>	<u>Stage</u>	<u>Window</u>	<u>Window</u>	<u>Height</u> <u>(Ft)</u>
January 23, 1984	L	1118	1248	-0.1
January 30, 1984	H	1302	1432	2.4
February 7, 1984	L	1042	1212	0.2
February 14, 1984	H	1244	1414	2.5
February 21, 1984	L	1038	1208	0.2
February 27, 1984	H	1214	1344	2.2
March 5, 1984	L	0915	1045	0.0
March 15, 1984	H	1242	1412	2.8
March 19, 1984	L	0905	1035	0.0
March 27, 1984	H	1132	1302	2.3
April 5, 1984	L	0923	1053	1.0
April 12, 1984	H	1128	1258	2.9
April 18, 1984	L	0902	1032	1.1
April 24, 1984	H	1001	1131	2.4
May 2, 1984	L	0907	1037	1.2
May 7, 1984	L	1212	1342	2.1
May 14, 1984	H	1301	1431	3.9
May 21, 1984	L	1227	1357	2.0
May 29, 1984	H	1240	1410	3.8

3.3 IMPINGEMENT AND ENTRAINMENT

IMPINGEMENT

SUMMARY

FROM FEBRUARY 25, 1984 TO

MAY 30, 1984

SPECIES NAME

NUMBER COLLECTED

ANCHOA MITCHILLI	9765
PRIONOTUS TRIBULUS	5897
OGCOEPHALUS RADIATUS	5358
LEIOSTOMUS XANTHURUS	2889
UROPHYCIS FLORIDANA	2220
ANCHOA HEPSETUS	1566
ATHERINIDAE	1072
LAGODON RHOMBOIDES	984
SPHOERODES NEPHELUS	973
LACTOPHRYS QUADRICORNIS	907
ACHIRUS LINEATUS	618
ANCYLOPSETTA QUADROCELLATA	581
CHILOMYCTERUS SCHOEPI	454
OPSANUS BETA	443
BREVOORTIA PATRONUS	403
STRONGYLURA MARINA	401
PEPRILUS BURTI	388
SYMPHURUS PLAGIUSA	359
TRINECTES MACULATUS	312
MENIDIA SP.	303
HIPPOCAMPUS ERECTUS	272
ETROPUS CROSSOTUS	260
MONACANTHUS CILIATUS	244
ORTHOPRISTIS CHRYSOPTERA	238
SYNGNATHUS FLORIDAE	230
CYNOSCION NEBULOSUS	204
PRIONOTUS SCITULUS	198
GYMNURA MICRURA	149
ALUTERUS SCHOEPI	148
SYNGNATHUS SCOVELLI	137
OPHICHTHUS GOMESI	129
BAIRDIELLA CHRYSOURA	128
SERRANIDAE	114
SYNGNATHUS LOUISIANAE	113
CLUPEIDAE	97
HYPSELENNIUS HENTZI	97
ALOSA ALABAMAE	84
CHASMODES SUBURRAE	79
HYPORHAMPHUS UNIFASCIATUS	74
ASTROSCOPUS Y-GRAECUM	63
SYNODUS FOETENS	61
PORICHTHYS PLECTRODON	61
DIPLECTRUM BIVITTATUM	50
OPISTHOGNATHIDAE	43
DASYATIS SABINA	41
CENTROPRISTIS PHILADELPHIC	40
PARALICHTHYS ALBIGUTTA	39
MEMBRAS MARTINICA	37

HARENGULA JAGUANA	35
MUGIL SP.	35
OPHISTHONEMA OGLINUM	33
MUGIL CEPHALUS	33
MENTICIRRHUS AMERICANUS	31
SPHOEROIDES SPENGLERI	29
GOBIESOX STRUMOSUS	28
EUCINOSTOMUS GULA	24
CHAETODIPTERRUS FABER	24
ARIUS FELIS	22
CENTROPRISTIS STRIATA	20
POLYDACTYLUS OCTONEMUS	20
BREVOORTIA SMITHI	18
OPHIDION GRAYI	17
HAEMULON AUROLINEATUM	17
MONACANTHUS HISPIDUS	11
TRICHIURUS LEPTURUS	10
GYMNOTHORAX NIGROMARGINATU	9
HIPPOCAMPUS ZOSTERAE	9
CARANX HIPPOS	9
MYROPHIS PUNCTATUS	8
OLIGOPLITES SAURUS	8
BASCANICHTHYS SCUTICARIS	6
ELOPS SAURUS	5
CYPRINODON VARIEGATUS	4
CHLOROSCOMBRUS CHRYSURUS	4
LAGOCEPHALUS LAEVIGATUS	4
SARDINELLA AURITA	3
BAGRE MARINUS	3
SYNGNATHUS SP.	3
ARCHOSARGUS PROBATOCEPHALU	3
SERRANUS ATROBRANCHUS	2
SERRANUS SUBLIGARIUS	2
CYNOSCION ARENARIUS	2
MUGIL CUREMA	2
CITHARICHTHYS MACROPS	2
DIPLECTRUM FORMOSUM	1
OPISTOGNATHUS AURIFRONS	1

IMPINGEMENT

SUMMARY

FROM FEBRUARY 25, 1984 TO

MAY 30, 1984

SPECIES NAME

NUMBER COLLECTED

PENAEUS DUORARUM	45365
CALLINECTES SAPIDUS	36113
LOLLIGUNCULA BREVIS	7807
SQUILLA EMPUSIA	6953
PALAEEMON FLORIDANUS	4043
METOPORHAPHIS CALCARATA	4024
PORTUNUS GIBBESI	2297
ALPHEUS HETEROCHAELIS	1040
XANTHIDAE	913
OVALIPES GUADULPENSIS	490
TRACHYPENAEUS SIMILIS	243
ALPHEUS NORMANNI	155
MENIPPE MERCENARIA	80
TOZEUMA CAROLINENSE	72
LYSMATA WURDEMANNI	62
UPOGEBIA AFFINIS	44
CALLINECTES ORNATUS	35
PORTUNUS SPINIMANUS	32
LIBINIA DUBIA	21
PETROLISTHES ARMATUS	17
PODOCHELA SIDNEYI	4
PALAEEMONETES INTERMEDIUS	3
PALAEEMONETES PUGIO	3
MACROCOELOMA TRISPINOSUM	2
POLINICES DUPLICATUS	2
PETROLISTHES GALATHINUS	1
EURYPANOPEUS DEPRESSUS	1
NEOPANOPE TEXANA	1
PANOPEUS HERBSTII	1
UCA SP.	1

IMPINGEMENT

SPECIES, NUMBER, AND WEIGHT OF ORGANISMS COLLECTED

UNIT 1

FEBRUARY 1984

SPECIES NAME	AVERAGE NUMBER PER 6 HOUR COLLECTION	AVERAGE WEIGHT PER 6 HOUR COLLECTION	FREQUENCY SAMPLED
PRIONOTUS TRIBULUS	31.38	46.85	0.88
UROPHYCIS FLORIDANA	25.00	58.31	1.00
OGCOCEPHALUS RADIATUS	11.25	705.37	1.00
SPHOERODES NEPHELUS	9.88	47.44	0.88
ANCHOA MITCHILLI	9.38	19.32	1.00
LACTOPHRYS QUADRICORNIS	7.63	592.50	0.50
CHILOMYCTERUS SCHOEPI	5.75	883.51	0.63
ACHIRUS LINEATUS	4.63	4.59	0.50
ANCYLOPSETTA QUADROCELLATA	3.75	5.34	0.50
TRINECTES MACULATUS	2.88	25.00	0.63
PEPRILUS BURTI	2.75	4.40	0.75
MONACANTHUS CILIATUS	2.50	4.52	0.63
BREVOORTIA PATRONUS	2.00	0.55	0.25
CHASMODES SUBURRAE	1.88	6.37	0.38
ALUTERUS SCHOEPI	1.63	514.14	0.38
ASTROSCOPUS Y-GRAECUM	1.50	2.61	0.50
OPSANUS BETA	1.13	8.07	0.50
LEIOSTOMUS XANTHURUS	1.00	0.87	0.38
BAIRDIELLA CHRYSOURA	0.88	7.41	0.63
SYMPHURUS PLAGIUSA	0.88	4.72	0.38
MENIDIA SP.	0.75	2.16	0.38
LAGODON RHOMBOIDES	0.75	4.75	0.63
MEMBRAS MARTINICA	0.63	3.69	0.50
CLUPEIDAE	0.50	0.05	0.25
PRIONOTUS SCITULUS	0.50	1.47	0.38
HYPORHAMPUS UNIFASCIATUS	0.38	1.77	0.38
HYPSOBLENNIUS HENTZI	0.38	2.02	0.25
ANCHOA HEPSETUS	0.25	2.32	0.25
HIPPOCAMPUS ERECTUS	0.25	0.82	0.13
MYROPHIS PUNCTATUS	0.13	0.09	0.13
OPHICHTHUS GOMESI	0.13	2.64	0.13
SYNGNATHUS LOUISIANAE	0.13	0.21	0.13
TOTAL FISH	132.38	2963.94	
CALLINECTES SAPIDUS	152.00	512.22	1.00
PENAEUS DUORARUM	32.13	267.61	1.00
METOPORHAPHIS CALCARATA	11.13	6.44	1.00
OVALIPES GUADULPENSIS	10.25	3.86	0.38
PORTUNUS GIBBESI	9.63	8.05	0.88
LOLLIGUNCULA BREVIS	8.00	39.41	0.75
PALAEON FLORIDANUS	5.50	2.92	0.63

SQUILLA EMPUSIA	3.63	29.50	0.63
ALPHEUS HETEROCHAEUS	2.50	5.10	0.63
XANTHIDAE	1.88	1.75	0.63
TRACHYPENAEUS SIMILIS	0.25	0.17	0.25
LYSMATA WURDEMANNI	0.25	0.26	0.13
TOZEUMA CAROLINENSE	0.25	0.04	0.13
PETROLISTHES ARMATUS	0.25	0.09	0.25
PALAEOMNETES INTERMEDIUS	0.13	0.09	0.13
ALPHEUS NORMANNI	0.13	0.14	0.13
PORTUNUS SPINIMANUS	0.13	0.22	0.13
EURYPANOPEUS DEPRESSUS	0.13	0.21	0.13
TOTAL INVERTEBRATES	238.13	878.10	

IMPINGEMENT

SPECIES, NUMBER, AND WEIGHT OF ORGANISMS COLLECTED

UNIT 2

FEBRUARY 1984

SPECIES NAME	AVERAGE NUMBER PER 6 HOUR COLLECTION	AVERAGE WEIGHT PER 6 HOUR COLLECTION	FREQUENCY SAMPLED
ATHERINIDAE	133.50	7.89	0.38
PRIONOTUS TRIBULUS	61.13	92.47	1.00
OGCOCEPHALUS RADIATUS	43.75	1302.97	1.00
ANCHOA MITCHILLI	28.75	57.36	1.00
BREVOORTIA PATRONUS	24.50	9.26	0.50
UROPHYCIS FLORIDANA	23.25	59.22	1.00
LACTOPHRYS QUADRICORNIS	12.75	1295.60	0.75
LEIOSTOMUS XANTHURUS	11.38	6.87	0.50
CLUPEIDAE	10.88	0.70	0.13
SPHOEROIDES NEPHELUS	9.75	54.77	0.63
CHILOMYCTERUS SCHOEPI	6.38	1032.12	0.63
LAGODON RHOMBOIDES	5.63	16.70	0.75
PEPRILUS BURTI	5.00	8.52	0.63
ACHIRUS LINEATUS	4.50	4.04	0.88
ANCYLOPSETTA QUADROCELLATA	4.13	6.71	0.63
TRINECTES MACULATUS	3.25	34.61	0.63
MENIDIA SP.	2.63	6.10	0.38
MONACANTHUS CILIATUS	2.50	6.41	0.63
HAEMULON AURILINEATUM	2.13	1.74	0.13
SYMPHURUS PLAGIUSA	2.00	16.14	0.63
HIPPOCAMPUS ERECTUS	1.75	13.60	0.63
BAIRDIELLA CHRYSOURA	1.75	21.75	0.63
ALUTERUS SCHOEPI	1.75	704.56	0.38
OPSANUS BETA	1.50	6.52	0.63
SYNGNATHUS FLORIDAE	1.50	1.52	0.25
MEMBRAS MARTINICA	1.25	5.30	0.50
MUGIL CEPHALUS	1.25	0.27	0.50
HYPORHAMPUS UNIFASCIATUS	1.13	1.75	0.25
ASTROSCOPUS Y-GRAECUM	1.13	1.06	0.25
CHASMODES SUBURRAE	0.88	2.05	0.38
OPHICHTHUS GOMESI	0.75	20.66	0.38
SYNGNATHUS SCOVELLI	0.63	0.31	0.25
HYSOBLIENNIUS HENTZI	0.63	3.92	0.25
PRIONOTUS SCITULUS	0.63	2.16	0.25
PORICHTHYS PLECTRODON	0.38	10.41	0.25
GOBIESOX STRUMOSUS	0.38	0.76	0.25
OPISTOGNATHIDAE	0.38	8.39	0.25
ETROPUS CROSSOTUS	0.38	4.96	0.13
PARALICHTHYS ALBIGUTTA	0.38	23.54	0.25
CITHARICHTHYS MACROPS	0.25	0.52	0.13
GYMNURA MICRURA	0.13	18.19	0.13
ANCHOA HEPSETUS	0.13	1.26	0.13
SYNODUS FOETENS	0.13	10.66	0.13
SERRANUS ATROBRANCHIUS	0.13	0.47	0.13

ARCHOSARGUS PROBATOCEPHALU

0.13

27.66

0.13

4

TOTAL FISH

417.00

4912.53

CALLINECTES SAPIDUS

126.63

747.45

1.00

PENAEUS DUORARUM

59.13

463.07

1.00

LOLLIGUNCULA BREVIS

46.38

87.41

1.00

METOPORHAPHIS CALCARATA

12.38

8.89

1.00

OVALIPES GUADULPENSIS

9.25

3.75

0.50

PORTUNUS GIBBESI

6.13

6.87

0.75

PALAEMON FLORIDANUS

5.25

3.29

0.50

XANTHIDAE

3.13

2.56

0.63

ALPHEUS HETEROCHAEIS

2.50

5.15

0.75

SQUILLA EMPUSIA

2.00

12.67

0.63

LIBINIA DUBIA

1.13

2.67

0.50

TOZEUMA CAROLINENSE

0.75

0.16

0.25

TRACHYPENAEUS SIMILIS

0.63

0.35

0.13

PETROLISTHES ARMATUS

0.50

0.32

0.38

MENIPPE MERCENARIA

0.38

6.59

0.25

UPDEGBIA AFFINIS

0.25

0.26

0.25

ALPHEUS NORMANNI

0.13

0.07

0.13

LYSMATA WURDEMANNI

0.13

0.19

0.13

PETROLISTHES GALATHINUS

0.13

0.11

0.13

NEOPANOPE TEXANA

0.13

0.04

0.13

TOTAL INVERTEBRATES

276.88

1351.90

IMPINGEMENT

SPECIES, NUMBER, AND WEIGHT OF ORGANISMS COLLECTED

UNIT 3

FEBRUARY 1984

SPECIES NAME	AVERAGE NUMBER PER 6 HOUR COLLECTION	AVERAGE WEIGHT PER 6 HOUR COLLECTION	FREQUENCY SAMPLED
UROPHYCIS FLORIDANA	119.25	278.34	1.00
PRIONOTUS TRIBULUS	111.88	134.66	1.00
ANCHOA MITCHILLI	92.50	168.22	1.00
OGCOEPHALUS RADIATUS	71.13	3263.71	1.00
SPHOERODES NEPHELUS	33.50	270.07	1.00
PEPRILUS BURTI	32.63	66.74	1.00
LACTOPHRYS QUADRICORNIS	23.00	2115.15	0.88
ACHIRUS LINEATUS	19.25	21.11	1.00
MENIDIA SP.	13.38	30.42	0.63
CHILOMYCTERUS SCHOEFFI	11.88	2233.90	0.88
MONACANTHUS CILIATUS	9.25	33.32	1.00
TRINECTES MACULATUS	8.75	74.61	0.75
BREVDORTIA PATRONUS	8.25	3.12	0.38
ANCYLOPSETTA QUADROCELLATA	8.25	13.85	0.38
LAGODON RHOMBOIDES	7.75	27.36	0.88
ALUTERUS SCHOEFFI	6.13	2124.09	0.75
CHASMODES SUBURRAE	4.63	17.60	0.63
LEIOSTOMUS XANTHURUS	4.38	3.07	0.38
HIPPOCAMPUS ERECTUS	4.25	13.05	0.88
ASTROSCOPUS Y-GRAECUM	4.00	5.10	0.75
HYPSOBLENNIUS HENTZI	3.63	32.94	0.63
PRIONOTUS SCITULUS	3.38	9.47	0.88
SYMPHURUS PLAGIUSA	3.38	40.65	0.63
SYNGNATHUS SCOVELLI	3.25	3.74	0.75
OPSANUS BETA	3.00	21.69	0.75
MEMBRAS MARTINICA	2.75	11.61	0.38
SYNGNATHUS LOUISIANAE	2.50	3.17	0.50
OPHICHTHUS GOMESI	2.38	82.09	0.88
SYNGNATHUS FLORIDAE	2.38	1.69	0.38
BAIRDIELLA CHRYSOURA	2.38	93.34	0.63
GOBIESOX STRUMOSUS	2.25	4.57	0.50
HYPORHAMPHUS UNIFASCIATUS	2.00	6.65	0.25
STRONGYLURA MARINA	2.00	24.50	0.25
ANCHOA HEPSETUS	1.88	17.64	0.50
PORICHTHYS PLECTRODON	1.75	76.35	0.50
PARALICHTHYS ALBIGUTTA	1.25	18.35	0.38
CLUPEIDAE	0.75	0.06	0.13
ETROPUS CROSSOTUS	0.63	2.99	0.25
OPHISTHONEMA OGILINUM	0.50	20.10	0.13
CYPRINODON VARIEGATUS	0.50	2.60	0.13
ATHERINIDAE	0.50	0.05	0.13
CARANX HIPPOS	0.50	692.45	0.13
SARDINELLA AURITA	0.25	4.10	0.13
ARIUS FELIS	0.25	2.35	0.13

SERRANUS SUBLIGARIUS	0.25	0.07	0.13
DASYATIS SABINA	0.13	1.89	0.13
MYROPHIS PUNCTATUS	0.13	0.06	0.13
BASCANICHTHYS SCUTICARIS	0.13	3.97	0.13
SERRANUS ATROBRANCHUS	0.13	1.06	0.13
CYNOSCIION ARENARIUS	0.13	1.72	0.13
MUGIL CEPHALUS	0.13	0.02	0.13
MUGIL SP.	0.13	0.02	0.13
OPISTOGNATHIDAE	0.13	5.63	0.13

TOTAL FISH	639.25	12085.14	
------------	--------	----------	--

CALLINECTES SAPIDUS	478.88	1905.91	1.00
LOLLIGUNCULA BREVIS	208.50	1704.09	1.00
PENAEUS DUORARUM	139.13	1207.80	1.00
METOPORHAPHIS CALCARATA	68.63	51.72	1.00
OVALIPES GUADULPENSIS	37.50	12.55	0.50
PALAEON FLORIDANUS	33.13	16.25	1.00
PORTUNUS GIBBESI	20.50	19.04	1.00
XANTHIDAE	15.63	10.84	1.00
SQUILLA EMPUSIA	14.50	124.97	0.88
ALPHEUS HETEROCHAEIS	12.50	25.40	1.00
TOZEUMA CAROLINENSE	6.00	0.70	0.50
TRACHYPENAEUS SIMILIS	1.13	0.72	0.50
LYSMATA WURDEMANNI	0.50	0.42	0.13
LIBINIA DUBIA	0.50	1.15	0.25
PALAEONETES INTERMEDIUS	0.25	0.07	0.13
ALPHEUS NORMANNI	0.25	0.20	0.13
UPOGEBIA AFFINIS	0.25	0.38	0.13
POLINICES DUPLICATUS	0.25	0.10	0.13

TOTAL INVERTEBRATES	1038.00	5082.32	
---------------------	---------	---------	--

IMPINGEMENT

SPECIES, NUMBER, AND WEIGHT OF ORGANISMS COLLECTED

UNIT 1

MARCH 1984

SPECIES NAME	AVERAGE NUMBER PER 6 HOUR COLLECTION	AVERAGE WEIGHT PER 6 HOUR COLLECTION	FREQUENCY SAMPLED
OGCOEPHALUS RADIATUS	44.19	2169.64	1.00
PRIONOTUS TRIBULUS	32.13	148.31	0.94
ANCHOA MITCHILLI	32.06	60.40	1.00
UROPHYCIS FLORIDANA	14.06	61.51	0.63
LACTOPHRYS QUADRICORNIS	6.50	577.66	0.88
LEIOSTOMUS XANTHURUS	6.00	7.50	0.75
SPHOERIDES NEPHELUS	5.63	29.78	0.88
ANCHOA HEPSETUS	4.38	40.91	0.63
LAGODON RHOMBOIDES	3.75	21.97	1.00
ANCYLOPSETTA QUADROCELLATA	3.69	8.12	0.69
ACHIRUS LINEATUS	3.19	6.42	1.00
CHILOMYCTERUS SCHOEPI	2.75	295.36	0.69
OPSANUS BETA	2.63	17.59	0.75
SYMPHURUS PLAGIUSA	2.63	14.24	0.50
PRIONOTUS SCITULUS	2.56	22.93	0.38
HIPPOCAMPUS ERECTUS	1.88	3.39	0.75
TRINECTES MACULATUS	1.50	12.96	0.75
MONACANTHUS CILIATUS	1.13	4.56	0.44
BAIRDIELLA CHRYSOURA	0.94	14.04	0.31
ETROPUS CROSSOTUS	0.88	7.84	0.38
ALUTERUS SCHOEPI	0.81	299.31	0.25
MENIDIA SP.	0.56	2.84	0.19
DIPLECTRUM BIVITTATUM	0.50	1.77	0.19
OPHICHTHUS GOMESI	0.44	15.22	0.25
BREVOORTIA PATRONUS	0.44	29.81	0.31
SYNGNATHUS LOUISIANAE	0.44	0.91	0.19
PARALICHTHYS ALBIGUTTA	0.44	2.44	0.19
SYNGNATHUS FLORIDAE	0.38	0.35	0.19
HYPSOBLENNIUS HENTZI	0.31	3.01	0.19
PEPRILUS BURTI	0.31	1.39	0.13
SYNGNATHUS SCOVELLI	0.25	0.32	0.13
EUCINOSTOMUS GULA	0.25	1.66	0.19
CHAETODIPTERUS FABER	0.25	22.24	0.19
DASYATIS SABINA	0.19	17.52	0.13
HYPORHAMPHUS UNIFASCIATUS	0.19	0.19	0.13
CENTROPRISTIS PHILADELPHIC	0.19	1.97	0.13
OPISTOGNATHIDAE	0.19	7.47	0.13
SPHOERIDES SPENGLERI	0.19	1.17	0.19
HARENGULA JAGUANA	0.13	3.59	0.06
SYNODUS FOETENS	0.13	2.76	0.06
ORTHOPRISTIS CHRYSOPTERA	0.13	1.42	0.06
ASTROSCOPUS Y-GRAECUM	0.13	0.22	0.06
CHASMODES SUBURRAE	0.13	0.36	0.13
SARDINELLA AURITA	0.06	2.88	0.06

STRONGYLURA MARINA	0.06	11.06	0.06
MONACANTHUS HISPIDUS	0.06	0.14	0.06
TOTAL FISH	179.56	3957.17	
PENAEUS DUORARUM	148.00	899.79	1.00
CALLINECTES SAPIDUS	113.06	407.78	1.00
SQUILLA EMPUSIA	82.25	375.72	1.00
METOPORHAPHIS CALCARATA	39.63	22.07	1.00
PORTUNUS GIBBESI	26.44	32.07	1.00
LOLLIGUNCULA BREVIS	9.56	57.94	0.94
PALAEON FLORIDANUS	5.63	3.56	0.69
ALPHEUS HETEROCHAEIS	4.69	9.47	0.63
TRACHYPENAEUS SIMILIS	1.31	0.76	0.19
ALPHEUS NORMANNI	1.31	0.86	0.31
XANTHIDAE	1.19	0.99	0.56
PORTUNUS SPINIMANUS	0.56	0.57	0.13
UPOGEBIA AFFINIS	0.50	0.82	0.06
LYSMATA WURDEMANNI	0.25	0.19	0.25
OVALIPES GUADULPENSIS	0.25	0.12	0.19
MENIPPE LUCENARIA	0.25	0.15	0.06
TOTAL INVERTEBRATES	434.88	1812.89	

IMPINGEMENT

SPECIES, NUMBER, AND WEIGHT OF ORGANISMS COLLECTED

UNIT 2

MARCH 1984

SPECIES NAME	AVERAGE NUMBER PER 6 HOUR COLLECTION	AVERAGE WEIGHT PER 6 HOUR COLLECTION	FREQUENCY SAMPLED
--------------	--	--	----------------------

UNIT NOT IN OPERATION AT TIMES OF SAMPLING THIS MONTH

IMPINGEMENT

SPECIES, NUMBER, AND WEIGHT OF ORGANISMS COLLECTED

UNIT 3

MARCH 1984

SPECIES NAME	AVERAGE NUMBER PER 6 HOUR COLLECTION	AVERAGE WEIGHT PER 6 HOUR COLLECTION	FREQUENCY SAMPLED
ANCHOA MITCHILLI	372.69	678.44	0.94
PRIONOTUS TRIBULUS	197.00	973.41	0.94
OGCOEPHALUS RADIATUS	167.63	5295.77	1.00
ANCHOA HEPSETUS	59.38	547.39	0.81
UROPHYCIS FLORIDANA	34.19	136.51	0.75
LAGODON RHOMBOIDES	19.25	82.39	0.94
LACTOPHRYS QUADRICORNIS	19.06	1454.82	0.94
ANCYLOPSETTA QUADROCELLATA	18.19	43.81	0.81
ACHIRUS LINEATUS	17.00	21.13	0.88
SPHOERODES NEPHELUS	16.44	97.92	0.88
LEIOSTOMUS XANTHURUS	15.75	15.93	0.75
SYMPHURUS PLAGIUSA	12.69	76.97	0.75
OPSANUS BETA	12.06	61.82	0.88
TRINECTES MACULATUS	9.13	61.34	0.69
CHILOMYCTERUS SCHOEPI	9.06	1149.68	0.88
ETROPUS CROSSOTUS	7.44	73.15	0.31
SYNGNATHUS FLORIDAE	6.06	6.53	0.69
PRIONOTUS SCITULUS	5.94	50.68	0.56
MENIDIA SP.	5.75	27.43	0.81
HIPPOCAMPUS ERECTUS	5.31	7.94	0.81
SYNGNATHUS LOUISIANAE	4.00	4.89	0.56
OPHICHTHUS GOMESI	3.75	159.14	0.75
SYNGNATHUS SCOVELLI	3.25	4.92	0.63
ALUTERUS SCHOEPI	3.13	1180.71	0.56
PEPRILUS BURTI	2.75	6.48	0.50
DIPLECTRUM BIVITTATUM	2.50	5.59	0.38
MONACANTHUS CILIATUS	2.44	11.54	0.56
HYPSOBLENNIUS HENTZI	2.19	16.39	0.50
CENTROPRISTIS PHILADELPHIC	1.88	23.01	0.38
BAIRDIELLA CHRYSOURA	1.75	24.40	0.63
PORICHTHYS PLECTRODON	1.50	48.95	0.44
HYPORHAMPUS UNIFASCIATUS	1.38	2.03	0.19
OPISTHOGNATHIDAE	1.38	43.99	0.25
EUCINOSTOMUS GULA	1.19	6.62	0.25
DASYATIS SABINA	1.13	150.02	0.19
OPHIDION GRAYI	1.06	41.14	0.19
CHASMODES SUBURRAE	1.06	4.01	0.38
BREVOORTIA PATRONUS	1.00	24.86	0.38
CHAETODIPTERUS FABER	1.00	20.02	0.31
HARENGULA JAGUANA	0.88	35.56	0.19
ORTHOPRISTIS CHRYSOPTERA	0.63	13.61	0.13
MONACANTHUS HISPIDUS	0.63	4.93	0.31
GYMNOTHORAX NIGROMARGINATU	0.56	34.15	0.13
ASTROSCOPUS Y-GRAECUM	0.50	1.31	0.25

MUGIL CEPHALUS	0.44	0.09	0.13
MYRUPHIS PUNCTATUS	0.38	2.23	0.13
ARIUS FELIS	0.31	14.09	0.13
STRONGYLURA MARINA	0.25	15.51	0.19
SYNODUS FOETENS	0.19	4.04	0.13
GOBIESOX STRUMOSUS	0.19	0.40	0.13
SYNGNATHUS SP.	0.13	0.02	0.13
MUGIL CUREMA	0.13	0.01	0.06
SPHOERODES SPENGLERI	0.13	0.71	0.06
OPHISTHONEMA OGILINUM	0.06	0.47	0.06
CHLOROSCOMBRUS CHRYSURUS	0.06	1.99	0.06
OPISTHOGNATHUS AURIFRONS	0.06	0.06	0.06
PARALICHTHYS ALBIGUTTA	0.06	0.11	0.06

TOTAL FISH	1053.88	12771.10	
------------	---------	----------	--

PENAEUS DUORARUM	591.36	3908.17	1.00
CALLINECTES SAPIDUS	474.66	3956.32	1.00
SQUILLA EMPUSIA	241.07	1044.52	1.00
LOLLIGUNCULA BREVIS	233.27	820.85	0.94
METOPORHAPHIS CALCARATA	145.98	88.95	1.00
PALAEON FLORIDANUS	91.89	45.77	1.00
PORTUNUS GIBBESI	83.34	98.46	0.94
ALPHEUS HETEROCHAEIS	39.76	66.55	0.75
XANTHIDAE	22.74	17.77	0.94
TRACHYPENAEUS SIMILIS	7.49	3.61	0.38
MENIPPE MERCENARIA	3.37	249.72	0.31
ALPHEUS NORMANNI	3.25	2.01	0.38
LYSMATA WURDEMANNI	2.43	2.80	0.25
UPOGEBIA AFFINIS	2.00	4.79	0.06
OVALIPES GUADULPENSIS	0.88	0.99	0.25
PORTUNUS SPINIMANUS	0.25	0.52	0.06
TOZEUMA CAROLINENSE	0.19	0.02	0.13
PETROLISTHES ARMATUS	0.19	0.17	0.19
LIBINIA DUBIA	0.19	0.19	0.13
PALAEONETES PUGIO	0.13	0.05	0.06
MACROCOELOMA TRISPINOSUM	0.13	0.09	0.06

TOTAL INVERTEBRATES	1944.55	10312.35	
---------------------	---------	----------	--

IMPINGEMENT

SPECIES, NUMBER, AND WEIGHT OF ORGANISMS COLLECTED

UNIT 1

APRIL 1984

SPECIES NAME	AVERAGE NUMBER PER 6 HOUR COLLECTION	AVERAGE WEIGHT PER 6 HOUR COLLECTION	FREQUENCY SAMPLED
ANCHOA MITCHILLI	26.00	53.47	1.00
OGCOEPHALUS RADIATUS	11.25	890.62	1.00
PRIONOTUS TRIBULUS	8.75	27.02	0.75
ANCHOA HEPSETUS	2.25	23.62	0.75
ANCYLOPSETTA QUADROCELLATA	2.00	7.50	0.75
ACHIRUS LINEATUS	2.00	2.25	1.00
LAGODON RHOMBOIDES	1.75	7.92	0.75
MONACANTHUS CILIATUS	1.50	8.70	0.50
LEIOSTOMUS XANTHURUS	1.25	1.42	0.75
SPHOEROIDES NEPHELUS	1.25	7.35	0.75
MENIDIA SP.	1.00	6.52	0.50
LACTOPHRYS QUADRICORNIS	1.00	134.00	0.50
TRINECTES MACULATUS	0.75	11.60	0.50
UROPHYCIS FLORIDANA	0.50	3.90	0.50
ARCHOSARGUS PROBATOCEPHALUS	0.50	70.57	0.25
OPHICHTHUS GOMESI	0.25	11.13	0.25
BREVOORTIA PATRONUS	0.25	0.25	0.25
HIPPOCAMPUS ERECTUS	0.25	0.15	0.25
DIPLECTRUM FORMOSUM	0.25	4.32	0.25
EUCINOSTOMUS GULA	0.25	3.13	0.25
HYPSOBLENNIUS HENTZI	0.25	1.70	0.25
ETROPUS CROSSITUS	0.25	1.92	0.25
TOTAL FISH	63.50	1279.10	
CALLINECTES SAPIDUS	177.25	828.90	1.00
PENAEUS DUORARUM	100.75	554.45	1.00
SQUILLA EMPUSIA	13.50	75.30	0.75
METOPORHAPHIS CALCARATA	7.25	3.70	1.00
PORTUNUS GIBBESI	6.00	6.90	1.00
LOLLIGUNCULA BREVIS	6.00	50.35	1.00
PALAEON FLORIDANUS	2.25	1.30	1.00
PORTUNUS SPINIMANUS	0.50	0.30	0.25
XANTHIDAE	0.50	0.45	0.50
MENIPPE MERCENARIA	0.25	0.65	0.25
TOTAL INVERTEBRATES	314.25	1522.30	

IMPINGEMENT

SPECIES, NUMBER, AND WEIGHT OF ORGANISMS COLLECTED

UNIT 2

APRIL 1984

SPECIES NAME	AVERAGE NUMBER PER 6 HOUR COLLECTION	AVERAGE WEIGHT PER 6 HOUR COLLECTION	FREQUENCY SAMPLED
LEIOSTOMUS XANTHURUS	69.80	190.97	1.00
ANCHOA MITCHILLI	51.90	109.69	0.90
OGCOCEPHALUS RADIATUS	26.30	2256.27	1.00
LAGODON RHOMBOIDES	18.90	66.36	0.80
OPSANUS BETA	8.80	185.44	0.90
ALOSA ALABAMAE	5.50	1.24	0.50
ANCHOA HEPSETUS	4.30	44.07	0.60
LACTOPHRYS QUADRICORNIS	3.60	427.16	0.80
SPHOERIDES NEPHELUS	3.30	22.86	0.70
MUGIL SP.	3.20	0.05	0.10
ETROPUS CROSSOTUS	2.90	32.53	0.40
GYMNURA MICRURA	2.30	379.41	0.40
OPHISTHONEMA OGLINUM	2.00	7.31	0.60
CHILOMYCTERUS SCHOEPI	1.60	327.90	0.30
SYNODUS FOETENS	1.20	22.46	0.30
STRONGYLURA MARINA	1.20	62.96	0.50
POLYDACTYLUS OCTONEMUS	1.20	5.44	0.50
PRIONOTUS TRIBULUS	1.10	17.46	0.50
HIPPOCAMPUS ERECTUS	1.00	2.97	0.50
PRIONOTUS SCITULUS	0.90	6.06	0.40
ARIUS FELIS	0.80	90.45	0.40
MONACANTHUS CILIATUS	0.80	4.38	0.40
HARENGULA JAGUANA	0.60	21.58	0.20
UROPHYCIS FLORIDANA	0.60	24.28	0.30
MENIDIA SP.	0.60	3.47	0.50
TRINECTES MACULATUS	0.60	15.84	0.30
OPHICHTHUS GOMEZI	0.50	27.82	0.20
SYNGNATHUS FLORIDAE	0.50	0.36	0.20
ACHIRUS LINEATUS	0.50	0.69	0.20
SYMPHURUS PLAGIUSA	0.50	1.58	0.20
PORICHTHYS PLECTRODON	0.40	6.88	0.10
GOBIESOX STRUMOSUS	0.40	0.76	0.10
HIPPOCAMPUS ZOSTERAE	0.40	0.30	0.20
SYNGNATHUS LOUISIANAE	0.40	0.56	0.10
BAIRDIELLA CHRYSOURA	0.40	8.64	0.10
SPHOERGIDES SPENGLERI	0.40	4.60	0.30
ELOPS SAURUS	0.30	91.40	0.10
SYNGNATHUS SCOVELLI	0.30	0.43	0.20
HYPSOBLENNIUS HENTZI	0.30	2.62	0.30
BREVOORTIA SMITHI	0.20	28.48	0.20
BAGRE MARINUS	0.20	38.38	0.10
HYPORHAMPUS UNIFASCIATUS	0.20	0.06	0.10
PEPRILUS BURTI	0.20	1.94	0.10
DASYATIS SABINA	0.10	8.75	0.10

IMPINGEMENT

SPECIES, NUMBER, AND WEIGHT OF ORGANISMS COLLECTED

UNIT 3

APRIL 1984

SPECIES NAME	AVERAGE NUMBER PER 6 HOUR COLLECTION	AVERAGE WEIGHT PER 6 HOUR COLLECTION	FREQUENCY SAMPLED
ANCHOA MITCHILLI	105.08	206.22	1.00
LEIOSTOMUS XANTHURUS	73.75	170.30	0.75
PRIONOTUS TRIBULUS	42.75	181.08	0.58
ANCHOA HEPSETUS	39.67	401.00	0.83
OGCOCEPHALUS RADIATUS	34.75	2747.95	1.00
LAGOON RHOMBOIDES	10.08	48.82	0.83
ETROPUS CROSSOTUS	5.75	68.03	0.67
SPHOERODES NEPHELUS	5.50	39.73	0.92
ANCYLOPSETTA QUADROCELLATA	5.42	29.08	0.25
MENIDIA SP.	4.58	23.13	0.75
ACHIRUS LINEATUS	4.33	6.52	0.42
MONACANTHUS CILIATUS	3.42	15.87	0.58
HIPPOCAMPUS ERECTUS	2.92	11.78	0.67
OPSANUS BETA	2.75	19.71	0.58
SYNODUS FOETENS	2.42	39.06	0.42
LACTOPHRYS QUADRICORNIS	2.33	324.97	0.58
ALOSA ALABAMAE	2.08	1.48	0.33
SYNGNATHUS FLORIDAE	1.67	3.52	0.58
BAIRDIELLA CHRYSOURA	1.67	35.89	0.33
CHILOMYCTERUS SCHOEFFI	1.58	128.28	0.33
UASYATIS SABINA	1.50	722.25	0.17
PORICHTHYS PLECTRODON	1.33	20.52	0.33
PRIONOTUS SCITULUS	1.33	21.38	0.42
STRONGYLURA MARINA	1.25	12.65	0.50
SYNGNATHUS LOUISIANAE	1.25	1.85	0.42
OPISTHOGNATHIDAE	1.17	42.50	0.42
PEPRILUS BURTI	1.17	3.23	0.33
HARENGULA JAGUANA	1.08	32.93	0.33
UROPHYCIS FLORIDANA	1.08	17.12	0.25
OPHICHTHUS GOMESI	0.92	49.05	0.33
GYMNURA MICRURA	0.83	78.22	0.25
DIPLECTRUM BIVITTATUM	0.83	1.89	0.25
TRICHIURUS LEPTURUS	0.83	3.44	0.25
BREVOORTIA SMITHI	0.75	115.59	0.17
ALUTERUS SCHOEFFI	0.75	336.33	0.33
SYNGNATHUS SCOVELLI	0.67	0.81	0.42
POLYDACTYLUS OCTONEMUS	0.67	2.39	0.42
ARIUS FELIS	0.58	59.20	0.42
OLIGOPLITES SAURUS	0.58	56.31	0.42
OPHISTHONEMA OGILINUM	0.50	2.27	0.17
CENTROPRISTIS PHILADELPHIC	0.50	27.67	0.17
HYPSOBLENNIUS HENTZI	0.50	4.32	0.25
SYMPHURUS PLAGIUSA	0.50	9.02	0.17
BREVOORTIA PATRONUS	0.42	0.42	0.17

HIPPOCAMPUS ZOSTERAE	0.42	0.22	0.25
CHAETODIPTERRUS FABER	0.33	21.00	0.17
HYPORHAMPUS UNIFASCIATUS	0.25	0.20	0.17
TRINECTES MACULATUS	0.25	2.47	0.17
SPHOEROIDES SPENGLERI	0.25	1.88	0.17
ELOPS SAURUS	0.17	29.07	0.08
ORTHOPRISTIS CHRYSOPTERA	0.17	3.27	0.08
MUGIL SP.	0.17	0.13	0.08
BASCANICHTHYS SCUTICARIS	0.08	6.22	0.08
BAGRE MARINUS	0.08	13.32	0.08
SYNGNATHUS SP.	0.08	0.02	0.08
CENTROPRISTIS STRIATA	0.08	4.22	0.08
MUGIL CEPHALUS	0.08	0.02	0.06
CHASMODES SUBURRAE	0.08	0.38	0.08

TOTAL FISH	376.00	6206.26	
------------	--------	---------	--

PENAEUS DUORARUM	803.25	5643.20	1.00
CALLINectes SAPIDUS	363.00	6200.59	1.00
LOLLIGUNCULA BREVIS	84.75	828.27	0.83
SQUILLA EMPUSIA	85.75	295.96	0.83
PALAEON FLORIDANUS	56.58	24.72	0.83
METOPORHAPHIS CALCARATA	18.33	10.66	0.83
PORTUNUS GIBBESI	14.75	16.67	0.83
XANTHIDAE	7.83	8.39	0.67
ALPHEUS HETEROCHAEELIS	7.08	8.63	0.33
OVALIPES GUADULPENSIS	1.33	2.27	0.08
ALPHEUS NORMANNI	0.67	0.20	0.08
TOZEUMA CAROLINENSE	0.42	0.08	0.25
PODOCHELA SIDNEYI	0.33	0.20	0.08
MENIPPE MERCENARIA	0.17	1.49	0.17
PORTUNUS SPINIMANUS	0.08	0.05	0.08
LIBINIA DUBIA	0.08	0.05	0.08

TOTAL INVERTEBRATES	1424.42	13041.44	
---------------------	---------	----------	--

IMPINGEMENT

SPECIES, NUMBER, AND WEIGHT OF ORGANISMS COLLECTED

UNIT 1

MAY 1984

SPECIES NAME	AVERAGE NUMBER PER 6 HOUR COLLECTION	AVERAGE WEIGHT PER 6 HOUR COLLECTION	FREQUENCY SAMPLED
ANCHOA MITCHILLI	3.35	6.58	0.59
LEIOSTOMUS XANTHURUS	2.47	4.84	0.41
CYNOSCION NEBULOSUS	1.88	2.76	0.35
OGCOEPHALUS RADIATUS	1.71	141.29	0.82
ORTHOPRISTIS CHRYSOPTERA	1.71	1.65	0.71
LAGODON RHOMBOIDES	1.06	1.29	0.24
OPSANUS BETA	0.82	4.68	0.29
SYMPHURUS PLAGIUSA	0.76	2.56	0.18
GYMNURA MICRURA	0.53	37.03	0.29
ETROPUS CROSSOTUS	0.53	7.45	0.12
BREVOORTIA PATRONUS	0.41	0.36	0.18
SYNGNATHUS FLORIDAE	0.35	0.55	0.12
SPHOERODES NEPHELUS	0.35	3.41	0.18
UROPHYCIS FLORIDANA	0.29	8.62	0.18
BAIRDIELLA CHRYSOURA	0.29	0.22	0.06
LACTOPHRYS QUADRICORNIS	0.29	34.38	0.12
CHILOMYCTERUS SCHOEPI	0.24	17.07	0.12
MUGIL CEPHALUS	0.12	0.13	0.12
ANCYLOPSETTA QUADROCELLATA	0.12	1.22	0.06
PARALICHTHYS ALBIGUTTA	0.12	5.51	0.06
ACHIRUS LINEATUS	0.12	0.25	0.12
MONACANTHUS CILIATUS	0.12	0.47	0.06
ALOSA ALABAMAE	0.06	0.04	0.06
STRONGYLURA MARINA	0.06	0.06	0.06
SYNGNATHUS LOUISIANA	0.06	0.12	0.06
SYNGNATHUS SCOVELLI	0.06	0.08	0.06
CHLOROSCOMBRUS CHRYSURUS	0.06	7.51	0.06
MENTICIRRHUS AMERICANUS	0.06	0.15	0.06
HYPSOBLENNIUS HENTZI	0.06	0.66	0.06
TOTAL FISH	18.06	290.96	
PENAEUS DUORARUM	117.18	455.40	0.82
CALLINectes SAPIDUS	24.71	462.07	1.00
SQUILLA EMPUSIA	3.88	22.51	0.35
LOLLIGUNCULA BREVIS	3.71	27.28	0.82
PALAEMON FLORIDANUS	2.06	1.11	0.35
XANTHIDAE	0.35	0.37	0.24
MENIPPE MERCENARIA	0.29	10.01	0.29
METOPORHAPHIS CALCARATA	0.29	0.16	0.12
PORTUNUS GIBBESI	0.12	0.15	0.12
PORTUNUS SPINIMANUS	0.12	0.06	0.12

PALAEOMONETES PU310
PANOPAEUS HERBSTII
TOTAL INVERTEBRATES

0.06
0.06
152.82

0.03
1.40
980.56

0.06
0.06

IMPINGEMENT

SPECIES, NUMBER, AND WEIGHT OF ORGANISMS COLLECTED

UNIT 2

MAY 1984

SPECIES NAME	AVERAGE NUMBER PER 6 HOUR COLLECTION	AVERAGE WEIGHT PER 6 HOUR COLLECTION	FREQUENCY SAMPLED
LEIOSTOMUS XANTHURUS	32.06	74.26	0.75
STRONGYLURA MARINA	17.56	4.99	0.63
ANCHOA MITCHILLI	14.31	21.17	0.75
ORTHOPRISTIS CHRYSOPTERA	10.06	6.71	0.69
LAGODON RHOMBOIDES	7.88	33.85	0.56
SERRANIDAE	7.06	1.52	0.13
BREVOORTIA PATRONUS	5.38	24.16	0.44
OGCOCEPHALUS RADIATUS	5.06	384.36	0.81
CYNOSCION NEBULOSUS	4.25	3.83	0.50
SYNGNATHUS FLORIDAE	3.69	4.52	0.25
LACTOPHYS QUADRICORNIS	3.31	449.36	0.25
GYMNURA MICRURA	3.06	195.56	0.50
HIPPOCAMPUS ERECTUS	2.75	14.54	0.25
SPHOEROIDES NEPHELUS	2.31	3.92	0.38
PRIONOTUS TRIBULUS	2.25	15.90	0.13
UROPHYCIS FLORIDANA	1.63	81.77	0.31
ANCYLOPSETTA QUADROCELLATA	1.50	20.90	0.13
SYMPHURUS PLAGIUSA	1.31	10.93	0.19
SYNGNATHUS SCOVELLI	1.19	1.35	0.13
SPHOEROIDES SPENGLERI	1.00	6.10	0.06
MENTICIRRHUS AMERICANUS	0.81	0.83	0.31
OPSANUS BETA	0.56	9.78	0.19
BREVOORTIA SMITHI	0.44	10.05	0.19
CHILOMYCTERUS SCHOEPI	0.38	57.82	0.25
BASCANICHTHYS SCUTICARIS	0.25	5.95	0.06
ETROPUS CROSSOTUS	0.25	2.65	0.06
LAGOCEPHALUS LAEVIGATUS	0.25	5.30	0.06
ALOSA ALABAMAE	0.19	0.15	0.06
OPHICHTHUS GOMESI	0.13	3.64	0.06
BAIRDIELLA CHRYSOURA	0.13	0.11	0.13
MUGIL CEPHALUS	0.13	25.77	0.13
OPHISTHONEMA OGLINUM	0.06	0.29	0.06
SYNODUS FOETENS	0.06	0.33	0.06
MENIDIA SP.	0.06	0.32	0.06
DIPLECTRUM BIVITTATUM	0.06	0.04	0.06
CARANX HIPPOS	0.06	8.76	0.06
CHLOROSCOMBRUS CHRYSURUS	0.06	6.91	0.06
HYPSOBLENNIUS HENTZI	0.06	0.40	0.06
ACHIRUS LINEATUS	0.06	0.08	0.06
TOTAL FISH	131.62	1498.91	

PENAEUS DUORARUM	267.71	985.62	0.94
CALLINECTES SAPIDUS	214.26	14146.71	1.00
PALAEON FLORIDANUS	50.62	15.00	0.31
LOLLIGUNCULA BREVIS	18.69	110.98	0.69
SQUILLA EMPUSIA	5.25	21.38	0.19
XANTHIDAE	1.25	1.13	0.19
TRACHYPENAEUS SIMILIS	1.00	0.70	0.06
PORTUNUS GIBBESI	0.75	0.80	0.13
TOZEUMA CAROLINENSE	0.50	0.15	0.06
PORTUNUS SPINIMANUS	0.25	0.27	0.06
MENIPPE MERCENARIA	0.19	8.36	0.13
TOTAL INVERTEBRATES	560.46	15291.11	

IMPINGEMENT

SPECIES, NUMBER, AND WEIGHT OF ORGANISMS COLLECTED

UNIT 3

MAY 1984

SPECIES NAME	AVERAGE NUMBER PER 6 HOUR COLLECTION	AVERAGE WEIGHT PER 6 HOUR COLLECTION	FREQUENCY SAMPLED
LEIOSTOMUS XANTHURUS	13.20	32.51	0.55
OGCOCEPHALUS RADIATUS	6.25	502.41	0.75
CYNOSCIION NEBULOSUS	5.20	4.85	0.55
ANCHOA MITCHILLI	3.70	6.04	0.35
STRONGYLURA MARINA	3.55	1.11	0.30
GYMNURA MICRURA	2.85	187.12	0.45
UROPHYCIS FLORIDANA	2.80	102.14	0.35
SPHOEROIDES NEPHELUS	2.40	28.74	0.30
LAGODON RHOMBOIDES	2.10	17.41	0.60
ORTHOPRISTIS CHRYSOPTERA	1.70	1.98	0.30
CHILOMYCTERUS SCHOEPI	1.40	188.52	0.35
LACTOPHRYS QUADRICORNIS	1.25	147.43	0.30
SYMPHURUS PLAGIUSA	0.95	3.73	0.25
OPSANUS BETA	0.95	8.57	0.15
SYNGNATHUS SCOVELLI	0.95	1.53	0.10
CENTROPRISTIS STRIATA	0.90	58.43	0.20
MENTICIRRHUS AMERICANUS	0.85	1.13	0.10
OPHICHTHUS GOMESI	0.85	31.70	0.20
HIPPOCAMPUS ERECTUS	0.85	6.67	0.20
HYPORHAMPUS UNIFASCIATUS	0.80	15.60	0.05
PARALICHTHYS ALBIGUTTA	0.80	57.44	0.05
MONACANTHUS CILIATUS	0.80	5.04	0.05
BAIRDIELLA CHRYSOURA	0.70	6.20	0.10
SYNODUS FOETENS	0.65	30.08	0.15
TRINECTES MACULATUS	0.55	3.73	0.15
MUGIL CEPHALUS	0.50	0.52	0.15
HYPSOBLENNIUS HENTZI	0.40	5.72	0.15
ETROPUS CROSSOTUS	0.35	3.67	0.10
SYNGNATHUS FLORIDAE	0.30	0.55	0.10
BREVOORTIA PATRONUS	0.15	0.10	0.05
CARANX HIPPOS	0.15	35.83	0.10
MENIDIA SP.	0.10	0.51	0.05
ANCYLOPSETTA QUADROCELLATA	0.10	1.18	0.10
OPHISTHONEMA OGILINUM	0.05	0.65	0.05
SYNGNATHUS LOUISIANAE	0.05	0.20	0.05
SERRANIDAE	0.05	0.01	0.05
CYNOSCIION ARENARIUS	0.05	7.69	0.05
PRIONOTUS SCITULUS	0.05	0.66	0.05
PRIONOTUS TRIBULUS	0.05	0.16	0.05
SPHOEROIDES SPENGLERI	0.05	0.67	0.05
TOTAL FISH	59.40	1508.32	

PENAEUS DUORARUM	578.90	2404.80	0.85
CALLINECTES SAPIDUS	530.69	30649.65	1.00
PALAEON FLORIDANUS	18.60	6.61	0.20
LOLLIGUNCULA BREVIS	13.30	53.71	0.55
SQUILLA EMPUSIA	11.42	69.46	0.30
XANTHIDAE	11.32	8.74	0.65
ALPHEUS NORMANNI	3.52	0.94	0.10
TRACHYPENAEUS SIMILIS	3.13	2.81	0.05
PETROLISTHES ARMATUS	0.40	0.32	0.05
MENIPPE MERCENARIA	0.30	11.19	0.20
ALPHEUS HETEROCHAEIS	0.20	0.22	0.05
LIBINIA DUBIA	0.20	0.08	0.05
UCA SP.	0.05	0.03	0.05
METOPORHAPHIS CALCARATA	0.05	0.01	0.05
TOTAL INVERTEBRATES	1172.08	33208.60	

ENTRAINMENT

DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

NOVEMBER 8, 1983

SPECIES NAME	STATION										
	A	B	C	D	E	F	G	H	I	J	K
CLUPEIDAE	1.502	0.000	0.000	0.167	0.732	0.423	0.000	0.000	0.000	0.000	0.000
CLUPEID	792.765	0.000	0.245	1.308	5.578	12.492	622.250	23.222	10.783	0.000	0.000
BREVOORTIA SP.	0.000	0.000	0.000	0.183	0.000	0.153	0.000	0.000	0.192	0.000	0.000
BREVOORTIA GUNTERI	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.577	0.000
HARENGULA JAGUANA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.143	0.000
OPHISTHONEMA OGLINUM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.323	0.358	0.000
ANCHOA MITCHILLI	0.000	1.117	0.000	0.000	0.000	1.447	1.288	0.000	0.000	0.315	0.000
ANCHOA SP.	0.000	0.650	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
BATRACHOIDIDAE	0.000	0.245	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GOBIESOX STRUMOSUS	0.358	0.418	0.262	0.165	0.262	0.153	0.000	0.408	0.317	0.783	0.535
HIPPOCAMPUS ERECTUS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.388	0.000	0.000
MICROGNATHUS CRINIGER	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.172	0.492	0.158	0.332
SYNGNATHUS FLORIDAE	0.000	0.000	0.000	0.183	0.730	0.120	0.000	0.730	0.355	0.445	3.768
SYNGNATHUS SCOVELLI	0.000	0.000	0.000	0.000	0.000	0.160	0.000	0.000	0.000	0.000	0.000
EUCINOSTOMUS SP.	0.000	0.000	0.000	0.000	0.000	0.170	0.000	0.000	0.328	0.302	0.182
SCIAENIDAE	0.000	1.643	0.000	0.000	0.000	0.000	0.345	0.000	2.295	0.000	0.200
BLENNIIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.143	0.000
GOBIOSOMA ROBUSTUM	0.173	0.000	0.000	0.000	0.000	0.000	0.000	0.172	0.000	0.000	0.000
PRIONOTUS SP.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.158	0.000
MONACANTHUS SP.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.200
SPHOEROIDES SP.	0.000	0.000	0.000	0.000	0.000	0.310	0.000	0.000	0.000	0.000	0.000
UNIDENTIFIED	1.303	0.000	0.000	0.348	0.000	0.310	0.000	2.228	0.000	0.000	0.748
UNIDENTIFIED-DAMAGED	0.000	0.155	0.000	0.315	0.000	0.260	0.000	0.000	0.000	0.143	0.000
PENAEUS SP.	0.000	0.000	0.000	0.155	0.000	0.000	0.000	0.000	0.000	0.157	0.000
CALLINECTES SP.	0.185	0.853	0.900	17.762	7.133	4.210	1.278	0.670	1.648	2.600	2.580
MENIPPE MERCENARIA	1.693	0.000	0.262	0.000	0.197	1.115	0.182	0.345	0.165	0.000	0.160
LOLLIGUNCULA BREVIS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.133
TOTAL OF AVERAGE DENSITIES	797.980	5.082	1.668	21.372	14.802	22.443	625.343	27.947	17.775	7.130	17.153

ENTRAINMENT
DENSITY BY STATION
NUMBER PER 100 CUBIC METERS
NOVEMBER 21, 1983

SPECIES NAME	A	B	C	D	E	F	G	H	I	J	K
CLUPEIDAE	0.220	0.000	0.205	0.000	0.343	0.000	0.000	0.000	0.000	0.137	0.410
CLUPEID	8.750	0.427	0.000	0.000	0.000	0.132	3.930	24.348	0.828	0.312	1.002
BREVOORTIA SP.	0.325	0.173	0.000	0.000	0.000	0.265	0.000	0.000	0.515	1.253	0.000
ANCHOA HEPSETUS	0.000	0.000	0.000	0.000	0.000	0.000	0.178	0.000	0.000	0.000	0.158
ANCHOA MITCHILLI	0.000	1.672	0.000	0.000	0.175	0.133	0.722	0.000	0.000	0.000	0.690
GOBIESOX STRUMOSUS	0.255	0.000	0.000	0.000	0.000	0.000	0.193	0.000	0.000	0.000	0.000
HYPORHAMPHUS UNIFASCIATUS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.147	0.000	0.158
MEMBRAS MARTINICA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.158
HIPPOCAMPUS ERECTUS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.193	0.662	0.000	1.170
SYNGNATHUS FLORIDAE	0.383	0.190	0.000	0.138	0.170	0.000	0.000	0.937	0.950	0.698	6.008
SYNGNATHUS SCOVELLI	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.273	0.000
SYNGNATHUS SP.	0.000	0.000	0.000	0.000	0.000	0.132	0.193	0.000	0.000	0.000	0.313
EUCINOSTOMUS SP.	0.000	0.000	0.000	1.228	0.170	0.133	0.000	0.000	0.000	0.137	0.000
MENTICIRRHUS SP.	0.000	0.000	0.000	0.000	0.000	0.133	0.000	0.000	0.000	0.000	0.000
UNIDENTIFIED BLENNY	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.185	0.000	0.000	0.000
PRIONOTUS SP.	0.000	0.000	0.000	0.162	0.000	0.000	0.000	0.000	0.000	0.000	0.283
MONACANTHUS SP.	0.000	0.000	0.000	0.000	0.000	0.133	0.000	0.000	0.122	0.000	0.000
SPHEROIDEUS SP.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.137	0.000
UNIDENTIFIED	0.162	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.142	0.000	0.172
UNIDENTIFIED-DAMAGED	0.323	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
PENAEUS SP.	0.000	0.000	0.000	0.162	0.000	0.297	1.910	0.000	0.000	0.412	0.000
TRACHYPENAEUS SP.	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CALLINECTES SP.	0.365	0.000	0.000	2.363	1.670	0.822	4.133	0.000	0.122	0.563	0.267
MENIPPE MERCENARIA	0.328	0.000	0.000	0.000	0.000	0.000	0.000	0.182	0.000	0.137	0.743
LOLLIGUNCULA BREVIS	0.323	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.147	0.000	0.313

TOTAL OF AVERAGE DENSITIES

11.527 2.462 0.643 4.053 2.528 2.180 11.260 25.845 3.633 4.058 11.847

ENTRAINMENT
DENSITY BY STATION
NUMBER PER 100 CUBIC METERS

DECEMBER 7, 1983

SPECIES NAME	A	B	C	D	E	F	G	H	I	J	K
MYROPHIS PUNCTATUS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.145
CLUPEIDAE	0.248	0.000	0.000	0.000	0.000	0.000	0.000	0.322	0.000	0.000	0.000
CLUPEID	3.460	0.000	0.195	1.963	2.093	0.000	0.000	82.668	21.590	0.435	3.088
BREVOORTIA SP.	0.000	0.163	0.000	0.283	0.603	0.152	0.278	0.167	0.000	0.313	0.300
HARENGULA JAGUANA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.833	0.307	0.000	0.000
ANCHOA MITCHILLI	0.177	1.073	0.212	0.135	0.000	0.610	0.307	0.000	0.000	0.000	0.000
GOBIESOX STRUMOSUS	0.000	0.000	0.000	0.000	0.297	0.000	0.000	0.185	0.000	0.000	0.000
MICROGNATHUS CRINIGER	0.000	0.000	0.000	0.000	0.148	0.000	0.297	0.000	0.000	0.000	0.000
SYNGNATHUS FLORIDAE	0.000	0.000	0.193	0.165	0.000	0.153	0.148	0.000	1.038	0.290	0.223
SYNGNATHUS SCOVELLI	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.132	0.367
SYNGNATHUS SP.	0.000	0.000	0.233	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUCINOSTOMUS SP.	0.252	0.328	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
PARALICHTHYS ALBIGUTTA	0.000	0.177	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.145	0.000
SOLEIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.130	0.000	0.000	0.000
MONACANTHUS HISPIDUS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.132	0.000	0.000
UNIDENTIFIED	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.463	0.760	0.290	0.310
PENAEUS SP.	0.000	1.445	0.000	0.142	0.915	0.153	0.000	0.000	0.000	0.000	0.000
CALLINectes SP.	0.177	0.530	0.187	0.000	0.000	0.153	0.000	0.000	0.000	0.000	0.112
LOLLIGUNCULA BREVIS	0.355	0.000	0.000	0.000	0.000	0.153	0.000	0.165	0.157	0.000	0.000
TOTAL OF AVERAGE DENSITIES	4.843	3.717	1.020	2.688	4.057	1.375	1.030	86.933	23.983	1.605	5.040

ENTRAINMENT
DENSITY BY STATION
NUMBER PER 100 CUBIC METERS
DECEMBER 20, 1983

SPECIES NAME	A	B	C	D	E	F	G	H	I	J	K
CLUPEIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.747	0.000	0.000	0.000
CLUPEID	14.177	0.000	1.667	2.790	1.382	0.688	0.445	221.433	7.012	0.253	49.577
BREVOORTIA SP.	0.000	0.122	0.000	0.000	0.000	0.000	0.000	0.000	0.097	0.130	0.000
HARENGULA JAGUANA	0.940	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.223	0.000	0.103
OPHISTHONEMA OGLINUM	0.000	0.000	0.000	0.000	0.000	0.000	0.157	0.000	0.000	0.000	0.000
SARDINELLA AURITA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.430	0.000	0.000	0.000
ANCHOA MITCHILLI	0.000	0.723	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GOBIESOX STRUMOSUS	0.000	0.000	0.000	0.118	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MICROGNATHUS CRINIGER	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.115	0.000	0.000
SYNGNATHUS FLORIDAE	0.000	0.000	0.123	0.000	0.000	0.000	0.000	0.107	0.000	0.503	0.000
SYNGNATHUS SCOVELLI	0.000	0.000	0.000	0.000	0.000	0.118	0.000	0.000	0.000	0.000	0.000
LAGODON RHOMBOIDES	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.355	0.000	0.217
SCIAENIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.292	0.000	0.225
CALLIONYMUS PAUCIRADIATUS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.117	0.000	0.000
PARALICHTHYS ALBIGUTTA	0.000	0.000	0.130	0.000	0.000	0.000	0.000	0.000	0.000	0.133	0.000
UNIDENTIFIED	0.000	0.000	0.633	0.127	0.000	0.000	0.432	0.000	2.452	0.128	6.608
UNIDENTIFIED-DAMAGED	0.000	0.000	0.000	0.000	0.000	0.107	0.000	0.000	0.000	0.000	0.000
PENAEUS SP.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.102
CALLINECTES SP.	0.000	0.000	0.000	0.115	0.000	0.000	0.000	0.293	0.107	0.000	0.000
LOLLIGUNCULA BREVIS	0.000	0.000	0.000	0.000	0.238	0.000	0.000	0.000	0.117	0.000	0.103
TOTAL OF AVERAGE DENSITIES	15.117	0.982	2.553	3.150	1.620	0.913	1.033	223.010	11.925	1.278	56.935

ENTRAINMENT

DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

JANUARY 3, 1984

SPECIES NAME	STATION										
	A	B	C	D	E	F	G	H	I	J	K
MYROPHIS PUNCTATUS	0.145	0.298	0.207	0.897	0.838	0.783	0.403	0.000	0.165	0.317	0.000
BREVOORTIA sp.	0.000	0.000	0.000	0.000	0.448	0.000	0.133	0.020	0.000	0.000	0.000
ANCHOA MITCHILLI	0.000	1.920	0.575	0.237	0.000	0.000	0.000	0.020	0.000	0.152	0.000
GOBIESOX STRUMOSUS	0.000	0.000	0.000	0.000	0.000	0.143	0.000	0.000	0.000	0.000	0.000
SYNGNATHIDAE	0.000	0.150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SYNGNATHUS FLORIDAE	0.000	0.000	0.155	0.000	0.987	1.525	0.000	0.000	0.000	0.000	0.000
SYNGNATHUS SCOVELLI	0.182	1.220	0.000	0.815	0.000	0.000	0.133	0.000	0.000	0.382	0.000
SYNGNATHUS sp.	0.000	0.298	0.797	0.860	1.423	1.650	0.000	0.000	0.000	0.000	0.000
LAGODON RHOMBOIDES	0.000	1.065	0.545	0.000	0.382	0.787	0.708	0.157	0.162	0.152	0.000
LEIOSTOMUS XANTHURUS	0.000	0.143	0.767	0.413	0.427	1.073	0.133	0.000	0.000	0.000	0.000
PARACLINUS FASCIATUS	0.122	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
PARALICHTHYS ALBIGUTTA	0.000	2.352	0.353	0.215	0.195	0.000	0.825	0.000	0.000	0.852	0.000
SPHOEROIDES DORSALIS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.147	0.000
TOTAL OF AVERAGE DENSITIES	0.448	7.447	3.398	3.457	4.700	5.962	2.337	0.197	0.327	2.175	0.000

ENTRAINMENT
DENSITY BY STATION
NUMBER PER 100 CUBIC METERS
JANUARY 17, 1984

SPECIES NAME	A	B	C	D	E	F	G	H	I	J	K
MYROPHIS PUNCTATUS	0.000	0.932	0.110	1.615	5.077	0.490	0.507	0.000	0.177	1.512	0.298
CLUPEID	1.460	1.157	0.000	0.000	0.850	0.000	3.732	0.480	0.000	0.320	0.000
BREVOORTIA SP.	1.043	9.083	0.000	7.000	95.800	1.373	20.683	0.107	2.137	5.543	0.518
HARENGULA JAGUANA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.107	0.000	0.000	0.000
ANCHOA MITCHILLI	0.000	0.103	0.000	0.000	1.073	0.000	0.000	0.000	0.000	0.000	0.000
OPSANUS BETA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.118	0.000	0.000	0.000
OGCOCEPHALUS RADIATUS	0.000	0.000	0.000	0.000	0.193	0.000	0.000	0.000	0.000	0.000	0.000
UROPHYCIS FLORIDANA	0.000	0.000	0.000	0.000	0.337	0.000	0.000	0.000	0.000	0.662	0.137
MEMBRAS MARTINICA	0.000	0.000	0.000	0.000	0.392	0.000	0.000	0.000	0.000	0.000	0.000
MICROGNATHUS CRINIGER	0.000	0.000	0.000	0.000	0.000	0.187	0.000	0.000	0.000	0.000	0.000
SYNGNATHUS FLORIDAE	0.000	0.000	0.000	0.000	0.653	0.000	0.000	0.000	0.000	0.000	0.000
SYNGNATHUS SCOVELLI	0.138	0.000	0.105	0.000	0.178	0.000	0.000	0.000	0.317	0.503	0.303
SYNGNATHUS SP.	0.108	0.660	0.000	0.318	0.178	0.000	0.130	0.000	0.000	0.757	0.000
SERRANIDAE	0.000	0.000	0.000	0.000	0.283	0.000	0.000	0.000	0.000	0.000	0.000
LAGODON RHOMBOIDES	0.117	0.622	0.000	0.150	3.885	0.392	1.082	0.000	0.123	1.315	0.257
LEIOSTOMUS XANTHURUS	0.000	0.772	0.110	0.000	10.770	0.532	3.133	0.000	0.123	0.722	0.000
MUGILLIDAE	0.000	0.000	0.000	0.000	4.050	0.000	0.000	0.000	0.000	0.000	0.000
GOBIOSOMA ROBUSTUM	0.000	0.000	0.000	0.000	0.193	0.000	0.000	0.000	0.000	0.000	0.000
MICROGOBIUS GULOSUS	0.000	0.000	0.000	0.000	0.193	0.000	0.000	0.000	0.000	0.000	0.000
PARALICHTHYS ALBIGUTTA	0.000	0.000	0.000	0.000	0.835	0.137	0.123	0.000	0.000	0.000	0.000
SYMPHURUS PLAGIUSA	0.000	0.000	0.000	0.000	0.193	0.000	0.000	0.000	0.000	0.000	0.000
UNIDENTIFIED	0.000	0.000	0.000	0.000	0.477	0.000	0.000	0.247	0.000	0.000	0.295
UNIDENTIFIED-DAMAGED	0.000	0.000	0.000	0.000	0.178	0.000	0.000	0.000	0.180	0.000	0.000
CALLINECTES SP.	0.000	0.717	0.462	0.318	1.657	0.000	0.593	0.000	0.123	0.320	0.440
TOTAL OF AVERAGE DENSITIES	2.867	14.045	0.787	9.402	127.447	3.110	29.983	1.058	3.180	11.653	2.248

ENTRAINMENT
DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

JANUARY 31, 1984

SPECIES NAME	A	B	C	D	E	F	G	H	I	J	K
MYROPHIS PUNCTATUS	0.000	0.000	0.252	1.037	0.565	1.913	0.615	0.335	0.000	2.655	0.000
CLUPEID	2.538	0.097	3.408	17.690	9.612	10.760	4.047	191.367	15.283	0.453	10.133
BREVOORTIA SP.	0.458	2.515	1.098	0.362	0.162	0.897	12.433	0.267	1.458	26.533	6.610
ANCHOA MITCHELLI	0.000	0.000	0.128	0.000	0.000	0.000	0.115	0.000	0.000	0.000	0.000
UROPHYCIS FLORIDANA	0.000	0.000	0.000	0.000	0.152	0.000	0.000	0.098	0.000	0.000	0.000
MEMBRAS MARTINICA	0.000	0.000	0.000	0.360	0.000	0.000	0.000	0.000	0.000	0.000	0.000
HIPPOCAMPUS ZOSTERAE	0.000	0.000	0.000	0.200	0.000	0.000	0.117	0.000	0.000	0.000	0.000
SYNGNATHUS SCOVELLI	0.098	0.037	0.000	0.450	0.152	0.448	0.090	0.000	0.000	1.602	0.540
SYNGNATHUS SP.	0.000	0.000	0.230	0.000	0.000	0.188	0.097	0.000	0.000	0.000	0.000
ARCHOSARGUS PROBATOCEPHALUS	0.068	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAGODON RHOMBOIDES	2.658	2.835	0.387	0.272	0.000	1.433	5.767	0.803	1.615	44.633	0.500
LEIOSTOMUS XANTHURUS	1.953	1.038	0.845	0.157	0.000	0.587	0.102	0.520	0.000	4.245	1.093
PARALICHTHYS ALBIGUTTA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.152	0.340
SYMPHURUS PLAGIUSA	0.000	0.000	0.000	0.000	0.000	0.000	0.102	0.000	0.000	0.000	0.000
UNIDENTIFIED	0.382	0.000	0.237	0.495	0.187	0.137	0.307	2.538	0.000	0.148	7.450
UNIDENTIFIED-DAMAGED	0.110	0.000	0.000	0.000	0.000	0.000	0.102	0.000	0.000	0.152	0.143
CALLINECTES SP.	0.000	0.000	0.000	0.000	0.000	0.150	0.000	0.000	0.000	0.000	0.000
TOTAL OF AVERAGE DENSITIES	8.267	6.582	6.585	21.022	10.828	16.513	23.892	195.928	18.357	80.573	26.810

ENTRAINMENT
DENSITY BY STATION
NUMBER PER 100 CUBIC METERS
FEBRUARY 14, 1984

SPECIES NAME	A	B	C	D	E	F	G	H	I	J	K
MYROPHIS PUNCTATUS	0.152	0.000	0.182	0.185	0.635	1.963	1.072	0.223	1.135	1.050	0.148
CLUPEID	1.262	0.000	0.000	0.817	0.458	0.000	27.233	34.063	1.103	0.000	5.160
BREVOORTIA SP.	0.000	1.812	0.800	0.528	2.490	1.455	0.000	0.000	0.457	1.270	0.153
ANCHOA HEPSETUS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.402	0.000	0.000
ANCHOA MITCHILLI	0.000	0.592	0.000	0.000	0.000	0.505	0.460	0.000	0.000	0.000	0.000
GORIESOX STRUMOSUS	0.000	0.368	0.193	0.000	0.000	0.000	0.000	0.147	0.000	0.000	0.000
UROPHYCIS FLORIDANA	0.152	0.000	0.000	0.000	0.000	0.000	0.000	0.180	0.000	0.000	0.000
SYNGNATHUS FLORIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.167	0.000	0.000	0.000
SYNGNATHUS LOUISIANAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.890	0.308	0.000	0.000
SYNGNATHUS SCOVELLI	0.168	0.315	0.000	0.592	0.855	0.320	0.157	0.167	0.000	2.070	0.148
SYNGNATHUS SP.	0.000	0.000	0.272	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAGODON RHOMBOIDES	0.000	0.157	0.000	0.345	0.167	0.000	0.272	0.000	0.767	0.000	0.000
SCIAENIDAE	2.882	0.000	0.893	0.000	0.000	0.208	0.000	2.513	0.000	0.000	0.000
LETOSTOMUS XANTHURUS	0.000	0.157	0.272	0.000	0.168	0.488	0.000	0.167	2.667	0.000	0.468
Gobiidae	0.000	0.157	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
PARALICHTHYS ALBIGUTTA	0.152	0.000	0.000	0.000	0.000	0.000	0.158	0.000	0.000	0.000	0.000
UNIDENTIFIED	0.433	0.000	0.000	0.000	0.000	0.208	0.000	1.348	0.295	0.000	0.532
UNIDENTIFIED-DAMAGED	0.000	0.000	0.193	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL OF AVERAGE DENSITIES	5.200	3.557	2.805	2.467	4.773	5.148	29.352	39.865	7.133	4.390	6.610

ENTRAINMENT
DENSITY BY STATION
NUMBER PER 100 CUBIC METERS
FEBRUARY 29, 1984

SPECIES NAME	A	B	C	D	E	F	G	H	I	J	K
MYROPHIS PUNCTATUS	0.225	0.695	1.450	1.337	2.415	10.033	1.817	0.472	3.513	2.048	4.937
CLUPEID	0.115	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
BREVOORTIA SP.	8.880	2.750	32.907	31.132	36.595	90.780	4.813	4.457	8.028	14.717	2.915
HARENGULA JAGUANA	0.000	0.000	0.133	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ANCHOA HEPSETUS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.137	0.000	0.000
ANCHOA MITCHILLI	44.062	0.000	0.000	0.323	0.577	0.263	0.000	10.968	1.168	0.000	0.128
ANCHOA SP.	0.000	0.000	0.000	0.000	0.000	0.263	0.000	0.000	0.000	0.000	0.000
GOBIESOX STRUMOSUS	0.950	1.210	3.373	2.927	4.172	1.412	1.632	2.715	8.028	1.117	2.947
MEMBRAS MARTINICA	0.000	1.047	0.115	0.000	0.270	0.000	2.662	0.000	0.442	0.865	0.000
HIPPOCAMPUS ZOSTERAE	0.000	0.000	0.000	0.000	0.000	0.000	0.115	0.000	0.000	0.000	0.000
SYNGNATHUS FLORIDAE	0.000	0.113	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SYNGNATHUS SCOVELLI	1.380	0.340	3.447	2.878	5.302	3.105	1.285	1.532	1.682	0.852	1.853
ARCHOSARGUS PROBATOCEPHALUS	0.000	0.000	0.000	0.000	0.130	0.000	0.000	0.000	0.000	0.000	0.000
LAGODON RHOMBOIDES	4.857	27.825	2.705	9.260	14.260	26.933	56.677	0.672	14.928	11.802	14.433
SCIAENIDAE	1.598	0.000	0.162	0.000	0.143	0.000	0.225	2.250	0.952	0.000	1.413
LEIOSTOMUS XANTHURUS	4.182	1.465	1.320	3.160	2.365	11.038	2.617	0.650	4.740	1.765	1.745
MICROPOGONIAS UNDULATUS	0.000	0.000	0.117	0.000	0.000	0.167	0.112	0.000	0.000	0.000	0.262
POGONIAS CROMIS	1.015	0.000	0.000	0.000	0.000	0.000	0.000	0.137	0.000	0.000	0.145
PARACLINUS FASCIATUS	0.120	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
UNIDENTIFIED BLENNY	0.000	0.000	0.117	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GOBIIDAE	0.000	0.000	0.000	0.145	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EVERMANNICHTHYS SPONGICOLA	0.000	0.137	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GOBIOSOMA ROBUSTUM	0.000	0.328	0.267	0.000	0.000	0.000	0.000	0.000	0.000	0.092	0.000
PRIONOTUS SP.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.130	0.000	0.000	0.000
PARALICHTHYS ALBIGUTTA	0.000	0.000	0.000	0.000	0.000	0.000	0.115	0.000	0.000	0.000	0.000
SYMPHURUS PLAGIUSA	0.000	0.000	0.000	0.000	0.000	0.000	0.112	0.000	0.000	0.000	0.000
UNIDENTIFIED	0.000	0.000	0.000	0.000	0.000	0.000	0.112	1.142	0.000	0.108	0.000
UNIDENTIFIED-DAMAGED	0.000	0.000	3.030	0.000	0.000	0.000	0.000	0.105	0.137	0.000	0.000
CALLINECTES SP.	0.000	0.113	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL OF AVERAGE DENSITIES	67.383	36.023	49.142	51.162	66.228	143.995	72.292	24.578	43.755	33.365	30.778

ENTRAINMENT
DENSITY BY STATION
NUMBER PER 100 CUBIC METERS
MARCH 13, 1984

SPECIES NAME	A	B	C	D	E	F	G	H	I	J	K
MYROPHIS PUNCTATUS	0.000	0.000	0.000	0.163	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CLUPEIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.878	0.000	0.000
CLUPEID	8.950	0.000	0.000	0.000	0.000	0.000	0.000	51.218	1215.42	1.477	116.000
BREVOORTIA SP.	0.000	0.615	3.388	3.583	0.345	0.180	0.850	0.000	0.000	0.000	0.000
HARENGULA JAGUANA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.152	0.000
ENGRAULIDAE	0.290	0.000	0.000	0.000	0.000	0.000	0.000	0.137	0.000	0.000	0.000
ANCHOA HEPSETUS	1.133	0.000	0.000	0.000	0.000	0.000	0.000	71.625	35.840	0.307	3.535
ANCHOA MITCHILLI	7.865	8.802	5.622	6.683	6.420	23.550	140.650	10.505	1.147	6652.67	15.900
ANCHOA SP.	0.370	0.000	0.000	0.000	0.000	0.000	0.000	0.107	0.410	0.147	0.000
GOBIOSOX STRUMOSUS	0.435	0.112	0.000	0.000	0.175	0.317	0.000	0.107	0.955	2.882	0.273
MEMBRAS MARTINICA	0.000	0.457	0.000	0.000	0.000	0.527	0.103	0.000	0.000	0.000	0.000
SYNGNATHIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.272	0.000	0.000
SYNGNATHUS FLORIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.780
SYNGNATHUS SCOVELLI	0.403	0.117	0.000	0.143	0.000	0.167	0.108	0.000	0.607	0.318	0.678
SYNGNATHUS SP.	0.145	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAGODON RHOMBOIDES	0.000	0.000	0.152	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SCIAENIDAE	13.782	0.722	88.830	0.175	0.000	0.680	0.792	28.793	60.233	149.383	18.187
LEIOTOMUS XANTHURUS	0.000	0.000	0.000	0.000	0.170	0.000	0.103	0.000	0.000	0.147	0.122
PUGONIAS CROMIS	0.467	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.035	1.738	0.668
PARACLINUS FASCIATUS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.683	0.000	0.000
BLENNIIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.160	0.000
UNIDENTIFIED BLENNY	0.290	0.228	0.352	0.000	0.000	0.000	0.103	0.000	0.000	0.167	0.000
Gobiidae	0.000	0.562	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GOBIOSOMA ROBUSTUM	0.000	0.000	0.882	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TRIGLIDAE/SOLEIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
UNIDENTIFIED	1.325	0.000	1.038	0.000	0.000	0.000	0.108	0.642	64.368	0.483	24.557
UNIDENTIFIED-DAMAGED	0.120	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.287	0.000	0.922

TOTAL OF AVERAGE DENSITIES

35.575 11.613 100.263 10.748 7.110 25.420 142.818 163.133 1386.63 6810.03 181.622

ENTRAINMENT

DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

APRIL 9, 1984

SPECIES NAME	A	B	C	D	E	F	G	H	I	J	K
CLUPEIDAE	0.867	0.000	0.000	0.000	0.000	0.137	0.000	0.000	0.147	0.000	0.223
CLUPEID	0.240	0.000	1.008	0.000	0.000	0.000	0.147	46.810	3.365	0.000	1.300
BREVOORTIA SP.	0.000	0.192	0.992	0.360	0.000	0.000	0.207	0.795	0.132	0.267	11.018
HARENGULA JAGUANA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.717	0.000	0.000	0.000
ENGRAULIDAE	0.120	0.000	0.000	0.000	0.000	0.000	0.207	113.583	393.800	0.000	12.250
ANCHOA HEPSETUS	8.098	1.940	3.247	0.000	4.200	0.413	0.207	20.580	82.947	16.848	10.333
ANCHOA MITCHILLI	1488.89	13627.6	426.938	1345.29	1709.91	1838.73	3159.35	1.338	13.768	1746.45	371.175
ANCHOA SP.	155.433	105.815	74.417	67.150	134.767	35.627	6.572	16.432	17.460	340.417	106.417
GOBIESOX STRUMOSUS	2.125	0.592	0.723	0.770	0.417	4.655	3.700	0.598	0.563	1.753	2.267
STRONGYLURA MARINA	0.000	0.000	0.000	0.000	0.000	0.000	0.623	0.000	0.000	0.000	0.000
ATHERINIDAE	0.000	0.632	0.000	0.000	0.000	0.137	0.000	0.000	0.000	0.000	0.000
MEMBRAS MARTINICA	0.665	4.432	9.583	0.895	2.442	1.702	9.347	0.000	0.000	1.427	0.947
MENIDIA SP.	0.000	1.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
HIPPOCAMPUS ERECTUS	0.000	0.000	0.000	0.000	0.000	0.203	0.000	0.000	0.000	0.000	0.000
HIPPOCAMPUS ZOSTERAE	0.000	0.455	0.000	0.000	0.175	0.000	0.877	0.000	0.000	0.000	0.000
MICROGNATHUS CRINIGER	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SYNGNATHUS FLORIDAE	0.630	0.192	0.000	0.000	0.000	0.000	0.573	0.000	0.422	1.532	0.392
SYNGNATHUS LOUISIANAE	0.000	0.000	0.158	0.252	0.000	0.000	0.000	0.000	0.000	0.143	0.000
SYNGNATHUS SCOVELLI	0.000	1.910	0.425	0.000	0.412	0.578	2.320	0.197	0.413	1.073	0.495
ORTHOPRISTIS CHRYSOPTERA	0.000	0.000	0.000	0.000	0.000	0.000	0.152	0.000	0.000	0.143	0.000
LAGODON RHOMBOIDES	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SCIAENIDAE	3886.69	3.878	115.333	4.572	10.957	2.730	47.065	1665.27	3920.18	226.333	4277.97
BAIRDIELLA CHRYSOURA	4.355	0.263	2.062	0.790	0.527	0.672	0.293	1.982	0.682	14.962	1.762
CYNOSCION ARENARIUS	0.487	0.000	0.197	0.000	0.000	0.172	0.000	0.892	0.000	0.000	0.980
MENTICIRRHUS SP.	0.000	0.000	0.000	0.000	0.000	0.203	0.000	0.000	0.000	0.000	0.195
POGONIAS CROMIS	4.193	0.368	0.625	0.000	0.175	0.000	0.000	0.000	0.260	0.000	0.275
BLENNIIDAE	0.000	0.000	0.000	0.000	0.000	1.550	0.000	2.380	3.347	115.700	14.273
UNIDENTIFIED BLENNY	11.658	13.850	30.925	8.780	22.350	43.053	57.517	0.593	6.125	79.550	6.350
GOBIIDAE	0.000	0.000	0.855	0.000	0.000	0.000	0.162	0.000	0.000	0.315	0.000
BATHYGOBIOUS SOPORATOR	0.000	0.000	0.178	2.333	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GOBIOSOMA ROBUSTUM	14.327	19.533	60.150	10.252	16.860	9.763	28.263	0.180	5.385	116.617	14.992
MICROGOBIOUS GULOSUS	0.000	0.000	0.190	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
PRIONOTUS SP.	0.218	0.183	0.000	0.000	0.000	0.000	0.000	0.400	0.130	0.000	0.147
TRIGLIDAE/SOLEIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.130	0.000	0.000
PARALICHTHYS ALBIGUTTA	0.122	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
UNIDENTIFIED	12.443	0.183	0.562	0.900	0.237	0.388	0.678	21.437	5.327	2.043	7.828
UNIDENTIFIED-DAMAGED	6.418	2.087	11.435	1.265	6.602	5.10	0.875	12.008	2.242	2.467	4.937
MENIPPE MERCENARIA	0.000	0.000	0.368	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LOLLIGUNCULA BREVIS	0.162	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.690

TOTAL OF AVERAGE DENSITIES

5598.14 13784.5 740.372 1443.61 1910.03 1942.22 3319.13 1916.39 4456.82 2663.04 4849.08

ENTRAINMENT
DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

APRIL 25, 1984

SPECIES NAME	A	B	C	D	E	F	G	H	I	J	K
MYROPHIS PUNCTATUS	0.000	0.000	0.517	0.000	0.192	0.000	0.000	0.000	0.000	0.000	0.000
CLUPEIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CLUPEID	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
BREVOORTIA SP.	0.000	4.323	247.668	0.158	0.720	2.277	4.045	0.858	2.533	0.000	0.000
HARENGULA JAGUANA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.545	0.175	11.397
ENGRAULIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.345	0.000	0.000
ANCHOA HEPSETUS	0.000	0.658	32.482	0.000	0.000	0.000	0.000	12.013	5.842	0.000	0.000
ANCHOA MITCHILLI	0.000	0.658	32.482	1.435	8.050	5.367	10.103	11.833	8.343	2.593	19.685
ANCHOA SP.	727.633	475.985	410.517	5692.01	4591.07	9874.78	3002.86	407.463	477.315	13757.8	5067.36
SYNODUS FOETENS	6.453	23.643	224.800	430.827	599.333	1122.58	27.430	25.750	37.982	54.358	55.652
GOBIESOX STRUMOSUS	0.185	0.335	2.052	0.000	0.000	0.865	0.380	0.000	0.000	0.000	0.000
HYPORHAMPHUS UNIFASCIATUS	0.000	0.703	2.747	0.765	0.983	2.855	0.137	0.430	3.350	6.727	1.005
MEMBRAS MARTINICA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.203
SYNGNATHIDAE	0.000	0.660	1.508	0.537	0.000	0.000	1.687	0.000	0.392	1.940	0.260
HIPPOCAMPUS ERECTUS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.215	0.000	0.000	0.000
HIPPOCAMPUS ZOSTERAE	0.203	0.000	0.000	0.177	0.173	0.507	0.000	0.000	0.208	0.000	0.397
MICROGNATHUS CRINIGER	0.000	0.000	0.000	0.000	0.192	0.000	0.153	0.000	0.000	0.000	0.000
SYNGNATHUS FLORIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.182	0.000	0.000	0.000
SYNGNATHUS LOUISIANAE	0.000	0.317	0.000	0.750	0.000	0.712	0.300	0.215	0.000	3.683	3.165
SYNGNATHUS SCOVELLI	0.185	0.647	0.000	0.398	0.487	0.162	1.468	0.000	0.000	0.167	0.600
SYNGNATHUS SP.	0.000	0.000	0.000	0.177	0.000	0.000	0.000	0.640	0.000	0.325	0.260
ORTHOPRISTIS CHRYSOPTERA	0.000	0.185	0.725	0.000	0.000	0.205	0.000	0.430	0.507	0.167	0.647
ARCHOSARGUS PROBATOCEPHALUS	0.000	0.150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAGODON RHOMBOIDES	0.000	0.162	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SCIAENIDAE	3.390	0.325	7.523	16.918	13.652	34.127	0.117	502.847	215.778	13.878	866.958
BAIRDIELLA CHRYSOURA	3.658	3.453	12.652	1.172	0.347	16.323	4.623	35.110	23.338	4.228	22.110
CYNOSCION ARENARIUS	0.172	0.000	0.000	0.000	0.180	0.183	0.000	1.717	0.608	0.498	0.200
CYNOSCION NEBULOSUS	0.172	0.000	1.093	0.912	2.442	2.558	0.140	0.645	0.987	1.803	3.880
CYNOSCION SP.	0.000	0.323	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LEIOTOMUS XANTHURUS	0.000	0.150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MENTICIRRHUS SP.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
POGONIAS CROMIS	1.100	0.312	0.000	0.000	0.365	0.418	0.293	0.000	0.412	0.000	0.000
PARACLINUS FASCIATUS	0.000	0.000	0.195	0.000	0.173	0.000	0.000	0.000	0.000	0.205	0.000
BLENNIIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.453
UNIDENTIFIED BLENNY	0.878	8.428	21.917	29.250	24.400	26.883	1.783	5.322	16.330	64.450	5.907
GOBIIDAE	3.803	1.467	0.562	0.198	0.182	2.000	5.537	2.133	2.717	22.533	6.367
BATHYGOBUS SOPORATOR	0.000	0.162	0.732	0.000	0.430	0.405	0.000	0.000	0.608	1.697	0.000
GOBIOSOMA ROBUSTUM	0.638	32.590	111.783	46.033	57.515	195.002	59.833	4.510	16.023	347.917	174.398
MICROGEBUS GULOSUS	0.000	0.325	0.000	0.000	0.000	0.648	0.000	0.430	0.000	0.000	0.193
MICRODESMUS LONGIPINNIS	0.000	0.000	0.975	4.060	2.670	2.675	0.422	0.000	22.083	15.153	3.147
TRIGLIDAE/SOLEIDAE	0.000	0.000	0.000	0.000	0.182	0.183	0.000	1.128	2.337	0.153	0.200
TETRAODONTIDAE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.203
UNIDENTIFIED	0.203	0.162	0.530	1.853	1.835	0.388	0.550	1.997	1.238	6.690	1.662
UNIDENTIFIED-DAMAGED	3.142	1.508	7.180	1.452	19.007	40.498	1.680	12.200	3.088	19.855	11.873
MENIPPE MERCENARIA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.830	0.000	0.193
LOLLIGUNULA BREVIS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.215	0.193	0.167	0.203

TOTAL OF AVERAGE DENSITIES

751.817 556.973 1098.22 6229.58 5333.43 11343 2 3123 82 1028 28 861.768 14330 2 6261.87

ENTRAINMENT

DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

NOVEMBER 8, 1983

SPECIES NAME	STATION			
	L	M	N	P
CLUPEID	8.848	0.000	0.000	0.000
HARENGULA JAGUANA	0.352	0.000	0.000	0.000
OPHISTHONEMA OGILINUM	0.352	0.283	0.000	0.000
GOBIESOX STRUMOSUS	0.365	0.000	0.000	0.000
LUCANIA PARVA	0.000	1.895	0.000	0.000
SYNGNATHUS SCOVELLI	0.000	0.877	0.000	0.000
EUCINOSTOMUS SP.	0.000	1.260	0.308	0.405
SCIAENOPS OCELLATUS	0.000	0.000	2.072	0.847
BLENNIIDAE	0.000	0.853	0.000	0.000
GOBIOSOMA ROBUSTUM	0.000	1.187	0.000	0.425
PRIONOTUS SP.	0.000	0.283	0.000	0.000
PENAEUS SP.	0.000	0.618	0.617	0.333
CALLINECTES SP.	0.000	3.175	1.965	0.000
TOTAL OF AVERAGE DENSITIES	9.917	10.432	4.962	2.415

ENTRAINMENT

DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

NOVEMBER 21, 1983

SPECIES NAME	STATION			
	L	M	N	P
CLUPEID	0.267	0.000	0.000	0.000
MEMBRAS MARTINICA	0.000	0.000	0.370	0.000
SYNGNATHUS SCOVELLI	0.000	1.295	0.000	0.328
SYNGNATHUS SP.	0.000	0.000	0.280	0.000
EUCINOSTOMUS SP.	0.000	0.000	0.668	1.060
GOBIIDAE	0.000	0.633	0.000	0.000
CALLINECTES SP.	0.570	0.000	0.317	0.000
TOTAL OF AVERAGE DENSITIES	0.837	1.928	1.635	1.388

ENTRAINMENT

DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

DECEMBER 7, 1983

SPECIES NAME	STATION			
	L	M	N	P
MYROPHIS PUNCTATUS	0.000	0.000	0.233	0.000
CLUPEID	0.275	0.000	0.000	0.000
BREVOORTIA SP.	0.000	0.438	0.000	0.000
ANCHOA MITCHILLI	3.547	0.215	0.000	0.000
LUCANIA PARVA	0.000	0.223	0.000	0.000
MEMBRAS MARTINICA	0.000	0.000	0.000	0.383
SYNGNATHUS FLORIDAE	0.000	0.412	0.000	0.000
SYNGNATHUS SCOVELLI	0.000	1.975	0.532	3.908
SYNGNATHUS SP.	0.000	0.223	0.000	0.000
EUCINOSTOMUS SP.	0.000	0.000	0.563	1.183
LAGODON RHOMBOIDES	0.563	0.000	0.000	0.000
PARALICHTHYS ALBIGUTTA	0.000	0.215	0.000	0.000
MONACANTHUS HISPIDUS	0.000	0.205	0.000	0.000
PENAEUS SP.	0.563	0.215	0.298	2.750
TOTAL OF AVERAGE DENSITIES	4.948	4.122	1.627	8.225

ENTRAINMENT

DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

DECEMBER 20, 1983

SPECIES NAME	STATION			
	L	M	N	P
CLUPEID	0.247	0.000	0.000	0.757
ANCHOA MITCHILLI	0.248	0.000	0.000	0.000
OLIGOPLITES SAURUS	0.248	0.000	0.000	0.000
EUCINOSTOMUS SP.	0.247	0.000	0.000	0.000
LOLLIGUNCULA BREVIS	0.503	0.000	0.000	0.000
 TOTAL OF AVERAGE DENSITIES	 1.493	 0.000	 0.000	 0.757

ENTRAINMENT

DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

JANUARY 3, 1984

SPECIES NAME	L	M	STATION N	P
MYROPHIS PUNCTATUS	1.355	0.000	0.000	1.750
BREVOORTIA SP.	0.257	0.000	0.000	0.000
SYNGNATHIDAE	0.297	0.000	0.000	0.000
SYNGNATHUS FLORIDAE	0.000	0.293	0.000	0.000
SYNGNATHUS SP.	0.548	0.000	0.000	0.000
LACODON RHOMBOIDES	1.357	21.217	5.562	5.972
LEIOSTOMUS XANTHURUS	1.632	4.677	2.560	8.343
MICROGOBIOUS GULOSUS	0.000	0.000	0.000	0.335
PARALICHTHYS ALBIGUTTA	3.355	1.850	0.932	3.970
UNIDENTIFIED-DAMAGED	0.000	0.000	0.253	0.000
CALLINECTES SP.	0.000	0.000	0.202	0.000
TOTAL OF AVERAGE DENSITIES	8.800	28.037	9.508	20.370

ENTRAINMENT

DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

JANUARY 17, 1984

SPECIES NAME	STATION			
	L	M	N	P
MYROPHIS PUNCTATUS	0.000	0.950	0.000	0.373
BREVOORTIA SP.	0.000	1.427	0.000	0.000
LUCANIA PARVA	0.000	0.000	0.000	0.373
SYNGNATHUS FLORIDAE	0.257	0.530	0.000	0.373
SYNGNATHUS SCOVELLI	0.000	0.240	0.000	0.450
LEIOSTOMUS XANTHURUS	0.000	0.238	0.000	0.748
MICROGOBIUS GULOSUS	0.000	0.000	0.742	0.373
CALLINECTES SP.	0.352	0.472	1.045	0.350
MENIPPE MERCENARIA	0.000	0.000	0.000	0.350
TOTAL OF AVERAGE DENSITIES	0.608	3.857	1.787	3.392

ENTRAINMENT

DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

JANUARY 31, 1981

SPECIES NAME	STATION			
	L	M	N	P
MYXOPHIS PUNCTATUS	0.783	1.150	1.473	2.228
CLUPEID	0.433	0.000	0.000	0.000
BREVOORTIA SP.	2.572	0.232	0.000	0.000
UROPHYCIS FLORIDANA	0.242	0.000	0.000	0.000
MEMBRAS MARTINICA	0.000	0.227	0.390	0.000
SYNGNATHUS SCOVELLI	0.397	0.243	0.435	0.000
LAGODON RHOMBOIDES	4.492	2.573	0.000	4.378
LEIOTOMUS XANTHURUS	1.098	0.8)	7.772	15.598
MUGILLIDAE	0.000	0.215	0.000	0.000
GOBIOSOMA ROBUSTUM	0.000	0.243	0.000	0.000
PARALICHTHYS ALBIGUTTA	0.242	0.000	0.000	0.000
UNIDENTIFIED DANCARD	0.000	0.282	0.000	0.000
PENAEUS SP.	0.000	0.463	0.000	0.000
CALLINECIES SP.	0.000	0.000	0.390	0.000
TOTAL	10.258	6.573	10.460	23.305
AVERAGE DENSITIES				

ENTRAINMENT

DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

FEBRUARY 14, 1984

SPECIES NAME	STATION			
	L	M	N	P
MYROPHIS PUNCTATUS	0.657	0.225	0.000	0.350
BREVOORTIA SP.	0.960	6.603	0.000	0.350
ANCHOA MITCHILLI	0.000	0.000	0.000	0.350
GOBIESOX STRUMOSUS	0.638	0.000	0.000	0.000
CYPRINODON VARIEGATUS	0.000	0.000	0.363	0.000
MEMBRAS MARTINICA	0.000	0.225	19.462	5.188
MENIDIA BERYLLINA	0.000	0.000	0.000	0.395
SYNGNATHUS SCOVELLI	0.305	0.225	0.000	0.790
LAGODON RHOMBOIDES	0.000	1.555	0.247	0.650
LEIOSTOMUS XANTHURUS	0.000	0.225	4.428	12.267
PARACLINUS FASCIATUS	0.000	0.000	0.000	0.380
Gobiidae	0.000	0.000	0.247	0.000
UNIDENTIFIED	0.333	0.000	0.000	0.380
CALLINECTES SP.	0.000	0.000	0.402	0.395
TOTAL OF AVERAGE DENSITIES	2.893	9.058	25.148	21.495

ENTRAINMENT
DENSITY BY STATION
NUMBER PER 100 CUBIC METERS
FEBRUARY 29, 1984

SPECIES NAME	STATION			
	L	M	N	P
MYROPHIS PUNCTATUS	2.352	0.480	4.177	0.503
BREVOORTIA SP.	29.265	4.052	1.538	0.503
GOBIESOX STRUMOSUS	2.482	0.647	0.000	1.692
CYPRINODONTIDAE	0.000	0.145	0.000	0.000
CYPRINODON VARIEGATUS	0.000	0.000	1.497	0.000
MEMBRAS MARTINICA	2.678	42.983	9.387	14.062
SYNGNATHUS SCOVELLI	1.652	0.437	2.495	2.355
SYNGNATHUS SP.	0.000	0.000	0.522	0.000
LAGODON RHOMBOIDES	16.433	16.392	11.063	7.457
SCIAENIDAE	0.000	0.292	0.000	0.000
LEIOSTOMUS XANTHURUS	3.577	3.885	13.510	18.740
MUGILLIDAE	0.000	0.000	0.980	0.000
GOBIOSOMA ROBUSTUM	0.000	0.498	0.000	0.235
MICROGOBIUS GULOSUS	0.000	0.323	0.000	0.000
UNIDENTIFIED	0.000	0.290	0.323	0.000
UNIDENTIFIED-DAMAGED	0.000	1.565	0.000	0.000
TOTAL OF AVERAGE DENSITIES	58.438	71.988	45.592	45.547

ENTRAINMENT
DENSITY BY STATION
NUMBER PER 100 CUBIC METERS

MARCH 13, 1984

SPECIES NAME	STATION			
	L	M	N	P
BREVOORTIA SP.	0.000	0.853	1.933	0.277
ANCHOA MITCHILLI	20.783	0.000	0.000	0.000
GOBIESOX STRUMOSUS	0.000	0.230	0.000	0.000
CYPRINODON VARIEGATUS	0.000	0.000	0.818	0.000
LUCANIA PARVA	0.000	0.000	0.240	0.000
MEMBRAS MARTINICA	0.670	4.742	20.857	17.888
SYNGNATHUS SCOVELLI	0.000	0.902	0.000	0.348
LAGODON RHOMBOIDES	0.000	0.230	1.610	0.000
SCIAENIDAE	1.413	0.000	0.000	0.000
LEIOSTOMUS XANTHURUS	0.000	0.230	0.993	0.625
BLENNIIDAE	0.447	0.458	2.395	9.612
UNIDENTIFIED	0.000	0.000	0.000	0.277
UNIDENTIFIED-DAMAGED	0.180	0.000	0.888	1.107
TOTAL OF AVERAGE DENSITIES	23.493	7.645	29.735	30.133

ENTRAINMENT

DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

MARCH 28, 1984

SPECIES NAME	STATION			
	L	M	N	P
MYROPHIS PUNCTATUS	1.207	0.000	3.300	5.357
CLUPEID	0.000	0.000	0.000	2.817
BREVOORTIA SP.	0.110	0.708	0.000	0.000
ANCHOA HEPSETUS	1.792	0.000	0.000	0.000
ANCHOA MITCHILLI	2235.557	5.320	2.700	0.507
ANCHOA SP.	61.983	0.752	2.323	0.217
GOBIESOX STRUMOSUS	5.355	0.000	0.000	0.000
STRONGYLURA MARINA	0.000	0.398	0.000	0.415
CYPRINODON VARIEGATUS	0.000	0.000	0.360	0.000
LUCANIA PARVA	0.000	0.000	1.632	1.060
MEMBRAS MARTINICA	0.367	4.418	93.162	58.283
HIPPOCAMPUS ZOSTERAE	0.223	0.000	0.000	0.000
SYNGNATHUS FLORIDAE	1.907	0.000	0.000	0.507
SYNGNATHUS SCOVELLI	0.905	0.707	1.472	3.313
ORTHOPRISTIS CHRYSOPTERA	4.752	0.000	0.000	0.632
ARCHOSARGUS PROBATOCEPHALUS	0.000	0.238	0.000	0.000
LAGODON RHOMBOIDES	0.000	1.055	5.945	107.117
SCIAENIDAE	371.000	0.353	0.000	0.000
BAIRDIELLA CHRYSOURA	5.930	0.000	0.000	0.000
LEIOSTOMUS XANTHURUS	0.507	0.000	4.367	26.198
BLENNIIDAE	7.785	3.933	0.000	0.000
UNIDENTIFIED BLENNY	11.267	4.130	1.623	0.000
GOBIIDAE	0.000	5.342	0.000	5.693
GOBIOSOMA ROBUSTUM	28.517	6.825	7.387	2.350
UNIDENTIFIED	4.798	0.000	2.662	0.415
UNIDENTIFIED-DAMAGED	5.820	0.940	0.000	0.000
TOTAL OF AVERAGE DENSITIES	2749.780	35.120	126.932	214.880

ENTRAINMENT

DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

APRIL 9, 1984

SPECIES NAME	L	M	STATION N	P
BREVOORTIA SP.	0.000	0.460	0.220	0.000
ANCHOA HEPSETUS	11.583	0.595	0.525	0.000
ANCHOA MITCHILLI	4438.550	2.235	2.425	0.257
ANCHOA SP.	36.517	0.315	0.000	1.017
GOBIESOX STRUMOSUS	0.000	0.545	0.233	0.342
STRONGYLURA MARINA	0.000	0.000	0.000	0.408
CYPRINODONTIDAE	0.000	0.000	0.000	0.665
CYPRINODON VARIEGATUS	0.000	0.000	1.600	0.450
LUCANIA PARVA	0.000	0.000	2.288	3.283
ATHERINIDAE	0.000	0.000	0.000	0.408
MEMBRAS MARTINICA	0.000	9.580	13.950	12.622
SYNGNATHUS SCOVELLI	0.488	2.788	0.908	2.903
SCIAENIDAE	36.483	5.808	0.233	0.000
BAIRDIELLA CHRYSOURA	1.263	0.000	0.000	0.000
POGONIAS CHROMIS	0.000	3.732	1.218	0.567
BLENNIIDAE	1.223	51.695	15.217	31.450
HYPSOBLENNIUS HENTZI	0.300	0.000	0.000	0.000
UNIDENTIFIED BLENNY	0.000	16.833	16.667	17.167
GOBIIDAE	0.000	0.280	23.387	13.962
BATHYGOBIUS SOPORATOR	0.000	0.315	0.000	0.000
GOBIOSOMA ROBUSTUM	14.417	173.850	42.067	228.610
UNIDENTIFIED	1.007	0.000	0.305	1.800
UNIDENTIFIED-DAMAGED	0.000	2.032	1.938	1.750
MENIPPE MERCENARIA	0.222	0.000	0.000	0.000
LOLLIGUNCULA BREVIS	0.222	0.000	0.000	0.000
TOTAL OF AVERAGE DENSITIES	4542.275	271.063	123.182	317.660

ENTRAINMENT

DENSITY BY STATION

NUMBER PER 100 CUBIC METERS

APRIL 25, 1984

SPECIES NAME	STATION			
	L	M	N	P
MYROPHIS PUNCTATUS	0.000	0.000	0.453	0.307
BREVOORTIA SP.	0.900	2.300	4.535	1.958
ANCHOA HEPSETUS	17.588	4.898	0.000	0.318
ANCHOA MITCHILLI	502.033	31.953	0.407	23.270
ANCHOA SP.	48.828	25.780	37.000	14.425
SYNODUS FOETENS	0.000	0.252	0.000	0.418
GOBIESOX STRUMOSUS	3.652	2.790	0.813	0.000
CYPRINODON VARIEGATUS	0.000	0.000	6.467	0.725
LUCANIA PARVA	0.000	0.000	2.297	0.000
ATHERINIDAE	0.000	0.252	0.000	0.418
MEMBRAS MARTINICA	0.260	17.590	63.433	21.952
MENIDIA SP.	0.000	0.000	0.407	0.000
SYNGNATHUS LOUISIANAE	0.317	0.000	0.000	0.000
SYNGNATHUS SCOVELLI	0.317	4.332	3.465	2.930
LAGODON RHOMBOIDES	0.000	0.245	1.090	0.000
SCIAENIDAE	0.000	0.000	0.000	0.343
BAIRDIELLA CHRYSOURA	0.000	1.800	0.813	0.335
LEIOSTOMUS XANTHURUS	0.000	0.000	0.312	0.000
POGONIAS CROMIS	0.000	0.753	1.703	0.642
BLENNIIDAE	9.807	46.117	6.785	0.687
UNIDENTIFIED BLENNI?	0.000	1.867	21.500	6.923
GOBIIDAE	0.000	12.567	68.667	107.583
GOBIOSOMA ROBUSTUM	20.132	210.852	88.485	140.633
MICROGOGIUS GULOSUS	0.000	18.833	0.000	0.000
MICRODESMUS LONGIPINNIS	0.000	0.260	0.000	0.000
DIODON HYSTRIX	0.363	0.000	0.000	0.000
UNIDENTIFIED	1.285	0.518	0.813	0.000
UNIDENTIFIED-DAMAGED	4.103	7.423	7.003	11.175
TOTAL OF AVERAGE DENSITIES	609.585	391.382	316.448	335.043

3.4 FISHERIES

1

FISHERIES SAMPLING COLLECTIONS
TOTAL NUMBER COLLECTED OVER ALL REPS FOR
TRAWL

SPECIES NAME	MARCH 1984								
	T1	T2	T3	STATION T4	T5	T6	T7	T8	T9
DASYATIS SABINA	0	0	0	0	1	0	0	0	0
ANCHOA MITCHILLI	0	6	8	0	0	0	8	2	1
ARIUS FELIS	0	0	0	0	0	0	0	1	3
OPSANUS BETA	0	3	0	3	2	0	9	1	1
OGCOEPHALUS RADIATUS	0	1	0	0	1	3	5	1	1
UROPHYCIS FLORIDANA	0	7	5	3	6	2	5	1	2
OPHIDIION HOLBROOKI	0	0	0	0	0	0	0	0	2
HIPPOCAMPUS ERECTUS	0	0	0	0	0	0	0	1	0
CENTROPRISTIS STRIATA	0	0	0	0	0	0	0	1	0
DIPLECTRUM BIVITTATUM	0	0	0	0	0	0	1	1	0
EUCINOSTOMUS GULA	0	0	0	0	0	0	1	0	2
ORTHOPRISTIS CHRYSOPTERA	0	0	0	4	0	0	0	0	0
LAGODON RHOMBOIDES	0	0	0	0	2	3	21	17	54
BAIRDIELLA CHRYSOURA	3	1	0	7	4	6	74	24	254
LEIUSTOMUS XANTHURUS	13	9	2	18	5	0	9	11	11
MICROPOGONIAS UNDULATUS	312	5	4	1	0	1	2	0	0
PRIONOTUS TRIBULUS	0	1	0	0	0	0	0	0	0
ANCYLOPSETTA QUADROCELLATA	2	2	2	2	1	2	1	0	0
ETROPUS CROSSOTUS	0	0	0	0	0	0	1	1	0
PARALICHTHYS ALBIGUTTA	0	0	2	1	0	0	1	0	0
SYMPHURUS PLAGIUSA	0	2	0	1	0	1	0	0	0
ALUTERUS SCHOEPI	5	4	1	0	1	1	0	0	0
MONACANTHUS CILIATUS	0	0	0	0	0	0	2	2	0
LACTOPHRYS QUADRICORNIS	0	0	0	0	0	0	6	1	1
CHILOMYCTERUS SCHOEPI	0	0	0	0	0	0	4	0	3
	0	0	0	0	0	0	2	0	0
TOTAL NUMBER OF FISH	335	41	24	40	23	19	152	64	335
SQUILLA EMPUSIA	0	1	13	5	2	0	1	0	1
PENAEUS DUORARUM	36	78	47	33	17	4	81	17	49
TRACHYPENAEUS SIMILIS	0	0	0	0	0	1	1	0	38
PALAEMON FLORIDANUS	0	8	0	0	0	1	12	8	0
PALAEMONETES INTERMEDIUS	2	5	0	0	0	0	0	0	0
PALAEMONETES VULGARIS	2	2	0	0	0	0	0	0	0
PERICLIMENES LONGICAUDATUS	0	0	0	0	0	0	6	2	1
ALPHEUS HETEROCHAEIS	0	0	0	0	0	0	1	0	0
HIPPOLYTE ZOSTERICOLA	0	0	0	0	0	1	9	9	0
THOR FLGRIDANUS	0	0	0	0	0	0	21	0	1
TOZEUMA CAROLINENSE	0	0	0	0	0	0	0	0	19
PETROLISTHES ARMATUS	0	0	0	0	0	0	0	1	0
PAGURUS GYMNOACTUS	0	9	16	10	0	0	8	10	1
PAGURUS LONGICARPUS	0	0	2	1	0	1	2	0	0
PAGURUS POLLICARIS	0	0	0	0	0	1	0	0	0
PERSOPHONA PUNCTATA	0	0	0	0	0	0	1	0	0
CALLINECTES SAPIDUS	3	11	5	4	2	0	4	0	2
OVALIPES GUADULPENSIS	0	0	0	0	0	1	0	0	0
PORTUNUS GIBBESI	0	0	0	0	1	1	0	1	3
EURYPANOPEUS DEPRESSUS	0	0	0	3	0	0	1	0	0
MENIPPE MERCENARIA	0	0	0	0	0	0	0	0	1
NEOPANOPE TEXANA	6	7	2	0	0	0	20	3	5
PANOPEUS HERBSTII	0	1	1	0	0	0	0	3	4
PINNIXA CRISTATA	0	0	1	1	0	1	0	0	0

LIBINIA DUBIA	0	0	0	0	0	0	6	2	0	2
MACROCOELOMA TRISPINOSUM	0	0	0	0	0	0	0	0	0	
METOPORHAPHIS CALCARATA	0	0	0	0	0	0	0	0	2	
PODOCHELA SIDNEYI	0	0	0	0	2	1	23	11	35	
EPIALTUS DILATATUS	0	0	0	0	0	0	0	0	4	
ARGOPECTIN GIBBUS	0	0	0	0	0	0	0	0	2	
CORYPHELLIDAE	0	0	0	0	0	0	0	0	5	
DORIDIDAE	0	3	0	1	0	0	0	0	0	
LOLLIGUNCULA BREVIS	0	0	0	0	0	0	1	0	0	
NASSARIUS VIBEX	0	0	0	13	2	0	7	0	0	
UROSALPINX CINEREA	1	4	1	21	0	0	5	0	0	
ECHINASTER SP.	0	0	1	0	0	0	1	0	0	
	0	0	0	0	0	0	5	2	33	
TOTAL NUMBER OF INVERTEBRATES	50	129	89	92	26	13	216	69	206	

FISHERIES SAMPLING COLLECTIONS
TOTAL NUMBER COLLECTED OVER ALL REPS FOR
TRAWL

5

SPECIES NAME	MAY 1984		STATION						
	T1	T2	T3	T4	T5	T6	T7	T8	T9
DASYATIS SABINA	0	0	0	0	0	0	1	0	0
ANCHOA MITCHILLI	0	1	0	2	0	7	0	3	3
SYNODUS FOETENS	0	0	0	0	0	0	1	1	1
ARIUS FELIS	0	0	0	1	1	0	2	2	1
OPSANUS BETA	0	0	0	2	0	0	1	0	1
OGCOCEPHALUS RADIATUS	0	0	0	0	4	1	0	0	1
OPHIDION HOLBROOKI	0	0	0	0	0	0	0	0	1
HIPPOCAMPUS ERECTUS	0	0	0	1	0	0	1	0	0
CENTROPRISTIS STRIATA	0	0	0	0	0	0	3	1	19
ORTHOPRISTIS CHRYSOPTERA	0	0	6	14	4	3	109	28	364
LAGODON RHOMBOIDES	72	2	7	15	2	14	125	67	345
BAIRDIELLA CHRYSOURA	19	44	13	14	7	11	1	2	5
CYNOSCION ARENARIUS	0	0	0	0	1	0	0	0	0
CYNOSCION NEBULOSUS	16	15	110	4	52	0	1	0	0
LEIOSTOMUS XANTHURUS	210	240	124	46	63	54	0	48	7
MENTICIRRHUS AMERICANUS	0	4	17	0	12	1	0	0	0
MICROPOGONIAS UNDULATUS	0	3	0	0	0	0	0	0	0
MULLUS AURATUS	0	0	0	0	0	0	0	0	0
POLYDACTYLUS OCTONEMUS	0	2	0	0	0	7	0	0	2
SCORPAENA BRASILIENSIS	0	0	0	0	0	0	0	0	3
PRIONOTUS SCITULUS	0	0	0	0	1	4	0	0	1
PRIONOTUS TRIBULUS	0	0	0	0	1	1	0	0	0
ANCYLOPSETTA QUADROCELLATA	0	0	0	0	0	0	0	1	4
ETROPUS CROSSOTUS	0	0	0	0	0	1	0	0	0
PARALICHTHYS ALBIGUTTA	0	0	0	2	3	1	0	0	1
CITHARICHTHYS MACROPS	0	0	0	0	0	1	0	0	0
TRINECTES MACULATUS	0	0	0	0	0	0	0	0	1
SYMPHURUS PLAGIUSA	1	0	1	2	1	1	0	2	3
ALUTERUS SCHOEPI	0	0	0	0	0	0	0	0	1
LACTOPHRYS QUADRICORNIS	0	0	0	0	0	0	3	1	6
CHILOMYCTERUS SCHOEPI	0	0	0	0	1	0	1	0	0
TOTAL NUMBER OF FISH	318	311	280	103	154	107	249	156	770
SQUILLA EMPUSIA	0	0	0	0	0	0	0	1	0
PENAEUS DUORARUM	29	48	39	8	20	4	21	2	71
TRACHYPENAEUS SIMILIS	0	0	0	0	1	0	0	0	0
PALAEON FLORIDANUS	0	1	0	0	0	0	6	0	0
PALAEONETES INTERMEDIUS	1	1	0	0	0	0	0	0	0
PALAEONETES VULGARIS	0	1	0	0	0	0	0	0	0
ALPHEUS HETEROCHAELIS	0	0	0	0	0	0	1	0	0
TOZEUMA CAROLINENSE	0	0	0	0	0	0	0	0	2
PROCESSA HEMPHILLI	0	0	0	0	0	0	0	0	1
PETROLISTHES ARMATUS	0	1	0	0	0	0	1	0	0
PAGURUS GYMNOACTUS	0	10	0	1	7	0	0	1	1
PAGURUS LONGICARPUS	1	2	0	0	1	0	1	0	1
PAGURUS POLLICARIS	0	0	0	1	1	0	0	2	1
PERSOPHONA PUNCTATA	0	0	0	0	1	1	0	0	0
CALLINECTES SAPIDUS	1	3	1	7	5	2	11	6	24
PORTUNUS GIBBESII	0	1	0	0	1	1	0	0	0
XANTHIDAE	0	0	0	0	0	0	1	0	0
MENIPPE MERCENARIA	0	1	0	0	0	0	0	4	1

NEOPANOPE TEXANA	0	4	3	1	1	0	1	0	0	6
PANOPEUS HERBSTII	4	0	1	0	1	0	1	0	0	
PILUMNUS SAYI	0	0	0	0	0	0	0	0	0	
LIBINIA DUBIA	0	0	0	0	0	0	1	0	0	
METOPORHAPHIS CALCARATA	0	0	1	0	2	1	0	1	0	
ARGOPECTIN GIBBUS	0	0	0	0	0	0	0	0	0	
DORIDIDAE	0	0	1	0	0	0	0	0	0	3
LOLLIGUNCULA BREVIS	0	0	0	1	0	0	0	0	0	0
LAEVICARDIUM MORTONI	0	0	0	0	0	3	0	0	0	1
NASSARIUS VIBEX	0	1	0	1	1	0	0	0	0	1
UROSALPINX CINEREA	0	0	2	0	0	0	0	0	0	0
ECHINASTER SP.	0	0	0	0	0	0	0	0	0	0
TOTAL NUMBER OF INVERTEBRATES	36	74	48	20	42	12	45	25	147	

FISHERIES SAMPLING COLLECTIONS
TOTAL BIOMASS (IN GRAMS) OVER ALL REPS FOR
TRAWL

MARCH 1984

SPECIES NAME	T1	T2	T3	T4	T5	T6	T7	T8	T9
DASYATIS SABINA	0.0	0.0	0.0	0.0	457.3	0.0	0.0	0.0	0.0
ANCHOA MITCHILLI	0.0	10.1	12.7	0.0	0.0	0.0	0.0	0.0	0.0
ARIUS FELIS	0.0	0.0	0.0	0.0	0.0	0.0	12.8	6.2	1.9
OPSANUS BETA	0.0	33.0	0.0	20.0	37.6	0.0	0.0	207.5	180.4
OGCOCEPHALUS RADIATUS	0.0	124.3	0.0	0.0	36.2	141.3	187.3	10.8	48.4
UROPHYCIS FLORIDANA	0.0	48.6	47.7	20.9	50.4	17.9	44.6	2.9	2.8
OPHIDIION HOLBROOKI	0.0	0.0	0.0	0.0	0.0	0.0	92.0	5.9	8.7
HIPPOCAMPUS ERECTUS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.8
CENTROPRISTIS STRIATA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
DIPLECTRUM BIVITTATUM	0.0	0.0	0.0	0.0	0.0	0.0	19.0	24.3	0.0
EUCINOSTOMUS GULA	0.0	0.0	0.0	48.4	0.0	0.0	0.9	0.0	6.3
ORTHOPRISTIS CHRYSOPTERA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAGONON RHOMBOIDES	13.5	0.2	0.0	0.0	34.8	64.9	477.7	387.7	1037.4
BAIRDIELLA CHRYSOURA	229.6	159.0	32.1	38.2	53.8	106.1	974.2	355.6	5672.6
LEIDOSTOMUS XANTHURUS	817.1	14.3	129.7	383.9	103.1	0.0	124.3	185.1	341.3
MICROPOGONIAS UNDULATUS	0.0	1.2	0.0	3.2	0.0	36.3	47.8	0.0	0.0
PRIONOTUS TRIBULUS	11.3	20.2	4.4	12.2	9.6	25.3	0.0	0.0	0.0
ANCYLOPSETTA QUADROCELLATA	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0
ETROPUS CROSOTUS	0.0	0.0	26.9	10.9	0.0	0.0	5.3	4.4	0.0
PARALICHTHYS ALBIGUTTA	0.0	104.3	0.0	10.2	0.0	33.4	0.0	0.0	0.0
SYMPHURUS PLAGIUSA	19.0	18.0	2.0	0.0	7.8	6.1	0.0	0.0	0.0
ALUTERUS SCHOEPI	0.0	0.0	0.0	0.0	0.0	0.0	567.0	804.0	0.0
MONACANTHUS CILIATUS	0.0	0.0	0.0	0.0	0.0	0.0	22.9	5.7	2.0
LACTOPHYRUS QUADRICORNIS	0.0	0.0	0.0	0.0	0.0	0.0	661.6	0.0	207.9
CHILOMYCTERUS SCHOEPI	0.0	0.0	0.0	0.0	0.0	0.0	410.4	0.0	0.0
TOTAL BIOMASS OF FISH	1090.5	593.2	255.1	547.9	790.6	431.3	3661.5	2003.1	7569.5
SQUILLA EMPUSIA	0.0	2.8	43.8	31.2	11.5	0.0	8.2	0.0	13.6
PENAEUS DUORARUM	328.6	631.1	381.0	237.4	137.4	37.4	339.1	122.5	305.3
TRACHYFFENAEUS SIMILIS	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.0	13.0
PALAEON FLORIDANUS	0.0	4.2	0.0	0.0	0.0	0.4	5.6	3.3	0.0
PALAEOMNETES INTERMEDIUS	1.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PALAEOMNETES VULGARIS	0.5	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PERICLIMENES LONGICAUDATUS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALPHEUS HETEROCHAEIS	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.1
HIPPOLYTE ZOSTERICOLA	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.0
THOR FLORIDANUS	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.1
TOZEUMA CAROLINENSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
PETROLISTHES ARMATUS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
PAGURUS GYMNOACTUS	0.0	0.4	0.6	0.3	0.0	0.0	0.3	0.5	0.1
PAGURUS LONGICARPUS	0.0	0.0	0.0	0.0	0.0	0.6	0.1	0.0	0.0
PAGURUS POLLICARIS	0.0	0.0	0.0	0.0	0.0	6.6	0.0	0.0	0.0
PERSOPHONA PUNCTATA	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
CALLINECTES SAPIDUS	10.5	97.6	111.0	25.0	76.2	0.0	200.9	0.0	193.2
OVALIPES GUADULPENSIS	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
PORTUNUS GIBBSII	0.0	0.0	0.0	0.0	1.2	1.1	0.0	2.8	5.5
EURYPANDEPUS DEPRESSUS	0.0	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.0
MENIPPE MERCENARIA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
NEOPANOPE TEXANA	6.0	5.5	1.4	0.0	0.0	0.0	4.1	0.6	0.6
PANOPEUS HERBSTII	0.0	0.3	0.1	0.0	0.0	0.0	0.0	1.3	0.8
PINNIXA CRISTATA	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0

LIBINIA DUBIA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.5	3.7	0.0	2
MACROCOELOMA TRISPINOSUM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	
METOPORHAPHIS CALCARATA	0.0	0.0	0.0	0.0	0.0	1.1	0.6	8.2	5.6	19.7	
PODOCHELA SIDNEYI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	
EPIALTUS DILATATUS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	
ARGOPECTIN GIBBUS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.5	
CORYPHELLIDAE	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
DORIDIDAE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	
LOLLIGUNCULA BREVIS	0.0	0.0	0.0	51.9	31.2	0.0	25.5	0.0	0.0	0.0	
NASSARIUS VIREX	0.3	1.6	0.3	4.1	0.0	0.0	0.8	0.0	0.0	0.0	
UROSALPINX CINEREA	0.0	0.0	0.1	0.0	0.0	0.0	2.3	0.0	0.0	0.0	
ECHINATER SP.	0.0	0.0	0.0	0.0	0.0	0.0	15.4	27.3	280.6		
TOTAL BIOMASS OF INVERTEBRATES	347.1	746.7	538.6	350.4	258.6	48.0	636.7	168.1	871.1		

FISHERIES SAMPLING COLLECTIONS
TOTAL BIOMASS (IN GRAMS) OVER ALL REPS FOR
TRAWL

3

SPECIES NAME	APRIL 1984								
	STATION								
	T1	T2	T3	T4	T5	T6	T7	T8	T9
DASYATIS SABINA	890.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CLUPEID	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARENGULA JAGUANA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OPHISTHONEMA OGLINUM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.4	0.0
ANCHOA MITCHILLI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
SYNODUS FOETENS	0.0	2.1	0.0	3.4	0.0	0.0	4.4	30.5	16.6
ARIUS FELIS	0.0	0.0	0.0	0.0	50.9	0.0	69.0	0.0	83.3
OPSANUS BETA	0.0	0.0	47.9	579.6	393.1	258.9	0.0	0.0	189.3
OGCOCEPHALUS RADIATUS	0.0	0.0	0.0	197.3	48.2	0.0	254.8	0.0	0.0
UROPHYCIS FLORIDANA	0.0	0.0	179.5	0.0	1.9	87.9	173.0	37.9	2.8
OPHIDIION HOLBROOKI	40.7	113.3	65.3	0.0	48.0	39.9	126.6	0.0	55.1
HIPPOCAMPUS ERECTUS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.2
SYNGNATHUS SCOVELLI	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0
CENTROPRISTIS PHILADELPHIC	1.1	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTROPRISTIS STRIATA	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.0	1.7
DIPLECTRUM RIVITTATUM	0.0	0.0	0.0	0.0	0.0	0.0	170.6	74.7	46.0
EUCIROSTOMUS GULA	0.0	0.0	0.0	8.5	0.0	0.0	0.0	0.0	3.6
ORTHOPRISTIS CHRYSOPTERA	0.0	0.0	50.6	0.0	45.1	119.6	910.8	222.6	753.8
LAGODON RHOMBOIDES	55.0	9.3	19.5	100.0	0.0	143.6	1527.1	121.6	199.6
BAIRDIELLA CHRYSOURA	58.6	0.0	0.0	352.6	0.0	0.0	64.0	141.6	30.3
LEIOSTOMUS XANTHURUS	330.4	200.8	162.4	3124.8	24.6	200.9	288.5	0.0	93.9
MENTICIRRHUS AMERICANUS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	202.6
CHAETODIPTERUS FABER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.2	0.0
ASTROSCOPUS V-GRAECUM	0.0	0.0	0.0	0.0	0.0	7.2	0.0	0.0	0.0
MICROGOBIOUS GULOSUS	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
PRIONOTUS SCITULUS	0.0	0.0	0.0	9.1	14.0	35.0	0.0	6.0	11.6
PRIONOTUS TRIBULUS	16.2	5.4	3.0	0.0	6.9	0.0	0.0	7.3	0.0
ANCYLOPSETTA QUADROCELLATA	0.0	0.0	19.1	0.0	0.0	0.0	12.8	20.6	0.0
ETROPUS CROSSOTUS	0.0	0.0	10.0	0.0	0.0	28.9	0.0	24.3	12.0
PARALICHTHYS ALBIGUTTA	0.0	12.9	0.0	55.6	0.0	58.1	0.0	33.4	595.7
CITHARICHTHYS MACROPS	0.0	0.0	14.2	0.0	0.0	0.0	0.0	0.0	0.0
TRINECTES MACULATUS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SYMPHURUS PLAGIOSA	0.0	10.7	5.1	4.0	10.6	5.0	0.0	9.9	48.0
MONACANTHUS CILIATUS	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0	8.0
LACTOPHYRUS QUADRICORNIS	0.0	0.0	0.0	0.0	0.0	128.3	1030.2	352.1	104.4
SPHOEROIDES NEPHELUS	0.0	0.0	0.0	0.0	4.7	0.0	0.0	7.7	0.0
CHILOMYCTERUS SCHOEPI	0.0	0.0	0.0	0.0	0.0	203.5	1688.6	164.4	191.2
TOTAL BIOMASS OF FISH	1394.9	357.9	576.6	4436.0	648.0	1316.8	6331.9	1315.2	2687.0
SQUILLA EMPUSIA	0.0	0.0	0.0	23.9	0.0	0.0	0.0	0.0	8.1
PENAEUS DUORARUM	166.6	133.2	299.1	803.8	222.8	88.2	575.6	179.1	174.2
SICYONIA LAEVIGATA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
TRACHYPENAEUS SIMILIS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	6.6
PALAEON FLORIDANUS	0.7	14.0	0.0	0.5	0.0	0.0	0.2	0.0	0.0
PALAEOMONETES INTERMEDIUS	0.4	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PALAEOMONETES PUGIO	0.0	0.9	0.0	0.0	0.0	0.0	0.1	0.0	0.0
PALAEOMONETES VULGARIS	0.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PERICLIMENES LONGICAUDATUS	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
ALPHEUS HETEROCHAEUS	0.0	1.9	1.9	0.0	0.0	0.0	3.4	0.0	0.0
ALPHEUS NORMANNI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
TOZEUMA CAROLINENSE	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.4

AMBIDEXTER SYMMETRICUS	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
PETROLISTHES ARMATUS	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
PAGURUS GYMNOACTUS	0.0	0.2	0.4	0.0	0.2	0.0	0.1	0.0	0.0
PAGURUS LONGICARPUS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
PAGURUS POLLICARIS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
CALLINECTES SAPIDUS	52.0	206.2	308.1	32.2	229.8	159.2	172.4	477.6	520.2
OVALIPES GUADULPENSIS	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	1.9
PORTUNUS GIBBESI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1
EURYPANOPEUS DEPRESSUS	0.3	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
MENIPPE MERCENARIA	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0
NEOPANOPE TEXANA	1.2	9.4	0.8	0.0	0.6	0.2	1.5	0.4	0.0
PANOPEUS HERBSTII	0.0	0.0	0.0	0.0	0.0	0.5	0.7	0.0	0.5
LIBINIA DUBIA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
MACROCOELOMA TRISPINOSUM	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
METOPORHAPHIS CALCARATA	0.0	0.0	0.0	0.0	0.0	0.3	1.8	0.8	0.6
POGOCHELA SIDNEYI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
EPIALTUS DILATATUS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
DORIDIDAE	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0
NASSARIUS VIBEX	0.3	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0
UROSALPINX CINEREA	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	6.7
OPHIOLEPIS ELEGANS	0.0	0.0	0.0	0.0	0.6	0.0	0.0	1.1	0.0
TOTAL BIOMASS OF INVERTEBRATES	222.3	369.2	614.2	860.6	457.0	249.5	760.9	659.9	735.1

FISHERIES SAMPLING COLLECTION
TOTAL BIOMASS (IN GRAMS) OVER ALL REPS FOR
TRAWL
MAY 1984

SPECIES NAME	STATION								
	T1	T2	T3	T4	T5	T6	T7	T8	T9
DASYATIS SABINA	0.0	0.0	0.0	0.0	0.0	0.0	435.2	0.0	0.0
ANCHOA MITCHELLI	0.0	2.2	0.0	4.1	0.0	18.1	0.0	6.4	5.0
SYNGNATHUS FOETENS	0.0	0.0	0.0	0.0	0.0	0.0	43.5	106.0	44.7
ARIUS FELIS	0.0	0.0	0.0	92.7	42.6	0.0	90.9	79.3	33.8
OPSANUS BETA	0.0	0.0	0.0	28.5	0.0	0.0	19.7	0.0	68.1
OGCOCEPHALUS RADIATUS	0.0	0.0	90.6	0.0	93.0	136.8	0.0	0.0	2.3
OPHIODON HOLBROOKI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2
HIPPOCAMPUS ERECTUS	0.0	0.0	0.0	12.4	0.0	0.0	2.1	0.0	0.0
CENTROPOMUS STRIATUS	0.0	0.0	0.0	0.0	4.8	0.0	86.0	15.0	492.7
ORTHOPRISTIS CHRYSOPTERA	0.0	0.0	185.7	15.0	41.1	93.2	605.9	505.8	1270.0
LAGODON RHOMBOIDES	437.7	4.6	110.9	57.7	31.4	247.0	1529.6	1333.6	7790.3
BAIRDIELLA CHRYSOURA	268.0	204.9	317.0	342.1	211.5	252.1	19.5	47.2	120.2
CYNOSCION ARENARIUS	0.0	0.0	0.0	0.0	151.1	0.0	0.0	0.0	0.0
CYNOSCION NEBULOSUS	83.7	6.7	45.4	2.3	25.0	0.0	0.9	0.0	0.0
LEIOSTOMUS XANTHURUS	948.2	1519.2	1319.3	437.2	782.2	826.1	0.0	521.8	107.8
MENTICIRRHUS AMERICANUS	0.0	1.7	7.6	0.0	4.8	0.3	0.0	0.0	0.0
MICROPOGONIAS UNDULATUS	0.0	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MULLUS AURATUS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3
POLYDACTYLUS OCTONEMUS	0.0	23.1	0.0	0.0	0.0	137.9	0.0	0.0	0.0
SCORPAENA BRASILIENSIS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.6
PRIONOTUS SCITULUS	0.0	0.0	0.0	0.0	8.1	67.0	0.0	0.0	9.7
PRIONOTUS TRIBULUS	0.0	0.0	0.0	0.0	0.2	10.1	0.0	0.0	0.0
ANCYLOPSETTA QUADROCELLATA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	73.9
ETROPUS CROSOTUS	0.0	0.0	0.0	0.0	0.0	6.4	0.0	0.0	0.0
PARALICHTHYS ALBIGUTTA	0.0	0.0	0.0	15.4	33.6	17.7	0.0	0.0	1.9
CITHARICHTHYS MACROPS	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0
TRINECTES MACULATUS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0
SYMPHURUS PLAGIOSA	6.3	0.0	1.3	7.3	4.9	3.1	0.0	12.4	4.5
ALUTERUS SCHOEPI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	186.8
LACTOPHRYX QUADRICORNIS	0.0	0.0	0.0	0.0	0.0	0.0	308.5	64.8	720.8
CHILOMYCTERUS SCHOEPI	0.0	0.0	0.0	0.0	248.1	0.0	215.0	0.0	0.0
TOTAL BIOMASS OF FISH	1743.9	1770.5	2077.8	1014.7	1682.4	1823.8	3356.8	2701.3	11000.6
SQUILLA EMPUSIA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0
PENAEUS DUORARUM	217.7	348.2	258.5	41.3	159.6	37.0	79.9	5.5	304.6
TRACHYPENAEUS SIMILIS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PALAEON FLORIDANUS	0.0	0.7	0.0	0.0	0.0	0.0	2.3	0.0	0.0
PALAEOMETES INTERMEDIUS	0.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PALAEOMETES VULGARIS	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALPHEUS HETEROCHAEIS	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
TOZEUMA CAROLINENSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
PROCESSA HEMPHILLI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
PETROLISTHES ARMATUS	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
PAGURUS GYMNODACTUS	0.0	0.5	0.0	0.2	0.2	0.0	0.0	0.1	0.1
PAGURUS LONGICARPUS	0.0	0.1	0.0	0.0	0.1	0.0	0.3	0.0	0.0
PAGURUS POLLICARIS	0.0	0.0	0.0	0.6	0.5	0.0	0.0	2.2	1.0
PERSOPHONA PUNCTATA	0.0	0.0	0.0	0.0	2.8	2.4	0.0	0.0	0.0
CALLINECTES SAPIDUS	22.2	112.0	13.6	391.6	325.8	75.7	584.5	104.6	613.5
PORTUNUS GIBBES	0.0	0.1	0.0	0.0	0.1	4.4	0.0	0.0	0.0
XANTHIDAE	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
MENIPPE MERCENARIA	0.0	0.8	0.0	0.0	0.0	0.0	0.0	31.8	0.8

NEOPANOPE TEXANA	0.0	0.9	0.6	0.2	0.3	0.0	0.1	0.0	0.0	6
PANOPEUS HERBSTII	6.8	0.0	0.5	0.0	0.1	0.0	0.0	0.0	0.0	
PILUMNUS SAYI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
LIBINIA DUBIA	0.0	0.0	0.0	0.0	0.0	0.0	11.7	0.0	0.0	
METOPORHAPHIS CALCARATA	0.0	0.0	0.3	0.0	0.7	0.5	7.6	0.0	0.0	
ARGOPECTIN GIBBUS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
DORIDIDAE	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	40.1	
LOLLIGUNCULA BREVIS	0.0	0.0	0.0	0.6	0.0	26.1	0.0	0.0	0.0	
LAEVICARDIUM MORTONI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	
NASSARIUS VIBEX	0.0	0.5	0.0	0.3	0.2	0.0	0.0	0.0	0.9	
UROSALPINX CINEREA	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	
ECHINASTER SP.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL BIOMASS OF INVERTEBRATES	247.0	465.1	280.5	434.8	490.4	146.1	687.3	227.3	1330.3	

FISHERIES SAMPLING COLLECTIONS
TOTAL NUMBER COLLECTED OVER ALL REPS FOR

SEINE

MARCH 1984

SPECIES NAME	STATION			
	S1	S2	S3	S4
CLUPEID	3849	4210	0	0
ANCHOA MITCHILLI	2	24	0	0
OGCOCEPHALUS RADIATUS	3	0	0	0
FUNDULUS GRANDIS	0	0	0	15
MENIDIA SP.	48	12	67	5
LAGOON RHOMBOIDES	346	5	3	20
LEIOSTOMUS XANTHURUS	1101	134	0	0
MUGIL CEPHALUS	2	0	0	0
TOTAL NUMBER OF FISH	5351	4385	70	40
PALAEOMONETES INTERMEDIUS	0	0	0	2
PAGURUS GYMNODACTYLUS	3	0	0	0
EURYPANOPUS DEPRESSUS	1	0	0	0
NASSARIUS VIBEX	1	0	0	0
TOTAL NUMBER OF INVERTEBRATES	5	0	0	2

FISHERIES SAMPLING COLLECTIONS
TOTAL NUMBER COLLECTED OVER ALL REPS FOR

SEINE

APRIL 1984

STATION

SPECIES NAME	S1	S2	S3	S4
CLUPEID	16	8	7	0
OGCOCEPHALUS RADIATUS	1	0	0	0
MENIDIA SP.	5	0	1	6
LAGODON RHOMBOIDES	15	4	0	6
MUGIL CEPHALUS	0	0	6	0
TOTAL NUMBER OF FISH	37	12	14	12
PALAEOMNETES INTERMEDIUS	0	1	0	0
PETROLISTHES ARMATUS	1	1	0	0
PAGURUS GYMNOACTUS	1	0	0	0
PAGURUS LONGICARPUS	0	1	0	0
CALLINECTES SAPIDUS	2	1	0	1
EURYPANOEUS DEPRESSUS	1	2	0	0
MENIPPE MERCENARIA	1	0	0	0
TOTAL NUMBER OF INVERTEBRATES	6	6	0	1

FISHERIES SAMPLING COLLECTIONS
TOTAL NUMBER COLLECTED OVER ALL REPS FOR
SEINE

SPECIES NAME	MAY 1984			
	STATION			
	S1	S2	S3	S4
ANCHOA MITCHILLI	274	0	1	1
SYNOCHUS FOETENS	0	0	1	0
ARIUS FELIS	0	0	2	0
STRONGYLURA MARINA	1	0	1	5
MENIDIA SP.	508	16	5	140
ORTHOPRISTIS CHRYSOPTERA	6	0	2	0
LAGODON RHOMBOIDES	1	0	0	17
BAIRDIELLA CHRYSOURA	15	0	0	0
LEIOSTOMUS XANTHURUS	0	0	0	2
MENTICIRRHUS AMERICANUS	0	0	0	1
MUGIL CEPHALUS	2	0	3	0
TOTAL NUMBER OF FISH	807	16	15	190
PETROLISTHES ARMATUS	2	0	0	0
CALLINECTES SAPIDUS	1	0	2	4
EURYPANOPEUS DEPRESSUS	0	0	0	1
TOTAL NUMBER OF INVERTEBRATES	3	0	2	5

1

FISHERIES SAMPLING COLLECTIONS
TOTAL BIOMASS (IN GRAMS) OVER ALL REPS FOR
SEINE

SPECIES NAME	MARCH 1984 STATION			
	S1	S2	S3	S4
CLUPEID				
ANCHOA MITCHILLI	507.0	572.3	0.0	0.0
OGCOCEPHALUS RADIATUS	0.5	10.6	0.0	0.0
FUNDULUS GRANDIS	193.3	0.0	0.0	0.0
MENIDIA SP.	0.0	0.0	0.0	5.6
LAGODON RHOMBoidES	276.3	13.0	129.2	26.7
LEIOSTOMUS XANTHURUS	67.7	3.9	1.2	148.9
MUGIL CEPHALUS	203.2	27.8	0.0	0.0
	0.5	0.0	0.0	0.0
TOTAL BIOMASS OF FISH	1248.5	627.6	130.4	181.2
PALAEEMONETES INTERMEDIUS	0.0	0.0	0.0	0.5
PAGURUS GYMNOdACTUS	0.1	0.0	0.0	0.0
EURYPANOPEUS DEPRESSUS	0.2	0.0	0.0	0.0
NASSARIUS VIBEX	0.2	0.0	0.0	0.0
TOTAL BIOMASS OF INVERTEBRATES	0.5	0.0	0.0	0.5

FISHERIES SAMPLING COLLECTIONS
TOTAL BIOMASS (IN GRAMS) OVER ALL REPS FOR
SEINE

SPECIES NAME	APRIL 1984 STATION			
	S1	S2	S3	S4
CLUPEID	8.0	3.1	3.6	0.0
OGCOCEPHALUS RADIATUS	44.7	0.0	0.0	0.0
MENIDIA SP.	19.1	0.0	9.2	28.0
LAGODON RHOMBOIDES	607.5	6.8	0.0	40.1
MUGIL CEPHALUS	0.0	0.0	0.5	0.0
TOTAL BIOMASS OF FISH	679.3	9.9	13.3	68.1
PALAEONETES INTERMEDIUS	0.0	0.3	0.0	0.0
PETROLISTHES ARMATUS	0.1	0.1	0.0	0.0
PAGURUS GYMNOCTACTUS	0.0	0.0	0.0	0.0
PAGURUS LONGICARPUS	0.0	0.0	0.0	0.0
CALLINECTES SAPIDUS	128.2	51.5	0.0	42.5
EURYPANOEPEUS DEPRESSUS	1.1	0.3	0.0	0.0
MENIPPE MERCENARIA	0.9	0.0	0.0	0.0
TOTAL BIOMASS OF INVERTEBRATES	130.3	52.2	0.0	42.5

FISHERIES SAMPLING COLLECTIONS
TOTAL BIOMASS (IN GRAMS) OVER ALL REPS FOR
SEINE

SPECIES NAME	MAY 1984 STATION			
	S1	S2	S3	S4
ANCHOA MITCHILLI	44.8	0.0	0.3	0.3
SYNODUS FOETENS	0.0	0.0	0.6	0.0
ARIUS FELIS	0.0	0.0	286.5	0.0
STRONGYLURA MARINA	65.0	0.0	1.7	2.7
MENIDIA SP.	97.7	1.2	1.8	47.8
ORTHOPRISTIS CHRYSOPTERA	0.8	0.0	1.1	0.0
LAGODON RHOMBOIDES	51.4	0.0	0.0	53.7
BAIRDIELLA CHRYSOURA	1.9	0.0	0.0	0.0
LEIOSTOMUS XANTHURUS	0.0	0.0	0.0	64.8
MENTICIRRHUS AMERICANUS	0.0	0.0	0.0	0.2
MUGIL CEPHALUS	0.3	0.0	307.2	0.0
TOTAL BIOMASS OF FISH	261.9	1.2	599.2	169.5
PETROLISTHES ARMATUS	1.5	0.0	0.0	0.0
CALLINECTES SAPIDUS	5.4	0.0	146.1	155.8
EURYPANOPEUS DEPRESSUS	0.0	0.0	0.0	0.2
TOTAL BIOMASS OF INVERTEBRATES	6.9	0.0	146.1	156.0

FISHERIES SAMPLING COLLECTIONS
TOTAL NUMBER COLLECTED OVER ALL REPS FOR
CREEK TRAWL
MARCH 1984

SPECIES NAME	TC1	TC2	TC3	TC4
CLUPEID	0	365	1	0
HARENGULA JAGUANA	2	0	0	0
SARDINELLA AURITA	3	27	0	0
FUNDULUS GRANDIS	0	0	0	1
SYAGNATHUS SCOVELLI	5	4	0	0
LAGOON RHUMBOIDES	389	1390	190	273
LEPTOMUS KANTHURUS	26	505	201	145
CH. AGGIES SUBURRAE	0	0	0	1
MICROGORGIIUS GULGSUS	0	0	1	1
PARALICHTHYS ALBIGUTTA	25	17	0	3
TOTAL NUMBER OF FISH	450	2308	393	424
PENAEUS DUORARUM	4	1	3	4
PALAEONETES INTERMEDIUS	46	32	89	128
PALAEONETES PUGIO	6	5	13	5
PALAEONETES VULGARIS	0	3	0	0
ALPHEUS HETEROCHAEILIS	0	1	0	0
HIPPOLYTE ZOSTERICOLA	0	1	2	0
PACURUS GYMNODACTYLUS	2	0	0	0
TALLINECTES SAPIIUS	23	3	0	1
NEOPANOPE TEXANA	9	0	3	1
PANOPEUS HERBERTI	1	0	0	0
TOTAL NUMBER OF INVERTEBRATES	91	46	110	139

FISHERIES SAMPLING COLLECTIONS
TOTAL NUMBER COLLECTED OVER ALL REPS FOR
CREEK TRAWL
APRIL 1984

SPECIES NAME	TC1	TC2	TC3	TC4
DASYATIS SABINA	0	0	0	1
CLUPEID	0	20	0	0
SYNGNATHUS FOETENS	0	1	0	0
SYNGNATHUS SCOVELLI	2	4	0	1
LAGODON RHOMBOIDES	41	312	133	22
LEIOSTOMUS XANTHURUS	3	10	67	1
MUGIL CEPHALUS	0	1	0	0
PARALICHTHYS ALBIGUTTA	0	13	4	0
TOTAL NUMBER OF FISH	46	361	204	25
PENAEUS DUORARUM	0	0	3	2
PALAEEMONETES INTERMEDIUS	5	23	20	36
PALAEEMONETES PUGIO	1	5	2	0
PALAEEMONETES VULGARIS	0	2	0	1
HIPPOLYTE ZOSTERICOLA	1	0	0	0
PAGURUS LONGICARPUS	0	1	0	0
CALLINECTES SAPIDUS	2	7	2	0
EURYPANOEPEUS DEPRESSUS	1	0	0	1
NEOPANOEPE TEXANA	2	1	3	4
TOTAL NUMBER OF INVERTEBRATES	12	39	30	44

FISHERIES SAMPLING COLLECTIONS
 TOTAL NUMBER COLLECTED OVER ALL REPS FOR
 CREEK TRAWL
 MAY 1984
 STATION

SPECIES NAME	TC1	TC2	TC3	TC4
SYNODUS FOETENS	6	0	2	0
OPSANUS RETA	0	0	0	2
FUNDULUS GRANDIS	0	4	0	0
LUCANIA PARVA	0	31	1	0
SYNGNATHUS SCOVELLI	4	14	0	0
ORTHOPRISTIS CHRYSOPTERA	14	4	7	0
LAGODON RHOMBOIDES	137	882	123	24
BAIRDIELLA CHRYSOURA	220	1	1	0
CYNOSCION NEBULOSUS	3	0	0	0
LEIOSTOMUS XANTHURUS	0	1	0	0
GOTIOSOMA BOSCI	0	1	0	0
PARALICHTHYS ALBIGUTTA	1	6	0	0
TOTAL NUMBER OF FISH	385	944	134	26
PENAEUS DUORARUM	0	1	0	0
PALAEEMONETES INTERMEDIUS	14	141	13	24
PALAEEMONETES PUGIO	56	28	3	0
PALAEEMONETES VULGARIS	0	15	0	0
HIPPOLYTE ZOSTERICOLA	0	4	0	0
PAGURUS GYMNOACTUS	1	0	0	0
CALLINECTES SAPIDUS	3	5	0	0
EURYPANOPEUS DEPRESSUS	1	1	3	0
NEOPANOPE TEXANA	8	3	1	0
NASSARIUS VIBEX	1	0	0	0
TOTAL NUMBER OF INVERTEBRATES	84	198	20	24

FISHERIES SAMPLING COLLECTIONS
TOTAL BIOMASS (IN GRAMS) OVER ALL REPS FOR
CREEK TRAWL
MARCH 1984

SPECIES NAME	TC1	TC2	TC3	TC4
CLUPEID	0.0	52.4	0.3	0.0
HARENGULA JAGUANA	0.2	0.0	0.0	0.0
SARDINELLA AURITA	0.7	3.2	0.0	0.0
FUNDULUS GRANDIS	0.0	0.0	0.0	0.6
SYNGNATHUS SCOVELLI	2.9	2.8	0.0	0.0
LAGOON RHOMBOIDES	203.3	348.6	115.9	87.6
LEIOSIOMUS XANTHURUS	11.5	98.7	300.9	123.3
CHASMODES SUBURRAE	0.0	0.0	0.0	1.9
MICROGObIUS GULOSUS	0.0	0.0	0.8	2.0
PARALICHTHYS ALBIGUTTA	90.5	83.4	0.0	4.3
TOTAL BIOMASS OF FISH	309.1	589.1	417.9	219.7
PENAEUS DUORARUM	16.0	1.3	5.4	17.5
PALAEOMONETES INTERMEDIUS	9.3	6.6	14.8	14.7
PALAEOMONETES PUGIO	2.5	1.0	3.3	0.6
PALAEOMONETES VULGARIS	0.0	1.2	0.0	0.0
ALPHEUS HETEROCHAEILIS	0.0	1.0	0.0	0.0
HIPPOLYTE ZOSTERICOLA	0.0	0.1	0.1	0.0
PAGURUS GYMNOACTUS	0.3	0.0	0.0	0.0
CALLINECTES SAPIDUS	74.0	3.3	0.0	2.4
NEOPANOPE TEXANA	2.5	0.0	2.4	0.1
PANOPEUS HERBSTII	7.9	0.0	0.0	0.0
TOTAL BIOMASS OF INVERTEBRATES	112.5	14.5	26.0	35.3

FISHERIES SAMPLING COLLECTIONS
TOTAL BIOMASS (IN GRAMS) OVER ALL REPS FOR
CREEK TRAWL

APRIL 1984

STATION

SPECIES NAME	TC1	TC2	TC3	T4
DASYATIS SABINA	0.0	0.0	0.0	518.2
CLUPEID	0.0	5.8	0.0	0.0
SYNODUS FOETENS	0.0	0.2	0.0	0.0
SYNGNATHUS SCOVELLI	1.5	1.6	0.0	1.0
LAGODON RHOMBOIDES	23.7	230.7	86.9	28.0
LEIOSTOMUS XANTHURUS	3.9	14.2	139.8	0.9
MUGIL CEPHALUS	0.0	0.1	0.0	0.0
PARALICHTHYS ALBIGUTTA	0.0	105.0	70.9	0.0
TOTAL BIOMASS OF FISH	29.1	357.6	297.6	548.1
PENAEUS DUORARUM	0.0	0.0	10.7	6.6
PALAEONETES INTERMEDIUS	1.0	3.4	3.3	4.5
PALAEONETES PUGIO	0.0	0.6	0.7	0.0
PALAEONETES VULGARIS	0.0	0.6	0.0	0.5
HIPPOLYTE ZOSTERICOLA	0.0	0.0	0.0	0.0
PAGURUS LONGICARPUS	0.0	0.1	0.0	0.0
CALLINECTES SAPIDUS	21.0	7.0	24.9	0.0
EURYPANOPEUS DEPRESSUS	0.4	0.0	0.0	0.1
NEOPANOPE TEXANA	0.3	0.2	0.9	1.1
TOTAL BIOMASS OF INVERTEBRATES	22.7	11.9	40.5	12.8

FISHERIES SAMPLING COLLECTIONS
TOTAL BIOMASS (IN GRAMS) OVER ALL REPS FOR
CREEK TRAWL
MAY 1984

SPECIES NAME	TC1	TC2	TC3	TC4
SYNODUS FOETENS	9.3	0.0	0.7	0.0
OPSANUS BETA	0.0	0.0	0.0	0.4
FUNDULUS GRANDIS	0.0	0.4	0.0	0.0
LUCANIA PARVA	0.0	6.1	0.3	0.0
SYNGNATHUS SCOVELLI	1.9	6.3	0.0	0.0
ORTHOPRISTIS CHRYSOPTERA	7.0	1.4	5.0	0.0
LAGODON RHOMBOIDES	189.6	1880.2	106.1	44.5
BAIRDIELLA CHRYSOURA	41.3	0.2	0.2	0.0
CYNOSCION NEBULOSUS	0.4	0.0	0.0	0.0
LEIOTOMUS XANTHURUS	0.0	2.0	0.0	0.0
GOBIOSOMA BOSCI	0.0	0.4	0.0	0.0
PARALICHTHYS ALBIGUTTA	6.3	29.0	0.0	0.0
TOTAL BIOMASS OF FISH	255.8	1926.0	112.3	44.9
PENAEUS DUORARUM	0.0	4.7	0.0	0.0
PALAEOMNETES INTERMEDIUS	1.2	13.7	2.3	4.3
PALAEOMNETES PUGIO	11.1	2.7	0.3	0.0
PALAEOMNETES VULGARIS	0.0	3.0	0.0	0.0
HIPPOLYTE ZOSTERICOLA	0.0	0.2	0.0	0.0
PAGURUS GYMNOACTUS	0.1	0.0	0.0	0.0
CALLINectes SAPIDUS	88.1	190.8	0.0	0.0
EURYPANOEPEUS DEPRESSUS	0.1	0.1	0.3	0.0
NEOPANOPE TEXANA	0.5	0.5	0.5	0.0
NASSARIUS VIREX	0.3	0.0	0.0	0.0
TOTAL BIOMASS OF INVERTEBRATES	101.4	215.7	3.4	4.3

FISHERIES SAMPLING COLLECTIONS
TOTAL NUMBER COLLECTED OVER ALL REPS FOR

DROP NET
MARCH 1984

SPECIES NAME	STATION	
	D1	D2
CLUPEID	45	7
LAGODON RHOMBOIDES	6	1
LEIOSTOMUS XANTHURUS	13	4
TOTAL NUMBER OF FISH	64	12
CALLINECTES SAPIDUS	1	0
TOTAL NUMBER OF INVERTEBRATES	1	0

FISHERIES SAMPLING COLLECTIONS
TOTAL NUMBER COLLECTED OVER ALL REPS FOR
DROP NET

APRIL 1984

SPECIES NAME	STATION	
	D1	D2
CLUPEID	41	0
OGCOCEPHALUS RADIATUS	0	1
LAGODON RHOMBOIDES	3	0
LEIOSTOMUS XANTHURUS	91	0
TOTAL NUMBER OF FISH	135	1

FISHERIES SAMPLING COLLECTIONS
TOTAL NUMBER COLLECTED OVER ALL REPS FOR

DROP NET
MAY 1984

SPECIES NAME	STATION	
	D1	D2
ANCHOA MITCHILLI	50	0
STRONGYLURA MARINA	0	1
MENIDIA SP.	3	0
CYNOSCION NEBULOSUS	1	0
CHILOMYCTERUS SCHOEPPFI	0	1
TOTAL NUMBER OF FISH	54	2

FISHERIES SAMPLING COLLECTIONS
TOTAL BIOMASS (IN GRAMS) OVER ALL REPS FOR
DROP NET
MARCH 1984

SPECIES NAME	STATION	
	D1	D2
CLUPEID	5.1	1.1
LAGODON RHOMBOIDES	0.9	0.1
LEIOSTOMUS XANTHURUS	2.0	1.5
TOTAL BIOMASS OF FISH	8.0	2.7
CALLINECTES SAPIDUS	0.4	0.0
TOTAL BIOMASS OF INVERTEBRATES	0.4	0.0

FISHERIES SAMPLING COLLECTIONS
TOTAL BIOMASS (IN GRAMS) OVER ALL REPS FOR
DROP NET
APRIL 1984

SPECIES NAME	STATION	
	D1	D2
CLUPEID	12.0	0.0
OGCOCEPHALUS RADIATUS	0.0	66.3
LAGODON RHOMBOIDES	0.6	0.0
LEIOSTOMUS XANTHURUS	13.7	0.0
TOTAL BIOMASS OF FISH	26.3	66.3

FISHERIES SAMPLING COLLECTIONS
TOTAL BIOMASS (IN GRAMS) OVER ALL REPS FOR

DROP NET
MAY 1984

SPECIES NAME	STATION	
	D1	D2
ANCHOA MITCHILLI	6.3	0.0
STRONGYLURA MARINA	0.0	1.1
MENIDIA SP.	0.8	0.0
CYDOSCION NEBULOSUS	0.1	0.0
CHILOMYCTERUS SCHOEPPFI	0.0	1012.0
TOTAL BIOMASS OF FISH	7.2	1013.1

FISH SPECIES LIST BY FAMILY

CHORDATA VERTEBRATA

SPHYRNIDAE

SPHYRNA TIBURO

DASYATIDAE

DASYATIS AMERICANA
DASYATIS SABINA
DASYATIS SAYI
GYMNURA MICRURA

LEPISOSTEIDAE

LEPISOSTEUS OCULATUS
LEPISOSTEUS OSSEUS
LEPISOSTEUS PLATYSTOMUS
LEPISOSTEUS PLATYRHINCUS
LEPISOSTEUS SPATULA

ELOPIDAE

ELOPS SAURUS
MEGALOPS ATLANTICUS

MURAENIDAE

GYMNOTHORAX NIGROMARGINATUS

OPHICHTHIDAE

AHLIA EGMONTIS
MYROPHIS PUNCTATUS
OPHICHTHUS GOMESI
BASCANICHTHYS SCUTICARIS

CLUPEIDAE

CLUPEID
BREVOORTIA SP.
BREVOORTIA GUNTERI
BREVOORTIA PATRONUS
BREVOORTIA SMITHI
DOROSOMA CEPEDIANUM
DOROSOMA PETENENSE
ETRUMEUS TERES

2

HARENGULA JAGUANA
JENKINSIA LAMPROTAENIA
OPHISTHONEMA OGLINUM
SARDINELLA AURITA
ALOSA CHRYSOCHLORIS
ALOSA ALABAMAE

ENGRAULIDAE

ANCHOA CUBANA
ANCHOA HEPSETUS
ANCHOA MITCHILLI
ANCHOA SP.

SYNODONTIDAE

SAURIDA BRASILIENSIS
SAURIDA NORMANI
SYNODUS FOETENS
SYNODUS INTERMEDIUS
SYNODUS POEYI
SYNODUS SYNODUS
TRACHINOCEPHALUS MYOPS

ARIIDAE

ARIUS FELIS
BAGRE MARINUS

BATRACHOIDIDAE

OPSANUS BETA
OPSANUS PARDUS
OPSANUS TAU
PORICHTHYS PLECTRODON

GOBIESOCIDAE

GOBIESOX STRUMOSUS

ANTENNARIIDAE

ANTENNARIUS OCELLATUS
HISTRIO HISTRIO

OGCOCEPHALIDAE

HALIEUTICHTHYS ACULEATUS
OGCOCEPHALUS NASUTUS
OGCOCEPHALUS PARVUS
OGCOCEPHALUS RADIATUS
OGCOCEPHALUS VESPERTILIO

OGCOCEPHALUS SP.

GADIDAE

UROPHYCIS CHUSS
UROPHYCIS FLORIDANA
UROPHYCIS REGIUS

OPHIDIIDAE

LEPOPHIDIUM JEANNAE
OPHIDION BEANI
OPHIDION GRAYI
OPHIDION HOLBROOKI
OPHIDION WELSHI

EXOCOETIDAE

CYSELURUS FURCATUS
CYSELURUS MELANURUS
HEMIRHAMPHUS BRASILIENSIS
HIRUNDICTHYS RONDELETTI
HYPORHAMPHUS UNIFASCIATUS

BELONIDAE

STRONGYLURA MARINA
STRONGYLURA NOTATA
STRONGYLURA TIMUCU
TYLOSURUS CORCODILUS

CYPRINODONTIDAE

CYPRINODON VARIEGATUS
FLORIDICTHYS CARPIO
FUNDULUS GRANDIS
FUNDULUS SIMILIS
FUNDULUS SP.
LUCANIA PARVA

POECILIIDAE

GAMBUSIA AFFINIS
POECILIA LATIPINNA

ATHERINIDAE

MEMBRAS MARTINICA
MENIDIA BERYLLINA
MENIDIA SP.

SYNGNATHIDAE

HIPPOCAMPUS ERECTUS
HIPPOCAMPUS ZOSTERAE
MICROGNATHUS CRINIGER
MICROGNATHUS CRINITUS
SYNGNATHUS FLORIDAE
SYNGNATHUS LOUISIANAE
SYNGNATHUS SCOVELLI
SYNGNATHUS SP.
HIPPOCAMPUS SP.

SERRANIDAE

CENTROPRISTIS OCYURUS
CENTROPRISTIS PHILADELPHIC
CENTROPRISTIS STRIATA
DIPLECTRUM BIVITTATUM
DIPLECTRUM FORMOSUM
EPINEPHELUS MORIO
EPINEPHELUS NIGRITUS
MYCTEROPERCA BONACI
MYCTEROPERCA MICROLEPIS
SERRANICULUS PUMILIO
SERRANUS ATROBRANCHUS
SERRANUS SUBLIGARIUS

GRAMMISTIDAE

RYPTICUS BISTRISPINUS
RYPTICUS SAPONACEUS

APOGONIDAE

APOGON AUROLINEATUS

RACHYCENTRIDAE

RACHYCENTRON CANADUM

ECHENEIDAE

ECHENEIS NAUCRATES
REMORA REMORA

CARANGIDAE

CARANX CRYOSOS
CARANX HIPPOS
CHLOROSCOMBRUS CHRYSURUS
DECAPTERUS PUNCTATUS
HEMICARANX AMBLYRHYNCHUS
OLIGOPLITES SAURUS

SELENE VOMER
TRACHINOTUS CARLINUS
TRACHINOTUS FALCATUS
UNIDENTIFIED CARANGID

LUTJANIDAE

LUTJANUS APODUS
LUTJANUS GRISEUS
LUTJANUS SYNAGRIS
OCYURUS CHRYSURUS
RHOMBOPLITES AURORUBENS

GERRIDAE

EUCINOSTOMUS ARGENTEUS
EUCINOSTOMUS GULA
EUCINOSTOMUS LEFROYI
EUCINOSTOMUS SP.

HAEMULIDAE

HAEMULON AUROLINEATUM
HAEMULON PLUMIERI
ORTHOPRISTIS CHRYSOPTERA
HAEMULON MACROSTOMUM

SPARIDAE

ARCHOSARGUS PROBATOCEPHALUS
CALAMUS ARCTIFRONS
DIPLODUS HOLBROOKI
LAGODON RHOMBOIDES
UNIDENTIFIED SPARID

SCIAENIDAE

BAIRDIELLA CHRYSOURA
CYNOSCION ARENARIUS
CYNOSCION NEBULOSUS
CYNOSCION SP.
EQUETUS LANCEOLATUS
EQUETUS UMBROSUS
LEIOSTOMUS XANTHURUS
MENTICIRRHUS AMERICANUS
MENTICIRRHUS SAXATILIS
MENTICIRRHUS LITTORALIS
MENTICIRRHUS SP.
MICROPOGONIAS UNDULATUS
POGONIAS CROMIS
SCIAENOPS OCELLATUS
UNIDENTIFIED SCIAENID

MULLIDAE

MULLUS AURATUS

EPHIPPIDAE

CHAETODIPTERUS FAER

LABRIDAE

HALICHOERES BIVITTATUS
HALICHOERES CAUDALIS

MUGILIDAE

MUGIL CEPHALUS
MUGIL CUREMA
MUGIL TRICHODON
MUGIL SP.

OPISTOGNATHIDAE

OPISTOGNATHUS AURIFRONS
OPISTOGNATHUS MACROGNATHUS
OPISTOGNATHUS MAXILLOSUS

URANOSCOPIDAE

ASTROSCOPUS GUTTATUS
ASTROSCOPUS Y-GRAECUM
KATHETOSTOMA ALBIGUTTA

CLINIDAE

LABRISOMUS NUCHIPINNUS
PARACLINUS FASCIATUS

BLENNIIDAE

CHASMODES SUBURRAE
CHASMODES?
HYPLEUROCHILUS GEMINATUS
HYPUBLENNIUS IONTHAS
HYPUBLENNIUS HENTZI
LUPINOBLENNIUS NICHOLSI
PARABLENNIUS MARMOREUS
SCARTELLA CRISTATA
UNIDENTIFIED BLENNY

CALLIONYMIDAE

7

CALLIONYMUS BAIRDI
CALLIONYMUS PAUCIRADIATUS
CALLIONYMUS SP.

Gobiidae

BATHYGobiUS SPORATOR
CORYPHOPTERUS PUNCTIPECTOP
EVERMANNICHTHYS SPONGICOLA
GOBIONELLUS HASTATUS
GOBIOsOMA BOSCI
GOBIOsOMA LONGIPALA
GOBIOsOMA ROBUSTUM
TOGLOssUS CALLIURUS
MICROGOBIUS GULOSUS
MICROGOBIUS THALASSINUS
RISOR RUBER
UNIDENTIFIED GOBY

Microdesmidae

MICROCESMUS LONGIPINNIS

Scombridae

AUXIS SP.
EUTHYNNUS ALLETTERATUS
SARDA SARDA
SCOMBEROMORUS CAVALLA
SCOMBEROMORUS MACULATUS

Trichiuridae

TRICHIURUS LEPTURUS

Stromateidae

PEPRILUS ALEPIDOTUS
PEPRILUS BURTI

Scorpaenidae

SCORPAENA BRASILIENSIS

Triglidae

BELLATOR MILITARIS
PRIONOTUS CAROLINUS
PRIONOTUS MARTIS
PRIONOTUS ROSEUS
PRIONOTUS SALMONICOLOR
PRIONOTUS SCITULUS

PRIONOTUS TRIBULUS
PRIONOTUS SP.
UNIDENTIFIED TRIGLID

TRIGLIDAE/SOLEIDAE

BOTHIDAE

ANCYLOPSETTA QUADROCELLATA
BOTHUS OCELLATUS
BOTHUS ROBINSI
CYLOPESTTA FIMBRIATA
ETROPUS CROSSOTUS
ETROPUS RIMOSUS
PARALICHTHYS ALBIGUTTA
SYACIUM PAPILLOSUM
CITHARICHTHYS MACROPS
UNIDENTIFIED BOTHID

SOLEIDAE

ACHIRUS LINEATUS
GYMNACHIRUS MELAS
TRINECTES MACULATUS
UNIDENTIFIED SOLE

CYNOGLOSSIDAE

SYMPHURUS PLAGIUSA

BALISTIDAE

ALUTERUS HEUDELTI
ALUTERUS SCHOEFFI
MONACANTHUS CILIATUS
MONACANTHUS HISPIDUS
MONACANTHUS SP.

OSTRACIIDAE

LACTOPHRYS BICAUDALIS
LACTOPHRYS QUADRICORNIS
LACTOPHRYS TRIGONUS

TETRAODONTIDAE

SPHOERIDES DORSALIS
SPHOERIDES NEPHELUS
SPHOERIDES SPENGLERI
SPHOERIDES SP.
LAGOCEPHALUS LAEVIGATUS

DIODONTIDAE

CHILOMYCTERUS SCHOEPPFI
DIODON HOLOCANTHUS
DIODON HYSTRIX

UNIDENTIFIED

UNIDENTIFIED-DAMAGED

PORIFERA

CNIDARIA

ANEMONE

NEMERTINEA

ARTHROPODA

ANNELIDA

SQUILLIDAE

SQUILLA EMPUSIA

DECAPODA

PENAEIDAE

PENAEUS AZTECUS
PENAEUS DUORARUM
PENAEUS SETIFERUS
PENAEUS SP.
PARAPENAEUS LONGIROSTRIS
SICYONIA DORSALIS
SICYONIA LAEVIGATA
SICYONIA TYPICA
SICYONIA SP.
TRACHYPENAEUS CONSTRICTUS
TRACHYPENAEUS SIMILIS
TRACHYPENAEUS SP.

PALAEMONIDAE

BRACHYCARPUS BIUNGUICULATU
PALAEMON FLORIDANUS
PALAEMONETES INTERMEDIUS
PALAEMONETES PUGIO
PALAEMONETES VULGARIS
PALAEMONETES SP.
PERICLIMENES AMERICANUS
PERICLIMENES LONGICAUDATUS

ALPHEIDAE

ALPHEUS FLORIDANUS
ALPHEUS HETEROCHAEUS
ALPHEUS NORMANNI
SYNALPHEUS FRITZMUELLERI
SYNALPHEUS LONGICARPUS
SYNALPHEUS SP.

OGYRIDIDAE

OGYRIDES LIMICOLA
OGYRIDES OCCIDENTALIS

HIPPOLYTIDAE

HIPPOLYTE CURACAOENSIS
HIPPOLYTE NICHOLSONI
HIPPOLYTE PLEURACANTHUS
HIPPOLYTE ZOSTERICOLA
HIPPOLYSMATA WURDMANNI
LATREUTES FUCORUM
LATREUTES INERMIS

LATREUTES PARVULUS
LYSMATA WURDEMANNI
THOR DOBKINI
THOR FLORIDANUS
TOZEUMA CAROLINENSE

PROCESSIDAE

AMBIDEXTER SYMMETRICUS
PROCESSA BERMUDENSIS
PROCESSA HEMPHILLI
PROCESSA VICINA
PROCESSA SP.

CALLIANASSIDAE

CALLIANASSA SP.
UPOGEBIA AFFINIS
DAMAGED CRAB

PORCELLANIDAE

EUCERAMUS PRAELONGUS
PETROLISTHES ARMATUS
PETROLISTHES GALATHINUS
PETROLISTHES SP.
POLYONYX GIBBESI
PORCELLANA SAYANA

PAGURIDAE

PAGURUS BREVIDACTYLUS
PAGURUS IMPRESSUS
PAGURUS GYMNOACTUS
PAGURUS LONGICARPUS
PAGURUS POLLICARIS
PAGURUS SP.

LEUCOSIIDAE

PERSOPHONA PUNCIATA

CALAPPIDAE

CALAPPA ANGUSTA
CALAPPA FLAMMEA
HEPATUS EPHELIITICUS
HEPATUS PUDIBUNDUS

PORTUNIDAE

CALLINECTES ORNATUS

CALLINECTES SAPIDUS
CALLINECTES SIMILIS
CALLINECTES SP.
OVALIPES GUADULPENSIS
OVALIPES OCELLATUS
PORTUNUS DEPRESSIFRONS
PORTUNUS GIBBESI
PORTUNUS SAYI
PORTUNUS SPINIMANUS
PORTUNUS SP.

XANTHIDAE

EURYPANOPEUS ABBREVIATUS
EURYPANOPEUS DEPRESSUS
HEXAPANOPEUS ANGUSTIFRONS
MENIPPE MERCENARIA
NEOPANOPE PACKARDII
NEOPANOPE TEXANA
PANOPEUS HERBSTII
PANOPEUS SP.
PANOPEUS TURGIDUS
PILUMNUS FLORIDANUS
PILUMNUS DASYPODUS
PILUMNUS SAYI
PILUMNUS SP.

PINNOTHERIDAE

PINNIXA CRISTATA
PINNIXA SAYANA
PINNOTHERES OSTREUM
PINNOTHERES MACULATUS

GRAPSIDAE

SESARMA CINEREUM
SESARMA RETICULATUM

GONEPLACIDAE

EURYPLAX NITIDA

OCYPODIDAE

UCA MINAX
UCA PUGILATOR
UCA PUGNAX
UCA SPECTOSA

MAJIDAE

PODCCHELA RIISEI

LIBINIA DUBIA
LIBINIA EMARGINATA
MACROCOELOMA TRISPINOSUM
METOPORHAPHIS CALCARATA
PODOCHELA SIDNEYI
MITHRAX SP.
PELIA MUTICA
PITHO LHERMINIERI

MOLLUSCA

ANACHIS SP.
APLYSIA SP.
APLYSIA WILCOXI
BURSATELLA LEACHI
ARGOPECTIN GIBBUS
BULLA OCCIDENTALIS
BULLA STRIATA
CALOTROPHOM OSTEARUM
CERITHIUM SP.
CERITHIUM FLORIDANUM
CHIONE SP.
CHIONE CANCELLATA
COLUMBELLA RUSTICOIDES
CRASSOSTREA VIRGINICA
CREPIDULA FORNICATA
CREPIDULA SP.
CORYPHELLIDAE
DORIDIDAE
HAMINOEA SP.
LOLLIGUNCULA BREVIS
LOLLIGO PEALI
LAEVICARDIUM MORTONI
MEIONGENA CORONA
MUREX POMUM
NASSARIUS VIBEX
OCTOPUS SP.
OLIVA SAYANA
POLINICES DUPLICATUS
PRUNUM APICUM
UROSALPINX CINEREA
UROSALPINX SP.
UROSALPINX TAMPAENSIS

ECHINODERMATA

ASTERIIDAE
ASTROPECTEN ARTICULATUS
LUIDIA CLATHRATA
LUIDIA SP.
ECHINASTER SP.

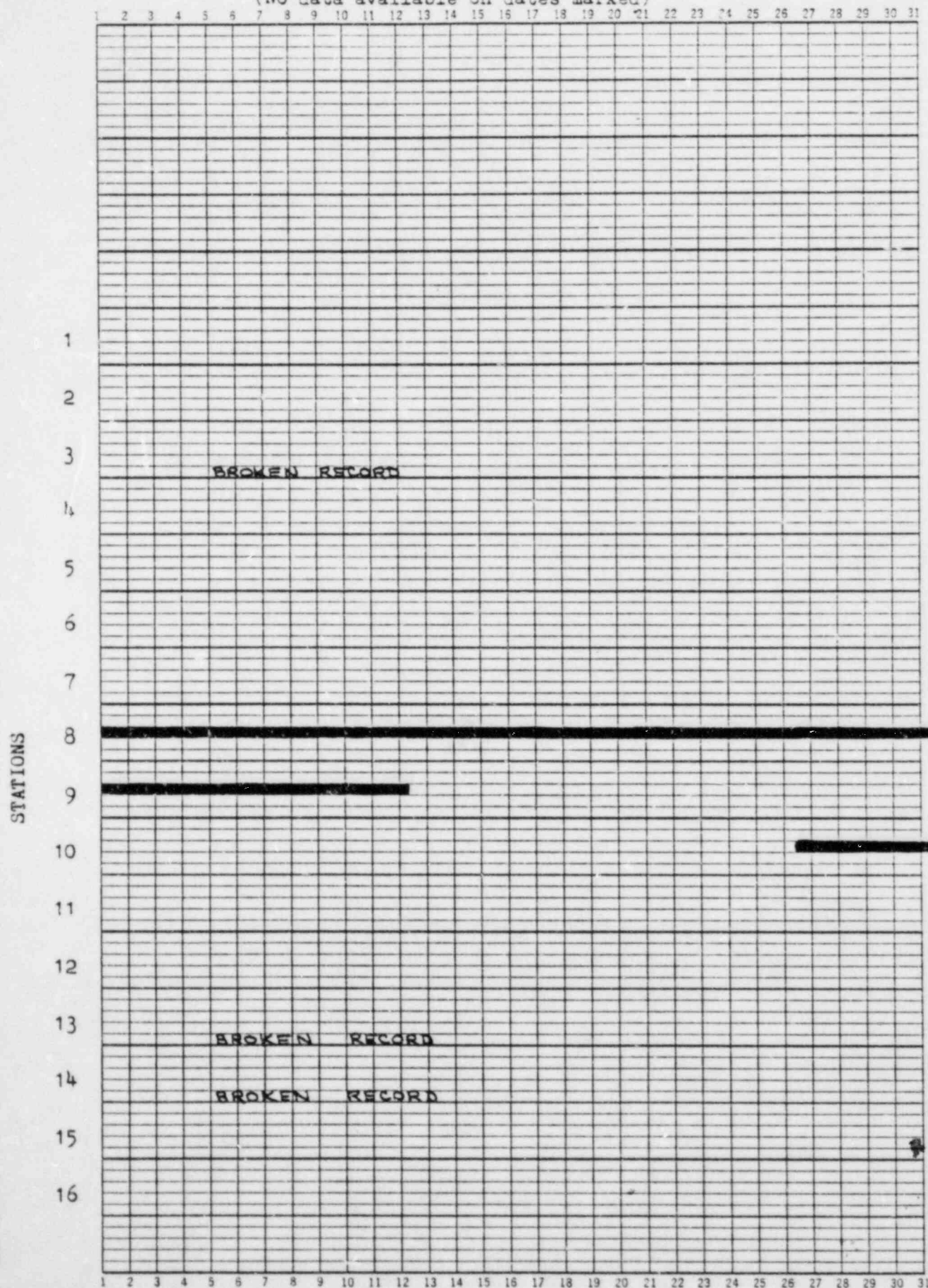
OPHIODERMA SP.
OPHIOLEPIS ELEGANS
OPHIOMUSIUM SP.
OPHIOPHRAGMUS WURDMANI
OPHIUROIDEA
OPHIOTHRIX ANGULATA
OPHIOTHRIX SP.
LYTECHINUS VARIEGATUS
MELLITA QUINQUIESPERFORATA
ENCOPE MICHELINI

CHORDATA

STYELLA PLICATA
MOLGULA SP.

3.5 PHYSICAL DATA

IN SITU CURRENT DATA
(No data available on dates marked)



IN SITU TIDE DATA
(No data available on dates marked)

