

seamap

environmental and
biological atlas of
the gulf of mexico
2005

gulf states marine fisheries commission

number 175

march 2010

GULF STATES MARINE FISHERIES COMMISSION COMMISSIONERS

ALABAMA

Barnett Lawley
Alabama Department of Conservation
and Natural Resources
64 North Union Street
Montgomery, AL 36130-1901

Representative Spencer Collier
P.O. Box 550
Irvington, AL 36544

Chris Nelson
Bon Secour Fisheries, Inc.
P.O. Box 60
Bon Secour, AL 36511

FLORIDA

Nick Wiley, Executive Director
FL Fish and Wildlife Conservation Commission
620 South Meridian Street
Tallahassee, FL 32399-1600

Senator Thad Altman
State Senator, District 24
6767 North Wickham Road, Suite 211
Melbourne, FL 32940

LOUISIANA

Robert Barham, Secretary
LA Department of Wildlife and Fisheries
P.O. Box 98000
Baton Rouge, LA 70898-9000

Senator Butch Gautreaux
714 2nd Street
Morgan City, LA 70380

Wilson Gaidry
8911 Park Avenue
Houma, LA 70363

MISSISSIPPI

William Walker, Executive Director
Mississippi Department of Marine Resources
1141 Bayview Avenue
Biloxi, MS 39530

Senator Tommy Gollott
235 Bayview Avenue
Biloxi, MS 39530

Joe Gill, Jr.
Joe Gill Consulting, LLC
910 Desoto Street
Ocean Springs, MS 39566-0535

TEXAS

Carter Smith, Executive Director
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, TX 78744

Senator Mike Jackson
Texas Senate
P.O. Box 12068
Austin, TX 78711

David McKinney
44 East Avenue, Suite 345
Austin, TX 78701

STAFF

Larry B. Simpson
Executive Director

David M. Donaldson
V.K. "Ginny" Herring
Nancy K. Marcellus
Cheryl R. Noble
Steven J. VanderKooy
Jeffrey K. Rester
Gregory S. Bray

Joseph P. Ferrer, III
Douglas J. Snyder
Deanna L. Valentine
Donna B. Bellais
Wendy L. Garner
Robert W. Harris

Ralph E. Hode
James R. Ballard
Alexander L. Miller
Lloyd W. Kirk
Debora K. McIntyre
Janet M. Lumpkin

SEAMAP ENVIRONMENTAL AND BIOLOGICAL ATLAS OF THE GULF OF MEXICO, 2005

Edited by

Jeffrey K. Rester
Gulf States Marine Fisheries Commission

Manuscript Design and Layout

Cheryl R. Noble
Gulf States Marine Fisheries Commission

GULF STATES MARINE FISHERIES COMMISSION

March 2010
Number 175

This project was supported in part by the National Oceanic and Atmospheric Administration, National Marine Fisheries Service, under State/Federal Project Number NA06NMF4350007.



SEAMAP SUBCOMMITTEE

Mr. Read Hendon, Chairman
Gulf Coast Research Laboratory

Mr. Myron Fischer
Louisiana Department of Wildlife and
Fisheries

Mr. Butch Pellegrin
National Marine Fisheries Service
Pascagoula Laboratory

Mr. John Mareska
Alabama Department of Conservation
and Natural Resources

Mr. Bob McMichael
Florida Fish and Wildlife
Conservation Commission
Florida Fish and Wildlife Research Institute

Mr. Fernando Martinez-Andrade
Texas Parks and Wildlife Department

Mr. Richard Leard
Gulf of Mexico Fishery Management Council

Mr. Jeffrey K. Rester
SEAMAP Coordinator
Gulf States Marine Fisheries Commission

DATA COORDINATING WORK GROUP

Mr. Lloyd W. Kirk, Leader
Gulf States Marine Fisheries Commission

Mr. Butch Pellegrin
Shrimp/Groundfish Work Group Leader
National Marine Fisheries Service
Pascagoula Laboratory

Mr. Read Hendon
Reef Fish Work Group Leader
Gulf Coast Research Laboratory

Dr. Joanne Shultz
Plankton Work Group Leader
National Marine Fisheries Service
Pascagoula Laboratory

Mr. Michael Murphy
Red Drum Work Group Leader
Florida Fish and Wildlife
Conservation Commission
Florida Fish and Wildlife Research Institute

TABLE OF CONTENTS

	PAGE
List of Tables	v
List of Figures	xiv
Acknowledgments	xviii
Introduction	1
Materials and Methods	2
Plankton Surveys	2
Environmental Data	4
Trawl Surveys	5
Summer Shrimp/Groundfish Survey	5
Fall Shrimp/Groundfish Survey	6
Reef Fish Survey	6
Results	7
Plankton Surveys	7
Environmental Data	7
Trawl Surveys	7
Summer Shrimp/Groundfish Survey	7
Fall Shrimp/Groundfish Survey	8
Real-Time Data Management	8
Reef Fish Survey	9
Discussion	9
Data Requests	10
Tables	12
Figures	170
Literature Cited	260

LIST OF TABLES

	PAGE
Table 1.	List of SEAMAP survey activities from 1982 to 2005. 12
Table 2.	Selected environmental parameters measured during 2005 SEAMAP surveys in the Gulf of Mexico, by individual vessel and survey. 13
Table 3.	2005 Summer Shrimp/Groundfish Survey species composition list, 292 trawl stations, for those vessels that used either a 40-ft or 20-ft trawl. Species with a total weight of less than 0.0227 kg (0.05 lb) are indicated on the table as 0.0 kg. 82
Table 4a.	Statistical Zone 11. Summary of dominant organisms taken in statistical zone 11 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. 95
Table 4b.	Statistical Zone 11. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. 97
Table 5a.	Statistical Zone 13. Summary of dominant organisms taken in statistical zone 13 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm. 98
Table 5b.	Statistical Zone 13. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.. No trawl samples were taken in depths greater than 30 fm. 100

LIST OF TABLES

PAGE

Table 6a.	Statistical Zone 14. Summary of dominant organisms taken in statistical zone 14 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 20 fm.	101
Table 6b.	Statistical Zone 14. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 20 fm.	102
Table 7a.	Statistical Zone 15. Summary of dominant organisms taken in statistical zone 15 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 20 fm.	103
Table 7b.	Statistical Zone 15. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 20 fm.	104
Table 8a.	Statistical Zone 16. Summary of dominant organisms taken in statistical zone 16 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.	105

LIST OF TABLES

PAGE

Table 8b.	Statistical Zone 16. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 40 fm.	107
Table 9a.	Statistical Zone 17. Summary of dominant organisms taken in statistical zone 17 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm.	108
Table 9b.	Statistical Zone 17. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 30 fm.	110
Table 10a.	Statistical Zone 18. Summary of dominant organisms taken in statistical zone 18 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm.	111
Table 10b.	Statistical Zone 18. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 30 fm.	113

LIST OF TABLES

PAGE

Table 11a.	Statistical Zone 19. Summary of dominant organisms taken in statistical zone 19 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm.	114
Table 11b.	Statistical Zone 19. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 30 fm.	116
Table 12a.	Statistical Zone 20. Summary of dominant organisms taken in statistical zone 20 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.	117
Table 12b.	Statistical Zone 20. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.	119
Table 13a.	Statistical Zone 21. Summary of dominant organisms taken in statistical zone 21 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.	120
Table 13b.	Statistical Zone 21. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 40 fm.	122

LIST OF TABLES

PAGE

Table 14a.	Statistical Zone 22. Summary of dominant organisms taken in statistical zone 17 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths less than 6 fm or greater than 20 fm.	123
Table 14b.	Statistical Zone 22. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths less than 6 fm or greater than 20 fm.	124
Table 15.	2005 Fall Shrimp/Groundfish Survey species composition list, 399 trawl stations, for those vessels that used either a 40-ft or 20-ft trawl. Species with a total weight of less than 0.0227 kg (0.05 lb) are indicated on the table as 0.0 kg.	125
Table 16a.	Statistical Zone 11. Summary of dominant organisms taken in statistical zone 11 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.	137
Table 16b.	Statistical Zone 11. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.	139
Table 17a.	Statistical Zone 13. Summary of dominant organisms taken in statistical zone 13 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.	140

LIST OF TABLES

PAGE

Table 17b.	Statistical Zone 13. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.	142
Table 18a.	Statistical Zone 14. Summary of dominant organisms taken in statistical zone 14 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.	143
Table 18b.	Statistical Zone 14. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.	145
Table 19a.	Statistical Zone 15. Summary of dominant organisms taken in statistical zone 15 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths less than 6 fm.	146
Table 19b.	Statistical Zone 15. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths less than 6 fm.	148
Table 20a.	Statistical Zone 16. Summary of dominant organisms taken in statistical zone 16 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.	149

LIST OF TABLES

PAGE

Table 20b.	Statistical Zone 16. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.	151
Table 21a.	Statistical Zone 17. Summary of dominant organisms taken in statistical zone 17 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.	152
Table 21b.	Statistical Zone 17. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.	154
Table 22a.	Statistical Zone 18. Summary of dominant organisms taken in statistical zone 18 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.	155
Table 22b.	Statistical Zone 18. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 40 fm.	157
Table 23a.	Statistical Zone 19. Summary of dominant organisms taken in statistical zone 19 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm.	158

LIST OF TABLES

PAGE

Table 23b.	Statistical Zone 19. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 30 fm.	160
Table 24a.	Statistical Zone 20. Summary of dominant organisms taken in statistical zone 20 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.	161
Table 24b.	Statistical Zone 20. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.	163
Table 25a.	Statistical Zone 21. Summary of dominant organisms taken in statistical zone 21 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.	164
Table 25b.	Statistical Zone 21. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.	166
Table 26a.	Statistical Zone 22. Summary of dominant organisms taken in statistical zone 21 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths less than 6 fm or greater than 10 fm.	167

LIST OF TABLES

PAGE

Table 26b.	Statistical Zone 22. Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths less than 6 fm or greater than 10 fm.	168
Table 27.	2005 Reef Fish Survey species composition list, 48 trap stations where a fish trap was used. Species with a total weight of less than 0.0227 kg (0.05 lb) are indicated on the table as 0.0 kg.	169

LIST OF FIGURES

	PAGE
Figure 1. 2005 SEAMAP Surveys, Gulf of Mexico.	170
Figure 2. Statistical zones for shrimp in the Gulf of Mexico.	171
Figure 3. Locations of plankton and environmental stations during the 2005 Spring Plankton Survey.	172
Figure 4. Locations of plankton stations during the 2005 Summer Shrimp/Groundfish Survey.	173
Figure 5. Locations of plankton stations during the 2005 Fall Shrimp/Groundfish Survey.	174
Figure 6. Locations of environmental stations during the 2005 Summer Shrimp/Groundfish Survey.	175
Figure 7. Locations of environmental stations during the 2005 Fall Shrimp/Groundfish Survey.	176
Figure 8. Locations of trawl stations during the 2005 Summer Shrimp/Groundfish Survey.	177
Figure 9. Locations of trawl stations during the 2005 Fall Shrimp/Groundfish Survey.	178
Figure 10. Locations of stations during the 2005 Reef Fish Survey.	179
Figure 11. Atlantic croaker, <u>Micropogonias undulatus</u> , number/hour for June-July 2005.	180
Figure 12. Atlantic croaker, <u>Micropogonias undulatus</u> , lb/hour for June-July 2005.	181
Figure 13. Longspine porgy, <u>Stenotomus caprinus</u> , number/hour for June-July 2005.	182
Figure 14. Longspine porgy, <u>Stenotomus caprinus</u> , lb/hour for June-July 2005.	183
Figure 15. Atlantic bumper, <u>Chloroscombrus chrysurus</u> , number/hour for June-July 2005.	184
Figure 16. Atlantic bumper, <u>Chloroscombrus chrysurus</u> , lb/hour for June-July 2005.	185
Figure 17. Gulf butterfish, <u>Peprilus burti</u> , number/hour for June-July 2005.	186
Figure 18. Gulf butterfish, <u>Peprilus burti</u> , lb/hour for June-July 2005.	187
Figure 19. Spot, <u>Leiostomus xanthurus</u> , number/hour for June-July 2005.	188
Figure 20. Spot, <u>Leiostomus xanthurus</u> , lb/hour for June-July 2005.	189
Figure 21. Rough scad, <u>Trachurus lathami</u> , number/hour for June-July 2005.	190
Figure 22. Rough scad, <u>Trachurus lathami</u> , lb/hour for June-July 2005.	191
Figure 23. Bluespotted searobin, <u>Prionotus roseus</u> , number/hour for June-July 2005.	192
Figure 24. Bluespotted searobin, <u>Prionotus roseus</u> , lb/hour for June-July 2005.	193
Figure 25. Shoal flounder, <u>Syacium gunteri</u> , number/hour for June-July 2005.	194
Figure 26. Shoal flounder, <u>Syacium gunteri</u> , lb/hour for June-July 2005.	195
Figure 27. Largescale lizardfish, <u>Saurida brasiliensis</u> , number/hour for June-July 2005.	196

LIST OF FIGURES

	PAGE
Figure 28. Largescale lizardfish, <u>Saurida brasiliensis</u> , lb/hour for June- July 2005.	197
Figure 29. Atlantic cutlassfish, <u>Trichiurus lepturus</u> , number/hour for June-July 2005.	198
Figure 30. Atlantic cutlassfish, <u>Trichiurus lepturus</u> , lb/hour for June- July 2005.	199
Figure 31. Red snapper, <u>Lutjanus campechanus</u> , number/hour for June-July 2005.	200
Figure 32. Red snapper, <u>Lutjanus campechanus</u> , lb/hour for June-July 2005.	201
Figure 33. Brown shrimp, <u>Farfantepenaeus aztecus</u> , number/hour for June-July 2005.	202
Figure 34. Brown shrimp, <u>Farfantepenaeus aztecus</u> , lb/hour for June-July 2005.	203
Figure 35. White shrimp, <u>Litopenaeus setiferus</u> , number/hour for June-July 2005.	204
Figure 36. White shrimp, <u>Litopenaeus setiferus</u> , lb/hour for June-July 2005.	205
Figure 37. Pink shrimp, <u>Farfantepenaeus duorarum</u> , number/hour for June-July 2005.	206
Figure 38. Pink shrimp, <u>Farfantepenaeus duorarum</u> , lb/hour for June-July 2005.	207
Figure 39. Lesser blue crab, <u>Callinectes similis</u> , number/hour for June-July 2005.	208
Figure 40. Lesser blue crab, <u>Callinectes similis</u> , lb/hour for June-July 2005.	209
Figure 41. Roughback shrimp, <u>Trachypenaeus similis</u> , number/hour for June-July 2005.	210
Figure 42. Roughback shrimp, <u>Trachypenaeus similis</u> , lb/hour for June-July 2005.	211
Figure 43. Mantis shrimp, <u>Squilla empusa</u> , number/hour for June-July 2005.	212
Figure 44. Mantis shrimp, <u>Squilla empusa</u> , lb/hour for June-July 2005.	213
Figure 45. Brown rock shrimp, <u>Sicyonia brevirostris</u> , number/hour June-July 2005.	214
Figure 46. Brown rock shrimp, <u>Sicyonia brevirostris</u> , lb/hour June-July 2005.	215
Figure 47. Longspine swimming crab, <u>Portunus spinicarpus</u> , number/hour for June-July 2005.	216
Figure 48. Longspine swimming crab, <u>Portunus spinicarpus</u> , lb/hour for June-July 2005.	217
Figure 49. Arrow squid, <u>Loligo pleii</u> , number/hour for June-July 2005.	218
Figure 50. Arrow squid, <u>Loligo pleii</u> , lb/hour for June-July 2005.	219
Figure 51. Atlantic croaker, <u>Micropogonias undulatus</u> , number/hour for October-December 2005.	220
Figure 52. Atlantic croaker, <u>Micropogonias undulatus</u> , lb/hour for October-December 2005.	221
Figure 53. Longspine porgy, <u>Stenotomus caprinus</u> , number/hour for October-December 2005.	222
Figure 54. Longspine porgy, <u>Stenotomus caprinus</u> , lb/hour for October-December 2005.	223

LIST OF FIGURES

	PAGE
Figure 55. Atlantic bumper, <u>Chloroscombrus chrysurus</u> , number/hour for October-December 2005.	224
Figure 56. Atlantic bumper, <u>Chloroscombrus chrysurus</u> , lb/hour for October-December 2005.	225
Figure 57. Silver seatrout, <u>Cynoscion nothus</u> , number/hour for October-December 2005.	226
Figure 58. Silver seatrout, <u>Cynoscion nothus</u> , lb/hour for October-December 2005.	227
Figure 59. Spot, <u>Leiostomus xanthurus</u> , number/hour for October-December 2005.	228
Figure 60. Spot, <u>Leiostomus xanthurus</u> , lb/hour for October-December 2005.	229
Figure 61. Gulf butterfish, <u>Peprilus burti</u> , number/hour for October-December 2005.	230
Figure 62. Gulf butterfish, <u>Peprilus burti</u> , lb/hour for October-December 2005.	231
Figure 63. Shoal flounder, <u>Syacium gunteri</u> , number/hour for October-December 2005.	232
Figure 64. Shoal flounder, <u>Syacium gunteri</u> , lb/hour for October-December 2005.	233
Figure 65. Atlantic cutlassfish, <u>Trichiurus lepturus</u> , number/hour for October-December 2005.	234
Figure 66. Atlantic cutlassfish, <u>Trichiurus lepturus</u> , lb/hour for October-December 2005.	235
Figure 67. Sand seatrout, <u>Cynoscion arenarius</u> , number/hour for October-December 2005.	236
Figure 68. Sand seatrout, <u>Cynoscion arenarius</u> , , lb/hour for October-December 2005.	237
Figure 69. Inshore lizardfish, <u>Synodus foetens</u> , number/hour for October-December 2005.	238
Figure 70. Inshore lizardfish, <u>Synodus foetens</u> , lb/hour for October-December 2005.	239
Figure 71. Red snapper, <u>Lutjanus campechanus</u> , number/hour for October-December 2005.	240
Figure 72. Red snapper, <u>Lutjanus campechanus</u> , lb/hour for October-December 2005.	241
Figure 73. Brown shrimp, <u>Farfantepenaeus aztecus</u> , number/hour for October-December 2005. ...	242
Figure 74. Brown shrimp, <u>Farfantepenaeus aztecus</u> , lb/hour for October-December 2005.	243
Figure 75. White shrimp, <u>Litopenaeus setiferus</u> , number/hour for October-December 2005.	244
Figure 76. White shrimp, <u>Litopenaeus setiferus</u> , lb/hour for October-December 2005.	245
Figure 77. Pink shrimp, <u>Farfantepenaeus duorarum</u> , number/hour for October-December 2005. ...	246
Figure 78. Pink shrimp, <u>Farfantepenaeus duorarum</u> , lb/hour for October-December 2005.	247
Figure 79. Lesser blue crab, <u>Callinectes similis</u> , number/hour for October-December 2005.	248
Figure 80. Lesser blue crab, <u>Callinectes similis</u> , lb/hour for October-December 2005.	249
Figure 81. Roughback shrimp, <u>Trachypenaeus similis</u> , number/hour for October-December 2005. .	250

LIST OF FIGURES

	PAGE
Figure 82. Roughback shrimp, <u>Trachypenaeus similus</u> , lb/hour for October-December 2005.	251
Figure 83. Brown rock shrimp, <u>Sicyonia brevirostris</u> , number/hour for October-December 2005. . .	252
Figure 84. Brown rock shrimp, <u>Sicyonia brevirostris</u> , lb/hour for October-December 2005.	253
Figure 85. Mantis shrimp, <u>Squilla empusa</u> , number/hour for October-December 2005.	254
Figure 86. Mantis shrimp, <u>Squilla empusa</u> , lb/hour for October-December 2005.	255
Figure 87. Iridescent swimming crab, <u>Portunus gibbesii</u> , number/hour for October-December 2005.	256
Figure 88. Iridescent swimming crab, <u>Portunus gibbesii</u> , lb/hour for October-December 2005.	257
Figure 89. Atlantic brief squid, <u>Lolliguncula brevis</u> , number/hour for October-December 2005. . .	258
Figure 90. Atlantic brief squid, <u>Lolliguncula brevis</u> , lb/hour for October-December 2005.	259

ACKNOWLEDGMENT

The 2005 SEAMAP Atlas was developed as a cooperative effort between the five Gulf States fishery management agencies and the National Marine Fisheries Service (NMFS), to present information collected during SEAMAP research survey activities in the Gulf of Mexico. The SEAMAP Data Coordinating Work Group would like to thank the following agencies for their participation in the project: Florida Fish and Wildlife Conservation Commission, Alabama Department of Conservation and Natural Resources, Gulf Coast Research Laboratory (representing the Mississippi Department of Marine Resources), Louisiana Department of Wildlife and Fisheries, Texas Parks and Wildlife Department, and NMFS-Southeast Fisheries Science Center.

Special thanks go to Gregg Bray and Cheryl Noble of the Gulf States Marine Fisheries Commission staff for their assistance in preparing this Atlas.

INTRODUCTION

The Southeast Area Monitoring and Assessment Program (SEAMAP) is a State/Federal/university program for the collection, management and dissemination of fishery-independent data (information collected without direct reliance on statistics reported by commercial or recreational fishermen) in United States waters of the Gulf of Mexico (Eldridge 1988). A major SEAMAP objective is to provide a large, standardized data base needed by management agencies, industry, and scientists to wisely manage and develop fishery resources for the least possible cost. To accomplish this goal, survey data must be disseminated in a useful format to SEAMAP participants, cooperators, and other interested organizations.

The SEAMAP Program began in March 1981 when the National Marine Fisheries Service (NMFS), Southeast Fisheries Science Center (SEFSC), presented a SEAMAP Strategic Plan (1981) to the Gulf States Marine Fisheries Commission (GSMFC). This strategic plan outlined the proposed program organization (goals, objectives, procedures, resource requirements, etc.). A SEAMAP Subcommittee was then formed within the existing framework of the GSMFC. The Subcommittee consists of one representative from each state fishery management agency [Florida Fish and Wildlife Conservation Commission (FWC); Alabama Department of Conservation and Natural Resources (ADCNR); Mississippi Department of Marine Resources (MDMR) represented by the University of Southern Mississippi, Gulf Coast Research Laboratory (USM/GCRL); Louisiana Department of Wildlife and Fisheries (LDWF); and Texas Parks and Wildlife Department (TPWD)], one from NMFS SEFSC and a non-voting member representing the Gulf of Mexico Fishery Management Council (GMFMC). The Subcommittee has organized and successfully coordinated numerous resource surveys from 1982 through 2004 (Table 1). The resultant data are published in atlases for the surveys in 1982 (Stuntz et al. 1985); 1983 (Thompson and Bane 1986a); 1984 (Thompson and Bane 1986b); 1985 (Thompson et al. 1988); 1986 (Sanders et al. 1990a); 1987 (Sanders et al. 1990b); 1988 (Sanders et al. 1991a); 1989 (Sanders et al. 1991b); 1990 (Sanders et al. 1992); 1991 (Donaldson et al. 1993); 1992 (Donaldson et al. 1994); 1993 (Donaldson et al. 1996); 1994 (Donaldson et al. 1997a); 1995 (Donaldson et al. 1997b); 1996 (Donaldson et al. 1998); 1997 (Rester et al. 1999); 1998 (Rester et al. 2000); 1999 (Rester et al. 2001); 2000 (Rester et al. 2002); 2001 (Rester et al. 2004); 2002 (Rester et al. 2008); 2003 (Rester et al. 2009); and 2004 (Rester 2009). Environmental assessment activities occurred with each of the surveys found in Table 1.

In March 2005, the SEAMAP Subcommittee identified and began to plan the year's SEAMAP survey activities for the Gulf of Mexico. In keeping with the program goal of establishing a coordinated long-term resource database, it was decided to continue the same types of survey activities conducted in 1982 through 2004. Overall survey objectives in 1982 to 2005 were to assess the distribution and abundance of recreational and commercial organisms collected by plankton, trap/video and trawl gears and document environmental factors that might affect their distribution and abundance. Data from plankton surveys are used for detection and assessment of fishery resources; in the determination of spawning seasons and areas; in investigations of early survival and recruitment mechanisms; and in estimation of the abundance of a stock based on its spawning production (Sherman et al. 1983). Assessment of the Texas Closure (Nichols 1982, 1984; Nichols and Poffenberger 1987) was the rationale for the establishment of the trawl surveys and to establish a seasonal data base to assess the abundance and distribution of the shrimp and groundfish stocks

across the northern Gulf of Mexico. The Reef Fish Survey is designed to determine the relative abundance of reef fish populations and habitat using a fish trap/video recording system (Russell, unpublished report).

A major purpose of SEAMAP is to provide resource survey data to State and Federal management agencies and universities participating in SEAMAP activities. This twenty-third in a series of SEAMAP environmental and biological atlases presents such data, in a summarized form, collected during the 2005 SEAMAP surveys. The area covered in the Gulf of Mexico for all SEAMAP survey activities during 2005 is shown in Figure 1.

MATERIALS AND METHODS

Methodology for the 2005 SEAMAP surveys is similar to that of the 1982 through 2004 surveys. Sampling was conducted within the U.S. Exclusive Economic Zone (EEZ) and state territorial waters. The NOAA Ship GORDON GUNTER collected plankton and environmental data during the Spring Plankton Survey from April 21 to May 29 while the USM/GCRL vessel TOMMY MUNRO collected plankton and environmental data from May 11 to May 14.

Vessels that participated in the Summer Shrimp/Groundfish Survey and concurrently sampled plankton and environmental data included the USM/GCRL vessel TOMMY MUNRO (June 24 – July 4), the Louisiana vessel PELICAN (July 7-9), and the NOAA Ship OREGON II (June 15 – August 1). The A.E. Verrill (June 2-7) and the TPWD vessels SAN JACINTO, SABINE, R.J. KEMP, MATAGORDA BAY, and NUECES (June 2-7) did not sample plankton in conjunction with the summer survey.

The NOAA Ship CARETTA participated in the Reef Fish Survey from February 8 – March 25. The NOAA Ship OREGON II participated in the Reef Fish Survey from April 20- May 3. The NOAA Ship GANDY participated in the Reef Fish Survey from May 23 to July 29 and October 18-27.

Vessels that participated in the Fall Shrimp/Groundfish Survey and concurrently sampled plankton and environmental data included the NOAA Ships OREGON II (November 6-16) and GORDON GUNTER (October 11 – November 15); and the Louisiana vessel PELICAN (October 10-13). The Alabama vessel A.E. Verrill (October 19) and TPWD vessels MATAGORDA BAY, SAN JACINTO, R.J. KEMP, NUECES, and SABINE (November 2-29) did not sample plankton in conjunction with the fall survey.

PLANKTON SURVEYS

Since 1982 SEAMAP resource surveys have been conducted by the National Marine Fisheries Service in cooperation with the states of Florida, Alabama, Mississippi, Louisiana, and Texas. Plankton sampling is carried out during these surveys at predetermined SEAMAP stations arranged in a fixed, systematic grid pattern across the entire Gulf of Mexico. Most but not all SEAMAP stations (designated by a unique SEAMAP number) are located at ~56 km or ½ degree intervals along this grid. Some SEAMAP stations are located at < 56 km intervals especially along the continental shelf edge, while others have been moved to avoid obstructions, navigational hazards or

shallow water. Most SEAMAP plankton samples are taken during either dedicated plankton and shrimp/bottomfish (trawl) surveys, but over the years additional samples were taken using SEAMAP gear and collection methods at locations other than designated SEAMAP stations and/or outside established SEAMAP surveys, e.g. during Louisiana seasonal trawl surveys, SEAMAP Squid/Butterfish survey; and other serendipitous or special projects.

The sampling gear and methodology used to collect SEAMAP plankton samples are similar to those recommended by Kramer et al. (1972), Smith and Richardson (1977) and Posgay and Marak (1980). A 61 cm bongo net fitted with 0.333 (0.335)¹ mm mesh netting is fished in an oblique tow path from a maximum depth of 200 m or to 2-5 m off the bottom at depths less than 200 m. A mechanical flowmeter is mounted off-center in the mouth of each bongo net to record the volume of water filtered. Volume filtered ranges from ~20 to 600 m³, but is typically 30 to 40 m³ at the shallowest stations and 300 to 400 m³ at the deepest stations. A single or double 2x1 m pipe frame neuston net fitted with 0.947 (0.950)¹ mm mesh netting is towed at the surface with the frame half-submerged for 10 minutes. Samples are taken upon arrival on station regardless of time of day. At each station either a bongo and/or neuston tow are made depending on the specific survey. Samples are routinely preserved in 5 to 10 % formalin and later transferred after 48 hours to 95 % ethanol for long term storage. During some surveys selected samples are preserved initially in 95 % ethanol and later transferred to fresh ethanol.

Initial processing of one bongo sample and one neuston sample (except those collected by Louisiana vessels) from each SEAMAP station was accomplished at the Sea Fisheries Institute, Plankton Sorting and Identification Center (ZSIOP), in Szczecin, Poland, under a Joint Studies Agreement with NMFS. Plankton samples collected by Louisiana vessels were retained by LDWF for sorting and identification at their facilities using the same protocols used at ZSIOP. Wet plankton volumes of bongo net samples were measured by displacement to estimate net-caught zooplankton biomass (Smith and Richardson 1977). Fish eggs and larvae were removed from bongo net samples, and fish larvae only from neuston net samples. Fish eggs were not identified further, but larvae were identified to the lowest possible taxon (to family in most cases). Body length (either notochord or standard length) was measured.

Sorted ichthyoplankton specimens from ZSIOP and LDWF were sent to the SEAMAP Archiving Center, managed in conjunction with the FWC, for long-term storage under museum conditions. Sorted ichthyoplankton samples from 1982 through 2005 are available for loan to researchers throughout the country. The alternate bongo and neuston samples from each station are retained at USM/GCRL as a backup for those samples transshipped to ZSIOP in case of loss or damage during transit. These backup unsorted plankton samples are curated and housed at the SEAMAP Invertebrate Plankton Archiving Center, managed in conjunction with USM/GCRL, and are available for use by researchers.

See the SEAMAP Operations Manual for a more detailed description of sampling methods and protocols. Refer to the NOAA vessel cruise reports for more specific information on the individual SEAMAP Plankton Surveys conducted during 2005.

¹ Mesh size change in database does not represent an actual change in gear but only a change in the accuracy at which plankton mesh aperture size can be measured by the manufacturer.

ENVIRONMENTAL DATA

Standardized methodology was used although the actual parameters measured varied among vessels participating in each survey. These parameters were measured based on equipment availability. The following parameters were recorded:

Vessel: Vessel code for each vessel.

Station: Station identifiers varied by state and vessel.

Cruise: Cruise numbers varied by state and vessels.

Date: Month/Day/Year.

Time: Local time and time zone, recorded at the start of sampling.

Latitude/longitude: Recorded to seconds.

Barometric pressure: Recorded in millibars.

Wave height: Estimated visually in meters.

Wind speed and direction: Recorded in knots with direction recorded in compass degrees from which the wind was blowing.

Air temperature: Recorded in Centigrade.

Cloud cover: Estimated visually in percent cloud cover.

Secchi depth: Secchi depth in meters, estimated at each daylight station. Standard oceanographic 30-cm white discs were lowered until no longer visible, and then raised until visible. If different depths were recorded, an average was used.

Water Color: Forel-Ule data was recorded.

The following parameters were measured at the surface, mid-depth and bottom; for bottom depths greater than 200 m, samples were taken at surface, 100 m and 200 m:

Water temperature: Temperatures were measured by a hand-held thermometer or by in situ electronic sensors onboard ship. No attempt was made to intercalibrate the various instruments used on individual vessels although several vessels did sample together to calibrate other sampling gear. Some error can be expected.

Salinity: Salinity samples were collected by Niskin bottles and stored for laboratory analysis with a salinometer. Conductivity probes or refractometers were used on some vessels. Salinity samples were also measured with in situ electronic sensors.

Chlorophyll: Chlorophyll samples were collected and frozen for later laboratory analysis. The general procedure for shipboard collection of chlorophyll was to collect more than 9 liters of water from the surface. This was kept stirred by bubbling air through it while filtration was being done. Three samples, to each of which a 1 ml, 1% (W/V), suspension of MgCO₃ was added, of up to 3 liters of water from the 9 liter sample were filtered through GF/C filters. The three filters were placed individually in Petri dishes, wrapped in opaque material and frozen until analysis. Each of the three samples was analyzed separately in the laboratory. Values in the tables that follow are the mean of the three samples.

Laboratory analyses for chlorophyll a and phaeophytin a (chlorophyll degradation product) were conducted by fluorometry and spectrophotometry. The general extraction procedures prior to measurement were similar. Samples analyzed by spectrophotometer included other

chlorophyllous products, but these have not been included as data in this report. The methodology used is described in Strickland and Parsons (1972) and Jeffrey and Humphrey (1975). Some of the values have been deleted from the data base because of analytical errors. In addition, chlorophyll samples data were also collected using a CTD. This method only obtains measures of chlorophyll a and is a measure of fluorescence (FL) and appears in the Tables as such.

Dissolved oxygen: Dissolved oxygen values were measured by electronic probes or by the Winkler titration method. No attempts were made to intercalibrate the methods. When oxygen was measured in samples collected from a Niskin sampler, the oxygen bottles were allowed to overflow a minimum of 10 seconds to eliminate oxygen contamination. The tubing which delivered the water sample was inserted to the bottom of the bottle and withdrawn while the sample was still flowing. The oxygen bottles were sealed with a ground-glass stopper and analyzed onboard the vessels.

Turbidity: Turbidity values were measured by electronic probes when equipment was available.

TRAWL SURVEYS

Summer Shrimp/Groundfish Survey

The sampling strategy and a description of the statistical rationale for the sampling design as described by Nichols in the 1982 SEAMAP Atlas (Stuntz et al. 1985) have been modified. Since 1987, the strategy has been that day/night sampling sites were chosen randomly in areas stratified by depth and statistical area. These areas are shrimp statistical zones 11 through 22 (Figure 2). Trawl stations sampled by NMFS, Alabama, Mississippi and Louisiana are made with a standard SEAMAP 40-ft net, and Texas sampled with a 20-ft net. Depth strata consisted of 1 fm intervals from 5 to 20 fm, a 2 fm interval from 20 to 22 fm, a 3 fm interval from 22 to 25 fm, 5 fm intervals from 25 to 50 fm and a 10 fm interval from 50 to 60 fm. Trawls were towed perpendicularly to the depth contours and covered the entire depth stratum on each station. Single tows were for a maximum of 55 minutes; for certain stations, a series of consecutive trawl tows was necessary to cover a given depth stratum, with a minimum individual tow across each stratum of 10 minutes and a maximum tow of 55 minutes. The Texas vessels towed 10 minutes parallel to the depth stratum. The Louisiana samples did not cover a complete depth stratum on several stations because of the distance between depth contours.

All *Litopenaeus setiferus*, *Farfantepenaeus aztecus*, and *Farfantepenaeus duorarum* were separated from the trawl catch at each station. Total count and weight by species were recorded for each station. A sample of up to 200 shrimp of each species from every trawl was sexed and measured to obtain length-frequency information. Estimated total numbers were derived from the total weights of those processed. Other species of fishes and invertebrates were identified, enumerated, and weighed. Weights and individual measurements on selected species, other than commercial shrimp, were also recorded.

Fall Shrimp/Groundfish Survey

The design of the Fall Survey was similar to the Summer Shrimp/Groundfish Survey. During the Fall Survey trawl stations were made with the standard 40-ft and 20-ft SEAMAP nets and covered

NMFS shrimp statistical zones 11 through 22 (Figure 2). Catch rates on all the vessels sampling were treated in the same manner as the Summer Shrimp/Groundfish Survey, with the exception to shrimp catches, where only 20 shrimp of each species from every trawl were measured, although Louisiana measures a minimum of 50 shrimp.

REEF FISH SURVEY

The primary purpose of this survey is to assess relative abundance and compute population estimates of reef fishes found on natural reef fish habitat in the Gulf of Mexico. Two types of gear are used to deploy video cameras: 1) a single-funnel fish trap (2.13 m long by 0.76 m square) with the camera mounted at a height of 25 cm above the bottom of the trap; or 2) a 4 camera array with 4 cameras mounted orthogonal to each other at a height of 25 cm above the bottom. Both gears are baited with squid before deployment. The resultant video recordings (typically of one hour duration) are processed back at the laboratory where fishes are identified and counted independently by two tape readers. Final counts are entered into the SEAMAP reef fish database along with additional observations on habitat and fish activity.

The hardbottom database from which sampling sites for this survey are chosen was developed in the following manner. Areas of natural reef habitat from Brownsville, Texas to the southern tip of Florida (at 81°00' W longitude and 24°02' N latitude) and between 9 and 110 m water depth were first inscribed on navigation charts, then divided into 10 by 10 nautical mile blocks (primary sample units). Each block was subdivided into 100-m², secondary sample units that were numbered and initially classified as being “reef” or “nonreef” and then entered into a database. Prior to the survey, blocks are selected from this database in the eastern and western Gulf with probability proportional to the number of “reef” sample units within a block. Within each selected block, 100 sample sites are randomly selected. During the survey each selected block is occupied for one 24-h period, where night hours are devoted to ship’s echo sounder surveys of up to 100 sites and daytime hours to trap/video sampling. Each potential sample site surveyed at night is given a final determination as being either a reef site or not based on echo patterns, vertical relief and other characteristics. Up to 8 actual “reef” sites are then randomly selected for sampling during that day (Russell, unpublished report). Trap/video sampling begins one hour after sunrise and ends one hour before sunset. Trap soak time is one hour.

Associated environmental data collected at each site usually includes profiles of salinity, temperature, and surface chlorophyll; and may also include profiles of dissolved oxygen, light transmittance, and fluorescence. Additional environmental and meteorological observations taken on stations follow standard SEAMAP methodology. During the NMFS component of the Reef Fish Survey, fish abundance is also measured with a fisheries acoustic device.

RESULTS

PLANKTON SURVEYS

The SEAMAP Archiving Center received 19,899 identified ichthyoplankton lots in 2005. Most of these samples have been accessioned into the SEAMAP Archiving Center computer systems and the remaining samples are being prepared for accession.

Plankton stations for the Spring Plankton Survey in conjunction with environmental are shown in Figure 3. The plankton stations for the Summer Shrimp/Groundfish Survey are shown in Figure 4. Due to several hurricanes in 2005, the Fall Plankton Survey was cancelled. Plankton stations for the Fall Shrimp/Groundfish Survey are shown in Figure 5.

ENVIRONMENTAL DATA

Environmental data were collected in conjunction with each plankton station for the Spring (Figure 3) Plankton Survey. Environmental data stations for the Summer Shrimp/Groundfish Survey are shown in Figure 6 and the Fall Shrimp/Groundfish Survey in Figure 7. A complete listing of environmental stations and dates of sampling by vessel for all SEAMAP surveys is shown in Table 2. In Table 2 under statistical zone, stations located outside the shrimp statistical zones are blank. Additional environmental information (Secchi readings, Forel-Ule, cloud cover, etc.) may be obtained from the SEAMAP Information System by contacting the SEAMAP Data Manager.

TRAWL SURVEYS

Summer Shrimp/Groundfish Survey

Shrimp and groundfish sampling was conducted during June and July from off Fort Morgan, Alabama to Brownsville, Texas. Figure 8 shows station locations. The Summer Shrimp/Groundfish Survey consisted primarily of biological trawl data and concomitant environmental and plankton data. A species composition listing from the 40-ft and 20-ft trawls is presented in Table 3, ranked in order of abundance, within the categories of finfish, crustaceans, and other invertebrates.

Tables 4a-14a present the biological data, from the 40-ft and 20-ft nets, of the eight most abundant fish, six most abundant invertebrates and squid within NMFS shrimp statistical zones 11 through 22, by depth stratum. Tables 4b-14b list the total catch and environmental data from the 40-ft and 20-ft nets within NMFS statistical zones listed above, by depth stratum.

For all catch rate tables, the standard error of the mean (SEM) was calculated with the equation:

$$SEM = \frac{\alpha}{\sqrt{n}}$$

where α = population standard deviation
n = number of samples

On all tables, NUM = number per hour; all weights shown are in kilograms per hour.

For all “b” tables, discrepancies between catch and environmental data may appear in the number of samples (n). These discrepancies may be due to different sampling depths for trawl and environmental stations, unsuccessful trawl stations and/or stations where only plankton data were collected.

Biological distributions of the ten most abundant finfish, plus red snapper, three main penaeid shrimps, five most abundant invertebrates and squid species, taken from Table 3 are displayed in plots of number/hour and lb/hour in Figures 11-50 computed within a 30 x 30 minute grid. The number in each grid square is the average number/hour or lb/hour from all stations (may be one or more stations) that were sampled within a particular grid. The number for the 30 x 30 minute grid is located in the lower right hand corner of the grid. Data for the biological plots were computed from the 40-ft and 20-ft trawl data, standardized to 40-ft trawls using relative headrope length. In the plots of lb/hour, a zero value indicates less than 0.5 lb/hr taken; only stations where some of the species were taken are shown.

Fall Shrimp/Groundfish Survey

Shrimp and groundfish sampling was conducted during October through December from off Fort Morgan, Alabama to Brownsville, Texas. Figure 9 shows the station locations. The Fall Shrimp/Groundfish Survey consisted of biological trawl data and concomitant environmental and plankton data. A species composition listing from the 40-ft and 20-ft trawls is presented in Table 15. The species lists for Table 15 are ranked in order of abundance within the categories of finfish, crustaceans, and other invertebrates.

Biological distributions of the ten most abundant finfish plus red snapper, three main penaeid shrimps, five most abundant invertebrates and squid species, taken from Table 15 are displayed in plots of number/hour and lb/hour in Figures 50 to 90 computed within a 30 x 30 minute grid. The number in each grid square is the average number/hour or lb/hour from all stations (may be one or more stations) that were sampled within a particular grid. The number for the 30 x 30 minute grid is located in the lower right hand corner of the grid. Data for the biological plots were computed from the 40-ft and 20-ft trawl data, standardized to 40-ft trawls using relative headrope length. In the plots of lb/hour, a zero value indicates less than 0.5 lb/hr taken; only stations where some of the species were taken are shown.

Tables 16a-26a present the biological data, from the 40-ft and 20-ft nets, of the eight most abundant fish, six most abundant invertebrates and squid species within NMFS shrimp statistical zones 11 through 22, by depth stratum. Tables 16b-26b list the total catch and environmental data from the 40-ft and 20-ft nets within the NMFS statistical zone listed above, by depth stratum. The catch data were calculated using the same equation that was used to compute catch rates for the Summer Shrimp/Groundfish Survey and as in the Summer Shrimp/Groundfish Survey, discrepancies in the “b” tables may have occurred.

REAL-TIME DATA MANAGEMENT

The SEAMAP Subcommittee agreed it was imperative to the success of the SEAMAP Program to distribute data on a near real-time basis to the fishing industry and others interested in SEAMAP.

Summarized data were distributed weekly to approximately 200 individuals during the Summer Shrimp/Groundfish Survey. The summarized data in the form of computer plots and data listings were sent to management agencies and industry members. These plots showed station locations, catches of brown, pink, and white shrimp in lb/hr and count/lb, and total finfish catch in lb/hr.

REEF FISH SURVEY

Primary data collection and sampling for reef fish assessment were conducted during February through May by NMFS personnel. Station data for these observations can be found in Table 2 and station locations are plotted in Figure 10. A species composition listing from the traps is presented in Table 26. The species list for Table 27 is ranked in order of abundance. Video tapes from all sources were analyzed using NMFS standardized protocols.

DISCUSSION

The quasisynoptic SEAMAP sampling program and the intended long-term nature of the sampling programs have been designed to provide the baseline data set needed for fishery management and conservation. In 1985, the SEAMAP long-term baseline data was disrupted by the loss of the Spring Gulf-wide plankton and Fall Mackerel Survey. In 1986, the SEAMAP Subcommittee renewed its commitment for the collection of baseline plankton data. These ichthyoplankton samples are and will continue to be used by researchers studying taxonomy, age and growth, bioenergetics, and other life history aspects, as well as spawning biomass and recruitment. Information on species' relative distributions within the Gulf of Mexico can be analyzed with respect to environmental data to assess population abundance as a function of environmental change.

Similar analyses and investigations are being undertaken with Summer and Fall Shrimp/Groundfish Survey data. These data sets are being utilized in resource management decisions, and because of the program's ability to process data quickly, the capability exists to optimize some fisheries on a real-time basis. The long-term data set on all of the species collected, not just those of commercial and recreational importance, offers an opportunity to examine ecological relationships, with the eventual goal of developing management models that take into account the multi-species nature of most Gulf fisheries. The value of the SEAMAP program lies in its use for both immediate and long-range management goals.

Much use has already been made of SEAMAP data. For example, during the past SEAMAP surveys an area of very low dissolved bottom oxygen was found off Louisiana in the summers of 1982, 1985-2005. The presence of this phenomenon and some of the related conditions and biological effects were reported by Leming and Stuntz (1984) and Hanifen et al. (1995), and during such occurrences, SEAMAP has distributed special environmental bulletins and news releases to management agencies and the shrimp industry. In addition, SEAMAP data were used to assist in the identification of the minimum 1997 reduction in red snapper shrimp trawl bycatch mortality rate that would enable the red snapper fishery to still recover to the 20% spawning potential ratio (SPR) by the year 2019 (Goodyear 1997). This analysis was requested and supported by the Gulf of Mexico Fishery Management Council to address the issue of red snapper bycatch. SEAMAP data were also used by some coastal states to determine the status of shrimp stocks and their movements just as the

shrimping seasons were to be opened and SEAMAP data were used to develop a guide to the grouper species of the western North Atlantic Ocean (Grace et al. 1994). The primary purpose of the guide is for species identification with projects that deploy underwater video camera systems.

Since SEAMAP's inception in 1982, the goal of plankton activities in the Gulf of Mexico has been to collect data on the early life stages of fishes and invertebrates that will complement and enhance the fishery-independent data gathered on the adult life-stage (Lyczkowski-Shultz and Brasher 1996).

An annual larval index for the Atlantic bluefin tuna is generated each year from the Spring Plankton Survey and is used by the International Commission for the Conservation of Atlantic Bluefin Tunas to estimate stock size (Scott et al. 1993). Larval indices generated from the Summer Shrimp/Groundfish and Fall Plankton Surveys have now become an integral part of the king mackerel assessment in the Gulf (Gledhill and Lyczkowski-Shultz 2000). Larvae from SEAMAP collections have formed the basis for formal descriptions of larval development for fishes such as the snappers, cobia, tripletail, and dolphin (Drass et al. 2000; Ditty and Shaw 1992; Ditty and Shaw 1993; Ditty et al. 1994). Data on distribution and relative abundance of larvae of all Gulf fishes captured during SEAMAP surveys have been summarized by Richards et al. 1984, Kelley et al. 1985, Kelley et al. 1990, and Kelley et al. 1993.

The SEAMAP data collected during the Summer Shrimp/Groundfish Survey continues to be used extensively for fishery management purposes. In 1981, the Gulf of Mexico Fishery Management Council's plan for shrimp was implemented (Center for Wetland Resources 1980), with one management measure calling for the temporary closure to shrimping in the EEZ off Texas. This closure complements the traditional closure of the Texas territorial sea, normally May 15 through early July of each year. The GMFMC determined that this type of closure would allow small brown shrimp to be protected from harvest, but would still allow the taking of larger brown shrimp by fishermen in deeper waters.

The National Marine Fisheries Service was charged with evaluating the effects of the Texas Closure and submitted a report to the GMFMC in December 2004. This report contained the results and an overview of the effect of the 2004 Texas Closure. After review of these data and other information, the GMFMC voted to continue the Texas Closure for 2005.

DATA REQUESTS

It is the policy of the SEAMAP Subcommittee that all verified non-confidential SEAMAP data, collected specimens, and samples shall be available to all SEAMAP participants, other fishery researchers, and management organizations approved by the Subcommittee. This atlas presents, to those individuals interested in the data or specimens, a chance to review the data in a summary form.

Data and specimen requests from SEAMAP participants, cooperators and others will normally be handled on a first-come, first-served, and time-available basis. Because of personnel and funding limitations, however, certain priorities must be assigned to the data and specimen requests. These priorities are reviewed by the SEAMAP Subcommittee. For further information on SEAMAP data management, see the [Southeast Area Monitoring and Assessment Program \(SEAMAP\) Management Plan: 2006-2010 \(ASMFC 2006\)](#).

Data requests and inquiries, as well as requests for plankton samples, can be made by contacting Jeff Rester, the SEAMAP Coordinator, Gulf States Marine Fisheries Commission, 2404 Government Street, Ocean Springs, MS 39564; (228) 875-5912 or via e-mail at jrester@gsmfc.org.

Table 1. List of SEAMAP survey activities from 1982 to 2005.

SEAMAP SURVEY ACTIVITIES							
YEAR	SPRING PLANKTON	SUMMER SHRIMP/GROUNDFISH	BUTTERFISH	FALL PLANKTON	FALL SHRIMP/GROUNDFISH	WINTER PLANKTON	REEF FISH
1982	APRIL-MAY	JUNE-JULY	--	--	--	--	--
1983	APRIL-MAY	JUNE-JULY	--	--	--	DECEMBER	--
1984	APRIL-MAY	JUNE-JULY	--	AUGUST	--	DECEMBER	--
1985	--	JUNE-JULY	JULY-AUGUST	SEPTEMBER	SEPTEMBER-DECEMBER	--	--
1986	APRIL-MAY	JUNE-JULY	MAY-JUNE	SEPTEMBER	OCTOBER-DECEMBER	--	--
1987	APRIL-MAY	JUNE-JULY	--	SEPTEMBER	SEPTEMBER-DECEMBER	--	--
1988	MARCH-MAY	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-DECEMBER	--	--
1989	APRIL-MAY	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-DECEMBER	--	--
1990	APRIL-MAY	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-DECEMBER	--	--
1991	APRIL-MAY	JUNE-JULY	--	AUGUST-SEPTEMBER	SEPTEMBER-DECEMBER	--	--
1992	APRIL-MAY	JUNE-JULY	--	AUGUST-OCTOBER	OCTOBER-DECEMBER	--	MAY-JUNE
1993	APRIL-MAY	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-DECEMBER	JANUARY- FEBRUARY	MAY-JULY, SEPTEMBER/NOVEMBER
1994	APRIL-MAY	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-NOVEMBER	--	MAY-JULY, AUGUST-OCTOBER, DECEMBER
1995	APRIL-JUNE	JUNE-JULY	--	SEPTEMBER	OCTOBER-DECEMBER	--	JANUARY, JUNE-AUGUST, DECEMBER
1996	APRIL-JUNE	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-DECEMBER	DECEMBER	JULY, AUGUST, NOVEMBER
1997	APRIL-JUNE	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-DECEMBER	--	JUNE, JULY, AUGUST, NOVEMBER
1998	APRIL-JUNE	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-NOVEMBER	--	MAY, JULY, AUGUST
1999	APRIL-MAY	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-NOVEMBER	--	JANUARY, AUGUST, OCTOBER, DECEMBER
2000	APRIL-MAY	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-DECEMBER	--	OCTOBER, NOVEMBER
2001	APRIL-MAY	JUNE-JULY	--	AUGUST-OCTOBER	OCTOBER-DECEMBER	--	MAY, JUNE, OCTOBER
2002	APRIL-MAY	JUNE-JULY	--	AUGUST-OCTOBER	OCTOBER-DECEMBER	--	FEBRUARY-MAY, OCTOBER
2003	MAY	JUNE-JULY	--	AUGUST-OCTOBER	OCTOBER-DECEMBER	--	OCTOBER-NOVEMBER
2004	APRIL-JUNE	JUNE-JULY	--	SEPTEMBER	OCTOBER-DECEMBER	JANUARY	FEBRUARY-MARCH
2005	APRIL-MAY	JUNE-AUGUST	--	--	OCTOBER-NOVEMBER	--	FEBRUARY-JULY, OCTOBER

Table 2. Selected environmental parameters measured during 2005 SEAMAP surveys in the Gulf of Mexico, by individual vessel and survey.
(Gear codes: ST = trawl; PN = bongo; NN = neuston net; BG = bathythermograph (CTD); TV = trap/video; EV = environmental).

OREGON II, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
1	4/20/2005	1748	2726.1	9630.9	20		40	79	22.7	22.4	20.2	33.3	36.3	36.5	0.887	7.9	7.4	5.1	
2	4/20/2005	1852	2726.8	9631.3	20		36	72	22.7	22.7	20.5	33.3	36.3	36.4	0.302	7.9	7.5	5.6	
3	4/20/2005	2001	2726.6	9631.5	20		34	68	22.7	22.7	20.5	33.3	36.3	36.4	0.487	7.9	7.6	5.7	
4	4/20/2005	2109	2726.6	9631.4	20		36	73	22.7	22.6	20.4	33.3	36.3	36.4	0.538	8.0	7.5	5.6	
5	4/20/2005	2215	2727.0	9631.4	20		40	79	22.7	22.3	20.4	33.2	36.3	36.4	0.610	8.0	7.4	5.6	
6	4/20/2005	2319	2726.6	9630.8	20		40	81	22.7	22.3	20.3	33.2	36.3	36.4	0.556	8.0	7.5	5.3	
7	4/21/2005	1323	2740.6	9615.9	20		40	81	23.0	22.2	20.6	33.4	36.0	36.4	0.426	7.9	7.8	6.1	
8	4/21/2005	1453	2744.6	9614.3	20		32	65	22.6	23.2	20.3	32.7	36.3	36.3	0.431	8.0	7.7	5.7	
9	4/21/2005	1629	2744.7	9614.6	20		34	68	22.7	23.3	20.3	32.7	36.4	36.3	0.347	8.0	7.7	5.6	
10	4/21/2005	1737	2744.8	9614.3	20		34	69	22.8	23.3	20.2	32.6	36.4	36.3	0.493	8.1	7.7	5.5	
11	4/21/2005	1822	2744.6	9614.3	20	113													TV
12	4/21/2005	1850	2745.0	9613.9	20		34	68	22.8	23.3	20.3	32.6	36.4	36.3	0.428	8.1	7.7	5.6	
13	4/21/2005	2034	2745.3	9613.7	20		36	71	22.9	23.2	20.2	32.6	36.3	36.3	0.422	8.1	7.7	5.5	
14	4/21/2005	2147	2745.2	9614.0	20		34	68	23.0	23.3	20.2	32.6	36.4	36.3	0.531	8.1	7.7	5.5	
15	4/21/2005	2301	2745.2	9613.7	20		35	70	23.1	23.0	20.2	32.6	36.3	36.3	0.576	8.1	7.6	5.5	
16	4/22/2005	1259	2751.7	9416.3	0		58	117	22.7	21.5	19.0	35.5	36.4	36.4	0.419	7.8	7.8	4.5	
17	4/22/2005	1432	2751.9	9415.7	0		46	91	22.8	21.8	20.6	35.3	36.4	36.5	0.275	7.8	7.8	6.4	
18	4/22/2005	1540	2751.9	9415.2	0		43	86	22.9	22.0	20.9	35.2	36.4	36.5	0.267	7.8	7.9	7.3	
19	4/22/2005	1617	2751.6	9415.2	0	150													TV
20	4/22/2005	1649	2751.9	9413.9	0		52	104	23.0	21.6	19.6	35.2	36.4	36.4	0.181	7.9	7.8	5.0	
21	4/22/2005	1822	2752.4	9414.9	0		48	95	23.1	21.9	19.7	35.1	36.4	36.5	0.206	7.9	7.9	5.2	
22	4/22/2005	1906	2752.1	9414.9	0	180													TV
23	4/22/2005	1928	2751.7	9415.4	0		38	77	23.2	22.2	21.0	35.3	36.4	36.5	0.230	7.9	7.9	7.5	
24	4/22/2005	2122	2753.0	9414.6	0		63	126	23.1	21.5	18.6	35.4	36.4	36.4	0.304	7.9	7.8	4.3	
25	4/22/2005	2220	2752.6	9413.7	0		58	116	23.2	21.4	19.5	35.2	36.4	36.4	0.360	7.9	7.8	4.9	
26	4/23/2005	1302	2749.9	9352.3	0		58	116	23.0	21.4	19.8	36.5	36.5	36.4	0.201	7.8	7.9	5.5	
27	4/23/2005	1347	2750.1	9352.3	0	206													TV

Table 2. Selected environmental parameters (continued)

OREGON II, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
28	4/23/2005	1428	2750.0	9352.1	0		59	118	23.0	21.3	19.5	36.5	36.4	36.4	0.127	7.8	7.8	5.2	
29	4/23/2005	1825	2751.3	9351.5	0		40	79	22.3	22.5	21.2	35.9	36.5	36.5	0.105	7.9	7.8	7.7	
30	4/23/2005	1923	2751.7	9352.9	0		52	104	22.1	21.9	19.7	35.9	36.4	36.5	0.115	7.9	7.9	5.4	
31	4/23/2005	2022	2752.6	9352.0	0		50	99	21.9	21.8	19.9	35.7	36.4	36.5	0.124	7.9	7.8	5.5	
32	4/23/2005	2133	2751.9	9351.1	0		36	73	22.2	22.4	21.3	35.4	36.5	36.5	0.155	7.9	7.8	7.7	
33	4/23/2005	2243	2751.8	9350.9	0		42	85	22.1	22.1	21.2	35.2	36.5	36.5	0.301	8.0	7.8	7.7	
34	4/24/2005	1302	2751.9	9349.9	0		46	92	21.7	21.8	21.2	35.1	36.4	36.5	0.283	7.9	7.8	7.6	
35	4/24/2005	1417	2750.1	9349.5	0		42	85	21.7	22.5	21.2	35.1	36.5	36.5	0.189	7.9	7.8	7.5	
36	4/24/2005	1508	2750.2	9349.3	0	196													TV
37	4/24/2005	1525	2751.1	9349.1	0	166	42	85	21.7	22.5	21.2	35.1	36.5	36.5	0.189	7.9	7.8	7.5	TV
38	4/24/2005	1718	2751.7	9348.2	0		46	91	21.8	22.4	20.9	34.9	36.4	36.5	0.172	8.0	7.9	7.2	
39	4/24/2005	1818	2753.2	9349.9	0		46	93	21.8	22.5	21.0	35.0	36.4	36.5	0.157	8.0	7.8	7.3	
40	4/24/2005	1856	2753.1	9349.6	0	180													TV
41	4/24/2005	1929	2753.5	9349.6	0		40	81	21.8	22.8	21.1	35.0	36.4	36.5	0.207	8.0	7.8	7.5	
42	4/24/2005	2103	2753.8	9348.4	0		44	89	21.9	22.4	21.0	34.7	36.4	36.5	0.229	8.0	7.8	7.4	
43	4/24/2005	2209	2754.2	9348.6	0		46	93	21.9	22.1	21.0	34.7	36.4	36.5	0.328	8.0	7.8	7.4	
44	4/24/2005	2319	2754.8	9349.0	0		58	115	21.9	21.6	19.3	34.7	36.5	36.4	0.349	8.0	7.7	4.8	
45	4/25/2005	1252	2819.5	9409.1	18		24	48	21.5	20.8	20.1	34.0	35.5	36.2	0.564	8.0	8.0	6.8	
46	4/25/2005	1352	2819.4	9409.3	18		23	46	21.5	20.7	20.1	34.0	35.0	36.3	0.541	8.0	8.0	6.8	
47	4/25/2005	1456	2819.6	9409.3	18		24	49	21.5	20.7	20.1	33.9	35.8	36.2	0.614	8.0	8.0	6.8	
48	4/25/2005	1537	2819.5	9408.8	18	72													TV
49	4/25/2005	1604	2819.9	9408.8	18		18	36	21.5	21.5	20.4	33.9	34.0	36.3	0.405	8.0	8.0	7.6	
50	4/25/2005	1730	2819.7	9409.6	18		26	51	21.5	20.3	20.1	33.9	36.0	36.3	0.707	8.0	8.0	6.9	
51	4/25/2005	1807	2819.5	9409.5	18	85													TV
52	4/25/2005	1827	2820.2	9408.7	18		23	46	21.5	20.4	20.1	33.8	35.7	36.2	0.633	8.0	8.0	6.9	
53	4/25/2005	2006	2820.1	9408.4	18		24	47	21.4	20.3	20.1	33.8	35.2	36.2	0.872	8.0	7.9	6.9	
54	4/25/2005	2112	2820.0	9408.5	18		20	39	21.4	21.3	20.2	33.8	33.9	36.3	1.066	8.0	8.0	7.2	

Table 2. Selected environmental parameters (continued)

OREGON II, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
55	4/25/2005	2211	2819.8	9408.3	18		20	41	21.4	21.4	20.1	33.8	33.9	36.3	0.932	8.0	8.0	7.0	
56	4/28/2005	1302	2805.6	9432.4	18		28	56	23.0	23.0	20.4	35.6	35.6	36.3	0.223	7.7	7.7	6.3	
57	4/28/2005	1416	2805.8	9432.1	18		28	55	22.9	22.5	20.4	35.5	35.7	36.3	0.136	7.7	7.8	6.3	
58	4/28/2005	1454	2805.6	9432.3	18	102													TV
59	4/28/2005	1528	2804.8	9431.8	18		28	55	23.1	22.5	20.3	35.7	35.8	36.3	0.104	7.7	7.8	6.5	
60	4/28/2005	1728	2803.6	9431.4	18		25	50	23.3	23.2	20.5	35.8	35.8	36.3	0.106	7.7	7.7	6.9	
61	4/28/2005	1927	2803.9	9430.8	18		27	54	23.4	23.3	20.3	35.8	35.9	36.3	0.110	7.7	7.7	6.7	
62	4/28/2005	2009	2803.7	9431.0	18	97													TV
63	4/28/2005	2040	2803.8	9430.6	18		28	56	23.4	23.4	20.4	35.9	35.9	36.3	0.121	7.7	7.7	6.7	
64	4/28/2005	2255	2803.3	9430.8	18		28	56	23.5	23.5	20.4	35.9	36.0	36.3	0.222	7.7	7.7	6.8	
65	4/29/2005	1248	2755.1	9335.7	0		22	45	22.6	22.6	22.6	36.1	36.2	36.4	0.193	7.8	7.8	7.7	
66	4/29/2005	1401	2753.0	9337.0	0		49	98	22.7	22.6	19.7	36.2	36.4	36.4	0.199	7.8	7.8	5.4	
67	4/29/2005	1440	2752.9	9337.0	0	173													TV
68	4/29/2005	1519	2753.8	9335.7	0		32	65	22.3	22.7	21.6	35.5	36.3	36.4	0.116	7.9	7.8	7.7	
69	4/29/2005	1703	2754.4	9335.1	0		30	60	22.4	22.5	21.9	35.3	36.2	36.4	0.209	7.9	7.7	7.8	
70	4/29/2005	1814	2757.1	9335.4	0		52	105	22.5	21.9	19.0	35.6	36.4	36.4	0.177	7.8	7.9	4.7	
71	4/29/2005	1857	2756.9	9335.5	0	145													TV
72	4/29/2005	1921	2756.8	9335.9	0		28	57	22.7	22.6	21.4	35.9	36.1	36.4	0.101	7.8	7.8	7.8	
73	4/29/2005	2101	2756.7	9336.6	0		35	70	22.8	22.5	21.1	35.2	36.4	36.4	0.286	7.9	7.9	7.5	
74	4/29/2005	2156	2757.1	9337.5	0	165	47	94	22.7	22.0	19.9	34.7	36.5	36.4	0.369	7.9	7.8	5.7	TV
75	4/29/2005	2307	2756.3	9337.6	0		41	82	22.7	22.4	20.5	35.1	36.5	36.4	0.333	7.9	7.9	6.8	
76	4/30/2005	1245	2755.0	9326.8	0		29	58	22.1	22.7	21.2	34.8	36.1	36.4	0.401	7.9	7.8	7.5	
77	4/30/2005	1406	2756.1	9326.5	0		42	85	22.3	22.5	19.3	35.0	36.4	36.4	0.433	7.9	7.8	5.3	
78	4/30/2005	1451	2755.9	9326.7	0	148													TV
79	4/30/2005	1526	2755.9	9324.5	0		49	98	22.2	21.5	18.9	34.5	36.3	36.4	0.362	7.9	7.8	5.0	
80	5/1/2005	1611	2753.8	9327.4	0		36	71	22.1	22.6	21.1	35.1	36.4	36.4	0.252	7.8	7.8	7.3	
81	5/1/2005	1718	2754.0	9326.8	0		66	133	22.1	21.5	17.8	35.1	36.4	36.3	0.263	7.9	7.6	4.4	

Table 2. Selected environmental parameters (continued)

OREGON II, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
82	5/3/2005	1247	2752.7	9318.2	0		24	48	22.1	22.2	21.9	35.4	35.5	36.4	0.280	7.8	7.8	7.7	
83	5/3/2005	1354	2753.0	9318.9	0		44	88	22.0	21.6	19.8	35.3	36.4	36.4	0.197	7.8	7.8	5.7	
84	5/3/2005	1500	2754.7	9318.1	0		42	83	22.0	21.7	19.9	35.3	36.3	36.4	0.175	7.8	7.8	5.8	
85	5/3/2005	1543	2754.8	9317.9	0	165													TV
86	5/3/2005	1615	2753.6	9317.3	0		26	52	22.1	22.1	21.5	35.4	35.5	36.4	0.128	7.8	7.8	7.5	
87	5/3/2005	2015	2753.8	9316.4	0		33	66	22.2	22.2	20.5	35.3	35.4	36.4	0.187	7.9	7.9	6.7	
88	5/4/2005	1236	2749.6	9303.9	0	109	34	68	22.1	22.1	20.6	36.2	36.2	36.4	0.321	7.8	7.8	7.0	TV
89	5/4/2005	1403	2749.7	9304.0	0	122	36	71	22.1	22.1	20.6	36.2	36.2	36.4	0.339	7.8	7.8	7.1	TV
90	5/4/2005	1522	2749.1	9304.5	0	157	46	91	22.0	21.1	20.5	36.2	36.2	36.4	0.144	7.8	7.8	7.0	TV
91	5/4/2005	1619	2749.1	9304.5	0	158													TV
92	5/4/2005	1645	2748.7	9304.1	0	167	42	85	22.0	21.6	20.3	36.2	36.3	36.4	0.173	7.8	7.8	6.5	TV
93	5/4/2005	1819	2748.0	9304.0	0	113	31	62	22.1	22.1	20.9	36.2	36.3	36.4	0.137	7.8	7.8	7.4	TV
94	5/4/2005	1929	2747.9	9304.2	0	119	32	65	22.1	22.1	20.9	36.2	36.3	36.4	0.176	7.9	7.8	7.4	TV
95	5/4/2005	2033	2748.1	9303.5	0	147	40	79	22.1	22.1	20.3	36.2	36.3	36.4	0.181	7.8	7.8	6.6	TV
96	5/4/2005	2145	2748.4	9303.3	0	123	37	74	22.1	22.1	20.6	36.3	36.3	36.4	0.280	7.8	7.8	7.2	TV
97	5/5/2005	1233	2757.7	9235.7	0	90	28	56	22.8	22.8	22.8	36.5	36.5	36.5	0.326	7.6	7.6	7.6	TV
98	5/5/2005	1348	2757.9	9233.4	0	224	62	125	22.8	22.6	19.4	36.5	36.5	36.4	0.157	7.7	7.6	5.1	TV
99	5/5/2005	1440	2757.9	9233.4	0	225													TV
100	5/5/2005	1511	2758.6	9235.4	0	165	44	87	22.8	22.8	19.7	36.5	36.5	36.5	0.130	7.7	7.7	5.3	TV
101	5/5/2005	1700	2758.6	9236.0	0	156	52	104	22.8	22.8	19.7	36.5	36.5	36.5	0.090	7.7	7.7	5.3	TV
102	5/5/2005	1758	2758.7	9236.1	0	154	52	105	22.8	22.7	19.8	36.5	36.5	36.5	0.095	7.7	7.7	5.4	TV
103	5/5/2005	1852	2758.7	9236.2	0	170	59	118	22.9	22.7	19.4	36.5	36.5	36.5	0.091	7.7	7.7	5.1	TV
104	5/5/2005	1944	2758.7	9236.2	0	170													TV
105	5/5/2005	2007	2758.3	9237.2	0	178	58	117	22.9	22.8	19.4	36.5	36.5	36.5	0.107	7.7	7.7	5.1	TV
106	5/5/2005	2147	2758.1	9237.1	0	184	58	117	22.9	22.8	19.5	36.5	36.5	36.5	0.144	7.7	7.7	5.1	TV
107	5/5/2005	2247	2757.5	9236.2	0	168	56	113	22.9	22.8	19.5	36.5	36.5	36.5	0.178	7.7	7.7	5.2	TV
108	5/6/2005	1230	2755.6	9222.7	0	138	34	68	22.4	22.4	21.5	36.5	36.5	36.5	0.213	7.8	7.8	7.2	TV

Table 2. Selected environmental parameters (continued)

OREGON II, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
109	5/6/2005	1337	2756.1	9222.2	0	177	30	61	22.4	22.4	21.6	36.5	36.5	36.5	0.141	7.8	7.8	7.3	TV
110	5/6/2005	1449	2756.1	9222.2	0	176													TV
111	5/6/2005	1509	2756.7	9222.8	0	175	43	86	22.5	22.4	21.0	36.5	36.5	36.5	0.069	7.8	7.8	7.0	TV
112	5/6/2005	1700	2757.4	9223.0	0		44	87	22.6	22.5	20.5	36.5	36.5	36.5	0.050	7.8	7.8	6.5	
113	5/6/2005	1809	2757.9	9222.4	0		32	63	22.6	22.5	22.2	36.5	36.5	36.5	0.050	7.8	7.8	7.7	
114	5/6/2005	1845	2757.9	9222.1	0	224													TV
115	5/6/2005	1908	2758.9	9221.9	0		57	114	22.8	22.3	19.7	36.5	36.5	36.5	0.050	7.8	7.8	5.2	
116	5/6/2005	2051	2759.1	9223.1	0		40	81	22.7	22.4	20.7	36.5	36.5	36.5	0.072	7.8	7.8	7.1	
117	5/6/2005	2154	2759.2	9223.2	0		40	80	22.7	22.4	20.6	36.5	36.5	36.5	0.116	7.8	7.8	6.7	
118	5/7/2005	1244	2802.9	9226.1	16		44	87	22.5	22.6	20.4	36.4	36.5	36.4	0.191	7.8	7.7	6.7	
119	5/7/2005	1356	2802.5	9226.5	16		40	79	22.5	22.6	21.0	36.4	36.5	36.4	0.096	7.8	7.7	7.6	
120	5/7/2005	1508	2801.9	9227.6	16		40	80	22.7	22.5	21.0	36.5	36.5	36.4	0.067	7.8	7.8	7.7	
121	5/7/2005	1548	2801.7	9227.3	16	178													TV
122	5/7/2005	1618	2801.1	9228.0	16		44	88	22.9	22.6	19.9	36.5	36.5	36.5	0.065	7.8	7.8	5.6	
123	5/7/2005	1756	2801.1	9228.9	16		46	91	23.0	22.6	19.9	36.5	36.5	36.5	0.050	7.8	7.8	5.7	
124	5/7/2005	1855	2801.1	9226.9	16		55	110	22.9	22.5	19.9	36.5	36.5	36.4	0.072	7.8	7.7	5.5	
125	5/7/2005	1934	2800.9	9227.0	16	176													TV
126	5/7/2005	1948	2800.2	9227.4	16	177	44	89	23.1	22.6	19.9	36.5	36.5	36.5	0.079	7.8	7.7	5.6	TV
127	5/7/2005	2208	2803.2	9228.6	16		40	79	23.1	22.6	21.0	36.5	36.5	36.4	0.143	7.8	7.8	7.4	
128	5/8/2005	1231	2821.0	9228.1	16	100	28	56	22.4	22.5	20.5	36.3	36.5	36.4	0.190	7.8	7.8	7.2	TV
129	5/8/2005	1337	2821.1	9228.0	16	106	29	58	22.4	22.5	20.4	36.3	36.5	36.3	0.120	7.8	7.8	6.9	TV
130	5/8/2005	1439	2820.7	9227.6	16	94	28	57	22.5	22.4	20.4	36.3	36.4	36.4	0.086	7.8	7.8	7.1	TV
131	5/8/2005	1524	2820.7	9227.6	16	96													TV
132	5/8/2005	1543	2821.2	9228.0	16	105	28	57	22.5	22.5	20.4	36.3	36.5	36.4	0.079	7.8	7.8	7.0	TV
133	5/8/2005	1731	2821.1	9227.4	16		29	58	22.7	22.5	20.4	36.3	36.5	36.4	0.086	7.8	7.8	7.0	
134	5/8/2005	1833	2820.8	9227.2	16		28	56	22.8	22.3	20.4	36.3	36.4	36.4	0.092	7.8	7.8	7.2	
135	5/8/2005	1932	2820.8	9226.8	16		30	59	22.8	22.4	20.4	36.3	36.5	36.4	0.088	7.9	7.8	6.9	

Table 2. Selected environmental parameters (continued)

OREGON II, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
136	5/8/2005	2034	2820.5	9227.3	16		26	53	22.9	22.4	20.4	36.2	36.4	36.4	0.108	7.9	7.8	7.1	
137	5/8/2005	2113	2820.2	9227.1	16	70													TV
138	5/8/2005	2141	2820.0	9227.4	16		30	60	22.8	22.4	20.4	36.2	36.4	36.4	0.176	7.9	7.8	6.9	
139	5/8/2005	2312	2819.8	9227.5	16		30	60	22.8	22.5	20.4	36.2	36.5	36.4	0.222	7.9	7.8	6.9	
140	5/9/2005	1243	2756.8	9200.5	0		28	57	23.8	23.2	22.1	36.6	36.6	36.5	0.109	7.6	7.7	7.6	
141	5/9/2005	1400	2756.5	9200.5	0		30	59	23.9	23.1	22.8	36.6	36.6	36.6	0.072	7.6	7.7	7.7	
142	5/9/2005	1504	2757.1	9200.0	0		47	94	23.9	23.0	20.8	36.6	36.6	36.5	0.058	7.6	7.7	6.9	
143	5/9/2005	1548	2756.9	9200.2	0	181													TV
144	5/9/2005	1616	2756.0	9200.2	0		40	81	24.0	23.0	21.0	36.6	36.6	36.5	0.057	7.6	7.7	7.2	
145	5/9/2005	1756	2756.2	9159.9	0		41	82	24.2	23.0	21.1	36.6	36.6	36.5	0.050	7.6	7.7	7.3	
146	5/9/2005	1900	2757.6	9200.6	0		52	103	24.4	23.0	20.3	36.6	36.6	36.5	0.055	7.7	7.8	6.1	
147	5/9/2005	1938	2757.3	9200.8	0	158													TV
148	5/9/2005	2007	2758.2	9159.9	0		52	104	24.1	22.8	20.5	36.6	36.6	36.5	0.070	7.7	7.8	6.5	
149	5/9/2005	2159	2758.1	9200.4	0		46	91	24.0	23.1	21.1	36.6	36.6	36.4	0.112	7.7	7.8	7.3	
150	5/9/2005	2304	2758.1	9201.0	0		42	84	24.8	23.1	21.2	36.6	36.6	36.4	0.095	7.6	7.8	7.4	
151	5/10/2005	1231	2804.6	9159.3	15	161	43	86	23.6	22.9	20.7	36.6	36.5	36.5	0.113	7.7	7.8	6.8	TV
152	5/10/2005	1342	2804.8	9159.3	15	159	39	78	23.6	23.1	21.0	36.6	36.5	36.5	0.037	7.7	7.7	7.3	TV
153	5/10/2005	1559	2805.0	9159.0	15		38	76	23.8	23.1	21.3	36.6	36.5	36.5	0.027	7.7	7.8	7.5	
154	5/10/2005	1640	2804.8	9159.4	15	148													TV
155	5/10/2005	1716	2805.0	9158.5	15		44	87	24.3	23.0	20.4	36.6	36.5	36.5	0.034	7.8	7.8	6.2	
156	5/10/2005	1842	2804.6	9158.7	15		44	87	24.2	23.0	20.7	36.6	36.5	36.5	0.035	7.7	7.8	6.8	
157	5/10/2005	1944	2804.8	9159.6	15		37	74	24.0	23.0	21.0	36.6	36.5	36.5	0.058	7.7	7.8	7.2	
158	5/10/2005	2027	2805.2	9159.5	15	147													TV
159	5/10/2005	2041	2805.5	9159.2	15		38	76	24.0	22.9	21.2	36.5	36.5	36.5	0.071	7.7	7.8	7.5	
160	5/10/2005	2244	2805.2	9159.3	15		40	79	24.0	22.8	21.0	36.6	36.5	36.5	0.129	7.8	7.8	7.3	
161	5/11/2005	1242	2803.1	9128.2	15		58	115	25.3	23.3	20.5	36.5	36.6	36.5	0.166	7.6	7.7	6.2	
162	5/11/2005	1359	2803.3	9127.9	15		56	111	25.3	23.0	20.7	36.5	36.5	36.5	0.087	7.6	7.8	6.2	

Table 2. Selected environmental parameters (continued)

OREGON II, REEFFISH SURVEY																				
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR	
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX		
163	5/11/2005	1516	2802.6	9128.0	15		64	127	25.4	22.9	19.0	36.5	36.6	36.4	0.091	7.5	7.7	5.1		
164	5/11/2005	1557	2802.3	9128.3	15	217														TV
165	5/11/2005	1627	2802.8	9127.3	15		60	120	25.5	23.2	19.6	36.5	36.6	36.5	0.056	7.6	7.6	5.5		
166	5/11/2005	1810	2802.1	9127.5	15		62	124	25.3	23.0	20.2	36.5	36.5	36.5	0.055	7.6	7.7	5.8		
167	5/11/2005	1921	2802.5	9129.3	15		50	99	25.6	23.5	21.6	36.5	36.6	36.5	0.065	7.6	7.7	7.4		
168	5/11/2005	2025	2801.9	9129.7	15		64	129	25.6	23.0	20.3	36.5	36.6	36.5	0.084	7.6	7.7	5.9		
169	5/11/2005	2113	2801.6	9129.7	15	240														TV
170	5/11/2005	2141	2801.1	9129.3	15		64	129	25.7	23.1	20.3	36.5	36.6	36.5	0.137	7.6	7.7	5.8		
171	5/11/2005	2322	2800.7	9128.6	15		56	111	25.7	23.4	21.0	36.5	36.6	36.5	0.144	7.6	7.7	7.0		
601	5/2/2005	1258	2749.8	9323.9	0		72	145	22.0	21.5	17.4	35.3	36.5	36.3	0.273	7.8	7.5	4.3		
602	5/2/2005	1730	2749.8	9323.8	0	252														TV
603	5/2/2005	1904	2754.1	9327.6	0		75	150	22.2	21.5	17.8	35.4	36.5	36.3	0.162	7.9	7.5	4.4		
604	5/2/2005	2047	2754.0	9327.6	0	273														TV
605	5/3/2005	127	2747.5	9326.5	0		94	188	22.3	21.1	15.6	35.7	36.5	36.1	0.225	7.9	6.3	4.2		
606	5/3/2005	35	2747.5	9326.5	0	333														TV

Table 2. Selected environmental parameters (continued)

CARETTA, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
1	2/8/2005	2103	2613.6	9708.9	21		28	56	19.9	19.3	19.1	36.2	36.2	36.2	0.000	7.6	7.5	7.3	
2	2/16/2005	1908	2916.3	8538.7	8	102	29	58	20.0	19.3	19.1	36.2	36.2	36.2	0.000	7.6	7.5	7.3	TV
3	2/16/2005	2004	2914.6	8540.0	8	122	34	68	20.3	19.5	19.1	36.2	36.2	35.8	0.000	7.6	7.5	7.1	TV
4	2/16/2005	2057	2914.4	8540.8	8	123	34	67	20.3	19.5	19.0	36.2	36.2	36.2	0.000	7.6	7.5	7.1	TV
5	2/16/2005	2150	2913.6	8539.8	8	124	34	67	20.4	19.6	19.1	36.2	36.2	36.2	0.000	5.1	7.4	7.1	TV
6	2/17/2005	1400	2915.1	8541.3	8	128	36	72	19.9	19.5	19.1	36.2	36.2	36.2	0.000	7.6	7.4	7.2	TV
7	2/17/2005	1454	2915.4	8541.4	8	114	35	70	19.9	19.5	19.1	36.2	36.2	36.2	0.000	7.7	7.5	7.2	TV
8	2/17/2005	1545	2915.7	8541.8	8	134	35	70	19.9	19.6	19.1	36.1	36.2	36.2	0.000	7.6	7.5	7.2	TV
9	2/17/2005	1646	2915.8	8541.8	8	109	36	71	19.8	19.5	19.1	36.1	36.2	36.2	0.000	7.7	7.4	7.2	TV
10	2/17/2005	1750	2915.9	8541.9	8	113	35	70	19.8	19.5	19.1	36.1	36.2	36.2	0.000	7.7	7.4	7.2	TV
11	2/17/2005	1842	2916.2	8542.4	8	109	34	69	19.8	19.5	19.1	36.1	36.2	36.2	0.000	7.7	7.5	7.1	TV
12	2/17/2005	1937	2916.6	8543.0	8	117	34	69	19.8	19.5	19.1	36.1	36.2	36.2	0.000	7.7	7.5	7.1	TV
13	2/20/2005	1547	2912.8	8539.8	8	121	5	10	20.8	20.8	20.8	36.4	36.4	36.4	0.000	7.3	7.3	0.0	TV
14	2/20/2005	1642	2913.0	8539.9	8	126	36	71	20.8	20.1	19.2	36.4	36.3	36.2	0.000	7.3	7.4	7.3	TV
15	2/20/2005	1753	2911.3	8540.7	8	133	36	71	21.1	20.9	19.7	36.4	36.4	36.4	0.000	7.3	7.3	6.1	TV
16	2/20/2005	1850	2911.3	8540.7	8	135	34	69	21.2	20.8	19.6	36.4	36.4	36.3	0.000	7.2	7.3	6.4	TV
17	2/20/2005	1951	2911.3	8541.2	8	140	38	77	21.1	20.4	19.7	36.4	36.3	36.3	0.000	7.3	7.4	6.3	TV
18	2/20/2005	2044	2910.4	8541.8	8	128	40	81	21.2	20.5	19.6	36.4	36.3	36.3	0.000	7.3	7.2	6.4	TV
19	2/20/2005	2139	2910.1	8542.5	8	134	39	78	21.1	20.5	19.8	36.4	36.3	36.3	0.000	7.3	7.3	6.3	TV
20	2/21/2005	1422	2910.4	8542.2	8	146	41	82	20.9	20.7	19.8	36.4	36.4	36.3	0.000	7.3	7.2	6.7	TV
21	2/21/2005	1527	2910.0	8542.8	8	135	40	79	20.9	20.3	19.8	36.4	36.3	36.3	0.000	7.3	7.0	6.7	TV
22	2/21/2005	1621	2909.9	8543.0	8	138	40	81	20.8	20.2	19.9	36.4	36.3	36.3	0.000	7.3	6.9	6.7	TV
23	2/21/2005	1717	2909.9	8543.1	8	137	42	84	20.8	20.2	19.8	36.4	36.3	36.3	0.000	7.4	6.9	6.7	TV
24	2/21/2005	1807	2909.8	8543.5	8	145	40	80	20.8	20.6	20.0	36.4	36.4	36.3	0.000	7.4	7.2	6.8	TV
25	2/21/2005	1858	2909.8	8543.6	8	154	41	82	20.8	20.7	19.9	36.3	36.4	36.3	0.000	7.4	7.3	6.7	TV
26	2/21/2005	1953	2909.8	8543.6	8	152	40	81	20.8	20.7	20.1	36.3	36.4	36.3	0.000	7.4	7.3	6.8	TV
27	2/21/2005	2047	2910.1	8544.1	8	159	44	88	21.1	20.8	20.0	36.3	36.4	36.3	0.000	7.5	7.4	6.8	TV

Table 2. Selected environmental parameters (continued)

CARETTA, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
28	2/21/2005	2138	2909.9	8542.9	8	137	38	77	20.8	20.8	20.0	36.3	36.3	36.3	0.000	7.5	7.4	6.9	TV
29	2/22/2005	1326	2859.5	8522.7	8	124													TV
30	2/22/2005	1419	2859.4	8522.5	8	116													TV
31	2/22/2005	1509	2859.3	8522.4	8	130													TV
32	2/22/2005	1559	2859.1	8522.2	8	115													TV
33	2/22/2005	1645	2859.1	8522.1	8	118													TV
34	2/22/2005	1735	2859.2	8521.8	8	112													TV
35	2/22/2005	1825	2859.0	8521.5	8	114													TV
36	2/22/2005	1914	2858.9	8521.9	8	113													TV
37	2/22/2005	2006	2858.5	8521.6	8	123													TV
38	2/22/2005	2101	2859.0	8522.1	8	119													TV
39	2/23/2005	1326	2859.0	8522.0	8	117	36	73	21.4	20.1	19.8	36.4	36.3	36.3	0.000	7.2	6.9	7.0	TV
40	2/23/2005	1415	2859.1	8522.1	8	138	32	64	21.4	20.3	19.9	36.4	36.4	36.3	0.000	7.1	7.1	6.9	TV
41	3/2/2005	1805	2916.8	8543.4	8	115	36	71	19.5	19.5	17.7	36.2	36.2	36.2	0.000	7.2	7.2	5.1	TV
42	3/2/2005	1910	2916.8	8543.4	8	111	34	69	19.6	19.5	17.6	18.5	36.2	36.2	0.000	10.4	7.2	5.0	TV
43	3/2/2005	2017	2916.8	8543.3	8	116	34	69	19.6	19.2	17.3	24.2	36.2	36.2	0.000	9.7	7.4	4.7	TV
44	3/2/2005	2117	2916.8	8543.2	8	112	35	70	19.3	18.7	17.3	19.6	36.1	36.2	0.000	9.7	7.5	4.6	TV
45	3/2/2005	2219	2916.7	8543.2	8	129	35	70	18.9	18.3	17.2	30.8	36.0	36.2	0.000	9.7	7.6	4.4	TV
46	3/5/2005	1259	2814.1	8444.6	6	131	35	70	20.9	20.5	19.9	36.4	36.4	36.4	0.000	7.2	7.2	6.6	TV
47	3/5/2005	1355	2813.9	8444.5	6	130	35	70	20.7	20.4	19.7	36.3	36.3	36.4	0.000	7.1	7.2	6.2	TV
48	3/5/2005	1452	2813.8	8444.4	6	128	35	70	20.7	20.4	19.7	36.3	36.3	36.4	0.000	7.1	7.1	6.4	TV
49	3/5/2005	1549	2813.6	8444.3	6	132	35	70	20.8	20.3	19.8	36.3	36.3	36.4	0.000	7.1	7.1	6.5	TV
50	3/5/2005	1644	2813.7	8443.4	6	131	36	72	20.9	20.4	19.8	36.3	36.3	36.4	0.000	7.2	7.2	6.4	TV
51	3/5/2005	1737	2813.3	8443.9	6	127	34	69	20.9	20.2	19.8	36.3	36.3	36.4	0.000	7.1	7.2	6.7	TV
52	3/5/2005	1828	2812.3	8443.2	6	127	36	72	21.2	20.4	19.8	36.3	36.3	36.4	0.000	7.2	7.0	6.4	TV
53	3/5/2005	1922	2812.3	8442.8	6	126	34	68	21.0	20.6	19.9	36.3	36.3	36.4	0.000	7.1	7.0	6.9	TV
54	3/5/2005	2014	2812.5	8443.2	6	127	35	70	21.4	20.6	19.8	36.4	36.3	36.4	0.000	7.1	7.0	6.7	TV

Table 2. Selected environmental parameters (continued)

CARETTA, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
55	3/5/2005	2115	2811.9	8438.7	6	125	36	71	21.2	20.6	19.9	36.4	36.4	36.4	0.000	7.2	7.3	6.1	TV
56	3/5/2005	2208	2810.4	8437.3	6	132	36	73	21.0	20.6	19.9	36.4	36.4	36.3	0.000	7.3	7.3	6.9	TV
57	3/6/2005	1305	2812.7	8445.8	6	147	40	79	20.3	20.3	19.5	36.4	36.4	36.3	0.000	7.2	7.1	6.5	TV
58	3/6/2005	1403	2811.9	8446.9	6	149	40	81	20.6	20.3	19.4	36.4	36.4	36.4	0.000	7.2	7.2	6.2	TV
59	3/6/2005	1500	2810.1	8447.3	6	165	45	90	21.2	20.4	19.2	36.4	36.4	36.3	0.000	7.2	7.2	6.4	TV
60	3/6/2005	1559	2809.4	8446.7	6	165	45	90	21.8	20.3	19.3	36.4	36.4	36.3	0.000	7.1	7.2	6.5	TV
61	3/6/2005	1655	2809.0	8445.7	6	154	43	86	22.0	20.2	19.3	36.4	36.3	36.3	0.000	7.1	7.2	6.6	TV
62	3/6/2005	1757	2807.0	8443.9	6	161	45	90	22.0	20.6	19.5	36.4	36.3	36.2	0.000	7.1	6.9	6.9	TV
63	3/6/2005	1854	2806.5	8442.2	6	154	40	81	22.0	20.8	20.0	36.4	36.3	36.3	0.000	7.1	7.3	7.0	TV
64	3/6/2005	1947	2806.1	8441.2	6	152	41	82	22.0	20.8	20.1	36.5	36.3	36.3	0.000	7.1	7.3	7.1	TV
65	3/18/2005	1842	2913.1	8546.0	8	168	48	96	18.6	18.3	18.2	35.6	36.0	36.3	0.000	7.5	7.1	4.9	TV
66	3/18/2005	1950	2913.3	8545.8	8	167	48	95	18.6	18.4	18.2	35.6	36.0	36.4	0.000	5.4	5.6	3.8	TV
67	3/18/2005	2059	2913.4	8545.8	8	168	47	94	18.7	18.4	18.2	35.6	36.0	36.3	0.000	7.5	7.0	4.9	TV
68	3/18/2005	2209	2913.8	8545.3	8	154													TV
69	3/19/2005	1353	2908.4	8547.3	8	166	48	96	18.7	18.6	17.7	35.7	36.1	36.3	0.000	7.6	7.1	4.5	TV
70	3/19/2005	1452	2908.2	8547.2	8	180	48	97	18.8	18.7	17.6	35.7	36.1	36.3	0.000	7.6	7.1	4.5	TV
71	3/19/2005	1607	2908.3	8547.0	8	176	48	95	18.8	18.7	17.4	35.7	36.1	36.3	0.000	7.6	7.1	4.4	TV
72	3/19/2005	1704	2908.4	8546.9	8	167	46	93	18.9	18.6	17.5	35.7	36.1	36.3	0.000	7.6	7.1	4.4	TV
73	3/19/2005	1800	2908.5	8546.3	8	189	51	102	18.9	18.4	16.8	35.7	36.0	36.2	0.000	7.7	7.2	4.4	TV
74	3/19/2005	1902	2911.3	8546.3	8	182	50	100	19.0	18.7	16.3	35.7	36.2	36.2	0.000	7.6	6.6	4.2	TV
75	3/19/2005	2001	2911.8	8546.4	8	182	50	100	18.9	18.6	16.2	35.7	36.2	36.2	0.000	7.7	7.0	4.2	TV
76	3/19/2005	2057	2913.5	8545.8	8	163	46	92	19.0	18.8	17.2	35.7	36.3	36.2	0.000	7.6	6.3	4.5	TV
77	3/19/2005	2155	2915.3	8546.9	8	164	45	90	19.3	19.0	16.5	35.8	36.4	36.2	0.000	7.7	5.4	4.3	TV
78	3/20/2005	1321	2916.9	8546.1	8	136	38	75	19.1	19.0	17.7	36.0	36.3	36.2	0.000	7.7	6.2	5.0	TV
79	3/20/2005	1419	2916.8	8544.5	8	132	35	70	19.0	18.6	18.0	35.9	36.1	36.2	0.000	7.7	7.3	5.3	TV
80	3/20/2005	1517	2915.8	8545.1	8	147	40	81	19.0	18.6	17.6	35.9	36.1	36.2	0.000	7.7	6.9	4.7	TV
81	3/20/2005	1611	2915.5	8544.4	8	144	40	80	0.0	18.5	17.7	0.0	36.1	36.3	0.000	0.0	7.1	4.6	TV

Table 2. Selected environmental parameters (continued)

CARETTA, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
82	3/20/2005	1707	2916.7	8543.1	8	114	32	63	0.0	18.6	18.1	0.0	36.1	36.3	0.000	0.0	7.1	5.2	TV
83	3/24/2005	1727	2916.5	8542.8	8	114	35	70	0.0	19.5	18.7	0.0	36.2	36.2	0.000	0.0	6.7	6.4	TV
84	3/24/2005	1819	2915.8	8541.8	8	127	35	70	0.0	20.0	18.8	0.0	36.2	36.2	0.000	0.0	6.8	6.4	TV
85	3/24/2005	1908	2914.6	8543.0	8	140	40	79	0.0	18.7	18.4	0.0	36.1	36.2	0.000	0.0	6.9	5.9	TV
86	3/24/2005	1959	2913.0	8542.6	8	157	44	87	0.0	19.1	18.1	0.0	36.2	36.3	0.000	0.0	6.2	5.0	TV
87	3/24/2005	2058	2913.4	8539.7	8	124	34	68	0.0	20.3	18.4	0.0	36.2	36.2	0.000	0.0	7.2	6.3	TV
88	3/24/2005	2148	2913.2	8539.0	8	133	36	71	0.0	20.0	18.4	0.0	36.3	36.2	0.000	0.0	6.5	5.7	TV
89	3/25/2005	1258	2859.3	8521.9	8	107	31	62	0.0	20.3	19.1	0.0	36.2	36.2	0.000	0.0	7.2	6.7	TV
90	3/25/2005	1353	2858.9	8521.8	8	115	32	63	0.0	20.0	18.8	0.0	36.2	36.2	0.000	0.0	7.1	6.3	TV
91	3/25/2005	1443	2858.7	8521.6	8	115	32	65	0.0	20.0	18.9	0.0	36.2	36.2	0.000	0.0	7.2	6.5	TV
92	3/25/2005	1535	2858.7	8521.6	8	115													TV
93	3/25/2005	1628	2858.5	8521.5	8	120	32	65	0.0	19.9	18.4	0.0	36.2	36.2	0.000	0.0	7.1	5.8	TV
94	3/25/2005	2019	2908.5	8547.3	8	166	45	90	0.0	18.6	18.1	0.0	36.1	36.3	0.000	0.0	7.1	5.3	TV
95	3/25/2005	2204	2913.3	8539.1	8	132	37	74	0.0	18.5	18.3	0.0	35.9	36.1	0.000	0.0	7.6	6.8	TV

Table 2. Selected environmental parameters (continued)

GANDY, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
172	5/23/2005	1913	2930.6	8747.4	10	81	26	53	26.1	22.7	21.4	33.9	36.2	36.5	0.000	5.1	5.1	4.5	TV
173	5/23/2005	2034	2932.0	8744.0	10		24	49	26.7	22.9	21.7	34.0	36.2	36.5	0.000	5.2	5.2	4.7	
174	5/23/2005	2129	2931.9	8743.7	10	77	24	49	26.9	22.9	21.6	34.0	36.1	36.5	0.000	5.2	5.1	4.6	TV
175	5/23/2005	2229	2931.7	8743.6	10	91	24	49	26.5	22.9	21.5	33.8	36.2	36.5	0.000	5.2	5.1	4.7	TV
176	5/24/2005	1151	2932.4	8741.5	10	94	26	53	26.6	23.0	21.6	33.2	36.3	36.5	0.000	5.1	5.2	4.7	TV
177	5/24/2005	1340	2927.2	8746.8	0	119	35	70	25.9	22.4	21.1	33.2	36.4	36.5	0.000	5.1	5.0	4.2	TV
178	5/26/2005	2006	2920.5	8745.5	0		49	98	27.1	22.0	19.3	31.7	36.3	36.4	0.000	5.1	4.8	3.3	
179	5/26/2005	2103	2921.2	8744.9	0		49	98	27.4	22.1	18.9	31.7	36.3	36.4	0.000	5.1	5.0	3.3	
180	5/26/2005	2202	2921.6	8744.3	0		49	98	26.9	22.0	19.0	31.7	36.4	36.4	0.000	5.1	5.0	3.3	ST
180	5/26/2005	2202	2921.6	8744.3	0														ST
181	5/26/2005	2256	2920.5	8744.0	0		54	108	27.1	22.0	18.4	31.7	36.4	36.4	0.000	5.1	5.0	3.2	
182	5/27/2005	1148	2927.8	8737.7	0	120	36	72	26.8	22.4	20.7	32.0	36.4	36.5	0.000	5.1	5.0	3.9	TV
183	5/27/2005	1250	2926.4	8737.0	0		38	76	26.8	22.0	20.5	32.0	36.3	36.5	0.000	5.1	4.8	3.8	
184	5/27/2005	1346	2926.8	8735.5	0		36	71	26.2	22.4	20.6	34.1	36.3	36.5	0.000	5.1	5.1	3.9	
185	5/27/2005	1428	2926.9	8735.6	0	122													TV
186	5/27/2005	1458	2927.0	8735.6	0		34	69	26.3	22.6	20.8	34.1	36.2	36.5	0.000	5.1	5.1	4.0	
187	5/27/2005	1628	2926.1	8734.7	0		40	81	26.4	22.2	19.8	33.8	36.3	36.5	0.000	5.1	5.0	3.4	
188	5/27/2005	1736	2926.7	8733.1	0		37	74	26.3	22.2	20.9	34.3	36.1	36.5	0.000	5.1	4.8	4.1	
189	5/27/2005	1836	2926.9	8733.1	0		36	72	26.4	22.5	20.9	34.3	36.2	36.5	0.000	5.1	5.0	4.1	
190	5/27/2005	1941	2927.1	8731.1	0		34	68	26.5	23.6	21.6	34.6	36.5	36.6	0.000	5.1	5.2	4.3	
191	5/27/2005	2038	2928.6	8730.2	0		32	64	26.8	23.0	21.6	34.2	36.3	36.5	0.000	5.0	5.3	4.6	
192	5/27/2005	2138	2929.0	8732.9	0		31	62	27.8	23.0	21.5	34.5	36.2	36.5	0.000	5.1	5.0	4.6	
193	5/27/2005	2235	2932.0	8732.3	10		32	64	27.6	23.6	21.5	34.4	36.6	36.5	0.000	5.0	5.2	4.6	
194	5/28/2005	1207	2933.3	8732.1	10		32	65	26.3	23.6	21.5	34.0	36.5	36.7	0.000	5.0	5.2	4.7	
195	5/28/2005	1307	2933.3	8732.5	10		32	65	26.3	23.6	21.1	34.0	36.6	36.8	0.000	5.0	5.2	4.6	
196	5/28/2005	1406	2933.3	8732.8	10		30	61	26.3	23.6	21.8	34.1	36.3	36.5	0.000	5.1	5.2	4.8	
197	5/28/2005	1503	2933.2	8732.7	10	118													TV
198	5/28/2005	1512	2933.1	8732.8	10		33	66	26.4	23.4	21.5	34.2	36.4	36.5	0.000	5.1	5.2	4.6	

Table 2. Selected environmental parameters (continued)

GANDY, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
199	5/28/2005	1626	2934.9	8732.9	10		33	66	26.3	23.7	20.5	34.4	36.1	36.6	0.000	5.1	5.2	3.9	
200	5/28/2005	1728	2933.3	8737.3	10		26	52	27.1	22.6	21.7	33.6	35.7	36.5	0.000	4.1	5.1	4.9	
201	5/28/2005	1832	2934.3	8737.6	10		24	47	26.8	22.7	21.9	33.8	35.7	36.6	0.000	5.0	5.2	5.1	
202	5/28/2005	1932	2933.8	8738.2	10		24	48	27.1	22.2	21.8	33.4	35.7	36.5	0.000	5.1	5.2	5.0	
203	5/28/2005	2033	2933.2	8739.5	10		24	48	27.1	21.7	21.8	32.8	35.8	36.5	0.000	5.0	5.2	5.0	
204	5/28/2005	2233	2940.5	8718.8	10		48	96	28.2	23.4	19.3	32.5	36.7	36.4	0.000	5.0	5.2	3.6	
205	5/29/2005	1205	2942.7	8719.9	10		42	83	26.8	23.0	19.5	30.5	36.4	36.3	0.000	5.1	5.2	3.6	
206	5/29/2005	1328	2945.9	8719.7	10		42	84	26.4	22.7	19.5	30.1	36.4	36.3	0.000	5.1	5.2	3.6	
207	5/29/2005	1424	2946.4	8719.5	10		46	93	26.6	22.5	19.5	30.0	36.4	36.3	0.000	5.2	5.2	3.6	
208	5/29/2005	1520	2946.6	8719.2	10		48	96	26.5	22.5	19.3	29.9	36.4	36.3	0.000	5.2	5.2	3.5	
209	5/29/2005	1619	2946.8	8719.1	10	176													TV
210	5/29/2005	1638	2947.2	8719.8	10		40	79	26.7	22.6	19.8	29.8	36.4	36.3	0.000	5.2	5.1	3.8	
211	5/29/2005	1828	2948.1	8717.3	10		42	83	27.1	22.7	19.8	30.4	36.4	36.3	0.000	5.2	5.2	3.7	
212	5/29/2005	1946	2947.7	8716.6	10		52	104	26.7	22.1	18.8	30.9	36.4	36.4	0.000	5.2	5.0	3.3	
213	5/29/2005	2050	2948.4	8716.3	10		44	87	26.8	22.6	19.4	30.8	36.4	36.3	0.000	5.2	5.2	3.5	
214	6/2/2005	1338	3002.0	8659.6	9		34	67	25.7	22.7	21.2	30.4	35.9	36.3	0.000	5.2	5.3	4.6	
215	6/2/2005	1516	3002.5	8659.4	9		33	66	25.7	22.7	21.2	30.3	35.8	36.3	0.000	5.2	5.3	4.7	
216	6/2/2005	1618	3002.8	8659.6	9		33	66	25.7	22.7	21.6	30.3	35.8	36.2	0.000	5.3	5.3	4.8	
217	6/2/2005	1715	3003.7	8659.0	9		38	75	25.8	22.4	21.5	30.5	35.8	36.3	0.000	5.2	5.1	4.8	
218	6/2/2005	1807	3003.7	8658.9	9	139													TV
219	6/2/2005	1822	3003.2	8658.9	9		35	70	25.9	22.7	21.4	30.4	35.9	36.3	0.000	5.2	5.3	4.8	
220	6/2/2005	2007	3005.0	8658.8	9		26	52	26.2	22.9	21.7	30.5	35.3	35.9	0.000	5.2	5.2	4.8	
221	6/2/2005	2107	3006.3	8656.7	9		24	47	25.9	23.2	21.6	31.4	35.0	35.7	0.000	5.2	5.2	4.8	
222	6/2/2005	2212	3007.2	8653.5	9		24	49	25.9	22.7	21.5	33.3	35.1	35.9	0.000	5.2	5.2	4.7	
223	6/2/2005	2306	3007.5	8651.6	9		24	48	25.6	22.2	21.5	34.0	34.9	35.8	0.000	5.2	5.1	4.7	
224	6/3/2005	1219	2957.6	8639.2	9		50	100	25.8	21.3	19.1	33.7	36.3	36.3	0.000	5.1	4.8	3.5	
225	6/3/2005	1329	2959.3	8637.9	9		35	70	25.7	22.7	20.6	33.7	36.0	36.3	0.000	5.1	5.3	4.2	

Table 2. Selected environmental parameters (continued)

GANDY, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
226	6/3/2005	1432	2958.5	8636.3	9		42	83	25.8	22.0	20.0	33.8	36.2	36.3	0.000	5.1	5.0	3.9	
227	6/3/2005	1541	2956.4	8637.5	9		52	103	25.9	21.3	18.8	33.6	36.3	36.3	0.000	5.1	4.7	3.4	
228	6/3/2005	1642	2956.5	8634.6	9		44	89	26.0	21.3	19.5	33.8	36.2	36.3	0.000	5.1	4.7	3.8	
229	6/3/2005	1813	2950.1	8628.1	9		42	84	26.4	22.4	19.6	33.7	36.3	36.3	0.000	5.1	5.2	3.7	
230	6/3/2005	1908	2947.5	8628.5	9		45	90	26.7	21.6	19.4	33.8	36.3	36.3	0.000	5.1	4.9	3.7	
231	6/3/2005	2012	2948.5	8626.7	9		43	86	26.7	22.4	19.3	33.9	36.4	36.3	0.000	5.1	5.1	3.5	
232	6/3/2005	2111	2949.0	8625.0	9		45	90	26.7	21.8	19.5	34.0	36.2	36.3	0.000	5.1	5.0	3.6	
233	6/3/2005	2211	2950.1	8624.3	9		40	79	26.6	23.0	19.8	34.1	36.4	36.3	0.000	5.1	5.3	3.7	
234	6/3/2005	2313	2949.1	8622.2	9		40	80	26.6	22.8	19.7	34.0	36.4	36.3	0.000	5.1	5.2	3.8	
235	6/4/2005	1357	2919.7	8555.8	8		34	69	26.1	21.2	20.0	34.6	35.6	35.9	0.000	5.1	5.3	4.3	
236	6/4/2005	1454	2919.1	8556.5	8														
237	6/4/2005	1601	2919.1	8558.2	8		42	83	26.2	21.0	20.0	34.5	35.7	36.0	0.000	5.1	5.1	4.4	
238	6/4/2005	1702	2919.0	8557.9	8		40	81	26.3	21.0	20.0	34.6	35.8	36.0	0.000	5.1	5.1	4.4	
239	6/4/2005	1805	2918.6	8557.2	8		44	87	26.4	20.5	19.8	34.5	36.0	36.1	0.000	5.1	5.0	4.1	
240	6/4/2005	1907	2918.5	8556.7	8		42	84	26.8	20.7	19.8	34.5	36.0	36.1	0.000	5.1	5.1	4.2	
241	6/4/2005	2009	2918.4	8556.7	8	183													TV
242	6/4/2005	2025	2918.5	8555.7	8		38	76	26.7	21.4	20.1	34.5	35.8	36.0	0.000	5.1	5.3	4.4	
243	6/4/2005	2207	2918.5	8554.9	8	131	35	70	26.8	21.7	20.2	34.6	35.7	35.9	0.000	5.1	5.4	4.5	TV
244	6/4/2005	2307	2918.1	8552.6	8		32	63	26.3	22.0	20.2	34.4	35.5	35.9	0.000	5.1	5.4	4.5	
245	6/5/2005	1307	2917.4	8545.4	8		34	69	26.0	20.9	20.3	34.4	35.8	36.0	0.000	5.1	5.1	4.5	
246	6/5/2005	1404	2917.0	8543.7	8		30	61	26.1	20.7	20.3	34.4	35.7	36.0	0.000	5.1	5.0	4.5	
247	6/5/2005	1506	2916.5	8542.9	8		34	69	26.3	20.8	20.3	34.4	35.7	36.0	0.000	5.1	4.9	4.5	
248	6/5/2005	1609	2916.4	8542.4	8		31	62	26.3	20.8	20.2	34.5	35.7	35.9	0.000	5.1	5.0	4.5	
249	6/5/2005	1708	2916.2	8542.2	8		30	60	26.4	20.8	20.1	34.5	35.7	35.9	0.000	5.1	4.9	4.5	
250	6/5/2005	1811	2916.0	8541.8	8		30	60	26.3	20.8	20.1	34.5	35.6	35.9	0.000	5.1	4.9	4.5	
251	6/5/2005	1916	2915.7	8541.7	8		30	60	26.6	20.7	20.2	34.4	35.6	35.9	0.000	5.1	5.0	4.5	
252	6/5/2005	2013	2915.7	8541.6	8		30	59	26.8	21.0	20.2	34.4	35.7	35.9	0.000	5.1	5.2	4.6	
253	6/5/2005	2116	2915.0	8541.1	8		30	61	26.9	21.8	20.2	34.5	35.5	36.0	0.000	5.1	5.4	4.6	

Table 2. Selected environmental parameters (continued)

GANDY, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
254	6/5/2005	2210	2915.2	8540.4	8		32	63	26.8	20.8	20.1	34.6	35.6	35.9	0.000	5.1	5.0	4.6	
255	6/7/2005	1535	2916.1	8545.3	8		42	83	26.9	20.2	19.2	34.6	36.0	36.5	0.000	5.1	4.6	4.0	
256	6/7/2005	1633	2914.8	8543.8	8		42	84	27.4	20.2	19.2	34.4	36.0	36.3	0.000	5.1	4.6	3.9	
257	6/7/2005	1732	2913.8	8545.0	8		46	93	27.2	20.3	19.1	34.4	36.1	36.3	0.000	5.1	4.5	3.8	
258	6/7/2005	1846	2913.4	8545.8	8		48	96	27.3	20.5	19.0	34.4	36.2	36.3	0.000	5.1	4.6	3.7	
259	6/7/2005	1952	2913.2	8545.7	8		47	94	27.9	20.4	19.1	34.3	36.1	36.3	0.000	5.1	4.6	3.8	
260	6/7/2005	2041	2913.3	8545.9	8	169													TV
261	6/7/2005	2057	2913.2	8546.0	8		49	98	27.4	20.5	18.8	34.4	36.2	36.3	0.000	5.1	4.7	3.5	
262	6/7/2005	2236	2912.6	8541.7	8		42	85	28.1	20.8	19.4	34.6	36.2	36.2	0.000	5.1	4.9	4.0	
263	6/8/2005	1255	2909.7	8545.9	8		48	95	27.2	20.4	18.0	34.4	36.1	36.3	0.000	5.1	4.9	3.2	
264	6/8/2005	1357	2908.1	8547.5	8		71	142	27.3	19.8	16.4	34.5	36.3	36.2	0.000	5.1	4.1	2.9	
265	6/8/2005	1455	2908.5	8546.6	8		48	96	27.4	20.7	18.0	34.5	36.2	36.3	0.000	5.1	5.0	3.2	
266	6/8/2005	1558	2909.6	8545.4	8		48	96	27.4	20.4	18.0	34.4	36.1	36.3	0.000	5.1	4.9	3.2	
267	6/8/2005	1654	2910.1	8544.5	8		46	91	27.5	19.9	18.5	34.4	36.0	36.3	0.000	5.1	4.6	3.6	
268	6/8/2005	1803	2910.0	8542.1	8		46	92	27.6	19.9	18.4	34.4	36.0	36.3	0.000	5.1	4.5	3.3	
269	6/8/2005	1853	2910.1	8542.2	8	137													TV
270	6/8/2005	1904	2910.4	8542.1	8		40	81	27.6	20.3	19.7	34.4	36.0	36.2	0.000	5.1	5.0	4.2	
271	6/8/2005	2040	2911.3	8541.0	8		42	83	27.8	20.1	19.1	34.5	36.1	36.3	0.000	5.1	4.7	3.9	
272	6/8/2005	2136	2911.2	8541.0	8		42	83	28.6	20.1	19.0	34.5	36.1	36.2	0.000	5.1	4.8	4.0	
273	6/8/2005	2241	2913.9	8540.3	8		35	70	28.1	20.4	19.5	34.5	36.0	36.2	0.000	5.1	4.9	4.0	
274	6/9/2005	1217	2914.8	8537.5	8	115	32	64	27.6	20.6	19.6	34.5	36.0	36.2	0.000	5.1	4.9	4.1	TV
275	6/9/2005	1324	2915.0	8540.2	8	116	32	65	27.7	21.1	19.5	34.5	35.9	36.2	0.000	5.1	5.2	4.0	TV
276	6/9/2005	1422	2914.6	8540.1	8	121	34	68	27.7	21.0	19.5	34.5	36.0	36.2	0.000	5.1	5.1	4.0	TV
277	6/9/2005	1526	2913.4	8539.9	8		36	72	27.4	21.0	19.5	34.5	36.1	36.2	0.000	5.1	5.1	4.1	
278	6/9/2005	1636	2912.5	8540.0	8		39	78	27.7	20.9	19.3	34.5	36.2	36.2	0.000	5.1	5.0	4.0	
279	6/9/2005	1731	2912.8	8540.0	8		39	78	27.9	20.7	19.1	34.5	36.2	36.3	0.000	5.1	4.9	3.8	
280	6/9/2005	1833	2912.8	8539.7	8		38	77	27.9	20.6	19.2	34.5	36.1	36.2	0.000	5.1	4.9	4.0	
281	6/9/2005	1937	2912.8	8540.0	8		38	77	28.0	21.0	19.2	34.5	36.2	36.3	0.000	5.1	5.0	3.9	

Table 2. Selected environmental parameters (continued)

GANDY, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
282	6/9/2005	2034	2913.1	8540.0	8		38	75	28.0	20.0	19.2	34.5	36.0	36.2	0.000	5.1	4.7	3.9	
283	6/9/2005	2129	2912.8	8539.8	8	134	36	72	28.0	20.7	19.5	34.5	36.3	36.2	0.000	5.1	4.9	4.2	TV
284	6/9/2005	2229	2913.0	8539.7	8	130	37	74	28.0	21.0	19.5	34.5	36.2	36.2	0.000	5.1	5.1	4.1	TV
285	6/14/2005	1455	2913.4	8539.4	8		35	70	26.8	21.6	20.2	35.2	35.8	36.2	0.000	5.2	5.3	4.3	
286	6/14/2005	1558	2913.9	8539.3	8		34	68	26.9	21.7	20.3	35.1	35.7	36.3	0.000	5.2	5.3	4.2	
287	6/14/2005	1650	2913.7	8538.5	8		35	70	27.1	23.4	20.3	35.1	35.3	36.2	0.000	5.2	5.4	4.3	
288	6/14/2005	1836	2858.6	8529.8	8		49	98	27.0	21.0	17.4	35.2	36.1	36.3	0.000	5.2	5.1	3.0	
289	6/14/2005	1936	2858.9	8528.9	8		42	84	27.0	21.6	17.8	35.2	36.1	36.3	0.000	5.2	5.2	3.2	
290	6/14/2005	2037	2859.0	8527.9	8		44	88	27.7	21.2	17.6	35.2	36.0	36.3	0.000	5.2	5.2	3.1	
291	6/14/2005	2144	2859.7	8522.3	8		28	56	26.7	22.1	20.1	34.9	35.5	36.1	0.000	5.2	5.3	4.6	
292	6/14/2005	2230	2859.5	8522.3	8	109													TV
293	6/15/2005	1200	2859.2	8521.9	8		34	67	26.6	21.8	19.5	34.8	35.6	36.2	0.000	5.2	5.2	4.0	
294	6/15/2005	1257	2859.1	8521.5	8		32	65	26.7	22.2	20.0	34.8	35.5	36.2	0.000	5.1	5.3	4.4	
295	6/15/2005	1358	2859.1	8522.3	8		36	73	26.8	22.1	19.0	34.7	35.6	36.3	0.000	5.2	5.2	3.7	
296	6/15/2005	1513	2855.3	8527.7	8		60	121	26.9	20.2	17.3	35.3	36.2	36.3	0.000	5.2	4.9	3.0	
297	6/15/2005	1602	2855.1	8527.7	8	211													TV
298	6/15/2005	1615	2854.9	8527.6	8		60	120	27.0	20.1	17.3	35.2	36.2	36.3	0.000	5.2	4.8	3.0	
299	6/15/2005	1811	2859.1	8521.9	8		34	68	26.9	23.3	19.4	34.8	35.2	36.3	0.000	5.2	5.4	3.9	
300	6/15/2005	1904	2858.7	8521.7	8		39	78	27.2	22.3	19.2	34.7	35.5	36.3	0.000	5.2	5.2	3.8	
301	6/15/2005	2017	2858.4	8521.5	8		38	76	27.0	22.0	19.2	34.8	35.6	36.3	0.000	5.2	5.2	3.8	
302	6/16/2005	1201	2837.6	8459.6	6		36	72	26.9	22.0	19.1	35.0	36.2	36.3	0.000	5.2	5.3	3.8	
303	6/16/2005	1335	2837.2	8459.4	6		36	71	26.9	22.0	19.2	35.0	36.1	36.3	0.000	5.2	5.4	3.8	
304	6/16/2005	1435	2837.3	8459.3	6		35	70	27.1	22.1	19.2	35.0	36.0	36.3	0.000	5.2	5.4	3.8	
305	6/16/2005	1535	2837.0	8459.1	6		35	70	27.2	22.2	19.4	35.0	36.0	36.3	0.000	5.2	5.4	4.0	
306	6/16/2005	1628	2837.0	8459.2	6	129													TV
307	6/16/2005	1640	2836.9	8459.0	6		36	71	27.3	22.6	19.5	35.0	36.0	36.3	0.000	5.2	5.4	4.1	
308	6/16/2005	1756	2835.3	8458.4	6		35	70	27.4	22.5	19.7	35.0	36.0	36.3	0.000	5.2	5.4	4.2	

Table 2. Selected environmental parameters (continued)

GANDY, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
309	6/16/2005	1848	2833.3	8456.9	6		36	72	27.5	22.4	20.0	35.0	36.0	36.3	0.000	5.2	5.4	4.4	
310	6/16/2005	1946	2832.2	8456.1	6		36	73	27.5	22.5	19.6	35.0	36.1	36.3	0.000	5.1	5.4	4.1	
311	6/16/2005	2053	2832.2	8456.0	6		36	71	27.7	22.5	19.6	35.1	36.0	36.3	0.000	5.1	5.4	4.1	
312	6/16/2005	2202	2831.0	8455.0	6		34	68	27.7	23.5	19.9	35.1	35.9	36.3	0.000	5.1	5.4	4.3	
313	6/17/2005	1201	2839.0	8424.0	6		16	33	27.2	25.5	22.2	35.5	35.5	35.8	0.000	5.1	5.3	5.1	
314	6/17/2005	1308	2837.9	8424.1	6		16	33	27.2	25.0	22.0	35.4	35.5	35.8	0.000	5.1	5.3	5.1	
315	6/17/2005	1412	2837.9	8423.3	6		19	38	27.5	24.1	22.5	35.5	35.5	35.8	0.000	5.1	5.4	5.2	
316	6/17/2005	1511	2836.7	8421.0	6		18	36	27.5	24.8	22.7	35.5	35.6	35.8	0.000	5.1	5.3	5.2	
317	6/17/2005	1611	2834.5	8420.5	6	53	16	32	27.6	25.0	22.9	35.5	35.5	35.8	0.000	5.1	5.3	5.2	TV
318	6/17/2005	1703	2834.5	8420.5	6	53													TV
319	6/17/2005	1741	2834.3	8420.9	6	54	16	31	27.8	24.3	22.7	35.5	35.5	35.8	0.000	5.1	5.3	5.3	TV
320	6/17/2005	1858	2833.2	8420.3	6	53	19	38	28.0	23.6	22.9	35.6	35.7	35.8	0.000	5.1	5.4	5.4	TV
321	6/17/2005	2002	2832.7	8420.9	6	51	14	28	28.2	25.1	22.5	35.5	35.6	35.8	0.000	5.1	5.3	5.4	TV
322	6/17/2005	2112	2831.1	8421.2	6	53	15	30	28.2	25.2	22.2	35.5	35.5	35.9	0.000	5.1	5.3	5.5	TV
323	6/17/2005	2223	2830.8	8421.8	6		16	31	28.2	25.1	22.1	35.5	35.4	35.9	0.000	5.1	5.3	5.4	
324	6/18/2005	1156	2837.8	8415.8	6	52	15	30	27.6	25.1	23.1	35.5	35.6	35.6	0.000	5.0	5.3	5.0	TV
325	6/18/2005	1255	2837.5	8415.6	6		15	30	27.6	25.0	23.0	35.5	35.6	35.7	0.000	5.0	5.3	5.2	
326	6/18/2005	1401	2836.9	8414.9	6		16	31	27.6	25.0	22.8	35.5	35.7	35.7	0.000	4.9	5.3	5.2	
327	6/18/2005	1457	2836.5	8414.9	6		17	34	27.7	25.1	22.9	35.5	35.6	35.7	0.000	5.1	5.3	5.3	
328	6/18/2005	1609	2834.6	8414.5	6		16	33	27.9	24.8	23.1	35.5	35.6	35.7	0.000	5.0	5.3	5.2	
329	6/18/2005	1724	2832.4	8413.2	6	60	15	30	27.5	24.8	23.2	35.5	35.7	35.7	0.000	4.9	5.3	5.2	TV
330	6/18/2005	1854	2831.4	8414.9	6		17	34	27.2	25.1	23.3	35.4	35.6	35.7	0.000	5.0	5.3	5.2	
331	6/18/2005	1938	2831.4	8415.0	6	63													TV
332	6/18/2005	2013	2831.5	8417.9	6		12	25	27.4	25.0	23.2	35.4	35.6	35.7	0.000	5.0	5.3	5.3	
333	6/18/2005	2139	2830.5	8414.4	6		16	31	27.3	24.8	23.3	35.4	35.7	35.7	0.000	5.0	5.3	5.1	
334	6/18/2005	2233	2830.4	8414.0	6		16	32	27.2	24.9	23.3	35.4	35.7	35.7	0.000	5.1	5.3	5.1	
335	6/19/2005	1206	2823.1	8412.1	6		18	37	27.0	24.5	21.3	35.6	35.7	36.0	0.000	5.1	5.4	5.0	

Table 2. Selected environmental parameters (continued)

GANDY, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
336	6/19/2005	1345	2825.4	8419.1	6		17	34	27.1	24.9	21.7	35.4	35.5	35.9	0.000	5.0	5.3	5.0	
337	6/19/2005	1505	2826.4	8419.3	6		17	34	27.2	25.0	21.6	35.4	35.4	36.0	0.000	5.0	5.3	5.0	
338	6/19/2005	1613	2826.3	8418.5	6		17	34	27.3	25.2	22.8	35.2	35.5	35.8	0.000	5.1	5.3	5.0	
339	6/19/2005	1708	2826.4	8418.4	6	66													TV
340	6/19/2005	1735	2827.5	8418.1	6		16	32	27.5	25.0	23.0	35.1	35.5	35.8	0.000	5.1	5.3	5.2	
341	6/19/2005	1904	2828.9	8418.4	6		18	37	27.3	24.4	22.5	35.2	35.6	35.8	0.000	5.1	5.4	5.3	
342	6/19/2005	2013	2829.0	8417.0	6		18	35	27.3	23.5	23.0	35.2	35.7	35.7	0.000	5.1	5.3	5.2	
343	6/19/2005	2110	2829.1	8418.7	6		16	31	27.4	24.9	22.3	35.3	35.6	35.9	0.000	5.1	5.4	5.3	
344	6/19/2005	2206	2829.3	8418.1	6		20	40	27.5	24.1	22.2	35.2	35.6	35.9	0.000	5.1	5.4	5.2	
345	6/19/2005	2257	2829.5	8418.2	6		18	35	27.9	24.3	22.4	35.1	35.6	35.8	0.000	5.1	5.4	5.2	
346	6/23/2005	1349	2819.8	8448.8	6		36	73	28.0	21.4	18.7	34.4	36.0	36.3	0.000	5.0	5.0	3.5	
347	6/23/2005	1455	2817.7	8446.8	6		36	72	27.9	21.6	18.7	34.5	36.1	36.3	0.000	5.0	5.2	3.5	
348	6/23/2005	1606	2814.7	8445.0	6		38	75	27.7	21.6	18.7	34.8	36.1	36.3	0.000	5.1	5.3	3.5	
349	6/23/2005	1700	2813.9	8444.5	6		38	76	27.9	21.6	18.7	35.0	36.1	36.3	0.000	5.1	5.3	3.5	
350	6/23/2005	1753	2813.8	8444.6	6		38	76	27.7	21.7	18.7	35.0	36.1	36.3	0.000	5.1	5.3	3.5	
351	6/23/2005	1856	2813.5	8444.5	6		38	77	27.9	21.6	18.7	35.0	36.1	36.3	0.000	5.1	5.3	3.5	
352	6/23/2005	1956	2813.4	8444.4	6		38	77	28.0	21.6	18.7	35.0	36.1	36.3	0.000	5.1	5.3	3.5	
353	6/23/2005	2050	2813.4	8444.0	6		34	69	28.0	21.8	18.8	35.0	35.9	36.3	0.000	5.1	5.4	3.6	
354	6/23/2005	2144	2813.3	8442.4	6		35	70	28.2	21.8	18.8	34.8	35.9	36.3	0.000	5.1	5.3	3.6	
355	6/23/2005	2236	2812.6	8443.3	6		34	69	27.9	22.3	18.8	35.0	35.7	36.3	0.000	5.1	5.4	3.6	
356	6/24/2005	1149	2812.5	8443.3	6		34	69	27.3	22.2	18.9	35.3	36.1	36.3	0.000	5.1	5.4	3.7	
357	6/24/2005	1250	2812.1	8443.0	6		34	68	27.3	22.5	18.9	35.3	36.0	36.3	0.000	5.1	5.5	3.6	
358	6/24/2005	1342	2812.2	8443.0	6		34	68	27.3	22.4	18.8	35.3	36.0	36.3	0.000	5.1	5.5	3.6	
359	6/24/2005	1437	2812.1	8443.1	6		35	70	27.3	22.3	18.7	35.3	36.1	36.3	0.000	5.1	5.4	3.5	
360	6/24/2005	1533	2812.1	8443.0	6	128													TV
361	6/24/2005	1548	2812.2	8442.3	6		35	70	27.4	22.2	18.8	35.3	36.0	36.3	0.000	5.1	5.4	3.6	
362	6/24/2005	1730	2812.0	8440.6	6		34	68	27.6	22.0	18.9	35.2	36.0	36.3	0.000	5.1	5.3	3.6	

Table 2. Selected environmental parameters (continued)

GANDY, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
363	6/24/2005	1832	2812.6	8439.2	6		35	70	27.8	21.3	19.0	34.9	36.1	36.3	0.000	5.1	5.2	3.7	
364	6/24/2005	1934	2813.1	8437.6	6		34	69	27.7	21.7	19.0	34.8	35.8	36.3	0.000	5.1	5.3	3.7	
365	6/24/2005	2039	2810.3	8438.0	6		36	72	27.6	21.7	18.9	35.0	36.1	36.3	0.000	5.1	5.3	3.6	
366	6/24/2005	2135	2810.2	8437.7	6		36	73	27.6	21.7	18.9	35.0	36.0	36.3	0.000	5.1	5.3	3.6	
367	6/24/2005	2231	2809.5	8437.4	6		36	73	27.6	21.7	18.9	35.0	36.1	36.3	0.000	5.1	5.3	3.6	
368	6/25/2005	1342	2809.4	8439.5	6	139													TV
369	6/25/2005	1451	2809.2	8438.3	6	134													TV
370	6/25/2005	1552	2808.1	8436.5	6	130													TV
371	6/25/2005	1653	2806.0	8438.1	6	147													TV
372	6/25/2005	1806	2804.9	8436.9	6	150													TV
373	6/25/2005	1900	2805.2	8439.4	6	148													TV
374	6/25/2005	1956	2805.5	8440.2	6	151													TV
375	6/25/2005	2053	2806.7	8440.0	6	145													TV
376	6/25/2005	2146	2806.0	8441.2	6	155													TV
377	6/25/2005	2243	2807.0	8443.6	6	156													TV
378	6/29/2005	1326	2749.6	8407.8	5		24	49	27.9	23.7	19.9	35.0	35.6	36.2	0.000	5.1	5.6	4.7	
379	6/29/2005	1422	2749.5	8408.6	5		25	50	27.8	23.9	19.2	35.0	35.4	36.3	0.000	5.1	5.6	3.8	
380	6/29/2005	1529	2748.0	8408.8	5		26	51	28.0	23.0	19.3	35.0	35.5	36.3	0.000	5.1	5.5	3.8	
381	6/29/2005	1624	2746.8	8409.6	5		24	47	28.0	22.9	19.3	35.0	35.6	36.3	0.000	5.1	5.5	4.1	
382	6/29/2005	1720	2746.7	8409.7	5	90													TV
383	6/29/2005	1741	2746.7	8409.5	5														ST
383	6/29/2005	1741	2746.7	8409.5	5		25	50	28.2	22.9	19.3	35.1	35.6	36.3	0.000	5.1	5.5	4.1	ST
384	6/29/2005	1913	2746.6	8409.5	5		26	51	28.2	22.6	19.2	35.0	35.6	36.3	0.000	5.1	5.5	3.8	
385	6/29/2005	2001	2746.3	8409.3	5		26	51	28.3	22.6	19.2	35.1	35.6	36.3	0.000	5.1	5.5	3.8	
386	6/29/2005	2056	2746.2	8409.6	5		24	49	28.3	24.1	19.2	35.0	35.3	36.3	0.000	5.1	5.5	3.8	
387	6/29/2005	2149	2745.4	8409.5	5		24	49	28.4	23.4	19.3	35.0	35.5	36.3	0.000	5.1	5.5	3.9	
388	6/29/2005	2243	2744.5	8409.0	5		26	52	28.4	23.0	19.4	35.0	35.5	36.3	0.000	5.1	5.5	3.9	

Table 2. Selected environmental parameters (continued)

GANDY, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
389	6/30/2005	1858	2559.6	8339.8	3	34	68	28.8	25.4	20.7	35.6	36.1	36.5	0.000	5.1	5.4	4.3		
390	6/30/2005	2142	2554.8	8335.8	3	36	71	28.5	24.1	20.5	35.7	36.2	36.5	0.000	5.1	5.5	4.0		
391	6/30/2005	2255	2553.3	8339.9	3	36	72	29.4	23.9	20.6	36.0	36.2	36.5	0.000	5.1	5.5	4.0		
392	7/1/2005	1156	2551.3	8339.3	3	36	73	29.1	24.4	20.6	36.3	36.3	36.5	0.000	5.0	5.4	4.0		
393	7/1/2005	1249	2550.8	8339.6	3	38	76	29.1	24.1	20.6	36.3	36.3	36.5	0.000	5.0	5.5	3.9		
394	7/1/2005	1342	2549.6	8339.3	3	38	75	29.0	24.2	20.5	36.3	36.4	36.5	0.000	5.0	5.4	3.9		
395	7/1/2005	1510	2547.0	8339.7	3	39	78	29.1	24.8	20.7	36.3	36.6	36.6	0.000	5.0	5.2	3.9		
396	7/1/2005	1606	2546.5	8339.9	3	40	80	29.2	25.0	20.6	36.3	36.5	36.5	0.000	5.0	5.2	3.9		
397	7/1/2005	1711	2543.8	8339.9	3	40	80	29.4	24.7	20.6	36.3	36.6	36.6	0.000	5.0	5.0	4.0		
398	7/1/2005	1813	2542.9	8339.1	3	38	76	29.5	24.7	20.4	36.3	36.6	36.5	0.000	5.0	5.1	3.9		
399	7/2/2005	1151	2442.6	8300.6	2	14	29	28.9	27.8	24.9	35.9	36.0	36.1	0.000	5.1	5.2	5.1		
400	7/2/2005	1248	2442.5	8301.3	2	13	26	29.1	28.1	25.3	35.9	36.0	36.1	0.000	5.0	5.1	5.4		
401	7/2/2005	1342	2441.9	8303.0	2	9	18	28.9	28.4	27.2	35.9	35.9	36.0	0.000	5.0	5.1	5.3		
402	7/2/2005	1435	2441.8	8302.7	2	10	19	29.1	28.3	27.0	35.9	36.0	35.9	0.000	5.1	5.1	5.1		
403	7/2/2005	1527	2441.5	8301.9	2	11	22	29.3	28.4	26.4	35.9	36.1	36.0	0.000	5.0	5.1	5.1		
404	7/2/2005	1619	2440.5	8302.2	2	10	19	29.2	28.0	26.9	35.9	35.9	36.0	0.000	5.1	5.1	5.1		
405	7/2/2005	1709	2441.0	8301.3	2	11	22	29.2	28.6	26.3	36.0	36.0	36.0	0.000	5.1	5.1	5.4		
406	7/2/2005	1801	2441.0	8300.8	2	12	25	29.8	28.2	26.4	36.0	36.0	36.0	0.000	5.1	5.1	5.4		
407	7/2/2005	1849	2440.7	8259.8	2	11	22	29.4	28.1	26.8	36.0	36.0	36.1	0.000	5.1	5.2	5.4		
408	7/2/2005	1936	2440.3	8259.0	2	12	25	29.3	28.0	25.6	36.1	36.1	36.1	0.000	5.2	5.3	5.4		
409	7/2/2005	2031	2442.3	8259.3	2	12	23	29.5	28.3	25.2	36.0	36.0	36.2	0.000	5.1	5.1	5.5		
410	7/2/2005	2124	2442.5	8259.7	2	6	13	29.4	28.5	27.9	36.0	35.9	36.0	0.000	5.1	5.1	5.6		
411	7/2/2005	2212	2442.2	8258.9	2	14	29	29.6	28.3	25.1	36.0	36.0	36.2	0.000	5.1	5.2	5.5		
412	7/3/2005	1144	2441.9	8255.5	2	8	15	28.9	28.4	27.7	36.1	36.4	36.3	0.000	5.1	5.2	5.1		
413	7/3/2005	1232	2440.8	8256.0	2	12	23	28.8	28.1	27.6	36.1	36.4	36.2	0.000	5.1	5.2	5.2		
414	7/3/2005	1328	2439.2	8257.0	2	12	23	29.0	28.1	27.4	36.1	36.1	36.1	0.000	5.1	5.0	4.8		
415	7/3/2005	1413	2439.2	8257.0	2	12	24	29.1	28.0	27.0	36.1	36.1	36.2	0.000	5.1	5.0	4.8		

Table 2. Selected environmental parameters (continued)

GANDY, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
416	7/3/2005	1459	2438.3	8257.7	2		12	23	29.1	28.5	27.1	36.1	36.1	36.2	0.000	5.1	5.0	4.8	
417	7/3/2005	1544	2437.6	8257.8	2		10	21	28.8	28.8	27.6	36.1	36.1	36.2	0.000	5.0	5.0	5.1	
418	7/3/2005	1634	2437.5	8258.5	2		11	22	29.1	28.5	27.0	36.1	36.1	36.2	0.000	5.1	5.1	5.1	
419	7/3/2005	1739	2435.1	8258.7	2		9	18	28.9	28.8	28.3	36.1	36.1	36.2	0.000	5.1	5.1	5.2	
420	7/3/2005	1830	2433.4	8257.6	2		10	20	29.4	28.9	27.3	36.1	36.1	36.2	0.000	5.1	5.1	5.2	
421	7/3/2005	1948	2430.9	8253.0	2		12	25	28.7	28.6	25.7	36.0	36.0	36.3	0.000	5.1	5.1	5.2	
422	7/3/2005	2132	2438.8	8300.2	2		14	29	29.0	28.1	24.7	36.0	36.0	36.2	0.000	5.2	5.3	5.2	
423	7/4/2005	1145	2443.5	8251.8	2		14	29	28.6	28.6	28.3	36.1	36.1	36.1	0.000	5.2	5.2	5.2	
424	7/4/2005	1246	2443.6	8247.9	2		8	15	28.6	28.6	27.6	36.1	36.1	36.1	0.000	5.2	5.2	4.8	
425	7/4/2005	1332	2443.6	8247.3	2		8	17	28.6	28.6	27.7	36.1	36.1	36.1	0.000	5.2	5.2	4.9	
426	7/4/2005	1419	2444.1	8247.1	2		10	20	28.5	28.4	28.0	36.1	36.1	36.1	0.000	5.3	5.2	5.1	
427	7/4/2005	1514	2444.2	8247.2	2		10	20	28.7	28.6	28.4	36.1	36.1	36.1	0.000	5.3	5.3	5.3	
428	7/4/2005	1601	2443.7	8246.5	2		14	27	28.7	28.5	26.7	36.1	36.1	36.2	0.000	5.2	5.3	5.1	
429	7/4/2005	1649	2442.6	8246.4	2		10	21	28.8	28.7	27.8	36.1	36.1	36.2	0.000	5.2	5.2	4.9	
430	7/4/2005	1739	2442.7	8246.5	2		8	17	28.9	28.8	28.5	36.1	36.1	36.1	0.000	5.2	5.2	5.2	
431	7/13/2005	1751	2920.9	8743.8	0		54	109	27.8	26.1	19.8	31.3	35.8	36.4	0.000	8.0	6.5	4.7	ST
431	7/13/2005	1751	2920.9	8743.8	0														ST
432	7/13/2005	1846	2924.3	8745.6	0		39	78	28.9	26.7	25.4	32.5	35.3	35.6	0.000	7.7	6.5	6.3	
433	7/13/2005	1938	2924.6	8744.8	0		36	72	28.7	26.4	25.9	33.8	35.2	35.7	0.000	6.6	6.5	6.5	
434	7/13/2005	2044	2926.9	8740.7	0		36	72	28.5	26.4	25.7	33.6	35.1	35.4	0.000	6.6	6.5	6.4	
435	7/13/2005	2126	2926.9	8740.9	0	117													TV
436	7/13/2005	2252	2927.9	8744.5	0		33	66	29.0	26.7	25.9	33.6	35.1	35.4	0.000	6.6	6.5	6.4	
437	7/14/2005	1215	2919.5	8749.5	0		49	98	27.9	26.2	20.4	33.7	35.3	36.4	0.000	6.5	6.5	5.0	
438	7/14/2005	1308	2918.8	8749.2	0		56	113	27.9	26.6	19.3	33.6	35.7	36.4	0.000	6.9	6.6	4.6	
439	7/14/2005	1408	2919.0	8748.6	0		54	108	28.0	26.1	19.7	33.6	35.4	36.4	0.000	6.4	6.4	4.6	
440	7/14/2005	1505	2919.1	8748.3	0		52	104	27.9	26.2	19.6	33.5	35.3	36.4	0.000	7.3	6.4	4.6	
441	7/14/2005	1603	2919.8	8746.9	0		51	102	28.4	26.4	21.2	33.0	35.4	36.4	0.000	8.2	6.5	5.2	

Table 2. Selected environmental parameters (continued)

GANDY, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
442	7/14/2005	1659	2919.6	8746.9	0		52	103	28.4	26.3	21.3	33.6	35.5	36.4	0.000	7.6	6.4	5.2	
443	7/14/2005	1755	2919.8	8746.1	0		53	106	28.3	26.3	20.5	33.3	35.7	36.4	0.000	7.7	6.5	4.9	
444	7/14/2005	1841	2919.8	8746.3	0	173													TV
445	7/14/2005	1900	2920.0	8746.0	0		50	101	28.1	26.2	21.2	33.7	35.7	36.4	0.000	4.5	6.5	5.0	
446	7/14/2005	2033	2919.9	8745.5	0		52	104	28.2	26.2	19.8	33.4	35.8	36.4	0.000	7.1	6.5	4.6	
447	7/14/2005	2208	2931.5	8740.5	10		28	55	29.7	26.5	26.1	31.0	35.0	35.5	0.000	5.8	6.4	6.4	
448	7/14/2005	2306	2933.1	8740.4	10		23	46	29.4	26.4	26.2	30.8	34.4	35.5	0.000	6.8	6.3	6.5	
449	7/15/2005	1215	2932.7	8741.7	10		23	46	28.9	26.6	26.1	31.1	34.1	35.4	0.000	6.6	6.3	6.2	
450	7/15/2005	1318	2932.6	8742.1	10		24	47	28.7	26.6	26.0	31.3	34.1	35.3	0.000	6.7	6.2	6.2	
451	7/15/2005	1412	2932.6	8742.0	10	88													TV
452	7/15/2005	1539	2931.5	8743.7	10		26	52	28.6	26.9	26.0	33.2	34.0	35.1	0.000	6.7	6.3	6.2	
453	7/27/2005	1710	2436.7	8303.1	2	37	10	19	29.9	28.1	26.3	35.8	35.9	35.8	0.000	6.3	6.5	6.6	TV
454	7/27/2005	1807	2437.4	8304.4	2	25	6	13	30.0	28.8	28.5	35.8	35.9	35.8	0.000	6.3	6.4	6.5	TV
455	7/27/2005	1856	2438.8	8302.4	2	29	8	16	30.3	27.8	27.1	35.9	35.9	35.8	0.000	6.3	6.6	6.9	TV
456	7/27/2005	1944	2439.3	8303.7	2	28	7	14	30.4	28.5	27.2	35.9	35.9	35.8	0.000	6.3	6.5	7.0	TV
457	7/27/2005	2033	2439.9	8303.2	2	28	8	16	30.4	28.4	26.7	35.9	35.9	35.8	0.000	6.3	6.5	7.0	TV
458	7/27/2005	2125	2440.0	8305.5	2	35	10	20	30.3	29.3	28.1	35.8	36.6	37.4	0.000	3.2	4.0	3.5	TV
459	7/28/2005	1201	2442.9	8342.4	2	115	32	63	30.5	28.1	24.5	36.1	35.8	36.4	0.000	6.2	6.5	6.5	TV
460	7/28/2005	1256	2444.2	8342.1	2	118	32	64	30.1	28.3	25.1	36.0	36.3	36.4	0.000	6.2	6.6	6.5	TV
461	7/28/2005	1352	2444.4	8343.1	2	119	33	66	30.4	28.1	24.7	36.1	36.3	36.4	0.000	6.3	6.6	6.5	TV
462	7/28/2005	1443	2445.1	8342.4	2	118	32	65	30.1	28.2	24.9	36.0	36.3	36.4	0.000	6.3	6.6	6.6	TV
463	7/28/2005	1538	2445.3	8341.9	2	117	32	64	30.2	28.2	24.8	36.0	36.3	36.4	0.000	6.2	6.6	6.6	TV
464	7/28/2005	1646	2446.7	8340.9	2	119	32	65	30.3	27.5	24.0	36.3	36.3	36.5	0.000	6.2	6.7	6.2	TV
465	7/28/2005	1741	2448.8	8340.7	2	118	32	65	30.2	27.2	23.9	36.1	36.4	36.5	0.000	6.3	6.7	6.5	TV
466	7/28/2005	1832	2448.5	8340.4	2	115	32	63	31.0	27.3	24.2	36.1	36.3	36.5	0.000	6.3	6.6	6.4	TV
467	7/28/2005	1926	2448.2	8341.2	2	115	33	66	30.4	27.6	24.3	36.3	36.3	36.4	0.000	6.3	6.7	6.6	TV
468	7/28/2005	2020	2448.0	8340.1	2	117	33	66	31.5	27.4	24.4	35.9	36.3	36.4	0.000	6.3	6.7	6.6	TV

Table 2. Selected environmental parameters (continued)

GANDY, REEFFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
469	7/29/2005	1225	2450.4	8340.6	2	123	32	65	30.2	26.8	23.7	36.0	36.3	36.5	0.000	6.3	6.7	6.3	TV
470	7/29/2005	1315	2450.6	8340.0	2	120	30	60											TV
471	7/29/2005	1406	2451.1	8340.4	2	118	32	65	30.0	26.7	23.7	36.1	36.3	36.5	0.000	6.4	6.8	6.3	TV
472	7/29/2005	1458	2451.1	8340.3	2	117	32	64	30.2	26.7	23.7	36.2	36.3	36.5	0.000	6.4	6.8	6.3	TV
473	7/29/2005	1549	2451.1	8340.0	2	119	32	64	30.2	26.6	23.7	36.2	36.4	36.5	0.000	6.3	6.8	6.3	TV
474	7/29/2005	1639	2451.2	8340.1	2	118	33	66	30.4	26.6	23.7	36.2	36.4	36.5	0.000	6.4	6.8	6.5	TV
475	7/29/2005	1729	2452.3	8340.1	2	114	32	65	30.6	26.7	23.5	36.2	36.4	36.5	0.000	6.3	6.8	6.4	TV
476	7/29/2005	1819	2451.8	8340.3	2	121	34	68	30.7	26.7	23.4	36.2	36.3	36.5	0.000	6.4	6.8	6.4	TV
477	7/29/2005	1909	2452.0	8340.4	2	125	35	70	30.6	26.7	23.3	36.2	36.3	36.5	0.000	6.3	6.8	6.4	TV
478	7/29/2005	1958	2450.8	8340.6	2	124	31	62	30.5	26.8	23.5	36.2	36.4	36.5	0.000	6.4	6.8	6.4	TV

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, SPRING PLANKTON SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
1	4/21/2005	704	3000.2	8659.4		71	36	71	21.7	21.7	18.4	35.1	36.0	36.3		7.2	6.7	4.7	PN
2	4/21/2005	1355	2930.7	8630.0		206	101	201	21.8	19.0	14.6	35.7	36.3	35.9		7.2	4.9	3.9	PN
3	4/21/2005	1808	2912.0	8600.3		194	96	192	20.9	17.3	14.9	35.2	36.3	36.0		7.4	4.4	3.9	PN
4	4/21/2005	2346	2839.9	8529.7		175	87	174	21.6	19.5	15.3	35.5	36.3	36.0		7.3	5.5	3.8	PN
5	4/22/2005	536	2800.2	8460.0		243	100	200	21.9	19.1	14.2	35.7	36.2	35.8		7.2	6.3	3.9	PN
6	4/22/2005	941	2729.9	8459.8		388	100	200	22.2	19.3	15.7	36.1	36.4	36.1		7.1	5.1	4.7	PN
7	4/22/2005	1327	2700.6	8500.6		852	101	201	23.9	20.3	14.4	36.3	36.6	35.9		6.7	4.8	4.1	PN
8	4/22/2005	1720	2630.3	8460.0		1818	100	200	23.1	19.5	14.9	36.2	36.4	36.0		7.0	4.7	4.7	PN
9	4/22/2005	2136	2600.4	8459.2		3100	101	201	24.7	21.8	16.2	36.3	36.4	36.2		6.7	6.3	4.3	PN
10	4/23/2005	31	2600.1	8430.8		216	100	200	24.1	19.8	14.3	36.4	36.5	35.9		6.8	4.8	4.4	PN
11	4/23/2005	352	2560.0	8400.6		136	67	133	24.4	21.1	17.5	36.4	36.3	36.3		6.7	6.8	4.4	PN
12	4/23/2005	752	2530.4	8400.1		137	68	135	25.2	22.2	17.7	36.4	36.6	36.2		6.6	6.0	4.6	PN
13	4/23/2005	1140	2460.0	8359.4		124	62	123	24.8	22.6	19.2	36.4	36.5	36.3		6.7	6.9	5.3	PN
14	4/23/2005	1524	2429.9	8400.0		1400	101	201	24.4	21.3	16.2	36.3	36.6	36.3		6.7	5.0	3.8	PN
15	4/23/2005	1920	2430.2	8329.8		231	101	201	24.3	20.1	16.1	36.3	36.4	36.1		6.8	5.9	4.4	PN
16	4/23/2005	5	2359.5	8329.3		1029	101	201	24.4	20.3	13.9	36.2	36.3	35.8		6.8	6.2	4.0	PN
17	4/24/2005	354	2359.5	8359.1		1413	101	201	23.7	20.3	14.3	36.3	36.4	35.8		6.9	5.9	4.1	PN
18	4/24/2005	959	2430.1	8429.7		3366	101	201	25.3	24.2	18.9	36.4	36.5	36.6		6.6	6.2	5.0	PN
19	4/24/2005	1550	2459.8	8429.9		2200	100	200	25.0	22.9	17.9	36.4	36.7	36.5		6.6	5.6	5.1	PN
20	4/24/2005	2004	2459.6	8459.5		3349	101	202	25.8	25.5	20.9	36.2	36.3	36.8		6.5	6.2	5.0	PN
21	4/24/2005	2328	2430.4	8500.1		3330	102	203	25.7	25.2	21.4	36.2	36.2	36.9		6.5	6.6	5.0	PN
22	4/25/2005	315	2439.5	8530.5		3352	101	201	25.5	25.1	24.6	36.2	36.3	36.7		6.6	6.5	5.6	PN
26	4/25/2005	1739	2530.6	8627.5		3257	101	201	25.7	25.1	22.9	36.2	36.3	36.9		6.6	6.4	5.0	PN
27	4/25/2005	2302	2600.1	8600.1		3175	101	202	25.1	22.3	18.6	36.4	36.4	36.5		6.6	6.8	4.8	PN
31	4/26/2005	1423	2759.9	8559.9		900	101	202	23.0	21.1	17.1	36.2	36.4	36.3		6.9	5.8	4.9	PN
32	4/26/2005	1858	2829.9	8600.2		332	102	203	22.8	21.3	16.7	36.1	36.7	36.2		6.9	5.2	4.7	PN
38	4/27/2005	1906	2700.1	8700.0		2946	100	200	26.3	25.5	19.7	36.2	36.4	36.7		6.5	6.2	5.0	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, SPRING PLANKTON SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
44	4/28/2005	1509	2700.4	8800.4		2700	103	205	25.7	24.2	22.4	36.2	36.4	36.9		6.5	6.5	5.0	PN
45	4/28/2005	1925	2659.8	8830.6		2562	102	203	25.1	24.2	23.0	36.3	36.4	36.9		6.6	6.6	5.1	PN
50	4/29/2005	1413	2559.2	9000.2		2862	101	201	24.0	21.8	16.4	36.6	36.4	36.2		6.8	6.8	4.4	PN
51	4/29/2005	1851	2629.9	9000.4		2745	101	202	25.3	21.3	14.6	36.5	36.6	35.9		6.5	5.2	4.5	PN
56	4/30/2005	1239	2600.5	9100.1		2660	100	200	23.9	21.2	15.5	36.4	36.5	36.0		6.8	5.5	4.1	PN
57	4/30/2005	1646	2600.1	9130.5		2100	102	204	23.9	20.3	15.0	36.3	36.5	36.0		6.8	4.6	4.0	PN
60	5/1/2005	1516	2629.9	9259.9		1600	101	202	22.5	20.2	16.9	36.5	36.5	36.3		7.0	5.1	4.9	PN
61	5/1/2005	1807	2616.5	9300.1		1888	101	201	23.4	20.1	14.7	36.3	36.5	35.9		6.9	4.9	4.1	PN
66	5/2/2005	1203	2700.1	9430.0		1098	102	203	23.1	21.1	15.5	36.5	36.5	36.0		6.9	5.4	4.3	PN
67	5/2/2005	1540	2659.6	9500.5		1500	101	201	23.8	21.9	16.8	36.1	36.7	36.2		6.8	5.2	4.1	PN
73	5/3/2005	1302	2659.8	9600.3		790	101	201	23.0	17.5	14.0	34.8	36.3	35.8		6.9	3.9	3.8	PN
74	5/3/2005	1727	2729.5	9600.3		208	101	202	23.4	18.7	14.8	35.4	36.4	35.9		6.9	4.0	3.8	PN
79	5/4/2005	1206	2800.2	9401.0		81	40	79	22.6	22.0	19.9	35.5	36.2	36.2		6.9	6.8	5.6	PN
80	5/4/2005	1628	2759.8	9330.0		92	45	90	22.2	21.1	19.4	34.9	36.3	36.4		7.1	7.2	4.4	PN
85	5/5/2005	1515	2659.8	9200.2		1900	100	200	22.4	20.2	14.3	36.2	36.4	35.9		7.0	5.9	4.0	PN
86	5/5/2005	2246	2759.5	9200.4		120	60	120	23.2	22.6	19.0	36.6	36.5	36.4		6.9	6.9	4.2	PN
102	5/14/2005	404	3000.4	8659.6		70	35	69	23.6	22.2	20.0	35.1	35.9	36.2		7.0	7.0	5.4	PN
103	5/14/2005	825	2930.2	8630.6		205	101	201	23.1	20.2	15.2	35.2	36.4	36.0		7.0	5.2	3.8	PN
104	5/14/2005	1239	2912.2	8559.9		192	96	192	23.1	19.1	14.6	34.7	36.2	35.9		7.1	5.6	3.8	PN
105	5/14/2005	1746	2840.6	8530.5		174	87	173	23.5	19.6	15.3	35.3	36.5	36.0		7.0	4.5	4.0	PN
106	5/14/2005	2331	2800.7	8500.5		251	101	201	23.9	18.5	14.2	35.8	36.4	35.8		7.0	4.6	3.9	PN
107	5/15/2005	327	2729.7	8500.5		387	101	201	24.5	19.8	14.7	36.2	36.5	35.9		6.8	4.8	4.2	PN
108	5/15/2005	716	2700.5	8500.6		900	102	204	23.9	20.0	14.7	36.1	36.4	35.9		6.9	5.6	4.3	PN
109	5/15/2005	1107	2630.8	8500.0		2290	102	204	23.8	19.9	14.8	36.0	36.4	35.9		6.9	5.3	4.5	PN
110	5/15/2005	1455	2600.2	8500.6		3300	102	203	27.2	21.7	16.0	36.2	36.4	36.1		6.4	6.5	4.3	PN
111	5/15/2005	1839	2600.1	8430.6		215	100	200	25.0	19.5	14.4	36.2	36.4	35.9		6.7	4.8	4.2	PN
112	5/15/2005	2309	2600.0	8400.3		135	67	134	24.4	21.4	17.3	36.3	36.3	36.3		6.8	6.8	4.2	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, SPRING PLANKTON SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
113	5/16/2005	217	2529.6	8400.5		136	67	133	24.9	21.9	17.1	36.3	36.4	36.2		6.7	6.8	4.1	PN
114	5/16/2005	559	2500.0	8400.5		124	62	123	25.7	21.9	17.9	36.2	36.4	36.4		6.5	6.6	4.3	PN
115	5/16/2005	946	2430.4	8400.6		2200	102	203	25.7	20.1	14.7	36.2	36.4	35.9		6.6	5.4	4.2	PN
116	5/16/2005	1323	2430.0	8330.8		289	102	203	24.9	20.1	13.1	36.3	36.4	35.7		6.7	5.6	4.1	PN
117	5/16/2005	1722	2359.9	8330.7		1100	100	200	25.6	21.3	14.9	36.3	36.5	35.9		6.6	6.0	4.2	PN
118	5/16/2005	2151	2400.7	8400.6		2230	101	201	27.3	22.7	17.4	36.2	36.6	36.4		6.4	6.2	5.0	PN
119	5/17/2005	431	2430.5	8430.5		3434	101	202	26.8	21.6	15.6	36.2	36.5	36.0		6.5	6.0	4.2	PN
120	5/17/2005	1008	2500.9	8429.9		2290	101	202	25.0	20.5	15.0	36.2	36.5	36.0		6.7	5.2	4.2	PN
121	5/17/2005	1415	2500.3	8500.5		3300	101	201	27.5	25.7	19.7	36.2	36.3	36.6		6.4	6.4	4.7	PN
122	5/17/2005	1747	2430.8	8500.5		3395	100	200	27.5	26.1	22.5	36.2	36.3	36.9		6.4	6.4	5.1	PN
123	5/17/2005	2148	2440.6	8530.6		3380	101	201	27.1	25.6	23.7	36.1	36.2	37.0		6.5	6.5	5.2	PN
124	5/18/2005	49	2459.7	8530.0		3303	100	200	27.3	25.9	23.1	36.2	36.3	37.0		6.4	6.5	5.3	PN
125	5/18/2005	432	2500.5	8600.8		3294	100	199	26.7	25.4	24.0	36.2	36.2	36.8		6.5	6.5	5.2	PN
126	5/18/2005	829	2529.0	8559.9		3202	100	200	27.4	25.8	22.7	36.2	36.2	36.9		6.4	6.5	5.1	PN
127	5/18/2005	1147	2529.7	8626.4		3240	101	201	27.5	25.9	23.0	36.2	36.2	36.9		6.4	6.5	5.1	PN
128	5/18/2005	1637	2600.3	8600.4		3200	101	201	27.6	25.2	19.6	36.1	36.7	36.7		6.4	5.6	5.1	PN
129	5/18/2005	2109	2629.8	8600.3		3200	102	203	25.4	18.1	13.3	35.4	36.4	35.7		6.8	4.4	4.1	PN
130	5/19/2005	56	2700.6	8600.8		3200	101	201	25.4	17.7	13.0	35.3	36.3	35.6		6.9	4.4	4.2	PN
131	5/19/2005	447	2730.1	8600.4		3239	101	201	26.5	20.0	15.0	36.2	36.5	36.0		6.5	5.0	4.3	PN
132	5/19/2005	901	2800.4	8600.8		992	100	200	24.8	20.3	15.8	35.3	36.3	36.1		6.9	5.7	4.7	PN
133	5/19/2005	1317	2829.8	8600.7		337	102	203	24.8	20.0	14.8	35.3	36.5	35.9		6.9	4.9	4.3	PN
134	5/19/2005	1750	2859.8	8629.1		376	101	201	25.8	20.0	15.6	35.9	36.3	36.1		6.7	6.3	4.6	PN
135	5/19/2005	2117	2859.4	8659.4		676	100	200	27.3	20.2	14.6	36.3	36.4	35.9		6.4	5.2	4.2	PN
136	5/20/2005	115	2830.9	8659.9		840	100	200	26.8	21.1	15.6	36.4	36.7	36.1		6.5	4.8	4.7	PN
137	5/20/2005	502	2800.5	8700.6		2215	101	202	26.9	22.5	17.1	36.3	36.9	36.3		6.4	4.8	5.0	PN
138	5/20/2005	845	2731.0	8659.8		3000	101	201	27.6	22.6	18.2	36.2	36.5	36.5		6.4	6.9	5.2	PN
139	5/20/2005	1158	2700.9	8659.8		2950	101	201	25.3	23.1	18.7	0.3	0.3	6.8		1.5	2.2	3.0	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, SPRING PLANKTON SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
140	5/20/2005	1526	2630.6	8659.5		3000	101	202	26.0	22.2	17.0	35.8	36.4	36.3		6.7	6.8	4.5	PN
141	5/20/2005	1724	2617.8	8700.7		3092	101	201	27.9	24.2	19.0	36.2	36.6	36.5		6.4	6.8	4.5	PN
142	5/20/2005	2157	2600.2	8729.6		3150	100	200	28.2	25.6	21.7	36.2	36.3	36.9		6.4	6.4	5.1	PN
143	5/21/2005	126	2559.8	8759.4		3162	100	200	28.5	26.5	20.0	36.2	36.3	36.7		6.3	6.3	5.1	PN
144	5/21/2005	504	2629.2	8800.4		2745	101	202	28.2	25.8	22.4	36.2	36.2	36.9		6.3	6.5	5.1	PN
145	5/21/2005	924	2659.6	8759.6		2750	101	202	27.5	25.6	23.3	36.2	36.3	36.9		6.4	6.5	5.2	PN
146	5/21/2005	1258	2659.5	8829.6		2470	101	202	27.5	26.1	22.3	36.2	36.2	36.9		6.4	6.5	4.8	PN
147	5/21/2005	1626	2659.6	8859.5		3300	100	200	28.0	25.3	19.3	36.2	36.6	36.6		6.3	5.8	5.1	PN
148	5/21/2005	2112	2629.3	8859.6		2550	101	201	27.7	21.6	16.9	36.3	36.7	36.3		6.4	4.9	5.1	PN
149	5/22/2005	115	2559.9	8900.1		3111	101	201	27.1	19.8	14.9	36.4	36.6	35.9		6.5	4.8	4.7	PN
150	5/22/2005	455	2559.8	8929.9		3294	101	201	26.3	22.2	17.0	36.7	36.5	36.2		6.6	6.6	4.2	PN
151	5/22/2005	904	2559.7	9001.0		2910	101	201	26.4	21.2	15.8	36.6	36.5	36.1		6.6	5.4	4.3	PN
152	5/22/2005	1237	2629.2	8960.0		2750	100	200	26.1	20.4	15.3	36.2	36.5	36.0		6.7	4.8	4.7	PN
153	5/22/2005	1619	2659.2	8960.0		3400	101	201	27.0	17.8	14.3	36.4	36.4	35.8		6.5	4.7	4.5	PN
154	5/22/2005	1958	2659.3	9030.4		2000	101	202	27.6	19.1	14.7	36.5	36.5	35.9		6.5	4.2	4.0	PN
155	5/22/2005	2335	2659.3	9059.6		1665	101	201	27.6	19.1	14.8	36.4	36.5	35.9		6.5	4.6	4.6	PN
156	5/23/2005	320	2630.7	9100.1		2105	102	203	27.0	19.4	13.7	36.5	36.5	35.8		6.5	4.5	4.0	PN
157	5/23/2005	721	2559.1	9100.3		2900	101	201	26.7	20.7	15.1	36.6	36.5	36.0		6.6	5.0	4.1	PN
158	5/23/2005	1107	2600.0	9129.0		2100	101	201	26.5	20.3	14.6	36.4	36.5	35.9		6.6	4.7	4.2	PN
159	5/23/2005	1434	2600.1	9159.4		2200	101	201	26.6	20.5	15.2	36.5	36.4	36.0		6.6	6.0	4.0	PN
160	5/23/2005	1822	2629.5	9200.1		1879	101	201	26.4	21.0	15.8	36.4	36.5	36.1		6.6	5.7	4.4	PN
161	5/23/2005	2209	2659.2	9200.5		1885	101	201	26.7	21.2	14.3	36.5	36.5	35.8		6.6	6.0	4.2	PN
162	5/24/2005	140	2700.0	9229.0		1446	100	200	26.4	19.7	14.2	36.3	36.5	35.8		6.7	4.9	4.1	PN
163	5/24/2005	513	2700.0	9259.1		1299	101	202	26.7	20.5	13.7	36.5	36.5	35.8		6.6	5.6	4.3	PN
164	5/24/2005	907	2630.9	9259.8		1630	101	201	26.7	20.0	15.2	36.5	36.5	36.0		6.6	4.6	4.3	PN
165	5/24/2005	1115	2617.8	9259.4		1885	101	201	26.3	19.7	14.0	35.6	36.5	35.8		6.6	4.5	4.2	PN
166	5/24/2005	1503	2601.1	9329.2		2200	103	205	26.2	19.4	12.8	36.0	36.4	35.6		6.7	4.3	3.8	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, SPRING PLANKTON SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
167	5/24/2005	1821	2601.2	9359.1		2379	100	200	27.1	19.7	14.9	36.0	36.6	35.9		6.6	4.6	4.2	PN
168	5/24/2005	2204	2629.2	9400.1		1556	101	201	26.7	21.2	15.7	36.4	36.5	36.1		6.6	6.0	4.4	PN
169	5/25/2005	158	2659.1	9360.0		961	101	201	26.5	20.7	16.1	35.8	36.6	36.1		6.7	4.8	4.0	PN
170	5/25/2005	535	2660.0	9429.1		204	102	204	26.3	21.3	16.0	35.2	36.4	36.1		6.7	6.7	4.1	PN
171	5/25/2005	909	2659.9	9458.8		1500	101	201	26.6	22.8	16.3	36.5	36.5	36.2		6.5	6.5	4.1	PN
172	5/25/2005	1311	2630.7	9459.6		1600	101	201	26.4	22.8	16.8	35.2	36.5	36.2		6.6	6.9	4.2	PN
173	5/25/2005	1718	2601.2	9459.0		2342	101	201	27.0	23.2	18.0	36.6	36.6	36.4		6.5	6.8	4.3	PN
174	5/25/2005	2108	2601.1	9529.2		1455	101	201	27.0	23.2	17.1	36.6	36.6	36.3		6.5	6.7	4.2	PN
175	5/26/2005	115	2601.7	9600.4		1043	102	203	26.7	21.1	16.0	35.7	36.5	36.1		6.5	5.1	3.9	PN
176	5/26/2005	521	2629.9	9600.8		1098	104	208	26.4	18.4	14.0	33.8	36.4	35.8		6.7	4.2	3.9	PN
177	5/26/2005	928	2700.9	9600.3		785	100	200	26.5	18.4	14.4	34.2	36.4	35.9		6.6	4.0	4.1	PN
178	5/26/2005	1306	2729.4	9559.9		206	99	198	25.9	20.5	15.7	34.5	36.5	36.1		6.7	5.2	4.0	PN
179	5/26/2005	1652	2800.1	9602.1		45	22	44	26.1	22.8	21.0	32.5	34.5	36.4		6.8	6.5	5.5	PN
180	5/26/2005	2042	2759.7	9530.6		55	27	53	27.4	23.8	21.4	28.6	34.1	36.4		6.8	6.9	6.0	PN
181	5/26/2005	2351	2800.5	9500.8		80	40	79	27.5	23.5	20.4	29.6	36.3	36.4		6.8	7.0	5.3	PN
182	5/27/2005	315	2800.7	9430.6		67	34	67	26.4	22.6	20.2	33.3	35.5	36.4		6.8	6.6	4.8	PN
183	5/27/2005	640	2830.0	9429.4		36	17	34	26.7	23.3	20.9	29.3	34.0	36.0		6.8	7.1	5.5	PN
184	5/27/2005	1008	2829.4	9400.7		41	21	41	26.3	22.8	20.6	33.6	35.3	35.7		6.8	7.1	5.8	PN
185	5/27/2005	1351	2800.8	9359.8		81	32	64	26.7	24.2	20.7	34.0	35.8	36.4		6.7	6.9	0.0	PN
186	5/27/2005	1701	2800.6	9330.7		91	45	89	25.5	23.0	20.3	35.0	36.5	36.4		6.9	7.0	5.4	PN
187	5/27/2005	2027	2829.1	9330.1		43	21	41	27.0	22.9	20.5	30.6	34.4	36.3		6.8	7.2	5.8	PN
188	5/27/2005	2356	2830.5	9300.1		46	22	44	26.8	22.5	20.6	32.9	35.2	36.2		6.9	7.2	6.0	PN
189	5/28/2005	414	2800.9	9258.2		105	52	104	27.9	22.3	19.9	33.9	36.4	36.4		6.6	7.1	4.8	PN
190	5/28/2005	807	2800.7	9229.8		104	53	104	26.5	21.9	19.5	34.5	36.3	36.4		6.7	7.1	5.0	PN
191	5/28/2005	1141	2759.6	9159.4		118	59	117	26.7	22.5	18.9	35.6	36.5	36.5		6.6	7.1	4.5	PN
192	5/28/2005	1515	2800.4	9129.9		162	80	160	27.4	21.2	16.4	34.4	36.6	36.2		6.5	5.4	4.5	PN
193	5/28/2005	1838	2800.4	9057.9		154	76	152	28.2	22.3	16.5	36.5	36.8	36.2		6.4	5.1	4.4	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, SPRING PLANKTON SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
194	5/28/2005	2145	2805.4	9030.8		143	71	142	28.3	22.4	17.2	35.2	36.8	36.3		6.6	5.1	4.5	PN
195	5/29/2005	112	2800.8	9000.4		539	100	200	28.8	21.4	16.0	36.2	36.5	36.1		6.3	5.7	4.7	PN
196	5/29/2005	502	2800.6	8930.1		998	101	202	28.5	25.4	19.4	36.2	36.8	36.6		6.3	5.7	5.0	PN
197	5/29/2005	855	2800.3	8900.1		1335	102	204	28.2	25.5	20.7	36.2	36.4	36.8		6.3	6.2	5.0	PN
198	5/29/2005	1226	2800.4	8829.9		2200	101	201	27.7	24.8	22.3	36.2	36.4	36.9		6.4	6.5	5.0	PN
199	5/29/2005	1552	2800.7	8759.6		2400	101	202	28.0	25.6	21.3	36.2	36.2	36.8		6.4	6.6	5.0	PN
200	5/29/2005	2003	2829.2	8800.1		2306	101	201	28.5	23.6	18.8	36.2	36.6	36.5		6.3	5.3	4.9	PN

Table 2. Selected environmental parameters (continued)

TOMMY MUNRO, SPRING PLANKTON SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
1	5/11/2005	1924	2930.0	8700.0	10	65	33	65	24.0	23.1	21.2	32.2	35.0	35.0		5.5	5.4	4.6	PN
2	5/12/2005	2023	2900.0	8600.0		66	33	66	23.6	21.8	20.3	34.3	35.1	35.0		5.4	4.9	4.5	PN
3	5/13/2005	1537	2900.0	8800.0	11	39	20	39	24.7	21.6	21.8	31.4	35.0	33.0		5.8	4.8	5.8	PN
4	5/13/2005	2158	2900.0	8800.0	11	332	10	200	25.1	18.1	15.4	32.2	35.2	35.1		5.4	4.2	3.8	PN
5	5/14/2005	1354	2900.0	8800.0	11	326	100	200	25.3	18.3	14.8	33.4	35.4	34.8					PN
6	5/13/2005	1836	2900.0	8800.0	11	24			24.6	21.0	21.2	29.9	34.6	35.3					PN

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GROUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
1	6/15/2005	48	2959.7	8800.6	11	27	13	24	27.7	25.7	25.3	29.8	33.6	34.1		6.7	6.0	6.0	PN
2	6/15/2005	425	2930.2	8800.6	11	43	22	42	27.3	24.1	22.7	33.9	35.4	35.8		6.2	6.4	6.2	PN
3	6/15/2005	613	2936.9	8808.0	11	37	19	36	27.8	24.2	22.5	33.3	35.6	36.0		6.2	6.4	6.1	ST
4	6/15/2005	1053	2949.8	8809.3	11	34	17	34	28.9	25.6	22.4	33.2	34.3	35.3		6.1	6.3	5.8	ST
5	6/15/2005	1243	2950.7	8800.2	11	32	15	30	28.2	25.7	22.9	34.1	34.6	35.2		6.1	6.2	6.0	ST
6	6/15/2005	1541	2928.3	8804.1	11	45	24	45	28.0	23.6	22.8	32.9	35.9	36.3		6.1	6.4	6.1	ST
7	6/15/2005	1729	2924.6	8800.3	11	73	37	72	27.8	23.0	20.4	33.8	36.4	36.5		6.2	6.4	4.3	ST
8	6/15/2005	2007	2921.6	8800.2	11	111	56	111	28.2	21.7	19.7	33.7	36.4	36.4		6.1	5.5	4.5	ST
9	6/16/2005	54	2920.4	8815.6	11	64	32	61	28.6	24.8	22.7	33.3	36.5	36.5		6.1	6.1	5.2	ST
10	6/16/2005	422	2914.2	8831.4	11	82	38	73	28.2	22.5	20.7	33.7	36.3	36.4		6.1	5.2	4.1	ST
11	6/16/2005	503	2914.1	8830.8	11	122	61	122	28.1	22.5	16.8	33.8	36.5	36.3		6.0	6.1	3.9	ST
12	6/16/2005	818	2909.6	8838.3	11	83	36	71	28.6	21.9	19.9	33.1	36.1	36.5		6.0	4.1	4.1	ST
13	6/16/2005	1201	2906.1	8852.7	11	84	36	71	28.6	22.0	18.5	29.4	35.9	36.5		7.5	4.1	4.2	ST
14	6/16/2005	1324	2905.4	8853.1	11	83													ST
15	6/16/2005	1507	2905.6	8856.2	11	55	25	48	29.3	22.8	20.7	27.5	35.7	36.4		8.0	4.7	4.0	ST
16	6/16/2005	1703	2901.7	8902.1	13	53	28	53	29.7	23.8	21.0	26.5	36.4	36.5		9.2	5.4	4.2	ST
17	6/18/2005	1234	2629.5	9629.9	21	82	42	81	27.9	22.4	21.1	36.4	36.5	36.5		5.9	6.3	4.8	PN
18	6/18/2005	1723	2559.7	9700.3	22	26	13	24	27.7	25.6	24.5	36.0	36.0	36.0		6.0	6.3	6.4	PN
19	6/18/2005	2304	2603.7	9630.2	21	61	30	59	28.6	26.4	22.4	36.1	36.5	36.5		5.9	6.2	6.0	PN
20	6/19/2005	122	2602.7	9623.8		92	44	85	28.2	24.0	21.4	36.5	36.2	36.4		5.9	6.5	5.4	ST
21	6/19/2005	404	2616.5	9621.4		99	50	99	28.8	23.5	20.2	35.5	36.6	36.5		5.9	6.3	4.2	ST
22	6/19/2005	631	2621.9	9634.7	21	56	29	56	28.3	24.4	21.9	35.5	36.4	36.3		5.9	5.9	4.8	ST
23	6/19/2005	755	2623.7	9632.4	21	63													ST
24	6/19/2005	917	2626.8	9633.7	21	65	31	61	28.2	23.0	21.5	36.2	36.3	36.4		5.9	6.0	5.1	ST
25	6/19/2005	1523	2630.2	9700.1	21	34	18	34	27.7	27.4	23.7	35.8	36.3	36.1		6.0	5.9	5.4	PN
26	6/19/2005	1640	2630.4	9703.2	21	30	15	30	27.6	26.8	24.0	36.0	36.2	36.1		5.9	5.9	5.7	ST
27	6/19/2005	1801	2632.7	9704.7	21	27	13	25	27.4	27.1	24.9	36.3	36.3	36.2		5.9	5.9	6.2	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GROUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
28	6/20/2005	124	2609.0	9703.6	21	20	10	18	28.2	27.6	25.0	36.5	36.5	36.0		6.0	6.0	6.6	ST
29	6/20/2005	254	2605.3	9657.9	21	29	14	26	28.2	28.0	24.5	35.9	36.5	36.2		6.0	5.9	6.3	ST
30	6/20/2005	431	2602.0	9652.9	21	35	16	31	28.0	25.6	23.7	35.8	36.0	36.3		5.9	6.3	6.4	ST
31	6/20/2005	700	2617.0	9650.0	21	40	21	40	28.8	27.7	23.5	35.6	36.3	36.2		5.8	6.0	5.7	ST
32	6/20/2005	820	2617.9	9652.7	21	39													ST
33	6/20/2005	1137	2633.8	9654.1	21	40	21	40	28.0	27.9	23.3	35.9	36.4	36.1		5.9	5.8	5.6	ST
34	6/20/2005	1253	2635.6	9651.8	21	44													ST
35	6/20/2005	1613	2645.0	9715.8	21	18	9	17	28.1	28.0	26.9	36.3	36.3	36.2		5.8	5.8	5.0	ST
36	6/20/2005	1748	2649.6	9716.9	21	18	9	16	28.3	28.3	25.7	36.3	36.3	36.1		5.8	5.8	5.5	ST
37	6/20/2005	1905	2650.4	9720.7	21	10	5	10	28.9	28.9	28.7	36.3	36.4	36.4		6.0	6.0	5.9	ST
38	6/20/2005	2215	2633.0	9707.6	21	22	11	21	27.8	27.6	25.5	36.4	36.4	36.2		5.9	5.8	6.2	ST
39	6/21/2005	125	2622.8	9711.6	21	13	6	9	28.0	28.0	28.0	36.4	36.4	36.4		5.9	5.9	5.9	ST
40	6/21/2005	245	2618.7	9709.8	21	15	7	12	28.1	28.1	28.1	36.4	36.4	36.4		6.0	6.0	5.9	ST
41	6/21/2005	429	2627.0	9703.4	21	26	11	22	28.1	28.0	25.5	36.0	36.1	36.2		5.9	5.9	5.9	ST
42	6/21/2005	645	2621.5	9650.2	21	41	21	41	28.7	27.6	23.5	35.6	36.2	36.2		5.8	6.0	5.9	ST
43	6/21/2005	805	2620.5	9647.6	21	42													ST
44	6/21/2005	930	2619.8	9644.9	21	44													ST
45	6/21/2005	1052	2619.0	9642.0	21	45													ST
46	6/21/2005	1603	2659.2	9659.3	21	43	22	41	28.4	27.4	23.0	35.9	36.2	36.1		5.8	5.9	5.4	PN
47	6/21/2005	1651	2659.2	9703.0	21	37	20	37	28.5	27.8	24.0	35.9	36.2	36.0		5.8	5.9	5.8	ST
48	6/21/2005	1811	2701.0	9707.3	20	31	15	30	28.6	28.3	26.0	36.1	36.1	36.1		5.8	5.8	6.0	ST
49	6/21/2005	2038	2655.4	9721.2	21	13	8	13	29.2	29.2	28.8	35.8	35.8	36.0		5.9	5.9	5.9	ST
50	6/21/2005	2207	2652.7	9714.4	21	24	11	21	28.4	28.4	26.5	36.2	36.2	36.2		5.9	5.8	5.5	ST
51	6/22/2005	123	2641.0	9718.3	21	10	6	10	29.1	29.2	29.2	36.4	36.4	36.4		5.9	5.9	5.9	ST
52	6/22/2005	328	2634.9	9703.8	21	31	15	29	28.1	27.8	26.1	36.0	36.1	36.3		5.9	6.0	6.4	ST
53	6/22/2005	455	2640.1	9701.7	21	35	17	33	28.3	28.3	23.9	36.2	36.2	36.1		5.8	5.9	6.7	ST
54	6/22/2005	744	2654.1	9714.8	21	24	13	24	28.3	28.3	26.9	36.2	36.2	36.1		5.8	5.8	5.2	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
55	6/22/2005	911	2659.4	9715.1	21	24	12	23	28.6	28.6	26.9	35.7	35.7	36.0		5.8	5.8	5.2	ST
56	6/22/2005	1137	2707.0	9720.0	20	15	8	15	29.1	29.1	29.1	35.5	35.5	35.5		5.8	5.8	5.8	ST
57	6/22/2005	1307	2713.2	9718.7	20	15	8	14	28.7	28.7	28.7	35.2	35.2	35.2		5.7	5.7	5.7	ST
58	6/22/2005	1823	2724.9	9655.0	20	40	21	40	29.4	28.0	23.0	33.9	35.4	35.9		5.9	5.9	4.3	ST
59	6/22/2005	2103	2716.8	9648.6	20	55	28	53	29.3	25.2	21.8	34.0	36.1	36.1		5.8	5.8	4.4	ST
60	6/22/2005	2223	2715.6	9645.7	20	61													ST
61	6/22/2005	2311	2715.3	9644.7	20	70	36	70	28.9	24.3	21.6	35.3	36.1	36.4		5.8	6.0	5.2	ST
62	6/23/2005	135	2716.1	9636.5	20	82	42	82	28.7	25.2	21.5	35.5	36.5	36.5		5.8	6.3	5.2	ST
63	6/23/2005	453	2725.6	9700.6	20	29	15	28	29.2	28.8	25.7	34.2	34.6	35.5		5.8	5.8	4.5	ST
64	6/23/2005	650	2723.3	9711.6	20	20	10	19	28.9	28.9	28.9	34.7	34.7	34.8		5.8	5.8	5.8	ST
65	6/23/2005	833	2729.2	9714.9	20	13	7	13	30.0	30.0	30.0	34.6	34.6	34.6		5.7	5.7	5.7	ST
66	6/23/2005	1057	2729.8	9659.5	20	29	16	29	29.0	29.0	25.8	34.3	34.5	30.7		5.7	5.8	3.6	PN
67	6/23/2005	1219	2738.4	9701.0	20	22	11	21	29.2	29.2	29.1	34.1	34.1	34.4		5.8	5.8	5.7	ST
68	6/23/2005	1433	2740.8	9646.1	20	33	17	32	28.5	28.1	25.5	34.8	35.7	35.8		5.8	5.9	6.1	ST
69	6/23/2005	1602	2735.5	9641.5	20	46	23	44	29.1	24.8	22.2	34.1	35.5	36.0		5.8	5.3	3.9	ST
70	6/23/2005	1723	2734.1	9639.0	20	52													ST
71	6/23/2005	1928	2728.4	9628.1		82	40	79	28.8	24.3	22.1	35.7	36.1	36.5		5.8	5.9	5.5	ST
72	6/23/2005	2144	2723.1	9628.4		91	45	88	28.8	24.3	21.5	35.7	36.1	36.4		5.9	6.0	5.0	ST
73	6/23/2005	2317	2721.9	9625.7		102													ST
74	6/24/2005	156	2729.6	9629.6	20	75	36	70	28.8	24.8	22.2	35.7	36.0	36.5		5.9	6.1	5.7	PN
75	6/24/2005	339	2731.3	9639.1	20	55	28	55	28.7	25.5	21.8	35.3	36.1	36.2		5.8	6.1	4.7	ST
76	6/24/2005	457	2732.3	9641.8	20	49													ST
77	6/24/2005	853	2754.6	9652.5	20	17	9	17	29.4	29.4	29.5	33.2	33.2	33.2		5.8	5.8	5.7	ST
78	6/24/2005	1136	2758.1	9655.9	20	10	6	10	30.3	30.3	30.3	33.0	33.0	33.0		5.7	5.7	5.6	ST
79	6/24/2005	1238	2757.5	9653.5	20	13	7	12	29.8	29.8	29.8	33.0	33.0	33.0		5.9	5.9	5.8	ST
80	6/24/2005	1607	2759.3	9629.4	20	28	14	27	29.1	29.1	27.0	32.8	33.1	34.6		5.9	5.8	5.0	PN
81	6/24/2005	1747	2749.9	9638.6	20	31	16	29	29.1	28.4	26.1	33.6	34.1	34.8		5.9	6.0	4.5	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
82	6/24/2005	2124	2743.2	9614.9	20	73	36	70	28.9	25.3	22.5	35.1	36.3	36.4		5.8	6.2	5.9	ST
83	6/25/2005	123	2803.9	9617.7	19	29	14	27	29.2	28.6	25.3	33.2	34.5	35.2		5.9	5.8	6.2	ST
84	6/25/2005	404	2759.6	9600.1	20	45	22	42	28.8	26.5	22.2	34.2	35.7	36.1		5.8	5.9	4.9	PN
85	6/25/2005	547	2754.9	9548.8	20	56	29	56	28.7	26.6	21.8	34.8	35.7	36.2		5.8	5.9	4.8	ST
86	6/25/2005	710	2752.4	9549.3	20	58													ST
87	6/25/2005	1302	2810.0	9525.5	19	46	23	45	28.4	28.0	22.5	34.9	35.3	36.2		5.8	5.8	5.5	ST
88	6/25/2005	1422	2807.9	9524.1	19	48													ST
89	6/25/2005	1542	2805.5	9522.5	19	51													ST
90	7/4/2005	2245	2921.4	9434.6	18	12	5	10	30.0	29.9	29.7	32.7	32.7	32.6		6.2	6.1	5.8	ST
91	7/5/2005	206	2859.7	9430.1	18	18	9	18	30.5	30.4	29.4	31.5	31.5	33.4		6.2	6.2	6.0	PN
92	7/5/2005	347	2845.7	9438.7	18	23	11	21	30.2	30.2	27.2	31.4	31.4	34.4		6.2	6.1	6.1	ST
93	7/5/2005	525	2850.1	9449.0	18	19	10	19	30.0	29.9	25.9	32.7	33.0	34.9		6.1	6.1	5.9	ST
94	7/5/2005	802	2859.7	9500.5	19	17	9	16	30.1	28.4	25.7	32.4	33.0	34.4		6.2	5.8	5.4	PN
95	7/5/2005	1024	2841.4	9455.9	18	27	14	26	30.0	29.7	24.7	31.8	33.1	35.5		6.1	6.2	6.7	ST
96	7/5/2005	1137	2845.3	9501.7	19	22	11	22	29.7	29.6	25.5	32.8	33.3	30.2		6.1	6.2	3.4	ST
97	7/5/2005	1334	2851.5	9514.0	19	19	10	19	29.9	29.0	24.5	33.2	34.0	35.7		6.3	5.9	4.6	ST
98	7/5/2005	1631	2842.0	9507.1	19	24	11	21	30.4	29.9	24.9	32.5	33.0	35.6		6.2	6.2	6.8	ST
99	7/5/2005	1858	2837.6	9508.0	19	28	14	27	30.3	29.4	25.4	32.1	34.6	35.6		6.2	6.3	7.1	ST
100	7/5/2005	2102	2837.7	9513.8	19	27	14	27	30.7	29.6	24.2	32.6	34.1	35.8		6.2	6.3	5.9	ST
101	7/5/2005	2328	2827.4	9512.8	19	33	17	32	30.5	29.4	23.4	32.6	34.7	35.9		6.1	6.3	6.4	ST
102	7/6/2005	220	2829.7	9530.3	19	25	13	24	30.4	30.0	24.4	32.9	33.3	35.7		6.2	6.2	6.0	ST
103	7/6/2005	348	2836.5	9533.3	19	19	10	19	30.2	30.1	26.4	32.9	33.1	35.2		6.2	6.2	5.9	ST
104	7/6/2005	424	2837.5	9533.7	19	16	7	13	30.1	30.1	29.0	33.3	33.4	34.4		6.2	6.2	5.6	ST
105	7/6/2005	638	2837.5	9546.6	19	13	7	12	30.1	30.1	28.9	33.5	33.6	34.3		6.2	6.1	4.8	ST
106	7/6/2005	857	2831.9	9605.2	19	11	6	11	29.9	29.9	29.6	33.6	33.6	33.9		6.1	6.1	5.9	ST
107	7/6/2005	1027	2829.2	9606.8	19	13	7	12	30.0	30.0	28.9	33.6	33.6	34.3		6.1	6.1	4.8	ST
108	7/6/2005	1207	2829.3	9600.2	19	16	7	14	30.0	30.0	29.1	33.2	33.2	34.2		6.2	6.2	5.6	PN

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
109	7/6/2005	1316	2823.4	9607.7	19	18	10	18	29.8	29.8	27.8	33.6	33.6	34.7		6.2	6.2	5.3	ST
110	7/6/2005	1513	2821.4	9618.5	19	15	7	12	30.0	30.0	28.3	33.5	33.5	34.6		6.1	6.1	5.1	ST
111	7/6/2005	1717	2812.1	9606.4	19	26	13	25	29.9	29.8	25.4	33.9	33.9	35.6		6.3	6.3	5.8	ST
112	7/6/2005	1924	2808.3	9553.3	19	36	19	36	30.4	29.5	23.3	32.9	33.9	36.1		6.3	6.4	6.1	ST
113	7/6/2005	2105	2813.4	9549.4	19	31	16	31	30.7	29.5	24.2	32.6	34.4	35.8		6.3	6.3	6.1	ST
114	7/6/2005	2250	2810.5	9542.6	19	36	18	35	30.1	29.5	23.0	33.4	34.2	36.0		6.2	6.3	6.3	ST
115	7/7/2005	122	2817.7	9534.4	19	31	16	29	30.7	29.7	24.0	33.1	33.8	35.7		6.2	6.3	6.0	ST
116	7/7/2005	301	2811.2	9540.1	19	37	19	36	29.9	29.4	23.0	33.7	34.3	36.0		6.3	6.3	6.1	ST
117	7/7/2005	627	2806.1	9601.2	19	35	18	35	30.0	30.0	23.9	33.3	33.6	36.0		6.2	6.3	6.2	ST
118	7/7/2005	804	2810.8	9559.8	19	30	15	28	29.9	29.9	25.1	33.8	33.8	35.7		6.2	6.3	6.4	ST
119	7/7/2005	1009	2819.6	9603.8	19	22	11	21	30.0	30.0	26.8	33.5	33.5	35.0		6.1	6.2	6.0	ST
120	7/7/2005	1849	2813.7	9535.7	19	36	19	36	30.3	29.5	23.1	33.2	34.3	36.0		6.2	6.3	5.8	ST
121	7/7/2005	2133	2816.5	9514.4	19	40	20	39	30.2	28.4	22.9	33.1	35.2	36.1		6.2	6.5	6.1	ST
122	7/8/2005	19	2806.9	9501.3	19	55	27	54	29.8	28.0	24.2	35.0	36.5	36.6		6.2	6.6	7.1	ST
123	7/8/2005	413	2810.4	9439.8	18	53	27	52	29.3	28.2	24.9	34.4	36.5	36.5		6.2	6.6	7.1	ST
124	7/8/2005	731	2816.8	9456.3	18	46	23	44	29.5	29.1	22.5	34.4	36.2	36.3		6.2	6.3	6.1	ST
125	7/8/2005	1031	2826.9	9504.3	19	37	19	36	29.5	29.0	24.2	33.2	35.1	35.8		6.2	6.3	6.1	ST
126	7/8/2005	1453	2829.2	9430.5	18	38	19	36	29.7	29.7	24.9	32.9	33.2	35.5		6.2	6.2	5.6	PN
127	7/8/2005	1839	2831.0	9352.7	17	40	21	40	30.4	29.0	21.2	31.4	32.8	36.0		6.2	5.8	4.8	ST
128	7/8/2005	2101	2830.7	9342.8	17	40	21	40	30.3	25.7	21.2	30.9	33.6	36.1		6.3	5.3	4.6	ST
129	7/8/2005	2326	2837.8	9351.8	17	31	15	30	30.1	29.4	22.7	32.0	32.5	35.3		6.2	6.2	5.1	ST
130	7/9/2005	25	2839.3	9353.1	17	29	14	26	30.5	29.9	24.8	31.7	32.2	34.3		6.2	6.3	5.1	ST
131	7/9/2005	334	2835.5	9335.5	17	36	19	36	30.3	26.2	21.7	31.3	33.5	35.8		6.2	5.7	4.2	ST
132	7/9/2005	520	2841.3	9334.3	17	30	15	28	30.8	29.6	22.8	31.4	33.0	35.2		6.2	6.3	4.4	ST
133	7/9/2005	648	2848.1	9329.1	17	25	12	22	30.5	30.4	24.8	31.1	31.6	34.6		6.2	6.2	3.7	ST
134	7/12/2005	1928	2938.3	9330.2	17	12	7	12	30.7	30.3	30.3	27.4	27.4	27.4		6.6	5.9	5.1	ST
135	7/12/2005	2210	2937.3	9347.5	17	11	6	11	31.2	31.2	30.2	27.8	27.8	27.9		7.7	7.4	5.4	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
136	7/13/2005	102	2930.1	9400.7	18	12	7	12	31.0	30.9	30.8	28.4	28.4	28.4		6.4	6.4	6.1	PN
137	7/13/2005	330	2940.0	9339.5	17	9	5	9	30.8	30.8	30.3	27.8	27.8	27.8		6.8	6.8	5.4	ST
138	7/13/2005	757	2920.1	9317.9	17	17	7	12	30.7	30.6	29.9	28.2	29.7	30.3		6.1	5.9	4.8	ST
139	7/13/2005	1105	2910.1	9259.8	16	20	9	18	30.5	30.6	27.6	28.9	29.5	33.0		6.2	6.1	0.9	ST
140	7/13/2005	1624	2919.4	9352.3	17	13	8	13	30.5	30.4	30.5	28.1	28.2	28.7		6.1	6.1	4.6	ST
141	7/13/2005	2237	2820.5	9358.1	17	55	27	53	30.6	24.2	21.1	31.4	35.7	36.1		6.2	6.8	5.0	ST
142	7/14/2005	324	2834.5	9319.1	17	39	20	39	30.3	27.8	22.5	33.1	35.7	35.8		6.1	6.6	4.6	ST
143	7/14/2005	511	2840.5	9320.6	17	33	17	33	30.4	27.1	23.3	32.0	33.8	35.5		6.1	6.1	4.6	ST
144	7/14/2005	719	2843.6	9309.9	17	29	14	27	30.8	30.1	24.6	29.4	32.0	35.2		6.1	6.2	4.7	ST
145	7/14/2005	827	2840.1	9310.3	17	34	18	34	30.7	29.1	23.1	29.2	34.0	35.7		6.2	6.3	4.5	ST
146	7/14/2005	1011	2833.9	9307.7	17	41	22	41	30.6	25.0	22.5	29.3	34.9	36.0		6.1	6.7	4.8	ST
147	7/14/2005	1252	2828.8	9300.8	17	47	23	45	30.5	25.9	22.1	30.2	35.0	36.1		6.1	6.0	4.9	ST
148	7/14/2005	1704	2834.0	9330.4	17	38	19	38	30.2	27.7	22.5	31.5	35.5	35.8		6.1	6.5	4.6	PN
149	7/14/2005	1803	2835.9	9334.6	17	38	19	38	30.3	26.7	22.5	31.5	35.5	35.7		6.1	6.6	4.6	ST
150	7/14/2005	2058	2848.0	9326.1	17	26	13	26	30.4	29.9	24.7	30.1	33.9	34.9		6.1	6.2	4.4	ST
151	7/14/2005	2311	2901.2	9329.2	17	23	12	23	30.3	30.2	24.6	30.2	30.5	34.4		6.1	6.1	1.5	PN
152	7/15/2005	215	2859.5	9301.0	17	24	13	24	30.2	30.4	25.2	29.7	31.5	34.4		6.2	6.1	1.8	PN
153	7/15/2005	506	2830.7	9254.4	16	48	25	48	30.4	24.1	22.0	30.5	35.9	36.3		6.1	7.0	5.8	ST
154	7/15/2005	918	2823.8	9223.9	16	58	30	58	29.9	28.6	22.0	33.7	36.4	36.4		6.1	6.3	6.1	ST
155	7/15/2005	1213	2830.3	9230.4	16	50	25	49	29.9	23.8	22.1	33.0	35.2	36.3		6.0	6.4	6.1	PN
156	7/15/2005	1359	2840.6	9239.6	16	35	18	34	30.0	25.9	23.1	30.6	35.0	36.0		6.1	6.6	4.1	ST
157	7/15/2005	1508	2843.6	9238.0	16	33	17	32	29.9	27.3	23.9	31.2	34.5	35.8		6.1	5.7	3.8	ST
158	7/15/2005	1836	2853.3	9248.0	16	25	13	25	29.8	29.8	24.7	29.9	31.5	35.2		6.0	5.7	0.9	ST
159	7/15/2005	2136	2906.9	9252.2	16	22	11	21	29.5	30.0	26.1	28.9	30.8	34.3		6.3	5.1	0.9	ST
160	7/15/2005	2339	2920.2	9253.9	16	16	8	15	29.9	30.1	29.0	27.9	28.2	32.1		6.1	5.8	0.2	ST
161	7/16/2005	219	2931.4	9241.9	16	11	6	11	29.8	29.8	29.9	26.5	26.5	29.3		5.2	5.1	0.1	ST
162	7/16/2005	623	2910.5	9222.5	16	13	6	11	29.6	29.7	29.3	28.0	28.4	31.5		6.1	6.0	1.9	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
163	7/16/2005	755	2906.8	9228.6	16	20	11	20	29.4	29.7	28.2	29.7	31.6	33.5		6.2	5.3	3.2	ST
164	7/16/2005	1031	2858.6	9227.0	16	26	14	26	29.6	29.7	26.0	31.7	32.3	34.9		6.0	6.0	3.0	ST
165	7/28/2005	2137	2909.0	9158.5	15	11	6	11	30.8	31.2	29.0	25.8	31.0	33.3		5.3	5.5	0.5	ST
166	7/28/2005	2333	2903.0	9202.1	16	16	9	16	31.0	29.7	26.9	25.1	32.3	35.2		5.8	1.7	0.4	ST
167	7/29/2005	20	2901.4	9202.4	16	20	11	20	31.2	30.2	26.1	20.2	32.1	35.6		6.3	5.7	1.2	ST
168	7/29/2005	217	2855.0	9203.0	16	24	13	24	30.8	30.4	25.5	29.7	32.7	35.7		6.2	5.9	2.7	ST
169	7/29/2005	440	2901.5	9200.8	16	18	9	17	31.1	30.4	26.7	23.0	32.2	35.3		6.2	4.7	0.9	ST
170	7/29/2005	757	2859.2	9135.0	15	13	8	13	31.3	31.1	28.0	23.6	31.0	34.8		6.4	4.5	0.2	ST
171	7/29/2005	944	2851.6	9136.2	15	20	11	20	31.0	30.1	26.6	26.7	32.3	35.5		6.1	4.5	3.2	ST
172	7/29/2005	1140	2842.6	9143.1	15	30	15	29	30.6	30.4	24.8	31.2	33.8	36.1		6.1	6.0	4.0	ST
173	7/29/2005	1304	2838.8	9138.2	15	33	17	33	30.8	29.4	24.3	32.0	34.8	36.2		6.1	6.3	3.7	ST
174	7/29/2005	1506	2843.1	9131.8	15	27	15	27	30.6	30.0	25.2	29.5	33.3	35.8		6.1	5.6	3.6	ST
175	7/29/2005	1639	2837.3	9133.4	15	33	16	29	30.5	30.3	25.4	28.5	33.8	36.0		6.1	6.1	6.1	ST
176	7/29/2005	1952	2844.9	9107.3	15	11	6	11	31.5	31.0	29.1	30.0	31.4	34.1		6.4	5.8	3.9	ST
177	7/29/2005	2134	2837.9	9107.8	15	20	10	19	31.3	30.7	26.8	30.9	32.3	35.7		6.5	6.0	1.4	ST
178	7/30/2005	101	2834.0	9123.1	15	35	18	35	31.1	29.3	23.7	32.4	34.4	36.3		6.2	6.3	4.3	ST
179	7/30/2005	243	2838.5	9114.9	15	23	12	23	31.3	30.3	25.9	29.6	33.5	36.0		6.3	6.1	1.4	ST
180	7/30/2005	430	2841.3	9106.1	15	16	9	16	31.4	30.3	26.9	30.7	32.4	35.6		6.3	3.9	2.0	ST
181	7/30/2005	928	2831.5	9045.0	14	30	15	30	30.4	28.0	26.3	32.0	35.2	35.8		6.3	4.9	4.4	ST
182	7/30/2005	1027	2835.1	9044.5	14	20	10	18	30.3	29.6	27.5	33.1	33.9	35.6		6.0	5.2	5.5	ST
183	7/30/2005	1209	2833.9	9039.1	14	24	13	24	30.3	27.9	26.6	32.5	35.2	35.9		6.0	5.3	5.3	ST
184	7/30/2005	1430	2853.6	9040.0	14	15	8	15	30.7	29.5	27.5	30.9	34.8	35.3		6.6	5.9	1.8	ST
185	7/30/2005	1650	2858.5	9028.8	14	12	6	11	30.7	29.8	28.8	30.6	33.9	34.5		6.3	5.4	4.6	PN
186	7/30/2005	1812	2858.4	9017.8	14	15	8	14	30.8	29.8	28.0	31.1	34.4	35.1		6.6	5.4	3.6	ST
187	7/30/2005	2048	2900.1	8959.6	13	24	12	23	31.6	29.4	27.2	30.2	35.5	35.7		7.4	6.0	3.5	PN
188	7/31/2005	56	2838.7	9022.9	14	29	15	29	31.1	29.9	25.9	33.1	34.4	35.9		6.0	6.1	3.3	ST
189	7/31/2005	208	2843.9	9017.1	14	28	13	24	30.5	29.0	26.7	33.8	34.8	35.8		6.2	5.6	3.6	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
190	7/31/2005	512	2848.3	9003.4	14	37	20	37	30.2	29.3	24.9	33.9	35.5	36.1		6.3	6.4	3.8	ST
191	7/31/2005	726	2856.9	8957.7	13	31	17	30	30.6	29.5	26.8	33.9	35.8	35.9		6.3	6.3	4.3	ST
192	7/31/2005	1007	2908.3	9004.9	14	12	7	12	30.6	30.5	28.4	30.7	31.8	34.9		6.7	5.3	0.7	ST
193	7/31/2005	1238	2857.5	8952.4	13	37	19	37	30.9	29.7	24.5	26.7	36.1	36.2		7.4	6.2	1.8	ST
194	7/31/2005	1440	2904.7	8947.3	13	28	13	24	31.2	29.3	26.5	27.6	35.2	35.3		7.0	5.9	1.0	ST
195	7/31/2005	1554	2905.6	8942.1	13	24	11	21	31.0	28.9	26.3	25.6	34.6	35.5		6.5	4.2	1.2	ST
196	7/31/2005	1713	2902.2	8936.4	13	21	10	18	30.7	29.9	27.9	27.4	33.1	35.1		6.3	3.9	3.3	ST
197	7/31/2005	1806	2901.9	8935.2	13	18	8	15	31.0	29.9	28.9	24.4	32.8	34.9		7.9	4.1	3.9	ST
198	7/31/2005	2018	2857.8	8944.7	13	51	26	51	30.7	27.5	21.3	31.2	35.6	36.5		6.6	5.9	2.1	ST
199	8/1/2005	53	2901.7	8930.8	13	13	6	11	30.8	30.2	28.7	22.2	29.3	34.5		8.7	4.7	1.8	ST
200	8/1/2005	139	2859.6	8930.1	13	24	13	24	31.4	28.2	25.8	18.3	34.8	35.6		10.7	1.4	1.7	ST

Table 2. Selected environmental parameters (continued)

TOMMY MUNRO, SUMMER SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR	SUR	MID	MAX	
1	6/24/2005	1809	3011.2	8836.4	11	13													ST
2	6/24/2005	2106	3001.8	8828.3	11	22													ST
3	6/24/2005	2312	2951.6	8839.0	11	20													ST
4	6/25/2005	47	2953.2	8847.2	11	10													ST
5	6/25/2005	408	2948.2	8846.4	11	11													ST
6	6/25/2005	726	2948.6	8834.4	11	26													ST
7	6/25/2005	13	2948.3	8831.2	11	29													ST
8	6/25/2005	1258	2943.0	8833.6	11	27													ST
9	6/25/2005	1436	2946.0	8841.3	11	18													ST
10	6/25/2005	1559	2946.4	8844.0	11	15													ST
11	6/25/2005	1756	2944.8	8852.2	11	6													ST
12	6/25/2005	1910	2944.2	8853.0	11	7													ST
13	6/25/2005	2157	2936.9	8831.8	11	37													ST
14	6/26/2005	107	2933.3	8838.4	11	22													ST
15	6/26/2005	425	2956.2	8847.5	11	9													ST
16	6/26/2005	1726	3002.9	8840.0	11	16													ST
17	7/2/2005	527	2910.2	8932.1	13	8													ST
18	7/2/2005	1026	2904.9	9012.7	14	6													ST
19	7/2/2005	1303	2911.3	9001.5	14	6													ST
20	7/3/2005	31	2914.7	9137.5	15	4													ST
21	7/3/2005	301	2921.0	9153.3	15	3													ST
22	7/3/2005	733	2930.0	9225.0	16	4													ST
23	7/3/2005	1602	2943.2	9341.0	17	5													ST
24	7/3/2005	2201	2932.9	9240.2	16	7													ST
25	7/4/2005	129	2938.6	9256.4	16	7													ST
26	7/4/2005	330	2943.5	9307.6	17	5													ST
27	7/4/2005	1222	2909.4	9155.5	15	8													ST

Table 2. Selected environmental parameters (continued)

PELICAN, SUMMER SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
35001	7/7/2005	840	2900.1	9029.9	14	11	4	9	28.6	28.8	28.9	28.4	29.5	30.5	3.066	4.9	4.8	4.5	PN
35002	7/7/2005	1249	2860.0	9100.1	15	7	3	6	28.8	29.0	28.7	24.7	25.6	27.9	7.336	4.8	4.2	3.0	PN
35003	7/7/2005	1639	2900.0	9130.0	15	11	5	9	30.0	29.2	28.6	27.2	28.7	31.8	6.398	6.7	5.7	3.7	PN
35004	7/7/2005	1848	2853.0	9122.6	15	11	5	11	30.6	29.5	28.6	26.7	28.1	31.7	1.016	5.9	7.0	3.3	ST
35005	7/7/2005	2225	2852.8	9122.0	15	11	5	11	30.4	29.4	28.7	27.4	28.8	31.8	1.059	7.7	5.7	3.4	ST
35006	7/8/2005	30	2848.2	9131.0	15	20	10	20	29.7	28.6	28.0	28.4	31.7	33.2	1.900	5.8	4.3	2.8	ST
35007	7/8/2005	316	2836.7	9123.0	15	29	16	29	30.1	28.6	23.6	28.5	34.1	36.2	0.750	5.4	5.2	2.7	ST
35008	7/8/2005	725	2848.6	9130.9	15	20	10	20	29.2	28.8	28.1	28.4	31.1	33.2	3.519	5.3	4.2	3.2	ST
35009	7/8/2005	950	2836.9	9123.1	15	30	14	30	29.8	28.9	23.7	31.7	33.4	36.2	0.309	5.2	5.0	2.5	ST
35010	7/8/2005	1246	2832.2	9115.8	15	35	16	34	29.5	28.6	23.0	31.5	33.9	36.3	0.322	5.5	5.2	3.6	ST
35011	7/8/2005	1421	2835.0	9112.8	15	27	13	27	30.1	28.8	24.6	31.4	32.3	36.0	0.853	5.3	4.6	1.0	ST
35012	7/8/2005	1617	2830.0	9060.0	14	35	16	32	29.7	27.9	23.4	32.0	33.4	36.3	0.971	5.4	2.9	2.8	PN
35013	7/8/2005	1836	2831.9	9111.8	15	33	16	33	29.7	28.6	23.1	31.5	34.1	36.3	0.189	5.4	5.2	3.2	ST
35014	7/8/2005	2233	2832.1	9116.1	15	35	17	35	29.7	29.0	22.8	31.5	35.0	36.3	0.178	5.4	5.2	3.8	ST
35015	7/9/2005	35	2832.2	9112.0	15	33	16	32	29.7	28.8	23.1	28.9	34.4	36.3	0.655	5.5	5.2	3.3	ST
35016	7/9/2005	228	2835.2	9113.0	15	29	15	28	29.5	28.6	23.7	28.7	33.8	36.2	0.758	5.7	4.7	2.1	ST

Table 2. Selected environmental parameters (continued)

A.E. VERRILL, SUMMER SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
23001	6/2/2005	1554	3003.1	8808.7	11	23	12	23	26.7	25.7	21.5	30.6	32.5	35.0		5.7	5.7	2.9	ST
23002	6/2/2005	1723	3000.3	8815.1	11	25	13	25	27.0	23.8	21.4	32.3	33.7	35.3		5.6	5.9	3.1	ST
23003	6/2/2005	1851	2955.2	8812.3	11	33	17	33	26.2	23.9	21.2	32.0	35.7	35.4		5.7	5.7	3.0	ST
23004	6/2/2005	2055	3003.3	8808.3	11	23	12	23	26.5	25.8	21.5	31.3	32.5	35.0		5.7	5.7	3.0	ST
23005	6/2/2005	2153	3006.2	8808.2	11	21	11	21	26.3	25.5	21.4	27.8	33.0	35.0		5.9	5.6	2.3	ST
23006	6/7/2005	1708	3004.7	8824.6	11	18	9	18	28.0	27.0	23.9	31.3	31.9	33.8		5.6	5.6	5.3	ST
23007	6/7/2005	1824	3010.1	8824.2	11	13	7	13	28.1	27.8	24.8	26.7	30.9	33.1		5.9	5.7	5.1	ST
23008	6/7/2005	2032	3011.8	8821.3	11	9	5	9	28.2	28.2	27.2	26.5	26.5	31.7		5.9	5.9	4.7	ST
23009	6/7/2005	2143	3011.1	8815.4	11	15	7	14	28.2	27.7	24.2	26.5	30.9	33.4		5.8	5.6	3.7	ST

Table 2. Selected environmental parameters (continued)

R.J. KEMP, SUMMER SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
31001	6/13/2005	820	2602.2	9708.5	21	7	4	7	25.6	25.4	25.3	36.4	36.4	36.2		7.7	7.6	7.8	ST
31002	6/13/2005	859	2601.8	9705.5	21	19	9	19	26.5	26.4	24.1	36.4	36.4	36.4		7.8	8.1	8.0	ST
31003	6/13/2005	946	2558.4	9705.6	22	18	9	18	26.6	26.2	24.1	36.5	36.5	36.5		7.6	7.8	7.8	ST
31004	6/13/2005	1028	2558.8	9702.5	22	23	12	23	27.2	27.2	24.0	36.5	36.5	36.4		7.5	7.7	8.3	ST
31005	6/13/2005	1104	2559.5	9700.6	22	25	13	25	27.4	27.3	21.4	36.4	36.4	35.5		7.2	7.2	7.9	ST
31006	6/13/2005	1207	2606.8	9659.6	21	26	13	26	27.3	27.1	26.6	35.7	36.2	35.9		7.2	7.2	7.4	ST
31007	6/13/2005	1309	2606.5	9706.5	21	18	9	18	26.3	26.2	25.5	36.4	36.4	36.2		7.0	7.3	7.7	ST
31008	6/13/2005	1347	2606.8	9707.5	21	16	8	16	26.4	26.0	25.5	36.4	36.4	31.3		7.6	10.8	8.1	ST
31009	6/16/2005	820	2607.4	9704.4	21	19	10	19	27.8	27.8	27.5	36.0	36.3	36.2		5.5	5.6	5.6	ST
31010	6/16/2005	904	2607.7	9700.4	21	26	13	26	27.8	27.7	27.3	35.8	36.0	36.3		6.0	5.6	5.7	ST
31011	6/16/2005	941	2609.3	9700.4	21	26	13	26	28.7	27.6	27.2	36.0	36.3	36.3		5.7	6.5	6.1	ST
31012	6/16/2005	1030	2609.6	9703.5	21	20	10	20	27.4	27.0	26.3	36.3	36.4	36.4		6.5	5.4	5.9	ST
31013	6/16/2005	1107	2610.3	9703.5	21	20	10	20	27.6	27.1	26.4	36.3	36.3	36.3		5.7	5.5	6.0	ST
31014	6/16/2005	1247	2620.8	9703.5	21	18	9	18	28.8	27.6	27.4	36.3	36.3	36.3		6.1	6.8	5.8	ST
31015	6/16/2005	1327	2620.4	9709.6	21	16	8	16	27.9	27.8	26.0	36.3	36.3	36.3		8.4	6.8	5.6	ST
31016	6/16/2005	1553	2611.8	9708.5	21	15	8	15	25.0	25.9	27.5	32.7	36.3	36.5		5.7	6.4	5.6	ST

Table 2. Selected environmental parameters (continued)

MATAGORDA BAY, SUMMER SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
32001	6/2/2005	638	2823.5	9618.5	19	9	4	9	26.7	26.3	25.6	32.4	33.3	33.8		6.0	6.1	4.5	ST
32002	6/2/2005	720	2827.5	9615.5	19	6	3	6	27.1	27.1	27.1	32.9	32.8	32.8		6.1	6.2	6.1	ST
32003	6/2/2005	809	2827.5	9610.5	19	12	6	12	26.4	26.4	23.4	33.2	33.1	34.7		6.1	6.2	2.8	ST
32004	6/2/2005	840	2828.5	9608.5	19	12	6	12	26.7	26.6	23.5	33.3	33.4	34.8		6.3	6.4	2.8	ST
32005	6/2/2005	917	2826.5	9607.5	19	15	8	15	26.4	26.2	23.5	33.2	33.3	35.3		6.3	6.2	4.8	ST
32006	6/2/2005	958	2826.5	9603.5	19	16	8	16	26.5	24.9	23.3	33.1	33.6	35.3		6.2	6.2	4.4	ST
32007	6/2/2005	1041	2824.5	9606.5	19	17	9	17	26.5	25.7	23.2	33.1	34.2	35.4		6.5	6.4	5.2	ST
32008	6/2/2005	1147	2819.5	9612.5	19	20	10	20	26.6	26.1	23.0	34.5	35.0	35.6		6.5	6.5	6.2	ST
32009	6/16/2005	800	2746.9	9701.5	20	13	13	13	28.6	28.9	29.0	33.3	33.3	33.0		5.4	5.6	5.0	ST
32010	6/16/2005	855	2742.2	9704.4	20	14	7	14	29.1	29.1	28.9	33.6	33.5	33.5		5.4	5.6	5.5	ST
32011	6/16/2005	922	2741.6	9704.4	20	14	7	14	29.1	29.0	29.0	33.4	33.4	33.4		5.4	5.5	5.3	ST
32012	6/16/2005	1007	2738.1	9708.7	20	13	6	13	29.4	29.3	29.3	33.9	33.8	33.9		5.4	5.6	5.6	ST
32013	6/16/2005	1100	2736.9	9704.6	20	19	9	19	29.3	29.0	28.9	33.4	33.5	33.6		5.3	5.0	5.2	ST
32014	6/16/2005	1346	2742.2	9657.5	20	21	11	21	29.5	29.2	29.7	37.7	33.0	33.0		5.7	5.8	5.7	ST
32015	6/16/2005	1418	2743.9	9658.5	20	19	10	19	29.5	29.0	29.0	33.0	32.8	32.8		5.6	5.8	5.8	ST
32016	6/16/2005	1504	2745.2	9654.6	20	21	11	21	29.3	29.3	29.0	33.1	33.0	32.9		5.7	5.7	6.0	ST
32017	6/23/2005	1013	2812.4	9627.8	19	16	8	16	29.2	29.2	29.1	32.4	32.4	32.5		5.3	5.5	5.4	ST
32018	6/23/2005	1108	2813.3	9623.6	19	20	9	20	29.0	29.0	28.9	32.4	32.8	32.4		5.3	5.6	5.4	ST
32019	6/23/2005	1153	2816.5	9627.8	19	9	4	9	29.9	29.9	29.8	32.0	32.1	32.3		5.5	5.6	5.3	ST
32020	6/23/2005	1231	2818.3	9627.6	19	5	2	5	30.1	30.1	29.9	31.7	31.7	31.7		5.6	5.7	5.8	ST
32021	6/23/2005	1310	2818.6	9624.8	19	8	4	8	30.1	29.9	29.8	32.0	32.1	32.1		5.3	5.7	5.6	ST
32022	6/23/2005	1408	2818.6	9622.7	19	13	7	13	29.9	29.9	29.8	32.2	32.2	32.4		5.7	5.7	5.8	ST
32023	6/23/2005	947	2821.5	9619.5	19	11	6	11	29.8	29.8	29.7	31.6	31.9	32.1		5.8	5.7	5.6	ST
32024	6/23/2005	1021	2819.5	9620.5	19	14	7	14	29.7	29.6	29.5	31.9	32.0	32.2		5.9	5.8	5.8	ST

Table 2. Selected environmental parameters (continued)

TRINITY BAY, SUMMER SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
65001	6/28/2005	944	2928.2	9431.9	18	7	4	7	29.8	29.8	29.8	26.0	26.0	27.0		6.7	6.4	4.2	ST
65002	6/28/2005	1019	2927.9	9430.3	18	9	4	9	30.1	29.9	29.9	27.4	27.0	27.3		6.0	5.9	5.2	ST
65003	6/28/2005	1105	2923.1	9430.9	18	12	6	12	30.1	29.9	29.8	28.0	28.0	28.1		5.9	5.9	5.7	ST
65004	6/28/2005	1144	2919.8	9432.3	18	13	7	13	30.1	29.8	29.8	28.2	28.2	28.3		6.2	6.0	5.3	ST
65005	6/28/2005	1214	2920.2	9434.0	18	12	6	12	30.2	29.9	29.9	27.0	28.3	28.2		6.1	6.1	5.9	ST
65006	6/28/2005	1250	2922.8	9435.4	18	10	5	10	26.7	30.2	30.0	26.8	27.9	28.0		6.3	6.2	4.5	ST
65007	6/28/2005	1411	2916.8	9438.3	18	13	7	13	30.3	30.0	29.9	26.5	27.1	28.4		6.3	6.4	4.7	ST
65008	6/28/2005	1447	2914.2	9438.9	18	14	7	14	30.6	30.1	30.0	27.3	27.9	28.1		6.3	6.0	6.1	ST

Table 2. Selected environmental parameters (continued)

SAN JACINTO, SUMMER SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
69001	6/7/2005	858	2916.5	9447.9	18	5	3	5	28.4	28.4	28.3	30.8	31.3	31.4		5.7	5.7	5.6	ST
69002	6/7/2005	1004	2912.9	9445.4	18	12	6	12	28.4	28.4	28.3	30.3	30.9	31.3		5.3	5.4	5.3	ST
69003	6/7/2005	1042	2912.0	9446.4	18	13	6	13	28.2	28.2	28.1	31.8	31.8	31.8		5.6	5.6	5.6	ST
69004	6/7/2005	1118	2911.3	9447.9	18	13	6	13	28.5	28.5	28.4	31.9	31.9	31.9		5.6	5.5	5.4	ST
69005	6/7/2005	1239	2906.9	9449.4	18	16	8	16	28.0	27.9	27.8	31.8	31.9	31.9		5.5	5.5	5.4	ST
69006	6/7/2005	1339	2909.9	9445.3	18	15	8	15	28.2	28.1	27.7	31.8	31.8	31.9		5.6	5.6	5.7	ST
69007	6/7/2005	1415	2909.3	9444.9	18	16	8	16	28.2	28.1	27.8	31.9	31.9	31.9		5.6	5.6	5.5	ST
69008	6/7/2005	1454	2911.2	9442.8	18	15	7	15	28.5	28.3	28.1	31.7	31.7	31.7		5.8	5.6	2.4	ST

Table 2. Selected environmental parameters (continued)

SABINE, SUMMER SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE		POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
	MM/DD/YY	TIME	LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
40001	6/1/2005	759	2944.2	9341.9	17	3	1	3	27.4	27.4	27.3	29.7	29.7	29.8		5.4	5.3	5.4	ST
40002	6/1/2005	842	2943.6	9338.1	17	6	3	6	27.7	27.6	27.2	29.7	29.7	29.8		5.7	5.5	3.2	ST
40003	6/1/2005	1027	2937.5	9334.9	17	11	5	11	27.2	26.8	26.0	29.5	29.6	30.4		6.8	4.5	1.8	ST
40004	6/1/2005	1053	2938.4	9335.3	17	10	5	10	27.4	26.9	26.1	29.6	29.7	30.4		6.4	5.5	1.3	ST
40005	6/1/2005	1128	2938.5	9338.8	17	10	5	10	27.4	27.1	26.1	30.0	30.0	30.3		6.0	5.8	1.9	ST
40006	6/1/2005	1154	2938.5	9339.3	17	10	5	10	27.4	27.1	26.1	29.9	30.0	30.0		6.1	5.7	2.0	ST
40007	6/1/2005	1222	2937.5	9339.9	17	11	6	11	27.3	27.1	25.8	30.0	30.1	30.4		6.1	5.9	1.9	ST
40008	6/1/2005	1258	2937.4	9342.2	17	10	5	10	27.3	26.8	25.8	30.0	30.3	30.6		6.3	5.6	2.7	ST
40009	6/16/2005	844	2932.3	9348.2	17	12	6	12	30.7	24.9	29.2	21.6	28.3	27.9		6.2	3.6	4.6	ST
40010	6/16/2005	951	2938.5	9353.7	17	5	2	5	31.2	31.1	30.9	21.5	21.5	21.6		5.7	5.6	4.6	ST
40011	6/16/2005	1038	2940.4	9356.2	17	2	1	2	31.2	31.2	31.0	21.3	21.3	21.3		5.8	5.6	5.4	ST
40012	6/16/2005	1259	2936.5	9403.8	18	7	4	7	31.5	29.8	29.0	21.3	27.6	27.6		5.8	4.9	1.8	ST
40013	6/16/2005	1401	2935.5	9359.2	17	8	4	8	31.8	30.2	29.1	20.9	25.4	28.9		6.5	4.9	2.3	ST
40014	6/16/2005	1507	2933.5	9359.7	17	10	5	10	31.8	29.9	28.8	21.4	28.5	29.1		7.3	6.0	1.7	ST
40015	6/16/2005	1544	2933.5	9356.4	17	10	5	10	31.8	29.8	28.9	21.3	26.3	27.3		7.0	5.3	2.3	ST
40016	6/16/2005	1621	2932.5	9356.8	17	11	6	11	31.7	29.5	28.9	21.3	23.2	27.9		7.3	4.5	2.9	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
1	11/6/2005	639	2939.5	9305.1	17	9													ST
2	11/6/2005	807	2939.6	9305.0	17	10	6	10	20.6	20.6	20.9	30.2	30.3	31.0		6.7	6.7	6.3	ST
3	11/6/2005	1537	2909.7	9202.9	16	11	6	11	22.2	22.1	22.2	32.6	32.6	32.7		6.9	6.8	6.6	ST
4	11/6/2005	1728	2903.5	9205.7	16	17	8	15	22.7	22.3	22.3	32.9	32.9	32.9		6.6	6.6	6.5	ST
5	11/6/2005	1844	2859.1	9208.0	16	23	11	22	23.4	23.1	24.2	33.0	33.2	34.7		6.7	6.6	6.0	ST
6	11/6/2005	2101	2847.6	9205.6	16	33	17	33	24.6	24.8	25.1	34.5	35.4	35.7		6.3	6.1	5.9	ST
7	11/7/2005	44	2903.9	9218.3	16	20	11	20	23.5	23.2	23.4	33.4	33.6	33.9		6.6	6.5	6.1	ST
8	11/7/2005	312	2855.2	9208.5	16	26	13	25	23.3	23.0	24.3	32.9	33.1	34.7		6.6	6.6	6.0	ST
9	11/7/2005	917	2810.4	9236.5	16	73													ST
10	11/7/2005	1047	2813.2	9236.7	16	67	32	63	25.8	25.8	25.6	36.4	36.4	36.5		5.9	5.8	5.4	ST
11	11/7/2005	1811	2826.0	9139.9	15	55	28	54	24.9	25.7	25.6	35.5	36.4	36.4		6.2	5.9	5.6	ST
12	11/7/2005	1931	2828.5	9139.8	15	51													ST
13	11/7/2005	2051	2830.5	9138.3	15	48													ST
14	11/8/2005	109	2831.8	9103.3	15	31	15	28	24.0	24.2	24.0	34.3	35.3	35.8		6.7	6.6	6.3	ST
15	11/8/2005	300	2830.2	9054.9	14	34	17	34	23.8	24.3	24.2	34.5	35.6	36.1		6.7	5.7	6.0	ST
16	11/8/2005	353	2832.0	9055.4	14	29	15	27	24.5	24.0	24.0	36.1	36.0	36.0		6.3	6.1	6.1	ST
17	11/8/2005	625	2837.4	9107.0	15	22	10	20	23.8	24.0	24.1	33.8	34.4	34.7		7.0	6.8	6.4	ST
18	11/8/2005	1232	2845.9	9118.7	15	16	7	14	22.0	22.4	22.4	32.8	33.2	33.2		6.6	6.7	6.6	ST
19	11/8/2005	1412	2838.5	9116.9	15	25	13	24	24.1	24.2	24.2	34.7	34.9	35.1		6.6	6.5	6.3	ST
20	11/8/2005	1720	2835.0	9100.7	15	24	11	22	24.1	23.8	24.0	34.0	34.1	35.8		6.6	6.1	6.1	ST
21	11/8/2005	1906	2831.8	9055.7	14	29	14	27	24.4	24.1	24.4	35.3	36.0	36.2		6.5	6.2	6.1	ST
22	11/8/2005	2119	2829.9	9044.6	14	33	17	33	24.3	24.3	24.6	35.1	35.6	36.1		6.6	6.1	5.9	ST
23	11/8/2005	2329	2830.0	9029.8	14	39	20	39	25.4	25.4	25.4	36.1	36.2	36.3		6.2	6.1	5.6	PN
24	11/9/2005	241	2853.6	9032.8	14	17	9	17	24.2	24.3	24.5	33.7	33.7	34.9		6.6	6.6	5.5	PN
25	11/9/2005	432	2850.7	9045.7	14	16	9	16	24.6	24.6	24.6	34.9	34.9	34.9		6.2	6.2	6.2	ST
26	11/9/2005	700	2833.0	9043.7	14	26	14	26	24.5	25.1	24.5	35.4	35.8	36.0		6.3	6.2	5.9	ST
27	11/9/2005	829	2829.1	9047.2	14	36	19	36	24.8	24.4	24.5	35.5	35.5	36.0		6.2	6.1	5.5	ST
28	11/9/2005	1001	2827.5	9051.9	14	37	19	36	25.5	25.5	24.4	35.9	35.9	36.2		6.1	6.0	5.9	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE		POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
	MM/DD/YY	TIME	LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
29	11/9/2005	1426	2810.3	9119.8	15	92	44	86	26.2	26.0	22.5	36.5	36.4	36.6		6.0	6.0	4.7	ST
30	11/9/2005	1553	2808.2	9121.0	15	102													ST
31	11/9/2005	1930	2817.8	9101.9	15	64	33	64	26.5	26.1	25.8	36.5	36.4	36.5		6.0	6.0	5.6	ST
32	11/9/2005	2049	2819.7	9100.6	15	57													ST
33	11/10/2005	17	2804.6	9029.9	14	153	73	144	26.2	26.0	16.7	36.5	36.5	36.2		6.0	5.9	3.9	PN
34	11/10/2005	539	2831.1	9000.4	14	89	41	80	25.5	25.2	24.0	36.2	36.2	36.5		6.1	6.0	5.2	ST
35	11/10/2005	804	2840.4	9004.1	14	72	34	67	25.7	25.7	25.5	36.3	36.3	36.3		6.1	6.0	5.9	ST
36	11/10/2005	954	2840.8	9005.8	14	64	33	64	25.8	25.7	25.4	36.3	36.3	36.3		6.1	6.1	5.9	ST
37	11/10/2005	1223	2837.3	9019.2	14	35	17	34	25.4	25.5	25.2	36.2	36.2	36.2		6.2	6.2	5.9	ST
38	11/10/2005	1545	2813.8	9034.5	14	73	35	70	26.2	26.4	24.9	36.3	36.5	36.4		6.0	6.0	5.4	ST
39	11/10/2005	1915	2820.2	9010.8	14	74	37	74	26.0	26.1	23.2	36.3	36.5	36.6		6.0	6.0	4.9	ST
40	11/10/2005	2037	2821.0	9009.7	14	73													ST
41	11/11/2005	44	2844.1	8949.6	13	85	43	85	25.6	25.6	21.4	36.0	36.3	36.5		6.2	6.0	4.0	ST
42	11/11/2005	300	2845.4	9004.5	14	40	19	38	25.8	25.7	25.6	36.3	36.3	36.4		6.1	6.1	5.8	ST
43	11/11/2005	611	2856.2	9007.6	14	24	13	24	25.0	25.9	25.4	34.5	36.0	36.2		6.4	5.3	5.7	ST
44	11/11/2005	817	2901.6	9020.6	14	11	6	11	23.9	23.9	23.8	32.0	32.0	32.5		6.9	6.9	6.0	ST
45	11/11/2005	1106	2853.9	9026.2	14	18	9	18	23.7	23.8	24.4	32.4	32.5	33.9		6.9	6.9	4.3	ST
46	11/11/2005	1230	2853.5	9026.6	14	19	10	19	24.2	24.2	24.9	33.4	33.5	34.7		5.9	5.8	4.0	ST
47	11/11/2005	1707	2856.4	8958.6	13	31	0	0											ST
48	11/11/2005	1916	2905.8	8950.7	13	24	12	23	23.5	23.5	26.1	30.4	31.6	35.8		7.3	7.1	4.4	ST
49	11/11/2005	2053	2907.4	8944.9	13	22	11	21	23.6	23.3	26.2	30.9	31.4	36.0		7.2	7.0	3.4	ST
50	11/11/2005	2217	2914.0	8944.4	13	12	6	11	23.7	23.5	24.4	29.6	30.3	34.7		7.4	7.1	2.3	ST
51	11/11/2005	2334	2912.6	8939.9	13	11	6	11	23.4	23.5	23.4	29.5	30.7	33.5		7.4	7.1	3.4	ST
52	11/12/2005	243	2903.1	8944.4	13	33	17	32	23.3	25.6	25.8	30.3	35.2	36.2		7.3	5.3	3.7	ST
53	11/12/2005	441	2908.7	8954.7	13	17	9	17	23.3	23.7	24.7	30.9	31.4	34.3		7.2	6.9	4.7	ST
54	11/12/2005	646	2906.7	9003.7	14	13	7	12	23.7	23.7	23.8	31.2	31.2	32.2		7.2	7.2	5.9	ST
55	11/12/2005	907	2858.7	9004.1	14	23	12	23	24.6	25.2	25.5	34.0	35.4	36.1		6.7	6.3	4.9	PN
56	11/12/2005	1222	2915.9	8948.6	13	9	5	9	23.2	23.3	22.7	30.4	30.4	31.9		6.8	6.8	5.2	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE		POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
	MM/DD/YY	TIME	LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
57	11/12/2005	1537	2859.0	8933.1	13	29	15	29	22.6	25.3	25.8	27.4	35.5	36.1		7.3	3.6	3.5	ST
58	11/12/2005	2021	2857.4	8933.5	13	48	24	46	23.1	25.8	25.0	29.9	36.1	36.4		7.6	5.2	4.5	PN
59	11/12/2005	2310	2857.5	8933.3	13	46	19	38	23.5	25.6	25.4	28.1	35.9	36.3		8.2	3.7	4.0	ST
60	11/13/2005	421	2859.7	8900.3		70	35	68	25.4	25.5	23.0	36.2	36.4	36.5		6.0	6.0	4.9	PN
61	11/13/2005	744	2907.6	8840.9	11	91	42	84	25.4	25.4	22.2	36.3	36.3	36.5		6.0	6.0	4.5	ST
62	11/13/2005	1046	2913.3	8829.6	11	113	51	102	23.9	25.2	20.0	34.9	36.2	36.5		6.3	5.7	4.0	NN
63	11/13/2005	1238	2916.1	8837.0	11	65	32	62	23.9	24.8	24.0	35.1	35.9	36.2		6.3	6.0	4.4	ST
64	11/13/2005	1443	2907.7	8840.9	11	91	44	87	25.4	25.4	22.8	36.3	36.3	36.4		6.0	6.0	4.8	ST
65	11/13/2005	1709	2907.5	8849.5	11	82	41	80	23.9	25.5	22.4	34.9	36.3	36.5		6.4	6.0	4.3	ST
66	11/13/2005	2013	2915.8	8857.8	11	25	13	25	22.9	23.1	22.9	33.8	35.3	35.3		6.8	6.3	6.2	ST
67	11/13/2005	2135	2916.4	8851.2	11	55	28	55	24.3	23.3	24.1	35.1	35.4	36.1		6.0	5.8	4.7	ST
68	11/14/2005	1	2916.0	8857.0	11	30	15	29	23.2	23.2	23.0	34.5	35.3	35.3		6.7	6.4	6.2	ST
69	11/14/2005	141	2921.8	8857.6	11	20	11	20	23.6	23.6	23.4	35.2	35.4	35.5		6.4	6.4	6.3	ST
70	11/14/2005	330	2924.9	8850.6	11	21	12	21	24.1	23.7	23.6	35.4	35.5	35.5		6.3	6.3	6.3	ST
71	11/14/2005	409	2924.1	8850.2	11	27	14	27	23.9	24.0	23.9	35.3	35.4	35.5		6.3	6.2	6.2	ST
72	11/14/2005	518	2923.6	8846.6	11	35	16	31	24.2	24.0	23.7	35.4	35.4	35.5		6.2	6.2	6.3	ST
73	11/14/2005	634	2923.5	8845.3	11	41	20	39	24.2	24.0	23.8	35.5	35.4	35.5		6.2	6.2	6.2	ST
74	11/14/2005	724	2922.6	8844.9	11	45													ST
75	11/14/2005	845	2920.2	8845.5	11	55	28	55	24.3	25.1	25.1	35.4	36.0	36.2		6.2	6.0	5.5	ST
76	11/14/2005	1222	2911.7	8851.7	11	63	30	59	23.8	25.3	24.5	34.0	36.2	36.4		6.4	5.9	5.5	ST
77	11/14/2005	1946	2924.6	8846.3	11	31	16	30	24.3	24.3	24.8	35.6	35.6	35.9		6.2	6.2	6.0	ST
78	11/14/2005	2027	2924.8	8844.4	11	43	22	43	24.6	24.6	24.9	35.7	35.8	35.9		6.2	6.2	5.8	ST
79	11/14/2005	2157	2928.0	8844.5	11	22	12	21	24.0	24.0	23.8	35.4	35.4	35.4		6.2	6.2	6.2	ST
80	11/15/2005	104	2917.9	8818.2	11	72	33	66	23.8	23.6	21.6	34.5	36.3	36.5		6.4	4.7	4.2	ST
81	11/15/2005	332	2922.8	8800.4	11	82	39	76	24.1	23.4	22.7	35.1	35.4	36.4		6.3	5.9	4.2	ST
82	11/15/2005	511	2923.7	8806.1	11	65	32	61	24.1	25.4	24.2	35.0	36.3	36.2		6.3	6.0	5.0	ST
83	11/15/2005	600	2923.7	8806.3	11	63													ST
84	11/15/2005	734	2924.4	8811.8	11	56	26	51	24.3	24.1	24.9	35.2	35.6	36.3		6.2	6.0	5.5	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
85	11/15/2005	913	2924.4	8811.7	11	55													ST
86	11/15/2005	1037	2921.9	8812.2	11	62													ST
87	11/15/2005	1445	2935.4	8836.0	11	26	11	22	24.0	24.0	24.0	35.5	35.5	35.5		6.2	6.2	6.1	ST
88	11/15/2005	1548	2936.3	8836.6	11	19	9	18	24.0	24.0	24.0	35.5	35.5	35.5		6.2	6.2	6.2	ST
89	11/15/2005	1620	2936.4	8836.7	11	18													ST
90	11/15/2005	1652	2936.1	8836.6	11	23	12	23	24.2	24.1	23.9	35.5	35.5	35.4		6.2	6.2	6.2	ST
91	11/15/2005	1822	2937.0	8842.1	11	18	9	18	24.1	23.9	23.8	35.5	35.5	35.5		6.2	6.2	6.2	ST
92	11/16/2005	134	2942.4	8810.4	11	37	19	36	23.3	23.2	23.3	35.0	35.0	35.6		6.4	6.3	6.1	PN
93	11/16/2005	602	2951.1	8817.0	11	34	17	34	22.8	23.9	23.6	34.3	35.4	35.7		6.4	6.2	5.9	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
1	10/11/2005	1625	2640.1	9634.4	21	92	46	91	28.6	28.2	21.5	35.0	36.2	36.5		5.7	5.1	4.9	ST
2	10/11/2005	1759	2640.1	9637.0	21	86													ST
3	10/11/2005	2120	2629.8	9629.7		81	39	77	28.8	28.4	23.7	35.7	36.2	36.5		5.7	5.5	5.9	PN
4	10/12/2005	10	2621.4	9621.2		101	51	101	28.7	25.3	20.6	36.3	36.4	34.1		5.7	5.2	3.7	ST
5	10/12/2005	457	2615.4	9625.0		72	33	63	28.7	28.6	24.3	35.0	36.3	36.5		5.9	5.7	5.6	ST
6	10/12/2005	813	2602.0	9629.8		62	30	57	28.8	28.6	26.1	34.4	36.1	36.3		5.8	5.6	5.1	PN
7	10/12/2005	1205	2559.7	9700.0	22	27	11	22	28.7	28.7	28.7	34.1	34.1	34.2		5.7	5.6	5.6	PN
8	10/12/2005	1445	2603.4	9651.7	21	36	16	31	28.5	28.5	29.0	34.1	34.1	35.9		5.8	5.8	5.0	ST
9	10/12/2005	1837	2619.7	9656.4	21	35	15	29	28.7	28.7	29.2	33.4	33.4	35.7		5.9	5.9	4.2	ST
10	10/12/2005	2121	2605.1	9701.6	21	24	9	18	28.9	28.6	28.6	33.9	34.0	34.0		6.0	5.9	5.6	ST
11	10/12/2005	2227	2605.5	9702.9	21	22	7	14	28.8	28.8	28.6	33.7	33.7	33.7		6.1	6.1	5.9	ST
12	10/13/2005	25	2601.3	9708.0	21	10	3	5	28.6	28.7	28.6	34.0	33.9	34.0		6.4	6.4	6.4	ST
13	10/13/2005	315	2615.1	9709.2	21	15	5	9	28.5	28.5	28.5	33.7	33.7	33.7		6.0	6.0	6.0	ST
14	10/13/2005	454	2619.3	9706.0	21	18	7	12	28.4	28.4	28.3	33.6	33.6	33.7		6.1	6.1	6.0	ST
15	10/13/2005	650	2617.3	9703.1	21	20	9	16	28.5	28.5	28.5	33.5	33.5	33.6		6.0	6.0	6.0	ST
16	10/13/2005	846	2622.8	9658.8	21	32	15	28	28.5	28.5	28.8	33.3	33.3	34.1		6.2	6.1	5.1	ST
17	10/13/2005	1018	2621.4	9702.1	21	26	10	19	28.6	28.6	28.4	33.4	33.4	33.5		6.1	6.1	5.9	ST
18	10/13/2005	1203	2629.8	9659.7	21	34	16	31	28.5	28.5	29.1	33.0	33.0	34.7		6.3	6.2	4.4	PN
19	10/13/2005	1526	2646.6	9655.6	21	46	22	43	28.5	28.7	28.9	34.3	34.7	36.0		5.9	5.7	5.2	ST
20	10/13/2005	1706	2646.3	9653.3	21	50													ST
21	10/13/2005	2130	2621.2	9702.0	21	26	11	21	28.7	28.6	28.6	33.3	33.3	33.4		6.2	6.2	5.9	ST
22	10/13/2005	2236	2621.0	9707.7	21	17	5	9	28.4	28.4	28.4	33.4	33.4	33.4		6.2	6.3	6.2	ST
23	10/14/2005	102	2624.5	9712.0	21	14	6	9	28.4	28.4	28.4	33.4	33.4	33.4		6.4	6.4	6.4	ST
24	10/14/2005	348	2638.5	9705.4	21	31	14	27	28.4	28.6	28.8	32.9	33.3	34.0		6.1	5.6	5.0	ST
25	10/14/2005	620	2635.4	9654.6	21	40	19	36	28.4	28.6	29.1	33.6	34.2	35.3		6.1	5.9	4.5	ST
26	10/14/2005	749	2635.5	9652.2	21	42													ST
27	10/14/2005	922	2635.5	9649.8	21	45													ST

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE		POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
	MM/DD/YY	TIME	LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
28	10/14/2005	1512	2654.4	9641.6	21	83	36	71	28.5	28.8	22.0	34.5	36.0	36.4		5.8	5.1	4.3	ST
29	10/14/2005	1654	2654.2	9644.1	21	76													ST
30	10/14/2005	1936	2658.7	9702.9	21	36	15	30	27.8	27.7	29.0	31.7	31.9	35.3		6.5	6.4	4.3	ST
31	10/14/2005	2233	2659.1	9713.1	21	25	11	21	27.9	27.9	27.8	32.1	32.2	32.2		6.6	6.5	6.2	ST
32	10/15/2005	127	2647.7	9716.4	21	18	8	14	28.0	28.0	28.1	32.6	32.6	32.6		6.5	6.6	6.6	ST
33	10/15/2005	327	2646.2	9709.9	21	27	12	23	28.1	28.1	28.1	32.6	32.6	32.7		6.2	6.2	6.3	ST
34	10/15/2005	442	2644.0	9708.4	21	29	16	24	28.2	28.2	28.2	32.8	32.8	32.8		6.2	6.2	6.2	ST
35	10/15/2005	853	2649.1	9641.6	21	82	42	81	28.4	28.7	21.3	34.4	36.1	36.5		5.9	4.9	4.2	ST
36	10/15/2005	1024	2649.1	9638.8	21	89													ST
37	10/15/2005	1418	2710.7	9642.0	20	73	35	69	27.8	28.3	23.6	35.0	36.1	36.5		5.7	5.7	5.1	ST
38	10/15/2005	1545	2710.5	9644.6	20	67													ST
39	10/15/2005	2035	2710.1	9718.6	20	16	6	11	27.5	27.5	27.4	31.5	31.5	31.6		6.7	6.6	6.6	ST
40	10/15/2005	2254	2658.1	9721.2	21	12	4	7	27.7	27.7	27.7	32.1	32.1	32.1		6.8	6.8	6.8	ST
41	10/16/2005	59	2706.0	9721.6	20	10	3	6	27.5	27.5	27.5	31.7	31.7	31.7		6.7	6.7	6.7	ST
42	10/16/2005	351	2657.5	9704.1	21	35	15	30	27.8	28.0	29.0	33.4	33.9	35.9		6.0	6.0	4.4	ST
43	10/16/2005	543	2701.2	9702.6	20	36	17	32	27.8	29.1	28.7	33.5	35.7	36.1		6.0	4.7	4.6	ST
44	10/16/2005	847	2707.7	9651.7	20	55	27	52	27.9	28.2	26.1	34.2	35.1	36.4		5.9	5.7	5.2	ST
45	10/16/2005	1019	2707.6	9649.0	20	60													ST
46	10/16/2005	1312	2714.0	9653.9	20	46	21	40	27.4	28.0	28.6	32.0	34.4	36.1		6.1	5.8	4.8	ST
47	10/16/2005	1436	2714.3	9656.6	20	41													ST
48	10/16/2005	1607	2715.8	9703.9	20	31	14	27	27.3	27.3	27.7	30.9	30.9	32.1		6.3	6.2	5.6	ST
49	10/16/2005	1836	2722.9	9704.6	20	27	11	22	27.3	27.4	27.7	30.8	31.0	32.1		6.5	6.4	5.3	ST
50	10/16/2005	2109	2728.9	9710.9	20	18	6	13	27.3	27.3	26.9	30.5	30.5	30.5		6.6	6.6	6.3	ST
51	10/16/2005	2303	2729.4	9659.8	20	29	11	22	27.4	27.3	28.5	30.6	30.6	36.1		6.7	6.5	5.0	PN
52	10/17/2005	154	2716.3	9713.3	20	21	9	16	27.6	27.6	27.7	31.5	31.5	31.7		6.2	6.3	6.2	ST
53	10/17/2005	637	2721.2	9641.1	20	64	31	61	28.2	28.4	24.2	35.9	36.3	36.6		5.8	5.7	5.5	ST
54	10/17/2005	816	2721.2	9638.6	20	69													ST
55	10/17/2005	958	2721.2	9638.3	20	69													ST

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
56	10/17/2005	1241	2729.7	9630.2	20	72	35	68	28.0	28.6	25.0	35.4	36.2	36.5		5.7	5.7	5.7	PN
57	10/17/2005	1450	2724.0	9639.2	20	64	30	59	28.4	28.4	26.3	36.3	36.3	36.4		5.7	5.7	5.8	ST
58	10/17/2005	1619	2724.6	9641.9	20	58													ST
59	10/17/2005	1952	2739.0	9649.4	20	31	13	26	27.1	27.9	28.7	30.2	33.4	35.9		7.1	6.0	5.3	ST
60	10/17/2005	2216	2745.0	9706.1	20	9	4	7	26.9	26.9	26.6	30.1	30.1	30.1		7.0	7.0	6.8	ST
61	10/18/2005	157	2739.6	9652.7	20	27	12	23	27.1	27.7	28.7	30.0	32.1	35.6		7.1	6.6	5.4	ST
62	10/18/2005	502	2733.4	9642.9	20	45	21	42	28.0	28.3	28.1	34.8	35.8	36.1		5.9	5.7	5.7	ST
63	10/18/2005	628	2732.2	9640.7	20	51													ST
64	10/18/2005	1115	2760.0	9640.1	20	20	8	15	27.2	27.2	27.3	30.3	30.3	30.4		6.9	6.9	6.9	ST
65	10/18/2005	1354	2758.7	9633.0	20	25	11	20	27.2	27.5	28.3	30.2	31.4	34.4		6.9	6.5	4.4	ST
66	10/18/2005	1718	2755.6	9657.4	20	10	5	8	26.5	26.5	26.5	29.4	29.4	29.4		7.6	7.6	7.6	ST
67	10/18/2005	2023	2803.1	9649.7	19	10	4	8	27.3	27.3	26.8	29.2	29.2	29.3		7.6	7.7	7.8	ST
68	10/19/2005	13	2814.3	9632.8	19	10	4	7	26.9	27.0	27.1	28.9	29.7	30.0		7.7	7.5	7.5	ST
69	10/19/2005	249	2806.6	9643.0	19	13	4	7	26.8	26.8	26.8	29.0	29.0	29.0		7.8	7.9	7.9	ST
70	10/19/2005	648	2806.4	9615.5	19	27	12	23	27.7	27.9	28.2	33.2	33.6	35.7		6.0	6.1	5.6	ST
71	10/19/2005	1033	2759.9	9558.2	20	45	21	42	27.9	28.1	28.5	34.1	35.3	36.0		5.9	5.8	5.7	ST
72	10/19/2005	1148	2757.4	9558.0	20	49													ST
73	10/19/2005	1510	2743.4	9545.3	20	83	42	83	28.2	28.3	21.5	36.1	36.1	36.6		5.8	5.8	4.5	ST
74	10/19/2005	1723	2744.5	9537.8	20	94	45	88	28.1	28.2	21.3	35.4	36.1	36.6		5.8	5.7	4.5	ST
75	10/19/2005	2109	2753.0	9533.3	20	64	30	59	28.1	28.1	24.2	34.3	35.5	36.6		5.9	5.8	5.4	ST
76	10/19/2005	2230	2750.5	9532.4	20	70													ST
77	10/20/2005	36	2760.0	9529.9		55	25	50	27.5	28.3	23.0	33.6	35.9	36.6		6.0	5.5	4.9	PN
78	10/20/2005	225	2753.8	9530.3	20	64	31	62	27.7	28.3	22.5	34.4	35.9	36.6		5.9	5.7	5.0	ST
79	10/20/2005	622	2742.5	9548.0	20	90	45	90	28.4	28.5	21.7	36.1	36.2	36.6		5.8	5.8	4.8	ST
80	10/20/2005	1040	2806.9	9533.6	19	45													ST
81	10/20/2005	1158	2808.9	9535.4	19	41	19	36	27.4	28.4	28.1	34.1	35.6	36.2		5.9	5.4	5.3	ST
82	10/20/2005	1347	2814.4	9540.5	19	33	14	28	27.5	28.0	28.4	32.7	33.0	34.5		6.1	6.0	4.9	ST

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
83	10/20/2005	1525	2814.2	9545.8	19	31	13	26	27.7	27.7	28.2	32.8	32.8	34.2		5.9	5.9	5.8	ST
84	10/20/2005	1818	2822.0	9533.1	19	27	13	24	27.0	27.8	27.9	31.2	33.0	33.9		6.7	6.0	5.7	ST
85	10/20/2005	2127	2816.2	9515.4	19	40													ST
86	10/20/2005	2246	2813.8	9515.3	19	44	21	42	27.6	28.1	28.2	32.8	34.9	36.1		6.2	5.8	5.6	ST
87	10/21/2005	155	2810.8	9532.0	19	40													ST
88	10/21/2005	317	2812.9	9532.1	19	38													ST
89	10/21/2005	625	2816.2	9546.0	19	29	13	25	27.6	27.9	27.9	32.7	33.0	34.0		6.1	6.0	5.5	ST
90	10/21/2005	1233	2815.3	9527.8	19	14	7	14	26.8	27.6	27.9	29.8	33.1	32.1		7.1	6.0	4.0	ST
91	10/21/2005	1438	2814.0	9619.4	19	22	9	18	26.3	27.5	27.8	29.8	33.8	34.4		7.0	5.9	5.9	ST
92	10/21/2005	1831	2823.2	9601.2	19	20	8	15	27.1	27.2	27.9	31.2	31.8	33.7		6.8	6.6	4.8	ST
93	10/21/2005	2132	2826.4	9608.6	19	15	5	10	27.0	26.9	27.8	29.3	29.8	32.6		7.0	6.9	5.3	ST
94	10/21/2005	2319	2830.3	9600.5	19	14	5	9	26.7	26.7	27.3	29.0	29.2	31.7		7.2	7.6	6.7	PN
95	10/21/2005	2351	2830.7	9560.0	19	14	6	11	26.7	27.2	27.4	29.7	30.9	32.1		7.3	6.9	6.5	ST
96	10/22/2005	152	2834.5	9558.9	19	9	3	6	26.4	26.4	26.4	28.7	28.7	28.7		7.3	7.3	7.3	ST
97	10/22/2005	508	2830.0	9541.2	19	22	9	16	26.7	26.9	27.6	30.0	30.4	31.8		7.1	7.1	5.4	ST
98	10/22/2005	627	2827.8	9541.2	19	24	11	20	26.6	26.8	27.4	30.0	30.2	31.8		7.2	7.2	6.0	ST
99	10/22/2005	930	2829.7	9529.7	19	2930	11	22	26.6	27.3	28.0	30.4	32.2	34.0		6.8	6.4	5.3	PN
100	10/22/2005	1348	2829.8	9500.1	19	39	16	29	27.3	27.3	28.3	33.0	33.0	35.1		6.1	6.1	5.9	PN
101	10/22/2005	1540	2830.4	9502.0	19	33	14	27	27.2	27.2	28.5	32.9	32.9	35.1		6.1	6.1	5.0	ST
102	10/22/2005	1839	2839.6	9451.7	18	27	13	24	27.0	27.0	28.0	32.3	32.3	33.2		6.3	6.2	5.0	ST
103	10/22/2005	2347	2828.6	9503.8	19	35	16	31	27.3	27.3	28.4	33.1	33.1	35.2		6.1	6.1	4.5	ST
104	10/23/2005	203	2837.9	9508.7	19	27	12	23	26.9	26.8	27.1	32.3	32.1	32.6		6.3	6.3	6.2	ST
105	10/23/2005	458	2846.2	9522.5	19	17	7	12	26.6	26.6	26.7	31.8	31.8	32.0		6.4	6.4	6.2	ST
106	10/23/2005	927	2851.4	9505.5	19	20	11	20	26.6	26.6	27.6	31.5	31.5	32.7		6.2	6.2	4.6	ST
107	10/23/2005	1044	2848.9	9505.2	19	20													ST
108	10/23/2005	1158	2846.4	9505.3	19	20													ST
109	10/23/2005	1441	2859.6	9500.1	19	17	6	11	25.6	25.6	26.3	29.7	29.7	30.3		6.7	6.7	5.9	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
110	10/23/2005	1704	2913.6	9451.1	18	10	5	10	25.4	25.4	25.2	28.9	28.9	29.0		6.6	6.6	6.1	ST
111	10/23/2005	1942	2907.0	9447.4	18	16	8	13	26.3	26.3	26.3	31.7	31.7	31.7		6.4	6.4	6.3	ST
112	10/23/2005	2101	2904.7	9447.1	18	18													ST
113	10/23/2005	2338	2900.2	9430.1	18	19	7	14	26.0	26.0	26.0	30.6	30.6	30.8		6.9	6.8	6.7	PN
114	10/26/2005	522	2839.7	9422.9	18	33	17	33	25.8	26.0	26.8	32.8	33.5	33.5		6.0	6.2	5.0	ST
115	10/26/2005	644	2837.7	9421.6	18	32													ST
116	10/26/2005	823	2833.8	9420.6	18	35	15	29	25.8	26.1	26.2	33.9	34.5	34.9		6.3	6.0	6.1	ST
117	10/26/2005	1040	2829.7	9430.0	18	40	17	34	26.4	26.7	27.7	34.5	34.8	35.7		5.9	6.0	5.2	PN
118	10/26/2005	1233	2832.1	9430.0	18	35	17	34	26.4	27.3	28.4	34.5	35.1	35.9		6.1	5.5	4.6	ST
119	10/26/2005	1502	2830.3	9422.3	18	37	19	37	25.9	26.2	27.2	34.2	34.7	35.7		6.2	6.1	5.0	ST
120	10/26/2005	1628	2827.9	9421.8	18	38													ST
121	10/26/2005	1930	2817.5	9430.7	18	46	22	43	26.8	26.7	27.0	35.3	35.3	35.4		6.2	6.0	5.7	ST
122	10/26/2005	2051	2815.5	9428.8	18	47													ST
123	10/26/2005	2218	2813.0	9428.2	18	49													ST
124	10/27/2005	245	2805.5	9450.0	18	55	27	54	26.5	27.6	26.2	34.4	35.3	36.3		5.9	5.3	5.1	ST
125	10/27/2005	706	2759.3	9512.1		73	36	73	26.7	27.3	23.6	35.2	35.8	36.5		6.0	5.9	5.5	ST
126	10/27/2005	937	2759.7	9500.0		92	39	76	27.2	27.6	22.7	35.2	35.7	36.5		5.9	5.7	5.1	PN
127	10/27/2005	1237	2756.8	9441.5		91	44	87	27.3	27.3	22.3	35.8	35.8	36.5		5.9	5.8	4.8	ST
128	10/27/2005	1728	2759.3	9429.2		75	38	73	26.4	26.9	22.8	34.6	35.4	36.5		6.1	6.0	4.8	ST
129	10/27/2005	2149	2811.3	9413.2	18	55													ST
130	10/27/2005	2314	2809.0	9412.9	18	59	29	56	26.6	26.6	24.8	34.9	34.9	36.4		6.0	6.0	4.2	ST
131	10/28/2005	226	2757.1	9404.6		83	43	82	26.5	28.4	22.6	34.7	36.2	36.5		6.1	5.7	5.5	ST
132	10/28/2005	748	2820.3	9354.1	17	55	26	51	26.6	26.6	26.6	35.8	35.8	35.9		5.9	5.9	5.9	ST
133	10/28/2005	907	2817.9	9353.7	17	58													ST
134	10/28/2005	1301	2812.8	9349.5	17	64	32	61	26.8	26.8	23.8	36.0	36.0	36.5		6.0	6.0	4.9	ST
135	10/28/2005	1426	2815.3	9349.7	17	61													ST
136	10/28/2005	1623	2817.5	9349.8	17	58													ST

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
137	10/28/2005	1754	2820.1	9350.0	17	56													ST
138	10/28/2005	2254	2858.2	9400.1	18	18	7	14	23.6	23.6	23.6	34.2	34.2	34.2		6.8	6.8	6.8	ST
139	10/29/2005	342	2909.5	9343.4	17	18	9	14	23.0	23.1	23.1	34.3	34.3	34.3		6.7	6.7	6.7	ST
140	10/29/2005	713	2918.3	9351.6	17	15	4	7	21.9	21.9	22.0	32.2	32.2	32.2		6.7	6.7	6.7	ST
141	10/29/2005	1222	2929.7	9359.8	17	12	3	6	22.1	22.1	22.0	30.7	30.7	30.7		6.3	6.3	6.3	PN
142	10/29/2005	1613	2922.8	9342.6	17	13	4	6	21.9	21.9	21.9	33.4	33.4	33.4		6.7	6.7	6.7	ST
143	10/29/2005	1738	2920.4	9342.6	17	14													ST
144	10/29/2005	2055	2926.2	9331.0	17	13	6	11	21.9	22.0	22.0	33.7	33.7	33.7		6.7	6.7	6.7	ST
145	10/29/2005	2213	2928.3	9332.8	17	12													ST
146	10/30/2005	334	2930.0	9300.3	17	14	4	7	22.1	22.1	22.1	32.6	32.6	32.6		6.8	6.8	6.8	PN
147	10/30/2005	511	2934.1	9251.9	16	11													ST
148	10/30/2005	625	2932.0	9252.0	16	12	5	10	22.0	22.0	22.0	32.0	32.0	32.0		6.6	6.6	6.6	ST
149	10/30/2005	907	2925.4	9244.0	16	15	7	12	21.5	21.5	21.6	31.7	31.7	31.7		6.9	6.8	6.8	ST
150	10/30/2005	1019	2923.2	9245.1	16	15													ST
151	10/30/2005	1134	2920.9	9246.4	16	16													ST
152	10/30/2005	1330	2913.9	9251.3	16	18	9	16	23.4	23.3	23.3	34.0	34.0	34.0		6.5	6.5	6.5	ST
153	10/30/2005	1448	2912.0	9253.3	16	19													ST
154	10/30/2005	1607	2910.1	9255.3	16	19													ST
155	10/30/2005	1715	2908.9	9256.6	16	20	8	15	24.0	24.0	24.0	34.7	34.7	34.7		6.4	6.4	6.3	ST
156	10/30/2005	2052	2919.6	9307.9	17	17	7	12	23.1	23.1	23.1	34.6	34.6	34.6		6.6	6.6	6.6	ST
157	10/30/2005	2309	2922.0	9307.9	17	15													ST
158	10/31/2005	250	2909.8	9323.6	17	18	7	14	23.7	23.7	23.7	35.0	35.0	35.0		6.4	6.4	6.4	ST
159	10/31/2005	706	2850.7	9320.0	17	24	11	21	24.3	24.3	24.3	35.4	35.4	35.4		6.4	6.4	6.4	ST
160	10/31/2005	1227	2839.6	9323.2	17	31	16	31	25.1	25.1	25.1	35.6	35.6	35.6		6.2	6.2	6.2	ST
161	10/31/2005	1434	2841.3	9330.8	17	29	15	28	24.6	24.6	24.6	35.4	35.4	35.4		6.2	6.2	6.2	ST
162	10/31/2005	1552	2842.9	9333.1	17	28													ST
163	10/31/2005	1756	2841.4	9342.6	17	25	12	25	24.9	24.8	24.8	35.5	35.5	35.6		6.3	6.3	6.2	ST

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
164	10/31/2005	2025	2830.2	9339.2	17	40	19	38	26.1	26.0	25.9	36.0	36.0	36.0		6.1	6.1	6.0	ST
165	11/1/2005	5	2829.5	9330.2	17	43	21	40	25.8	25.7	26.1	35.9	35.9	36.1		6.1	6.1	6.0	PN
166	11/1/2005	614	2807.8	9324.4	17	73	38	73	26.7	26.7	22.5	36.5	36.5	36.5		6.0	6.0	4.8	ST
167	11/1/2005	745	2805.4	9324.6	17	80													ST
168	11/1/2005	1020	2805.9	9314.2	17	82	41	81	26.6	26.6	21.8	36.4	36.4	36.5		6.0	6.0	4.6	ST
169	11/1/2005	1154	2803.8	9312.4	17	89													ST
170	11/1/2005	1252	2803.2	9311.7	17	91													ST
171	11/1/2005	1427	2805.4	9312.8	17	85	39	76	26.6	26.6	21.9	36.4	36.4	36.5		5.9	5.9	4.7	ST
172	11/1/2005	1827	2806.6	9254.0	16	81	42	81	26.6	26.6	21.7	36.4	36.5	36.5		6.0	6.0	4.5	ST
173	11/1/2005	2002	2808.9	9254.0	16	74													ST
174	11/2/2005	915	2759.3	9233.5		110	54	107	26.5	26.5	20.0	36.4	36.4	36.5		6.0	6.0	4.2	ST
175	11/2/2005	1040	2801.5	9232.6	16	104													ST
176	11/2/2005	1328	2809.7	9223.6	16	72	36	69	26.2	26.3	26.3	36.3	36.3	36.3		6.0	6.0	6.0	ST
177	11/2/2005	1633	2822.8	9218.3	16	55	28	53	25.9	25.9	25.9	36.3	36.3	36.3		6.0	6.0	6.0	ST
178	11/2/2005	1802	2825.3	9218.7	16	53													ST
179	11/2/2005	2021	2825.4	9218.7	16	54													ST
180	11/2/2005	2143	2827.7	9218.3	16	51													ST
181	11/3/2005	100	2836.8	9227.9	16	35	18	35	24.9	24.9	24.9	35.7	35.7	35.7		6.2	6.2	6.2	ST
182	11/3/2005	222	2836.4	9225.2	16	36													ST
183	11/3/2005	531	2831.1	9225.8	16	45	24	45	25.3	25.3	25.3	36.0	36.0	36.0		6.1	6.1	6.1	ST
184	11/3/2005	656	2828.7	9226.6	16	49													ST
185	11/3/2005	820	2826.3	9227.4	16	52													ST
186	11/3/2005	1108	2833.1	9239.1	16	40	18	35	25.1	25.0	25.0	36.1	36.1	36.1		6.2	6.1	6.2	ST
187	11/3/2005	1400	2829.8	9300.0	17	48	21	40	25.3	25.3	25.3	36.0	36.0	36.0		6.1	6.1	6.1	PN
188	11/3/2005	1520	2831.1	9301.6	17	40	20	39	25.0	25.0	25.0	35.9	35.9	35.9		6.2	6.1	6.1	ST
189	11/3/2005	1648	2833.8	9301.3	17	38													ST
190	11/3/2005	2022	2859.8	9300.5	17	28	10	19	23.8	23.5	23.6	34.7	34.7	34.8		6.6	6.5	6.5	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
191	11/3/2005	2356	2848.2	9254.1	16	28	13	24	24.3	24.3	24.2	35.1	35.1	35.2		6.5	6.4	6.3	ST
192	11/4/2005	311	2835.9	9258.8	16	33	17	32	24.7	24.6	24.6	35.8	35.8	35.9		6.4	6.3	6.2	ST
193	11/4/2005	553	2838.4	9249.2	16	33	17	32	24.7	24.8	24.7	35.8	35.9	35.9		6.3	6.3	6.2	ST
194	11/4/2005	921	2842.6	9239.7	16	29	14	27	24.6	24.6	24.6	35.6	35.6	35.6		6.3	6.3	6.3	ST
195	11/4/2005	1040	2841.5	9240.5	16	30													ST
196	11/4/2005	1327	2833.8	9233.9	16	36	18	35	25.1	25.1	25.1	36.0	36.0	36.0		6.2	6.2	6.2	ST
197	11/4/2005	1618	2841.6	9223.4	16	33	16	31	24.4	24.8	25.1	35.2	35.5	35.9		6.3	6.2	6.2	ST
198	11/4/2005	1735	2838.8	9222.5	16	33													ST
199	11/4/2005	2036	2851.7	9216.9	16	26	13	24	24.7	24.8	25.0	35.1	35.3	35.5		6.4	6.2	6.0	ST
200	11/4/2005	2324	2860.0	9232.2	16	37	11	21	23.9	23.6	23.4	34.3	34.3	34.3		6.6	6.5	6.4	PN
201	11/5/2005	218	2855.0	9246.1	16	22	11	21	23.9	23.9	23.8	34.7	34.7	34.7		6.5	6.5	6.4	ST
202	11/5/2005	344	2853.3	9244.4	16	24													ST
203	11/5/2005	710	2856.2	9217.1	16	22	10	20	23.0	23.2	24.3	33.3	33.6	34.9		6.7	6.5	6.3	ST
204	11/5/2005	1011	2848.0	9209.4	16	28	14	26	23.7	24.5	24.6	34.1	35.2	35.3		6.6	6.3	6.3	ST
205	11/5/2005	1248	2900.1	9200.1	16	20	7	13	22.7	22.7	22.3	32.8	32.8	32.7		6.9	6.9	6.7	PN
206	11/5/2005	1334	2900.3	9159.8	15	15	5	10	22.5	22.5	22.1	32.7	32.7	32.7		7.0	7.0	6.7	ST
207	11/5/2005	1559	2859.7	9206.7	16	16	8	15	23.0	23.0	23.0	33.1	33.1	33.1		6.7	6.7	6.7	ST
208	11/5/2005	1801	2854.3	9212.6	16	22	11	20	24.5	24.4	24.5	34.8	34.9	35.0		6.4	6.4	6.3	ST
209	11/5/2005	2103	2843.3	9203.3	16	31	15	30	24.7	24.8	25.0	35.1	35.3	35.6		6.3	6.2	6.1	ST
210	11/5/2005	2349	2833.7	9209.0	16	40	21	40	25.1	25.3	25.5	35.6	36.0	36.2		6.3	6.1	6.0	ST
211	11/6/2005	117	2831.4	9208.0	16	44													ST
212	11/6/2005	317	2829.9	9200.0	16	49	25	48	25.4	25.4	25.4	36.1	36.1	36.1		6.2	6.1	6.0	PN
213	11/6/2005	626	2844.3	9147.6	15	25	13	24	24.1	24.2	24.9	34.2	34.3	35.2		6.6	6.5	6.1	ST
214	11/6/2005	950	2856.2	9130.4	15	15	5	9	22.2	22.1	21.8	31.6	31.6	31.6		7.0	6.9	6.5	PN
215	11/6/2005	1222	2852.4	9132.7	15	14	6	12	22.9	22.8	22.7	32.3	32.3	32.3		6.8	6.8	6.8	ST
216	11/6/2005	1635	2836.7	9155.2	15	37	18	36	24.9	25.1	25.3	35.1	35.6	35.8		6.3	6.2	5.9	ST
217	11/6/2005	1759	2834.3	9155.6	15	40													ST

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
218	11/6/2005	2044	2833.2	9142.8	15	40	21	40	25.1	25.4	25.6	35.6	35.9	36.1		6.3	6.1	5.9	ST
219	11/6/2005	2207	2830.8	9143.0	15	44													ST
220	11/6/2005	2249	2830.1	9143.3	15	48	25	48	25.4	25.5	25.6	35.7	36.1	36.2		6.3	6.1	6.0	ST
221	11/7/2005	132	2830.2	9130.5	15	46	22	43	22.3	25.7	25.7	31.9	36.0	36.3		7.3	6.1	5.8	PN
222	11/7/2005	532	2809.0	9141.6	15	83	41	80	26.1	26.1	21.6	36.4	36.4	36.5		6.1	6.0	4.4	ST
223	11/7/2005	700	2806.6	9142.4	15	89													ST
224	11/7/2005	954	2800.1	9200.0	16	117	57	114	26.3	26.2	19.0	36.4	36.4	36.4		6.1	6.0	4.1	PN
225	11/7/2005	1231	2808.3	9156.1	15	82	41	81	25.9	26.0	21.4	36.3	36.3	36.5		6.0	6.0	4.8	ST
226	11/7/2005	1410	2805.7	9156.1	15	89													ST
227	11/7/2005	1847	2805.2	9204.3	16	92	45	90	26.1	26.1	20.5	36.4	36.4	36.4		6.1	6.0	4.5	ST
228	11/7/2005	2025	2802.5	9204.7	16	102													ST
229	11/8/2005	134	2759.7	9130.3		169	84	167	26.4	22.2	15.8	36.4	36.5	36.0		6.1	5.2	4.0	PN
230	11/8/2005	524	2759.7	9059.7		156	77	153	26.5	24.3	16.0	36.4	36.5	36.1		6.1	6.1	4.1	PN
231	11/9/2005	125	2915.1	8759.9		253	101	201	24.3	19.7	14.7	35.1	36.4	35.9		6.5	4.1	4.2	PN
232	11/9/2005	358	2930.1	8802.7	11	44	19	38	24.5	24.4	24.6	35.4	35.4	35.8		6.4	6.3	5.5	PN
233	11/13/2005	231	2959.9	8808.4	11	27	11	20	22.7	22.7	22.8	35.1	35.1	35.2		6.7	6.7	6.6	PN
234	11/13/2005	501	2950.5	8806.4	11	32	16	29	23.2	23.2	23.2	35.0	35.0	35.5		6.4	6.4	6.1	ST
235	11/13/2005	624	2949.1	8808.7	11	32													ST
236	11/13/2005	850	2944.4	8802.0	11	33	16	31	22.9	23.0	23.2	34.9	35.3	35.5		6.5	6.5	6.4	ST
237	11/13/2005	1119	2930.1	8807.9	11	40	19	38	23.7	23.9	24.9	35.3	35.4	35.9		6.4	6.4	5.6	ST
238	11/13/2005	1305	2935.6	8807.9	11	37	16	31	23.3	23.2	23.8	35.0	35.0	35.4		6.5	6.5	5.8	ST
239	11/13/2005	1525	2930.3	8808.4	11	40	20	40	24.3	24.3	24.3	35.6	35.6	35.6		6.2	6.2	6.1	ST
240	11/13/2005	1743	2927.9	8804.4	11	46	22	43	24.8	24.6	24.3	35.7	35.7	35.6		6.2	6.2	6.1	ST
241	11/13/2005	1908	2925.5	8804.5	11	52													ST
242	11/13/2005	2218	2929.9	8830.0	11	53	24	47	24.5	24.4	24.9	35.6	35.6	36.0		6.4	6.3	5.8	PN
243	11/14/2005	115	2927.4	8847.5	11	15	7	13	23.9	23.8	23.6	35.4	35.4	35.5		6.5	6.5	6.5	ST
244	11/14/2005	238	2928.8	8847.4	11	13	6	11	24.0	24.0	23.3	35.4	35.4	35.3		6.5	6.5	6.5	ST

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
245	11/14/2005	638	2941.3	8831.5	11	29	13	26	24.4	24.4	24.7	35.5	35.5	35.8		6.3	6.3	5.4	ST
246	11/14/2005	946	2958.3	8824.7	11	26	12	24	21.6	22.2	23.5	32.2	34.0	35.2		7.0	6.7	6.4	ST
247	11/14/2005	1231	2947.3	8825.1	11	31	15	30	23.2	23.4	23.6	34.9	35.1	35.2		6.5	6.3	6.2	ST
248	11/14/2005	1512	2941.0	8829.0	11	33	17	32	23.7	23.7	23.9	35.3	35.3	35.4		6.4	6.4	6.2	ST
249	11/14/2005	1734	2946.0	8830.8	11	28	14	27	24.1	24.0	23.8	35.3	35.3	35.3		6.4	6.4	6.1	ST
250	11/14/2005	2022	2952.7	8841.0	11	14	6	13	22.8	22.7	22.8	34.3	34.7	34.8		6.8	6.7	6.6	ST
251	11/14/2005	2254	2958.1	8830.1	11	29	13	24	24.0	23.7	23.7	35.3	35.3	35.3		6.5	6.5	6.3	PN
252	11/15/2005	57	3006.7	8829.1	11	11	5	10	21.8	21.8	22.0	31.9	32.0	33.6		7.1	7.1	6.3	ST
253	11/15/2005	229	3002.8	8828.2	11	18	10	18	21.8	22.2	22.9	32.4	34.0	35.0		7.0	6.7	5.4	ST
254	11/15/2005	1222	3007.0	8842.5	11	11	5	8	22.0	22.0	22.1	33.4	33.4	33.5		6.9	6.9	6.8	ST

Table 2. Selected environmental parameters (continued)

A.E. VERRILL, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE		POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
	MM/DD/YY	TIME	LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
23001	10/19/2005	1324	3010.6	8803.6	11	9	5	9	25.6	25.0	26.5	31.2	31.5	33.4		6.7	6.7	6.4	ST
23002	10/19/2005	1412	3008.3	8806.7	11	15	3	6	25.8	25.8	26.0	31.1	32.1	32.6		6.2	6.2	5.9	ST
23003	10/19/2005	1628	3012.0	8821.5	11	15	7	15	25.5	26.4	26.4	32.3	33.8	34.0		6.6	6.1	5.7	ST
23004	10/19/2005	1831	3001.1	8823.1	11	26	13	25	26.7	26.4	26.5	34.8	35.0	34.4		6.3	6.3	5.8	ST
23005	10/19/2005	2043	3000.6	8810.1	11	27	14	27	25.8	26.1	26.8	32.9	34.2	35.1		6.5	6.2	5.4	ST
23006	10/19/2005	2245	3010.4	8801.0	11	11	6	11	25.1	24.9	25.7	33.3	33.3	33.8		6.5	6.6	6.3	ST

Table 2. Selected environmental parameters (continued)

PELICAN, FALL SHRIMP GROUND FISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
35001	10/10/2005	840	2900.0	9030.0	14	11	5	10	26.3	26.8	27.5	31.2	31.7	32.9	1.064	7.0	6.7	5.6	PN
35002	10/10/2005	1201	2902.3	9010.2	14	13	6	12	26.9	27.1	28.2	30.5	31.3	34.1	0.406	6.7	6.4	4.7	ST
35003	10/10/2005	1339	2900.8	9003.3	14	20	7	19	27.0	28.1	28.3	31.1	34.3	34.6	0.363	6.8	5.7	5.0	ST
35004	10/10/2005	1440	2860.0	8959.9	13	24	14	24	27.2	27.7	28.1	31.6	33.8	34.5	0.178	6.7	6.0	4.6	PN
35005	10/10/2005	1635	2902.0	8954.3	13	26	14	26	27.4	27.4	28.1	32.0	33.1	35.0	0.105	6.7	6.4	3.7	ST
35006	10/10/2005	1956	2902.2	9010.0	14	12	6	12	26.9	26.9	28.2	30.5	30.6	34.3	0.363	6.8	6.6	4.7	ST
35007	10/10/2005	2121	2900.8	9003.3	14	20	7	19	27.1	27.6	28.2	31.4	33.2	34.6	0.371	6.6	6.3	5.2	ST
35008	10/10/2005	2327	2902.4	8954.1	13	27	11	26	27.2	27.3	28.1	31.5	32.7	34.9	0.058	6.7	6.6	4.3	ST
35009	10/11/2005	59	2901.3	8950.1	13	33	15	32	27.1	27.4	27.9	31.4	33.1	35.3	0.067	6.6	6.4	3.5	ST
35010	10/11/2005	233	2902.5	8944.4	13	35	15	33	26.8	27.3	28.1	30.3	32.5	35.5	0.259	6.9	6.5	4.4	ST
35011	10/11/2005	402	2906.2	8939.6	13	18	8	17	27.5	27.5	28.2	31.1	31.2	33.1	0.301	6.8	6.8	5.6	ST
35012	10/11/2005	514	2900.6	8935.5	13	22	9	21	27.3	27.3	28.2	31.3	31.3	35.5	0.354	6.8	6.8	5.7	ST
35013	10/11/2005	735	2860.0	8930.0	13	15	7	15	25.7	27.4	28.2	27.7	31.9	35.0	1.074	7.4	6.3	4.9	PN
35014	10/11/2005	912	2900.4	8935.5	13	22	11	22	27.4	27.4	28.3	31.4	31.4	35.4	0.337	6.8	6.8	5.7	ST
35015	10/11/2005	1058	2904.9	8939.1	13	18	10	17	27.4	27.4	28.2	31.1	32.1	34.7	0.365	6.7	6.5	4.7	ST
35016	10/11/2005	1221	2902.2	8944.3	13	35	16	34	27.0	27.4	28.1	31.4	33.1	35.9	0.206	6.7	6.4	4.8	ST
35017	10/11/2005	1400	2900.4	8950.7	13	33	16	32	27.1	27.5	27.8	31.3	32.7	35.4	0.350	6.9	6.3	3.5	ST
35018	10/11/2005	1729	2843.8	9013.9	14	31	15	29	27.9	28.5	28.3	31.9	33.8	35.0	0.924	6.8	5.9	4.8	ST
35019	10/11/2005	1959	2844.0	9013.9	14	31	15	30	27.5	28.5	28.3	31.5	33.6	34.9	0.692	6.9	5.9	5.0	ST
35020	10/11/2005	2335	2859.6	9032.0	14	11	4	10	26.9	27.0	27.5	31.5	31.5	33.4	1.057	6.8	6.8	4.6	ST
35021	10/12/2005	154	2858.7	9046.2	14	9	4	8	26.8	26.8	26.8	31.8	31.8	31.8	0.137	6.6	6.6	6.6	ST
35022	10/12/2005	518	2835.7	9030.5	14	27	13	27	27.6	28.2	28.3	34.4	34.9	35.2	0.163	6.5	5.7	5.5	ST
35023	10/12/2005	800	2831.3	9030.0	14	37	18	36	27.6	28.3	27.8	35.0	35.4	35.6	0.107	6.4	5.8	6.0	PN
35024	10/12/2005	928	2835.9	9030.6	14	27	9	27	27.5	28.2	28.2	34.3	34.9	35.2	0.133	6.5	5.7	5.5	ST
35025	10/12/2005	1248	2859.5	9032.0	14	11	6	10	26.9	26.7	27.5	31.0	31.1	33.6	0.698	7.1	7.0	5.1	ST
35026	10/12/2005	1456	2858.8	9046.4	14	9	5	8	27.1	26.7	26.7	31.6	31.6	31.8	0.234	6.6	6.6	6.7	ST
35027	10/12/2005	1654	2860.0	9100.1	15	7	3	6	26.9	26.9	26.7	31.0	31.0	31.5	0.150	6.7	6.8	6.8	PN

Table 2. Selected environmental parameters (continued)

PELICAN, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
35028	10/12/2005	2056	2853.2	9130.0	15	16	7	16	28.3	27.1	27.3	32.5	33.0	33.4	1.074	7.3	6.8	5.6	ST
35029	10/13/2005	759	2900.2	9130.0	15	11	5	10	26.6	26.6	26.8	32.4	32.4	32.7	1.277	6.8	6.8	6.3	PN
35030	10/13/2005	932	2853.1	9130.1	15	16	8	16	26.9	27.2	27.4	32.9	33.3	33.6	0.453	6.8	6.5	5.5	ST
35031	10/13/2005	1355	2829.9	9100.1	15	33	15	33	27.8	27.6	27.7	35.3	35.3	35.5	0.851	6.3	6.2	5.6	PN

Table 2. Selected environmental parameters (continued)

R.J. KEMP, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
31001	11/9/2005	759	2602.8	9708.5	21	8	4	8	25.8	25.8	25.8	33.7	33.8	33.8		5.6	5.6	5.7	ST
31002	11/9/2005	857	2557.4	9705.5	22	18	9	18	25.5	26.1	26.3	33.0	33.2	34.7		6.3	5.8	4.7	ST
31003	11/9/2005	1000	2600.8	9700.6	21	25	13	25	25.5	25.9	26.9	32.7	33.8	35.2		6.4	6.3	4.7	ST
31004	11/9/2005	1050	2603.4	9659.5	21	26	13	26	25.6	26.1	26.7	32.7	33.6	35.1		6.3	6.1	5.3	ST
31005	11/9/2005	1139	2606.8	9701.5	21	23	12	23	25.7	25.8	26.3	32.7	33.5	34.8		6.4	6.3	5.3	ST
31006	11/9/2005	1215	2607.5	9702.6	21	22	11	22	25.6	25.8	26.3	32.7	33.5	34.5		6.4	6.3	4.8	ST
31007	11/9/2005	1308	2608.8	9708.7	21	14	7	14	26.1	26.6	26.1	34.0	34.4	33.6		6.0	5.7	5.3	ST
31008	11/9/2005	1358	2604.4	9706.6	21	16	8	16	25.8	26.0	26.2	33.9	33.3	33.8		6.2	5.9	5.3	ST
31009	11/22/2005	850	2609.3	9705.4	21	18	9	18	22.7	22.4	21.9	34.5	34.6	34.6		6.7	6.9	6.4	ST
31010	11/22/2005	938	2610.8	9702.4	21	22	11	22	23.1	23.1	22.6	34.2	34.2	34.3		7.0	6.8	6.6	ST
31011	11/22/2005	1026	2614.3	9704.5	21	18	9	18	22.9	22.8	22.3	34.2	34.2	34.2		7.2	7.2	7.1	ST
31012	11/22/2005	1121	2619.8	9702.5	21	22	11	22	22.7	22.4	22.2	34.0	34.0	34.2		7.2	7.0	6.9	ST
31013	11/22/2005	1157	2619.3	9703.4	21	19	10	19	22.5	22.1	22.1	33.9	34.0	34.2		7.4	7.2	6.1	ST
31014	11/22/2005	1300	2621.6	9708.4	21	16	8	16	22.2	21.9	21.6	33.9	33.8	33.9		6.9	7.3	6.8	ST
31015	11/22/2005	1347	2619.2	9709.5	21	16	8	16	21.8	21.4	21.2	34.1	34.1	34.1		7.2	7.2	6.2	ST
31016	11/22/2005	1508	2615.8	9708.5	21	15	8	15	22.5	22.1	22.0	34.4	34.4	34.4		7.1	7.1	6.8	ST

Table 2. Selected environmental parameters (continued)

MATAGORDA BAY, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
32001	11/2/2005	910	2820.5	9619.6	19	13	7	13	21.2	21.3	23.3	30.1	30.1	31.6		6.8	6.9	6.1	ST
32002	11/2/2005	950	2820.5	9617.5	19	16	8	16	21.3	21.3	23.5	30.2	30.3	32.1		6.7	6.9	6.2	ST
32003	11/2/2005	1022	2820.5	9616.5	19	16	8	16	21.2	21.2	23.6	30.2	30.6	32.5		6.7	6.9	6.0	ST
32004	11/2/2005	1120	2821.6	9610.5	19	18	9	18	23.2	23.1	23.2	32.0	32.1	32.2		6.3	6.6	6.4	ST
32005	11/2/2005	1225	2826.5	9605.5	19	15	8	15	22.9	22.9	22.9	31.5	31.5	31.6		6.6	6.6	6.4	ST
32006	11/2/2005	1313	2830.5	9609.6	19	8	4	8	21.4	21.3	21.2	30.2	30.1	30.1		6.7	7.0	6.9	ST
32007	11/2/2005	1413	2825.5	9615.6	19	11	5	11	22.3	22.2	23.2	30.8	30.8	31.4		6.7	6.7	6.2	ST
32008	11/2/2005	1444	2824.5	9615.5	19	12	6	12	22.5	22.4	22.4	31.0	31.0	31.6		6.8	6.7	6.6	ST
32009	11/21/2005	1000	2818.4	9620.5	19	16	8	16	19.8	19.8	20.5	31.1	31.2	31.5		6.5	6.5	6.2	ST
32010	11/21/2005	1035	2818.5	9618.5	19	17	9	17	19.9	19.9	21.3	31.3	32.2	31.7		6.6	6.6	6.0	ST
32011	11/21/2005	1107	2816.5	9617.5	19	19	10	19	20.4	20.7	21.6	30.9	31.8	32.6		6.5	6.4	6.1	ST
32012	11/21/2005	1147	2815.5	9620.4	19	19	9	19	20.7	20.7	31.7	31.8	31.9	32.7		6.6	6.4	6.1	ST
32013	11/21/2005	1224	2812.5	9620.5	19	22	11	22	21.3	21.5	21.8	32.5	32.9	33.4		6.5	6.4	6.1	ST
32014	11/21/2005	1316	2811.5	9626.5	19	18	9	18	20.9	21.3	21.3	32.0	32.7	32.6		6.6	6.4	6.2	ST
32015	11/21/2005	1349	2813.5	9627.5	19	15	8	15	20.3	20.4	21.2	31.4	31.5	32.3		6.4	6.3	6.0	ST
32016	11/21/2005	1425	2816.6	9625.5	19	12	6	12	18.6	18.6	18.1	30.8	30.8	30.9		6.8	6.8	6.6	ST

Table 2. Selected environmental parameters (continued)

SABINE, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
40001	11/3/2005	820	2939.6	9351.1	17	3	1	3	19.2	19.3	19.3	29.0	28.9	29.0		7.8	7.9	7.5	ST
40002	11/3/2005	906	2936.5	9352.8	17	6	3	6	19.4	19.4	19.7	28.8	28.8	29.0		7.6	7.4	6.6	ST
40003	11/3/2005	935	2936.7	9353.1	17	6	3	6	19.6	19.5	19.9	28.8	28.8	29.0		7.5	7.3	5.8	ST
40004	11/3/2005	1024	2937.4	9359.2	17	6	3	6	20.1	19.8	19.9	29.6	29.6	29.6		7.7	7.4	7.2	ST
40005	11/3/2005	1053	2936.6	9400.8	18	7	3	7	20.6	20.1	20.4	29.0	29.7	29.9		7.8	7.6	6.8	ST
40006	11/3/2005	1131	2938.5	9403.2	18	5	2	5	20.6	20.1	20.1	29.7	29.7	29.7		7.8	7.7	7.5	ST
40007	11/3/2005	1246	2934.4	9356.8	17	9	4	9	20.9	19.8	20.7	29.4	29.4	30.5		7.6	7.2	5.7	ST
40008	11/3/2005	1323	2933.6	9354.3	17	11	5	11	20.3	20.9	21.4	29.1	30.6	31.7		7.6	6.4	6.5	ST
40009	11/20/2005	855	2942.2	9347.3	17	3	2	3	15.9	16.0	16.2	26.1	26.0	26.1		8.3	8.4	8.4	ST
40010	11/20/2005	922	2941.8	9347.9	17	3	2	3	16.0	16.1	16.2	26.1	26.1	26.3		8.5	8.4	8.3	ST
40011	11/20/2005	955	2939.5	9347.2	17	7	3	7	17.2	17.2	17.1	26.9	26.9	26.9		7.9	7.8	8.0	ST
40012	11/20/2005	1048	2938.5	9344.8	17	8	4	8	17.8	18.4	18.9	27.2	28.1	29.1		7.8	7.7	7.3	ST
40013	11/20/2005	1137	2943.4	9341.2	17	5	2	5	16.3	16.4	16.9	25.8	25.9	26.2		8.2	8.1	8.3	ST
40014	11/20/2005	1234	2936.5	9337.9	17	10	5	10	18.5	18.5	18.8	30.4	30.5	30.2		7.7	7.6	7.4	ST
40015	11/20/2005	1335	2934.3	9345.4	17	11	6	11	18.3	18.6	19.3	28.5	31.7	32.2		8.1	7.8	7.2	ST
40016	11/20/2005	1412	2935.6	9347.7	17	10	5	10	17.9	18.9	19.3	27.4	28.6	30.4		7.8	7.5	7.1	ST

Table 2. Selected environmental parameters (continued)

NUECES, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
67001	11/2/2005	802	2750.2	9659.7	20	12	6	12	21.6	21.6	21.6	28.6	30.0	30.8		6.5	6.5	6.5	ST
67002	11/2/2005	841	2752.8	9656.5	20	13	6	13	22.8	22.7	22.6	30.4	30.4	31.4		6.5	6.6	6.6	ST
67003	11/2/2005	915	2754.3	9654.6	20	13	7	13	22.9	22.9	22.8	30.7	30.7	30.9		6.6	6.7	6.6	ST
67004	11/2/2005	955	2759.7	9654.2	20	8	4	8	21.5	21.5	21.5	29.7	29.6	29.9		6.8	7.0	6.8	ST
67005	11/2/2005	1040	2756.2	9649.7	20	17	8	17	23.2	23.2	23.1	31.0	31.1	31.2		6.6	6.5	6.6	ST
67006	11/2/2005	1117	2753.8	9652.7	20	16	8	16	23.2	23.2	23.6	31.1	31.1	31.1		6.6	6.6	6.5	ST
67007	11/2/2005	1200	2749.1	9654.8	20	18	9	18	23.5	23.5	23.6	31.4	31.6	31.7		6.5	6.5	6.4	ST
67008	11/2/2005	1240	2747.8	9653.9	20	20	10	20	23.6	23.6	23.8	31.8	31.8	33.0		6.6	6.6	6.4	ST
67009	11/21/2005	734	2747.7	9658.5	20	17	8	17	20.5	20.5	20.5	31.9	31.9	91.8		6.9	6.9	6.8	ST
67010	11/21/2005	805	2746.7	9700.5	20	15	8	15	20.0	20.0	19.4	31.5	31.5	31.6		6.9	7.1	7.0	ST
67011	11/21/2005	837	2743.8	9700.5	20	17	9	17	20.4	20.5	20.6	31.8	31.8	32.0		7.0	6.9	6.8	ST
67012	11/21/2005	907	2742.1	9700.4	20	19	9	19	21.4	21.4	21.3	32.4	32.4	32.5		6.7	6.8	6.7	ST
67013	11/21/2005	939	2740.8	9703.4	20	16	8	16	20.7	20.7	21.4	32.0	31.9	31.9		6.9	6.7	6.7	ST
67014	11/21/2005	1009	2738.0	9702.3	20	20	10	20	21.8	21.8	21.9	32.9	33.0	33.1		6.8	7.0	6.6	ST
67015	11/21/2005	1037	2736.8	9701.5	20	21	11	21	22.2	22.2	22.2	33.3	33.3	33.4		6.9	6.7	6.7	ST
67016	11/21/2005	1121	2741.2	9658.6	20	21	11	21	21.8	21.8	21.9	32.7	32.7	32.7		7.0	7.0	6.7	ST

Table 2. Selected environmental parameters (continued)

SAN JACINTO, FALL SHRIMP/GOUNDFISH SURVEY																			
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
69001	11/13/2005	1202	2913.4	9443.9	18	12	6	12	23.8	23.1	22.8	29.8	30.5	31.2		7.1	7.0	7.0	ST
69002	11/13/2005	1239	2912.8	9442.4	18	13	7	13	24.0	22.9	22.9	29.8	31.2	35.6		6.9	6.3	6.5	ST
69003	11/13/2005	1320	2912.2	9446.9	18	11	6	11	24.0	23.2	23.1	29.6	29.5	31.5		7.0	6.8	6.5	ST
69004	11/13/2005	1405	2908.9	9447.4	18	15	8	15	23.9	23.8	23.2	31.2	31.7	32.6		7.0	7.0	6.7	ST
69005	11/13/2005	1443	2907.2	9447.9	18	16	8	16	24.3	23.4	23.0	29.6	31.9	32.4		7.1	6.2	6.3	ST
69006	11/13/2005	1531	2912.9	9452.3	18	9	4	9	24.3	24.3	24.1	29.5	29.4	29.6		7.1	6.9	7.1	ST
69007	11/13/2005	1602	2914.4	9449.7	18	8	4	8	24.2	24.2	23.5	29.3	29.3	29.5		7.0	7.1	6.8	ST
69008	11/13/2005	1637	2916.9	9446.2	18	6	3	6	24.3	24.1	23.9	29.4	29.4	29.5		7.1	7.0	6.9	ST
69009	11/29/2005	1028	2911.1	9440.7	18	15	8	15	18.7	18.6	18.7	32.2	32.3	32.3		6.8	6.8	6.8	ST
69010	11/29/2005	1109	2910.8	9440.3	18	15	7	15	18.6	18.6	18.7	33.2	32.3	32.3		6.7	6.7	6.6	ST
69011	11/29/2005	1157	2912.1	9438.7	18	15	8	15	18.3	18.3	18.6	32.2	32.1	32.2		6.4	6.4	6.4	ST
69012	11/29/2005	1244	2915.8	9437.2	18	24	7	13	18.5	18.7	18.6	32.1	31.2	32.1		6.5	6.4	6.3	ST
69013	11/29/2005	1355	2923.4	9428.7	18	20	6	11	18.4	18.4	18.3	31.7	31.7	31.6		6.3	6.3	6.2	ST
69014	11/29/2005	1434	2924.7	9430.1	18	18	5	10	18.4	18.3	18.3	31.5	31.6	31.6		6.3	6.3	6.3	ST
69015	11/29/2005	1510	2926.1	9432.8	18	16	4	9	18.3	18.4	18.4	31.6	31.6	31.5		6.4	6.4	6.3	ST
69016	11/29/2005	1543	2926.8	9433.1	18	14	4	8	18.2	18.4	18.3	31.6	31.6	31.6		6.5	6.3	6.4	ST

Table 2. Selected environmental parameters (continued)

GANDY, REEFFISH SURVEY																				
STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL SUR	DISSOLVED OXYGEN, PPM			GEAR	
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX		
1	10/18/2005	1445	2918.8	8746.6	0		91	182	27.5	20.8	14.2	35.8	36.9	35.8	0.000	5.2	3.9	3.2		
2	10/18/2005	1741	2918.9	8746.5	0	319														TV
3	10/18/2005	2109	2919.6	8737.0	0	579	171	342	27.7	15.1	11.0	36.0	36.2	35.4	0.000	5.2	3.4	2.9		TV
4	10/19/2005	1231	2923.1	8731.9	0	351	92	185	26.7	18.8	14.6	34.4	37.0	35.9	0.000	5.2	3.6	3.3		TV
5	10/19/2005	1346	2923.1	8731.9	0	350														TV
6	10/19/2005	1455	2923.1	8731.9	0	353														TV
7	10/19/2005	1558	2923.1	8731.9	0	357														TV
8	10/19/2005	1718	2923.2	8730.6	0		131	262	27.2	16.8	12.3	34.2	36.4	35.6	0.000	5.3	3.5	3.1		
9	10/19/2005	1950	2923.5	8730.6	0	390														TV
10	10/19/2005	2056	2923.6	8730.6	0	386														TV
11	10/19/2005	2157	2923.6	8730.6	0	387														TV
12	10/20/2005	1243	2941.0	8717.8	10	308	88	175	26.8	19.5	13.9	35.8	36.6	36.1	0.000	5.2	3.4	3.2		TV
13	10/20/2005	1356	2941.0	8717.8	10	307														TV
14	10/20/2005	1510	2941.0	8717.8	10	307														TV
16	10/20/2005	1945	2927.7	8653.9	0		249	498	26.4	12.2	9.0	35.0	35.6	35.1	0.000	5.5	3.1	2.9		
17	10/27/2005	1432	2910.1	8759.8	0		248	495	26.4	12.3	6.5	36.0	35.6	34.9	0.000	5.2	3.1	3.3		

Table 3. 2005 Summer Shrimp/Groundfish Survey species composition list, 292 trawl stations, for those vessels that used either a 40-ft or 20-ft trawl.

Species with a total weight of less than 0.0227 kg (0.05 lb) are indicated on the table as 0.0 kg.

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
<u>Finfishes</u>					
Micropogonias undulatus	Atlantic croaker	108000	2684.0	135	46.2
Stenotomus caprinus	longspine porgy	88009	1115.0	186	63.7
Chloroscombrus chrysurus	Atlantic bumper	18945	593.5	153	52.4
Peprilus burti	gulf butterfish	12911	398.3	157	53.8
Leiostomus xanthurus	spot	8554	520.6	80	27.4
Trachurus lathami	rough scad	5955	103.7	95	32.5
Prionotus roseus	bluespotted searobin	5816	70.0	64	21.9
Syacium gunteri	shoal flounder	5192	112.0	145	49.7
Saurida brasiliensis	largescale lizardfish	4911	30.4	99	33.9
Trichiurus lepturus	Atlantic cutlassfish	4628	121.6	68	23.3
Cynoscion nothus	silver seatrout	3988	156.7	79	27.1
Serranus atrobranchus	blackear bass	3725	31.5	69	23.6
Prionotus rubio	blackwing searobin	3618	43.2	37	12.7
Prionotus longispinosus	bigeye searobin	3324	37.7	52	17.8
Mullus auratus	red goatfish	3236	72.1	33	11.3
Upeneus parvus	dwarf goatfish	3211	46.9	118	40.4
Anchoa hepsetus	striped anchovy	3076	35.3	73	25.0
Synodus foetens	inshore lizardfish	3046	279.3	157	53.8
Stellifer lanceolatus	star drum	2430	29.5	36	12.3
Centropristis philadelphica	rock sea bass	2183	52.4	110	37.7
Larimus fasciatus	banded drum	1861	58.5	46	15.8
Steindachneria argentea	luminous hake	1856	3.5	3	1.0
Brevoortia patronus	gulf menhaden	1697	26.5	24	8.2
Lagodon rhomboides	pinfish	1631	81.9	114	39.0
Anchoa mitchilli	bay anchovy	1401	1.9	34	11.6
Pristipomoides aquilonaris	wenchman	1363	75.4	54	18.5
Prionotus paralatus	Mexican searobin	1260	23.0	53	18.2

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
		CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OCCURRENCE
<i>Etropus crossotus</i>	fringed flounder	1202	20.4	76	26.0
<i>Harengula jaguana</i>	scaled sardine	1185	47.9	51	17.5
<i>Cynoscion arenarius</i>	sand seatrout	1067	88.0	66	22.6
<i>Diplectrum bivittatum</i>	dwarf sand perch	882	23.2	87	29.8
<i>Lutjanus campechanus</i>	red snapper	794	115.3	97	33.2
<i>Prionotus stearnsi</i>	shortwing searobin	787	7.9	52	17.8
<i>Etrumeus teres</i>	round herring	748	5.2	10	3.4
<i>Citharichthys spilopterus</i>	bay whiff	737	10.6	38	13.0
<i>Halieutichthys aculeatus</i>	pancake batfish	694	4.0	67	22.9
<i>Opisthonema oglinum</i>	Atlantic thread herring	657	53.5	33	11.3
<i>Polydactylus octonemus</i>	Atlantic threadfin	655	22.6	27	9.2
<i>Sphoeroides parvus</i>	least puffer	651	5.3	87	29.8
<i>Lagocephalus laevigatus</i>	smooth puffer	554	13.8	89	30.5
<i>Lepophidium breviparbe</i>	blackedge cusk-eel	504	14.1	43	14.7
<i>Anchoa lyolepis</i>	dusky anchovy	489	1.0	17	5.8
<i>Porichthys plectrodon</i>	Atlantic midshipman	444	10.8	62	21.2
<i>Cyclopsetta chittendeni</i>	Mexican flounder	417	42.0	61	20.9
<i>Symphurus plagiusa</i>	blackcheek tonguefish	410	7.2	32	11.0
<i>Trichopsetta ventralis</i>	sash flounder	400	9.5	20	6.8
<i>Selene vomer</i>	lookdown	312	10.7	22	7.5
<i>Menticirrhus americanus</i>	southern kingfish	305	37.1	25	8.6
<i>Eucinostomus gula</i>	silver jenny	304	11.2	33	11.3
<i>Arius felis</i>	hardhead catfish	292	35.2	17	5.8
<i>Peprilus alepidotus</i>	harvestfish	274	4.0	23	7.9
<i>Prionotus alatus</i>	spiny searobin	272	1.8	3	1.0
<i>Syacium papillosum</i>	dusky flounder	265	10.9	27	9.2
<i>Cynoscion spp.</i>	seatrouts	237	1.4	8	2.7
<i>Lutjanus synagris</i>	lane snapper	234	19.3	37	12.7
<i>Synodus poeyi</i>	offshore lizardfish	218	1.4	36	12.3
<i>Peprilus triacanthus</i>	butterfish	209	8.0	6	2.1

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
		CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OCCURRENCE
<i>Selene setapinnis</i>	Atlantic moonfish	188	10.3	47	16.1
<i>Scorpaena calcarata</i>	smoothhead scorpionfish	178	2.9	16	5.5
<i>Monacanthus hispidus</i>	planehead filefish	163	2.3	42	14.4
<i>Sardinella brasiliensis</i>	orangespot sardine	157	1.0	3	1.0
<i>Chaetodipterus faber</i>	Atlantic spadefish	144	0.9	9	3.1
<i>Scomberomorus maculatus</i>	spanish mackerel	144	6.9	16	5.5
<i>Decapterus punctatus</i>	round scad	142	6.9	15	5.1
<i>Bellator militaris</i>	horned searobin	132	0.8	8	2.7
<i>Sardinella aurita</i>	spanish sardine	130	5.2	16	5.5
<i>Selar crumenophthalmus</i>	bigeye scad	130	3.5	17	5.8
<i>Urophycis Florida</i>	southern hake	125	8.0	18	6.2
<i>Ogcocephalus declivirostris</i>	slantbrow batfish	113	3.9	33	11.3
<i>Ancylopsetta quadrocellata</i>	ocellated flounder	107	10.0	32	11.0
<i>Caranx crysos</i>	blue runner	93	8.7	26	8.9
<i>Symphurus diomedianus</i>	spottedfin tonguefish	82	1.9	14	4.8
<i>Prionotus tribulus</i>	bighead searobin	76	2.3	16	5.5
<i>Sphyraena guachancho</i>	guaguanche	73	8.1	24	8.2
<i>Diplectrum formosum</i>	sand perch	70	6.7	19	6.5
<i>Hemicaranx amblyrhynchus</i>	bluntnose jack	68	8.2	10	3.4
<i>Engyophrys senta</i>	spiny flounder	63	0.3	15	5.1
<i>Balistes capriscus</i>	gray triggerfish	61	8.2	30	10.3
<i>Gymnachirus texae</i>	fringed sole	60	0.9	19	6.5
<i>Raja texana</i>	roundel skate	59	16.6	13	4.5
<i>Ancylopsetta dilecta</i>	three-eye flounder	55	3.0	10	3.4
<i>Caulolatilus intermedius</i>	anchor tilefish	49	6.0	14	4.8
<i>Lepophidium jeannae</i>	mottled cusk-eel	48	2.1	4	1.4
<i>Serraniculus pumilio</i>	pygmy sea bass	48	0.3	3	1.0
<i>Gobionellus hastatus</i>	darer gobies	45	0.3	8	2.7
<i>Gymnachirus melas</i>	naked sole	44	0.4	6	2.1
<i>Paralichthys lethostigma</i>	southern flounder	44	11.8	19	6.5

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
<i>Rhomboplites aurorubens</i>	vermilion snapper	44	4.1	8	2.7
<i>Estropus microstomus</i>	smallmouth flounder	43	0.4	2	0.7
<i>Haemulon aurolineatum</i>	tomtate	42	1.4	5	1.7
<i>Kathetostoma albigutta</i>	lancer stargazer	39	1.6	8	2.7
<i>Equetus wamotoi</i>	blackbar drum	37	1.1	6	2.1
<i>Bagre marinus</i>	gafftopsail catfish	34	0.6	5	1.7
<i>Bregmaceros Atlanticus</i>	antenna codlet	34	0.0	10	3.4
<i>Sphoeroides spengleri</i>	bandtail puffer	31	0.7	6	2.1
<i>Hildebrandia flava</i>	yellow conger	30	2.1	9	3.1
<i>Caranx hippos</i>	crevalle jack	28	3.2	4	1.4
<i>Citharichthys macrops</i>	spotted whiff	27	0.9	16	5.5
<i>Citharichthys cornutus</i>	horned whiff	26	0.1	9	3.1
<i>Bollmannia communis</i>	ragged goby	25	0.1	9	3.1
<i>Brotula barbata</i>	bearded brotula	25	0.7	7	2.4
<i>Paralichthys squamilentus</i>	broad flounder	25	3.9	6	2.1
<i>Antennarius radiosus</i>	singlespot frogfish	24	0.4	10	3.4
<i>Decapterus macarellus</i>	mackerel scad	24	0.3	1	0.3
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark	24	30.9	12	4.1
<i>Centropristis ocyura</i>	bank sea bass	22	0.9	3	1.0
<i>Ophidion holbrooki</i>	bank cusk-eel	20	2.0	1	0.3
<i>Equetus umbrosus</i>	cubbyu	18	0.8	6	2.1
<i>Scomberomorus cavalla</i>	king mackerel	18	3.3	9	3.1
<i>Hoplunnis macrurus</i>	freckled pike-conger	17	0.2	8	2.7
<i>Echeneis naucrates</i>	sharksucker	16	2.9	6	2.1
<i>Ophidion welshi</i>	crested cusk-eel	16	0.5	4	1.4
<i>Menticirrhus littoralis</i>	gulf kingfish	15	1.6	3	1.0
<i>Urophycis regia</i>	spotted hake	15	0.2	1	0.3
<i>Lactophrys quadricornis</i>	scrawled cowfish	14	1.9	4	1.4
<i>Orthopristis chrysoptera</i>	pigfish	13	0.8	6	2.1
<i>Pomatomus saltatrix</i>	bluefish	11	0.7	1	0.3

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
<i>Prionotus ophryas</i>	bandtail searobin	11	0.1	7	2.4
<i>Trachinocephalus myops</i>	snakefish	11	0.8	3	1.0
<i>Ogcocephalus pantostictus</i>	spotted batfish	10	1.4	8	2.7
<i>Pontinus longispinis</i>	longspine scorpionfish	10	0.1	1	0.3
<i>Sphoeroides dorsalis</i>	marbled puffer	10	0.2	6	2.1
<i>Apogon aurolineatus</i>	bridle cardinalfish	9	0.1	2	0.7
<i>Priacanthus arenatus</i>	bigeye	9	0.1	7	2.4
<i>Apogon maculatus</i>	saddletailed cardinalfish	8	0.0	2	0.7
<i>Lonchopisthus micrognathus</i>	swordtail jawfish	8	0.0	1	0.3
<i>Neomerinthe hemingwayi</i>	spinycheek scorpionfish	8	0.9	5	1.7
<i>Rachycentron canadum</i>	cobia	8	28.6	3	1.0
<i>Antennarius ocellatus</i>	ocellated frogfish	7	0.0	4	1.4
<i>Dorosoma petenense</i>	threadfin shad	7	0.5	3	1.0
Exocoetidae	flyingfishes	7	0.1	3	1.0
<i>Seriola dumerili</i>	greater amberjack	7	0.9	3	1.0
<i>Symphurus civitatus</i>	offshore tonguefish	7	0.1	1	0.3
<i>Calamus leucosteus</i>	whitebone porgy	6	2.0	4	1.4
<i>Urophycis cirrata</i>	gulf hake	6	0.1	2	0.7
<i>Aluterus heudeloti</i>	dotterel filefish	5	0.1	3	1.0
<i>Ariomma bondi</i>	silver-rag	5	0.1	2	0.7
<i>Conodon nobilis</i>	barred grunt	5	0.3	3	1.0
<i>Heteropriacanthus cruentatus</i>	glasseye snapper	5	0.0	4	1.4
<i>Hippocampus erectus</i>	lined seahorse	5	0.0	2	0.7
<i>Mustelus canis</i>	smooth dogfish	5	8.8	5	1.7
<i>Ophichthus gomesi</i>	shrimp eel	5	0.4	2	0.7
<i>Rypticus maculatus</i>	whitespotted soapfish	5	0.1	3	1.0
<i>Aluterus scriptus</i>	scrawled filefish	4	0.0	2	0.7
<i>Bairdiella chrysoura</i>	silver perch	4	0.1	4	1.4
<i>Bellator brachychir</i>	shortfin searobin	4	0.0	2	0.7
<i>Cyclopsetta fimbriata</i>	spotfin flounder	4	0.4	2	0.7

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
<i>Gymnura altavela</i>	spiny butterfly ray	4	9.1	3	1.0
<i>Mustelus norrisi</i>	Florida smoothhound	4	3.3	2	0.7
<i>Ophichthus puncticeps</i>	palespotted eel	4	2.5	1	0.3
<i>Prionotus martis</i>	barred searobin	4	0.0	2	0.7
<i>Sphyrna tiburo</i>	bonnethead	4	3.5	3	1.0
<i>Squatina dumeril</i>	Atlantic angel shark	4	8.3	2	0.7
<i>Synodus intermedius</i>	sand diver	4	0.1	2	0.7
<i>Achirus lineatus</i>	lined sole	3	0.0	3	1.0
<i>Anchoviella perfasciata</i>	poey's anchovy	3	0.0	1	0.3
<i>Dasyatis sabina</i>	Atlantic stringray	3	0.9	3	1.0
<i>Ogcocephalus corniger</i>	longnose batfish	3	0.0	1	0.3
<i>Opsanus pardus</i>	leopard toadfish	3	0.6	1	0.3
<i>Scomber japonicus</i>	chub mackerel	3	0.1	1	0.3
<i>Trachinotus carolinus</i>	Florida pompano	3	0.1	2	0.7
<i>Umbrina coroides</i>	sand drum	3	0.1	1	0.3
<i>Antennarius striatus</i>	striated frogfish	2	0.0	1	0.3
<i>Bothus robindi</i>	twospot flounder	2	0.0	1	0.3
<i>Carcharhinus acronotus</i>	blacknose shark	2	5.3	2	0.7
<i>Chilomycterus schoepfi</i>	striped burrfish	2	0.2	2	0.7
<i>Eucinostomus argenteus</i>	spotfin mojarra	2	0.1	1	0.3
<i>Euleptorhamphus velox</i>	flying halfbeak	2	0.0	1	0.3
<i>Fistularia petimba</i>	red cornetfish	2	0.3	2	0.7
<i>Gobioides broussoneti</i>	violet goby	2	0.4	1	0.3
<i>Gobionellus boleosoma</i>	darer goby	2	0.0	1	0.3
<i>Gymnothorax saxicola</i>	honeycomb moray	2	0.3	1	0.3
<i>Neobythites gillii</i>	cusks-eel	2	0.0	1	0.3
<i>Ogcocephalus parvus</i>	roughback batfish	2	0.0	1	0.3
<i>Promethichthys prometheus</i>	purple snake mackerel	2	0.1	1	0.3
<i>Rhinoptera bonasus</i>	cownose ray	2	16.9	2	0.7
<i>Syngnathus louisianae</i>	chain pipefish	2	0.0	1	0.3

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
<i>Trinectes maculatus</i>	hogchoker	2	0.0	2	0.7
<i>Anisotremus surinamensis</i>	black margate	1	0.1	1	0.3
<i>Carcharhinus limbatus</i>	blacktip shark	1	0.2	1	0.3
<i>Echiophis punctifer</i>	snapper eel	1	0.3	1	0.3
<i>Epinephelus niveatus</i>	snowy grouper	1	0.0	1	0.3
<i>Eucinostomus melanopterus</i>	flagfin mojarra	1	0.0	1	0.3
<i>Gymnothorax kolpos</i>	blacktail moray	1	1.0	1	0.3
<i>Mycteroperca phenax</i>	scamp	1	0.3	1	0.3
<i>Narcine brasiliensis</i>	lesser electric ray	1	0.4	1	0.3
<i>Ogcocephalus radiatus</i>	polka-dot batfish	1	0.2	1	0.3
<i>Ophidion grayi</i>	blotched cusk-eel	1	0.1	1	0.3
<i>Pagrus pagrus</i>	red porgy	1	0.2	1	0.3
<i>Paralichthys albigutta</i>	gulf flounder	1	0.4	1	0.3
<i>Phtheichthys lineatus</i>	slender suckerfish	1	0.1	1	0.3
<i>Pogonias cromis</i>	black drum	1	8.1	1	0.3
<i>Prionotus scitulus</i>	leopard searobin	1	0.0	1	0.3
<i>Pristigenys alta</i>	short bigeye	1	0.1	1	0.3
<i>Raja olseni</i>	spreadfin skate	1	0.6	1	0.3
<i>Rhinobatos lentiginosus</i>	Atlantic guitarfish	1	0.6	1	0.3
<i>Rypticus bistrispinus</i>	freckled soapfish	1	0.0	1	0.3
<i>Saurida caribbaea</i>	smallscale lizardfish	1	0.0	1	0.3
<i>Scorpaena brasiliensis</i>	barbfish	1	0.0	1	0.3
<i>Sphyraena barracuda</i>	great barracuda	1	0.1	1	0.3
<i>Symphurus parvus</i>	pygmy tonguefish	1	0.0	1	0.3
<u>Crustaceans</u>					
<i>Farfantepenaeus aztecus</i>	brown shrimp	22894	347.9	220	75.3
<i>Callinectes similis</i>	lesser blue crab	13703	173.6	198	67.8

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
<i>Trachypenaeus similis</i>	roughback shrimp	13039	60.8	119	40.8
<i>Squilla empusa</i>	mantis shrimp	7485	61.8	137	46.9
<i>Sicyonia brevirostris</i>	brown rock shrimp	6332	65.0	68	23.3
<i>Portunus spinicarpus</i>	longspine swimming crab	5399	31.8	54	18.5
<i>Portunus gibbesii</i>	iridescent swimming crab	2517	12.1	129	44.2
<i>Litopenaeus setiferus</i>	white shrimp	2032	80.1	81	27.7
<i>Sicyonia dorsalis</i>	lesser rock shrimp	1624	4.3	87	29.8
<i>Trachypenaeus constrictus</i>	roughneck shrimp	1429	7.2	17	5.8
<i>Callinectes sapidus</i>	blue crab	1259	74.9	73	25.0
<i>Xiphopenaeus kroyeri</i>	seabob	948	4.1	14	4.8
<i>Squilla chydrea</i>	mantis shrimp	828	5.3	61	20.9
<i>Solenocera vioscai</i>	humpback shrimp	713	3.7	24	8.2
<i>Farfantepenaeus duorarum</i>	pink shrimp	668	13.2	44	15.1
<i>Portunus spinimanus</i>	blotched swimming crab	289	8.1	65	22.3
<i>Calappa sulcata</i>	yellow box crab	191	36.3	44	15.1
<i>Anasimus latus</i>	stilt spider crab	165	1.3	24	8.2
<i>Raninoides louisianensis</i>	gulf frog crab	108	0.8	16	5.5
<i>Stenorhynchus seticornis</i>	yellowline arrow crab	60	0.2	11	3.8
<i>Ovalipes Floridanus</i>	Florida lady crab	55	0.5	8	2.7
<i>Libinia dubia</i>	longnose spider crab	51	0.2	18	6.2
<i>Parapenaeus politus</i>	deepwater rose shrimp	46	0.1	6	2.1
<i>Parthenope granulata</i>	bladetooth elbow crab	45	0.1	8	2.7
<i>Libinia emarginata</i>	portly spider crab	35	2.0	12	4.1
<i>Hepatus epheliticus</i>	calico crab	33	0.8	16	5.5
<i>Persephona crinita</i>	pink purse crab	32	0.1	10	3.4
<i>Pagurus pollicaris</i>	flatclaw hermit crab	26	0.1	15	5.1
<i>Squilla neglecta</i>	mantis shrimp	23	0.5	5	1.7
<i>Dardanus insignis</i>	red brocade hermit	18	0.0	4	1.4
<i>Leander tenuicornis</i>	brown glass shrimp	17	0.0	2	0.7
<i>Arenaeus cribrarius</i>	speckled swimming crab	16	1.1	9	3.1

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Pagurus annulipes		16	0.2	2	0.7
Portunus sayi	sargassum swimming crab	16	0.1	7	2.4
Persephona mediterranea	mottled purse crab	14	0.1	8	2.7
Petrochirus diogenes	giant hermit crab	12	0.6	5	1.7
Sicyonia burkenroadi	spiny rock shrimp	12	0.1	6	2.1
Euphosynoplax clausa	craggy bathyal crab	9	0.1	5	1.7
Podochela sidneyi	shortfinger neck crab	8	0.0	5	1.7
Alpheus	snapping shrimps	7	0.0	4	1.4
Paguristes triangulatus	hermit crab	7	0.1	1	0.3
Porcellana sayana	spotted porcelain crab	7	0.0	3	1.0
Metoporphaphis calcarata	false arrow crab	6	0.0	4	1.4
Myropsis quinquespinosa	fivespine purse crab	5	0.0	3	1.0
Parthenope serrata	sawtooth elbow crab	5	0.0	3	1.0
Podochela riisei	longfinger neck crab	5	0.0	4	1.4
Pseudorhombila quadridentata	flecked squareback crab	5	0.1	2	0.7
Scyllarus chacei	chace slipper lobster	5	0.0	2	0.7
Sesarma	short-tailed crabs	5	0.1	2	0.7
Dromidia antillensis	hairy sponge crab	4	0.0	4	1.4
Leiolambrus nitidus	white elbow crab	4	0.0	3	1.0
Leiolambrus nitidus	white elbow crab	4	0.0	3	1.0
Squilla edentata		4	0.1	1	0.3
Dyspanopeus texana	gulf grassflat crab	3	0.0	3	1.0
Hypoconcha arcuata	granulate shellback crab	3	0.0	1	0.3
Pagurus bullisi	hermit crab	3	0.0	1	0.3
Plesionika longicauda	pandalid shrimp	3	0.0	1	0.3
Speocarcinus lobatus	gulf squareback crab	3	0.0	3	1.0
Alpheus Floridanus	sand snapping shrimp	2	0.0	2	0.7
Collodes robustus	spider crab	2	0.0	2	0.7
Dardanus fucosus	bareye hermit	2	0.0	2	0.7
Paguristes hummi	left-handed hermit crabs	2	0.0	2	0.7

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
<i>Pseudomedeus agassizii</i>	rough rubble crab	2	0.0	1	0.3
<i>Scyllarides nodifer</i>	ridged slipper lobster	2	0.7	1	0.3
Xanthidae	mud crabs	2	0.0	1	0.3
<i>Calappa flammea</i>	flame box crab	1	0.0	1	0.3
<i>Libinia</i>	spider crabs	1	0.0	1	0.3
<i>Munida forceps</i>	squat lobster	1	0.0	1	0.3
<i>Pagurus longicarpus</i>	long-armed hermit crab	1	0.0	1	0.3
<i>Parapenaeus</i> spp.	penaeid shrimps	1	0.0	1	0.3
<i>Parthenope</i>	elbow crabs	1	0.0	1	0.3
<i>Pilumnus sayi</i>	spineback hairy crab	1	0.0	1	0.3
<i>Porcellana sigsbeiana</i>	striped porcelain crab	1	0.0	1	0.3
<i>Stenocionops spinimanus</i>	prickly spider crab	1	0.3	1	0.3
<i>Stenopus scutellatus</i>	golden coral shrimp	1	0.0	1	0.3
<i>Synalpheus fritzmuelleri</i>	speckled snapping shrimp	1	0.0	1	0.3
Unidentified crustacean	unidentified crustacean	1	0.0	1	0.3
<u>Others</u>					
<i>Loligo pleii</i>	arrow squid	14784	204.3	131	44.9
<i>Renilla mulleri</i>	short-stemmed sea pansy	6047	31.0	94	32.2
<i>Amusium papyraceum</i>	paper scallop	5607	41.1	45	15.4
<i>Lolliguncula brevis</i>	Atlantic brief squid	3203	34.0	104	35.6
<i>Loligo pealeii</i>	longfin squid	2466	33.1	50	17.1
<i>Astropecten duplicatus</i>	spiny beaded sea star	1902	2.3	54	18.5
<i>Luidia clathrata</i>	sea star	617	11.5	53	18.2
<i>Chrysaora quinquecirrha</i>	sea nettle	436	10.6	51	17.5
<i>Mnemiopsis mccradyi</i>	comb jelly	220	3.4	10	3.4
<i>Aurelia aurita</i>	moon jellyfish	202	3.2	15	5.1
<i>Ophiolepis elegans</i>	brittle star	136	0.2	6	2.1

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Loligo spp.	squids	133	1.2	5	1.7
Pitar cordatus	schwengel's pitar	96	2.3	14	4.8
Astropecten cingulatus	starfish	87	1.4	21	7.2
Mellita quinquesperforata	five-slotted sand dollar	69	0.2	5	1.7
Cantharus cancellarius	cancellate cantharus	67	0.1	9	3.1
Scyphozoa	jellyfishes	60	1.3	2	0.7
Hydrozoa	hydralike animals	51	1.2	9	3.1
Luidia alternata	banded luidia	48	0.9	9	3.1
Styela plicata	tunicate	45	0.8	9	3.1
Actinidae	sea anemones	35	0.3	8	2.7
Cnidaria	coelenterates	28	1.5	1	0.3
Chione clenchi	clench venus	26	0.3	7	2.4
Polystira albida	white giant turris	26	0.4	5	1.7
Calliactris tricolor	common sea anemone	24	0.1	5	1.7
Polystira tellea	delicate giant turret	24	0.3	2	0.7
Argopecten gibbus	calico scallop	22	0.1	3	1.0
Bryozoa	moss animals	20	0.1	6	2.1
Ctenophora	comb jellies	20	0.0	4	1.4
Molpadia spp.	sea cucumber	16	0.4	3	1.0
Unidentified invertebrates	unidentified invertebrate	15	17.2	6	2.1
Macoma brevisfrons	short macoma	14	0.1	4	1.4
Clypeaster prostratus	sea biscuit	11	2.6	2	0.7
Encope aberrans	sand dollar	11	0.6	3	1.0
Sconsia striata	royal bonnet	11	0.4	2	0.7
Anadara Floridana	cut-ribbed ark	10	0.0	2	0.7
Echinaster sentus	spiny sea star	10	0.3	3	1.0
Porifera	sponges	10	0.2	5	1.7
Tethyaster grandis	starfish	9	0.4	5	1.7
Anthozoa	anthozoans	8	0.1	1	0.3
Muricanthus fulvescens	giant eastern murex	8	0.2	3	1.0

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
<i>Aequorea forskalea</i>	hydromedusae	7	0.1	3	1.0
<i>Astropecten articulatus</i>	plated-margined sea star	7	0.1	3	1.0
<i>Neverita duplicata</i>	shark eye	7	0.1	5	1.7
<i>Laevicardium mortoni</i>	yellow eggcockle	6	0.1	2	0.7
<i>Octopus vulgaris</i>	common Atlantic octopus	6	0.5	5	1.7
<i>Aplysia</i>	opisthobranchs	5	0.0	1	0.3
Aplysiidae	opisthobranchs	5	0.0	1	0.3
<i>Calliactis</i> spp.	anemone	5	0.0	4	1.4
<i>Conus austini</i>	cone shell	5	0.0	1	0.3
Molpadiidae	sea cucumbers	5	0.2	2	0.7
<i>Agriopuma texasianum</i>	Texas venus	4	0.1	2	0.7
<i>Architectonica nobilis</i>	common sundial	3	0.1	1	0.3
<i>Arcinella cornuta</i>	Florida spiny jewelbox	3	0.0	2	0.7
<i>Distorsio clathrata</i>	Atlantic distorsio	3	0.0	1	0.3
Holothuroidea	sea cucumbers	3	0.0	3	1.0
<i>Armina tigrina</i>	tiger armina	2	0.0	1	0.3
<i>Busycotypus spiratus</i>	pearwhelk	2	0.0	1	0.3
<i>Caretta caretta</i>	loggerhead turtle	2	76.4	2	0.7
Cerithiidae	gastropods	2	0.0	2	0.7
<i>Cucumaria pulcherrima</i>		2	0.0	1	0.3
<i>Fasciolaria liliun</i>	banded tulip	2	0.0	1	0.3
<i>Hemipholis elongata</i>	brittle star	2	0.0	2	0.7
<i>Hexaplex fulvescens</i>	giant eastern murex	2	0.0	1	0.3
<i>Phyllorhiza punctata</i>	jellyfish	2	4.2	1	0.3
Polychaeta	bristleworms	2	0.0	2	0.7
<i>Stomolophus meleagris</i>	many-mouthed sea jelly	2	0.0	2	0.7
<i>Strombus alatus</i>	Florida fighting conch	2	0.2	2	0.7
<i>Thais haemastoma</i>	rocksnail	2	0.0	2	0.7
<i>Ventricolaria rigida</i>	rigid venus	2	0.1	1	0.3
<i>Arbacia punctulata</i>	purple sea-urchin	1	0.0	1	0.3

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Argopecten irradians	bay scallop	1	0.0	1	0.3
Asteroidea	starfishes	1	0.0	1	0.3
Busycon sinistrum	lightning whelk	1	0.0	1	0.3
Clibanarius vittatus	thinstripe hermit crab	1	0.0	1	0.3
Clypeaster ravenelii	cake urchin	1	0.2	1	0.3
Macoma tenta	elongate macoma	1	0.0	1	0.3
Molgula manhattensis		1	0.0	1	0.3
Nassarius vibex	bruised nassa	1	0.0	1	0.3
Noetia ponderosa	ponderous ark	1	0.0	1	0.3
Nuculana concentrica	concentric nutclam	1	0.0	1	0.3
Nudibranchia	nudibranchs	1	0.0	1	0.3
Paranthus rapiformis	onion anemone	1	0.0	1	0.3
Tellina texana	Texas tellin	1	0.0	1	0.3

Table 4a
 Statistical Zone 11

Summary of dominant organisms taken in statistical zone 11 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Portunus spinicarpus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	8	2.1	1.14	0.0	0.00	15
Squilla spp	0.0	0.00	0.0	0.00	5	98.9	67.97	0.4	0.27	8	19.0	13.76	0.2	0.19	15
Farfantepenaeus aztecus	10.0	7.75	0.1	0.04	5	92.9	75.39	0.9	0.74	8	16.1	10.69	0.2	0.14	15
Trachypenaeus similis	7.0	7.00	0.0	0.02	5	53.6	39.11	0.1	0.11	8	22.4	16.09	0.1	0.06	15
Callinectes similis	6.0	4.00	0.0	0.02	5	70.2	44.37	0.4	0.20	8	6.6	4.41	0.1	0.04	15
Trachypenaeus constrictus	0.0	0.00	0.0	0.00	5	36.8	33.55	0.1	0.13	8	60.4	47.59	0.3	0.19	15
Micropogonias undulatus	18.0	18.00	0.4	0.35	5	48.7	29.56	2.8	2.20	8	51.3	51.33	2.7	2.68	15
Stenotomus caprinus	3.0	3.00	0.0	0.02	5	10.6	7.82	0.1	0.04	8	413.3	137.03	2.5	0.86	15
Steindachneria argentea	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	15
Leiostomus xanthurus	0.7	0.67	0.0	0.02	5	131.9	87.76	9.3	6.11	8	43.6	29.58	3.8	2.58	15
Anchoa hepsetus	57.7	29.26	0.4	0.29	5	201.8	194.39	2.3	2.16	8	92.1	48.53	1.4	0.91	15
Trachurus lathami	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	8	284.1	272.49	1.4	1.18	15
Chloroscombrus chrysurus	238.1	178.46	10.4	8.63	5	87.5	76.80	3.5	2.81	8	0.0	0.00	0.0	0.00	15
Prionotus longispinosus	6.0	6.00	0.1	0.05	5	103.7	86.29	0.9	0.76	8	10.6	9.63	0.1	0.05	15
Squid spp	10.4	5.49	0.2	0.15	5	51.8	32.78	0.5	0.27	8	231.9	66.28	2.1	0.59	15

Table 4a (continued)

Statistical Zone 11

Summary of dominant organisms taken in statistical zone 11 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.															
SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Portunus spinicarpus	81.4	81.43	0.2	0.15	2	0.0	0.00	0.0	0.00	0	624.2	182.63	5.5	1.82	5
Squilla spp	473.6	473.57	3.7	3.66	2	0.0	0.00	0.0	0.00	0	37.0	16.93	1.2	0.94	5
Farfantepenaeus aztecus	62.1	62.14	1.4	1.38	2	0.0	0.00	0.0	0.00	0	51.0	19.62	2.6	0.90	5
Trachypenaeus similis	387.9	387.86	1.4	1.36	2	0.0	0.00	0.0	0.00	0	16.2	10.36	0.0	0.03	5
Callinectes similis	469.3	469.29	3.6	3.59	2	0.0	0.00	0.0	0.00	0	10.7	10.67	0.1	0.13	5
Trachypenaeus constrictus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5
Micropogonias undulatus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0	1456.0	735.76	87.6	42.65	5
Stenotomus caprinus	166.2	106.15	8.4	6.26	2	0.0	0.00	0.0	0.00	0	443.9	271.99	22.4	13.92	5
Steindachneria argentea	2663.6	2663.60	4.0	4.04	2	0.0	0.00	0.0	0.00	0	23.3	23.33	0.1	0.10	5
Leiostomus xanthurus	0.6	0.58	0.1	0.06	2	0.0	0.00	0.0	0.00	0	279.4	122.48	25.7	11.27	5
Anchoa hepsetus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5
Trachurus lathami	2.1	2.14	0.1	0.07	2	0.0	0.00	0.0	0.00	0	1.2	1.24	0.1	0.14	5
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5
Prionotus longispinosus	53.6	53.57	1.1	1.13	2	0.0	0.00	0.0	0.00	0	5.9	4.65	0.0	0.03	5
Squid spp	124.5	119.84	0.8	0.75	2	0.0	0.00	0.0	0.00	0	11.6	6.45	0.1	0.03	5

Table 4b
Statistical Zone 11

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.																		
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch	21.9	8.06	5	38.2	19.85	8	32.8	10.25	15	0.0	0	0	0.0	0	0	181.0	70.19	5
Total finfish	12.2	9.91	5	34.5	19.06	8	28.0	10.44	15	0.0	0	0	0.0	0	0	171.0	68.22	5
Total crustacean	2.8	2.44	5	3.5	1.57	7	2.0	0.82	13	0.0	0	0	0.0	0	0	9.9	2.73	5
Total other	6.9	3.65	5	0.7	0.29	7	3.0	0.93	15	0.0	0	0	0.0	0	0	0.2	0.06	5
Surface temperature	28.2	0	1	28.1	0.04	3	27.3	0.31	9	0.0	0	0	28.2	0.42	2	28.3	0.11	5
Midwater temperature	28.2	0	1	27.5	0.25	3	25.1	0.29	9	0.0	0	0	23.9	0.93	2	22.1	0.16	5
Bottom temperature	27.2	0	1	24.3	0.26	3	22.2	0.43	9	0.0	0	0	21.6	1.14	2	19.1	0.68	5
Surface salinity	26.5	0	1	28.2	1.55	3	31.6	0.66	9	0.0	0	0	33.5	0.25	2	32.8	0.85	5
Midwater salinity	26.5	0	1	31.2	0.31	3	33.9	0.39	9	0.0	0	0	36.4	0.02	2	36.3	0.11	5
Bottom salinity	31.7	0	1	33.4	0.23	3	35.1	0.17	9	0.0	0	0	36.5	0.02	2	36.4	0.05	5
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	5.9	0	1	5.8	0.09	3	6.0	0.12	9	0.0	0	0	6.2	0.05	2	6.3	0.29	5
Midwater oxygen	5.9	0	1	5.6	0.03	3	5.9	0.1	9	0.0	0	0	6.3	0.15	2	5.0	0.39	5
Bottom oxygen	4.7	0	1	4.7	0.5	3	4.2	0.55	9	0.0	0	0	4.8	0.45	2	4.2	0.1	5

Table 5a
 Statistical Zone 13

Summary of dominant organisms taken in statistical zone 13 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	1	95.4	31.01	0.8	0.24	3	204.9	123.03	3.1	2.19	6
Callinectes similis	0.0	0.00	0.0	0.00	1	120.4	110.90	0.7	0.64	3	315.8	147.18	3.8	2.04	6
Trachypenaeus similis	0.0	0.00	0.0	0.00	1	243.5	143.87	0.5	0.27	3	182.6	111.64	0.9	0.59	6
Portunus gibbesii	0.0	0.00	0.0	0.00	1	47.0	42.60	0.2	0.16	3	148.8	110.41	0.6	0.44	6
Squilla spp	0.0	0.00	0.0	0.00	1	312.3	288.22	2.6	2.57	3	85.6	31.21	0.5	0.21	6
Litopenaeus setiferus	0.0	0.00	0.0	0.00	1	79.3	32.18	2.0	0.84	3	9.1	5.49	0.4	0.27	6
Micropogonias undulatus	0.0	0.00	0.0	0.00	1	6331.0	4117.70	167.5	112.10	3	452.8	311.82	22.2	16.29	6
Trichiurus lepturus	0.0	0.00	0.0	0.00	1	104.5	67.62	2.3	1.82	3	146.9	83.03	4.5	2.52	6
Anchoa mitchilli	1285.7	0.00	1.2	0.00	1	126.7	126.67	0.1	0.13	3	0.0	0.00	0.0	0.00	6
Steindachneria argentea	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	444.6	444.62	1.1	1.15	6
Prionotus roseus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	205.0	132.41	2.1	1.39	6
Prionotus longispinosus	0.0	0.00	0.0	0.00	1	533.1	306.37	2.8	1.76	3	18.5	18.46	0.4	0.39	6
Cynoscion nothus	0.0	0.00	0.0	0.00	1	323.1	177.49	13.3	6.57	3	21.0	13.61	1.6	1.05	6
Leiostomus xanthurus	0.0	0.00	0.0	0.00	1	342.0	199.82	22.7	14.68	3	18.7	15.10	1.3	1.10	6
Squid spp	0.0	0.00	0.0	0.00	1	96.2	52.76	1.1	0.58	3	79.5	56.02	0.6	0.40	6

Table 5a (continued)

Statistical Zone 13

Summary of dominant organisms taken in statistical zone 13 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	1316.7	0.00	21.5	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes similis	658.9	0.00	11.2	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachypenaeus similis	617.5	0.00	3.4	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Portunus gibbesii	10.9	0.00	0.1	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squilla spp	68.7	0.00	0.5	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Litopenaeus setiferus	6.5	0.00	0.1	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	5.5	0.00	0.5	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trichiurus lepturus	1987.6	0.00	28.1	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Anchoa mitchilli	42.5	0.00	0.1	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Steindachneria argentea	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Prionotus roseus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Prionotus longispinosus	26.2	0.00	0.6	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion nothus	31.6	0.00	3.9	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Leiostomus xanthurus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid spp	57.8	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 5b
 Statistical Zone 13

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 30 fm.																		
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch	2.6	0	1	225.0	134.3	3	82.6	36.99	6	0.0	0	0	0.0	0	0	0.0	0	0
Total finfish	2.6	0	1	216.0	130.2	3	72.2	32.93	6	0.0	0	0	0.0	0	0	0.0	0	0
Total crustacean	0.0	0	1	8.0	5.01	3	9.8	5.43	6	0.0	0	0	0.0	0	0	0.0	0	0
Total other	0.0	0	1	1.1	0.58	3	0.6	0.38	6	0.0	0	0	0.0	0	0	0.0	0	0
Surface temperature	0.0	0	0	31.0	0.18	3	30.8	0.22	7	0.0	0	0	0.0	0	0	0.0	0	0
Midwater temperature	0.0	0	0	29.4	0.63	3	28.6	0.81	7	0.0	0	0	0.0	0	0	0.0	0	0
Bottom temperature	0.0	0	0	27.8	0.98	3	25.7	0.88	7	0.0	0	0	0.0	0	0	0.0	0	0
Surface salinity	0.0	0	0	21.6	1.78	3	28.3	1.08	7	0.0	0	0	0.0	0	0	0.0	0	0
Midwater salinity	0.0	0	0	32.3	1.6	3	35.2	0.42	7	0.0	0	0	0.0	0	0	0.0	0	0
Bottom salinity	0.0	0	0	35.0	0.34	3	35.7	0.18	7	0.0	0	0	0.0	0	0	0.0	0	0
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	0.0	0	0	9.1	0.83	3	7.2	0.38	7	0.0	0	0	0.0	0	0	0.0	0	0
Midwater oxygen	0.0	0	0	3.4	1.01	3	5.4	0.37	7	0.0	0	0	0.0	0	0	0.0	0	0
Bottom oxygen	0.0	0	0	2.5	0.72	3	2.8	0.53	7	0.0	0	0	0.0	0	0	0.0	0	0

Table 6a
 Statistical Zone 14

Summary of dominant organisms taken in statistical zone 14 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 20 fm.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	215.4	183.49	1.1	0.91	3	42.5	7.89	0.4	0.06	2	165.1	61.42	2.1	0.74	6
Callinectes similis	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2	107.1	57.02	3.0	1.66	6
Portunus gibbesii	25.9	20.20	0.1	0.12	3	1.2	1.20	0.0	0.01	2	81.7	37.10	0.4	0.22	6
Trachypenaeus similis	68.0	68.00	0.1	0.08	3	0.0	0.00	0.0	0.00	2	62.9	29.49	0.3	0.17	6
Litopenaeus setiferus	75.8	70.17	1.1	0.95	3	84.6	5.40	3.5	0.29	2	3.4	1.58	0.2	0.09	6
Squilla spp	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2	41.8	17.08	0.4	0.17	6
Micropogonias undulatus	5238.7	2818.00	126.5	77.49	3	3080.7	396.88	85.4	2.64	2	1351.4	829.27	63.3	36.04	6
Chloroscombrus chrysurus	1.9	1.90	0.1	0.07	3	5447.0	3898.60	150.7	86.91	2	164.6	88.39	7.7	4.75	6
Trichiurus lepturus	570.3	561.31	5.3	5.21	3	241.8	150.55	9.0	6.53	2	15.5	9.81	0.3	0.22	6
Prionotus roseus	1.0	0.95	0.0	0.01	3	0.0	0.00	0.0	0.00	2	210.6	134.98	2.7	1.67	6
Leiostomus xanthurus	120.7	46.13	3.1	1.19	3	109.4	0.97	5.6	0.56	2	132.3	81.61	13.3	8.15	6
Anchoa mitchilli	575.7	502.58	1.1	0.97	3	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	6
Opisthonema oglinum	3.8	2.52	0.1	0.08	3	382.2	229.85	35.6	21.49	2	10.8	6.67	0.9	0.53	6
Cynoscion nothus	1.0	0.95	0.1	0.05	3	326.6	21.83	25.0	3.44	2	10.5	10.50	0.6	0.60	6
Squid spp	28.6	28.57	0.3	0.27	3	8.4	8.40	0.2	0.15	2	9.6	4.28	0.0	0.02	6

Table 6b
 Statistical Zone 14

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 20 fm.																			
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm			
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	
Total catch	144.0	72.1	3	345.0	117.3	2	115.0	52.98	6	0.0	0	0	0.0	0	0	0.0	0	0	
Total finfish	141.0	73.14	3	340.0	117	2	106.0	50.64	6	0.0	0	0	0.0	0	0	0.0	0	0	
Total crustacean	2.6	1.99	3	4.4	0.2	2	9.5	2.82	6	0.0	0	0	0.0	0	0	0.0	0	0	
Total other	0.3	0.29	3	0.1	0.12	2	0.1	0.07	6	0.0	0	0	0.0	0	0	0.0	0	0	
Surface temperature	30.6	0	1	30.2	0.52	4	30.4	0.16	7	0.0	0	0	0.0	0	0	0.0	0	0	
Midwater temperature	30.5	0	1	29.5	0.24	4	28.8	0.32	7	0.0	0	0	0.0	0	0	0.0	0	0	
Bottom temperature	28.4	0	1	28.3	0.35	4	25.9	0.52	7	0.0	0	0	0.0	0	0	0.0	0	0	
Surface salinity	30.7	0	1	30.3	0.63	4	32.9	0.3	7	0.0	0	0	0.0	0	0	0.0	0	0	
Midwater salinity	31.8	0	1	33.1	1.23	4	34.6	0.28	7	0.0	0	0	0.0	0	0	0.0	0	0	
Bottom salinity	34.9	0	1	33.8	1.13	4	35.9	0.09	7	0.0	0	0	0.0	0	0	0.0	0	0	
Surface chlorophyll	0.0	0	0	3.1	0	1	1.0	0	1	0.0	0	0	0.0	0	0	0.0	0	0	
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
Surface oxygen	6.7	0	1	6.1	0.41	4	6.0	0.12	7	0.0	0	0	0.0	0	0	0.0	0	0	
Midwater oxygen	5.3	0	1	5.4	0.23	4	5.2	0.43	7	0.0	0	0	0.0	0	0	0.0	0	0	
Bottom oxygen	0.7	0	1	3.6	0.65	4	4.1	0.38	7	0.0	0	0	0.0	0	0	0.0	0	0	

Table 7a

Statistical Zone 15

Summary of dominant organisms taken in statistical zone 15 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 20 fm.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes similis	11.0	8.54	0.0	0.03	4	5.2	5.20	0.0	0.02	5	209.3	51.55	3.3	0.92	17
Farfantepenaeus aztecus	215.8	147.49	1.7	1.13	4	19.4	9.93	0.2	0.08	5	175.2	87.70	2.5	1.35	17
Squilla spp	4.0	3.37	0.0	0.02	4	34.0	18.01	0.2	0.09	5	167.7	51.11	1.2	0.35	17
Callinectes sapidus	11.5	7.59	0.9	0.59	4	34.5	14.42	3.4	1.83	5	107.0	51.08	3.4	1.11	17
Trachypenaeus similis	1.0	1.00	0.0	0.00	4	12.2	7.74	0.1	0.05	5	103.2	57.62	0.5	0.30	17
Trachypenaeus constrictus	0.0	0.00	0.0	0.00	4	2.8	2.80	0.0	0.01	5	74.7	31.42	0.5	0.19	17
Micropogonias undulatus	1462.5	854.61	14.0	8.35	4	3770.6	3400.40	97.2	88.31	5	1743.1	925.87	47.2	24.53	17
Chloroscombrus chrysurus	2163.0	2154.60	51.0	50.75	4	163.6	106.10	6.1	4.07	5	180.5	168.11	6.9	6.33	17
Syacium gunteri	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	5	340.0	116.35	8.2	2.81	17
Peprilus burti	0.0	0.00	0.0	0.00	4	2.2	1.46	0.1	0.07	5	338.2	151.91	12.2	5.51	17
Prionotus roseus	0.0	0.00	0.0	0.00	4	378.6	351.23	5.0	4.71	5	153.4	68.29	1.9	0.90	17
Prionotus longispinosus	6.0	5.35	0.0	0.03	4	0.0	0.00	0.0	0.00	5	263.0	252.55	3.3	3.12	17
Stenotomus caprinus	0.0	0.00	0.0	0.00	4	0.4	0.40	0.0	0.00	5	237.4	126.64	2.4	1.18	17
Leiostomus xanthurus	7.5	4.50	0.1	0.07	4	446.1	435.11	21.6	21.11	5	58.3	34.85	3.7	2.38	17
Squid spp	96.1	39.33	1.2	0.51	4	116.2	61.38	2.3	1.79	5	47.7	22.21	0.4	0.19	17

Table 7b
 Statistical Zone 15

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 20 fm.																			
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm			
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	
Total catch	86.8	58.89	4	151.0	123.8	5	123.0	38.7	17	0.0	0	0	0.0	0	0	0.0	0	0	
Total finfish	81.5	59.56	4	143.0	120.1	5	109.0	38.75	17	0.0	0	0	0.0	0	0	0.0	0	0	
Total crustacean	3.8	2.28	4	5.7	2.28	5	12.4	2.43	17	0.0	0	0	0.0	0	0	0.0	0	0	
Total other	1.5	0.53	4	2.9	2.18	4	2.4	1.63	9	0.0	0	0	0.0	0	0	0.0	0	0	
Surface temperature	29.8	1.01	2	30.9	0.25	6	30.2	0.16	18	0.0	0	0	0.0	0	0	0.0	0	0	
Midwater temperature	30.1	1.11	2	30.1	0.34	6	29.3	0.18	18	0.0	0	0	0.0	0	0	0.0	0	0	
Bottom temperature	28.8	0.11	2	28.3	0.32	6	24.8	0.4	18	0.0	0	0	0.0	0	0	0.0	0	0	
Surface salinity	25.3	0.53	2	27.6	1.04	6	30.1	0.39	18	0.0	0	0	0.0	0	0	0.0	0	0	
Midwater salinity	28.3	2.69	2	30.0	0.72	6	33.4	0.26	18	0.0	0	0	0.0	0	0	0.0	0	0	
Bottom salinity	30.6	2.74	2	33.3	0.71	6	35.8	0.23	18	0.0	0	0	0.0	0	0	0.0	0	0	
Surface chlorophyll	7.3	0	1	2.8	1.79	3	0.9	0.33	10	0.0	0	0	0.0	0	0	0.0	0	0	
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
Surface oxygen	5.1	0.25	2	6.6	0.25	6	5.8	0.1	18	0.0	0	0	0.0	0	0	0.0	0	0	
Midwater oxygen	4.9	0.65	2	5.4	0.45	6	5.3	0.16	18	0.0	0	0	0.0	0	0	0.0	0	0	
Bottom oxygen	1.8	1.25	2	2.8	0.58	6	3.1	0.28	18	0.0	0	0	0.0	0	0	0.0	0	0	

Table 8a

Statistical Zone 16

Summary of dominant organisms taken in statistical zone 16 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	187.9	75.52	1.4	0.33	3	26.9	20.72	0.2	0.13	7	361.9	181.12	4.0	1.86	7
Squilla spp	0.0	0.00	0.0	0.00	3	171.3	104.11	1.2	0.77	7	374.4	300.65	3.0	2.28	7
Trachypenaeus similis	0.0	0.00	0.0	0.00	3	5.2	4.10	0.0	0.01	7	449.1	336.64	2.0	1.45	7
Callinectes similis	53.3	53.33	0.2	0.17	3	17.3	8.26	0.2	0.09	7	84.2	42.94	1.3	0.69	7
Portunus gibbesii	0.0	0.00	0.0	0.00	3	74.7	36.43	0.2	0.10	7	103.1	57.94	0.4	0.20	7
Sicyonia brevirostris	0.0	0.00	0.0	0.00	3	0.5	0.50	0.0	0.00	7	10.7	4.59	0.1	0.06	7
Micropogonias undulatus	12258.0	4713.70	132.5	32.91	3	1688.2	1444.70	27.5	22.26	7	3524.0	2570.20	85.2	61.09	7
Stenotomus caprinus	0.0	0.00	0.0	0.00	3	405.5	245.69	3.6	2.14	7	2970.8	1202.80	31.1	10.49	7
Prionotus rubio	0.0	0.00	0.0	0.00	3	61.6	60.99	0.6	0.62	7	503.0	501.17	4.0	3.94	7
Peprilus burti	0.0	0.00	0.0	0.00	3	279.1	273.99	7.9	7.76	7	133.1	66.88	3.9	1.62	7
Chloroscombrus chrysurus	4.1	2.05	0.3	0.27	3	122.1	98.23	4.0	3.38	7	183.0	79.74	6.8	2.84	7
Prionotus roseus	0.0	0.00	0.0	0.00	3	1.4	1.38	0.0	0.01	7	146.1	146.05	1.4	1.43	7
Trachurus lathami	0.0	0.00	0.0	0.00	3	4.4	4.39	0.1	0.07	7	67.9	31.48	1.3	0.62	7
Brevoortia patronus	663.6	655.72	7.2	6.37	3	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	7
Squid spp	55.7	52.71	0.5	0.51	3	21.7	13.71	0.2	0.12	7	192.4	95.64	2.9	1.65	7

Table 8a (continued)

Statistical Zone 16

Summary of dominant organisms taken in statistical zone 16 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	392.1	0.00	10.5	0.00	1	190.4	0.00	6.0	0.00	1	0.0	0.00	0.0	0.00	0
Squilla spp	100.7	0.00	1.1	0.00	1	27.7	0.00	0.5	0.00	1	0.0	0.00	0.0	0.00	0
Trachypenaeus similis	63.2	0.00	0.5	0.00	1	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Callinectes similis	476.8	0.00	5.8	0.00	1	64.6	0.00	1.0	0.00	1	0.0	0.00	0.0	0.00	0
Portunus gibbesii	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Sicyonia brevirostris	399.6	0.00	5.1	0.00	1	36.9	0.00	0.5	0.00	1	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	425.4	0.00	26.4	0.00	1	85.4	0.00	6.0	0.00	1	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	50.4	0.00	2.4	0.00	1	85.4	0.00	4.0	0.00	1	0.0	0.00	0.0	0.00	0
Prionotus rubio	69.6	0.00	3.0	0.00	1	21.9	0.00	0.9	0.00	1	0.0	0.00	0.0	0.00	0
Peprilus burti	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	12.9	0.00	0.5	0.00	1	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Prionotus roseus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Trachurus lathami	6.4	0.00	0.1	0.00	1	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Brevoortia patronus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Squid spp	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0

Table 8b
 Statistical Zone 16

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 40 fm.																			
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm			
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	
Total catch	149.0	40.62	3	48.8	29.12	7	170.0	74.19	7	0.0	0	0	29.9	0	1	0.0	0	0	
Total finfish	146.0	40.22	3	45.6	27.86	7	147.0	71.09	7	0.0	0	0	20.3	0	1	0.0	0	0	
Total crustacean	2.7	0.79	3	2.8	1.7	7	13.4	6.42	7	0.0	0	0	8.1	0	1	0.0	0	0	
Total other	0.5	0.53	3	0.4	0.25	7	9.1	5.74	7	0.0	0	0	1.5	0	1	0.0	0	0	
Surface temperature	0.0	0	0	30.4	0.26	7	29.8	0.17	7	0.0	0	0	29.9	0	1	0.0	0	0	
Midwater temperature	0.0	0	0	30.1	0.13	7	29.0	0.64	7	0.0	0	0	28.6	0	1	0.0	0	0	
Bottom temperature	0.0	0	0	27.9	0.56	7	25.3	0.63	7	0.0	0	0	22.0	0	1	0.0	0	0	
Surface salinity	0.0	0	0	25.7	1.18	7	30.2	0.37	7	0.0	0	0	33.7	0	1	0.0	0	0	
Midwater salinity	0.0	0	0	29.9	0.89	7	32.6	0.6	7	0.0	0	0	36.4	0	1	0.0	0	0	
Bottom salinity	0.0	0	0	33.2	0.9	7	35.1	0.34	7	0.0	0	0	36.4	0	1	0.0	0	0	
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
Surface oxygen	0.0	0	0	6.0	0.14	7	6.1	0.04	7	0.0	0	0	6.1	0	1	0.0	0	0	
Midwater oxygen	0.0	0	0	5.0	0.58	7	5.8	0.18	7	0.0	0	0	6.3	0	1	0.0	0	0	
Bottom oxygen	0.0	0	0	0.8	0.24	7	2.7	0.49	7	0.0	0	0	6.1	0	1	0.0	0	0	

Table 9a
 Statistical Zone 17

Summary of dominant organisms taken in statistical zone 17 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Sicyonia brevirostris	0.0	0.00	0.0	0.00	17	0.6	0.60	0.0	0.00	5	717.6	199.66	7.3	1.96	9
Farfantepenaeus aztecus	191.8	64.79	1.1	0.39	17	23.7	16.99	0.2	0.16	5	291.1	85.56	5.2	1.50	9
Callinectes similis	20.2	9.27	0.0	0.03	17	8.4	4.49	0.0	0.01	5	177.8	75.27	2.3	0.86	9
Trachypenaeus similis	2.1	1.02	0.0	0.00	17	2.5	1.60	0.0	0.00	5	95.5	48.87	0.5	0.26	9
Squilla spp	3.4	1.03	0.0	0.00	17	26.4	26.40	0.2	0.17	5	63.2	16.92	0.9	0.24	9
Xiphopenaeus kroyeri	48.1	29.16	0.3	0.18	17	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	9
Micropogonias undulatus	1277.8	426.82	14.2	4.93	17	126.9	96.58	1.8	1.14	5	138.5	135.88	9.1	8.82	9
Stenotomus caprinus	0.0	0.00	0.0	0.00	17	133.0	131.74	1.6	1.57	5	644.0	149.72	18.8	5.93	9
Chloroscombrus chrysurus	127.9	38.89	2.4	0.84	17	702.6	506.77	17.8	12.47	5	114.2	73.91	5.1	3.25	9
Saurida brasiliensis	0.0	0.00	0.0	0.00	17	0.0	0.00	0.0	0.00	5	50.0	21.20	0.3	0.12	9
Stellifer lanceolatus	162.2	78.12	1.6	0.64	17	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	9
Mullus auratus	0.0	0.00	0.0	0.00	17	0.0	0.00	0.0	0.00	5	170.0	145.66	3.0	2.43	9
Peprilus burti	50.3	28.46	0.8	0.44	17	35.5	32.54	0.9	0.90	5	7.4	6.59	0.3	0.21	9
Centropristis philadelphica	0.0	0.00	0.0	0.00	17	32.2	30.25	0.2	0.21	5	98.6	32.04	1.8	0.60	9
Squid spp	70.4	17.18	0.7	0.15	17	123.2	64.54	1.2	0.59	5	84.0	19.95	1.2	0.27	9

Table 9a (continued)

Statistical Zone 17

Summary of dominant organisms taken in statistical zone 17 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Sicyonia brevirostris	219.5	85.35	2.4	0.96	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Farfantepenaeus aztecus	239.1	140.86	5.1	2.80	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes similis	152.9	66.41	2.7	1.20	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachypenaeus similis	48.7	32.72	0.3	0.23	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squilla spp	8.1	5.13	0.1	0.08	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Xiphopenaeus kroyeri	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	309.6	309.18	21.8	21.78	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	563.1	135.67	24.0	5.24	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	0.9	0.61	0.0	0.02	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Saurida brasiliensis	145.6	42.86	0.7	0.20	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stellifer lanceolatus	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Mullus auratus	13.6	5.78	0.3	0.15	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Peprilus burti	71.5	53.87	3.6	2.88	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Centropristis philadelphica	41.8	22.34	1.4	0.70	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid spp	66.1	30.55	0.7	0.25	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 9b

Statistical Zone 17

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 30 fm.																			
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm			
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	
Total catch	30.5	7.01	17	38.9	25.48	5	82.2	12.96	9	0.0	0	0	0.0	0	0	0.0	0	0	
Total finfish	26.2	6.43	17	36.2	25.66	5	63.2	11.98	9	0.0	0	0	0.0	0	0	0.0	0	0	
Total crustacean	2.3	0.63	17	1.1	0.21	5	17.7	4.52	9	0.0	0	0	0.0	0	0	0.0	0	0	
Total other	2.3	0.56	17	1.6	0.56	5	1.3	0.24	9	0.0	0	0	0.0	0	0	0.0	0	0	
Surface temperature	29.3	0.54	15	30.9	0.22	5	30.4	0.06	13	0.0	0	0	0.0	0	0	0.0	0	0	
Midwater temperature	28.7	0.48	15	29.1	1.08	5	29.0	0.42	13	0.0	0	0	0.0	0	0	0.0	0	0	
Bottom temperature	28.0	0.52	15	29.8	0.31	5	23.6	0.32	13	0.0	0	0	0.0	0	0	0.0	0	0	
Surface salinity	26.7	1.04	15	25.3	1.6	5	30.8	0.28	13	0.0	0	0	0.0	0	0	0.0	0	0	
Midwater salinity	27.8	0.77	15	27.4	1.12	5	33.0	0.42	13	0.0	0	0	0.0	0	0	0.0	0	0	
Bottom salinity	28.4	0.78	15	28.4	0.52	5	35.1	0.16	13	0.0	0	0	0.0	0	0	0.0	0	0	
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
Surface oxygen	6.4	0.17	15	6.5	0.23	5	6.2	0.01	13	0.0	0	0	0.0	0	0	0.0	0	0	
Midwater oxygen	5.7	0.18	15	5.2	0.49	5	6.2	0.06	13	0.0	0	0	0.0	0	0	0.0	0	0	
Bottom oxygen	3.2	0.41	15	4.4	0.39	5	4.1	0.32	13	0.0	0	0	0.0	0	0	0.0	0	0	

Table 10a

Statistical Zone 18

Summary of dominant organisms taken in statistical zone 18 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	10.8	5.82	0.0	0.02	5	210.3	78.02	2.0	0.97	14	858.0	810.00	11.4	10.49	2
Sicyonia brevirostris	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	14	112.0	112.00	1.3	1.30	2
Trachypenaeus similis	0.0	0.00	0.0	0.00	5	53.6	28.89	0.2	0.14	14	1072.0	1060.00	5.5	5.48	2
Callinectes similis	7.2	4.41	0.0	0.01	5	62.3	17.49	0.3	0.10	14	44.0	28.00	0.5	0.35	2
Squilla spp	0.0	0.00	0.0	0.00	5	40.4	13.29	0.3	0.14	14	82.0	50.00	1.0	0.76	2
Farfantepenaeus duorarum	0.0	0.00	0.0	0.00	5	22.0	22.00	0.5	0.49	14	150.0	126.00	3.4	2.96	2
Micropogonias undulatus	559.2	256.97	7.1	3.21	5	1126.6	370.08	14.0	4.62	14	2.0	2.00	0.0	0.03	2
Stenotomus caprinus	0.0	0.00	0.0	0.00	5	512.9	512.86	4.5	4.51	14	2122.0	558.00	13.3	1.70	2
Serranus atrobranchus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	14	0.0	0.00	0.0	0.00	2
Chloroscombrus chrysurus	26.4	6.73	0.6	0.18	5	128.7	102.73	4.1	3.47	14	20.0	20.00	0.7	0.75	2
Leiostomus xanthurus	52.8	33.21	1.1	0.64	5	88.0	61.30	2.1	1.53	14	0.0	0.00	0.0	0.00	2
Cynoscion nothus	14.4	10.50	0.5	0.33	5	72.4	37.17	1.8	1.14	14	0.0	0.00	0.0	0.00	2
Trachurus lathami	0.0	0.00	0.0	0.00	5	43.7	43.71	0.7	0.71	14	110.0	110.00	1.9	1.94	2
Centropristis philadelphica	0.0	0.00	0.0	0.00	5	1.4	1.43	0.0	0.02	14	126.0	86.00	1.4	0.96	2
Squid spp	54.0	23.62	0.4	0.16	5	152.3	39.16	1.4	0.30	14	486.0	446.00	6.1	5.59	2

Table 10a (continued)

Statistical Zone 18

Summary of dominant organisms taken in statistical zone 18 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	315.3	0.00	8.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Sicyonia brevirostris	1236.0	0.00	11.2	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachypenaeus similis	18.5	0.00	0.1	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes similis	163.6	0.00	1.7	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squilla spp	73.1	0.00	0.8	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Farfantepenaeus duorarum	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	151.6	0.00	6.9	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Serranus atrobranchis	588.0	0.00	2.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Leiostomus xanthurus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion nothus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachurus lathami	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Centropristis philadelphica	102.5	0.00	2.1	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid spp	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 10b

Statistical Zone 18

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 30 fm.																		
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch	12.7	4.65	5	39.3	13.19	14	66.0	21.2	2	0.0	0	0	0.0	0	0	0.0	0	0
Total finfish	10.8	3.9	5	31.7	12.35	14	33.8	5	2	0.0	0	0	0.0	0	0	0.0	0	0
Total crustacean	0.7	0.12	5	5.6	1.82	14	25.8	11	2	0.0	0	0	0.0	0	0	0.0	0	0
Total other	1.7	1.08	5	2.0	0.41	14	6.4	5.2	2	0.0	0	0	0.0	0	0	0.0	0	0
Surface temperature	29.3	0.82	5	29.4	0.27	16	30.0	0.14	3	0.0	0	0	0.0	0	0	0.0	0	0
Midwater temperature	29.6	0.31	5	29.3	0.25	16	29.9	0.16	3	0.0	0	0	0.0	0	0	0.0	0	0
Bottom temperature	29.4	0.33	5	28.8	0.32	16	25.6	0.81	3	0.0	0	0	0.0	0	0	0.0	0	0
Surface salinity	26.4	1.53	5	30.2	0.56	16	32.1	0.45	3	0.0	0	0	0.0	0	0	0.0	0	0
Midwater salinity	28.0	0.89	5	30.4	0.51	16	32.6	0.58	3	0.0	0	0	0.0	0	0	0.0	0	0
Bottom salinity	28.3	0.8	5	30.8	0.55	16	35.1	0.39	3	0.0	0	0	0.0	0	0	0.0	0	0
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.1	0.18	5	5.9	0.09	16	6.2	0.03	3	0.0	0	0	0.0	0	0	0.0	0	0
Midwater oxygen	5.8	0.26	5	5.9	0.08	16	6.2	0.03	3	0.0	0	0	0.0	0	0	0.0	0	0
Bottom oxygen	4.3	0.66	5	5.4	0.22	16	6.1	0.32	3	0.0	0	0	0.0	0	0	0.0	0	0

Table 11a
 Statistical Zone 19

Summary of dominant organisms taken in statistical zone 19 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	6.5	6.50	0.0	0.03	6	83.6	40.21	0.5	0.24	18	306.1	142.98	4.7	2.53	17
Callinectes similis	50.5	49.31	0.7	0.66	6	335.8	109.43	4.0	1.43	18	95.0	31.59	1.1	0.36	17
Squilla spp	8.0	8.00	0.1	0.05	6	175.6	73.13	1.4	0.62	18	40.2	14.58	0.4	0.13	17
Trachypenaeus similis	0.0	0.00	0.0	0.00	6	62.1	17.17	0.1	0.04	18	102.7	43.45	0.5	0.22	17
Litopenaeus setiferus	140.5	139.30	5.8	5.75	6	104.5	41.82	4.3	1.69	18	0.0	0.00	0.0	0.00	17
Sicyonia dorsalis	0.0	0.00	0.0	0.00	6	3.3	1.39	0.0	0.00	18	37.4	14.82	0.1	0.05	17
Stenotomus caprinus	0.0	0.00	0.0	0.00	6	294.0	199.67	3.2	2.20	18	2363.2	359.45	19.2	3.02	17
Micropogonias undulatus	945.5	932.36	16.7	16.38	6	973.6	497.31	21.1	11.34	18	101.7	101.40	2.4	2.41	17
Trachurus lathami	0.0	0.00	0.0	0.00	6	2.3	1.76	0.0	0.03	18	209.6	62.31	4.0	1.30	17
Mullus auratus	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	18	8.2	3.84	0.1	0.05	17
Cynoscion nothus	100.5	92.28	2.2	1.92	6	247.8	87.27	6.8	2.85	18	4.5	4.10	0.2	0.20	17
Prionotus roseus	5.0	5.00	0.1	0.07	6	183.4	72.10	2.0	0.78	18	14.8	13.34	0.2	0.16	17
Chloroscombrus chrysurus	126.0	49.19	1.6	0.72	6	133.4	95.44	3.7	2.83	18	64.8	18.31	2.5	0.68	17
Peprilus burti	5.0	5.00	0.2	0.18	6	100.2	32.04	2.6	0.95	18	59.1	47.98	1.7	1.36	17
Squid spp	14.0	6.69	0.2	0.11	6	165.4	31.09	1.9	0.30	18	277.5	73.80	3.8	1.07	17

Table 11a (continued)

Statistical Zone 19

Summary of dominant organisms taken in statistical zone 19 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	12.6	3.79	0.4	0.11	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes similis	9.8	3.78	0.1	0.04	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squilla spp	0.7	0.44	0.0	0.00	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachypenaeus similis	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Litopenaeus setiferus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Sicyonia dorsalis	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	563.9	119.11	22.7	5.02	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	1.3	1.33	0.1	0.10	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachurus lathami	85.9	63.48	1.2	0.85	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Mullus auratus	385.3	383.40	10.6	10.51	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion nothus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Prionotus roseus	0.2	0.22	0.0	0.01	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Peprilus burti	33.3	21.44	1.6	1.05	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid spp	29.5	7.63	0.2	0.06	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 11b

Statistical Zone 19

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 30 fm.																		
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch	41.7	28.12	6	78.4	20.06	18	50.5	6.84	17	0.0	0	0	0.0	0	0	0.0	0	0
Total finfish	34.0	21.8	6	58.7	18.68	18	38.6	6.09	17	0.0	0	0	0.0	0	0	0.0	0	0
Total crustacean	10.1	9.73	4	10.8	3.22	18	7.8	2.97	17	0.0	0	0	0.0	0	0	0.0	0	0
Total other	1.0	0.25	6	9.0	2.63	18	4.1	1.06	17	0.0	0	0	0.0	0	0	0.0	0	0
Surface temperature	29.0	0.66	6	28.8	0.36	20	30.1	0.09	18	0.0	0	0	0.0	0	0	0.0	0	0
Midwater temperature	28.9	0.69	6	28.5	0.4	20	29.6	0.08	18	0.0	0	0	0.0	0	0	0.0	0	0
Bottom temperature	28.6	0.75	6	26.8	0.6	20	24.4	0.25	18	0.0	0	0	0.0	0	0	0.0	0	0
Surface salinity	32.4	0.3	6	33.0	0.15	20	33.0	0.11	18	0.0	0	0	0.0	0	0	0.0	0	0
Midwater salinity	32.6	0.32	6	33.2	0.17	20	34.0	0.13	18	0.0	0	0	0.0	0	0	0.0	0	0
Bottom salinity	32.8	0.36	6	34.2	0.27	20	35.4	0.31	18	0.0	0	0	0.0	0	0	0.0	0	0
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	5.8	0.14	6	6.1	0.07	20	6.2	0.02	18	0.0	0	0	0.0	0	0	0.0	0	0
Midwater oxygen	5.9	0.11	6	6.1	0.06	20	6.3	0.03	18	0.0	0	0	0.0	0	0	0.0	0	0
Bottom oxygen	5.5	0.23	6	5.1	0.2	20	6.0	0.17	18	0.0	0	0	0.0	0	0	0.0	0	0

Table 12a
 Statistical Zone 20

Summary of dominant organisms taken in statistical zone 20 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.															
SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	1	115.3	100.74	0.9	0.82	11	329.2	214.43	3.0	2.10	9
Trachypenaeus similis	0.0	0.00	0.0	0.00	1	50.9	48.54	0.2	0.14	11	67.2	56.02	0.2	0.20	9
Callinectes similis	26.3	0.00	0.3	0.00	1	76.8	31.08	1.0	0.40	11	68.8	28.81	0.6	0.23	9
Sicyonia dorsalis	0.0	0.00	0.0	0.00	1	0.8	0.52	0.0	0.00	11	26.8	21.06	0.0	0.04	9
Portunus spinicarpus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	11	1.1	1.14	0.0	0.00	9
Solenocera vioscai	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	11	0.0	0.00	0.0	0.00	9
Stenotomus caprinus	7.5	0.00	0.0	0.00	1	215.8	190.72	2.0	1.78	11	843.4	257.93	5.8	2.06	9
Peprilus burti	7.5	0.00	0.2	0.00	1	3.9	3.33	0.1	0.09	11	368.7	200.73	5.9	2.75	9
Chloroscombrus chrysurus	1710.0	0.00	46.1	0.00	1	102.3	68.97	3.0	2.19	11	111.8	88.74	3.3	2.51	9
Saurida brasiliensis	0.0	0.00	0.0	0.00	1	0.3	0.27	0.0	0.00	11	102.2	47.87	0.7	0.32	9
Serranus atrobranchus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	11	4.5	3.54	0.0	0.02	9
Synodus foetens	0.0	0.00	0.0	0.00	1	4.6	2.05	0.1	0.08	11	24.7	7.06	1.4	0.49	9
Upeneus parvus	0.0	0.00	0.0	0.00	1	11.9	4.74	0.1	0.05	11	48.8	17.29	0.4	0.13	9
Pristipomoides aquilonaris	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	11	1.1	0.62	0.0	0.01	9
Squid spp	56.3	0.00	0.8	0.00	1	282.6	104.06	3.9	1.46	11	574.7	116.48	7.4	2.67	9

Table 12a (continued)

Statistical Zone 20

Summary of dominant organisms taken in statistical zone 20 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.															
SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	57.0	29.02	1.5	0.65	6	16.3	4.69	0.6	0.20	4	92.8	0.00	3.7	0.00	1
Trachypenaeus similis	286.1	181.28	1.3	0.83	6	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	1
Callinectes similis	75.9	41.48	0.4	0.21	6	2.4	2.37	0.0	0.03	4	0.0	0.00	0.0	0.00	1
Sicyonia dorsalis	105.6	52.70	0.3	0.13	6	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	1
Portunus spinicarpus	24.8	22.12	0.2	0.15	6	130.8	59.94	0.7	0.31	4	60.0	0.00	0.3	0.00	1
Solenocera vioscai	105.6	65.41	0.5	0.33	6	1.8	1.81	0.0	0.01	4	2.3	0.00	0.0	0.00	1
Stenotomus caprinus	150.0	38.45	3.6	1.41	6	136.3	24.24	5.6	1.06	4	74.7	0.00	3.2	0.00	1
Peprilus burti	158.5	86.69	6.2	3.33	6	109.3	51.90	8.6	4.35	4	187.9	0.00	7.1	0.00	1
Chloroscombrus chrysurus	0.4	0.36	0.0	0.02	6	0.6	0.58	0.0	0.01	4	0.0	0.00	0.0	0.00	1
Saurida brasiliensis	142.7	82.96	1.1	0.60	6	112.0	68.24	0.6	0.36	4	2.3	0.00	0.0	0.00	1
Serranus atrobranchus	79.8	34.74	0.8	0.36	6	32.1	19.36	0.4	0.18	4	62.3	0.00	0.8	0.00	1
Synodus foetens	42.1	9.17	4.8	1.23	6	65.7	15.97	7.8	1.96	4	10.2	0.00	1.1	0.00	1
Upeneus parvus	18.9	8.81	0.7	0.27	6	36.0	13.11	1.2	0.42	4	35.1	0.00	1.2	0.00	1
Pristipomoides aquilonaris	56.9	28.04	1.6	0.85	6	46.1	32.62	1.7	0.88	4	60.0	0.00	2.9	0.00	1
Squid spp	87.0	25.97	1.8	0.50	6	66.2	43.20	1.5	0.99	4	54.3	0.00	1.3	0.00	1

Table 12b

Statistical Zone 20

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.																		
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch	64.9	0	1	16.9	7.1	11	36.3	8.23	9	0.0	0	0	41.4	5.51	4	43.7	0	1
Total finfish	61.9	0	1	9.7	5.38	10	23.9	5.97	9	0.0	0	0	36.5	5.75	4	34.1	0	1
Total crustacean	1.1	0	1	3.1	1.56	10	4.5	2.71	9	0.0	0	0	1.7	0.48	4	5.8	0	1
Total other	1.9	0	1	5.5	1.35	11	7.8	2.67	9	0.0	0	0	3.3	0.64	4	4.0	0	1
Surface temperature	30.3	0	1	29.3	0.12	11	29.1	0.09	11	0.0	0	0	28.9	0.04	2	28.7	0.03	2
Midwater temperature	30.3	0	1	29.2	0.11	11	28.7	0.14	11	0.0	0	0	24.8	0.51	2	25.0	0.16	2
Bottom temperature	30.3	0	1	29.2	0.12	11	26.9	0.62	11	0.0	0	0	22.1	0.45	2	21.9	0.37	2
Surface salinity	33.0	0	1	33.8	0.27	11	34.5	0.42	11	0.0	0	0	35.2	0.11	2	35.6	0.08	2
Midwater salinity	33.0	0	1	33.8	0.27	11	34.4	0.32	11	0.0	0	0	36.2	0.08	2	36.2	0.24	2
Bottom salinity	33.0	0	1	33.8	0.28	11	34.4	0.49	11	0.0	0	0	36.4	0.01	2	36.5	0.02	2
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	5.7	0	1	5.6	0.06	11	5.8	0.02	11	0.0	0	0	5.8	0	2	5.9	0.05	2
Midwater oxygen	5.7	0	1	5.6	0.07	11	5.8	0.02	11	0.0	0	0	6.1	0.1	2	6.2	0.1	2
Bottom oxygen	5.6	0	1	5.6	0.08	11	5.2	0.26	11	0.0	0	0	5.6	0.35	2	5.5	0.25	2

Table 13a

Statistical Zone 21

Summary of dominant organisms taken in statistical zone 21 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	2.0	2.00	0.0	0.01	3	2.4	1.96	0.0	0.01	14	280.8	99.95	3.9	1.43	16
Portunus spinicarpus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	14	5.7	3.76	0.0	0.01	16
Trachypenaeus similis	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	14	112.4	57.11	0.5	0.24	16
Callinectes similis	25.3	22.85	0.2	0.22	3	36.8	23.61	0.4	0.24	14	206.6	69.38	2.0	0.62	16
Farfantepenaeus duorarum	0.0	0.00	0.0	0.00	3	18.8	15.03	0.4	0.37	14	59.8	36.61	1.0	0.61	16
Sicyonia dorsalis	0.0	0.00	0.0	0.00	3	3.4	1.86	0.0	0.01	14	30.9	14.53	0.1	0.04	16
Stenotomus caprinus	0.0	0.00	0.0	0.00	3	836.8	175.44	6.8	1.64	14	2262.8	431.76	18.4	4.04	16
Micropogonias undulatus	1.8	1.82	0.0	0.04	3	2.1	2.14	0.0	0.04	14	417.2	417.16	13.4	13.38	16
Leiostomus xanthurus	46.0	46.00	0.6	0.58	3	7.3	7.29	0.2	0.18	14	339.0	331.84	20.9	20.39	16
Upeneus parvus	0.0	0.00	0.0	0.00	3	201.4	94.58	1.7	0.69	14	117.9	28.59	0.9	0.26	16
Serranus atrobranchus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	14	4.7	2.98	0.0	0.02	16
Saurida brasiliensis	0.0	0.00	0.0	0.00	3	9.6	8.92	0.1	0.05	14	16.3	6.92	0.1	0.05	16
Chloroscombrus chrysurus	35.6	24.21	1.7	1.19	3	48.6	37.63	2.2	1.72	14	50.9	22.37	2.2	0.97	16
Peprilus burti	1.7	1.67	0.0	0.02	3	31.1	16.16	0.2	0.08	14	75.2	37.16	1.6	0.96	16
Squid spp	15.7	10.27	0.1	0.11	3	160.6	53.76	1.8	0.64	14	416.0	121.86	5.8	1.60	16

Table 13a (continued)

Statistical Zone 21

Summary of dominant organisms taken in statistical zone 21 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	156.3	48.64	4.7	1.14	9	88.8	21.34	3.9	0.26	2	0.0	0.00	0.0	0.00	0
Portunus spinicarpus	151.6	81.80	0.9	0.51	9	1211.8	1035.50	5.1	4.32	2	0.0	0.00	0.0	0.00	0
Trachypenaeus similis	244.6	83.35	1.3	0.40	9	30.3	0.27	0.2	0.02	2	0.0	0.00	0.0	0.00	0
Callinectes similis	109.9	25.13	0.8	0.18	9	1.6	1.64	0.0	0.04	2	0.0	0.00	0.0	0.00	0
Farfantepenaeus duorarum	0.1	0.12	0.0	0.01	9	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0
Sicyonia dorsalis	16.2	8.37	0.0	0.02	9	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	500.6	151.18	3.1	1.12	9	111.3	1.16	5.9	0.44	2	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	0.4	0.38	0.1	0.09	9	1.6	1.64	0.2	0.21	2	0.0	0.00	0.0	0.00	0
Leiostomus xanthurus	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0
Upeneus parvus	39.2	14.80	0.8	0.27	9	1.9	1.88	0.1	0.07	2	0.0	0.00	0.0	0.00	0
Serranus atrobranchus	124.2	26.52	1.0	0.23	9	187.5	26.28	2.6	0.34	2	0.0	0.00	0.0	0.00	0
Saurida brasiliensis	137.1	46.13	0.8	0.24	9	1.6	1.64	0.0	0.01	2	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0
Peprilus burti	10.1	3.98	0.3	0.13	9	1.6	1.64	0.1	0.13	2	0.0	0.00	0.0	0.00	0
Squid spp	356.9	72.03	4.1	1.06	9	199.8	51.44	4.5	1.11	2	0.0	0.00	0.0	0.00	0

Table 13b

Statistical Zone 21

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 40 fm.																			
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm			
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	
Total catch	8.0	1.45	3	23.8	7.58	14	84.6	38.16	16	0.0	0	0	35.3	5.7	2	0.0	0	0	
Total finfish	6.2	1.58	3	15.1	3.7	14	68.9	37.98	16	0.0	0	0	20.1	2.07	2	0.0	0	0	
Total crustacean	0.9	0.19	3	1.5	0.73	14	9.1	2.62	16	0.0	0	0	9.5	4.65	2	0.0	0	0	
Total other	1.1	0.26	3	7.2	4.38	14	6.5	1.57	16	0.0	0	0	5.7	1.08	2	0.0	0	0	
Surface temperature	27.9	1.13	3	27.5	0.3	14	28.1	0.1	17	0.0	0	0	28.4	0.18	2	27.9	0	1	
Midwater temperature	27.8	1.21	3	27.4	0.26	14	27.6	0.18	17	0.0	0	0	24.7	1.73	2	22.4	0	1	
Bottom temperature	27.7	1.22	3	26.7	0.34	14	25.4	0.32	17	0.0	0	0	21.9	0.48	2	21.1	0	1	
Surface salinity	36.4	0.01	3	36.0	0.26	14	36.0	0.06	17	0.0	0	0	36.1	0.04	2	36.4	0	1	
Midwater salinity	36.4	0.01	3	36.3	0.04	14	36.2	0.05	17	0.0	0	0	36.4	0.13	2	36.5	0	1	
Bottom salinity	36.3	0.05	3	35.9	0.36	14	36.1	0.03	17	0.0	0	0	36.4	0.02	2	36.5	0	1	
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
Surface oxygen	6.5	0.58	3	6.4	0.25	14	6.0	0.08	17	0.0	0	0	5.9	0	2	5.9	0	1	
Midwater oxygen	6.5	0.55	3	6.6	0.38	14	6.0	0.09	17	0.0	0	0	6.1	0.1	2	6.3	0	1	
Bottom oxygen	6.5	0.63	3	6.2	0.26	14	6.0	0.14	17	0.0	0	0	5.6	0.45	2	4.8	0	1	

Table 14a
 Statistical Zone 22

Summary of dominant organisms taken in statistical zone 22 during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths less than 6 fm or greater than 20 fm.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	0	12.0	0.00	0.1	0.00	1	12.0	0.00	0.1	0.03	2
Podochela sidneyi	0.0	0.00	0.0	0.00	0	12.0	0.00	0.0	0.00	1	6.0	6.00	0.0	0.01	2
Parthenope serrata	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	9.0	9.00	0.0	0.02	2
Alpheus spp	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	6.0	6.00	0.0	0.00	2
Portunus gibbesii	0.0	0.00	0.0	0.00	0	6.0	0.00	0.0	0.00	1	3.0	3.00	0.0	0.01	2
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	12.0	0.00	0.1	0.00	1	2022.0	246.00	18.1	1.91	2
Leiostomus xanthurus	0.0	0.00	0.0	0.00	0	198.0	0.00	3.7	0.00	1	0.0	0.00	0.0	0.00	2
Lagodon rhomboides	0.0	0.00	0.0	0.00	0	108.0	0.00	2.8	0.00	1	3.0	3.00	0.1	0.12	2
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	54.0	0.00	1.4	0.00	1	0.0	0.00	0.0	0.00	2
Syacium gunteri	0.0	0.00	0.0	0.00	0	30.0	0.00	0.7	0.00	1	12.0	6.00	0.3	0.01	2
Upeneus parvus	0.0	0.00	0.0	0.00	0	18.0	0.00	0.3	0.00	1	9.0	9.00	0.1	0.09	2
Lutjanus campechanus	0.0	0.00	0.0	0.00	0	6.0	0.00	0.2	0.00	1	9.0	3.00	0.4	0.21	2
Diplectrum bivittatum	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	9.0	9.00	0.3	0.26	2
Squid spp	0.0	0.00	0.0	0.00	0	54.0	0.00	0.6	0.00	1	15.0	3.00	0.1	0.03	2

Table 14b

Statistical Zone 22

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths less than 6 fm or greater than 20 fm.																		
Environmental Category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch	0.0	0	0	11.4	0	1	20.4	1.8	2	0.0	0	0	0.0	0	0	0.0	0	0
Total finfish	0.0	0	0	9.6	0	1	19.5	2.1	2	0.0	0	0	0.0	0	0	0.0	0	0
Total crustacean	0.0	0	0	0.6	0	1	0.6	0	2	0.0	0	0	0.0	0	0	0.0	0	0
Total other	0.0	0	0	1.2	0	1	0.6	0	2	0.0	0	0	0.0	0	0	0.0	0	0
Surface temperature	0.0	0	0	26.6	0	1	27.4	0.14	3	0.0	0	0	0.0	0	0	0.0	0	0
Midwater temperature	0.0	0	0	26.2	0	1	26.7	0.55	3	0.0	0	0	0.0	0	0	0.0	0	0
Bottom temperature	0.0	0	0	24.1	0	1	23.3	0.96	3	0.0	0	0	0.0	0	0	0.0	0	0
Surface salinity	0.0	0	0	36.5	0	1	36.3	0.14	3	0.0	0	0	0.0	0	0	0.0	0	0
Midwater salinity	0.0	0	0	36.5	0	1	36.3	0.16	3	0.0	0	0	0.0	0	0	0.0	0	0
Bottom salinity	0.0	0	0	36.5	0	1	36.0	0.27	3	0.0	0	0	0.0	0	0	0.0	0	0
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	0.0	0	0	7.6	0	1	6.9	0.46	3	0.0	0	0	0.0	0	0	0.0	0	0
Midwater oxygen	0.0	0	0	7.8	0	1	7.1	0.41	3	0.0	0	0	0.0	0	0	0.0	0	0
Bottom oxygen	0.0	0	0	7.8	0	1	7.5	0.58	3	0.0	0	0	0.0	0	0	0.0	0	0

Table 15. 2005 Fall Shrimp/Groundfish Survey species composition list, 399 trawl stations, for those vessels that used either a 40-ft or 20-ft trawl.

Species with a total weight of less than 0.0227 kg (0.05 lb) are indicated on the table as 0.0 kg.

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
<u>Finfishes</u>					
Micropogonias undulatus	Atlantic croaker	198000	8016.0	319	79.9
Stenotomus caprinus	longspine porgy	80571	2132.0	282	70.7
Chloroscombrus chrysurus	Atlantic bumper	74482	1082.0	233	58.4
Cynoscion nothus	silver seatrout	8989	423.2	223	55.9
Leiostomus xanthurus	spot	8381	700.5	211	52.9
Peprilus burti	gulf butterflyfish	8252	532.3	182	45.6
Syacium gunteri	shoal flounder	7800	125.6	218	54.6
Trichiurus lepturus	Atlantic cutlassfish	6765	308.8	151	37.8
Cynoscion arenarius	sand seatrout	6420	631.2	228	57.1
Synodus foetens	inshore lizardfish	6059	695.9	260	65.2
Serranus atrobranchus	blackear bass	5724	49.0	82	20.6
Prionotus longispinosus	bigeye searobin	5648	157.2	154	38.6
Harengula jaguana	scaled sardine	5350	121.8	117	29.3
Trachurus lathami	rough scad	4085	138.7	100	25.1
Lutjanus campechanus	red snapper	4042	189.9	240	60.2
Lagodon rhomboides	pinfish	3636	219.7	187	46.9
Centropristis philadelphica	rock sea bass	3558	149.0	206	51.6
Upeneus parvus	dwarf goatfish	3169	105.8	109	27.3
Anchoa hepsetus	striped anchovy	2539	34.7	79	19.8
Halieutichthys aculeatus	pancake batfish	2477	14.9	102	25.6
Pristipomoides aquilonaris	wenchman	2294	141.9	70	17.5
Lutjanus synagris	lane snapper	2230	122.0	135	33.8
Selene setapinnis	Atlantic moonfish	2143	59.7	139	34.8
Larimus fasciatus	banded drum	2133	130.3	94	23.6
Diplectrum bivittatum	dwarf sand perch	2090	34.7	94	23.6

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
		CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OCCURRENCE
<i>Eucinostomus gula</i>	silver jenny	2014	46.3	130	32.6
<i>Prionotus roseus</i>	bluespotted searobin	1897	84.7	65	16.3
<i>Stellifer lanceolatus</i>	star drum	1867	24.8	55	13.8
<i>Peprilus alepidotus</i>	harvestfish	1861	49.1	89	22.3
<i>Prionotus paralatus</i>	Mexican searobin	1646	63.5	46	11.5
<i>Chaetodipterus faber</i>	Atlantic spadefish	1465	58.7	175	43.9
<i>Cynoscion</i> spp.	seatrouts	1461	5.7	42	10.5
<i>Saurida brasiliensis</i>	largescale lizardfish	1359	4.2	73	18.3
<i>Prionotus rubio</i>	blackwing searobin	1271	51.4	64	16.0
<i>Opisthonema oglinum</i>	Atlantic thread herring	1142	30.8	66	16.5
<i>Prionotus stearnsi</i>	shortwing searobin	1133	11.4	31	7.8
<i>Cyclopsetta chittendeni</i>	Mexican flounder	1059	93.2	131	32.8
<i>Lepophidium brevibarbe</i>	blackedge cusk-eel	1059	31.7	81	20.3
<i>Porichthys plectrodon</i>	Atlantic midshipman	1009	18.0	97	24.3
<i>Sphoeroides parvus</i>	least puffer	1004	5.5	79	19.8
<i>Trichopsetta ventralis</i>	sash flounder	949	23.0	43	10.8
<i>Citharichthys spilopterus</i>	bay whiff	947	14.6	100	25.1
<i>Arius felis</i>	hardhead catfish	932	171.7	63	15.8
<i>Etropus crossotus</i>	fringed flounder	872	12.5	119	29.8
<i>Brevoortia patronus</i>	gulf menhaden	800	39.8	40	10.0
<i>Mullus auratus</i>	red goatfish	754	41.5	52	13.0
<i>Syacium papillosum</i>	dusky flounder	553	29.1	33	8.3
<i>Bagre marinus</i>	gafftopsail catfish	517	54.4	42	10.5
<i>Menticirrhus americanus</i>	southern kingfish	471	44.8	53	13.3
<i>Prionotus scitulus</i>	leopard searobin	431	9.3	4	1.0
<i>Synodus poeyi</i>	offshore lizardfish	431	2.4	34	8.5
<i>Balistes capriscus</i>	gray triggerfish	420	35.2	87	21.8
<i>Lagocephalus laevigatus</i>	smooth puffer	391	65.3	77	19.3
<i>Symphurus diomedianus</i>	spottedfin tonguefish	372	8.0	35	8.8
<i>Scomberomorus maculatus</i>	Spanish mackerel	359	36.1	45	11.3

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
		CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OCCURRENCE
<i>Haemulon aurolineatum</i>	tomtate	326	16.1	17	4.3
<i>Ogcocephalus declivirostris</i>	slantbrow batfish	312	5.1	51	12.8
<i>Scorpaena calcarata</i>	smoothhead scorpionfish	293	3.9	36	9.0
<i>Selar crumenophthalmus</i>	bigeye scad	281	13.8	17	4.3
<i>Hemicaranx amblyrhynchus</i>	bluntnose jack	277	9.2	24	6.0
<i>Gymnachirus texae</i>	fringed sole	270	4.0	37	9.3
<i>Diplectrum formosum</i>	sand perch	260	22.7	21	5.3
<i>Sphyraena guachancho</i>	guaguanche	248	23.5	54	13.5
<i>Ancylopsetta quadrocellata</i>	ocellated flounder	241	35.4	45	11.3
<i>Ophidion welschi</i>	crested cusk-eel	174	7.0	30	7.5
<i>Orthopristis chrysoptera</i>	pigfish	170	14.1	21	5.3
<i>Symphurus plagiosa</i>	blackcheek tonguefish	170	2.8	52	13.0
<i>Scomberomorus cavalla</i>	king mackerel	159	25.0	35	8.8
<i>Selene vomer</i>	lookdown	135	3.0	40	10.0
<i>Kathetostoma albigutta</i>	lancer stargazer	130	6.5	24	6.0
<i>Pontinus longispinis</i>	longspine scorpionfish	128	6.0	6	1.5
<i>Centropristis ocyura</i>	bank sea bass	125	10.1	15	3.8
<i>Caranx crysos</i>	blue runner	123	13.4	34	8.5
<i>Decapterus punctatus</i>	round scad	123	5.6	10	2.5
<i>Citharichthys macrops</i>	spotted whiff	121	2.4	19	4.8
<i>Anchoa mitchilli</i>	bay anchovy	111	0.2	30	7.5
<i>Sardinella aurita</i>	Spanish sardine	110	2.3	7	1.8
<i>Rhomboplites aurorubens</i>	vermillion snapper	103	10.3	13	3.3
<i>Paralichthys lethostigma</i>	southern flounder	102	35.9	32	8.0
<i>Hildebrandia flava</i>	yellow conger	101	5.9	24	6.0
<i>Prionotus ophryas</i>	bandtail searobin	100	1.4	16	4.0
<i>Equetus umbrosus</i>	cubbyu	97	2.5	20	5.0
<i>Monacanthus hispidus</i>	planehead filefish	97	1.5	13	3.3
<i>Prionotus tribulus</i>	bighead searobin	94	9.4	20	5.0
<i>Trachinocephalus myops</i>	snakefish	77	4.5	8	2.0

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
		CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OCCURRENCE
<i>Conodon nobilis</i>	barred grunt	70	2.6	8	2.0
<i>Lepophidium jeannae</i>	mottled cusk-eel	70	3.4	6	1.5
<i>Raja texana</i>	roundel skate	67	29.7	33	8.3
<i>Ancylopsetta dilecta</i>	three-eye flounder	65	5.2	10	2.5
<i>Urophycis floridana</i>	southern hake	62	9.5	10	2.5
<i>Ogcocephalus pantostictus</i>	spotted batfish	56	8.5	7	1.8
<i>Brotula barbata</i>	bearded brotula	54	3.5	17	4.3
<i>Priacanthus arenatus</i>	bigeye	54	8.8	9	2.3
<i>Ophidion holbrookii</i>	bank cusk-eel	52	2.5	6	1.5
<i>Oligoplites saurus</i>	leatherjack	48	1.0	9	2.3
<i>Lonchopisthus micrognathus</i>	swordtail jawfish	46	0.2	3	0.8
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark	45	41.8	17	4.3
<i>Bollmannia communis</i>	ragged goby	44	0.1	11	2.8
<i>Sphoeroides spengleri</i>	bandtail puffer	42	0.4	12	3.0
<i>Sphyrna tiburo</i>	bonnethead	41	57.3	21	5.3
<i>Equetus wamotoi</i>	blackbar drum	40	3.8	11	2.8
<i>Etrumeus teres</i>	round herring	38	0.4	3	0.8
<i>Sphoeroides dorsalis</i>	marbled puffer	36	1.0	9	2.3
<i>Bellator militaris</i>	horned searobin	31	0.1	8	2.0
<i>Ophichthus gomesi</i>	shrimp eel	30	2.1	6	1.5
<i>Caulolatilus intermedius</i>	anchor tilefish	28	2.5	11	2.8
<i>Steindachneria argentea</i>	luminous hake	27	0.4	3	0.8
<i>Hoplunnis macrurus</i>	freckled pike-conger	26	0.3	8	2.0
<i>Prionotus alatus</i>	spiny searobin	24	0.5	2	0.5
<i>Pagrus pagrus</i>	red porgy	20	2.3	5	1.3
<i>Polydactylus octonemus</i>	Atlantic threadfin	20	1.8	5	1.3
<i>Neomerinthe hemingwayi</i>	spinycheek scorpionfish	19	5.4	9	2.3
<i>Anchoa</i>	anchovies	17	0.0	1	0.3
<i>Carcharhinus acronotus</i>	blacknose shark	17	49.5	6	1.5
<i>Dasyatis americana</i>	southern stingray	17	86.4	10	2.5

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
		CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OCCURRENCE
Dorosoma petenense	threadfin shad	17	0.4	9	2.3
Eucinostomus argenteus	spotfin mojarra	17	0.3	11	2.8
Caranx hippos	crevalle jack	16	1.0	6	1.5
Decodon puellaris	red hogfish	16	0.7	8	2.0
Bathyanthias mexicanus	yellowtail bass	15	0.2	3	0.8
Rachycentron canadum	cobia	15	5.4	10	2.5
Engyophrys senta	spiny flounder	14	0.1	2	0.5
Paralichthys squamilentus	broad flounder	14	3.8	8	2.0
Trachinotus carolinus	Florida pompano	14	3.2	9	2.3
Echeneis naucrates	sharksucker	12	3.4	8	2.0
Epinephelus flavolimbatus	yellowedge grouper	12	0.7	7	1.8
Seriola dumerili	greater amberjack	11	2.8	3	0.8
Peristedion gracile	slender searobin	10	0.1	3	0.8
Sciaenops ocellatus	red drum	10	47.5	8	2.0
Seriola	amberjacks	10	3.4	2	0.5
Antennarius radiosus	singlespot frogfish	9	0.2	7	1.8
Auxis rochei	bullet mackerel	9	1.1	2	0.5
Hemanthias aureorubens	streamer bass	9	0.1	1	0.3
Mustelus canis	smooth dogfish	9	11.3	7	1.8
Ophidion grayi	blotched cusk-eel	8	0.3	1	0.3
Pomatomus saltatrix	bluefish	8	2.7	4	1.0
Rypticus maculatus	whitespotted soapfish	8	0.2	5	1.3
Squatina dumeril	Atlantic angel shark	8	15.2	6	1.5
Gobionellus hastatus	darther gobies	7	0.0	2	0.5
Paralichthys albigutta	gulf flounder	7	5.7	2	0.5
Rhinoptera bonasus	cownose ray	7	39.6	3	0.8
Seriola rivoliana	almaco jack	7	1.8	1	0.3
Sphyrna lewini	scalloped hammerhead	7	12.7	1	0.3
Calamus arctifrons	grass porgy	6	0.4	2	0.5
Calamus proridens	littlehead porgy	6	1.4	2	0.5

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
		CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OCCURRENCE
Dasyatis sabina	Atlantic stringray	6	2.3	5	1.3
Lutjanus griseus	grey snapper	6	0.9	4	1.0
Synodus intermedius	sand diver	6	0.4	2	0.5
Alectis ciliaris	African pompano	5	0.3	3	0.8
Bothus robinsi	twospot flounder	5	0.1	1	0.3
Gymnothorax nigromarginatus	blackedge moray	5	0.6	3	0.8
Scorpaena brasiliensis	barbfish	5	0.8	2	0.5
Symphurus civitatus	offshore tonguefish	5	0.1	1	0.3
Symphurus urospilus	spottail tonguefish	5	0.1	2	0.5
Trinectes maculatus	hogchoker	5	0.1	4	1.0
Apogon aurolineatus	bridle cardinalfish	4	0.0	1	0.3
Calamus leucosteus	whitebone porgy	4	0.2	1	0.3
Citharichthys cornutus	horned whiff	4	0.0	1	0.3
Hemipteronotus novacula	pearly razorfish	4	0.1	1	0.3
Bregmaceros atlanticus	antenna codlet	3	0.0	2	0.5
Euthynnus alletteratus	little tunny	3	1.0	1	0.3
Fistularia petimba	red cornetfish	3	1.3	3	0.8
Mustelus norrisi	Florida smoothhound	3	5.2	2	0.5
Narcine brasiliensis	lesser electric ray	3	1.2	2	0.5
Opsanus pardus	leopard toadfish	3	0.5	3	0.8
Pisces	fishes	3	0.0	1	0.3
Scorpaena agassizii	longfin scorpionfish	3	0.1	1	0.3
Stephanolepis setifer	pygmy filefish	3	0.1	1	0.3
Aluterus monoceros	unicorn filefish	2	1.0	1	0.3
Apogon affinis	bigtooth cardinalfish	2	0.0	1	0.3
Chilomycterus schoepfi	striped burrfish	2	0.4	2	0.5
Dasyatis say	bluntnose stingray	2	2.3	2	0.5
Epinephelus niveatus	snowy grouper	2	0.1	2	0.5
Estropus microstomus	smallmouth flounder	2	0.0	1	0.3

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
		CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OCCURRENCE
<i>Gymnura altavela</i>	spiny butterfly ray	2	1.3	1	0.3
<i>Myliobatis freminvillii</i>	bullnose ray	2	6.7	1	0.3
<i>Symphurus pelicanus</i>	longtail tonguefish	2	0.0	1	0.3
<i>Achirus lineatus</i>	lined sole	1	0.0	1	0.3
<i>Antennarius striatus</i>	striated frogfish	1	0.0	1	0.3
Apogonidae	cardinalfishes	1	0.0	1	0.3
<i>Bairdiella chrysoura</i>	silver perch	1	0.0	1	0.3
<i>Carcharhinus limbatus</i>	blacktip shark	1	10.0	1	0.3
<i>Caulolatilus chrysops</i>	goldface tilefish	1	0.2	1	0.3
<i>Caulolatilus cyanops</i>	blackline tilefish	1	0.2	1	0.3
<i>Conger oceanicus</i>	conger eel	1	0.2	1	0.3
<i>Conger triporiceps</i>	manytooth conger	1	0.2	1	0.3
<i>Echeneis neucratoides</i>	whitefin sharksucker	1	0.2	1	0.3
<i>Elops saurus</i>	ladyfish	1	0.1	1	0.3
<i>Gymnothorax kolpos</i>	blacktail moray	1	0.1	1	0.3
<i>Hyporhamphus unifasciatus</i>	silverstripe halfbeak	1	0.1	1	0.3
<i>Lactophrys triqueter</i>	smooth trunkfish	1	0.0	1	0.3
<i>Mycteroperca phenax</i>	scamp	1	0.3	1	0.3
<i>Myrophis punctatus</i>	speckled worm eel	1	0.0	1	0.3
<i>Ogocephalus parvus</i>	roughback batfish	1	0.0	1	0.3
<i>Opsanus beta</i>	gulf toadfish	1	0.5	1	0.3
<i>Pogonias cromis</i>	black drum	1	1.6	1	0.3
<i>Prionotus</i>	searobins	1	0.0	1	0.3
<i>Prionotus carolinus</i>	common searobin	1	0.0	1	0.3
<i>Prionotus martis</i>	barred searobin	1	0.0	1	0.3
<i>Rhinobatos lentiginosus</i>	Atlantic guitarfish	1	0.6	1	0.3
<i>Rypticus bistrispinus</i>	freckled soapfish	1	0.0	1	0.3
<i>Saurida caribbaea</i>	smallscale lizardfish	1	0.0	1	0.3
<i>Torpedo nobiliana</i>	Atlantic torpedo	1	0.8	1	0.3

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
		CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OCCURRENCE
<u>Crustaceans</u>					
Farfantepenaeus aztecus	brown shrimp	22661	450.8	288	72.2
Callinectes similis	lesser blue crab	10541	219.5	250	62.7
Litopenaeus setiferus	white shrimp	6021	167.1	155	38.8
Trachypenaeus similis	roughback shrimp	2905	6.8	93	23.3
Sicyonia brevirostris	brown rock shrimp	2101	33.8	69	17.3
Squilla empusa	mantis shrimp	1988	21.7	144	36.1
Portunus gibbesii	iridescent swimming crab	1964	11.4	147	36.8
Portunus spinicarpus	longspine swimming crab	1845	12.9	39	9.8
Sicyonia dorsalis	lesser rock shrimp	1678	4.8	40	10.0
Trachypenaeus constrictus	roughneck shrimp	1029	1.7	39	9.8
Xiphopenaeus kroyeri	seabob	418	1.4	14	3.5
Callinectes sapidus	blue crab	414	39.3	83	20.8
Portunus spinimanus	blotched swimming crab	380	14.1	66	16.5
Farfantepenaeus duorarum	pink shrimp	358	8.3	34	8.5
Squilla chydrea	mantis shrimp	342	2.3	36	9.0
Solenocera vioscai	humpback shrimp	341	1.5	24	6.0
Calappa sulcata	yellow box crab	276	63.6	77	19.3
Anasimus latus	stilt spider crab	138	1.0	23	5.8
Raninoides louisianensis	gulf frog crab	104	0.8	21	5.3
Hepatus epheliticus	calico crab	60	4.4	13	3.3
Ovalipes floridanus	Florida lady crab	46	0.6	9	2.3
Petrochirus diogenes	giant hermit crab	23	0.4	4	1.0
Parapenaeus politus	deepwater rose shrimp	20	0.0	5	1.3
Micropanope sculptipes	sculptured mud crab	16	0.2	4	1.0
Arenaeus cribrarius	speckled swimming crab	14	1.0	5	1.3
Myropsis quinquespinosa	fivespine purse crab	14	0.1	4	1.0
Persephona crinita	pink purse crab	14	0.0	8	2.0

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
		CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OCCURRENCE
<i>Plesionika longicauda</i>	pandalid shrimp	14	0.0	5	1.3
<i>Dardanus insignis</i>	red brocade hermit	13	0.2	4	1.0
<i>Euphosynoplax clausa</i>	craggy bathyal crab	13	0.0	7	1.8
<i>Podochela sidneyi</i>	shortfinger neck crab	13	0.0	5	1.3
<i>Danielum ixbauchac</i>	red sea crab	12	0.1	2	0.5
<i>Libinia emarginata</i>	portly spider crab	12	2.8	6	1.5
<i>Pagurus pollicaris</i>	flatclaw hermit crab	12	0.2	9	2.3
<i>Stenorhynchus seticornis</i>	yellowline arrow crab	12	0.0	5	1.3
<i>Paguristes triangulatus</i>	hermit crab	11	0.0	2	0.5
<i>Porcellana sayana</i>	spotted porcelain crab	10	0.0	3	0.8
Unidentified crustacean	unidentified crustacean	10	0.0	4	1.0
<i>Pseudorhombila quadridentata</i>	flecked squareback crab	8	0.2	5	1.3
<i>Pagurus bullisi</i>	hermit crab	7	0.0	3	0.8
<i>Libinia dubia</i>	longnose spider crab	5	0.1	4	1.0
<i>Munida forceps</i>	squat lobster	5	0.0	2	0.5
<i>Scyllarus chacei</i>	chace slipper lobster	5	0.0	2	0.5
<i>Bathynectes longispina</i>	bathyal swimming crab	4	0.1	3	0.8
<i>Menippe adina</i>	gulf stone crab	4	0.0	3	0.8
<i>Dardanus fucosus</i>	bareye hermit	3	0.0	2	0.5
<i>Metoporphaphis calcarata</i>	false arrow crab	3	0.0	2	0.5
<i>Axiopsis hirsutimana</i>	lobster shrimps	2	0.0	1	0.3
<i>Sicyonia burkenroadi</i>	spiny rock shrimp	2	0.0	1	0.3
<i>Stenocionops coelata</i>	spider crab	2	0.0	1	0.3
<i>Stenocionops furcata</i>	furcate crab	2	0.0	1	0.3
<i>Acanthocarpus alexandri</i>	gladiator box crab	1	0.0	1	0.3
<i>Alpheus</i>	snapping shrimps	1	0.0	1	0.3
<i>Leiolambrus nitidus</i>	white elbow crab	1	0.0	1	0.3
<i>Leiolambrus nitidus</i>	white elbow crab	1	0.0	1	0.3
<i>Lironeca ovalis</i>	isopod	1	0.0	1	0.3
<i>Mesopenaeus tropicalis</i>	salmon shrimp	1	0.0	1	0.3

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
		CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OCCURRENCE
Pagurus longicarpus	long-armed hermit crab	1	0.0	1	0.3
Scyllarides nodifer	ridged slipper lobster	1	0.3	1	0.3
Speocarcinus lobatus	gulf squareback crab	1	0.0	1	0.3
Stenocionops spinimanus	prickly spider crab	1	0.1	1	0.3
Stenocionops spinosissimus	tenspine spider crab	1	0.2	1	0.3
Upogebia affinis	coastal mud shrimp	1	0.0	1	0.3
<u>Others</u>					
Renilla mulleri	short-stemmed sea pansy	3168	6.1	77	19.3
Lolliguncula brevis	Atlantic brief squid	2962	34.1	147	36.8
Aurelia aurita	moon jellyfish	2882	330.9	68	17.0
Amusium papyraceum	paper scallop	2012	21.2	48	12.0
Astropecten duplicatus	spiny beaded sea star	1524	2.1	43	10.8
Loligo pleii	arrow squid	1500	16.3	82	20.6
Astropecten cingulatus	starfish	887	11.0	57	14.3
Loligo pealeii	longfin squid	793	13.5	69	17.3
Beroe ovata	comb jelly	220	3.0	11	2.8
Chrysaora quinquecirrha	sea nettle	193	2.9	32	8.0
Pitar cordatus	schwengel's pitar	193	3.9	13	3.3
Polystira albida	white giant turris	176	1.7	18	4.5
Loligo spp.	squids	115	0.6	12	3.0
Anadara baughmani	baughman's ark	110	1.4	13	3.3
Tamoya haplonema	sea wasp	107	13.1	25	6.3
Luidia clathrata	sea star	100	3.0	24	6.0
Strombus alatus	Florida fighting conch	81	8.1	1	0.3
Styela plicata	tunicate	66	0.7	3	0.8
Chione clenchi	clench venus	64	0.8	6	1.5
Sconsia striata	royal bonnet	56	0.8	10	2.5
Encope aberrans	sand dollar	52	2.0	2	0.5

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
		CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OCCURRENCE
<i>Tethyaster grandis</i>	starfish	49	2.2	10	2.5
<i>Conus austini</i>	cone shell	38	0.5	6	1.5
Gorgonidae	gorgonians	33	0.1	2	0.5
<i>Paracaudina chilensis</i>		29	0.4	1	0.3
<i>Calliactis</i> spp.	anemone	27	0.2	4	1.0
Schizasterida	sea urchins	24	1.6	1	0.3
Unidentified invertebrates	unidentified invertebrate	16	0.4	7	1.8
<i>Agriopuma texasianum</i>	texas venus	15	0.2	2	0.5
<i>Laevicardium laevigatum</i>	egg cockle	14	1.3	1	0.3
<i>Distorsio clathrata</i>	Atlantic distorsio	13	0.1	6	1.5
<i>Stomolophus meleagris</i>	many-mouthed sea jelly	13	7.1	9	2.3
<i>Mnemiopsis mccradyi</i>	comb jelly	11	0.1	5	1.3
<i>Murex hidalgoi</i>		10	0.3	1	0.3
<i>Polystira</i>	giant-turris	10	0.1	2	0.5
<i>Neverita duplicata</i>	shark eye	9	0.1	6	1.5
<i>Clypeaster ravenelii</i>	cake urchin	8	0.4	3	0.8
<i>Luidia alternata</i>	banded luidia	8	0.2	2	0.5
Anthozoa	anthozoans	7	0.0	5	1.3
<i>Anthenoides piercei</i>	starfish	6	0.2	1	0.3
<i>Architectonica nobilis</i>	common sundial	6	0.1	1	0.3
Holothuroidea	sea cucumbers	6	0.2	1	0.3
<i>Macoma brevifrons</i>	short macoma	6	0.0	3	0.8
<i>Aplysia morio</i>	sooty seahare	5	0.4	1	0.3
<i>Chloeia</i>	polychetes	5	0.1	1	0.3
Fasciolhunter	mollusks	5	0.6	1	0.3
Maldanidae	polychetes	5	0.2	1	0.3
<i>Mellita quinquiesperforata</i>	five-slotted sand dollar	5	0.0	3	0.8
Actinidae	sea anemones	4	0.0	3	0.8
Amphinomidae	polychetes	4	0.1	1	0.3
<i>Caretta caretta</i>	loggerhead turtle	4	150.0	4	1.0

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
		CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OCCURRENCE
Molpadia spp.	sea cucumber	4	0.1	1	0.3
Muricanthus fulvescens	giant eastern murex	4	0.0	2	0.5
Clypeaster prostratus	sea biscuit	3	0.6	1	0.3
Tonna galea	giant tun	3	0.7	1	0.3
Busycon pulleyi	prickly whelk	2	0.1	1	0.3
Busycon sinistrum	lightning whelk	2	0.1	2	0.5
Cantharus cancellarius	cancellate cantharus	2	0.0	2	0.5
Circomphalus strigillinus	empress venus	2	0.1	1	0.3
Molgula citrina		2	0.1	1	0.3
Octopus vulgaris	common Atlantic octopus	2	0.1	2	0.5
Antillophos candeanus	beaded phos	1	0.0	1	0.3
Astropecten articulatus	plated-margined sea star	1	0.0	1	0.3
Brissopsis atlantica		1	0.0	1	0.3
Bryozoa	moss animals	1	0.0	1	0.3
Calliactris tricolor	common sea anemone	1	0.0	1	0.3
Cerianthus	tube dwelling anemones	1	0.0	1	0.3
Cymatium parthenopeum	giant triton	1	0.0	1	0.3
Glycera	polychetes	1	0.0	1	0.3
Laevicardium mortoni	yellow eggcockle	1	0.1	1	0.3
Lepidochelys kempfi	Atlantic ridley	1	30.0	1	0.3
Oliva sayana	lettered olive	1	0.0	1	0.3
Scaphella dubia	dubious volute	1	0.2	1	0.3
Tunicata	sea squirts	1	0.0	1	0.3

Table 16a
 Statistical Zone 11

Summary of dominant organisms taken in statistical zone 11 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	15.1	5.32	0.1	0.05	4	34.0	22.68	0.4	0.27	9	19.0	6.35	0.3	0.11	20
Litopenaeus setiferus	2.1	1.22	0.1	0.05	4	53.8	29.34	2.1	1.11	9	67.9	44.71	1.6	0.93	20
Portunus spinicarpus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	20
Callinectes similis	12.2	8.70	0.1	0.04	4	11.7	6.07	0.1	0.04	9	15.2	5.82	0.2	0.06	20
Sicyonia brevirostris	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	9	0.8	0.55	0.0	0.01	20
Portunus gibbesii	2.9	2.88	0.0	0.02	4	2.7	1.93	0.0	0.01	9	9.0	3.80	0.1	0.03	20
Micropogonias undulatus	610.1	602.80	22.5	22.14	4	597.4	210.46	26.3	8.83	9	1162.7	343.59	52.7	15.73	20
Stenotomus caprinus	75.6	72.30	1.2	1.13	4	61.9	42.34	1.2	0.85	9	245.6	87.60	7.1	2.72	20
Leiostomus xanthurus	10.9	4.70	0.8	0.35	4	40.6	17.92	3.0	1.31	9	37.3	10.15	2.9	0.78	20
Cynoscion arenarius	3.8	2.72	0.3	0.26	4	5.7	3.43	0.4	0.26	9	52.1	21.18	5.1	2.43	20
Chloroscombrus chrysurus	158.0	96.43	3.9	2.50	4	172.7	73.79	7.2	3.49	9	94.5	30.18	4.0	1.53	20
Trichiurus lepturus	0.0	0.00	0.0	0.00	4	10.2	5.24	0.6	0.42	9	10.2	5.55	0.6	0.34	20
Cynoscion nothus	4.6	4.62	0.2	0.22	4	13.2	5.97	0.5	0.18	9	27.3	12.28	1.4	0.56	20
Eucinostomus gula	0.8	0.79	0.0	0.01	4	21.1	9.88	0.4	0.19	9	73.5	29.43	1.8	0.76	20
Squid spp	0.0	0.00	0.0	0.00	4	9.5	3.07	0.0	0.01	9	23.9	7.65	0.4	0.17	20

Table 16a (continued)

Statistical Zone 11

Summary of dominant organisms taken in statistical zone 11 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	76.1	40.45	1.9	0.84	9	158.5	88.34	4.1	2.08	3	314.6	103.03	9.0	3.18	4
Litopenaeus setiferus	3.5	3.32	0.1	0.14	9	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4
Portunus spinicarpus	0.0	0.00	0.0	0.00	9	72.8	64.81	0.6	0.54	3	181.4	123.10	1.7	0.91	4
Callinectes similis	41.7	18.90	0.8	0.32	9	7.9	5.10	0.2	0.15	3	22.8	12.67	0.4	0.22	4
Sicyonia brevirostris	8.6	6.02	0.2	0.11	9	65.8	37.99	1.3	0.68	3	67.0	41.34	1.3	0.79	4
Portunus gibbesii	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4
Micropogonias undulatus	193.1	37.63	12.9	2.44	9	224.6	187.69	14.7	11.53	3	47.0	28.16	3.4	1.86	4
Stenotomus caprinus	190.3	62.87	11.4	4.19	9	348.6	178.35	15.9	8.32	3	206.7	112.15	11.1	5.82	4
Leiostomus xanthurus	101.2	42.47	8.0	3.63	9	304.3	217.64	30.5	21.42	3	182.7	171.00	21.6	20.49	4
Cynoscion arenarius	73.8	52.84	7.2	5.03	9	47.3	14.11	5.2	1.31	3	206.0	49.98	22.9	5.48	4
Chloroscombrus chrysurus	21.7	10.38	1.5	0.69	9	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4
Trichiurus lepturus	59.9	59.88	2.6	2.56	9	33.5	33.45	2.3	2.27	3	118.1	81.89	4.3	2.66	4
Cynoscion nothus	74.2	72.95	5.4	5.28	9	4.6	2.74	0.5	0.24	3	19.3	16.98	2.3	1.92	4
Eucinostomus gula	28.4	10.67	1.1	0.38	9	65.8	60.93	2.8	2.66	3	15.6	15.56	0.8	0.81	4
Squid spp	5.7	2.52	0.1	0.05	9	5.8	5.82	0.0	0.02	3	0.9	0.91	0.1	0.07	4

Table 16b

Statistical Zone 11

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.																		
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch	43.5	24.33	4	55.2	13.44	9	97.0	19.68	20	0.0	0	0	108.0	52.21	3	130.0	42.43	4
Total finfish	40.8	25.13	4	52.3	12.74	9	93.2	19.5	20	0.0	0	0	99.1	51.91	3	115.0	40.15	4
Total crustacean	0.5	0.19	2	3.2	1.28	8	3.3	1	19	0.0	0	0	8.5	3.93	3	13.8	4.7	4
Total other	4.1	4.11	2	0.1	0.06	8	0.7	0.23	20	0.0	0	0	0.4	0.4	3	1.4	0.9	4
Surface temperature	24.5	0.89	4	23.6	0.37	10	23.8	0.22	23	0.0	0	0	23.9	0.07	4	24.5	0.36	5
Midwater temperature	24.5	0.97	4	23.6	0.35	10	23.8	0.2	23	0.0	0	0	24.8	0.4	4	25.0	0.41	5
Bottom temperature	25.2	1.07	4	23.6	0.33	10	23.9	0.21	23	0.0	0	0	23.6	0.66	4	22.0	0.52	5
Surface salinity	32.2	0.44	4	34.4	0.5	10	34.9	0.18	23	0.0	0	0	34.7	0.26	4	35.5	0.33	5
Midwater salinity	32.6	0.55	4	34.7	0.38	10	35.2	0.09	23	0.0	0	0	36.2	0.11	4	36.1	0.17	5
Bottom salinity	33.7	0.13	4	34.9	0.32	10	35.4	0.07	23	0.0	0	0	36.3	0.06	4	36.5	0.03	5
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.7	0.13	4	6.5	0.1	10	6.4	0.04	23	0.0	0	0	6.4	0.03	4	6.2	0.08	5
Midwater oxygen	6.6	0.21	4	6.5	0.08	10	6.3	0.03	23	0.0	0	0	5.7	0.32	4	5.9	0.06	5
Bottom oxygen	6.2	0.16	4	6.3	0.12	10	6.1	0.06	23	0.0	0	0	4.8	0.3	4	4.4	0.14	5

Table 17a
 Statistical Zone 13

Summary of dominant organisms taken in statistical zone 13 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes similis	0.0	0.00	0.0	0.00	1	20.7	8.88	0.2	0.06	5	214.5	71.57	2.5	0.73	13
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	1	12.8	7.79	0.1	0.09	5	79.0	17.19	0.5	0.12	13
Litopenaeus setiferus	370.3	0.00	7.2	0.00	1	87.0	35.50	2.6	1.08	5	108.0	42.22	3.2	0.93	13
Portunus gibbesii	0.0	0.00	0.0	0.00	1	49.9	28.27	0.2	0.14	5	162.2	121.03	1.0	0.73	13
Callinectes sapidus	0.0	0.00	0.0	0.00	1	5.9	1.86	0.9	0.42	5	44.5	23.11	2.5	0.70	13
Trachypenaeus constrictus	3.4	0.00	0.0	0.00	1	3.7	3.72	0.0	0.01	5	33.2	26.02	0.0	0.03	13
Micropogonias undulatus	805.7	0.00	30.7	0.00	1	703.7	274.09	28.4	11.90	5	2020.0	414.11	87.4	17.53	13
Trichiurus lepturus	485.1	0.00	5.9	0.00	1	133.6	86.56	2.3	1.36	5	217.6	92.39	12.5	6.37	13
Cynoscion nothus	157.7	0.00	3.1	0.00	1	33.3	13.46	0.8	0.44	5	122.8	43.02	2.9	0.69	13
Cynoscion arenarius	133.7	0.00	3.3	0.00	1	24.5	18.98	0.7	0.25	5	119.5	57.09	10.2	6.75	13
Prionotus longispinosus	0.0	0.00	0.0	0.00	1	125.1	89.65	2.0	1.36	5	92.1	40.59	1.8	0.78	13
Lutjanus campechanus	0.0	0.00	0.0	0.00	1	40.1	23.32	1.2	1.01	5	72.3	43.19	1.0	0.55	13
Eucinostomus gula	0.0	0.00	0.0	0.00	1	66.2	66.21	1.1	1.11	5	24.9	13.52	0.4	0.22	13
Stenotomus caprinus	0.0	0.00	0.0	0.00	1	52.5	34.78	0.8	0.52	5	52.4	32.88	0.8	0.51	13
Squid spp	102.9	0.00	0.6	0.00	1	49.3	18.91	0.3	0.12	5	31.2	9.94	0.2	0.06	13

Table 17a (continued)

Statistical Zone 13

Summary of dominant organisms taken in statistical zone 13 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes similis	1218.0	0.00	16.4	0.00	1	0.0	0.00	0.0	0.00	0	335.5	0.00	7.6	0.00	1
Farfantepenaeus aztecus	52.0	0.00	0.5	0.00	1	0.0	0.00	0.0	0.00	0	2942.7	0.00	21.0	0.00	1
Litopenaeus setiferus	58.0	0.00	1.9	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Portunus gibbesii	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Callinectes sapidus	18.0	0.00	4.1	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Trachypenaeus constrictus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Micropogonias undulatus	2120.0	0.00	117.6	0.00	1	0.0	0.00	0.0	0.00	0	2299.1	0.00	139.8	0.00	1
Trichiurus lepturus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Cynoscion nothus	726.0	0.00	29.4	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Cynoscion arenarius	276.0	0.00	29.4	0.00	1	0.0	0.00	0.0	0.00	0	471.8	0.00	54.8	0.00	1
Prionotus longispinosus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Lutjanus campechanus	158.0	0.00	14.1	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Eucinostomus gula	8.0	0.00	0.1	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Stenotomus caprinus	16.0	0.00	0.3	0.00	1	0.0	0.00	0.0	0.00	0	19.1	0.00	0.4	0.00	1
Squid spp	26.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1

Table 17b

Statistical Zone 13

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.																			
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm			
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	
Total catch	70.3	0	1	54.6	18.5	5	141.0	25.18	13	0.0	0	0	0.0	0	0	255.0	0	1	
Total finfish	61.4	0	1	49.2	18.89	5	129.0	22.97	13	0.0	0	0	0.0	0	0	219.0	0	1	
Total crustacean	7.4	0	1	4.6	0.7	5	10.0	1.78	13	0.0	0	0	0.0	0	0	35.5	0	1	
Total other	1.4	0	1	0.8	0.39	5	3.0	2.63	8	0.0	0	0	0.0	0	0	0.0	0	1	
Surface temperature	23.2	0	1	25.1	0.81	6	26.0	0.53	13	0.0	0	0	0.0	0	0	25.6	0	1	
Midwater temperature	23.3	0	1	25.5	0.87	6	26.5	0.43	13	0.0	0	0	0.0	0	0	25.6	0	1	
Bottom temperature	22.7	0	1	26.2	0.93	6	27.4	0.28	13	0.0	0	0	0.0	0	0	21.4	0	1	
Surface salinity	30.4	0	1	30.0	0.55	6	30.9	0.32	13	0.0	0	0	0.0	0	0	36.0	0	1	
Midwater salinity	30.4	0	1	31.3	0.28	6	32.9	0.38	13	0.0	0	0	0.0	0	0	36.3	0	1	
Bottom salinity	31.9	0	1	34.2	0.31	6	35.5	0.14	13	0.0	0	0	0.0	0	0	36.5	0	1	
Surface chlorophyll	0.0	0	0	0.6	0.25	3	0.2	0.04	9	0.0	0	0	0.0	0	0	0.0	0	0	
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
Surface oxygen	6.8	0	1	7.2	0.13	6	6.9	0.07	13	0.0	0	0	0.0	0	0	6.2	0	1	
Midwater oxygen	6.8	0	1	6.8	0.13	6	6.2	0.25	13	0.0	0	0	0.0	0	0	6.0	0	1	
Bottom oxygen	5.2	0	1	4.3	0.49	6	4.2	0.22	13	0.0	0	0	0.0	0	0	4.0	0	1	

Table 18a
 Statistical Zone 14

Summary of dominant organisms taken in statistical zone 14 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	79.6	60.14	0.5	0.34	3	131.5	67.67	0.7	0.34	8	168.9	57.73	1.3	0.42	15
Callinectes similis	2.7	2.67	0.0	0.01	3	4.9	1.58	0.1	0.03	8	41.4	11.79	0.8	0.20	15
Litopenaeus setiferus	100.8	38.48	2.6	1.00	3	63.1	20.08	2.0	0.67	8	30.6	15.43	1.2	0.60	15
Portunus gibbesii	3.5	3.53	0.0	0.03	3	5.0	2.95	0.0	0.02	8	10.5	3.87	0.1	0.03	15
Squilla spp	0.7	0.67	0.0	0.01	3	1.7	0.58	0.0	0.01	8	2.5	1.11	0.0	0.01	15
Callinectes sapidus	3.2	1.74	0.6	0.29	3	3.3	2.20	0.2	0.11	8	6.2	3.04	0.5	0.19	15
Micropogonias undulatus	383.4	362.61	15.5	14.88	3	607.8	259.08	22.2	9.55	8	1881.5	364.69	77.8	14.89	15
Leiostomus xanthurus	10.1	9.10	0.7	0.65	3	33.1	7.16	2.2	0.48	8	93.3	14.71	6.9	1.05	15
Cynoscion arenarius	8.2	8.24	0.7	0.67	3	52.6	39.17	4.1	3.27	8	48.0	17.99	5.2	1.96	15
Prionotus roseus	2.4	2.35	0.1	0.07	3	25.7	17.58	0.6	0.41	8	33.5	17.27	0.9	0.47	15
Stenotomus caprinus	0.0	0.00	0.0	0.00	3	0.3	0.25	0.0	0.01	8	44.8	13.55	0.8	0.27	15
Trichiurus lepturus	7.2	5.34	0.1	0.07	3	47.8	36.55	1.5	1.26	8	20.3	9.34	1.2	0.67	15
Lagodon rhomboides	0.0	0.00	0.0	0.00	3	2.0	1.51	0.1	0.07	8	7.4	2.56	0.3	0.11	15
Stellifer lanceolatus	125.9	125.88	1.7	1.71	3	65.2	42.52	1.1	0.69	8	3.0	2.82	0.1	0.07	15
Squid spp	0.7	0.67	0.0	0.00	3	20.4	12.14	0.2	0.09	8	17.5	10.12	0.1	0.05	15

Table 18a (continued)

Statistical Zone 14

Summary of dominant organisms taken in statistical zone 14 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	523.3	0.00	4.5	0.00	1	798.2	366.24	9.3	3.07	4	120.0	0.00	4.1	0.00	1
Callinectes similis	107.8	0.00	2.2	0.00	1	446.7	288.23	9.7	5.72	4	66.0	0.00	1.5	0.00	1
Litopenaeus setiferus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	1
Portunus gibbesii	0.0	0.00	0.0	0.00	1	4.1	4.09	0.0	0.04	4	0.0	0.00	0.0	0.00	1
Squilla spp	18.9	0.00	0.2	0.00	1	23.4	8.40	0.3	0.11	4	24.0	0.00	0.2	0.00	1
Callinectes sapidus	1.1	0.00	0.1	0.00	1	3.0	1.33	0.4	0.20	4	0.0	0.00	0.0	0.00	1
Micropogonias undulatus	3395.6	0.00	127.3	0.00	1	1763.3	913.33	99.2	50.10	4	1734.0	0.00	96.9	0.00	1
Leiostomus xanthurus	413.3	0.00	30.7	0.00	1	302.1	198.24	28.2	17.89	4	72.0	0.00	7.8	0.00	1
Cynoscion arenarius	114.4	0.00	13.1	0.00	1	130.6	93.84	18.3	14.06	4	96.0	0.00	13.4	0.00	1
Prionotus roseus	222.2	0.00	6.6	0.00	1	136.6	11.77	6.4	1.14	4	234.0	0.00	14.0	0.00	1
Stenotomus caprinus	121.1	0.00	2.5	0.00	1	197.6	53.24	8.7	1.88	4	24.0	0.00	1.2	0.00	1
Trichiurus lepturus	0.0	0.00	0.0	0.00	1	123.2	118.47	5.1	4.79	4	0.0	0.00	0.0	0.00	1
Lagodon rhomboides	534.4	0.00	25.2	0.00	1	46.5	32.58	2.9	1.68	4	0.0	0.00	0.0	0.00	1
Stellifer lanceolatus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	1
Squid spp	0.0	0.00	0.0	0.00	1	0.7	0.73	0.1	0.06	4	0.0	0.00	0.0	0.00	1

Table 18b

Statistical Zone 14

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.																		
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch	39.0	33.19	3	41.8	13.93	8	114.0	17.77	15	0.0	0	0	219.0	60.56	4	196.0	0	1
Total finfish	34.6	31.61	3	38.4	13.46	8	110.0	17.59	15	0.0	0	0	196.0	52.74	4	179.0	0	1
Total crustacean	3.7	1.45	3	3.1	0.66	8	4.1	1.18	15	0.0	0	0	20.5	9.01	4	8.4	0	1
Total other	2.1	0	1	0.3	0.13	5	0.2	0.1	11	0.0	0	0	2.9	1.4	4	7.8	0	1
Surface temperature	25.9	1.01	3	25.4	0.46	10	25.8	0.36	17	0.0	0	0	25.9	0.1	4	25.9	0.33	2
Midwater temperature	25.8	0.93	3	25.5	0.47	10	26.2	0.44	17	0.0	0	0	26.0	0.15	4	25.6	0.39	2
Bottom temperature	25.7	0.97	3	26.1	0.57	10	26.1	0.45	17	0.0	0	0	24.8	0.53	4	20.3	3.67	2
Surface salinity	31.8	0.12	3	32.0	0.48	10	34.2	0.41	17	0.0	0	0	36.3	0.02	4	36.3	0.12	2
Midwater salinity	31.8	0.12	3	32.2	0.44	10	35.2	0.23	17	0.0	0	0	36.4	0.04	4	36.3	0.15	2
Bottom salinity	32.0	0.25	3	33.9	0.28	10	35.7	0.15	17	0.0	0	0	36.4	0.06	4	36.4	0.15	2
Surface chlorophyll	0.2	0.05	2	0.7	0.15	5	0.4	0.12	7	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.7	0.1	3	6.7	0.13	10	6.5	0.06	17	0.0	0	0	6.1	0.03	4	6.1	0.05	2
Midwater oxygen	6.7	0.1	3	6.6	0.13	10	6.0	0.07	17	0.0	0	0	6.0	0.02	4	6.0	0.05	2
Bottom oxygen	6.4	0.22	3	5.1	0.23	10	5.6	0.11	17	0.0	0	0	5.5	0.24	4	4.6	0.65	2

Table 19a
 Statistical Zone 15

Summary of dominant organisms taken in statistical zone 15 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths less than 6 fm.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	0	24.8	17.59	0.1	0.10	5	144.3	95.53	1.2	0.77	6
Callinectes similis	0.0	0.00	0.0	0.00	0	6.1	3.84	0.1	0.10	5	29.2	15.02	0.6	0.31	6
Litopenaeus setiferus	0.0	0.00	0.0	0.00	0	47.6	24.34	2.2	1.22	5	9.8	8.33	0.5	0.43	6
Portunus gibbesii	0.0	0.00	0.0	0.00	0	10.2	3.64	0.1	0.04	5	3.5	2.24	0.0	0.02	6
Squilla spp	0.0	0.00	0.0	0.00	0	4.0	4.00	0.0	0.05	5	2.0	2.00	0.0	0.02	6
Trachypenaeus constrictus	0.0	0.00	0.0	0.00	0	4.0	4.00	0.0	0.02	5	2.0	2.00	0.0	0.00	6
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	3291.5	1298.00	106.0	43.77	5	3455.2	949.17	125.6	31.34	6
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	134.3	40.40	2.0	0.65	5	268.6	186.74	6.2	4.84	6
Leiostomus xanthurus	0.0	0.00	0.0	0.00	0	80.3	57.80	5.3	3.78	5	117.0	47.80	8.0	3.05	6
Prionotus longispinosus	0.0	0.00	0.0	0.00	0	235.0	192.13	4.0	3.08	5	11.6	8.35	0.3	0.19	6
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	0	199.7	125.91	2.2	1.35	5	0.0	0.00	0.0	0.00	6
Peprilus burti	0.0	0.00	0.0	0.00	0	28.7	23.19	2.0	1.63	5	17.5	14.08	1.4	1.08	6
Cynoscion nothus	0.0	0.00	0.0	0.00	0	68.2	38.83	4.1	2.63	5	62.2	28.20	4.7	2.17	6
Cynoscion arenarius	0.0	0.00	0.0	0.00	0	120.0	87.72	11.4	7.95	5	34.8	15.23	4.6	2.14	6
Squid spp	0.0	0.00	0.0	0.00	0	8.9	5.38	0.2	0.11	5	4.1	3.03	0.1	0.07	6

Table 19a (continued)

Statistical Zone 15

Summary of dominant organisms taken in statistical zone 15 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths less than 6 fm.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	10.4	3.65	0.2	0.06	7	15.7	9.39	0.4	0.28	2	174.8	53.66	5.0	1.29	4
Callinectes similis	13.0	9.95	0.2	0.17	7	37.0	2.27	0.8	0.04	2	7.6	5.40	0.2	0.12	4
Litopenaeus setiferus	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	4
Portunus gibbesii	1.3	1.29	0.0	0.01	7	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	4
Squilla spp	0.2	0.16	0.0	0.00	7	1.6	1.58	0.0	0.02	2	0.0	0.00	0.0	0.00	4
Trachypenaeus constrictus	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	4
Micropogonias undulatus	1207.1	484.12	55.6	18.23	7	753.9	19.75	37.9	0.56	2	20.9	12.02	1.8	0.94	4
Stenotomus caprinus	832.4	98.58	24.8	3.34	7	385.4	78.83	11.3	0.16	2	153.1	50.93	6.6	2.54	4
Leiostomus xanthurus	73.5	27.74	6.4	2.54	7	105.5	1.87	7.8	0.01	2	1.6	1.30	0.2	0.13	4
Prionotus longispinosus	44.0	26.47	1.5	0.88	7	0.0	0.00	0.0	0.00	2	25.7	8.69	1.3	0.46	4
Chloroscombrus chrysurus	2.2	1.13	0.1	0.06	7	0.0	0.00	0.0	0.00	2	0.5	0.55	0.0	0.03	4
Peprilus burti	116.9	39.15	8.7	2.88	7	8.1	4.97	0.6	0.37	2	27.4	20.62	2.2	1.59	4
Cynoscion nothus	34.4	8.84	3.1	0.82	7	27.1	13.98	2.6	1.06	2	0.0	0.00	0.0	0.00	4
Cynoscion arenarius	6.2	1.78	1.0	0.19	7	0.0	0.00	0.0	0.00	2	23.9	11.52	4.4	2.19	4
Squid spp	11.8	6.06	0.0	0.03	7	0.0	0.00	0.0	0.00	2	0.5	0.55	0.0	0.01	4

Table 19b

Statistical Zone 15

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths less than 6 fm.																		
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch	0.0	0	0	164.0	50.39	5	169.0	31.52	6	0.0	0	0	92.4	8.67	2	46.7	8.5	4
Total finfish	0.0	0	0	160.0	49.43	5	166.0	30.34	6	0.0	0	0	91.1	8.32	2	38.5	7.87	4
Total crustacean	0.0	0	0	3.0	1.17	5	2.4	1.21	6	0.0	0	0	1.2	0.29	2	5.9	1.15	4
Total other	0.0	0	0	0.3	0.1	4	0.1	0.07	6	0.0	0	0	0.0	0	2	2.2	0.61	4
Surface temperature	26.9	0	1	24.5	1.01	7	24.7	0.53	7	0.0	0	0	26.5	0	1	26.1	0.08	3
Midwater temperature	26.9	0	1	24.4	0.92	7	24.7	0.51	7	0.0	0	0	26.1	0	1	26.0	0.05	3
Bottom temperature	26.7	0	1	24.4	0.99	7	24.9	0.5	7	0.0	0	0	25.8	0	1	21.8	0.34	3
Surface salinity	31.0	0	1	32.4	0.17	7	34.5	0.21	7	0.0	0	0	36.5	0	1	36.4	0.04	3
Midwater salinity	31.0	0	1	32.6	0.22	7	34.8	0.22	7	0.0	0	0	36.4	0	1	36.4	0.04	3
Bottom salinity	31.5	0	1	32.8	0.27	7	35.4	0.16	7	0.0	0	0	36.5	0	1	36.5	0.03	3
Surface chlorophyll	0.2	0	1	0.9	0.25	3	0.9	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.7	0	1	6.9	0.08	7	6.6	0.09	7	0.0	0	0	6.0	0	1	6.0	0.03	3
Midwater oxygen	6.8	0	1	6.8	0.06	7	6.4	0.1	7	0.0	0	0	6.0	0	1	6.0	0	3
Bottom oxygen	6.8	0	1	6.3	0.2	7	6.1	0.1	7	0.0	0	0	5.6	0	1	4.6	0.12	3

Table 20a
 Statistical Zone 16

Summary of dominant organisms taken in statistical zone 16 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	7.8	0.00	0.0	0.00	1	7.9	2.11	0.0	0.01	10	78.9	32.37	1.0	0.30	22
Sicyonia brevirostris	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	10	24.8	11.43	0.4	0.18	22
Callinectes similis	2.6	0.00	0.0	0.00	1	15.4	5.53	0.1	0.09	10	46.1	9.27	1.0	0.21	22
Litopenaeus setiferus	54.8	0.00	2.7	0.00	1	91.8	17.39	3.2	0.51	10	11.0	4.54	0.5	0.22	22
Trachypenaeus constrictus	0.0	0.00	0.0	0.00	1	71.3	38.49	0.1	0.05	10	3.9	2.75	0.0	0.01	22
Squilla spp	2.6	0.00	0.1	0.00	1	1.6	0.95	0.0	0.00	10	11.0	3.69	0.1	0.04	22
Micropogonias undulatus	939.1	0.00	28.4	0.00	1	1407.9	507.50	42.0	14.89	10	3599.7	785.26	128.9	22.47	22
Stenotomus caprinus	47.0	0.00	0.5	0.00	1	494.4	105.51	6.8	1.55	10	372.9	60.80	9.4	2.57	22
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	1	544.0	208.23	5.7	2.40	10	180.8	113.00	2.6	1.46	22
Peprilus burti	2.6	0.00	0.2	0.00	1	49.0	26.93	3.3	1.90	10	91.5	36.35	6.4	2.42	22
Leiostomus xanthurus	0.0	0.00	0.0	0.00	1	24.9	22.97	1.5	1.37	10	109.9	20.09	9.4	2.02	22
Cynoscion nothus	2.6	0.00	0.0	0.00	1	114.5	73.94	7.3	5.31	10	47.8	19.56	3.5	1.31	22
Trichiurus lepturus	10.4	0.00	0.2	0.00	1	123.8	76.40	7.9	5.14	10	27.2	11.82	2.1	0.89	22
Prionotus longispinosus	0.0	0.00	0.0	0.00	1	16.4	4.67	0.3	0.09	10	53.6	17.70	1.4	0.44	22
Squid spp	39.1	0.00	0.3	0.00	1	18.0	6.34	0.2	0.09	10	3.0	1.05	0.1	0.03	22

Table 20a (continued)

Statistical Zone 16

Summary of dominant organisms taken in statistical zone 16 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	61.8	15.08	1.3	0.28	9	369.2	176.92	8.6	3.79	4	25.0	7.09	1.1	0.22	4
Sicyonia brevirostris	60.9	16.63	1.0	0.27	9	34.1	11.07	0.5	0.18	4	6.5	6.55	0.1	0.11	4
Callinectes similis	12.8	4.93	0.3	0.10	9	3.6	1.39	0.1	0.04	4	0.0	0.00	0.0	0.00	4
Litopenaeus setiferus	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	4
Trachypenaeus constrictus	1.4	0.97	0.0	0.00	9	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	4
Squilla spp	27.2	13.94	0.3	0.18	9	3.0	2.06	0.1	0.05	4	0.0	0.00	0.0	0.00	4
Micropogonias undulatus	701.7	205.20	40.6	11.04	9	111.5	65.19	10.1	5.81	4	0.0	0.00	0.0	0.00	4
Stenotomus caprinus	195.6	38.99	6.4	1.19	9	225.2	107.10	8.9	4.16	4	319.8	92.57	14.4	3.82	4
Chloroscombrus chrysurus	0.5	0.48	0.0	0.02	9	0.8	0.82	0.0	0.04	4	0.0	0.00	0.0	0.00	4
Peprilus burti	17.5	10.03	1.3	0.74	9	17.7	17.73	1.4	1.37	4	66.3	38.75	5.3	3.13	4
Leiostomus xanthurus	53.9	20.91	5.0	1.91	9	51.8	22.25	6.0	2.61	4	0.0	0.00	0.0	0.00	4
Cynoscion nothus	5.1	2.20	0.4	0.16	9	3.3	2.60	0.3	0.21	4	0.0	0.00	0.0	0.00	4
Trichiurus lepturus	0.6	0.61	0.0	0.04	9	0.5	0.55	0.0	0.04	4	3.8	2.25	0.3	0.20	4
Prionotus longispinosus	42.1	10.61	1.9	0.49	9	16.3	12.65	0.6	0.44	4	10.2	5.32	0.6	0.29	4
Squid spp	1.8	1.16	0.1	0.05	9	0.8	0.52	0.0	0.01	4	6.9	2.57	0.4	0.17	4

Table 20b

Statistical Zone 16

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.																			
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm			
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	
Total catch	37.3	0	1	90.8	27.05	10	194.0	23.96	22	0.0	0	0	56.8	6.48	4	59.4	11.44	4	
Total finfish	34.2	0	1	83.7	27.77	10	187.0	23.86	22	0.0	0	0	45.1	4.07	4	56.2	11.9	4	
Total crustacean	2.9	0	1	3.6	0.51	10	3.9	0.63	22	0.0	0	0	9.7	3.87	4	2.0	0.88	4	
Total other	0.3	0	1	3.5	3.19	10	3.5	3.47	22	0.0	0	0	1.9	0.92	4	1.2	0.25	4	
Surface temperature	22.2	0	1	22.5	0.33	5	24.1	0.15	20	0.0	0	0	26.0	0.21	2	26.3	0.15	3	
Midwater temperature	22.1	0	1	22.4	0.32	5	24.2	0.17	20	0.0	0	0	26.0	0.24	2	26.3	0.16	3	
Bottom temperature	22.2	0	1	22.4	0.32	5	24.3	0.16	20	0.0	0	0	25.9	0.35	2	20.4	0.78	3	
Surface salinity	32.6	0	1	32.7	0.42	5	34.6	0.23	20	0.0	0	0	36.4	0.03	2	36.4	0.02	3	
Midwater salinity	32.6	0	1	32.7	0.42	5	34.8	0.23	20	0.0	0	0	36.4	0.04	2	36.4	0.02	3	
Bottom salinity	32.7	0	1	32.7	0.42	5	35.1	0.18	20	0.0	0	0	36.4	0.07	2	36.4	0.03	3	
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
Surface oxygen	6.9	0	1	6.7	0.07	5	6.5	0.04	20	0.0	0	0	6.0	0.05	2	6.1	0.03	3	
Midwater oxygen	6.8	0	1	6.6	0.05	5	6.4	0.04	20	0.0	0	0	5.9	0.1	2	6.0	0	3	
Bottom oxygen	6.6	0	1	6.6	0.06	5	6.2	0.04	20	0.0	0	0	5.7	0.3	2	4.4	0.13	3	

Table 21a
Statistical Zone 17

Summary of dominant organisms taken in statistical zone 17 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	0.4	0.43	0.0	0.00	14	5.6	1.53	0.1	0.04	10	18.4	10.37	0.4	0.24	6
Litopenaeus setiferus	24.6	10.19	0.5	0.25	14	75.6	16.78	2.9	0.65	10	0.0	0.00	0.0	0.00	6
Callinectes similis	6.6	2.06	0.0	0.01	14	6.3	2.86	0.0	0.02	10	2.8	1.78	0.1	0.05	6
Sicyonia brevirostris	0.1	0.09	0.0	0.00	14	0.0	0.00	0.0	0.00	10	0.0	0.00	0.0	0.00	6
Xiphopenaeus kroyeri	155.2	109.06	0.4	0.28	14	0.0	0.00	0.0	0.00	10	0.0	0.00	0.0	0.00	6
Portunus spinicarpus	0.0	0.00	0.0	0.00	14	0.0	0.00	0.0	0.00	10	0.0	0.00	0.0	0.00	6
Stenotomus caprinus	13.2	9.12	0.2	0.12	14	1668.6	372.66	21.9	4.72	10	918.8	458.68	34.5	12.10	6
Micropogonias undulatus	9.9	3.01	0.4	0.14	14	1845.2	476.86	65.2	17.02	10	881.5	248.42	48.4	13.36	6
Peprilus burti	2.1	1.35	0.1	0.07	14	54.2	31.38	2.9	1.68	10	103.2	77.57	7.1	5.34	6
Trichiurus lepturus	6.8	2.41	0.1	0.04	14	171.3	59.19	4.0	1.39	10	7.7	3.80	0.6	0.27	6
Lutjanus synagris	0.0	0.00	0.0	0.00	14	0.0	0.00	0.0	0.00	10	71.7	36.20	3.8	1.57	6
Synodus foetens	0.0	0.00	0.0	0.00	14	7.1	3.15	0.6	0.30	10	130.3	52.93	12.4	5.43	6
Prionotus longispinosus	0.0	0.00	0.0	0.00	14	115.3	71.15	1.9	1.22	10	3.6	3.64	0.1	0.12	6
Cynoscion nothus	45.0	13.53	0.2	0.04	14	52.0	12.19	2.0	0.58	10	43.3	31.97	3.0	2.11	6
Squid spp	63.9	12.19	0.7	0.15	14	39.4	9.00	0.6	0.15	10	0.0	0.00	0.0	0.00	6

Table 21a (continued)

Statistical Zone 17

Summary of dominant organisms taken in statistical zone 17 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	172.6	150.78	4.1	3.43	4	131.3	49.53	3.5	1.28	5	126.4	27.43	4.9	0.88	5
Litopenaeus setiferus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	5
Callinectes similis	37.3	30.92	0.9	0.79	4	73.5	26.31	1.5	0.52	5	7.0	3.31	0.2	0.08	5
Sicyonia brevirostris	24.0	11.71	0.3	0.16	4	80.1	27.34	1.2	0.42	5	8.1	4.79	0.1	0.07	5
Xiphopenaeus kroyeri	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	5
Portunus spinicarpus	1.6	1.64	0.0	0.01	4	16.1	16.15	0.1	0.13	5	89.7	30.00	0.7	0.21	5
Stenotomus caprinus	1151.1	307.27	39.4	11.71	4	1055.3	341.24	32.9	9.66	5	271.4	106.28	12.2	5.03	5
Micropogonias undulatus	470.6	146.75	28.1	9.20	4	100.6	50.14	7.3	3.07	5	4.7	1.59	0.7	0.23	5
Peprilus burti	116.1	56.04	8.1	3.90	4	116.7	56.93	7.9	3.91	5	75.9	47.78	6.2	3.90	5
Trichiurus lepturus	4.3	4.29	0.3	0.26	4	5.2	3.28	0.4	0.24	5	12.4	5.63	0.8	0.35	5
Lutjanus synagris	218.3	78.76	10.6	3.33	4	63.0	26.17	2.9	1.15	5	0.0	0.00	0.0	0.00	5
Synodus foetens	40.6	5.97	7.3	1.62	4	43.0	18.78	6.6	2.98	5	17.2	5.42	2.9	1.07	5
Prionotus longispinosus	14.1	8.00	0.4	0.22	4	28.9	7.75	1.3	0.32	5	17.3	5.12	1.5	0.50	5
Cynoscion nothus	9.4	5.45	0.9	0.50	4	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	5
Squid spp	0.0	0.00	0.0	0.00	4	5.7	5.67	0.3	0.34	5	7.5	3.12	0.2	0.14	5

Table 22a
Statistical Zone 18

Summary of dominant organisms taken in statistical zone 18 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Litopenaeus setiferus	264.3	251.27	2.8	2.40	6	36.8	10.67	0.7	0.14	14	18.0	18.00	0.2	0.21	8
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	6	6.3	3.89	0.1	0.04	14	116.5	51.57	2.3	1.09	8
Callinectes similis	2.2	1.38	0.0	0.01	6	11.8	3.19	0.1	0.01	14	59.0	23.21	1.2	0.51	8
Trachypenaeus similis	9.9	6.56	0.0	0.01	6	140.2	41.48	0.3	0.08	14	29.8	21.34	0.1	0.04	8
Squilla spp	4.7	3.66	0.0	0.03	6	26.0	7.20	0.2	0.05	14	52.5	26.96	0.5	0.23	8
Sicyonia brevirostris	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	14	5.4	3.77	0.1	0.06	8
Stenotomus caprinus	0.0	0.00	0.0	0.00	6	55.0	33.98	1.0	0.62	14	327.2	175.94	10.8	6.10	8
Chloroscombrus chrysurus	214.8	164.32	1.4	1.09	6	669.0	424.63	4.9	3.03	14	61.3	40.82	2.6	1.69	8
Micropogonias undulatus	235.9	233.52	7.6	7.55	6	350.0	251.23	10.1	6.47	14	270.5	95.73	15.4	5.32	8
Cynoscion nothus	92.8	39.67	0.4	0.17	6	175.0	28.66	1.9	0.79	14	42.1	20.30	1.7	1.38	8
Peprilus burti	5.7	5.69	0.2	0.20	6	22.5	14.44	1.0	0.66	14	31.5	20.71	2.3	1.49	8
Stellifer lanceolatus	104.3	55.90	1.2	0.79	6	48.0	15.86	0.5	0.15	14	131.3	101.41	0.7	0.55	8
Anchoa hepsetus	17.5	17.45	0.2	0.25	6	58.3	40.25	0.9	0.63	14	0.0	0.00	0.0	0.00	8
Upeneus parvus	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	14	4.8	3.21	0.1	0.09	8
Squid spp	96.8	38.68	1.0	0.43	6	76.0	19.54	0.8	0.36	14	33.1	25.41	0.3	0.24	8

Table 22a (continued)

Statistical Zone 18

Summary of dominant organisms taken in statistical zone 18 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Litopenaeus setiferus	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Farfantepenaeus aztecus	79.2	35.65	2.3	1.21	6	52.5	0.00	1.7	0.00	1	0.0	0.00	0.0	0.00	0
Callinectes similis	10.3	3.04	0.2	0.07	6	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Trachypenaeus similis	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Squilla spp	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Sicyonia brevirostris	33.6	9.60	0.5	0.14	6	11.3	0.00	0.1	0.00	1	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	1147.1	299.38	44.3	10.79	6	1170.0	0.00	38.3	0.00	1	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	168.4	115.18	7.3	4.68	6	75.0	0.00	4.1	0.00	1	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	104.1	46.23	7.0	2.68	6	146.3	0.00	11.9	0.00	1	0.0	0.00	0.0	0.00	0
Cynoscion nothus	34.3	34.34	2.3	2.30	6	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Peprilus burti	54.5	27.69	3.9	1.92	6	191.3	0.00	13.5	0.00	1	0.0	0.00	0.0	0.00	0
Stellifer lanceolatus	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Anchoa hepsetus	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Upeneus parvus	79.6	28.75	2.6	0.98	6	116.3	0.00	4.6	0.00	1	0.0	0.00	0.0	0.00	0
Squid spp	1.4	1.43	0.1	0.09	6	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0

Table 21b

Statistical Zone 17

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.																		
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch	8.8	1.57	14	134.0	27.34	10	157.0	11.93	6	0.0	0	0	91.1	11.19	5	62.5	14.48	5
Total finfish	3.9	1.2	14	128.0	27.32	10	156.0	11.72	6	0.0	0	0	81.4	12.53	5	53.9	13.95	5
Total crustacean	1.3	0.4	13	3.3	0.64	10	0.7	0.31	6	0.0	0	0	8.5	1.73	5	7.2	1.18	5
Total other	4.0	1.44	14	2.5	1.09	10	0.0	0	6	0.0	0	0	1.2	0.43	5	1.4	0.34	5
Surface temperature	18.6	0.46	14	22.0	0.51	9	24.5	0.23	5	0.0	0	0	26.7	0.04	2	26.6	0	2
Midwater temperature	18.6	0.43	14	22.0	0.48	9	24.5	0.27	5	0.0	0	0	26.7	0.05	2	26.6	0.02	2
Bottom temperature	18.9	0.46	14	22.1	0.41	9	24.5	0.26	5	0.0	0	0	23.2	0.63	2	21.9	0.03	2
Surface salinity	28.2	0.42	14	32.8	0.69	9	35.3	0.17	5	0.0	0	0	36.2	0.23	2	36.4	0.01	2
Midwater salinity	33.5	4.83	14	33.1	0.47	9	35.3	0.17	5	0.0	0	0	36.3	0.22	2	36.4	0.01	2
Bottom salinity	28.9	0.5	14	33.2	0.46	9	35.4	0.16	5	0.0	0	0	36.5	0	2	36.5	0.01	2
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	7.8	0.11	14	6.8	0.17	9	6.3	0.07	5	0.0	0	0	6.0	0	2	6.0	0.05	2
Midwater oxygen	7.6	0.15	14	6.7	0.14	9	6.3	0.06	5	0.0	0	0	6.0	0	2	6.0	0.05	2
Bottom oxygen	7.2	0.24	14	6.7	0.08	9	6.3	0.06	5	0.0	0	0	4.9	0.05	2	4.7	0.05	2

Table 22b

Statistical Zone 18

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 40 fm.																		
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch	19.7	14.29	6	31.4	17.08	14	58.6	15.88	8	0.0	0	0	103.0	0	1	0.0	0	0
Total finfish	14.0	11.36	6	25.9	14.71	14	50.7	16.79	8	0.0	0	0	102.0	0	1	0.0	0	0
Total crustacean	3.6	2.88	5	1.3	0.22	14	5.7	1.67	8	0.0	0	0	1.9	0	1	0.0	0	0
Total other	2.9	1.07	6	4.1	2.91	14	2.2	1.9	8	0.0	0	0	0.0	0	1	0.0	0	0
Surface temperature	23.2	0.85	6	21.9	0.86	14	24.0	1.44	7	0.0	0	0	26.6	0	1	0.0	0	0
Midwater temperature	23.0	0.95	6	21.6	0.81	14	24.2	1.48	7	0.0	0	0	26.6	0	1	0.0	0	0
Bottom temperature	22.9	0.86	6	21.6	0.79	14	24.8	1.66	7	0.0	0	0	24.8	0	1	0.0	0	0
Surface salinity	29.3	0.13	6	31.3	0.37	14	33.1	0.43	7	0.0	0	0	34.9	0	1	0.0	0	0
Midwater salinity	29.4	0.12	6	31.6	0.28	14	33.3	0.59	7	0.0	0	0	34.9	0	1	0.0	0	0
Bottom salinity	29.5	0.12	6	32.2	0.34	14	33.8	0.64	7	0.0	0	0	36.4	0	1	0.0	0	0
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	7.2	0.19	6	6.7	0.08	14	6.2	0.06	7	0.0	0	0	6.0	0	1	0.0	0	0
Midwater oxygen	7.2	0.17	6	6.6	0.08	14	6.1	0.11	7	0.0	0	0	6.0	0	1	0.0	0	0
Bottom oxygen	6.9	0.19	6	6.5	0.06	14	5.5	0.27	7	0.0	0	0	4.2	0	1	0.0	0	0

Table 23a
 Statistical Zone 19

Summary of dominant organisms taken in statistical zone 19 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	52.9	47.54	0.2	0.15	5	20.0	17.52	0.3	0.24	18	146.7	43.60	2.6	0.81	16
Squilla spp	15.9	8.62	0.1	0.07	5	12.8	5.93	0.1	0.06	18	46.2	18.83	0.4	0.18	16
Callinectes similis	1.7	1.71	0.0	0.02	5	7.0	2.46	0.1	0.03	18	39.8	17.21	0.7	0.41	16
Trachypenaeus similis	0.7	0.69	0.0	0.00	5	13.9	6.33	0.0	0.01	18	42.6	17.88	0.1	0.05	16
Litopenaeus setiferus	117.4	76.33	2.1	1.29	5	31.8	13.23	0.7	0.33	18	6.4	2.75	0.3	0.13	16
Portunus gibbesii	34.3	17.91	0.2	0.08	5	7.6	6.53	0.0	0.04	18	23.4	7.93	0.1	0.04	16
Chloroscombrus chrysurus	2124.0	900.84	7.8	3.39	5	1072.8	481.94	7.9	3.09	18	720.5	257.10	13.1	3.83	16
Stenotomus caprinus	0.0	0.00	0.0	0.00	5	120.7	118.00	2.8	2.71	18	1007.4	210.29	22.3	4.57	16
Micropogonias undulatus	3.6	2.40	0.1	0.07	5	189.8	117.11	8.8	5.30	18	781.2	182.10	43.3	9.68	16
Harengula jaguana	7.9	5.46	0.1	0.09	5	332.2	181.83	4.2	2.18	18	29.8	16.36	0.7	0.38	16
Syacium gunteri	2.7	1.11	0.1	0.04	5	27.0	9.42	0.5	0.17	18	111.0	27.74	1.9	0.52	16
Cynoscion nothus	87.7	50.46	0.3	0.12	5	78.7	22.26	1.6	0.50	18	43.3	18.62	2.8	1.23	16
Peprilus burti	2.1	1.32	0.1	0.06	5	8.7	4.17	0.3	0.16	18	82.5	28.58	4.3	1.47	16
Peprilus alepidotus	82.9	56.99	0.7	0.52	5	96.9	76.86	1.6	1.10	18	10.1	5.17	0.4	0.20	16
Squid spp	40.4	19.80	0.4	0.15	5	110.7	58.48	1.1	0.47	18	32.0	11.50	0.4	0.12	16

Table 23a (continued)

Statistical Zone 19

Summary of dominant organisms taken in statistical zone 19 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 30 fm.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	109.0	44.86	3.5	1.42	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squilla spp	4.2	2.90	0.1	0.08	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes similis	55.2	38.56	1.5	1.06	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachypenaeus similis	2.2	2.20	0.0	0.01	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Litopenaeus setiferus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Portunus gibbesii	1.5	1.47	0.0	0.01	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	365.0	209.43	10.3	4.84	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	871.4	294.73	21.3	6.63	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	141.2	31.57	10.0	2.23	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Harengula jaguana	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Syacium gunteri	8.3	5.72	0.2	0.12	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion nothus	4.4	4.36	0.4	0.37	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Peprilus burti	56.9	23.66	3.6	1.55	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Peprilus alepidotus	3.4	1.46	0.1	0.07	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid spp	15.2	14.38	0.1	0.10	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 23b

Statistical Zone 19

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths greater than 30 fm.																		
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch	46.0	14.55	5	43.0	15.32	18	128.0	20.1	16	0.0	0	0	0.0	0	0	0.0	0	0
Total finfish	31.4	15.24	5	39.5	14.62	18	120.0	19.94	16	0.0	0	0	0.0	0	0	0.0	0	0
Total crustacean	3.3	1.57	4	1.6	0.49	17	5.2	1.5	16	0.0	0	0	0.0	0	0	0.0	0	0
Total other	11.8	8.03	5	2.0	0.47	18	3.3	2.04	16	0.0	0	0	0.0	0	0	0.0	0	0
Surface temperature	24.9	1.25	5	23.0	0.66	20	26.7	0.43	14	0.0	0	0	0.0	0	0	26.6	0	1
Midwater temperature	24.8	1.28	5	23.0	0.67	20	26.9	0.44	14	0.0	0	0	0.0	0	0	27.3	0	1
Bottom temperature	24.9	1.16	5	24.2	0.74	20	27.5	0.45	14	0.0	0	0	0.0	0	0	28.0	0	1
Surface salinity	29.6	0.38	5	30.6	0.23	20	31.8	0.32	14	0.0	0	0	0.0	0	0	30.4	0	1
Midwater salinity	29.7	0.35	5	31.1	0.25	20	32.4	0.29	14	0.0	0	0	0.0	0	0	32.2	0	1
Bottom salinity	29.9	0.44	5	31.8	0.2	20	33.8	0.32	14	0.0	0	0	0.0	0	0	34.0	0	1
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	7.2	0.21	5	6.8	0.08	20	6.4	0.12	14	0.0	0	0	0.0	0	0	6.8	0	1
Midwater oxygen	7.2	0.18	5	6.7	0.1	20	6.3	0.11	14	0.0	0	0	0.0	0	0	6.4	0	1
Bottom oxygen	7.1	0.28	5	6.2	0.16	20	5.4	0.15	14	0.0	0	0	0.0	0	0	5.3	0	1

Table 24a
 Statistical Zone 20

Summary of dominant organisms taken in statistical zone 20 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	3	3.3	2.66	0.0	0.02	15	134.0	69.16	2.2	1.18	10
Callinectes similis	0.0	0.00	0.0	0.00	3	2.6	1.21	0.0	0.01	15	68.9	58.43	1.5	1.42	10
Sicyonia dorsalis	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	15	0.4	0.36	0.0	0.00	10
Trachypenaeus similis	0.0	0.00	0.0	0.00	3	1.2	0.87	0.0	0.00	15	12.0	5.26	0.0	0.01	10
Squilla spp	0.5	0.49	0.0	0.00	3	3.3	2.53	0.0	0.02	15	6.4	2.66	0.1	0.02	10
Litopenaeus setiferus	2.5	1.81	0.1	0.08	3	7.5	3.41	0.1	0.07	15	4.2	1.91	0.2	0.08	10
Chloroscombrus chrysurus	779.1	429.47	21.4	15.67	3	928.1	426.52	8.6	5.88	15	1625.7	581.31	19.1	5.76	10
Stenotomus caprinus	0.0	0.00	0.0	0.00	3	7.5	7.06	0.1	0.13	15	263.0	108.23	4.7	2.03	10
Serranus atrobranchus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	15	38.7	38.65	0.3	0.34	10
Syacium gunteri	0.0	0.00	0.0	0.00	3	14.4	4.66	0.2	0.08	15	164.7	30.91	2.6	0.48	10
Micropogonias undulatus	0.0	0.00	0.0	0.00	3	46.6	29.52	2.6	1.77	15	54.8	33.20	3.7	2.21	10
Synodus foetens	0.5	0.49	0.0	0.00	3	4.3	3.01	0.3	0.18	15	50.4	14.45	3.4	0.98	10
Lutjanus campechanus	4.1	2.26	0.1	0.05	3	1.7	1.06	0.0	0.03	15	32.5	11.09	0.6	0.18	10
Trachurus lathami	0.0	0.00	0.0	0.00	3	0.8	0.82	0.0	0.02	15	4.5	2.48	0.1	0.06	10
Squid spp	8.2	5.01	0.1	0.09	3	63.4	12.83	0.5	0.11	15	87.2	24.56	0.6	0.20	10

Table 24a (continued)

Statistical Zone 20

Summary of dominant organisms taken in statistical zone 20 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Farfantepenaeus aztecus	276.6	85.57	8.6	2.65	7	143.8	67.42	3.6	1.65	10	91.0	64.36	3.5	2.69	2
Callinectes similis	176.5	51.38	4.1	1.17	7	66.0	29.31	1.0	0.49	10	4.6	4.62	0.1	0.09	2
Sicyonia dorsalis	42.4	23.31	0.1	0.06	7	30.8	24.07	0.1	0.07	10	0.0	0.00	0.0	0.00	2
Trachypenaeus similis	32.0	17.10	0.2	0.09	7	3.1	3.08	0.0	0.02	10	0.0	0.00	0.0	0.00	2
Squilla spp	6.6	3.13	0.1	0.03	7	6.0	3.19	0.1	0.04	10	0.0	0.00	0.0	0.00	2
Litopenaeus setiferus	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	10	0.0	0.00	0.0	0.00	2
Chloroscombrus chrysurus	316.5	238.40	8.8	5.79	7	14.7	13.12	0.7	0.61	10	0.0	0.00	0.0	0.00	2
Stenotomus caprinus	347.6	161.52	8.6	4.24	7	251.3	47.73	6.7	1.23	10	250.1	66.79	9.3	1.51	2
Serranus atrobranchus	107.4	43.37	0.8	0.37	7	140.2	67.41	1.1	0.57	10	30.3	23.59	0.2	0.15	2
Syacium gunteri	85.2	44.17	1.2	0.57	7	7.3	3.46	0.1	0.04	10	0.0	0.00	0.0	0.00	2
Micropogonias undulatus	99.9	27.58	7.9	2.00	7	45.2	25.94	3.8	2.18	10	23.5	13.46	1.8	0.96	2
Synodus foetens	61.3	16.16	6.2	1.49	7	40.7	10.60	4.7	1.25	10	58.8	31.15	7.3	2.96	2
Lutjanus campechanus	66.4	11.06	2.1	0.79	7	34.9	12.35	1.3	0.35	10	0.0	0.00	0.0	0.00	2
Trachurus lathami	72.1	40.28	1.5	0.86	7	32.7	26.59	0.7	0.60	10	6.9	6.92	0.1	0.14	2
Squid spp	38.3	31.29	0.1	0.12	7	13.5	4.40	0.1	0.05	10	54.0	49.36	0.3	0.03	2

Table 24b

Statistical Zone 20

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.																			
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm			
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	
Total catch	39.0	14.04	3	38.0	19.26	15	47.3	11.13	10	0.0	0	0	35.9	6.79	1	0	63.2	17.15	2
Total finfish	26.7	14.83	3	18.1	8.87	15	42.3	11.11	10	0.0	0	0	30.0	5.27	1	0	56.7	13.65	2
Total crustacean	0.2	0.2	3	0.6	0.1	14	4.3	2.52	10	0.0	0	0	5.3	2.31	1	0	5.1	3.08	2
Total other	12.2	10.16	3	19.8	18.33	15	0.9	0.22	10	0.0	0	0	0.5	0.18	1	0	1.4	0.42	2
Surface temperature	25.6	1.38	4	22.9	0.66	15	26.0	0.69	11	0.0	0	0	28.0	0.1	6	28.2	0.07	3	
Midwater temperature	25.6	1.38	4	22.9	0.65	15	26.3	0.76	11	0.0	0	0	28.3	0.06	6	28.3	0.1	3	
Bottom temperature	25.5	1.36	4	22.9	0.64	15	26.7	0.81	11	0.0	0	0	24.3	0.52	6	21.5	0.12	3	
Surface salinity	30.2	0.52	4	31.2	0.27	15	31.4	0.38	11	0.0	0	0	35.2	0.33	6	35.9	0.22	3	
Midwater salinity	30.2	0.52	4	31.3	0.22	15	32.2	0.45	11	0.0	0	0	36.1	0.13	6	36.1	0.04	3	
Bottom salinity	30.3	0.5	4	35.5	4.03	15	33.9	0.53	11	0.0	0	0	36.5	0.03	6	36.6	0.01	3	
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
Surface oxygen	7.0	0.2	4	6.7	0.04	15	6.7	0.11	11	0.0	0	0	5.8	0.04	6	5.8	0	3	
Midwater oxygen	7.1	0.19	4	6.7	0.05	15	6.3	0.18	11	0.0	0	0	5.7	0.02	6	5.8	0.03	3	
Bottom oxygen	7.0	0.21	4	6.6	0.05	15	5.6	0.24	11	0.0	0	0	5.4	0.13	6	4.6	0.1	3	

Table 25a
 Statistical Zone 21

Summary of dominant organisms taken in statistical zone 21 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes similis	0.0	0.00	0.0	0.00	2	0.8	0.54	0.0	0.02	14	47.6	26.62	1.2	0.67	20
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	2	4.3	2.35	0.0	0.02	14	99.6	35.62	1.9	0.73	20
Trachypenaeus similis	0.0	0.00	0.0	0.00	2	47.9	47.95	0.1	0.05	14	32.7	21.38	0.0	0.03	20
Sicyonia dorsalis	0.0	0.00	0.0	0.00	2	1.0	0.59	0.0	0.00	14	5.0	3.02	0.0	0.00	20
Portunus spinicarpus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	14	0.5	0.50	0.0	0.00	20
Farfantepenaeus duorarum	0.0	0.00	0.0	0.00	2	7.8	6.49	0.1	0.14	14	23.2	15.74	0.4	0.30	20
Chloroscombrus chrysurus	93.5	81.50	0.9	0.86	2	483.6	155.88	6.6	2.35	14	1124.7	437.44	21.0	7.96	20
Syacium gunteri	2.5	2.50	0.2	0.15	2	8.0	3.24	0.2	0.06	14	150.4	41.31	2.4	0.61	20
Stenotomus caprinus	0.0	0.00	0.0	0.00	2	20.5	11.09	0.4	0.21	14	252.1	68.61	4.7	1.24	20
Serranus atrobranchus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	14	10.2	8.03	0.1	0.07	20
Upeneus parvus	0.0	0.00	0.0	0.00	2	0.8	0.68	0.0	0.01	14	25.3	10.35	0.6	0.27	20
Cynoscion nothus	10.0	10.00	0.3	0.27	2	4.1	2.85	0.0	0.02	14	82.2	40.82	2.5	1.23	20
Synodus foetens	15.0	15.00	0.8	0.75	2	5.2	2.35	0.2	0.10	14	33.4	9.51	1.7	0.56	20
Micropogonias undulatus	0.0	0.00	0.0	0.00	2	0.2	0.17	0.0	0.02	14	47.6	26.15	3.8	2.12	20
Squid spp	15.0	15.00	0.1	0.07	2	83.0	30.44	0.6	0.17	14	51.6	12.92	0.4	0.09	20

Table 25a (continued)

Statistical Zone 21

Summary of dominant organisms taken in statistical zone 21 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

SPECIES	21-30 fm					31-40 fm					>40 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes similis	458.0	134.04	12.2	3.36	5	0.0	0.00	0.0	0.00	0	7.1	4.34	0.1	0.06	5
Farfantepenaeus aztecus	134.3	34.06	3.2	0.83	5	0.0	0.00	0.0	0.00	0	154.2	40.73	4.7	1.40	5
Trachypenaeus similis	134.4	80.96	0.4	0.20	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5
Sicyonia dorsalis	205.7	172.89	0.5	0.44	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5
Portunus spinicarpus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0	59.6	19.99	0.3	0.10	5
Farfantepenaeus duorarum	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5
Chloroscombrus chrysurus	139.2	81.44	6.0	3.57	5	0.0	0.00	0.0	0.00	0	1.1	1.09	0.0	0.01	5
Syacium gunteri	315.0	86.40	3.3	0.99	5	0.0	0.00	0.0	0.00	0	0.6	0.63	0.0	0.01	5
Stenotomus caprinus	111.4	52.44	2.0	1.05	5	0.0	0.00	0.0	0.00	0	86.4	35.12	2.4	0.78	5
Serranus atrobranchus	220.8	62.29	2.1	0.61	5	0.0	0.00	0.0	0.00	0	231.1	48.11	2.0	0.39	5
Upeneus parvus	49.4	25.66	2.0	1.15	5	0.0	0.00	0.0	0.00	0	99.2	49.70	2.8	1.33	5
Cynoscion nothus	11.1	7.80	0.3	0.12	5	0.0	0.00	0.0	0.00	0	0.2	0.22	0.0	0.02	5
Synodus foetens	49.8	27.96	5.0	2.90	5	0.0	0.00	0.0	0.00	0	32.4	13.50	2.8	1.09	5
Micropogonias undulatus	69.2	24.73	5.0	2.02	5	0.0	0.00	0.0	0.00	0	3.2	1.86	0.4	0.18	5
Squid spp	14.9	9.78	0.1	0.07	5	0.0	0.00	0.0	0.00	0	62.1	31.77	0.7	0.11	5

Table 25b

Statistical Zone 21

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm.																		
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch	10.3	9.7	2	26.5	11.69	14	58.8	11.6	20	0.0	0	0	0.0	0	0	33.6	4.07	5
Total finfish	3.3	2.7	2	9.5	2.67	14	52.5	11.4	20	0.0	0	0	0.0	0	0	25.1	5.14	5
Total crustacean	1.8	1.2	2	1.2	0.73	11	5.0	1.48	19	0.0	0	0	0.0	0	0	5.6	1.44	5
Total other	5.6	4.95	2	16.3	9.29	14	1.7	0.34	19	0.0	0	0	0.0	0	0	2.9	0.21	5
Surface temperature	27.2	1.41	2	25.4	0.75	14	27.3	0.41	21	0.0	0	0	0.0	0	0	28.5	0.05	3
Midwater temperature	27.2	1.42	2	25.3	0.8	14	27.4	0.4	21	0.0	0	0	0.0	0	0	28.6	0.2	3
Bottom temperature	27.2	1.41	2	25.2	0.83	14	27.6	0.43	21	0.0	0	0	0.0	0	0	21.6	0.22	3
Surface salinity	33.8	0.18	2	33.7	0.18	14	33.1	0.14	21	0.0	0	0	0.0	0	0	34.6	0.19	3
Midwater salinity	33.9	0.08	2	33.7	0.19	14	33.4	0.13	21	0.0	0	0	0.0	0	0	36.1	0.07	3
Bottom salinity	33.9	0.09	2	33.7	0.18	14	34.3	0.23	21	0.0	0	0	0.0	0	0	36.5	0.01	3
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.0	0.4	2	6.6	0.13	14	6.3	0.07	21	0.0	0	0	0.0	0	0	5.8	0.06	3
Midwater oxygen	6.0	0.4	2	6.6	0.15	14	6.2	0.07	21	0.0	0	0	0.0	0	0	5.0	0.07	3
Bottom oxygen	6.1	0.35	2	6.3	0.14	14	5.4	0.17	21	0.0	0	0	0.0	0	0	4.5	0.22	3

Table 26a
 Statistical Zone 22

Summary of dominant organisms taken in statistical zone 22 during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths less than 6 fm or greater than 10 fm.

SPECIES	0-5 fm					6-10 fm					11-20 fm				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Portunus spinimanus	0.0	0.00	0.0	0.00	0	6.0	0.00	0.1	0.00	1	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	0	2718.0	0.00	17.3	0.00	1	0.0	0.00	0.0	0.00	0
Eucinostomus argenteus	0.0	0.00	0.0	0.00	0	6.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Peprilus burti	0.0	0.00	0.0	0.00	0	6.0	0.00	0.3	0.00	1	0.0	0.00	0.0	0.00	0
Selene vomer	0.0	0.00	0.0	0.00	0	6.0	0.00	0.1	0.00	1	0.0	0.00	0.0	0.00	0
Syacium gunteri	0.0	0.00	0.0	0.00	0	6.0	0.00	0.1	0.00	1	0.0	0.00	0.0	0.00	0
Squid spp	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0

Table 26b

Statistical Zone 22

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (n) of samples taken during the 2005 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m ³ , and oxygen in ppm. No trawl samples were taken in depths less than 6 fm or greater than 10 fm.																		
Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch	0.0	0	0	18.6	0	1	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Total finfish	0.0	0	0	18.0	0	1	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Total crustacean	0.0	0	0	0.6	0	1	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Total other	0.0	0	0	0.6	0	1	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface temperature	0.0	0	0	25.5	0	1	28.7	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Midwater temperature	0.0	0	0	26.1	0	1	28.7	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Bottom temperature	0.0	0	0	26.3	0	1	28.7	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Surface salinity	0.0	0	0	33.0	0	1	34.1	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Midwater salinity	0.0	0	0	33.2	0	1	34.1	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Bottom salinity	0.0	0	0	34.7	0	1	34.2	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	0.0	0	0	6.3	0	1	5.7	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Midwater oxygen	0.0	0	0	5.8	0	1	5.6	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Bottom oxygen	0.0	0	0	4.7	0	1	5.6	0	1	0.0	0	0	0.0	0	0	0.0	0	0

Table 27. 2005 ReeffishSurvey species composition list, 48 trap stations where a fish trap was used.

Species with a total weight of less than 0.0227 kg (0.05 lb) are indicated on the table as 0.0 kg.

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
<u>Finfishes</u>					
Rhomboplites aurorubens	vermilion snapper	144	69.4	10	1.7
Pagrus pagrus	red porgy	58	30.4	15	2.5
Lutjanus campechanus	red snapper	52	93.6	13	2.2
Balistes capriscus	gray triggerfish	27	22.7	8	1.3
Mycteroperca phenax	scamp	23	44.1	11	1.8
Epinephelus morio	red grouper	18	36.9	6	1.0
Calamus nodosus	knobbed porgy	11	6.2	4	0.7
Haemulon aurolineatum	tomtate	4	0.7	2	0.3
Caulolatilus microps	blue-line tilefish	2	9.4	2	0.3
Diplectrum formosum	sand perch	2	0.3	1	0.2
Epinephelus flavolimbatus	yellowedge grouper	2	2.2	1	0.2
Holacanthus bermudensis	blue angelfish	2	1.1	2	0.3
Mycteroperca microlepis	gag	2	10.6	2	0.3
Calamus leucosteus	whitebone porgy	1	0.4	1	0.2
Chaetodon sedentarius	reef butterflyfish	1	0.1	1	0.2
Epinephelus adscensionis	rock hind	1	0.1	1	0.2
Epinephelus drummondhayi	speckled hind	1	2.0	1	0.2
Epinephelus nigritus	warsaw grouper	1	16.8	1	0.2
Epinephelus niveatus	snowy grouper	1	0.8	1	0.2
Gymnothorax moringa	spotted moray	1	0.7	1	0.2
Haemulon melanurum	cottonwick	1	0.5	1	0.2
Muraena retifera	reticulate moray	1	1.2	1	0.2
Opsanus pardus	leopard toadfish	1	1.7	1	0.2

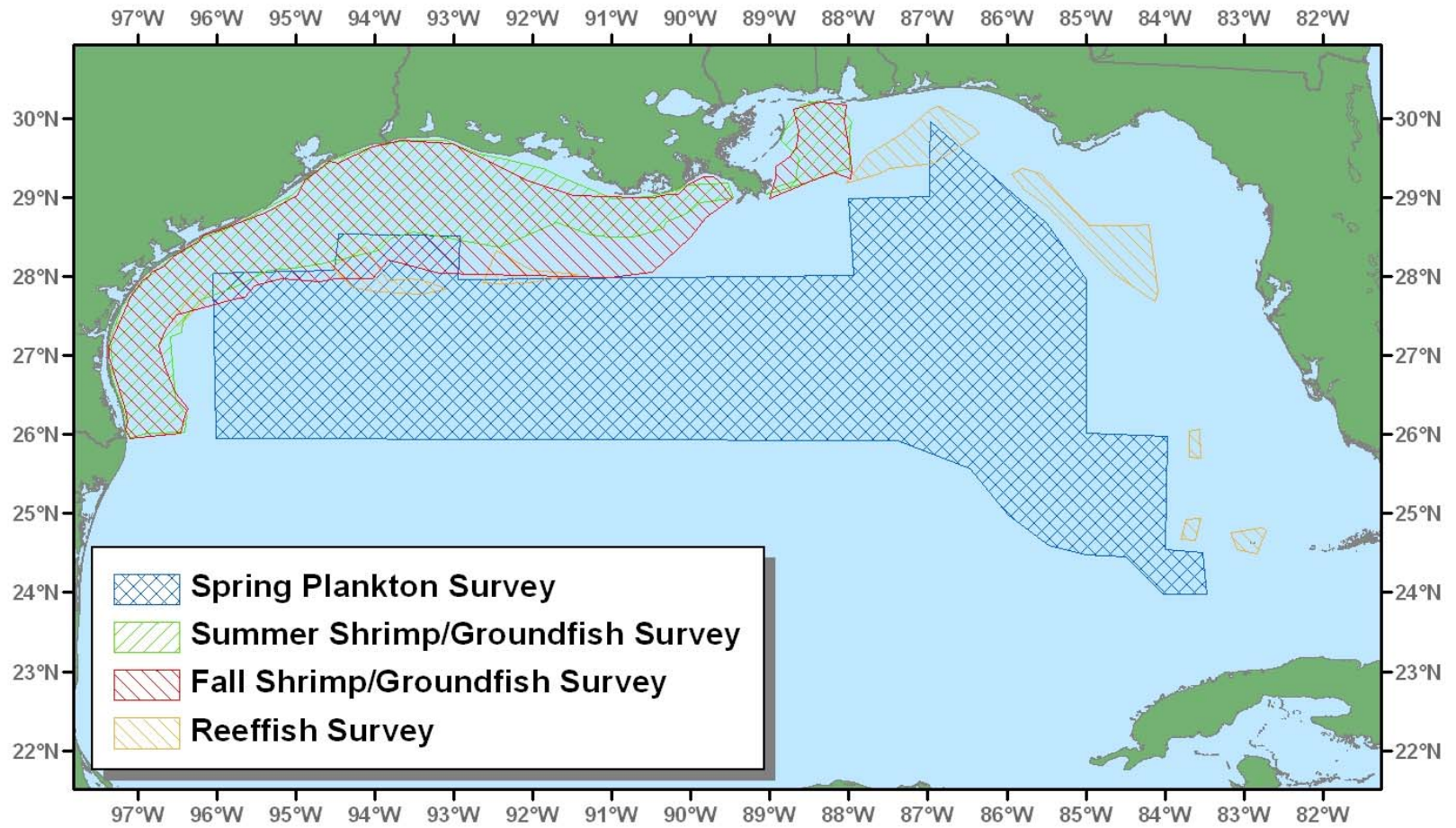


Figure 1. 2005 SEAMAP Surveys, Gulf of Mexico.

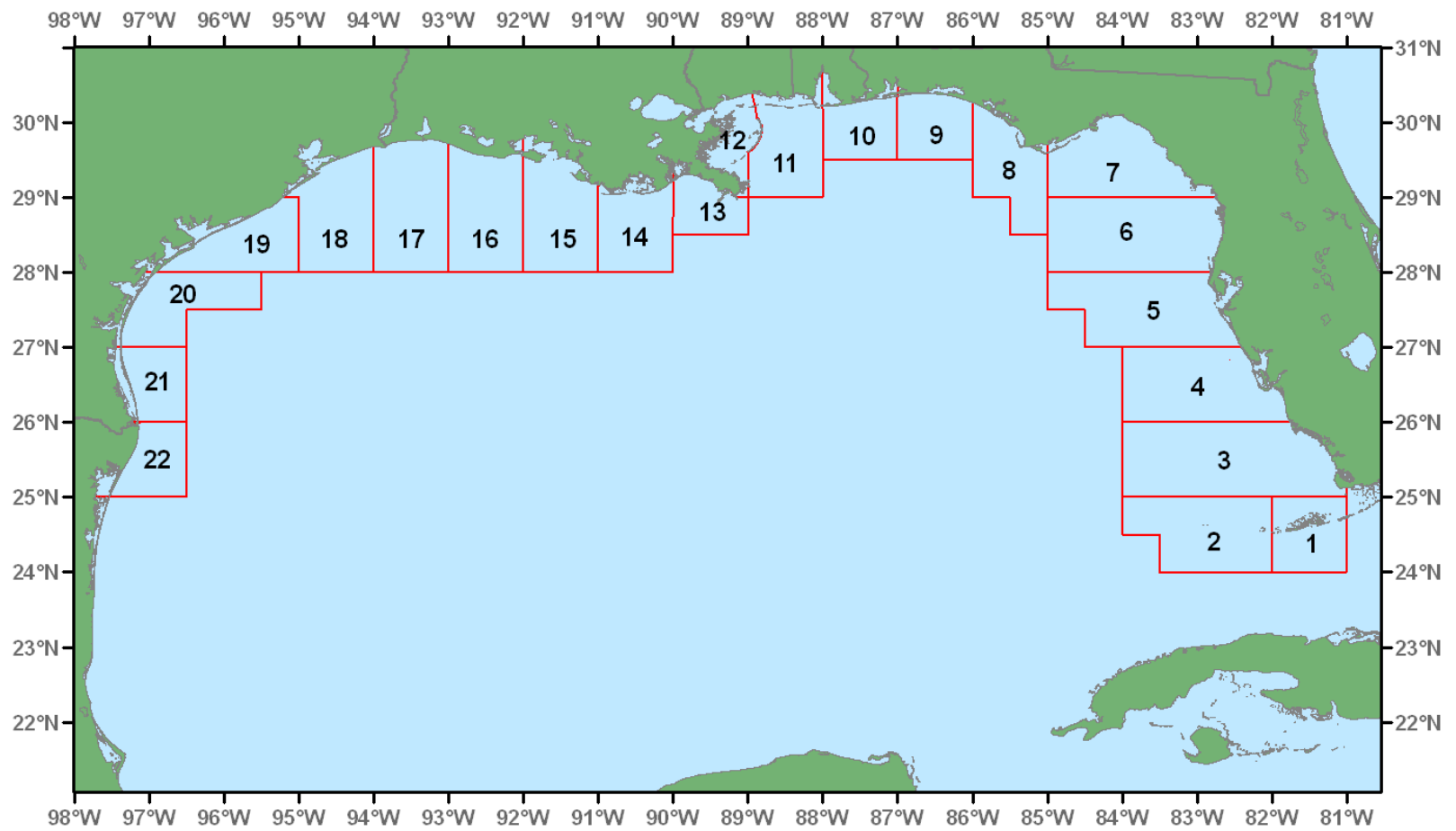


Figure 2. Statistical zones for shrimp in the Gulf of Mexico.

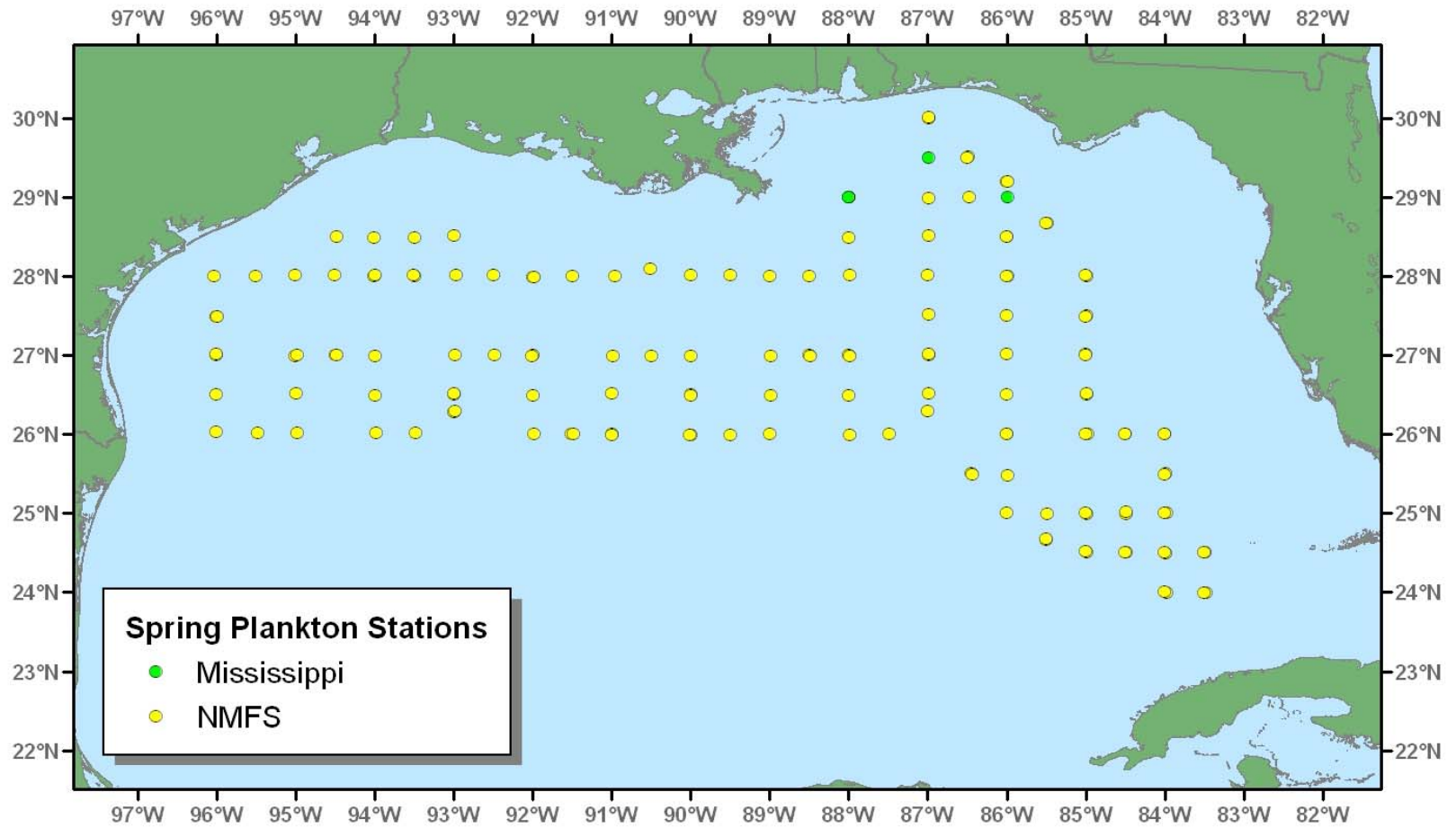


Figure 3. Locations of plankton and environmental stations during the 2005 Spring Plankton Survey.

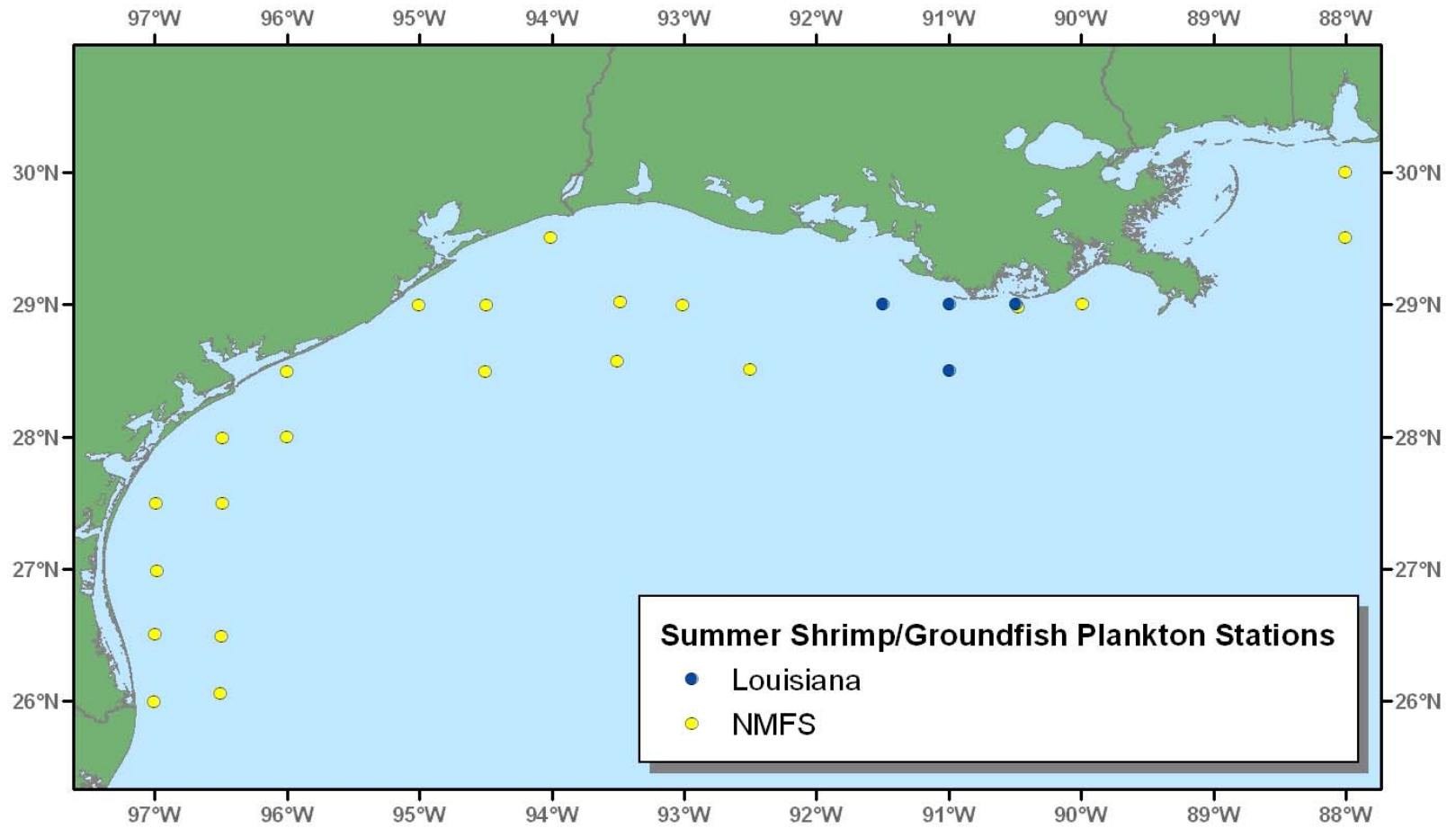


Figure 4. Locations of plankton stations during the 2005 Summer Shrimp/Groundfish Survey.

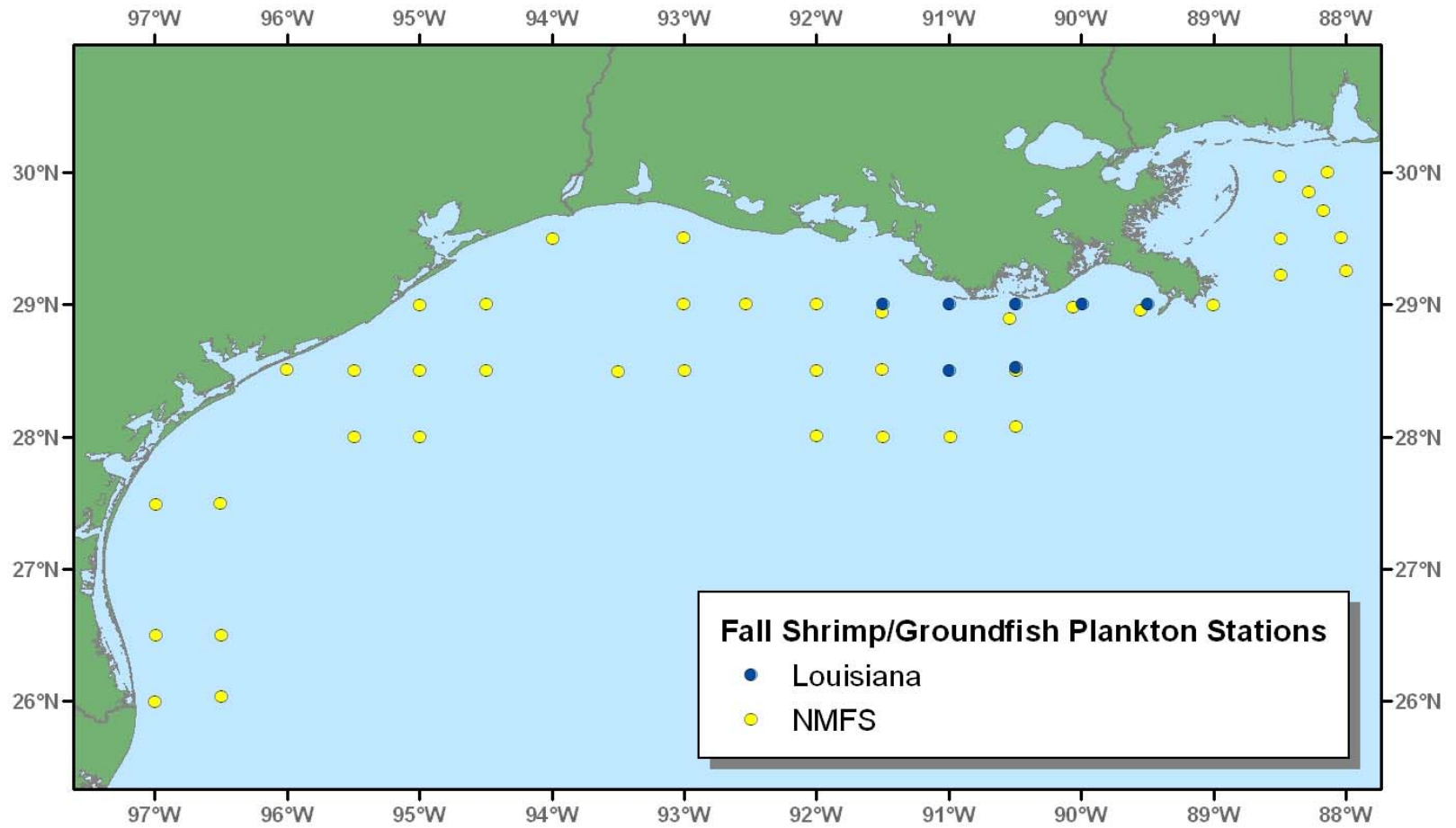


Figure 5. Locations of plankton stations during the 2005 Fall Shrimp/Groundfish Survey.

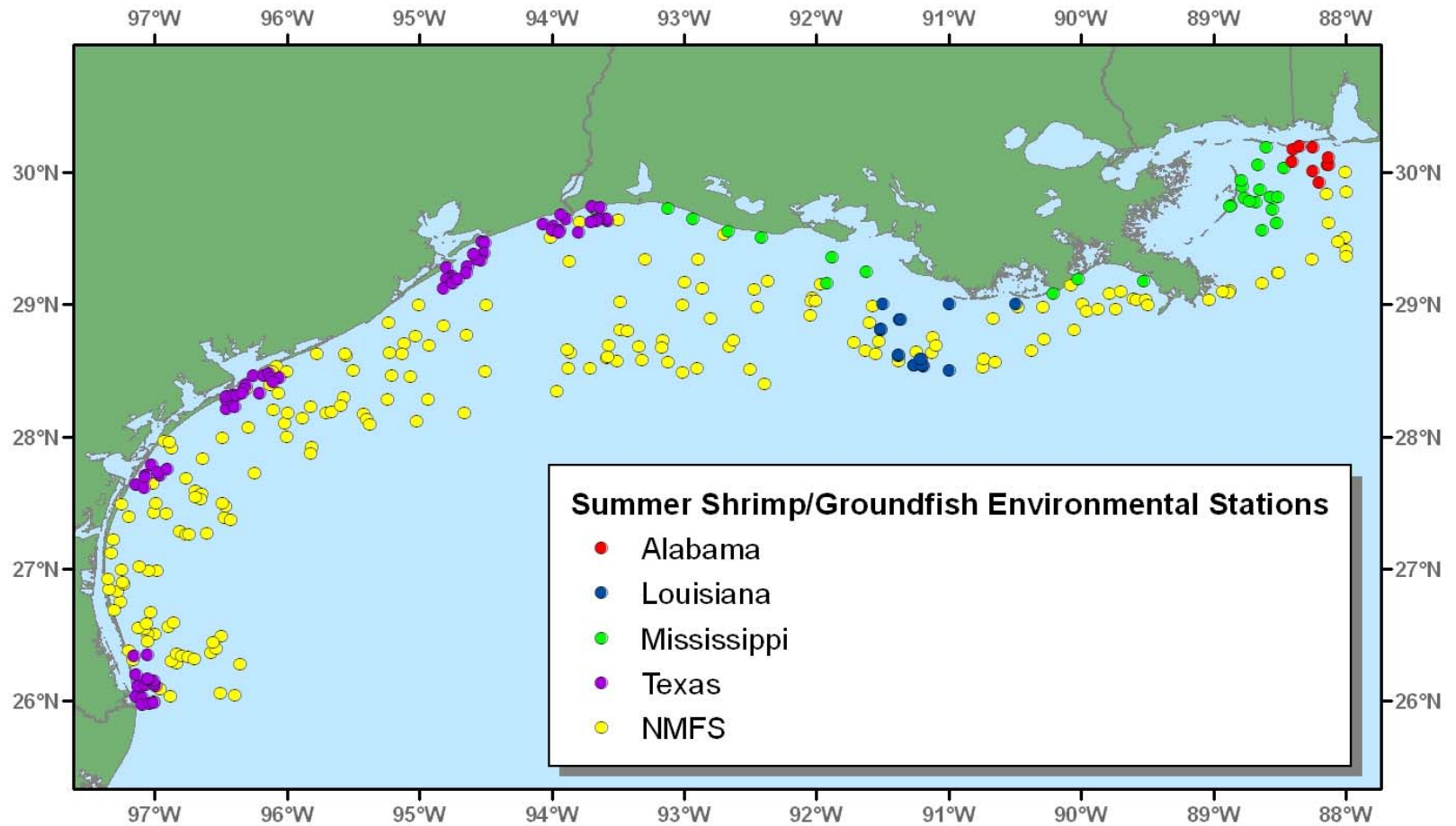


Figure 6. Locations of environmental stations during the 2005 Summer Shrimp/Groundfish Survey.

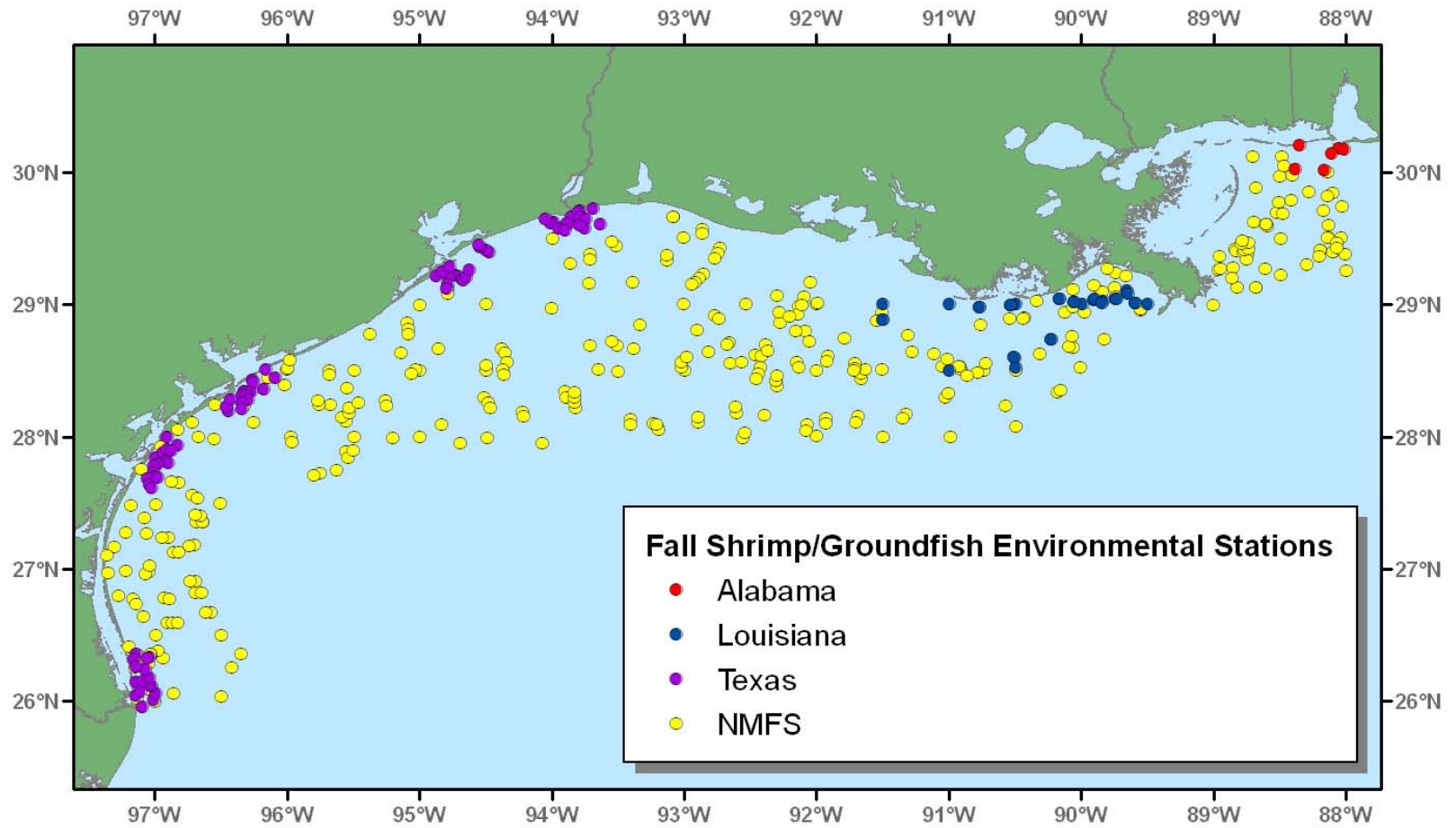


Figure 7. Locations of environmental stations during the 2005 Fall Shrimp/Groundfish Survey.

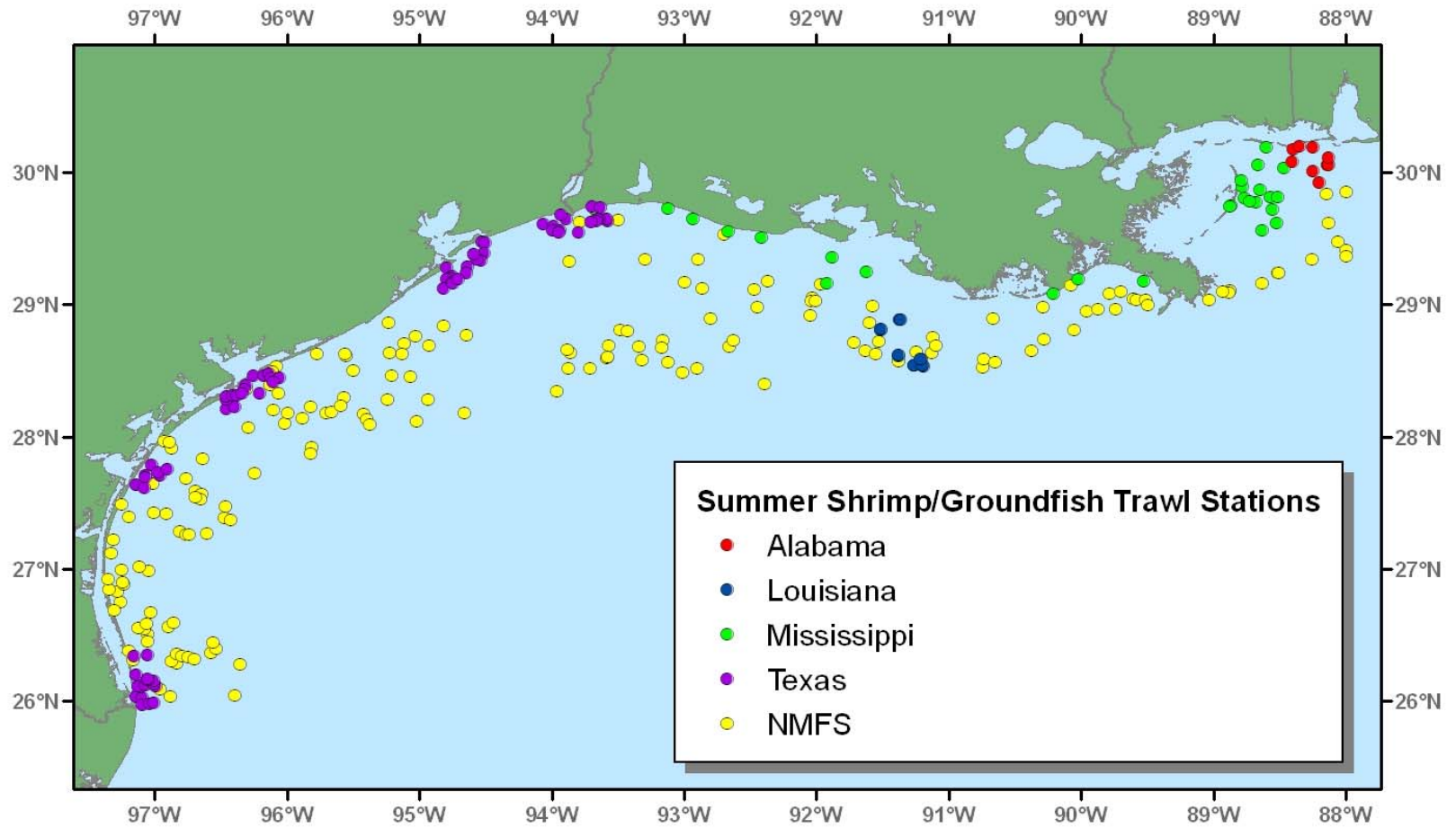


Figure 8. Locations of trawl stations during the 2005 Summer Shrimp/Groundfish Survey.

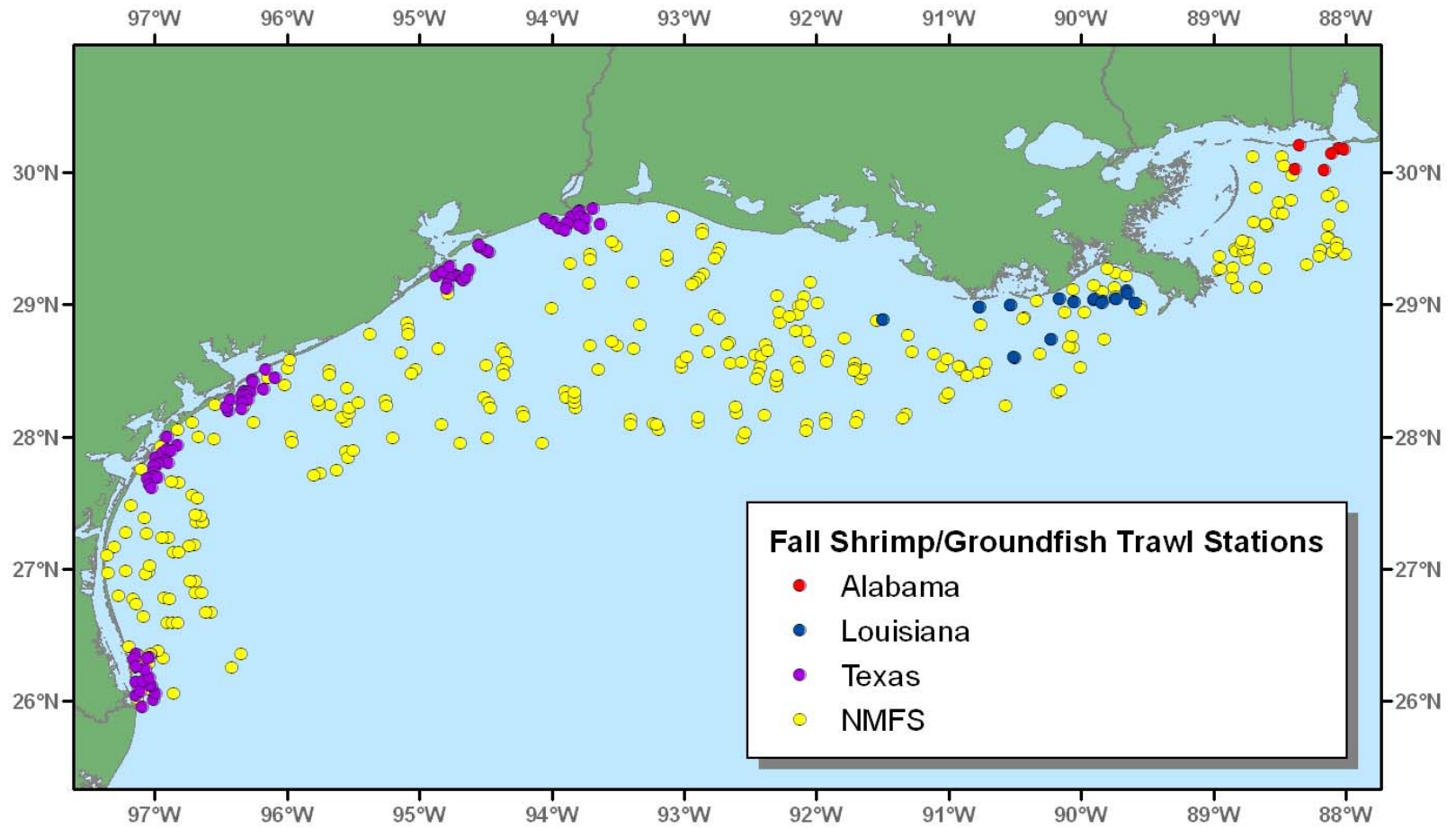


Figure 9. Locations of trawl stations during the 2005 Fall Shrimp/Groundfish Survey.

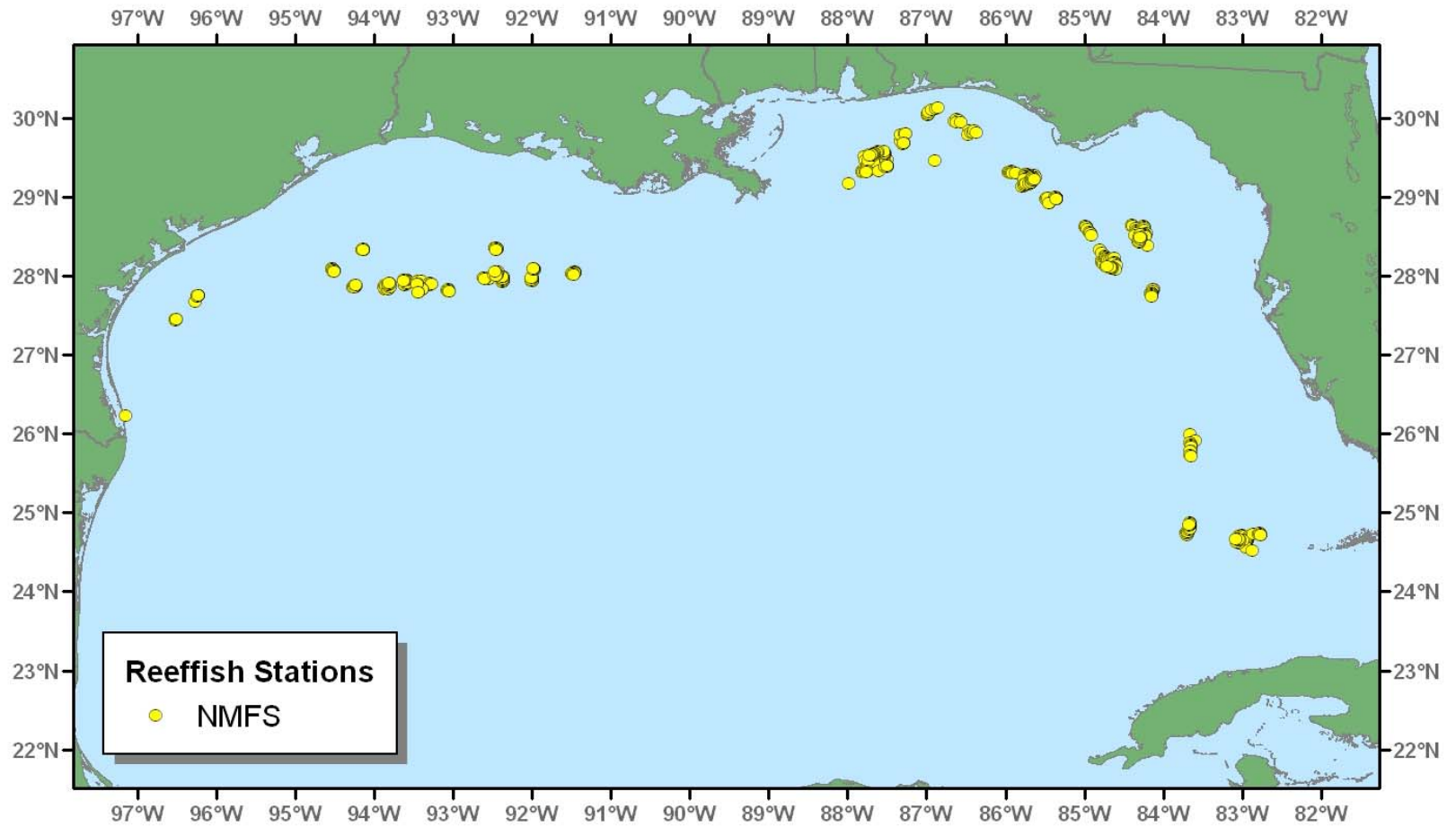


Figure 10. Locations of stations during the 2005 Reef Fish Survey.

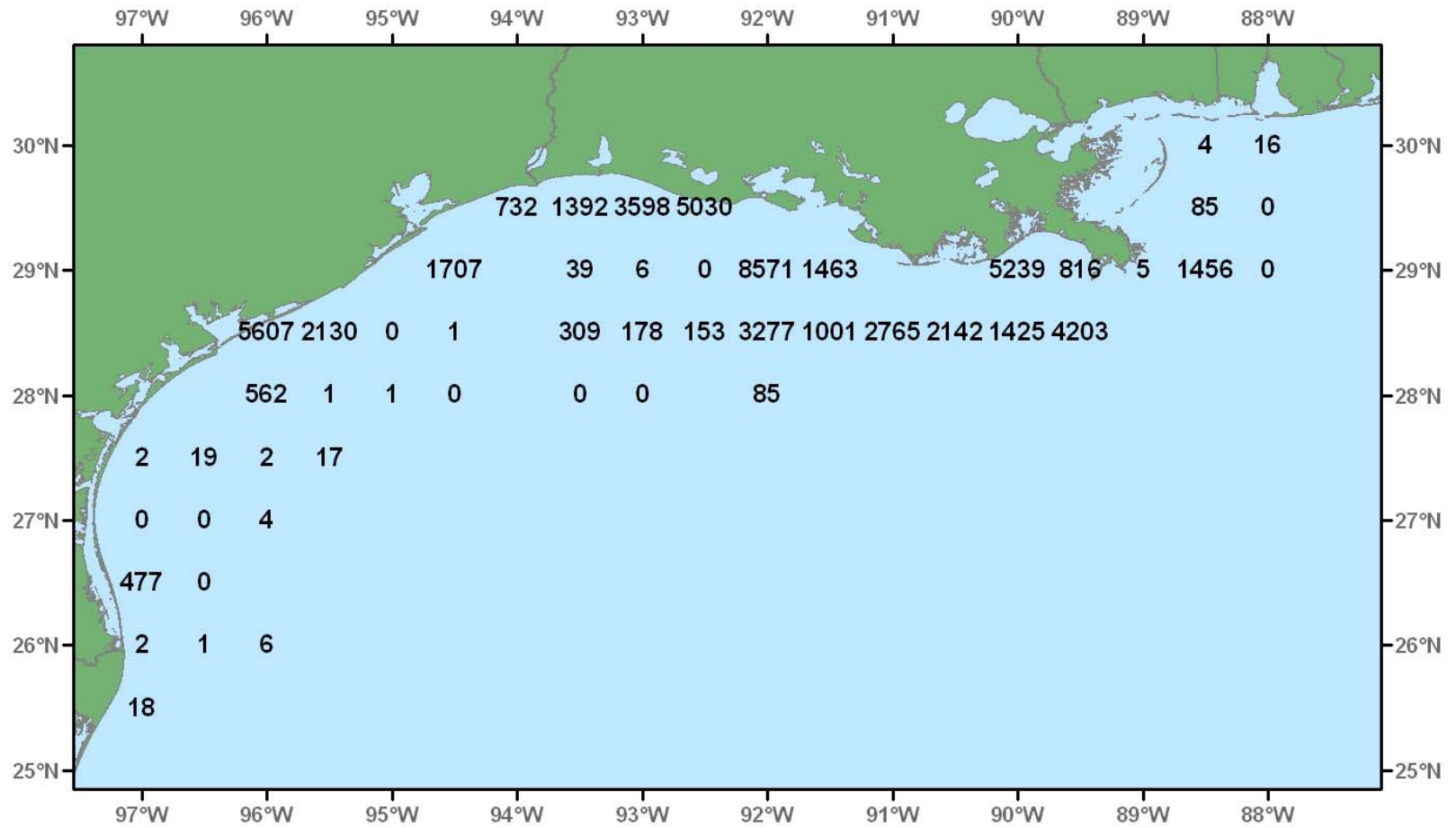


Figure 11. Atlantic croaker, *Micropogonias undulatus*, number/hour for June-July 2005.

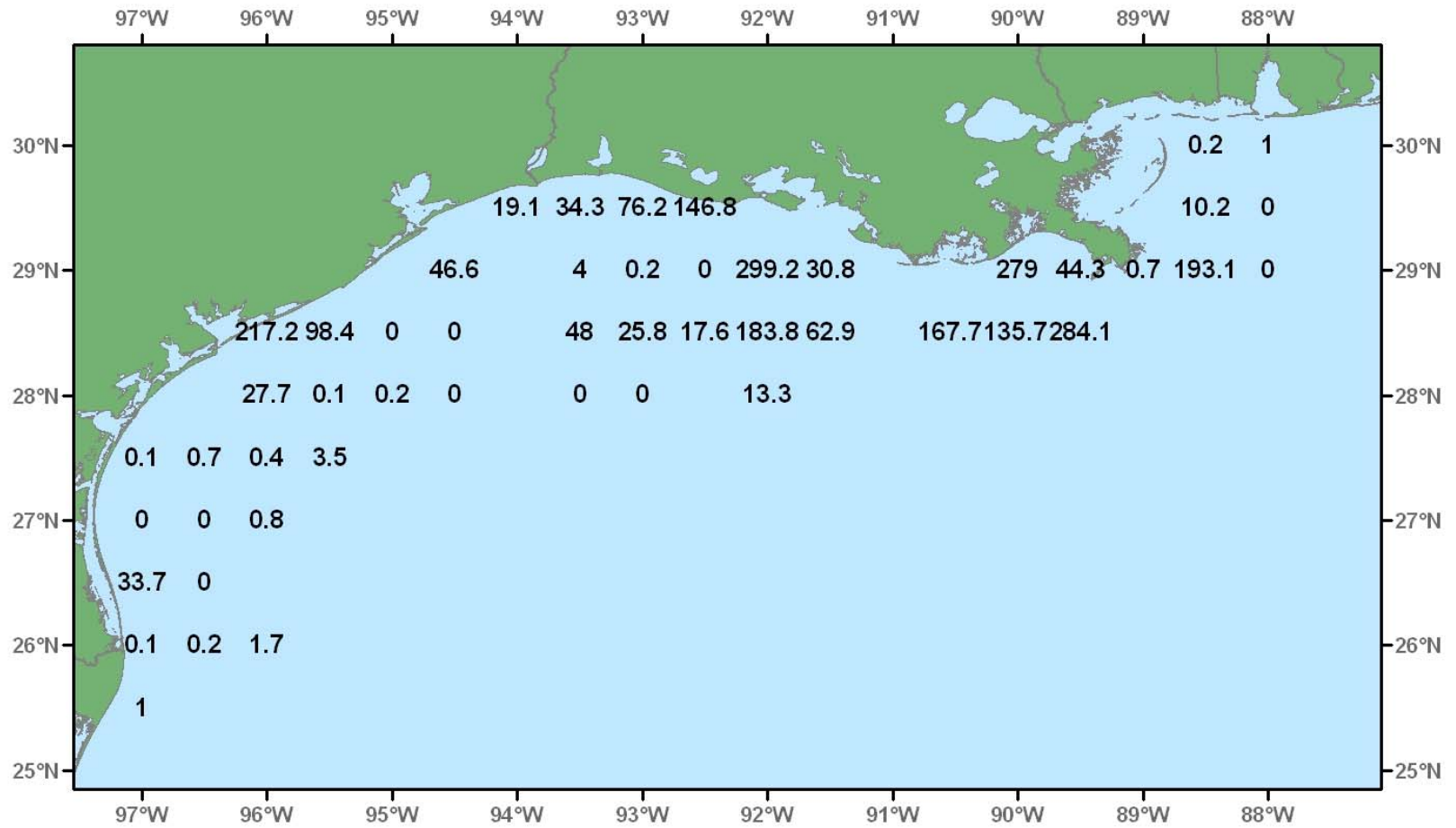


Figure 12. Atlantic croaker, *Micropogonias undulatus*, lb/hour for June-July 2005.

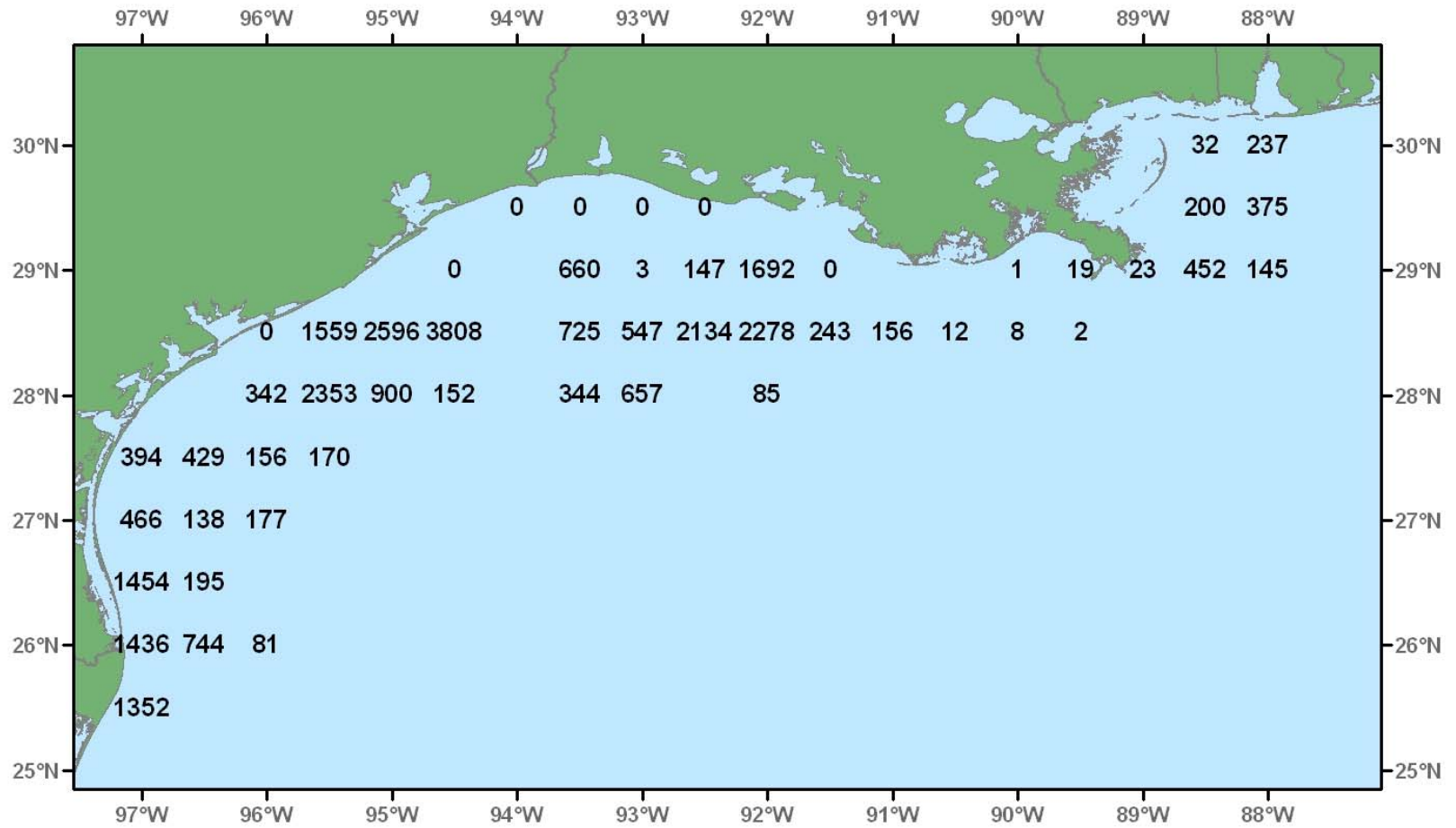


Figure 13. Longspine pogy, *Stenotomus caprinus*, number/hour for June-July 2005.

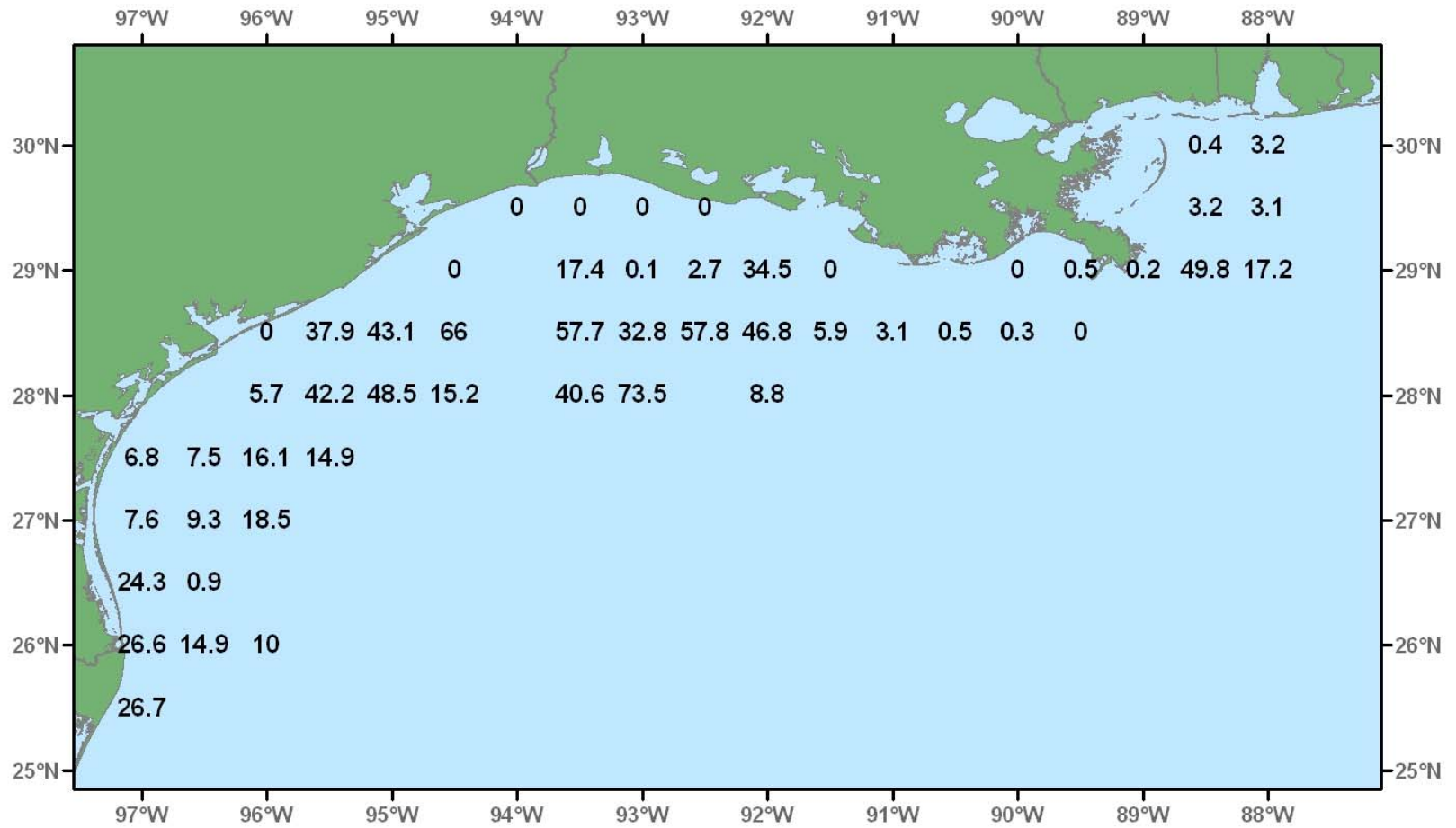


Figure 14. Longspine pogy, *Stenotomus caprinus*, lb/hour for June-July 2005.

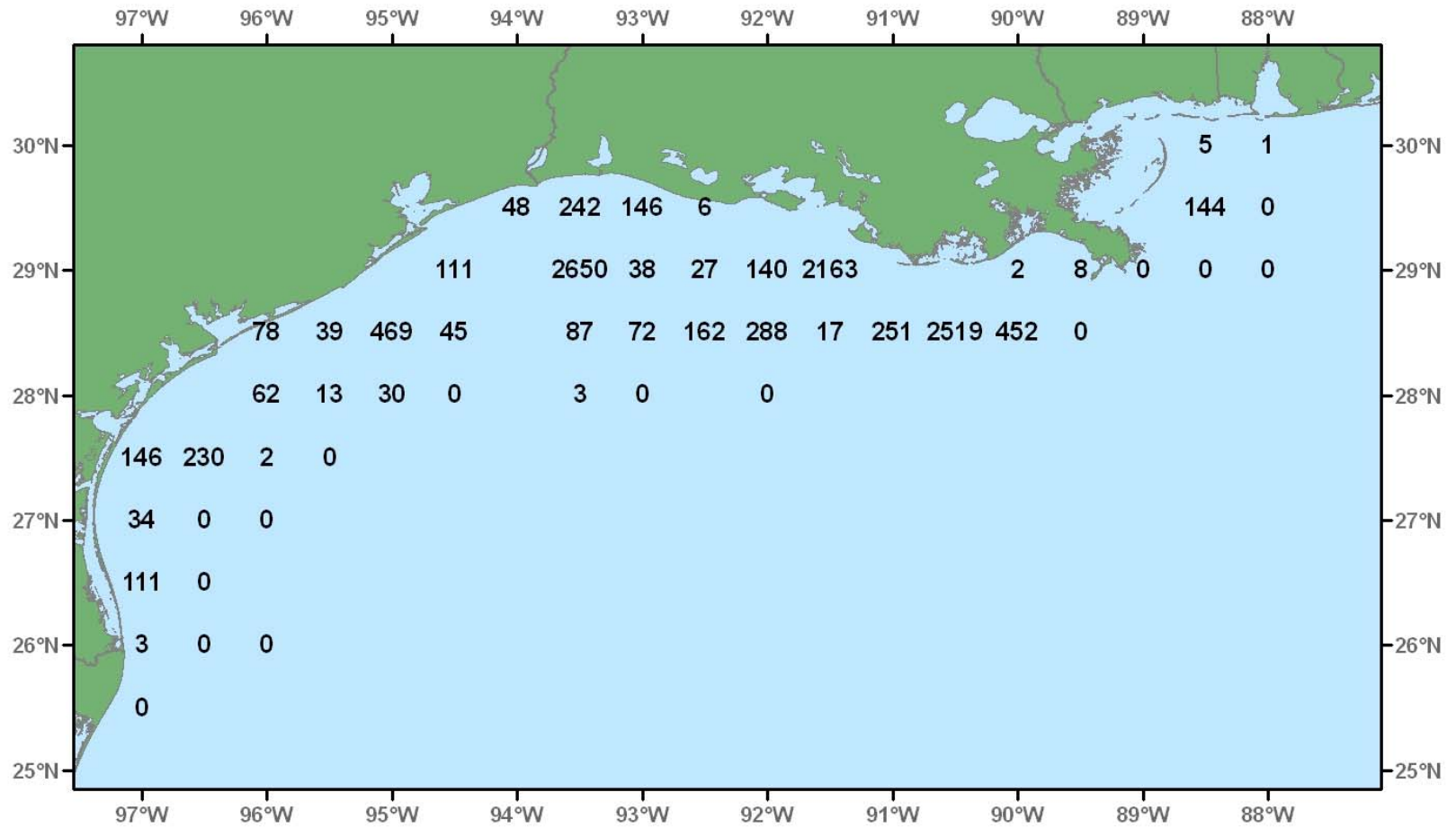


Figure 15. Atlantic bumper, *Chloroscombrus chrysurus*, number/hour for June-July 2005.

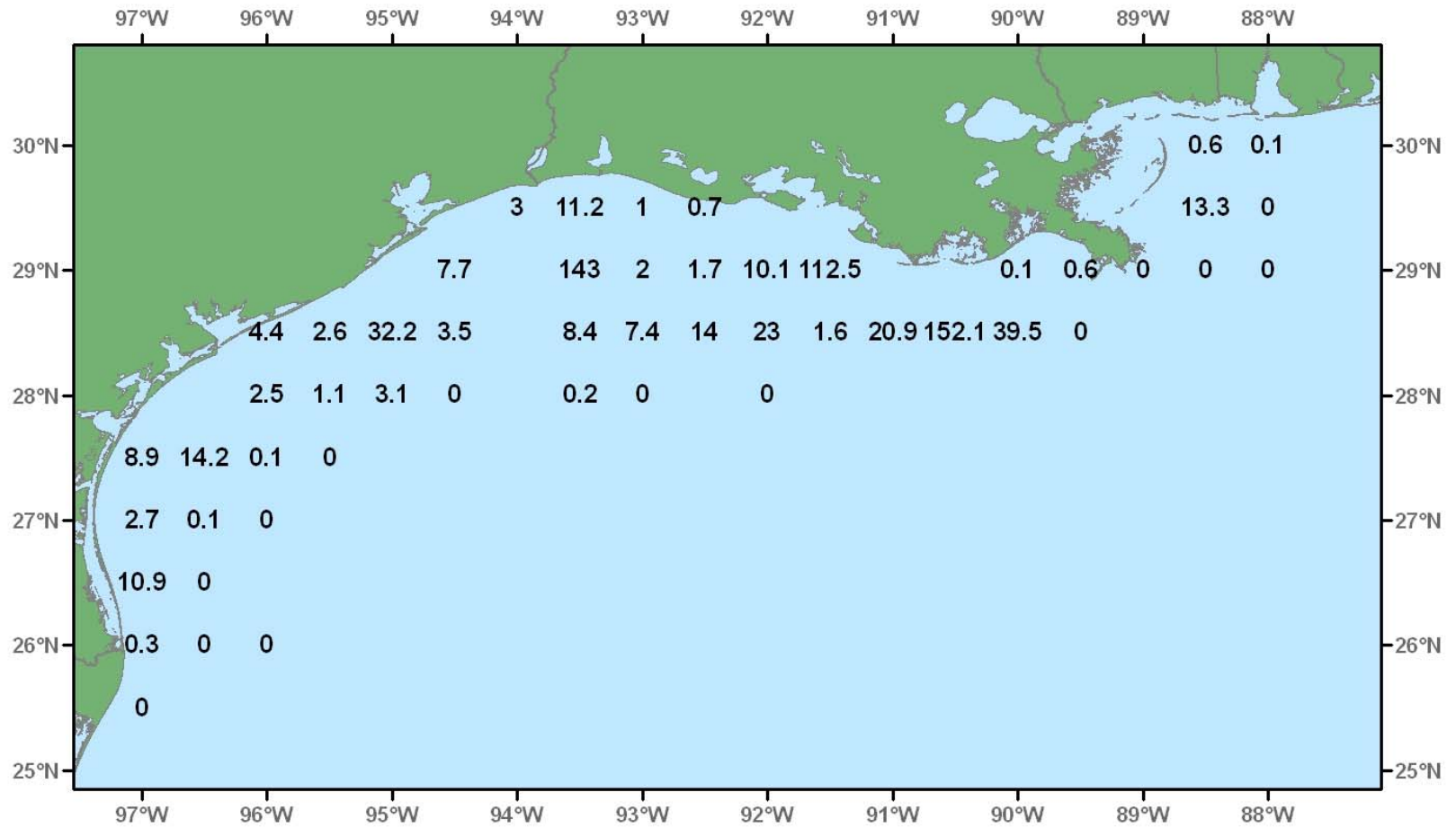


Figure 16. Atlantic bumper, *Chloroscombrus chrysurus*, lb/hour for June-July 2005.

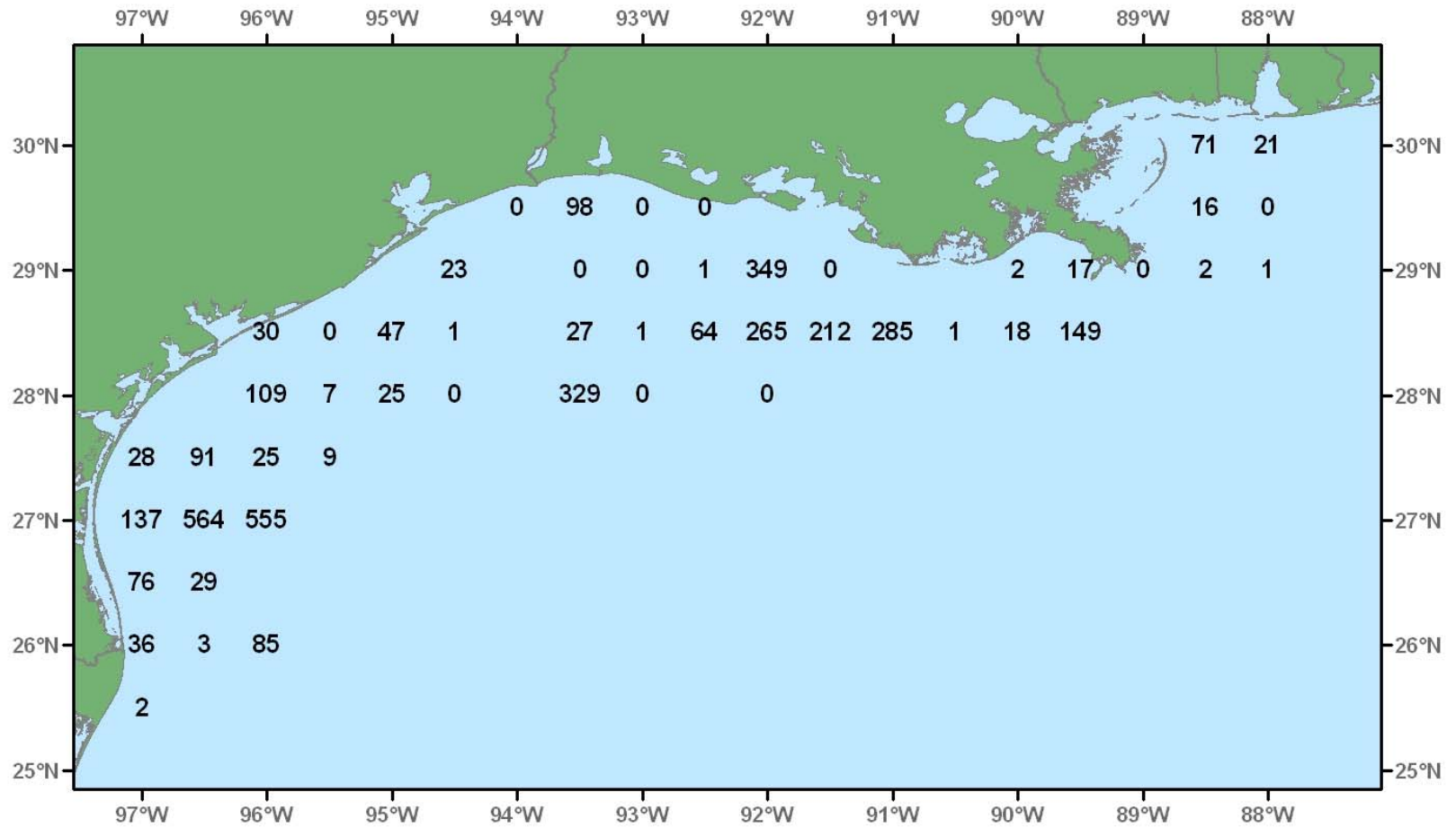


Figure 17. Gulf butterfish, *Peprilus burti*, number/hour for June-July 2005.

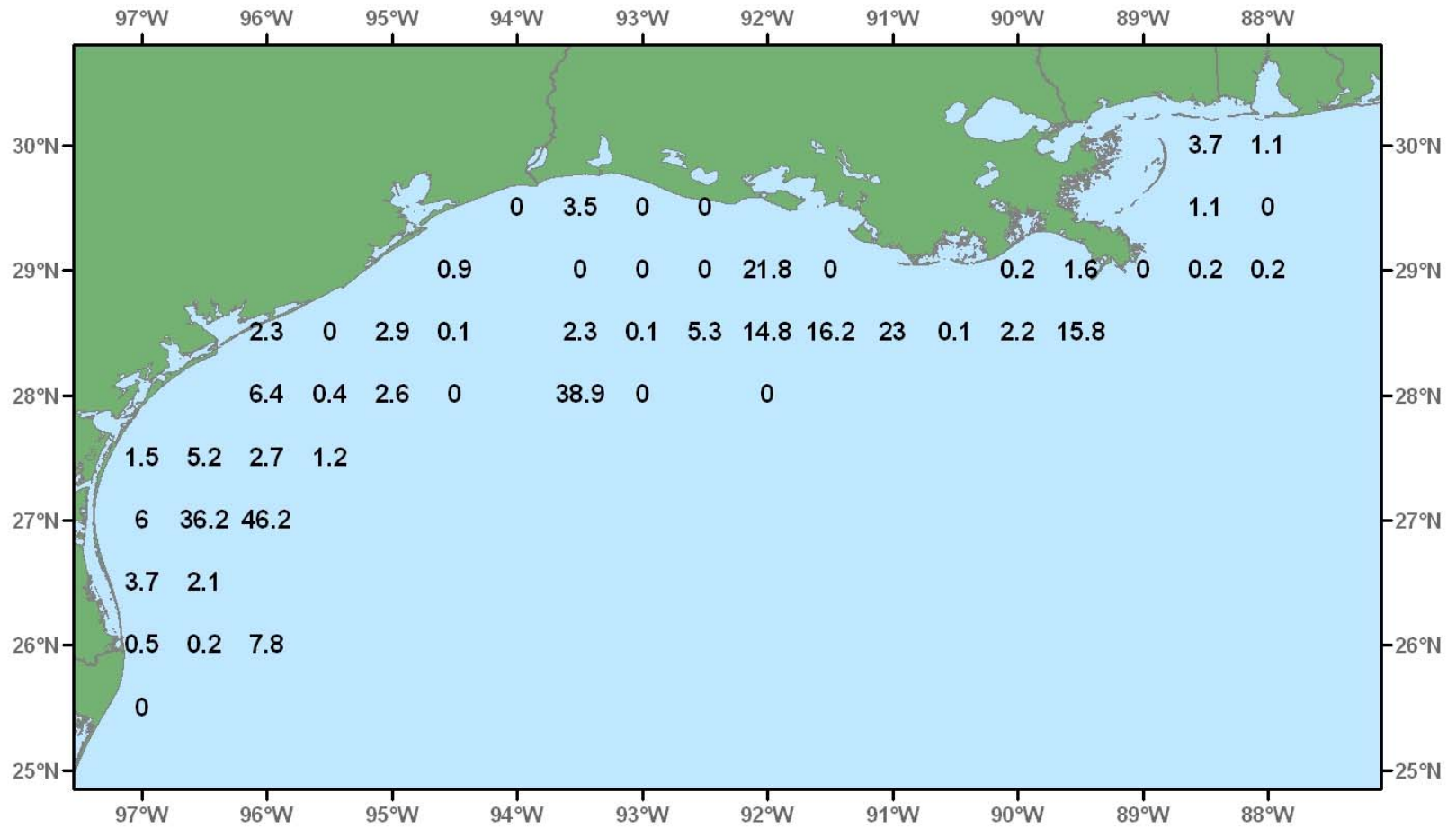


Figure 18. Gulf butterfish, *Peprilus burti*, lb/hour for June-July 2005.

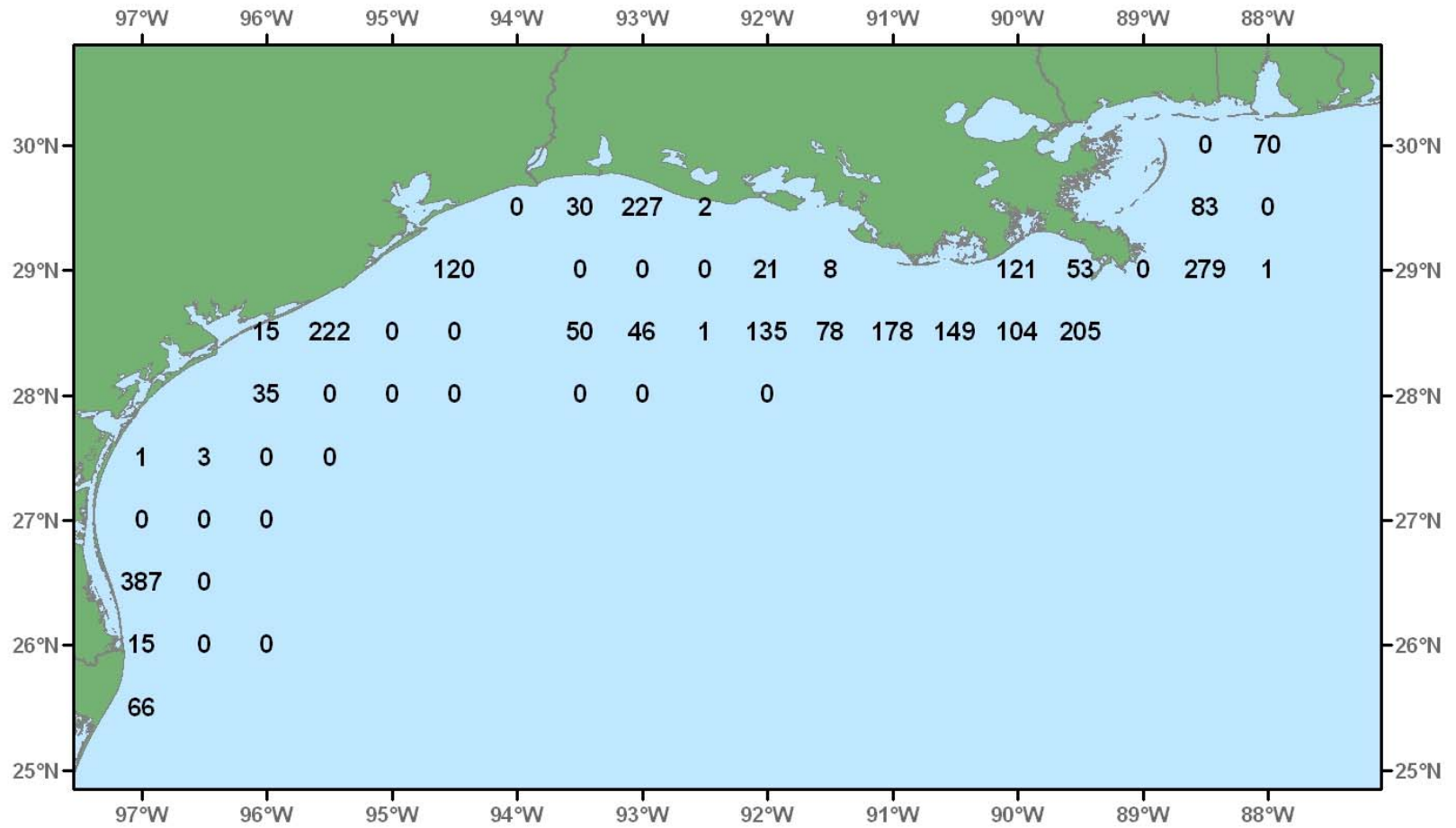


Figure 19. Spot, *Leiestomus xanthurus*, number/hour for June-July 2005.

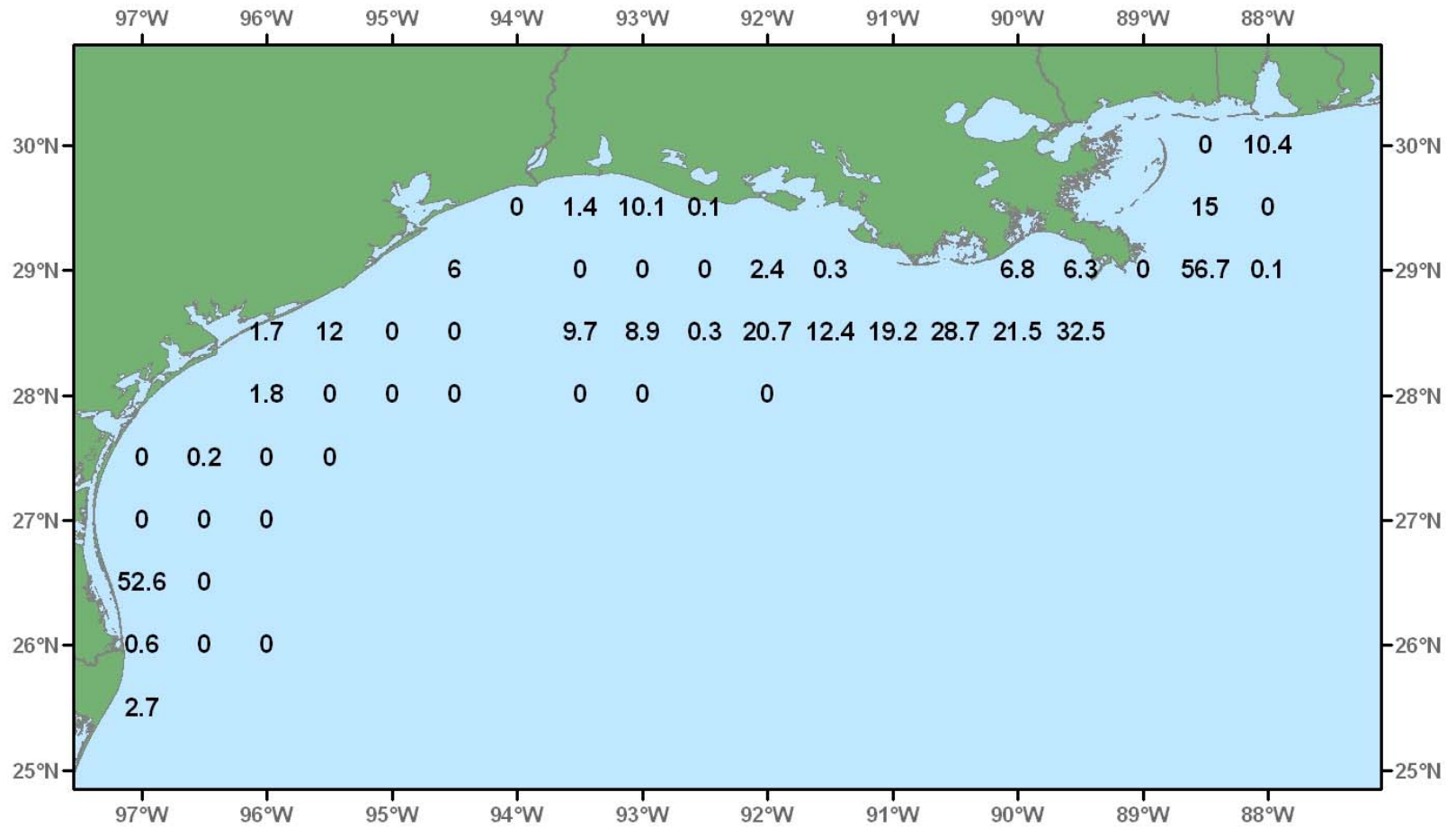


Figure 20. Spot, *Leioostomus xanthurus*, lb/hour for June-July 2005.

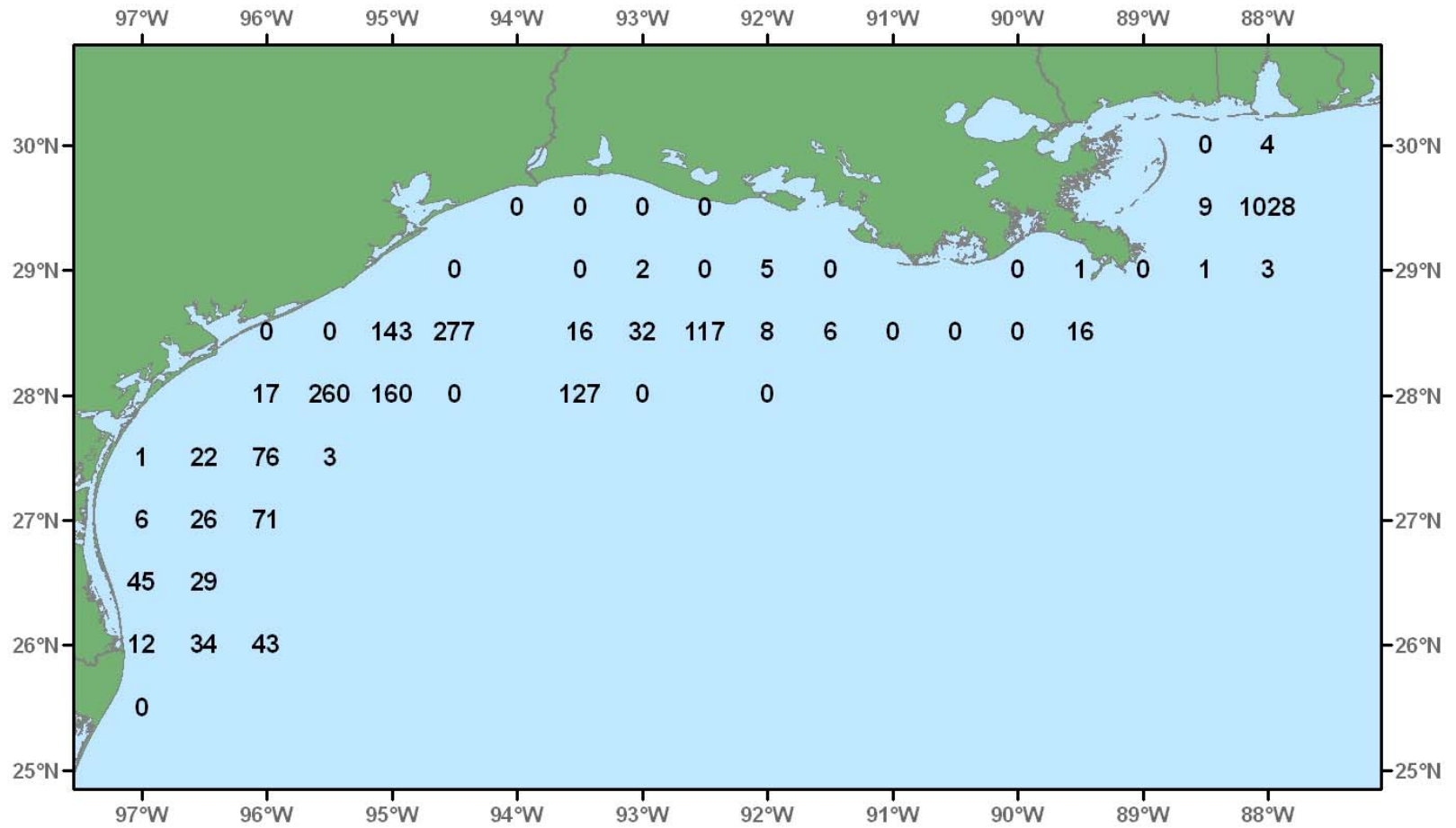


Figure 21. Rough scad, *Trachurus lathami*, number/hour for June-July 2005.

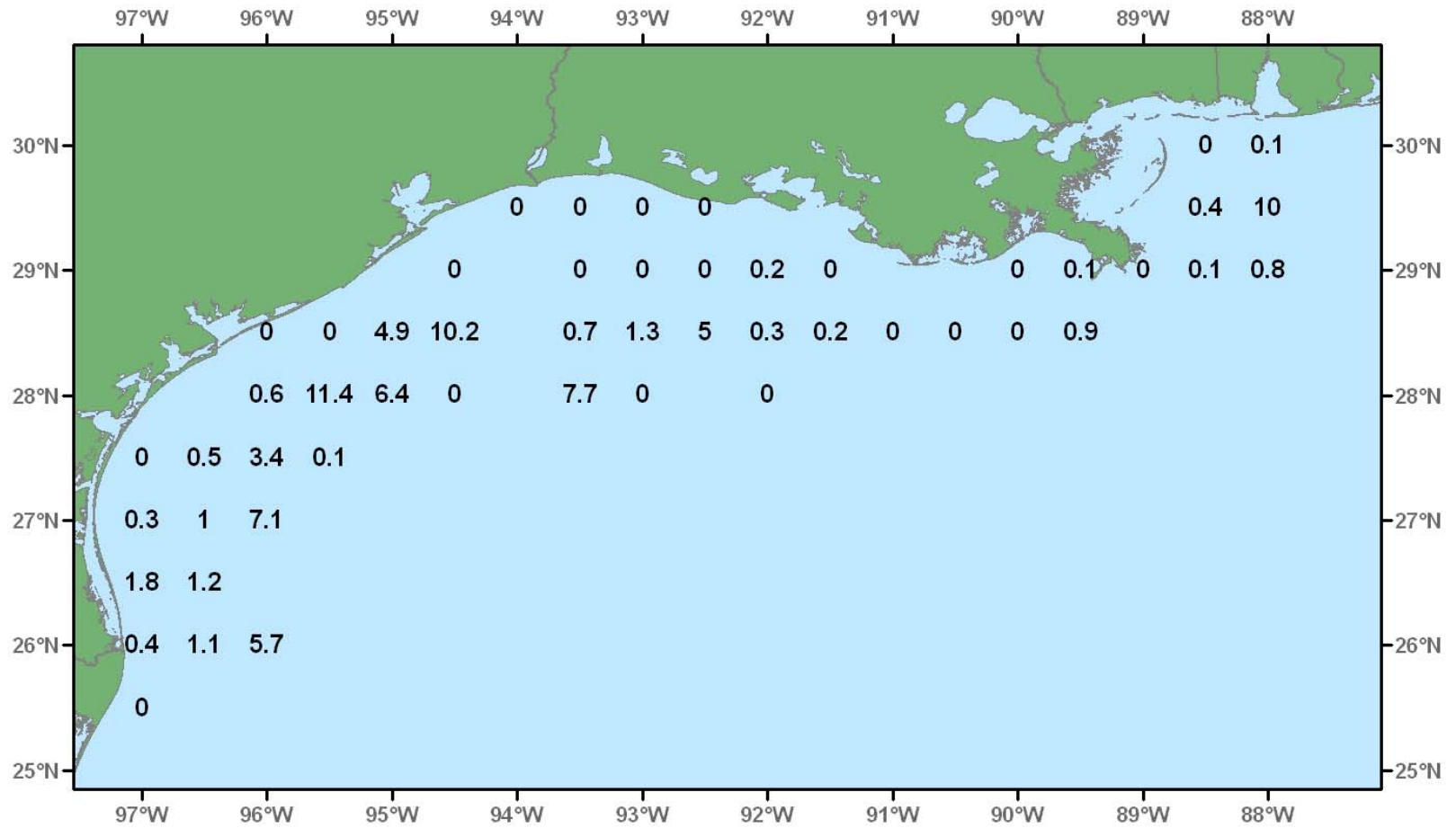


Figure 22. Rough scad, *Trachurus lathami*, lb/hour for June-July 2005.

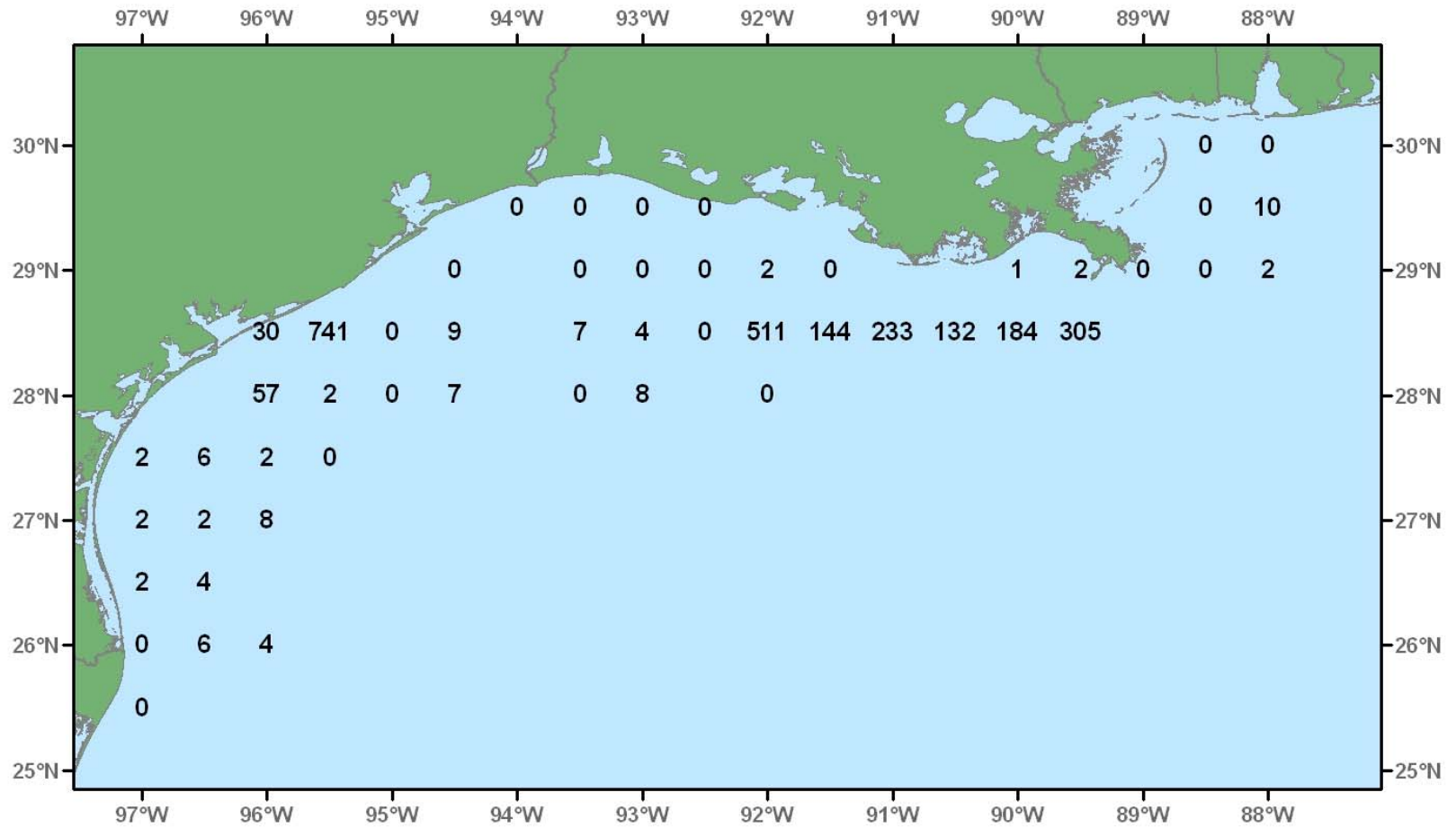


Figure 23. Bluespotted searobin, *Prionotus roseus*, number/hour for June-July 2005.

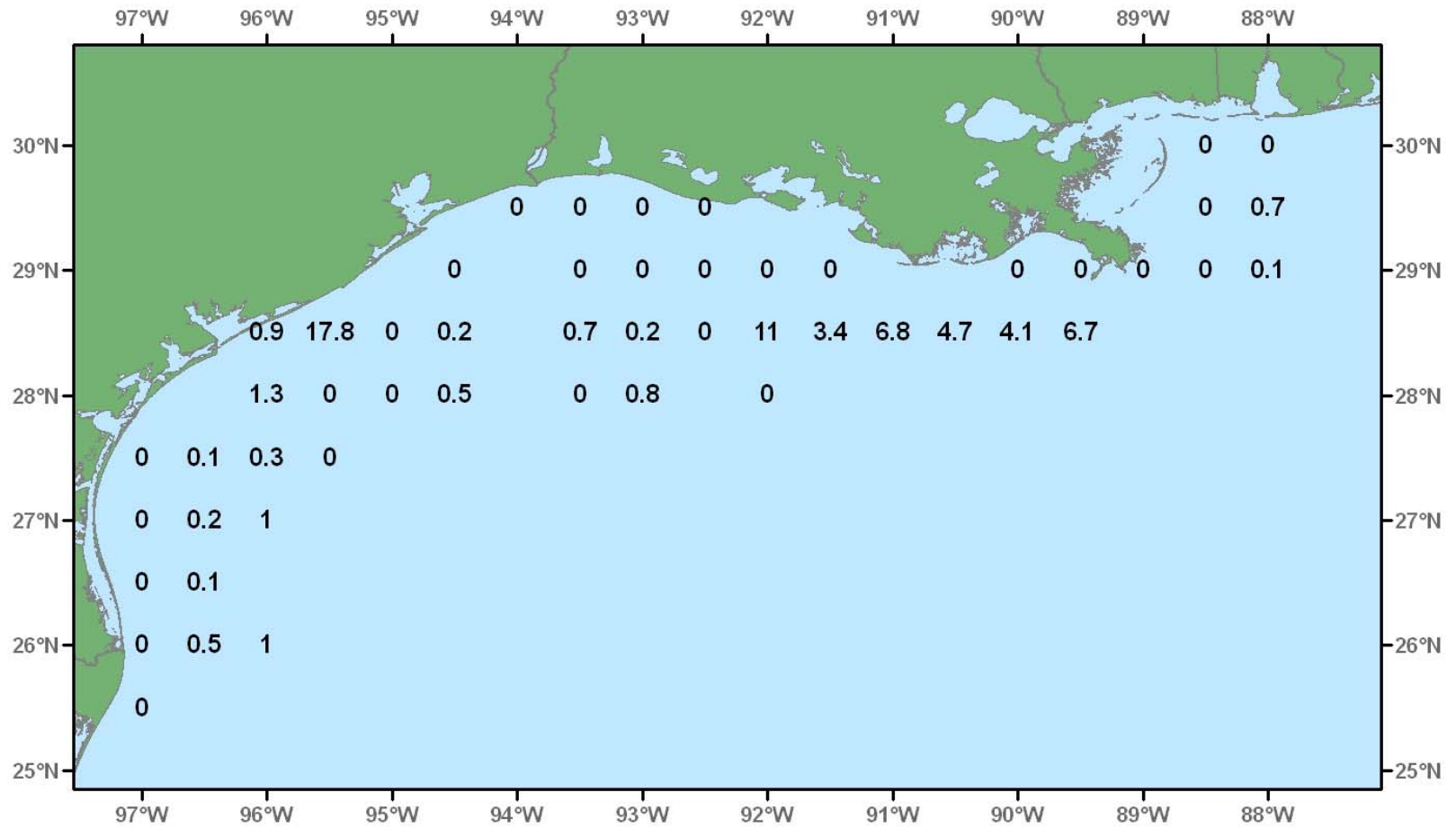


Figure 24. Bluespotted searobin, *Prionotus roseus*, lb/hour for June-July 2005.

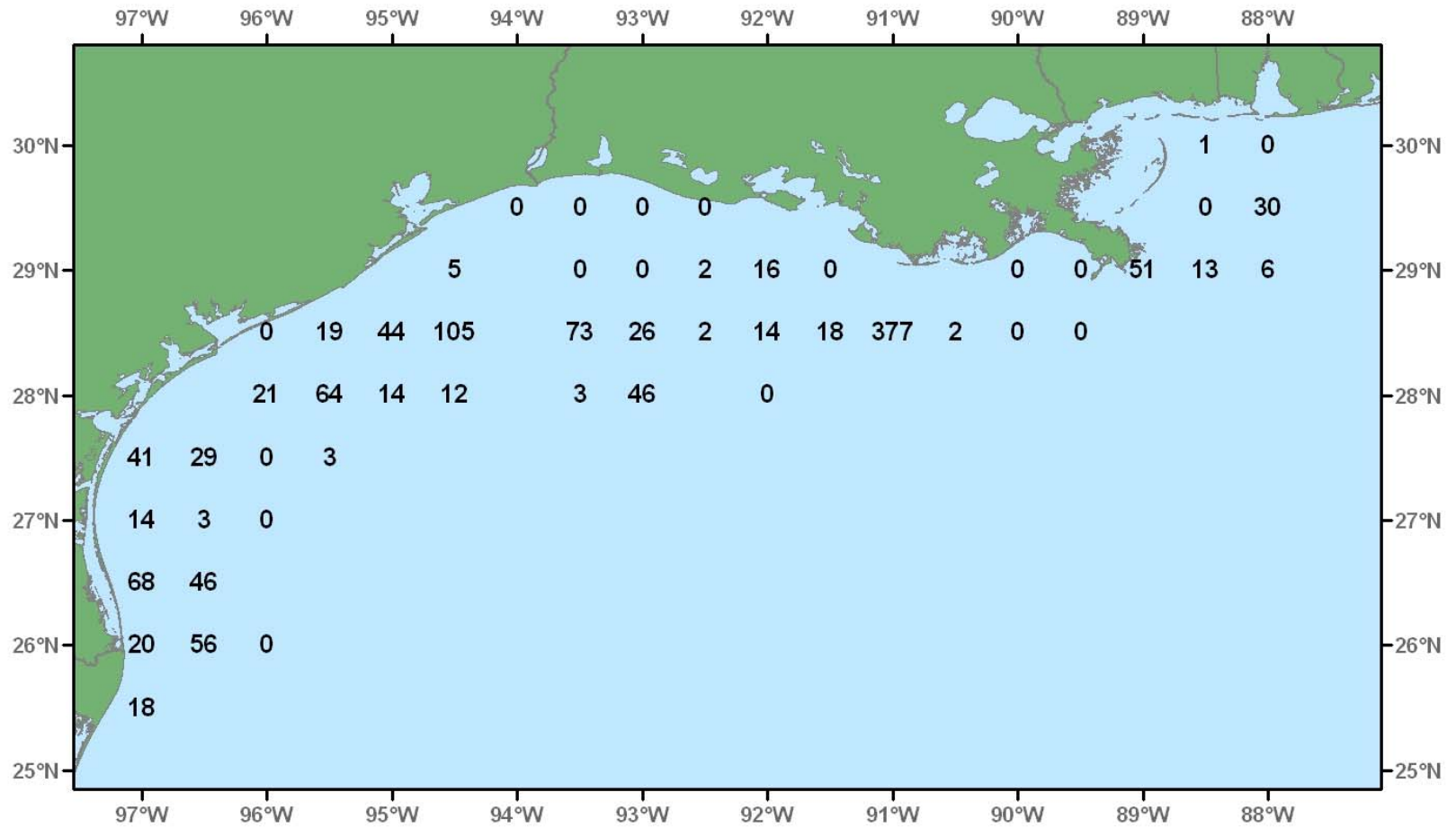


Figure 25. Shoal flounder, *Syacium gunteri*, number/hour for June-July 2005.

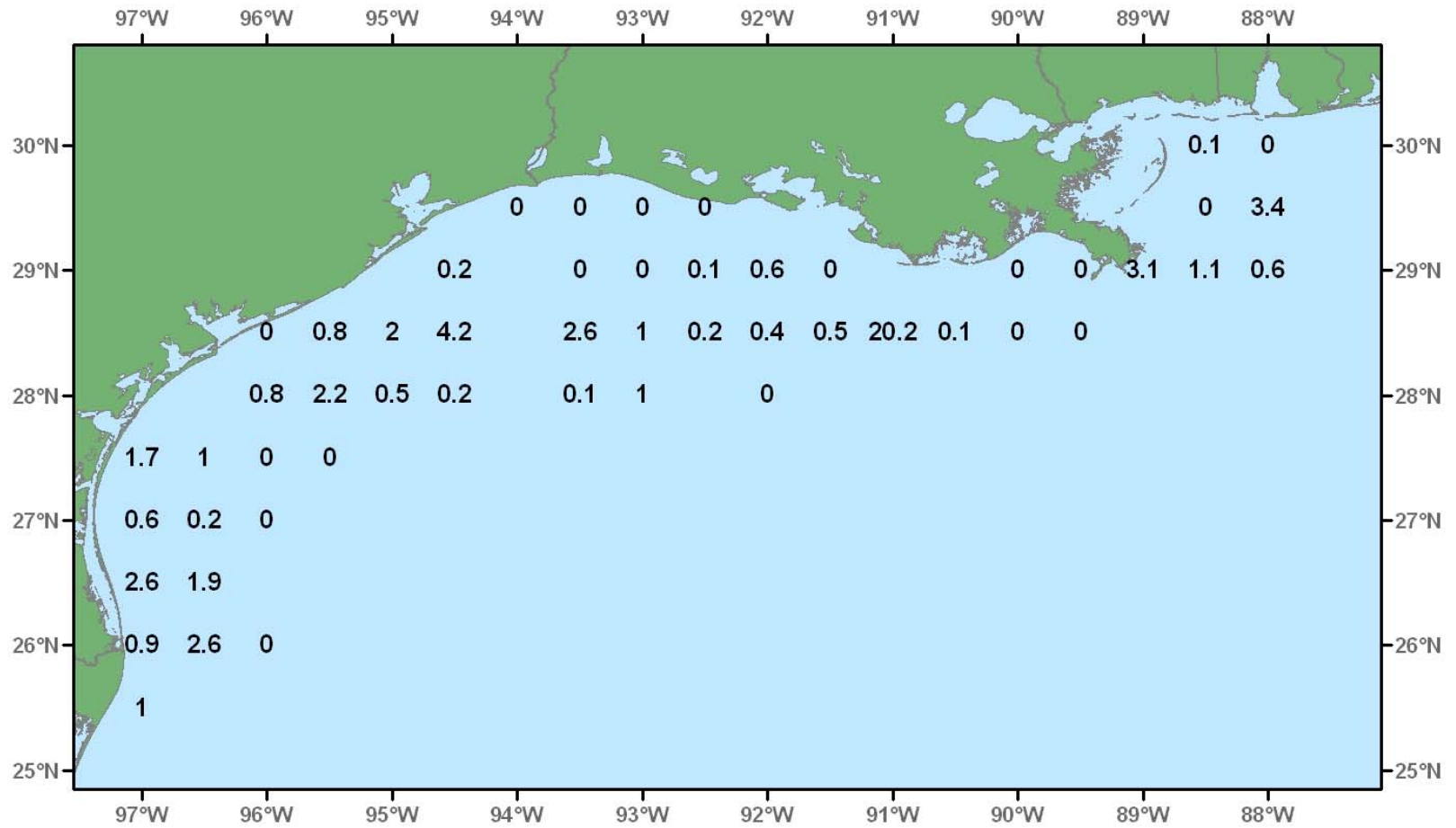


Figure 26. Shoal flounder, *Syacium gunteri*, lb/hour for June-July 2005.

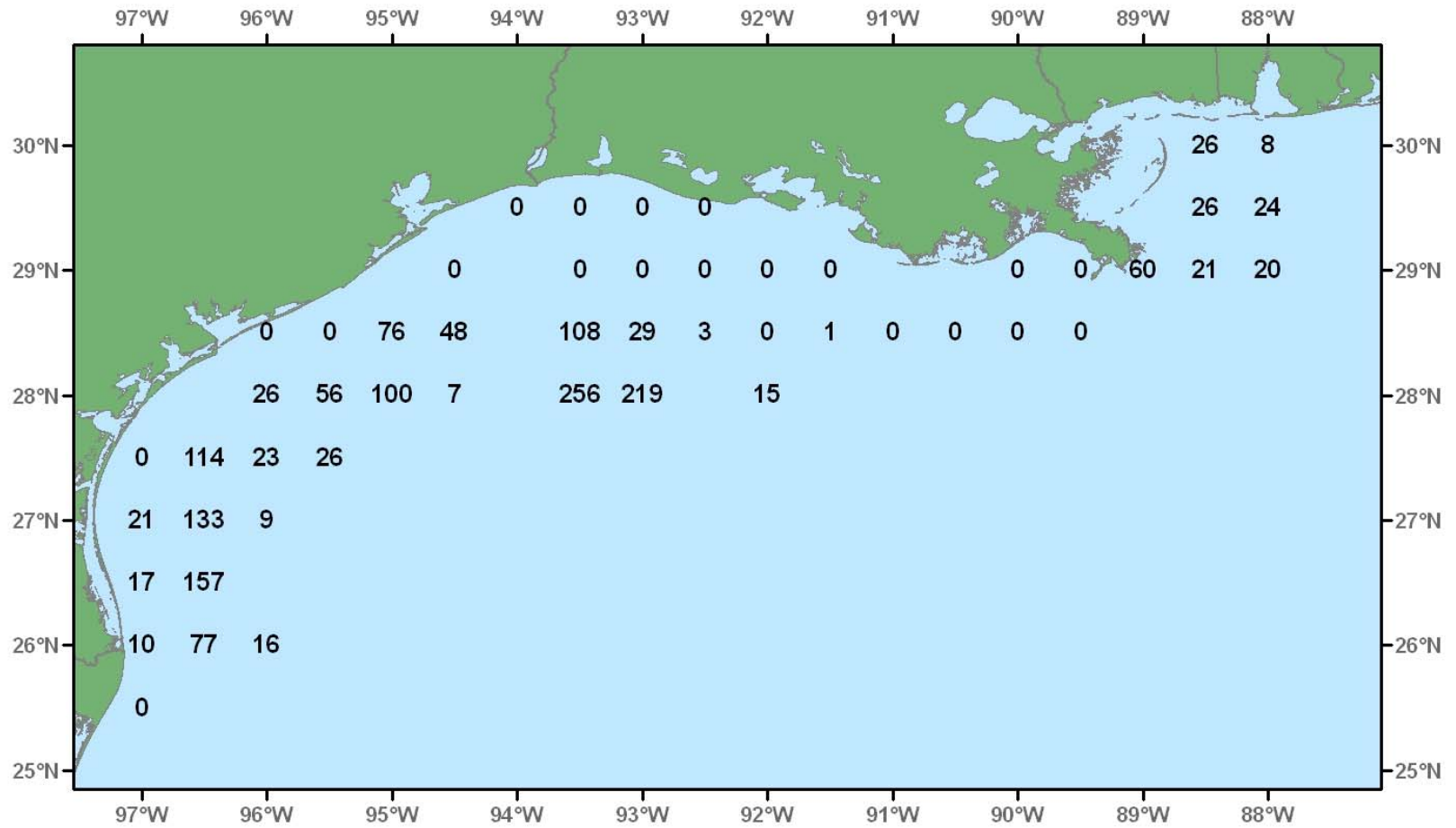


Figure 27. Largescale lizardfish, *Saurida brasiliensis*, number/hour for June-July 2005.

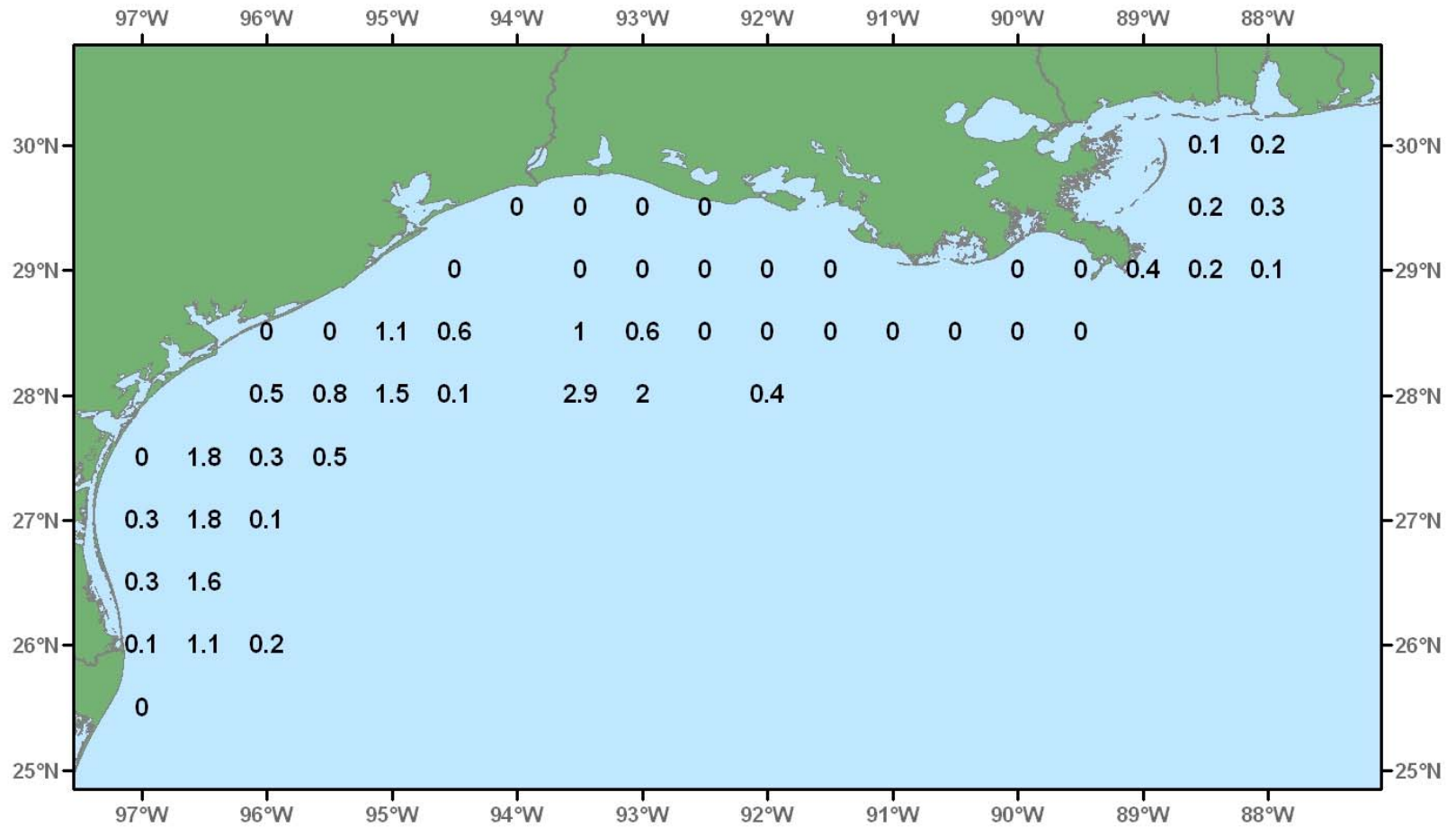


Figure 28. Largescale lizardfish, *Saurida brasiliensis*, lb/hour for June-July 2005.

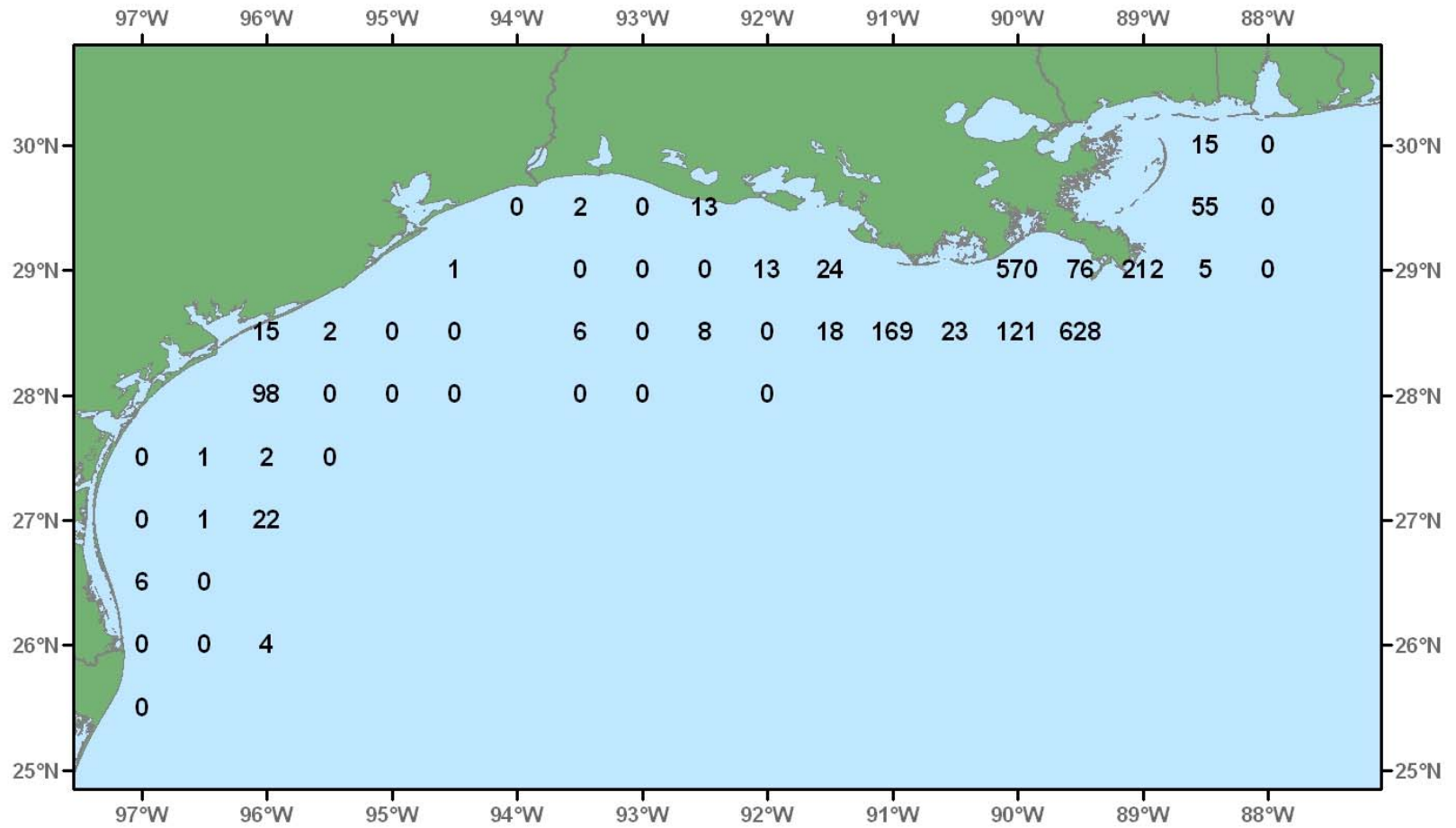


Figure 29. Atlantic cutlassfish, *Trichiurus lepturus*, number/hour for June-July 2005.

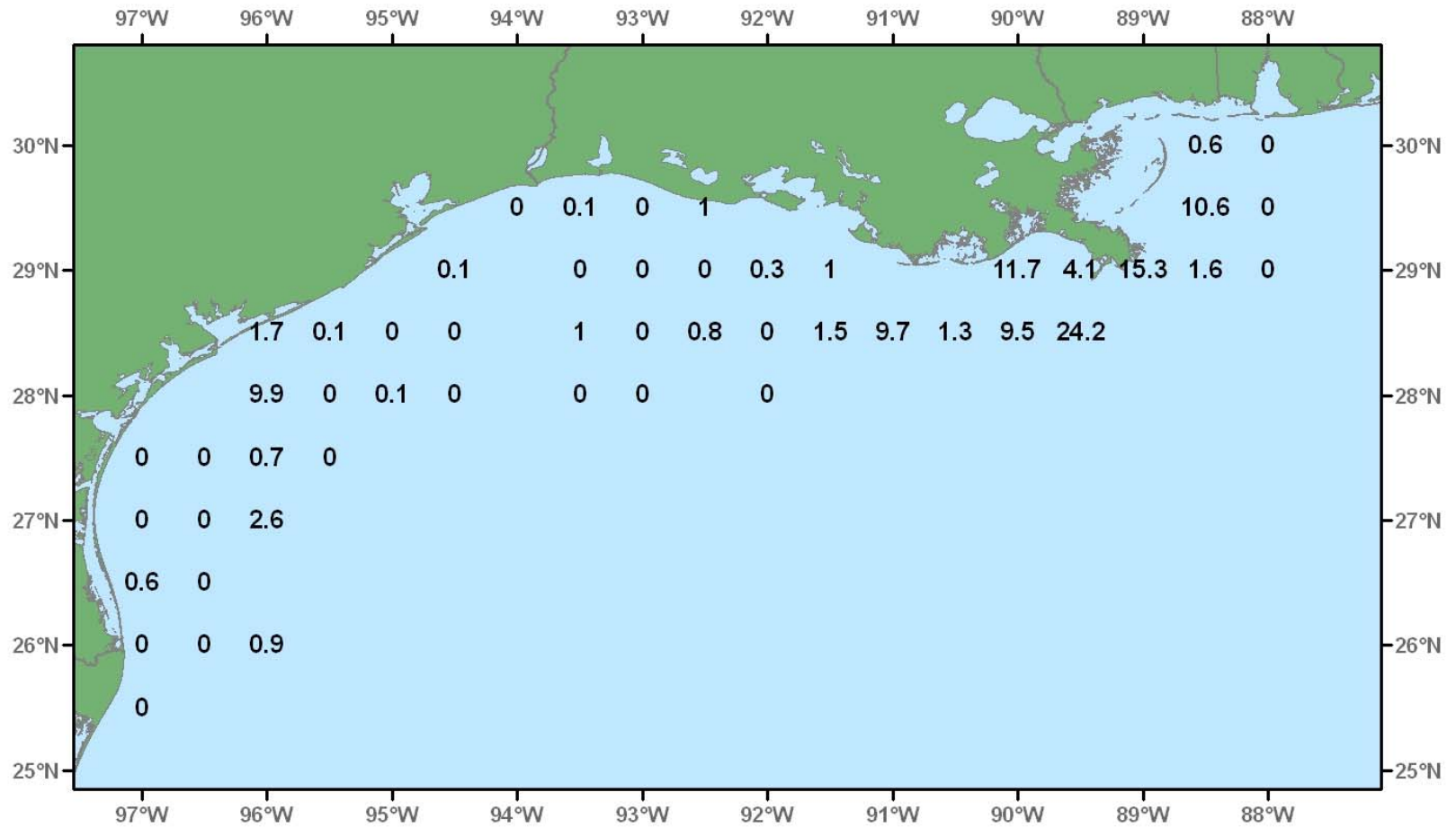


Figure 30. Atlantic cutlassfish, *Trichiurus lepturus*, lb/hour for June-July 2005.

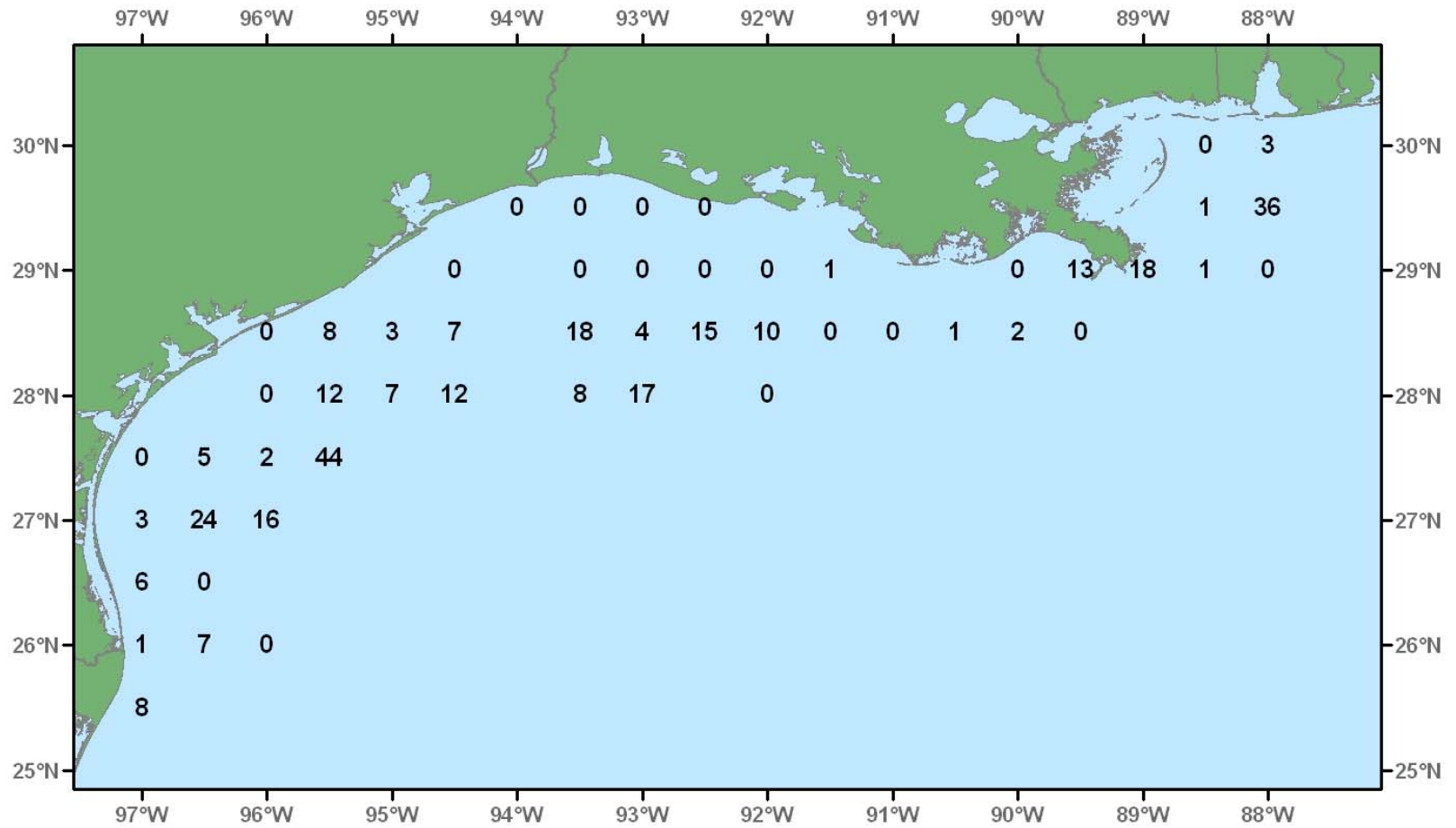


Figure 31. Red snapper, *Lutjanus campechanus*, number/hour for June-July 2005.

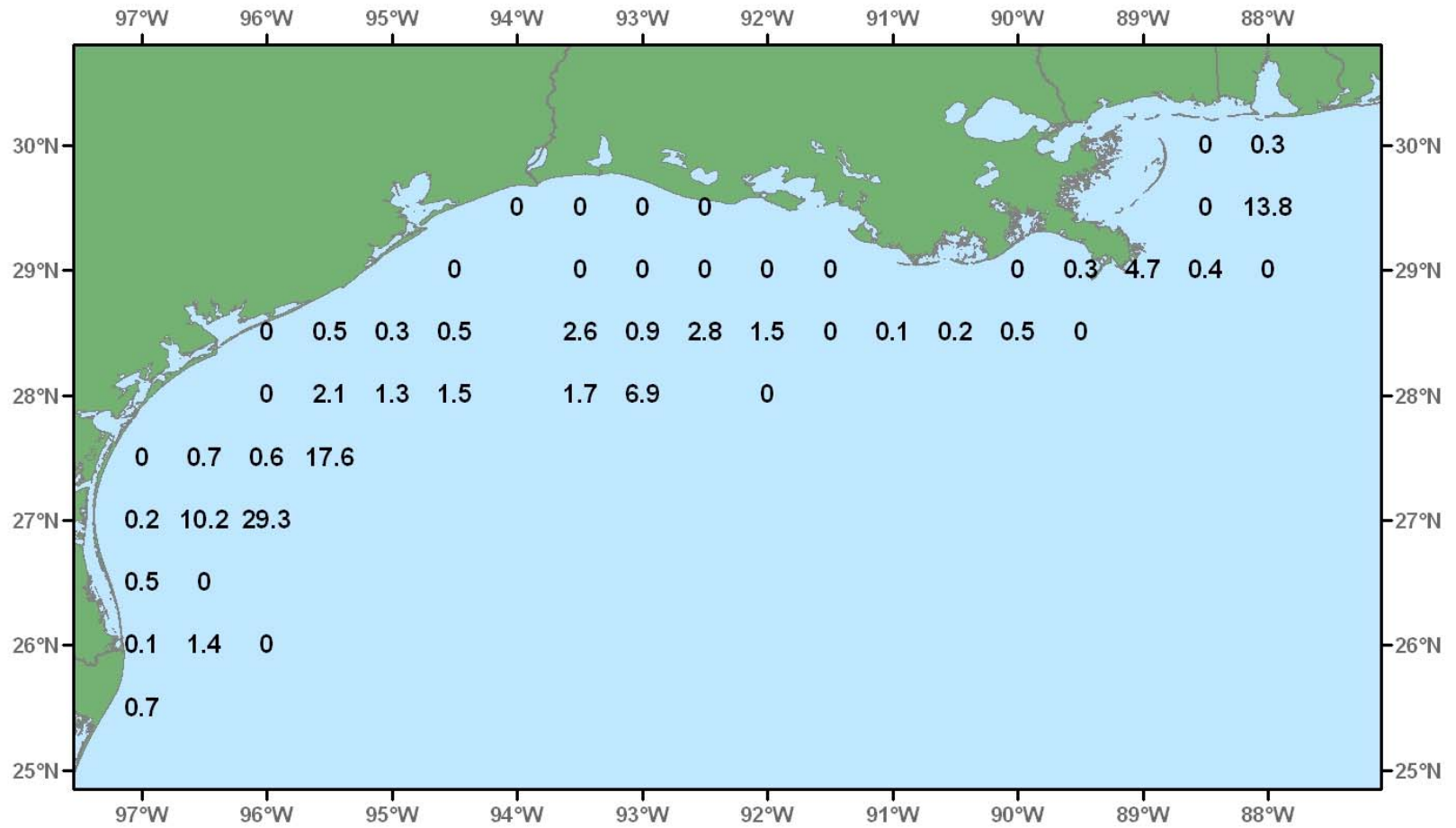


Figure 32. Red snapper, *Lutjanus campechanus*, lb/hour for June-July 2005.

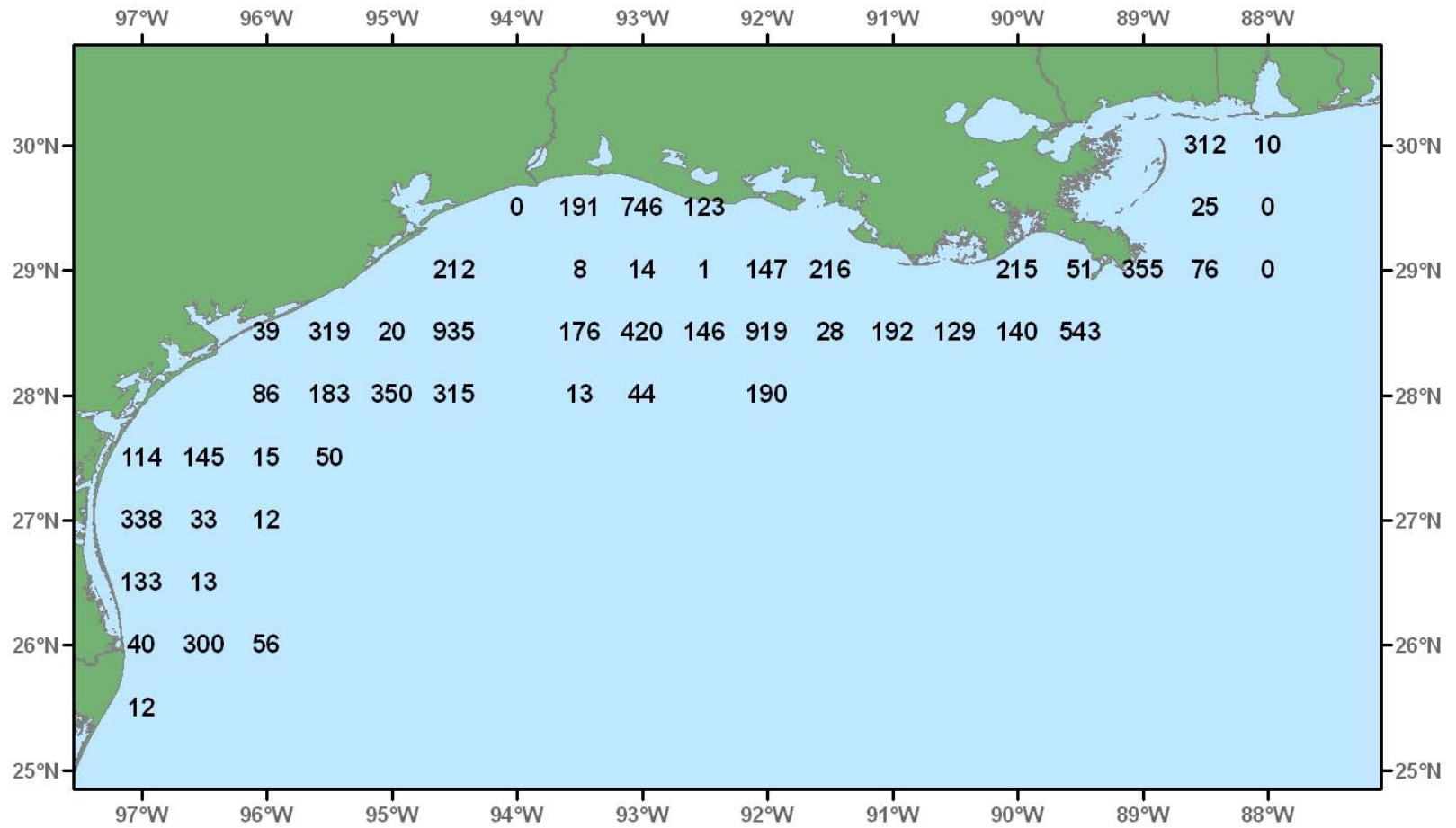


Figure 33. Brown shrimp, *Farfantepenaeus aztecus*, number/hour for June-July 2005.

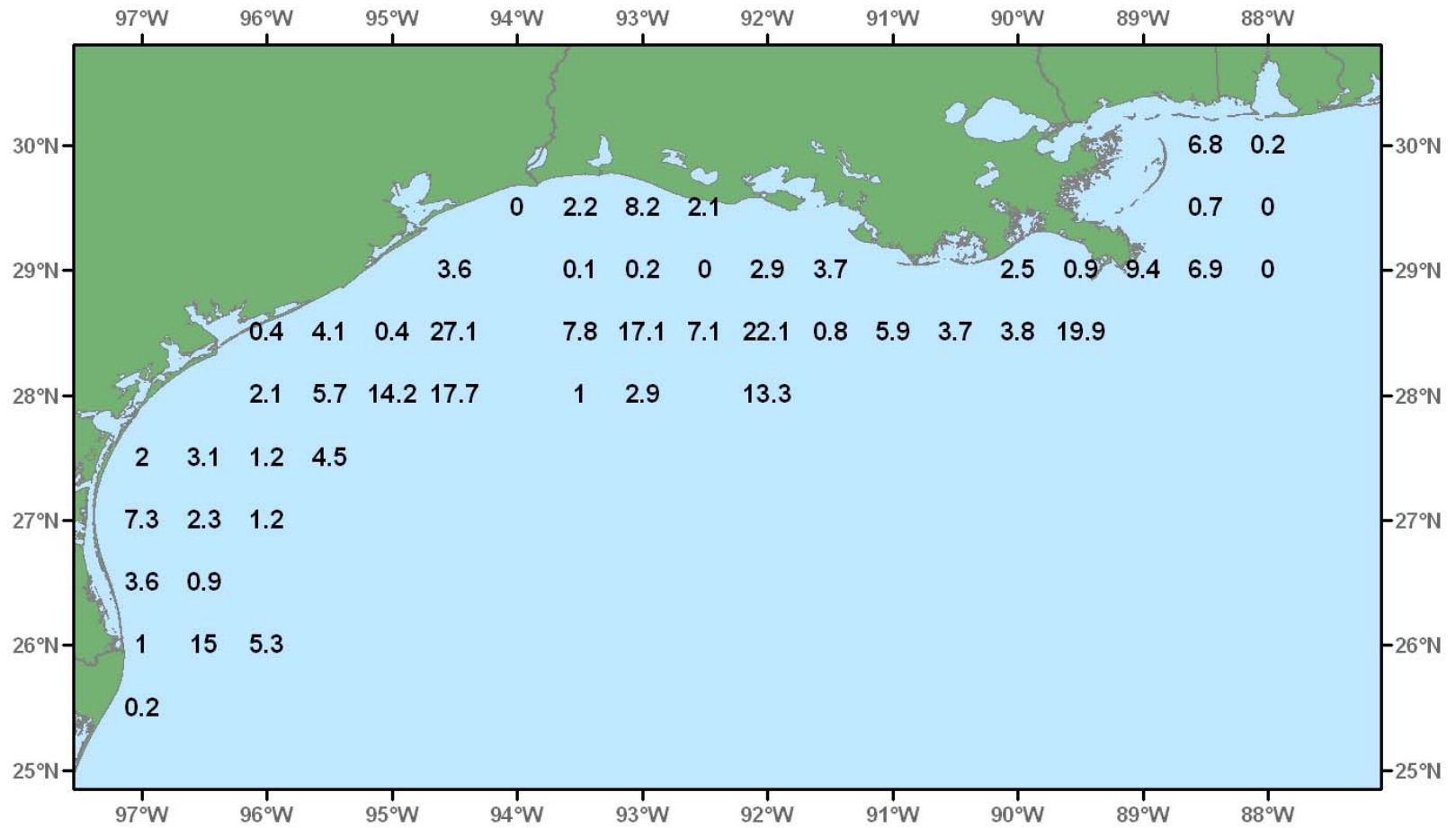


Figure 34. Brown shrimp, *Farfantepenaeus aztecus*, lb/hour for June-July 2005.

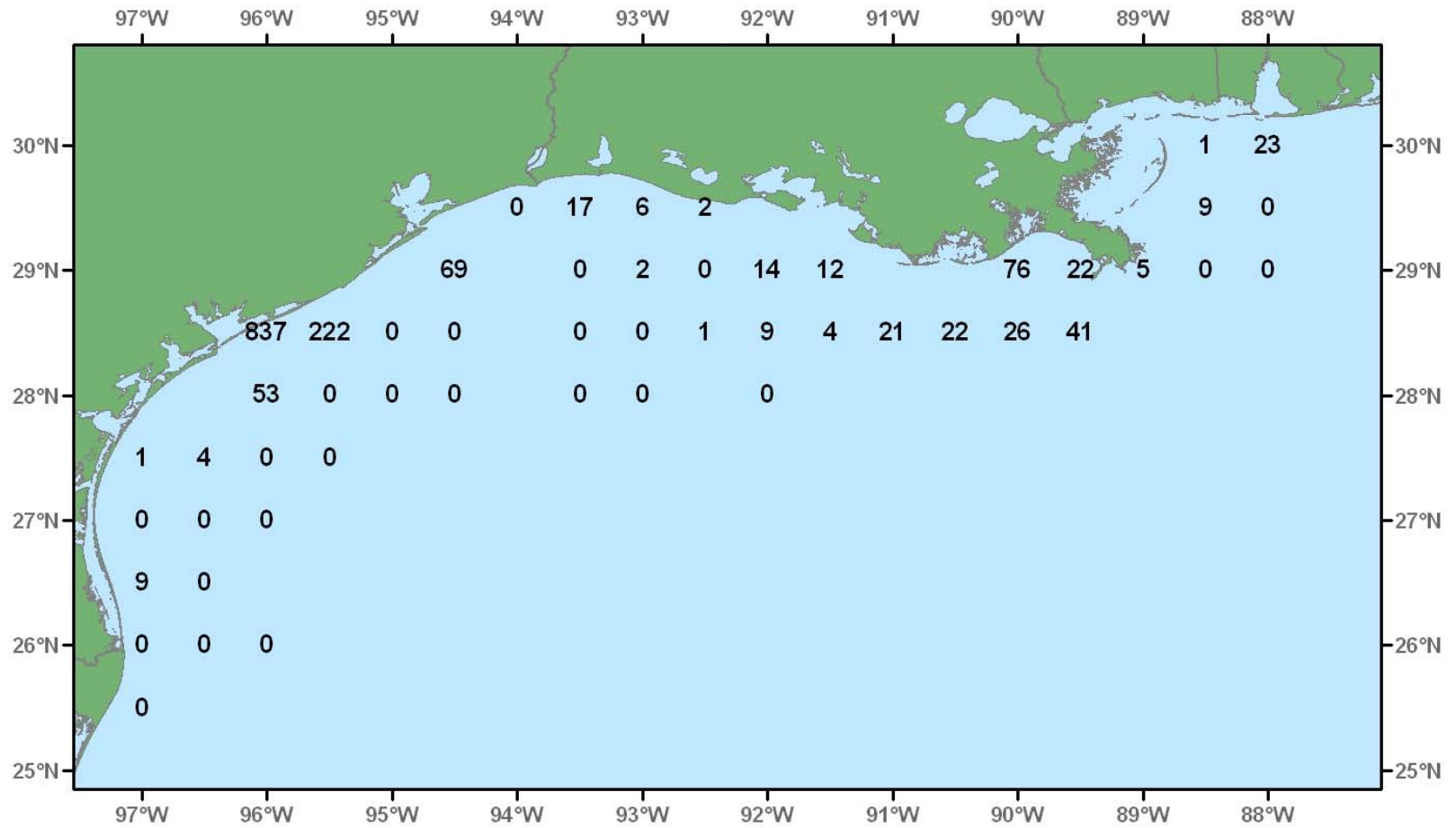


Figure 35. White shrimp, *Litopenaeus setiferus*, number/hour for June-July 2005.

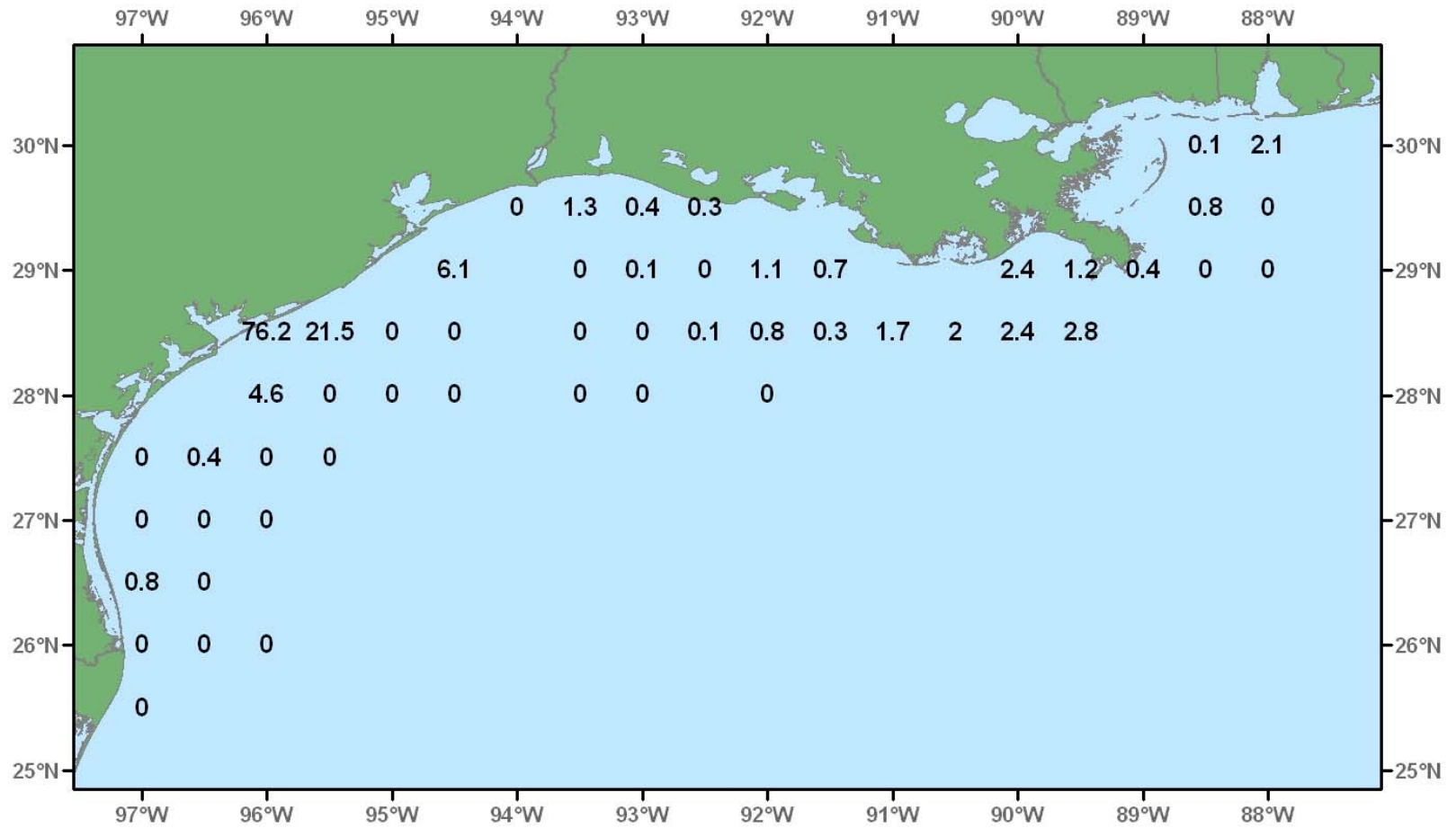


Figure 36. White shrimp, *Litopenaeus setiferus*, lb/hour for June-July 2005.

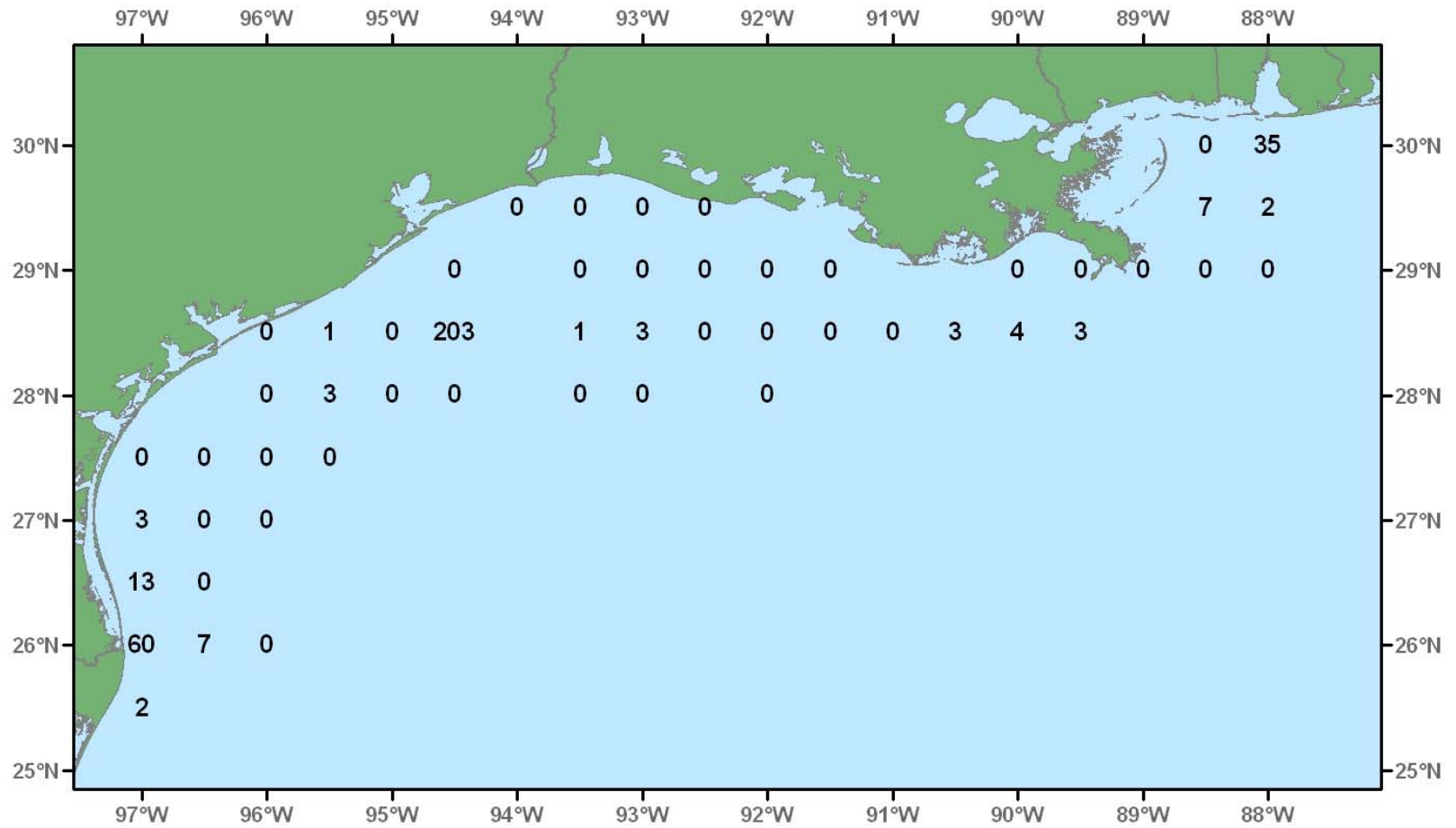


Figure 37. Pink shrimp, *Farfantepenaeus duorarum*, number/hour for June-July 2005.

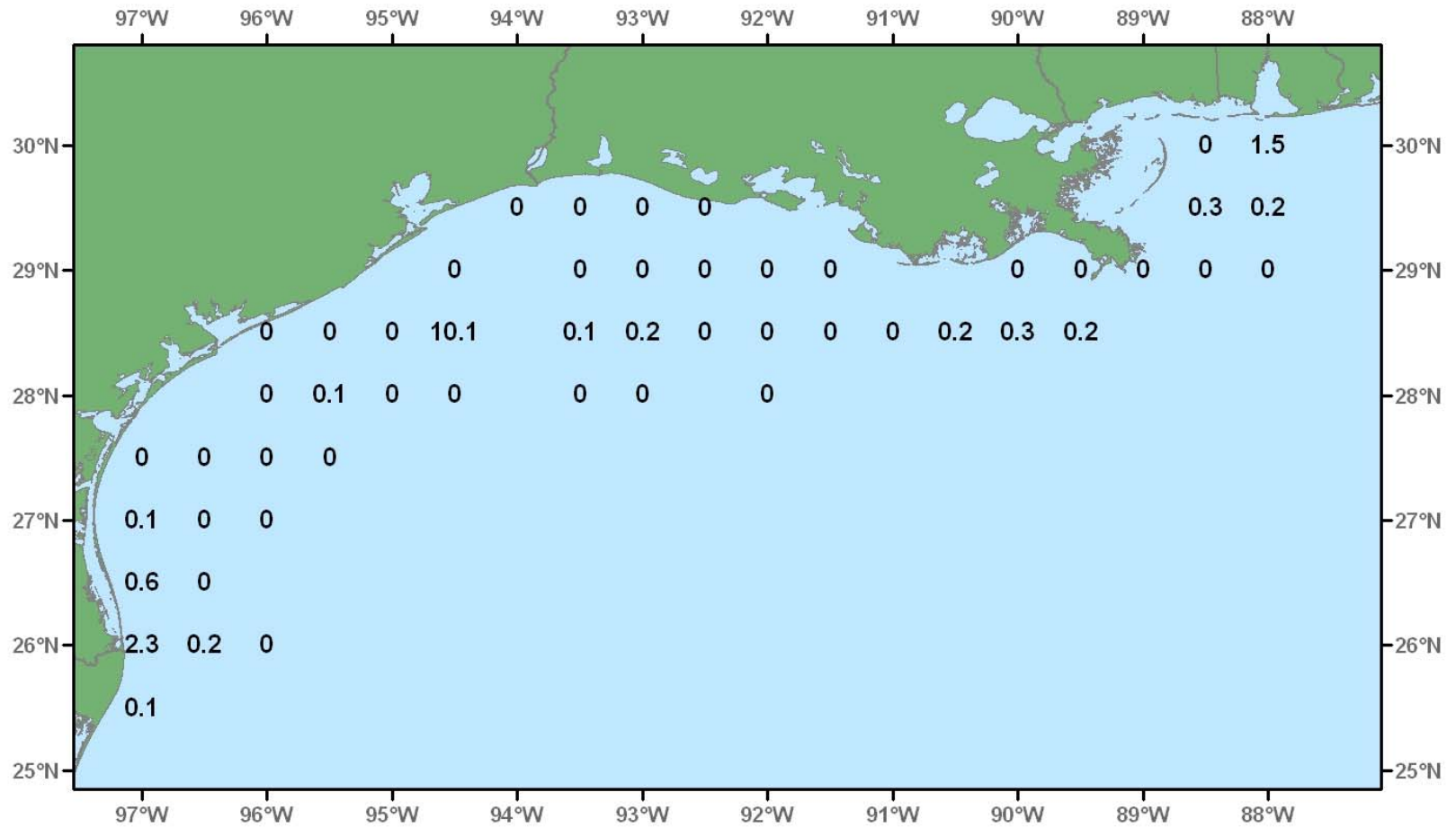


Figure 38. Pink shrimp, *Farfantepenaeus duorarum*, lb/hour for June-July 2005.

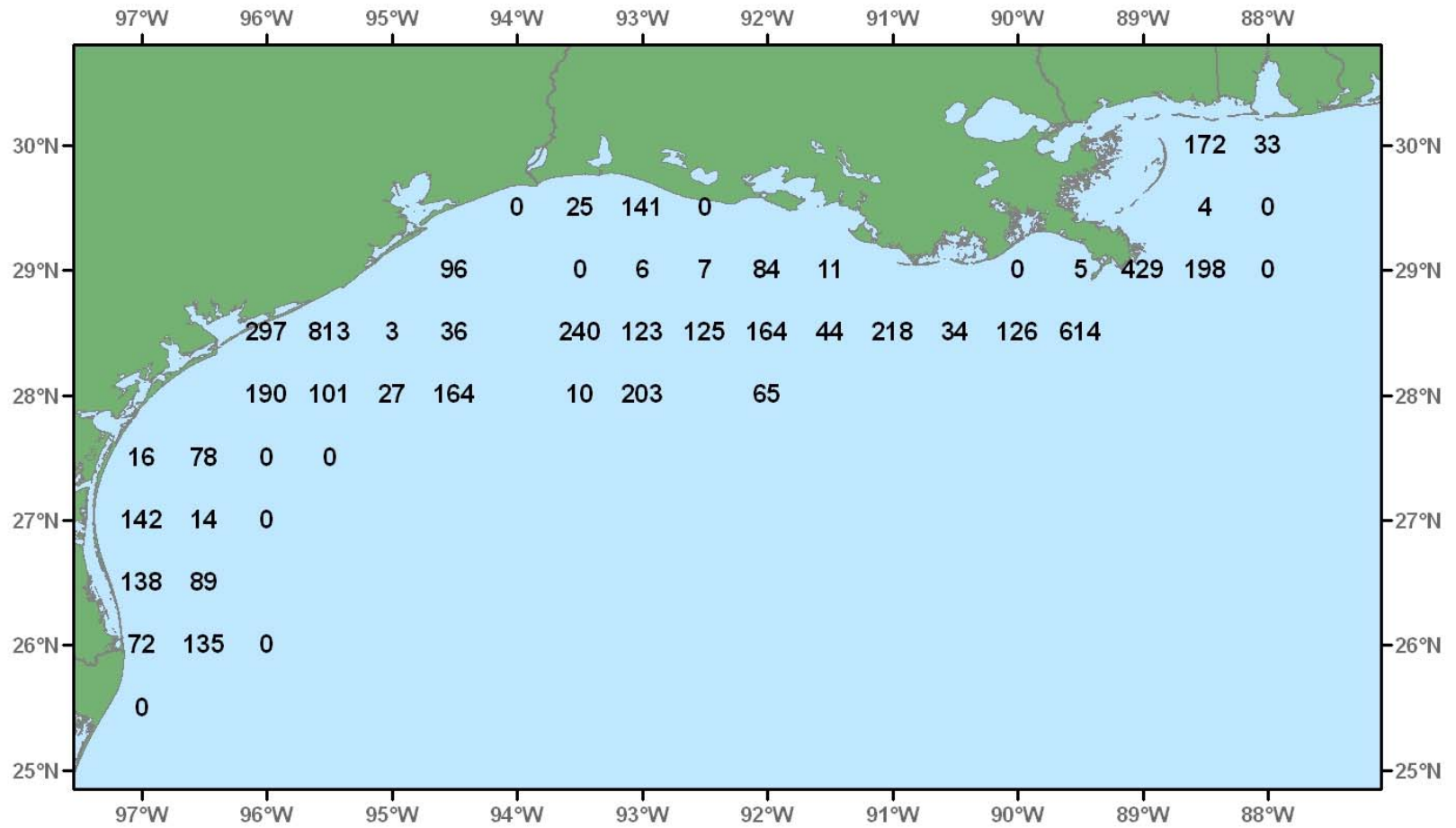


Figure 39. Lesser blue crab, *Callinectes similis*, number/hour for June-July 2005.

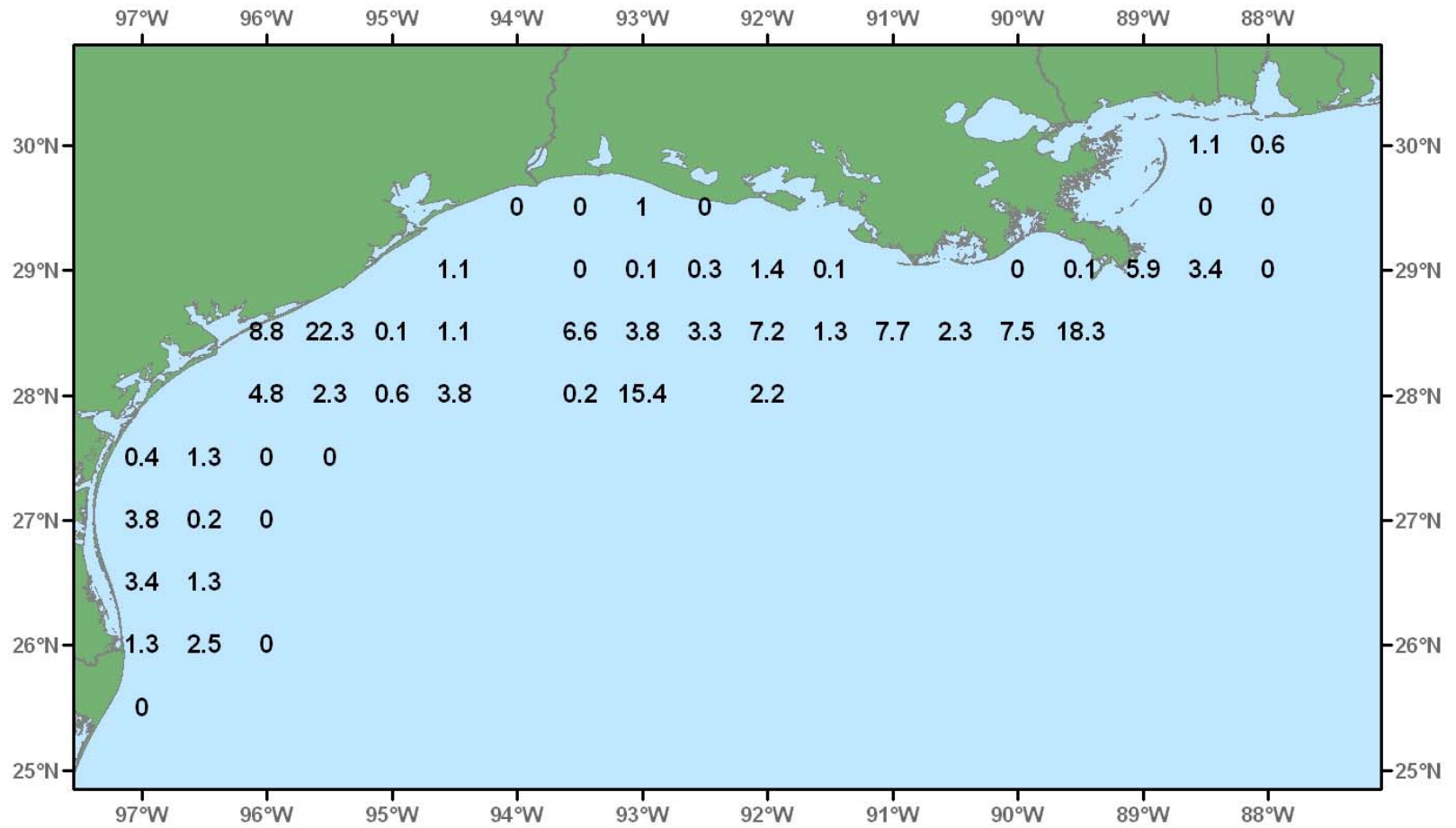


Figure 40. Lesser blue crab, *Callinectes similis*, lb/hour for June-July 2005.

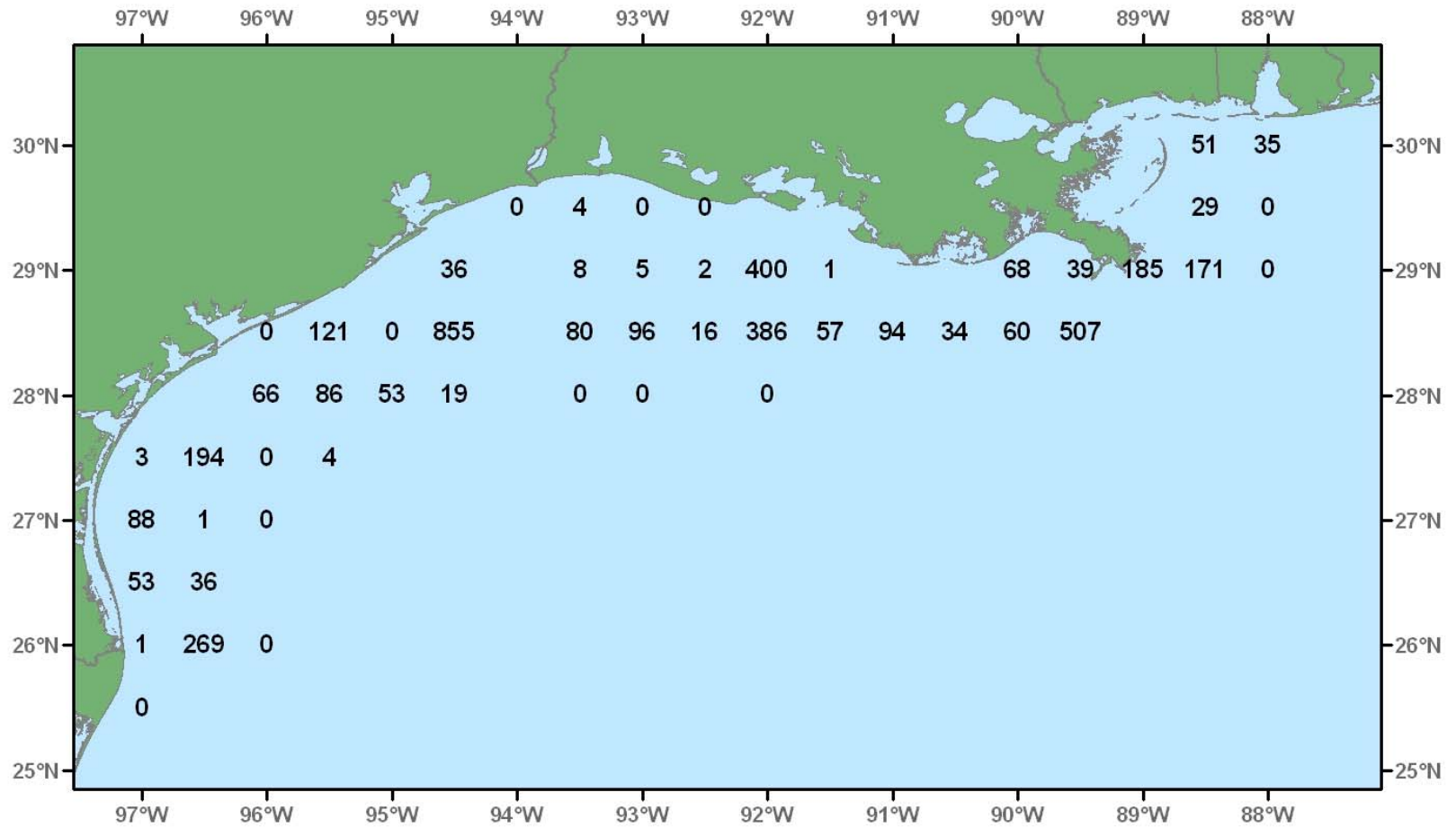


Figure 41. Roughback shrimp, *Trachypenaeus similis*, number/hour for June-July 2005.

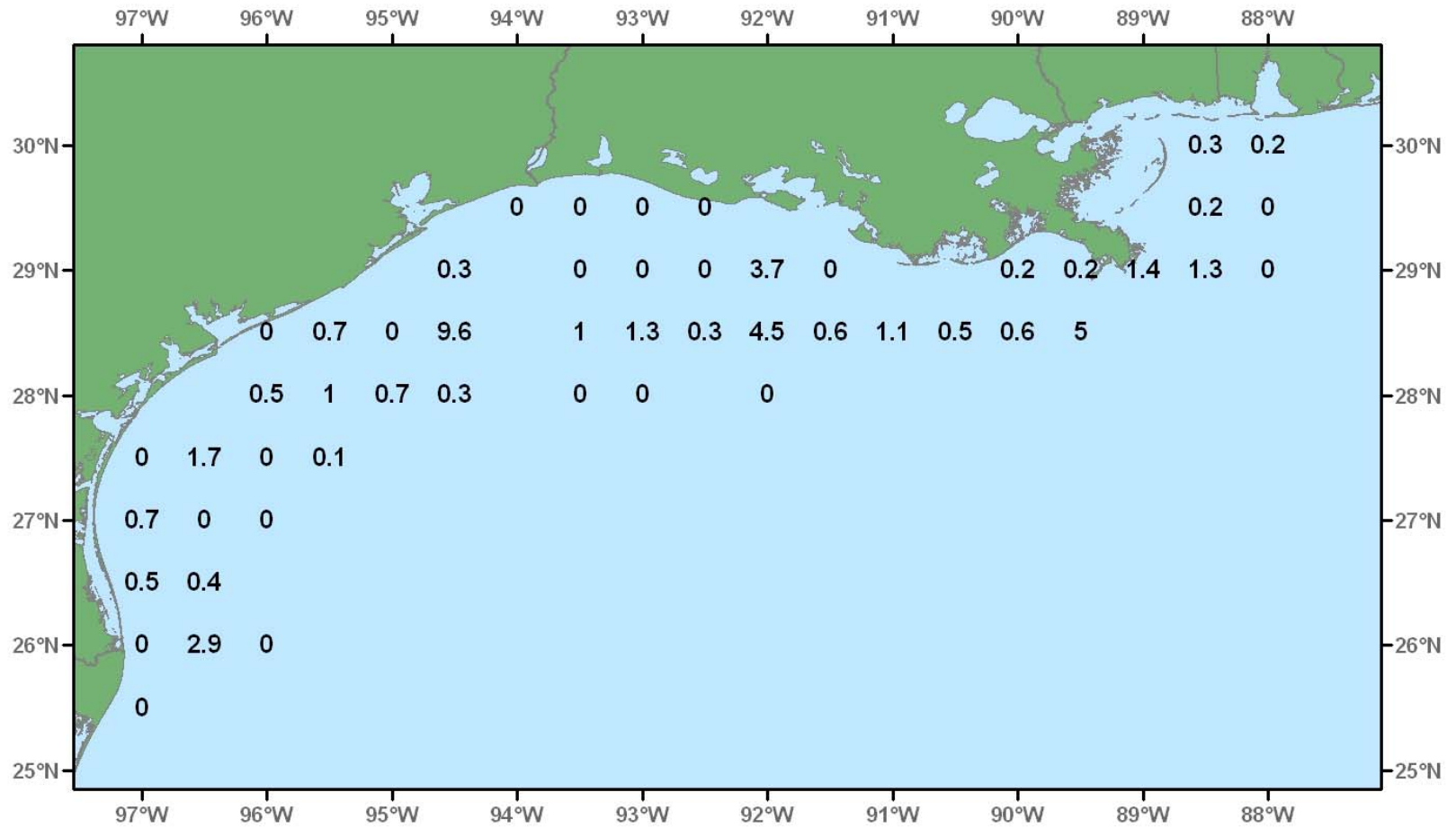


Figure 42. Roughback shrimp, *Trachypenaeus similis*, lb/hour for June-July 2005.

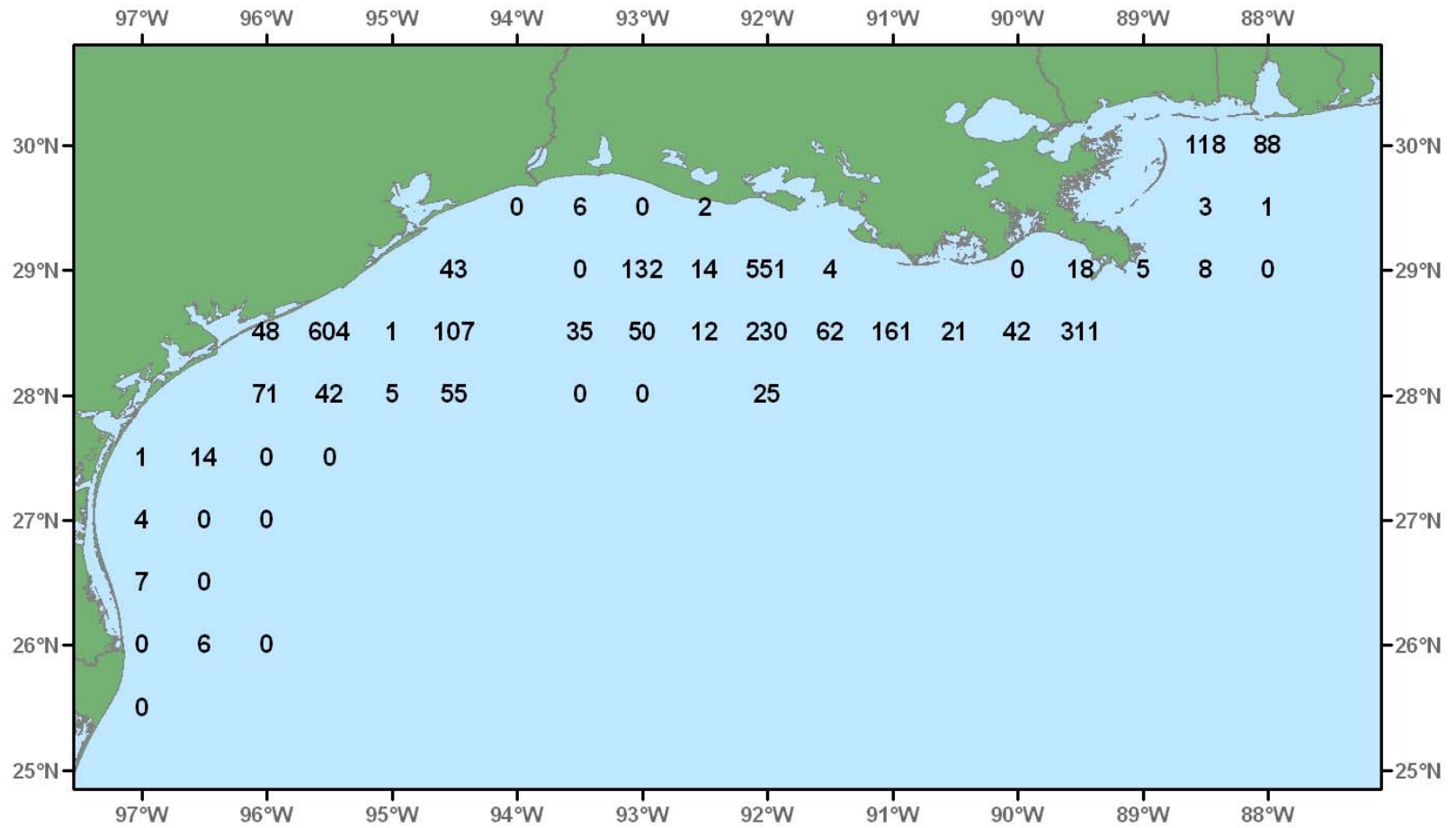


Figure 43. Mantis shrimp, *Squilla empusa*, number/hour for June-July 2005.

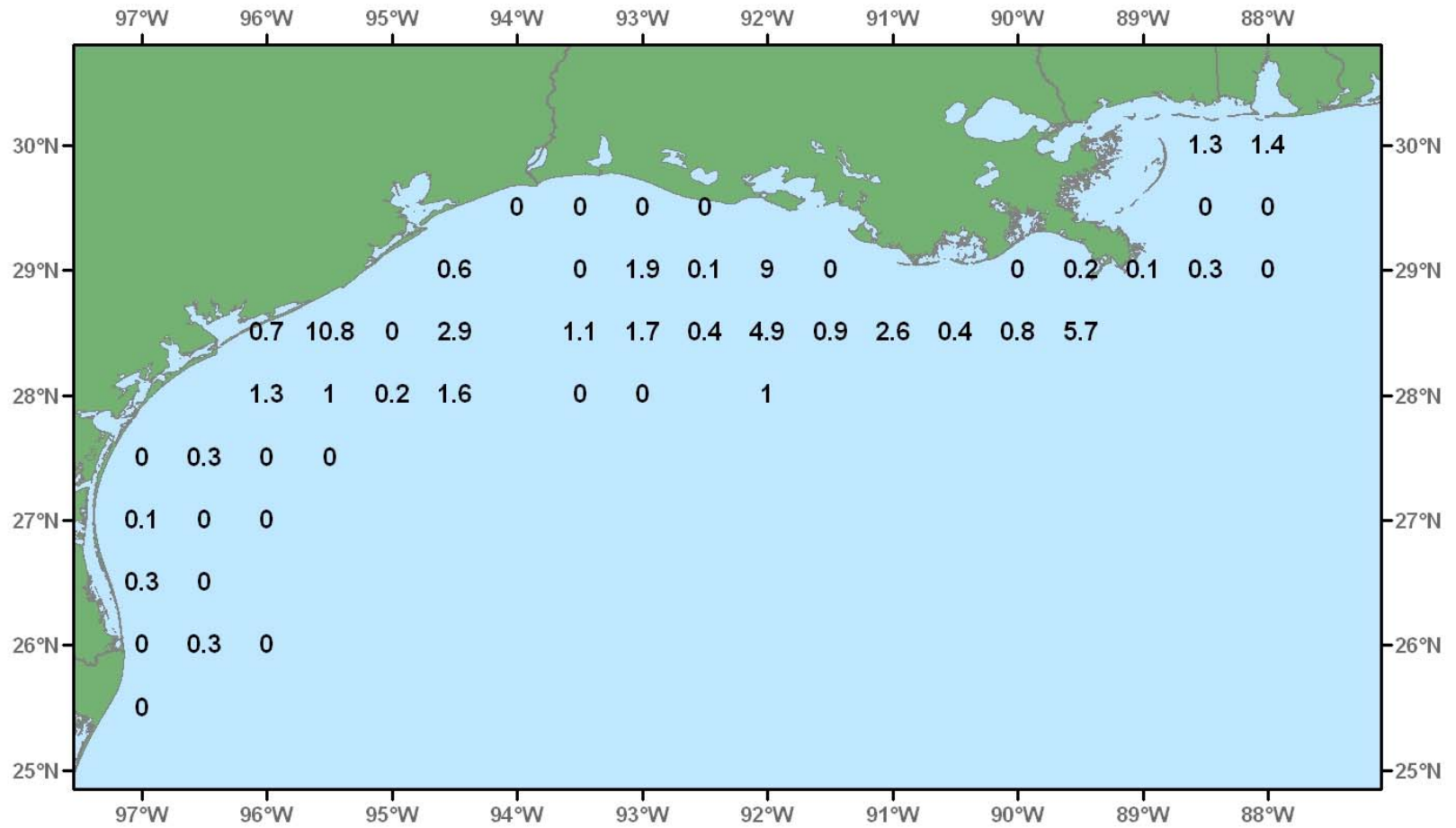


Figure 44. Mantis shrimp, *Squilla empusa*, lb/hour for June-July 2005.

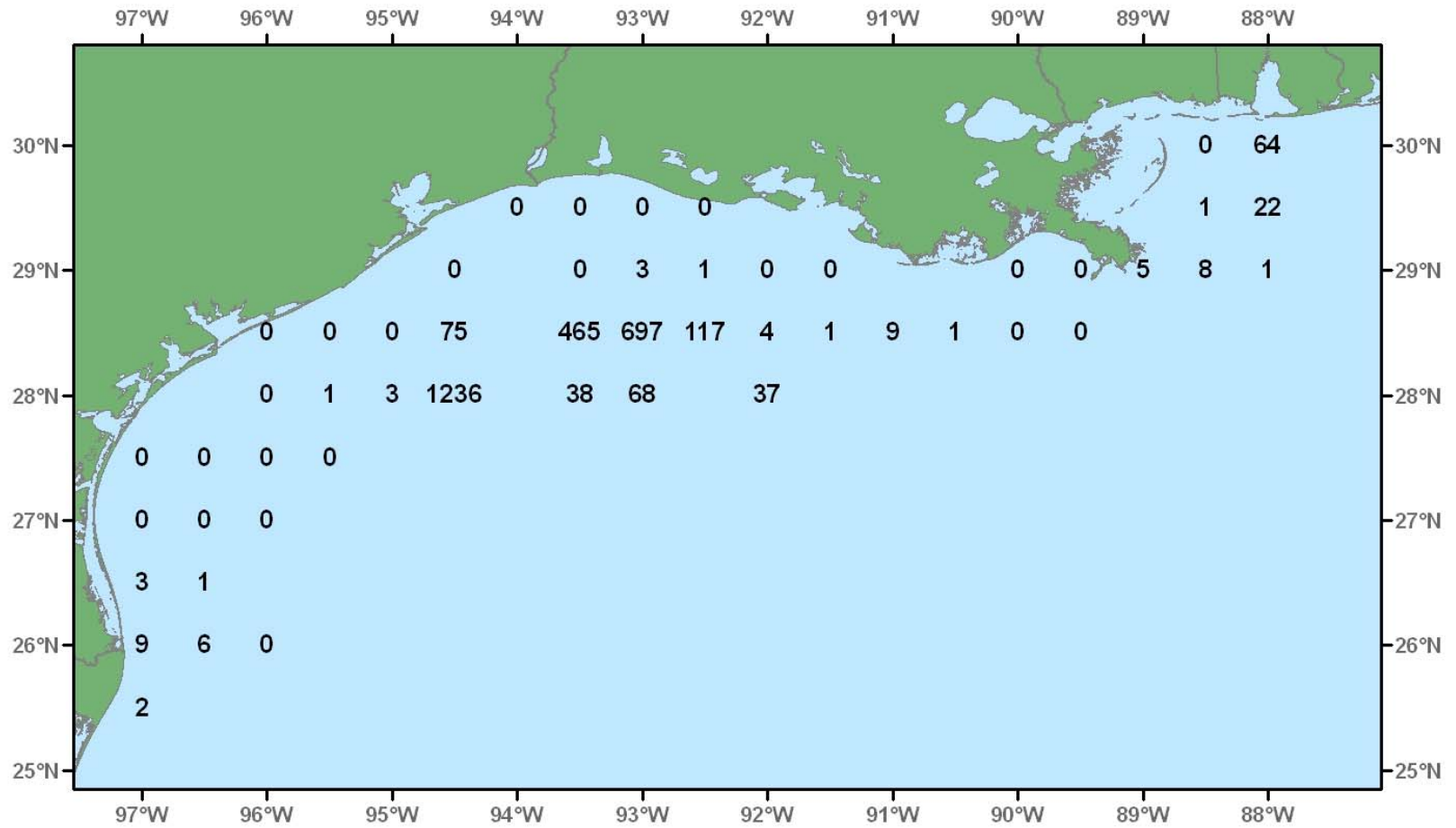


Figure 45. Brown rock shrimp, *Sicyonia brevirostris*, number/hour for June-July 2005.

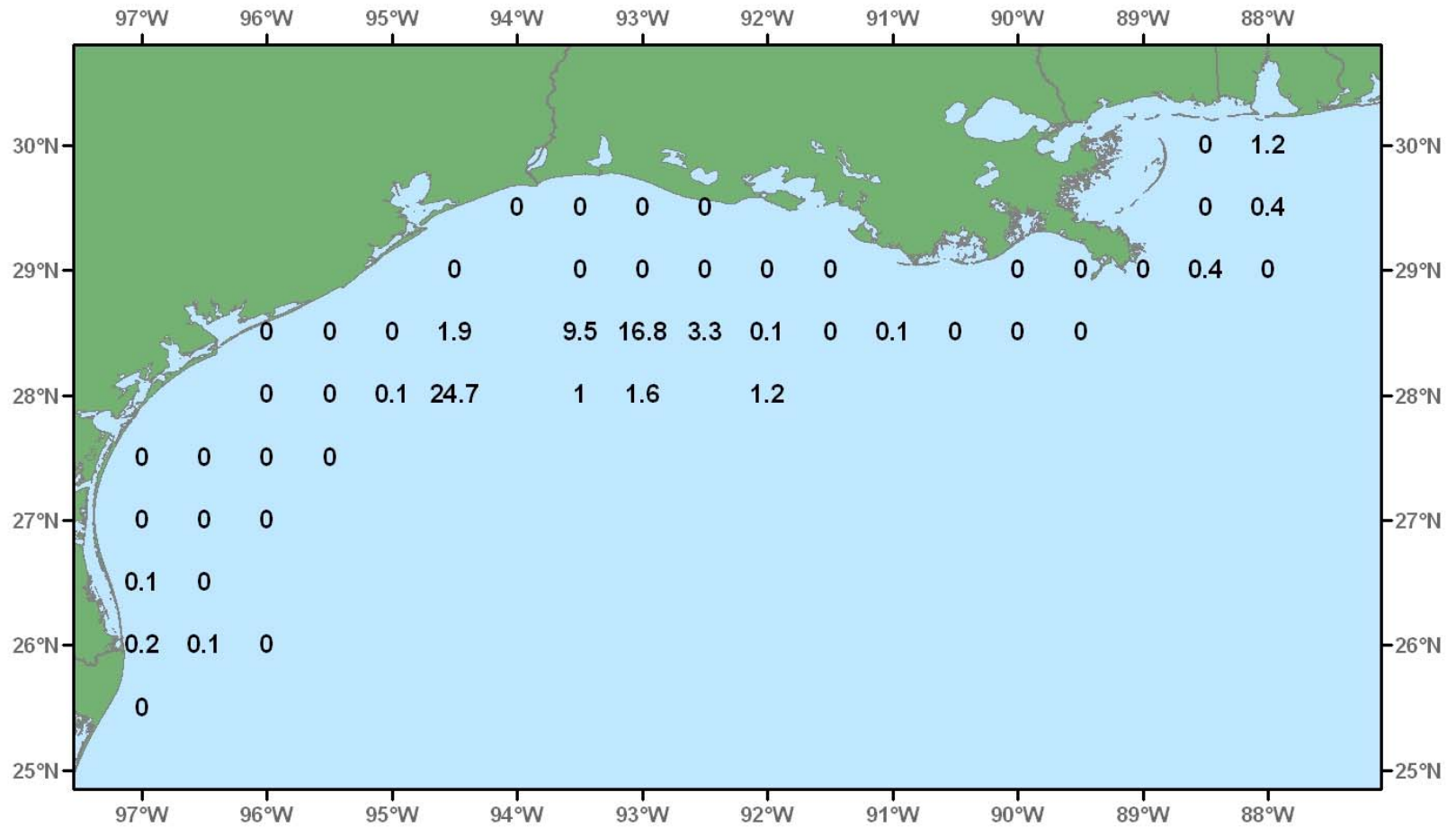


Figure 46. Brown rock shrimp, *Sicyonia brevirostris*, lb/hour for June-July 2005.

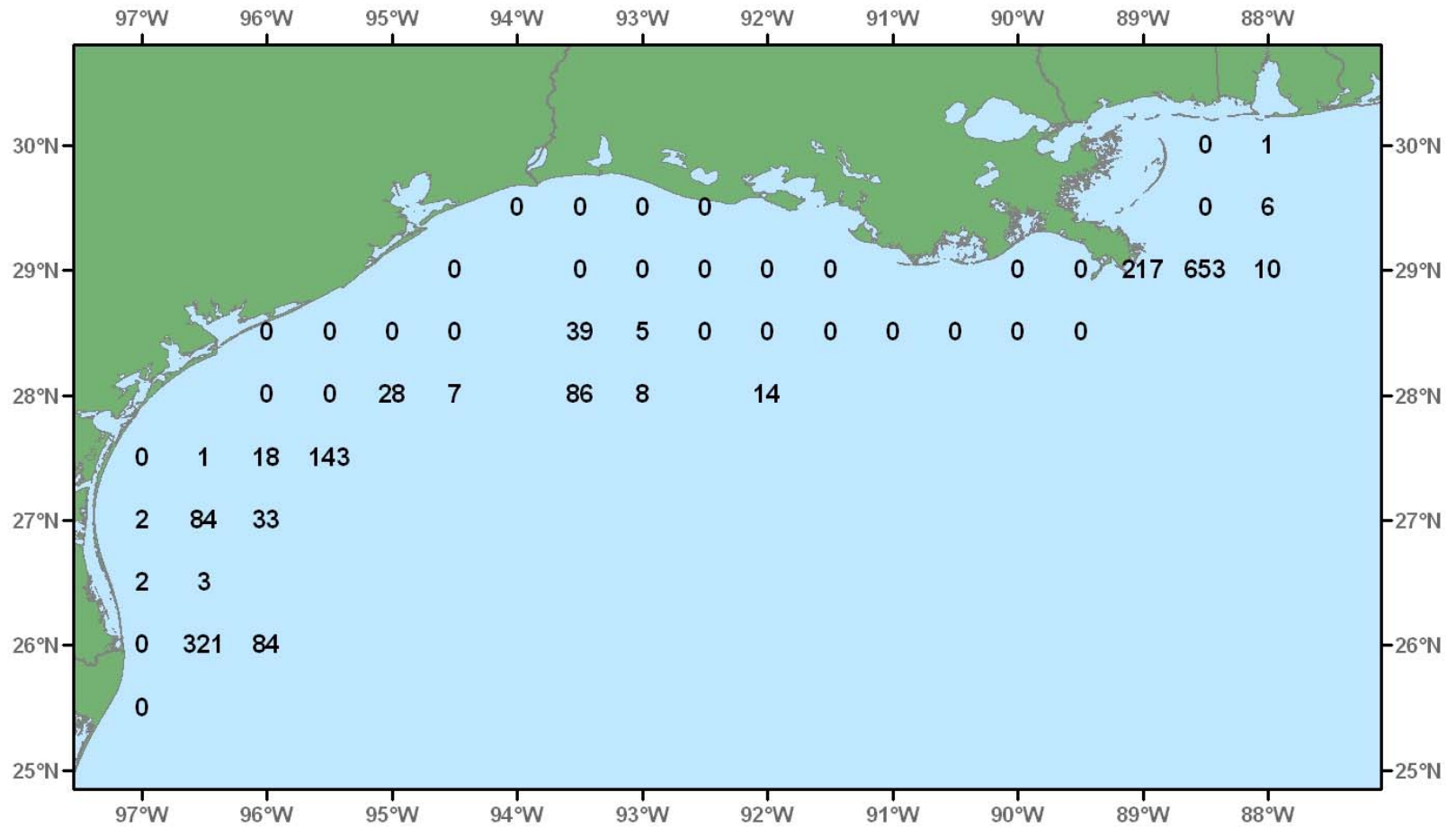


Figure 47. Longspine swimming crab, *Portunis spinicarpus*, number/hour for June-July 2005.

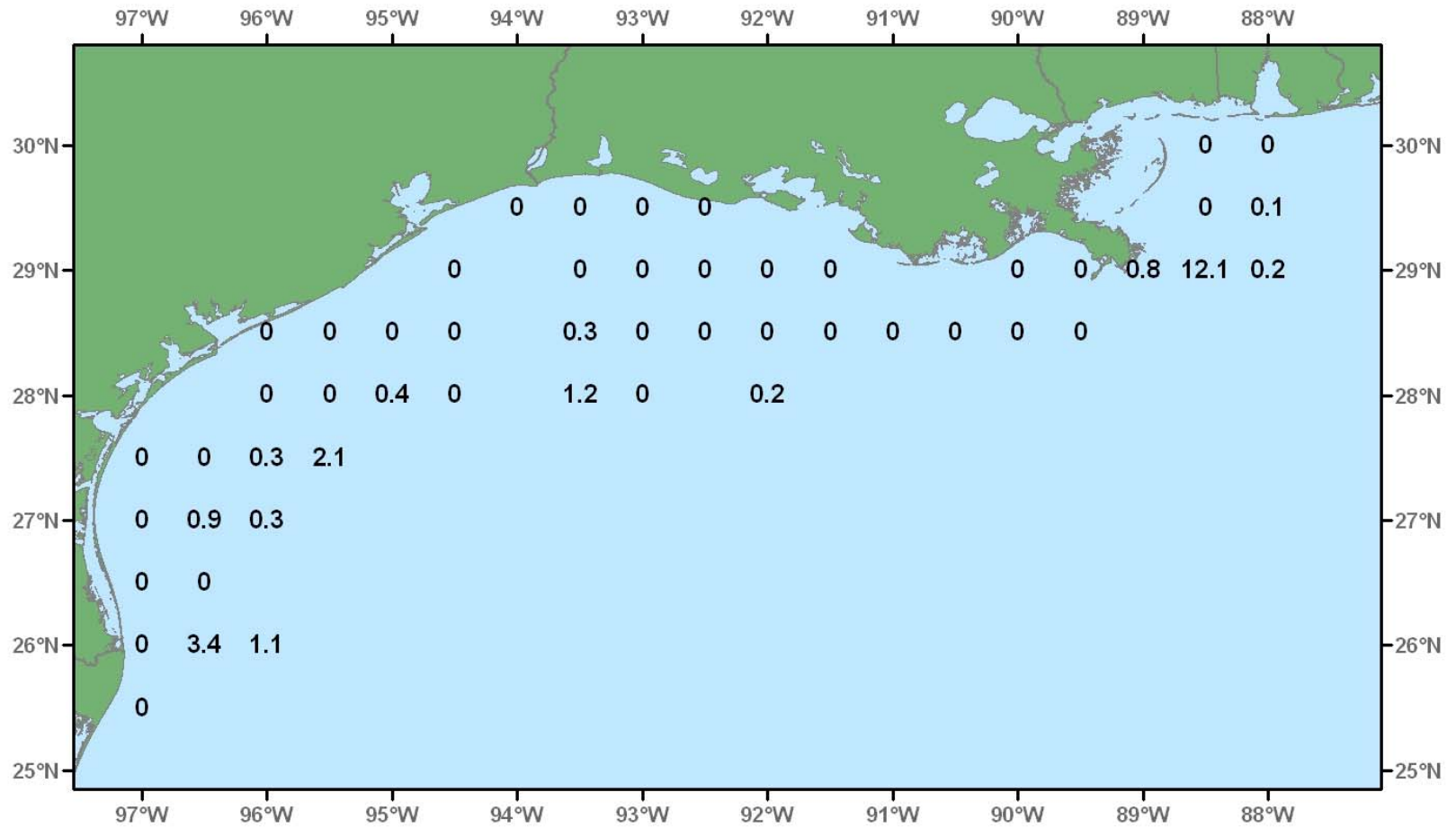


Figure 48. Longspine swimming crab, *Portunis spinicarpus*, lb/hour for June-July 2005.

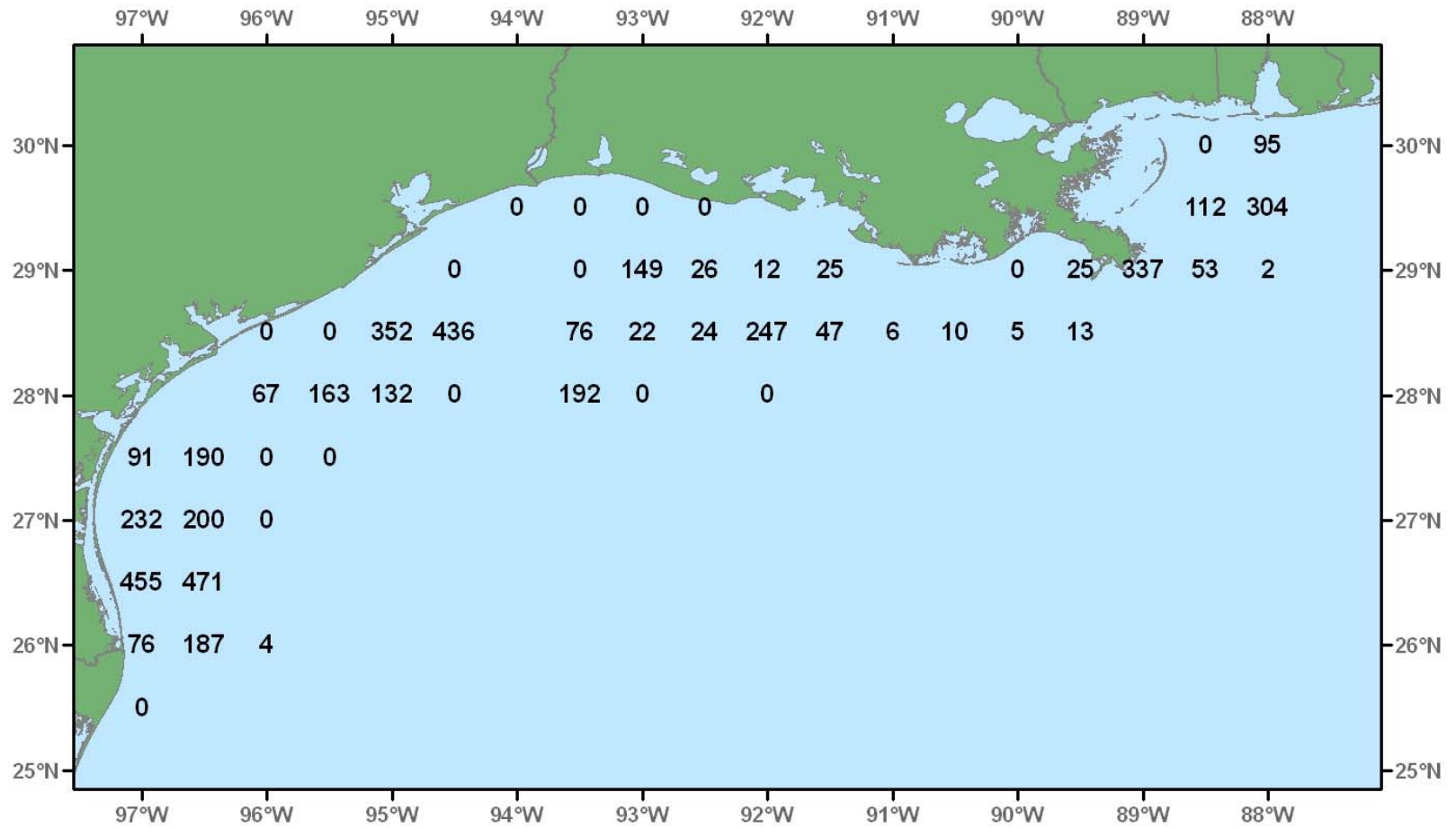


Figure 49. Arrow squid, *Loligo pleii*, number/hour for June-July 2005.

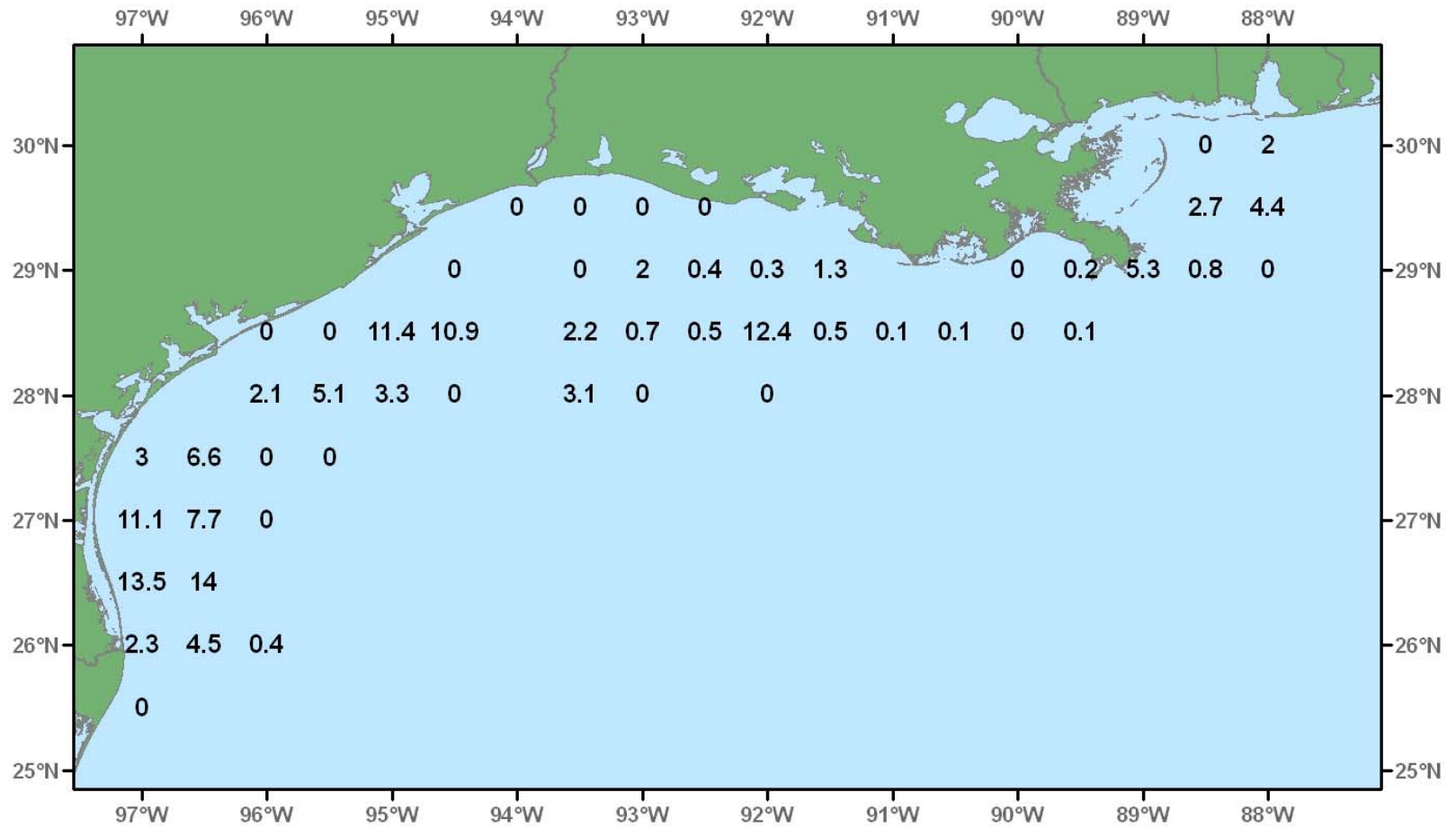


Figure 50. Arrow squid, *Loligo pleii*, lb/hour for June-July 2005.

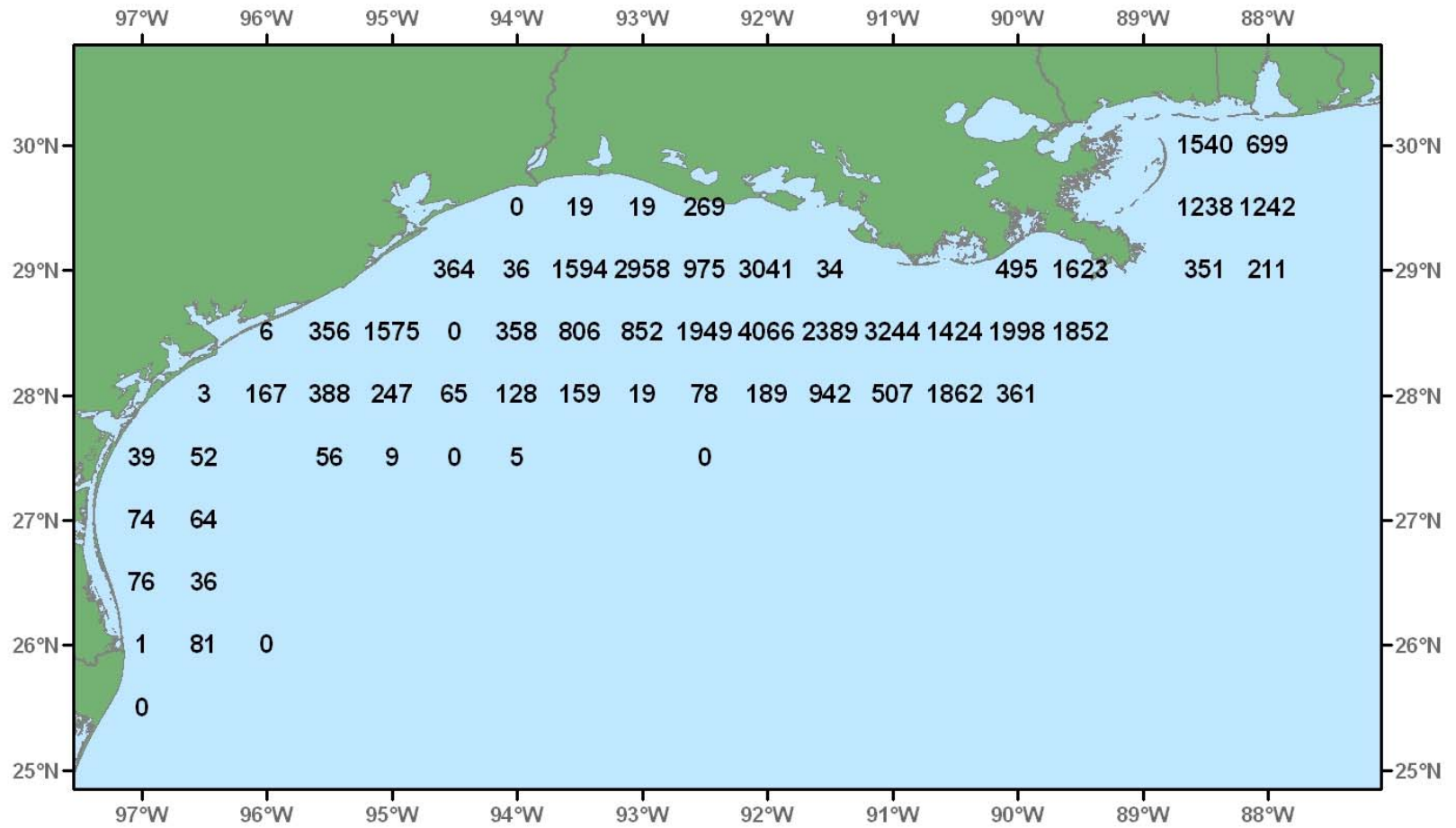


Figure 51. Atlantic croaker, *Micropogonias undulatus*, number/hour for October-December 2005.

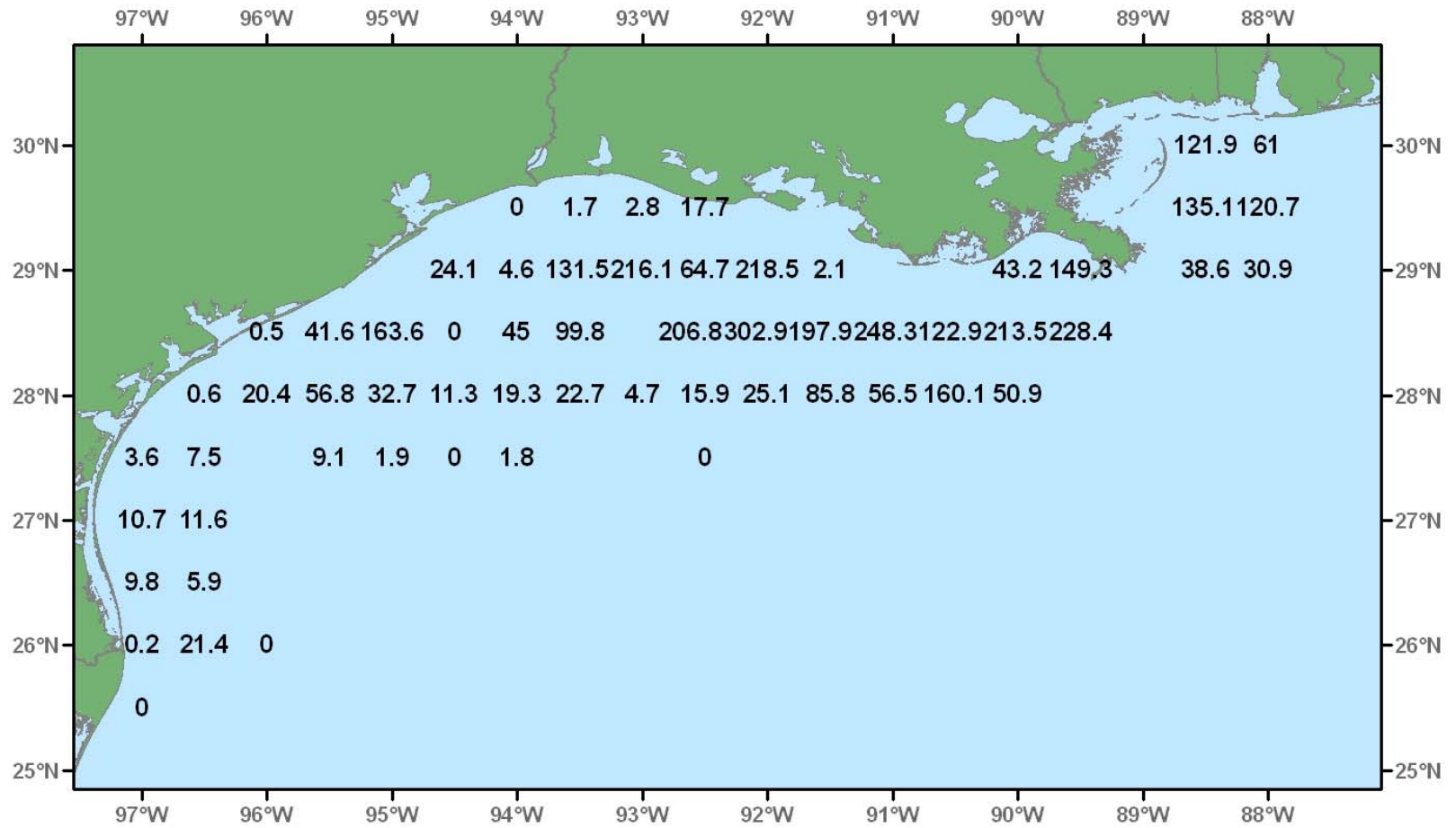


Figure 52. Atlantic croaker, *Micropogonias undulatus*, lb/hour for October-December 2005.

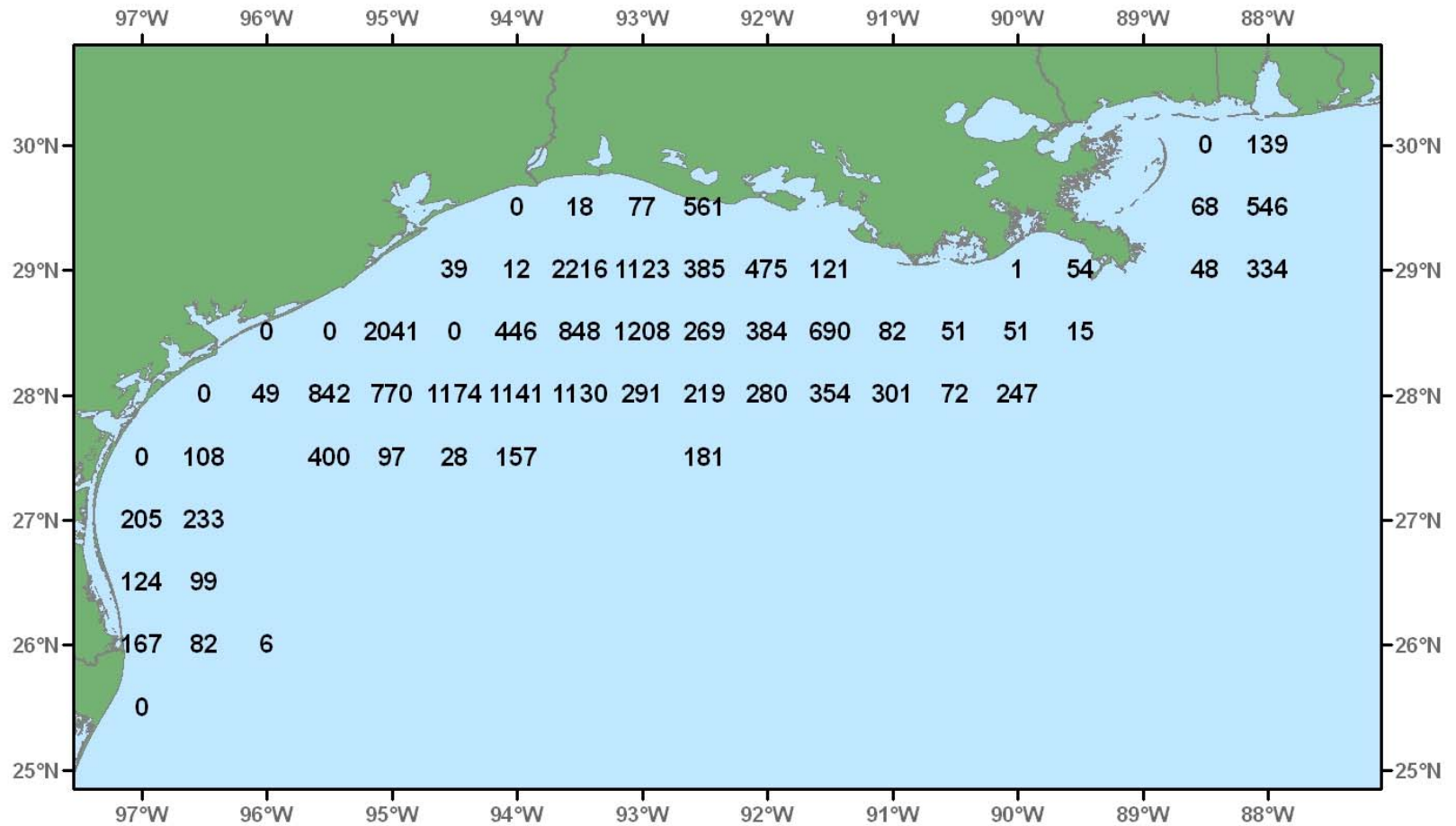


Figure 53. Longspine pogy, *Stenotomus caprinus*, number/hour for October-December 2005.

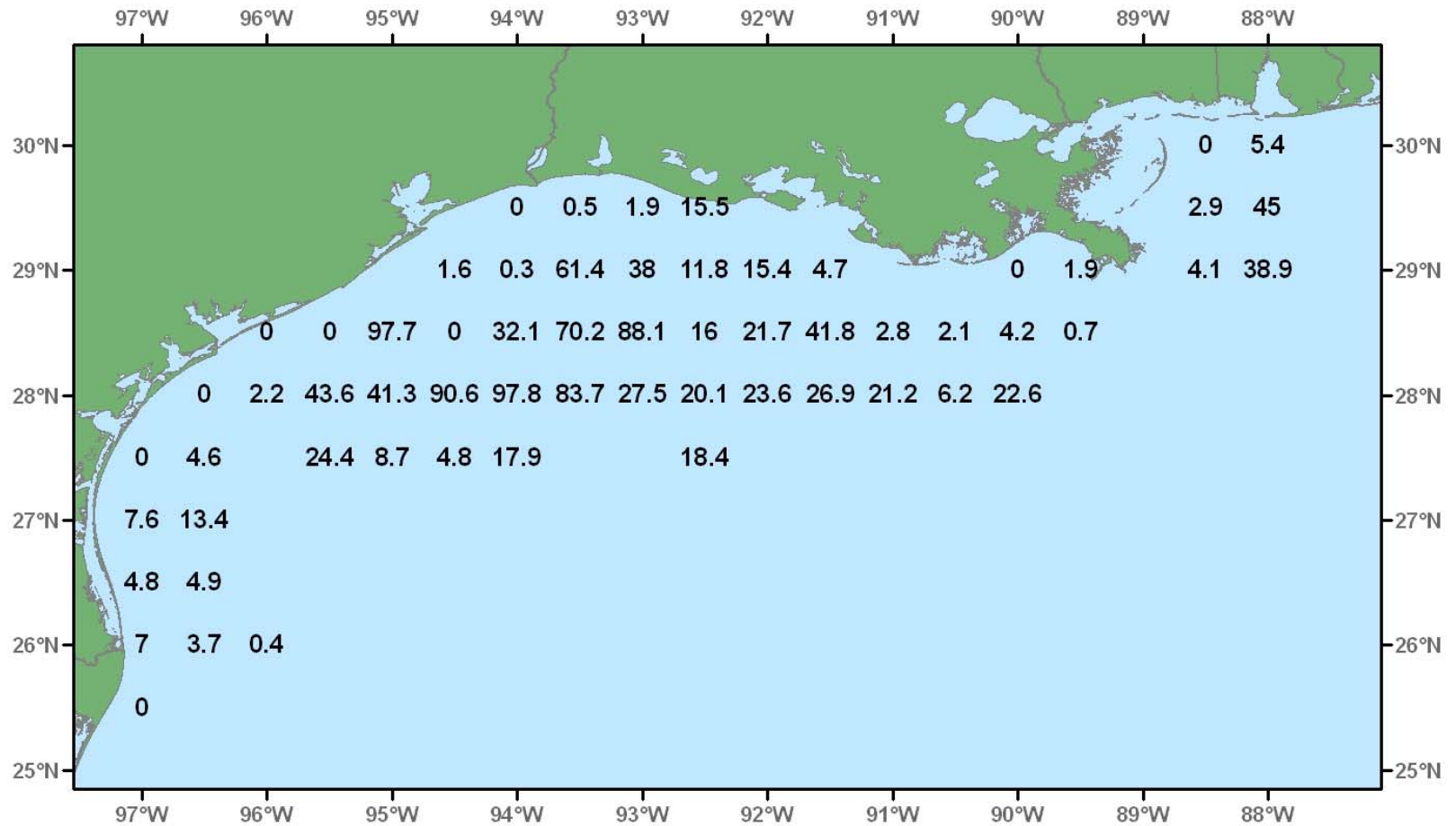


Figure 54. Longspine pogy, *Stenotomus caprinus*, lb/hour for October-December 2005.

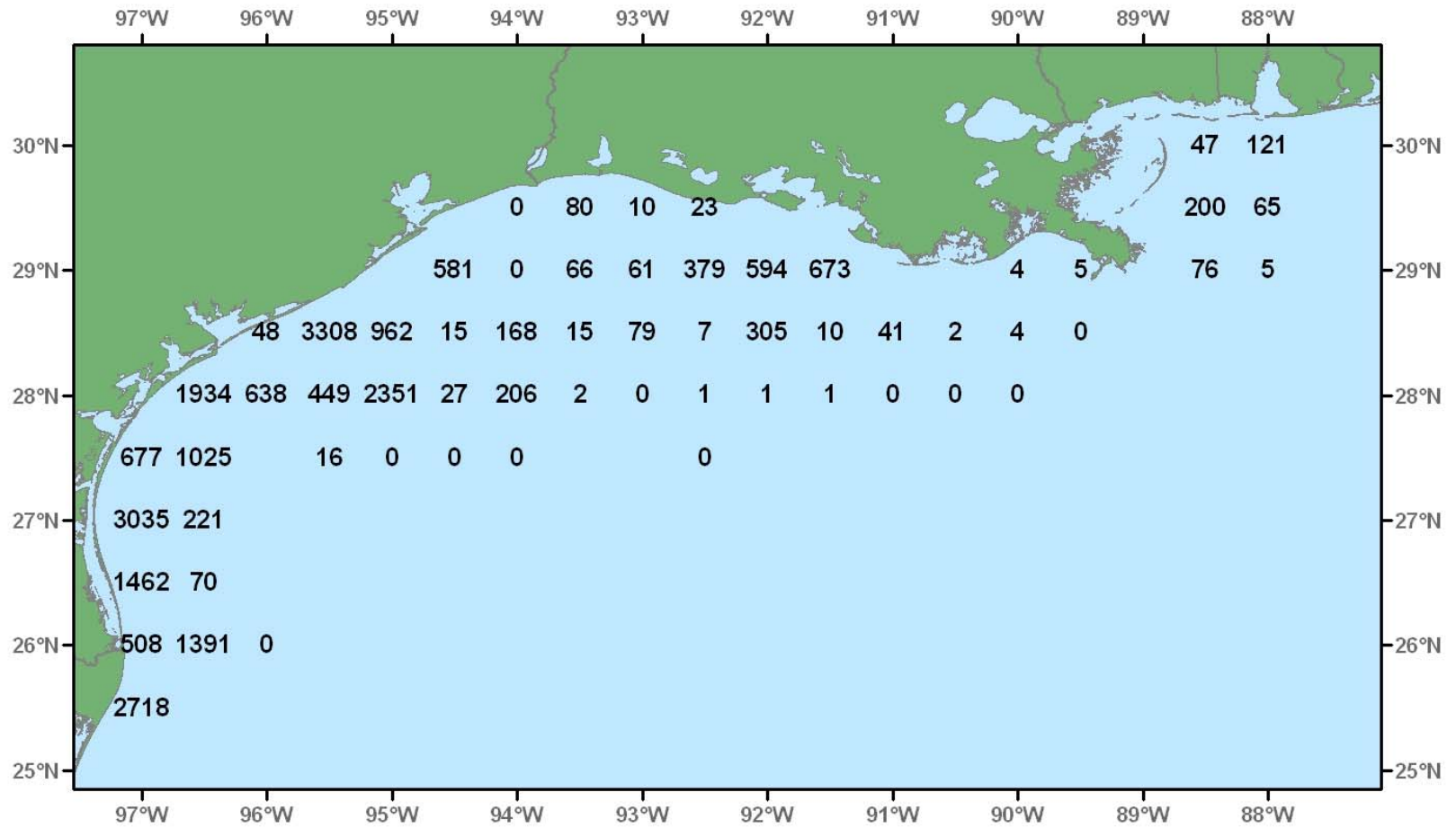


Figure 55. Atlantic bumper, *Chloroscombrus chrysurus*, number/hour for October-December 2005.

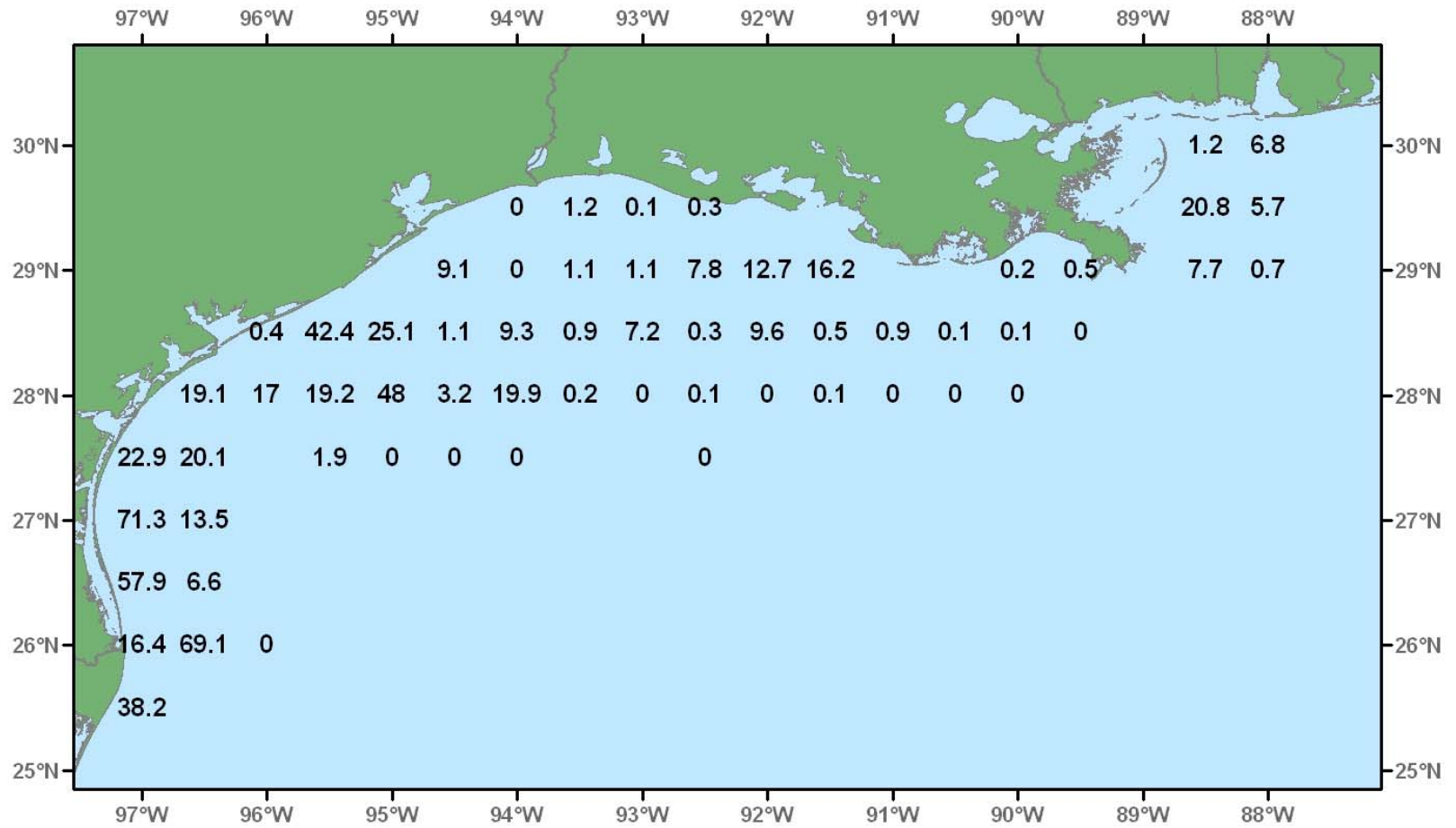


Figure 56. Atlantic bumper, *Chloroscombrus chrysurus*, lb/hour for October-December 2005.

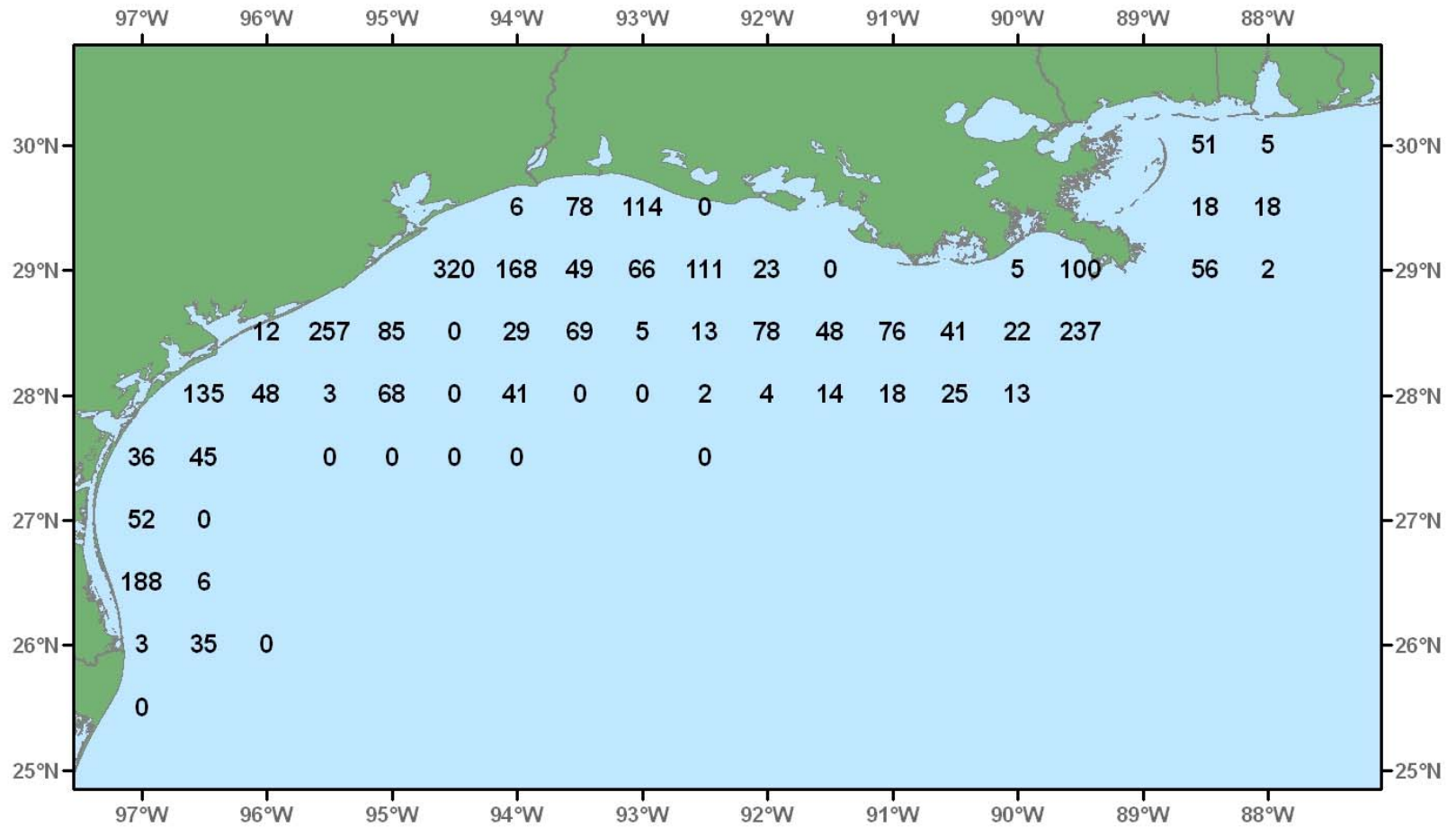


Figure 57. Silver seatrout, *Cynoscion nothus*, number/hour for October-December 2005.

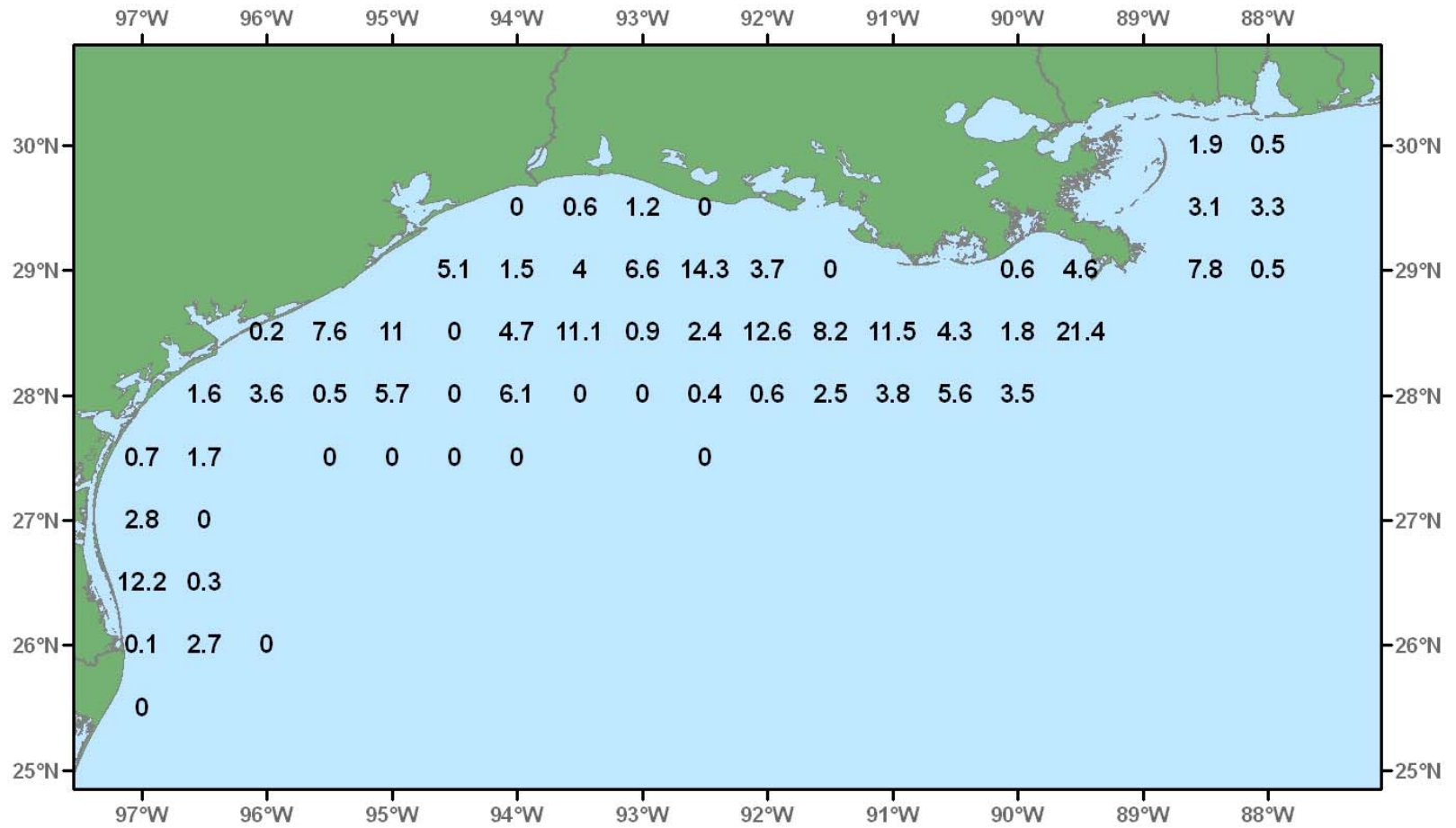


Figure 58. Silver seatrout, *Cynoscion nothus*, lb/hour for October-December 2005.

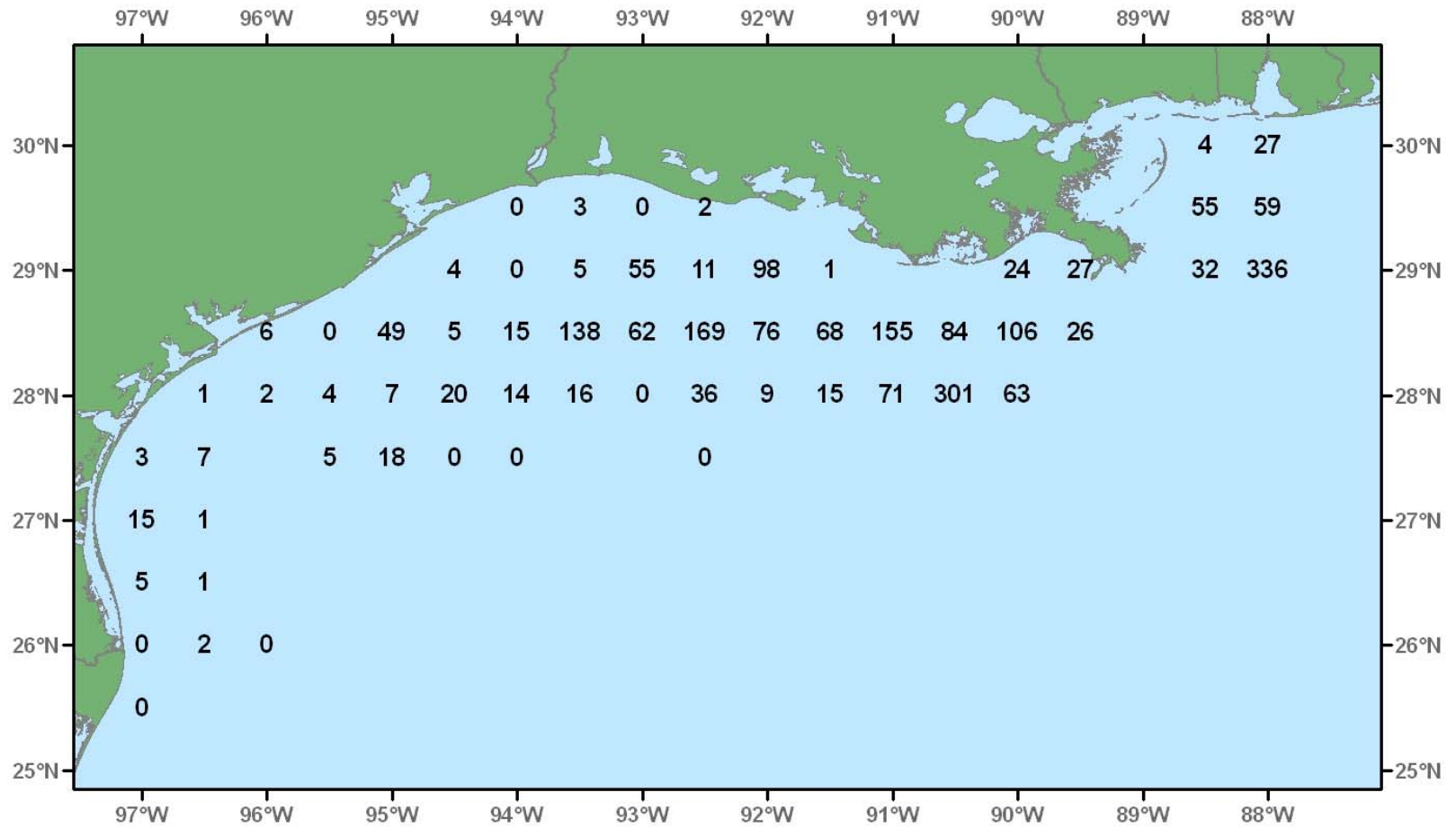


Figure 59. Spot, *Leiestomus xanthurus*, number/hour for October-December 2005.

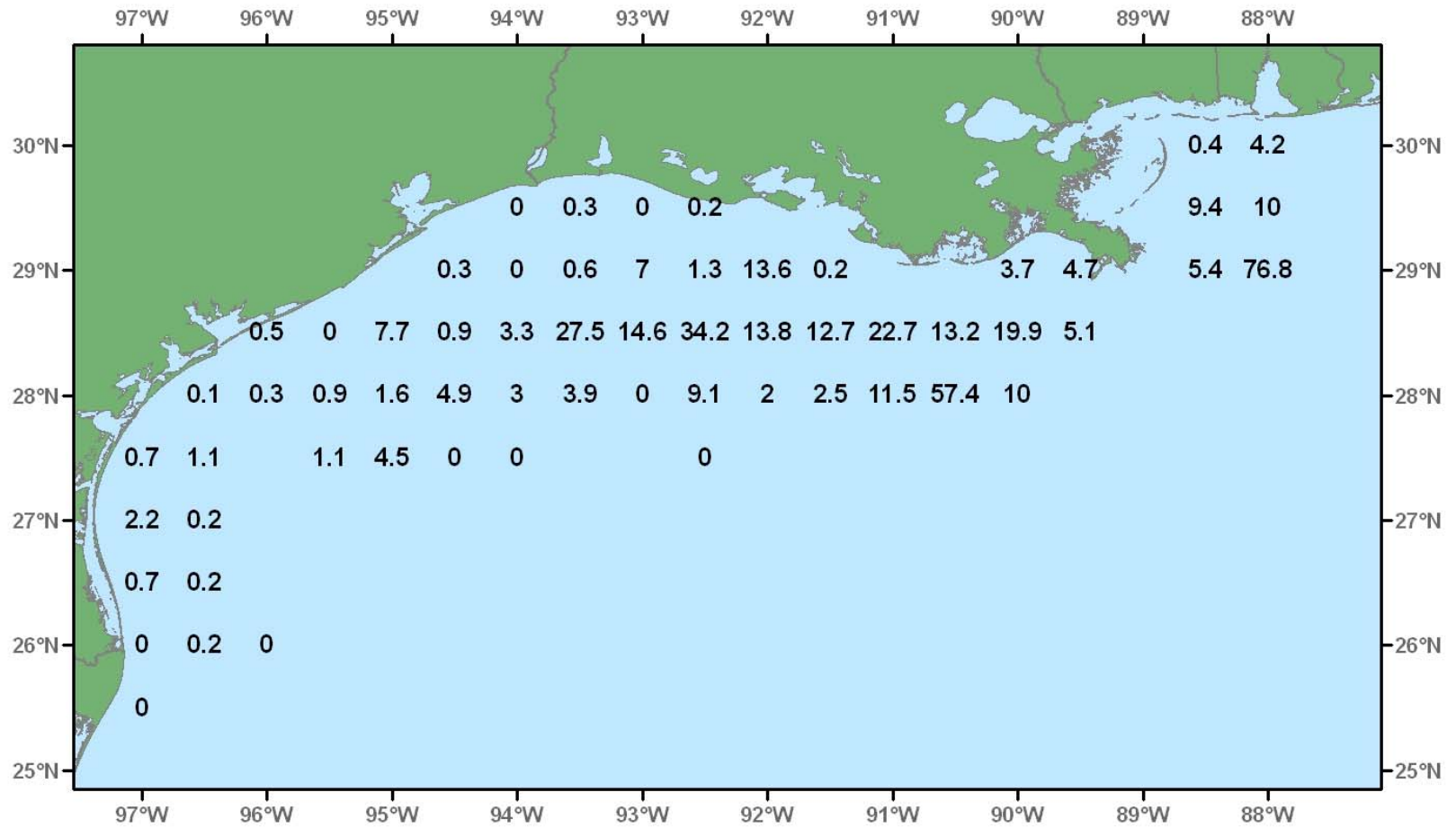


Figure 60. Spot, *Leiostomus xanthurus*, lb/hour for October-December 2005.

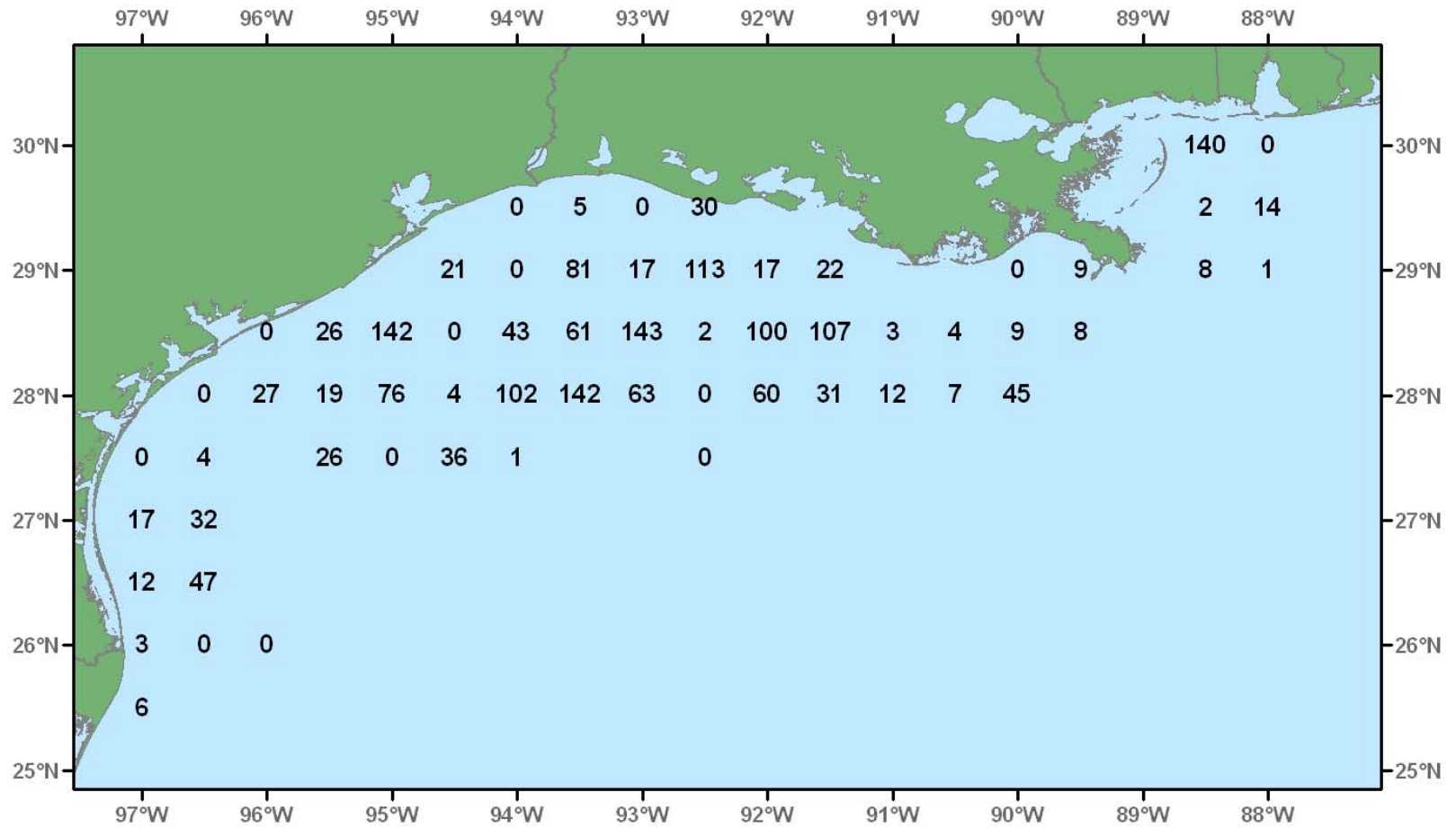


Figure 61. Gulf butterfish, *Peprilus burti*, number/hour for October-December 2005.

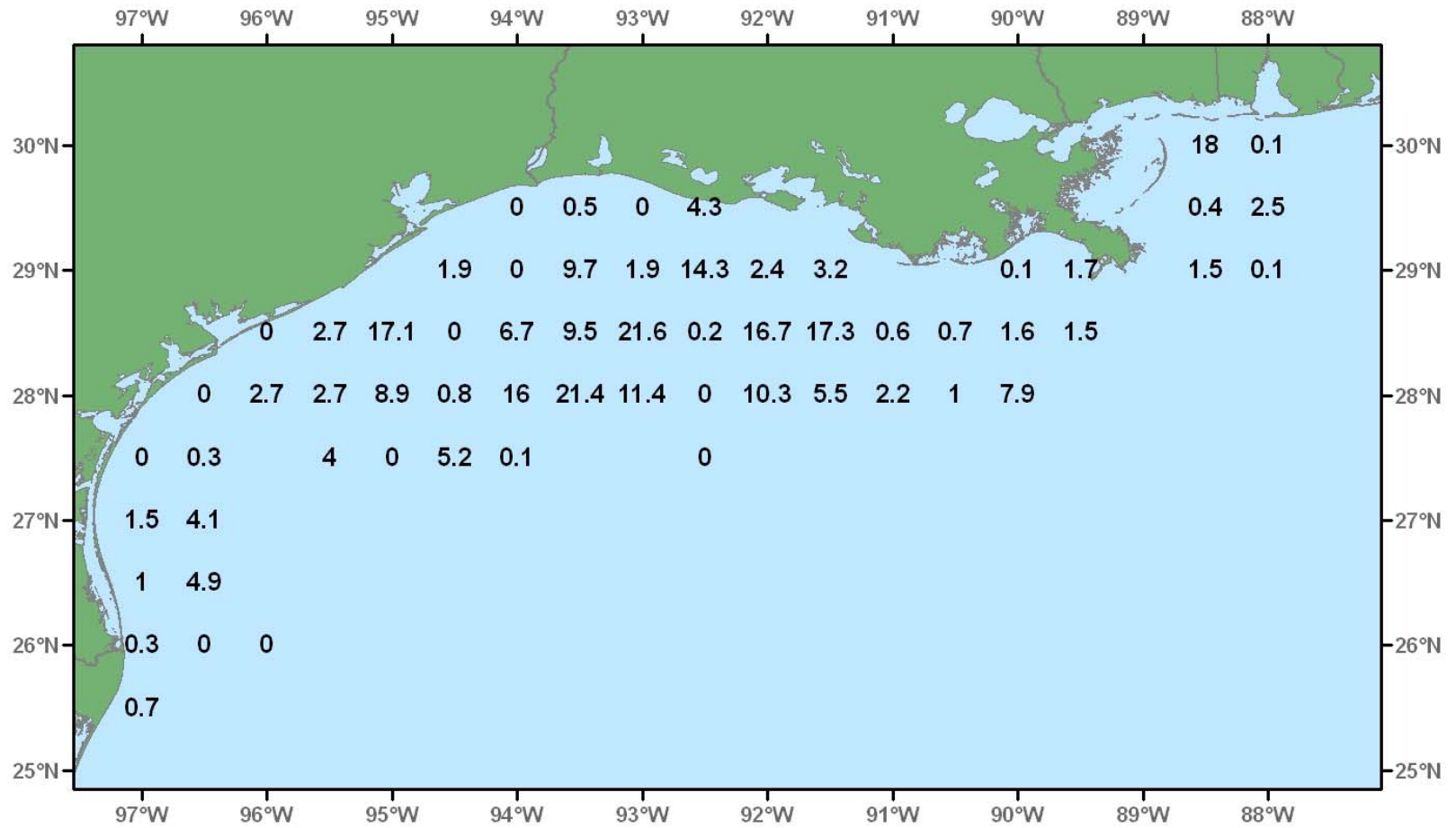


Figure 62. Gulf butterfish, *Peprilus burti*, lb/hour for October-December 2005.

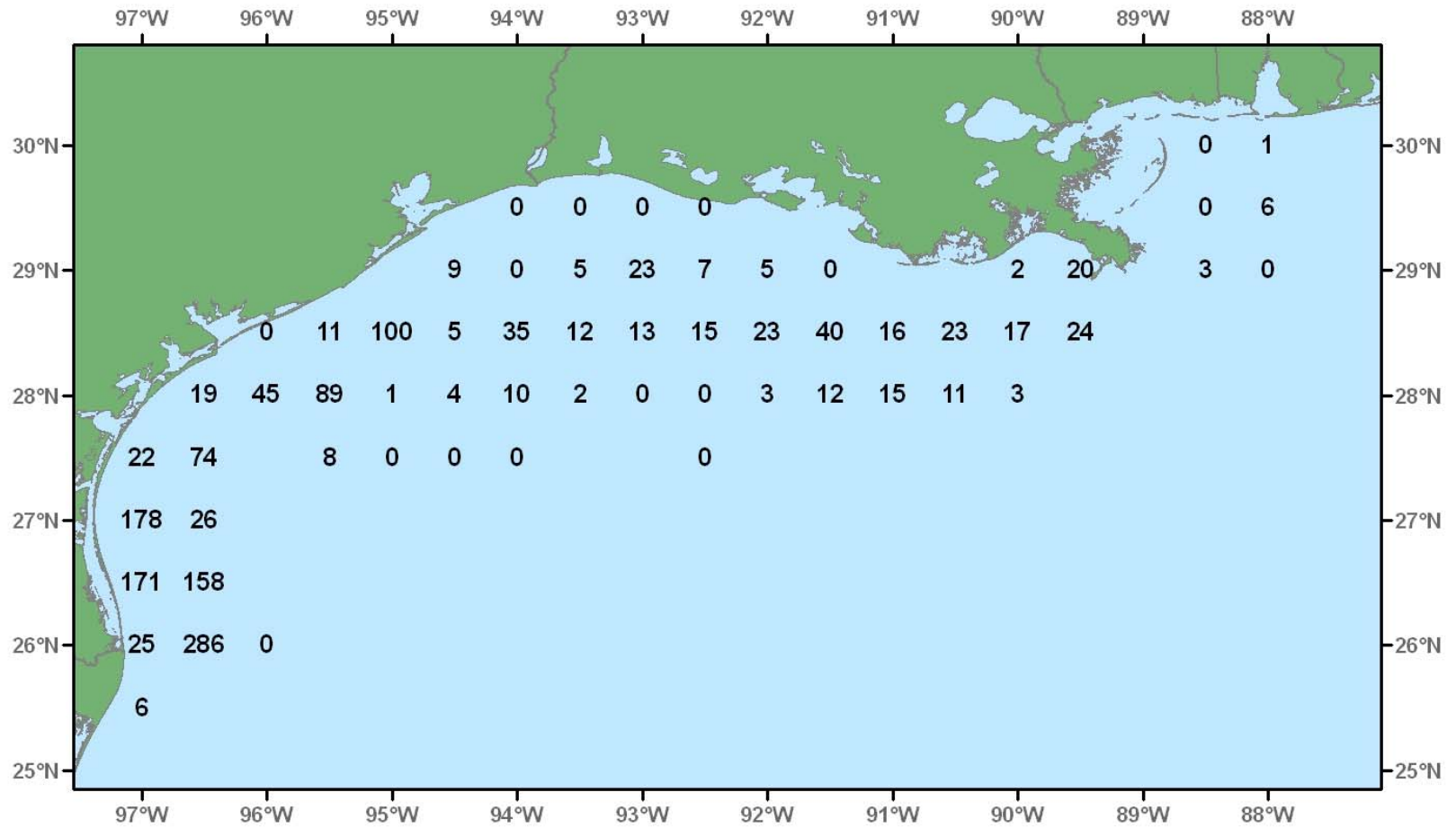


Figure 63. Shoal flounder, *Syacium gunteri*, number/hour for October-December 2005.

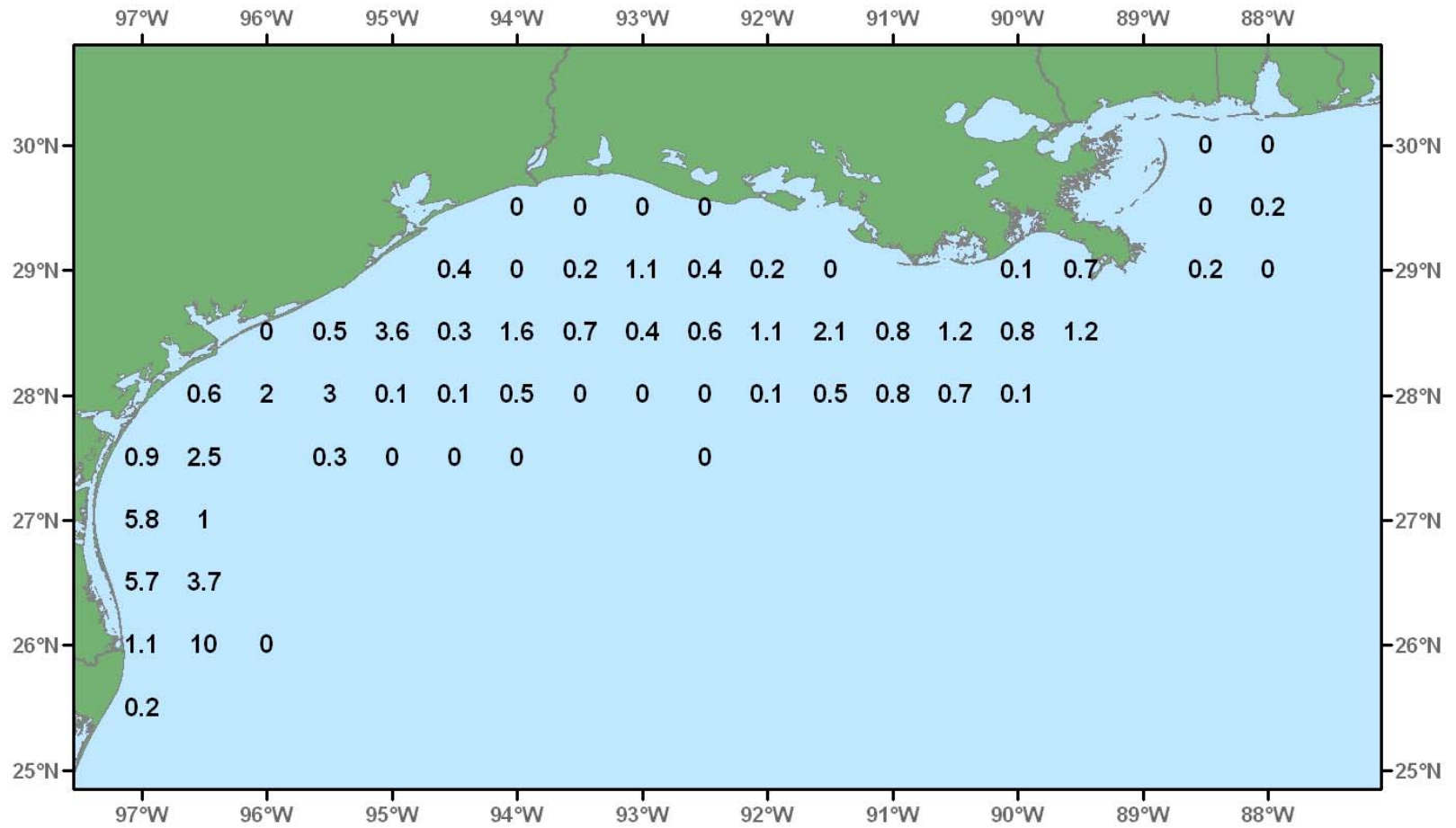


Figure 64. Shoal flounder, *Syacium gunteri*, lb/hour for October-December 2005.

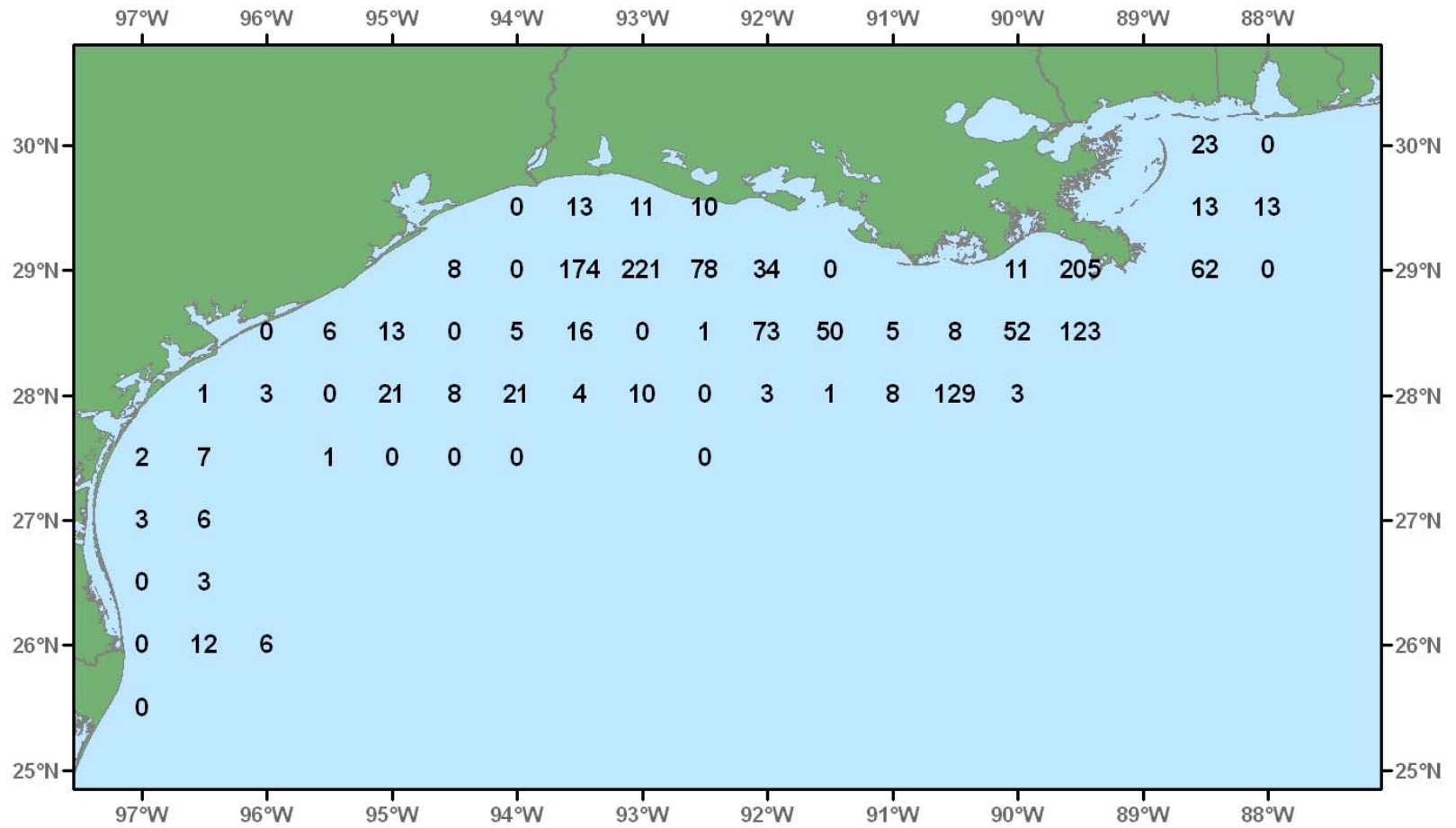


Figure 65. Atlantic cutlassfish, *Trichiurus lepturus*, number/hour for October-December 2005.

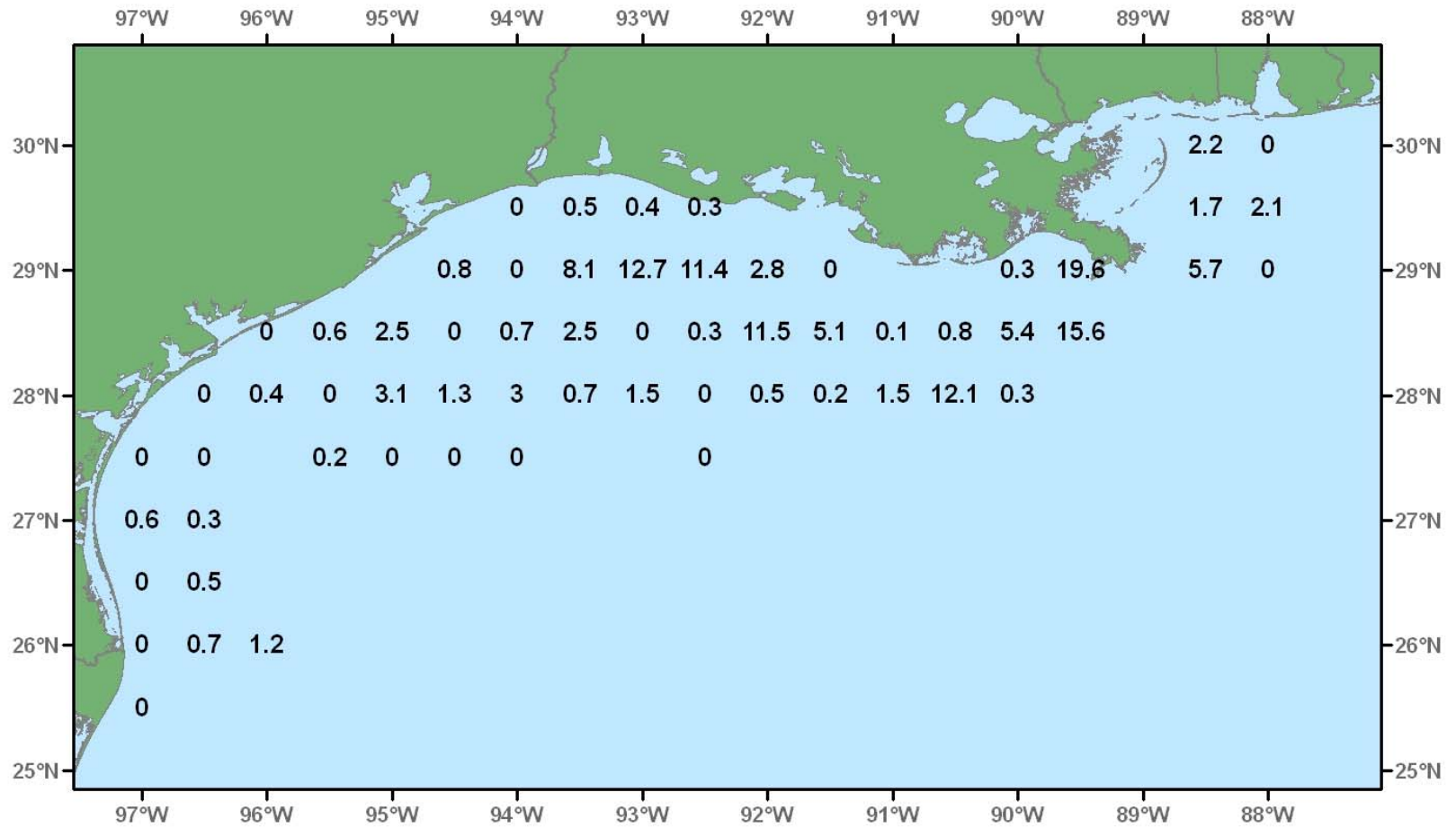


Figure 66. Atlantic cutlassfish, *Trichiurus lepturus*, lb/hour for October-December 2005.

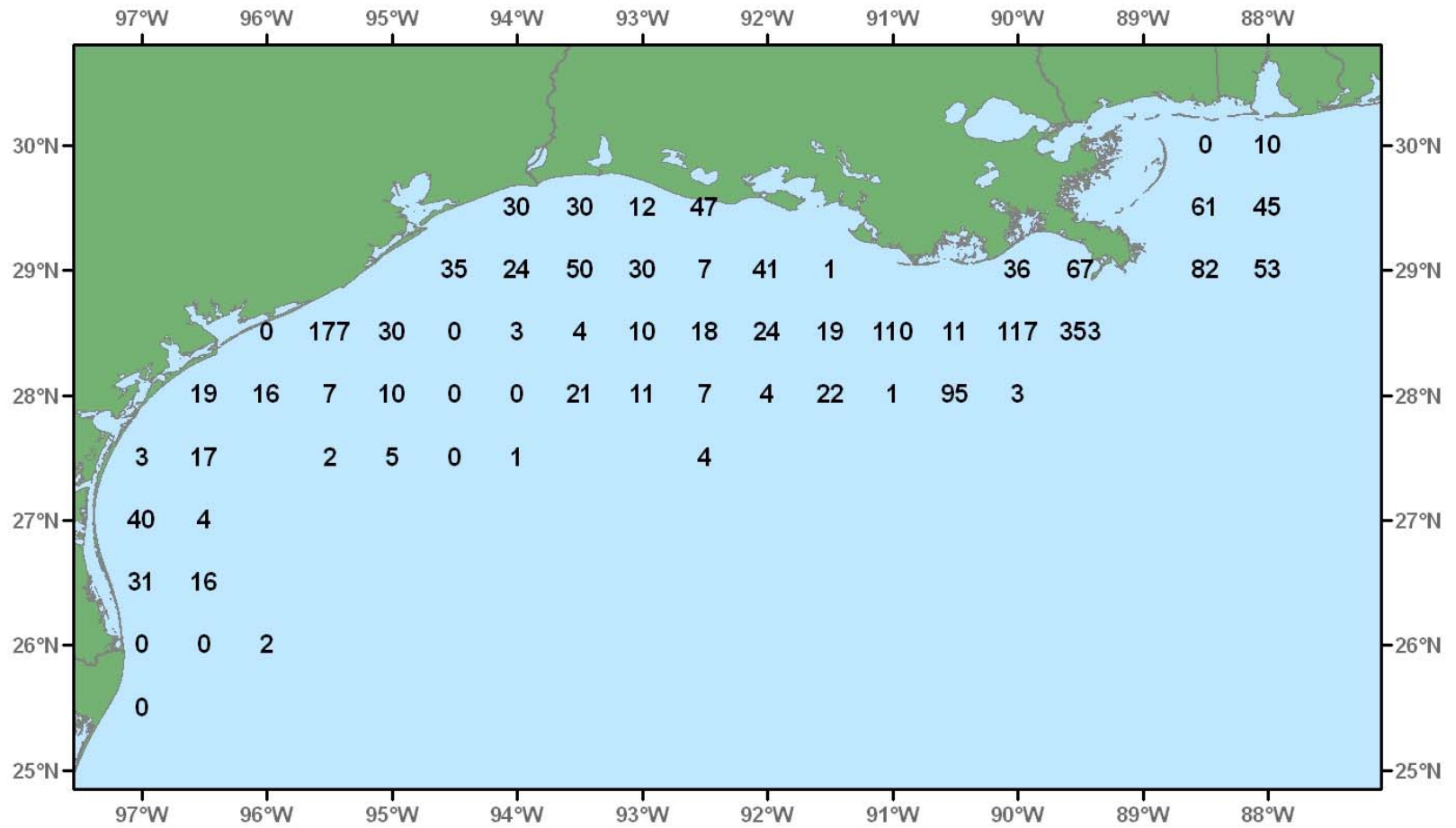


Figure 67. Sand seatrout, *Cynoscion arenarius*, number/hour for October-December 2005.

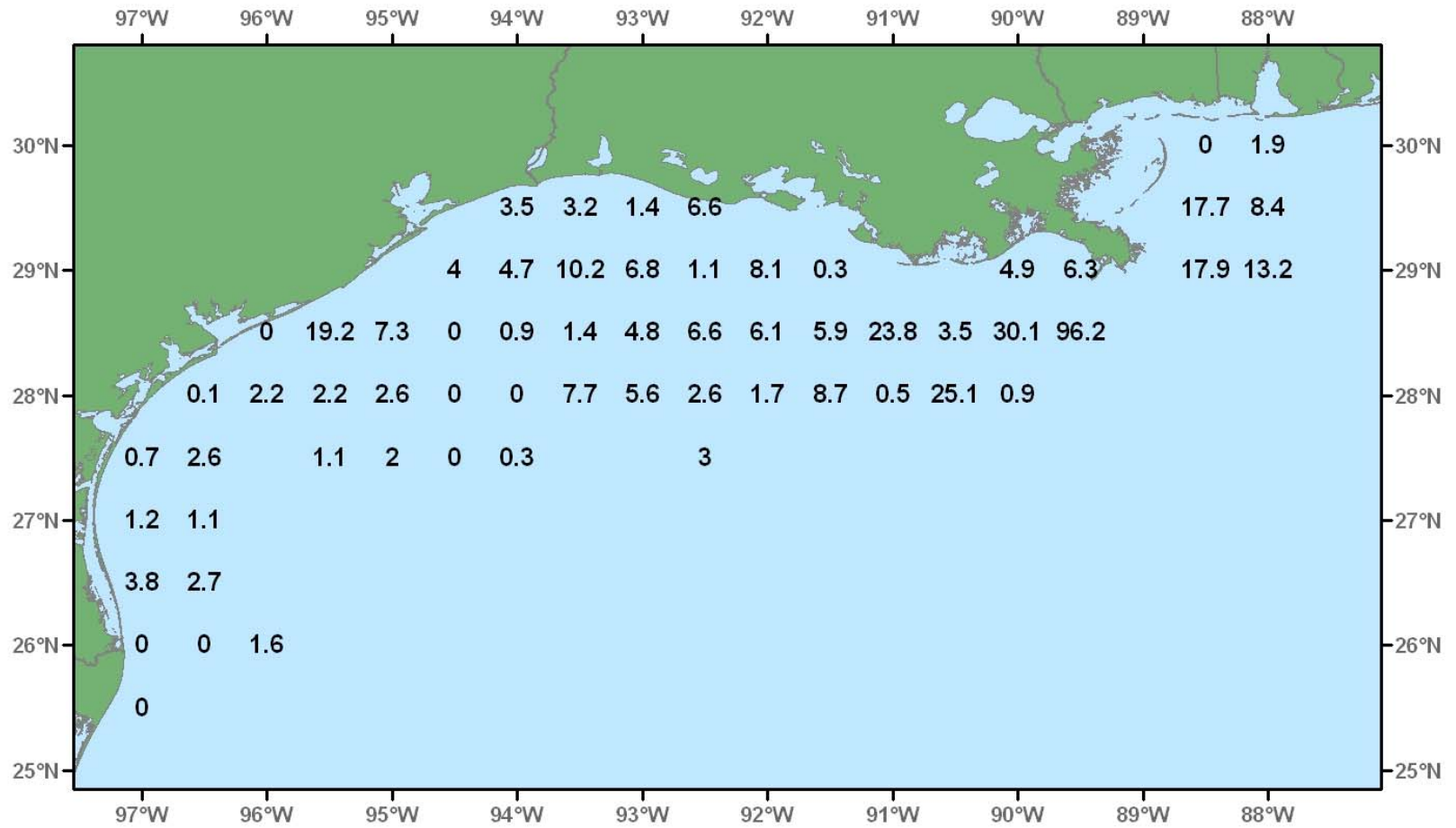


Figure 68. Sand seatrout, *Cynoscion arenarius*, lb/hour for October-December 2005.

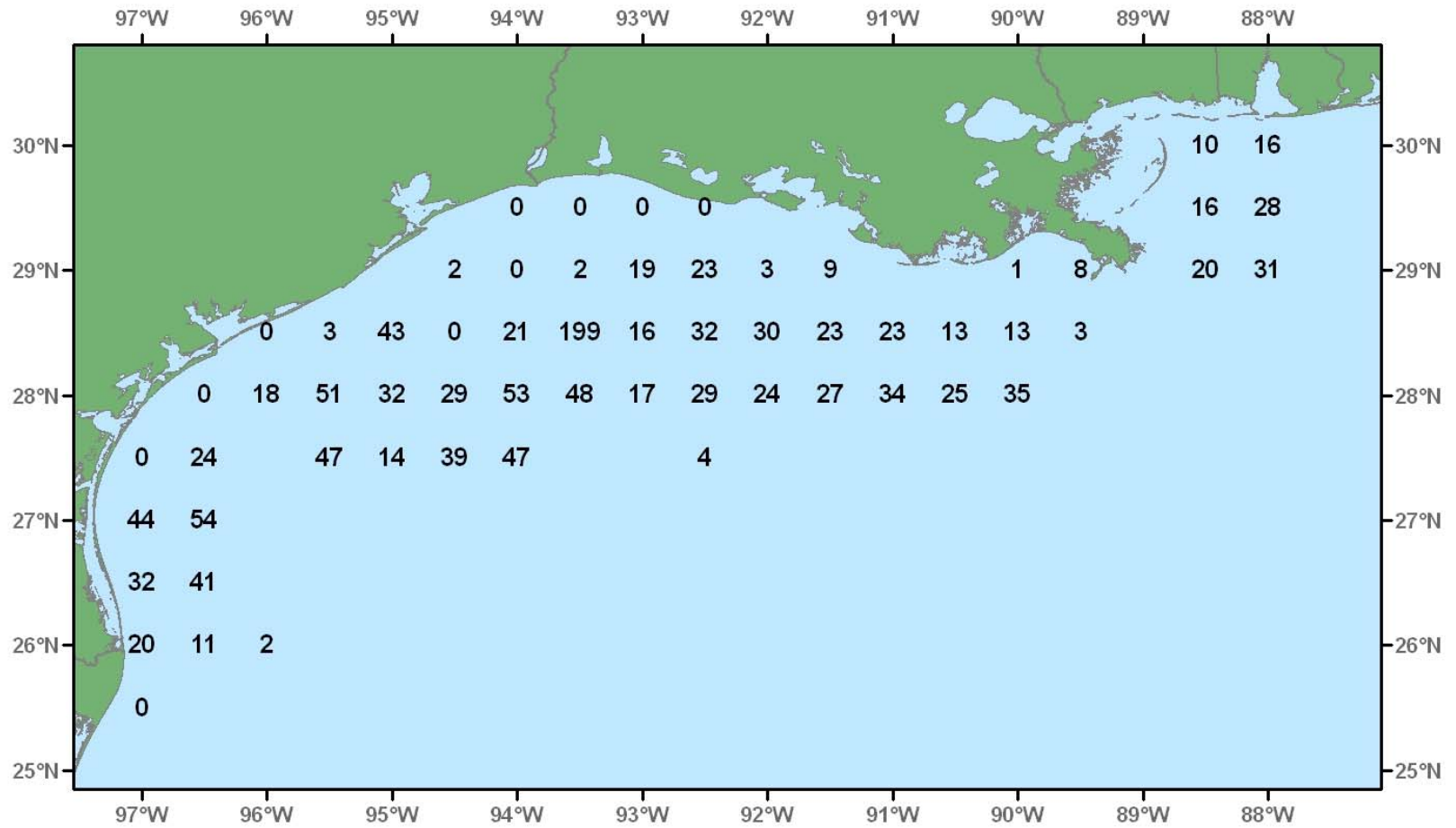


Figure 69. Inshore lizardfish, *Synodus foetens*, number/hour for October-December 2005.

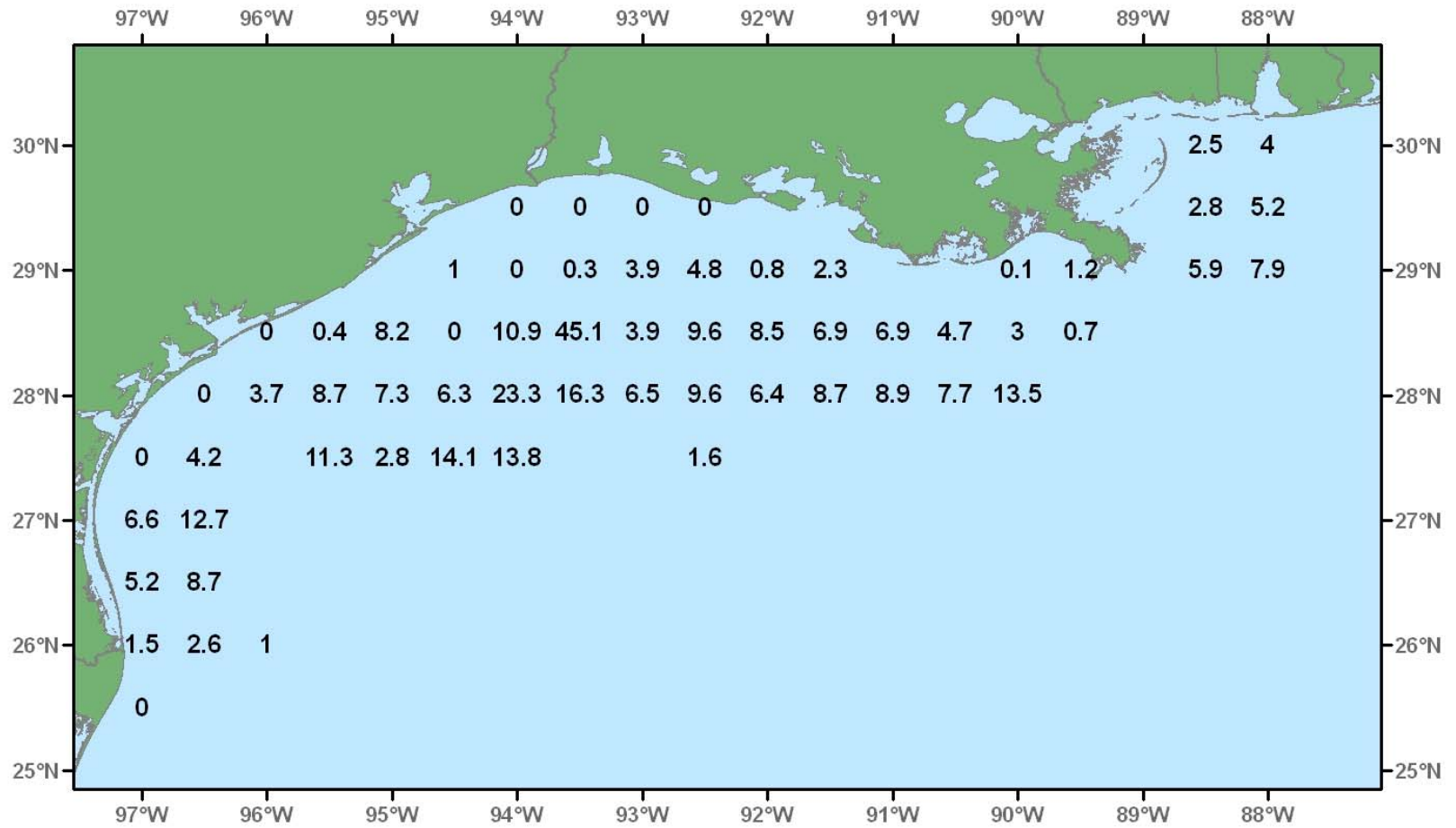


Figure 70. Inshore lizardfish, *Synodus foetens*, lb/hour for October-December 2005.

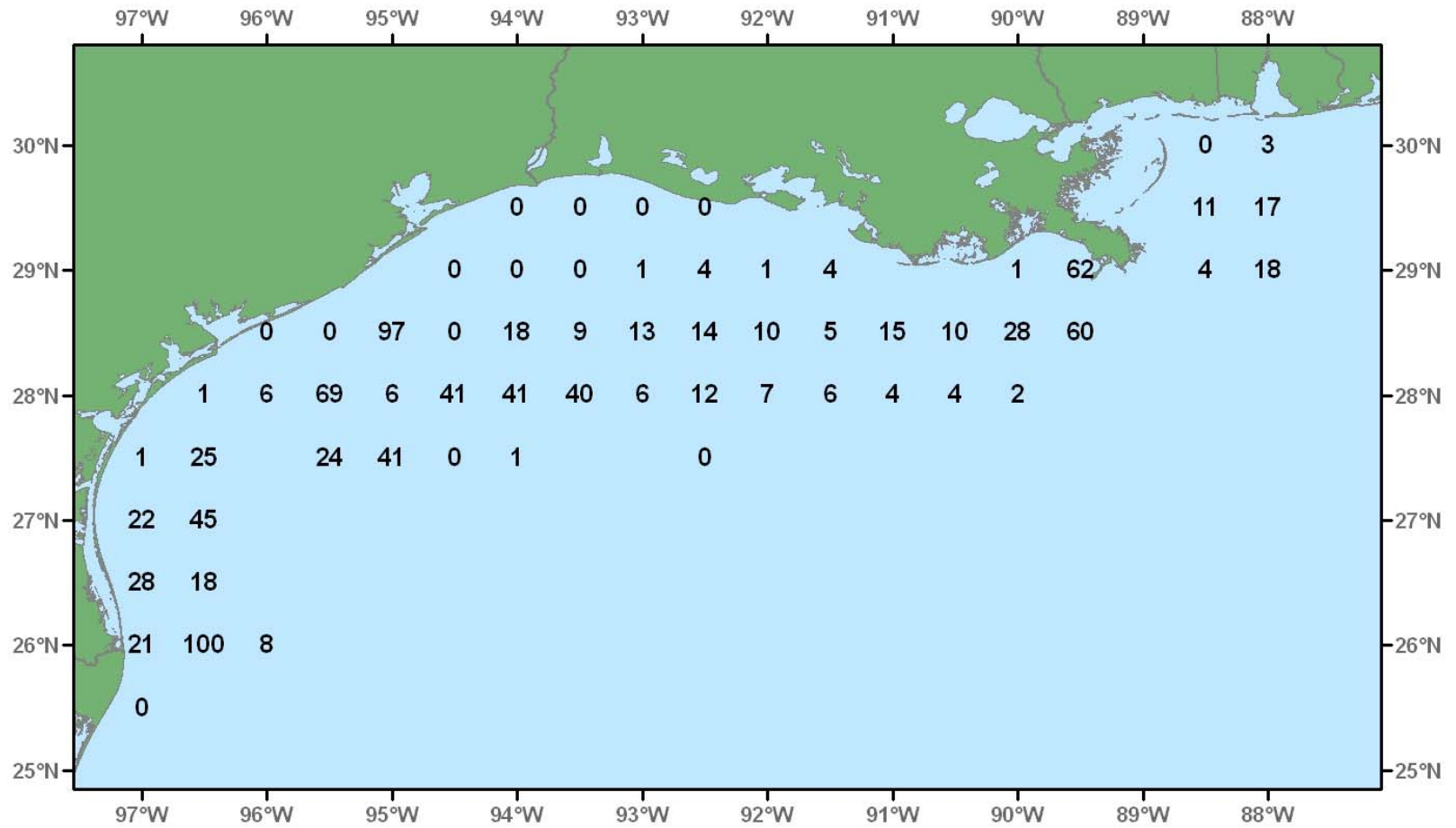


Figure 71. Red snapper, *Lutjanus campechanus*, number/hour for October-December 2005.

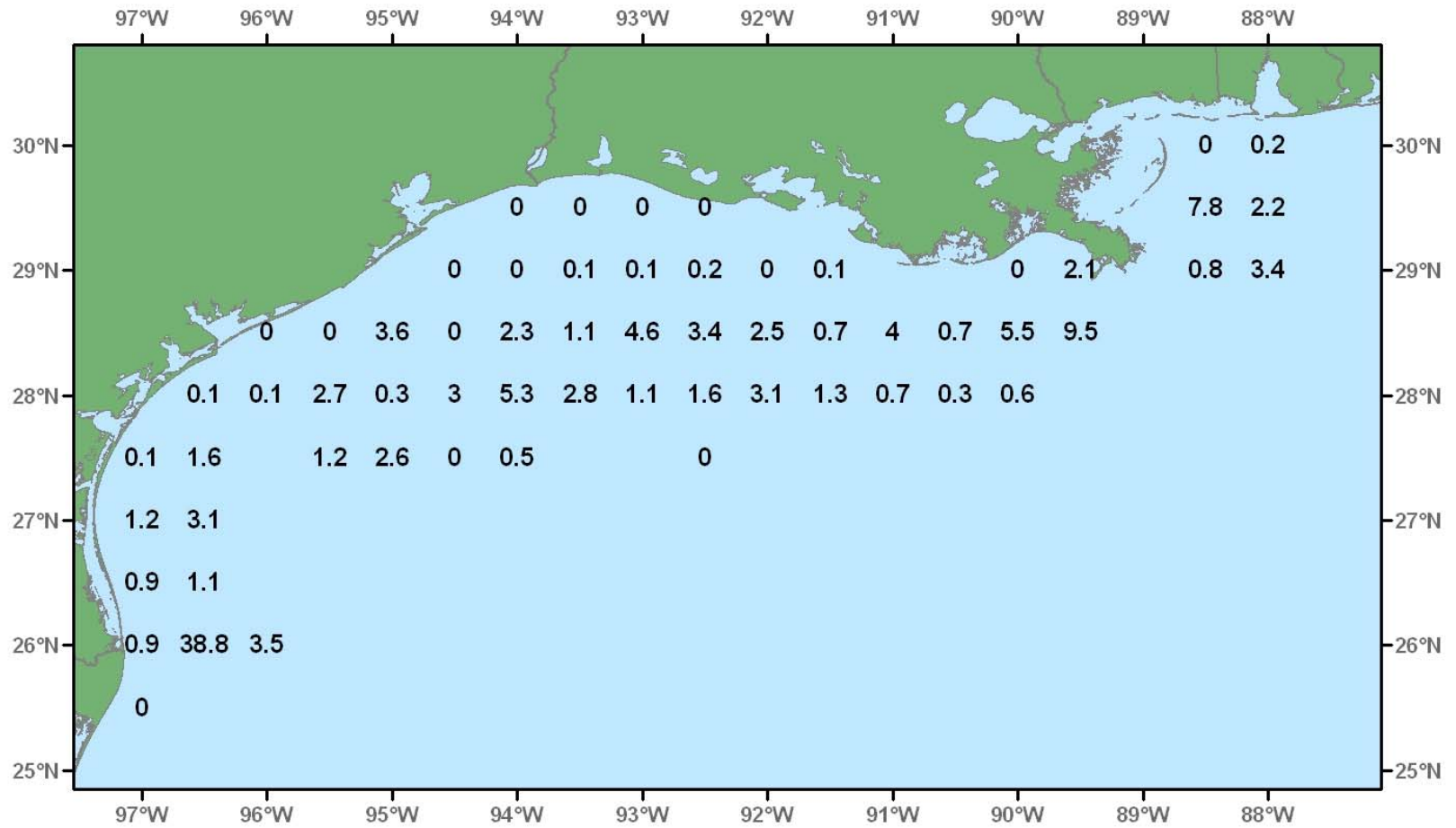


Figure 72. Red snapper, *Lutjanus campechanus*, lb/hour for October-December 2005.

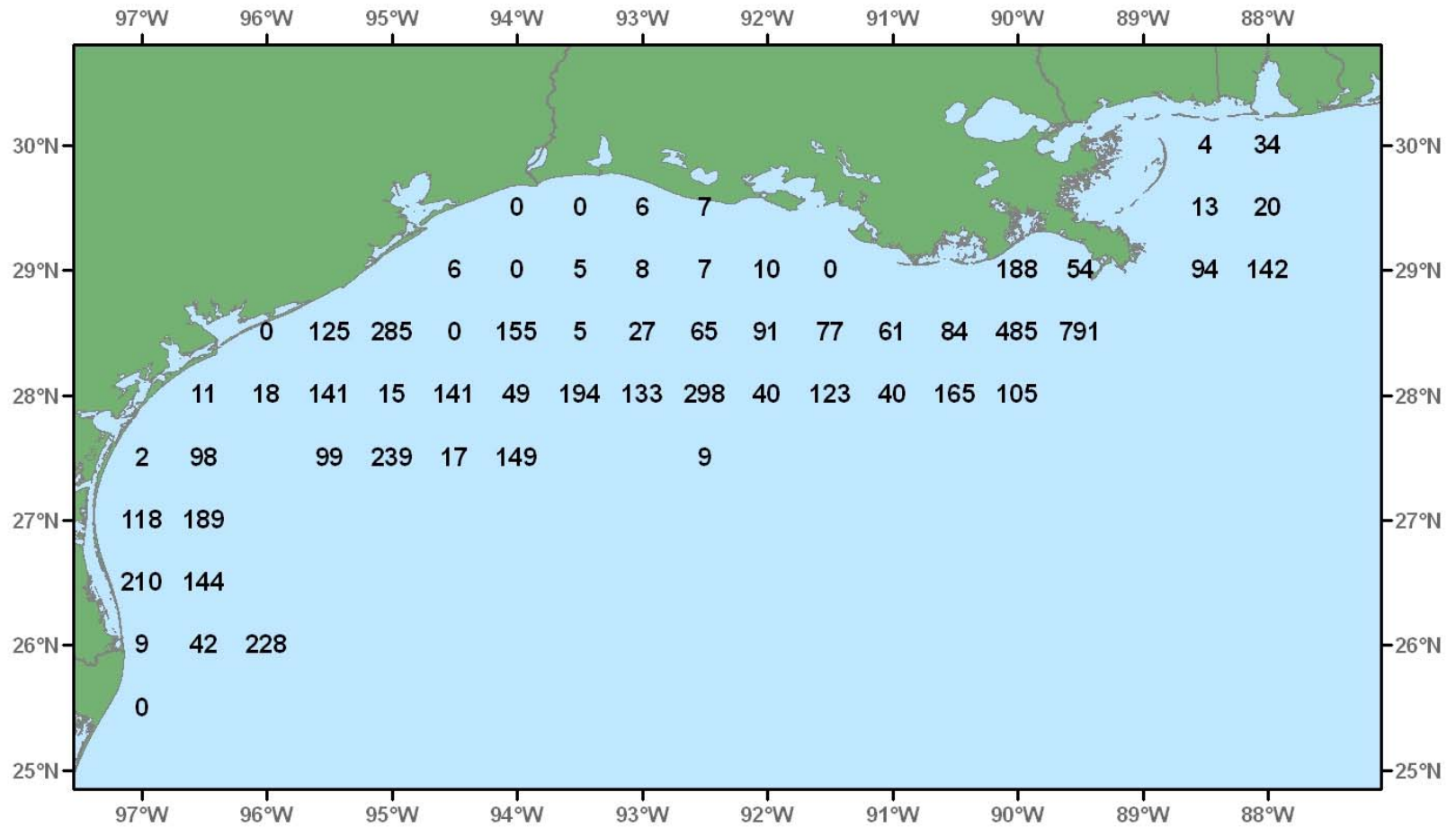


Figure 73. Brown shrimp, *Farfantepenaeus aztecus*, number/hour for October-December 2005.

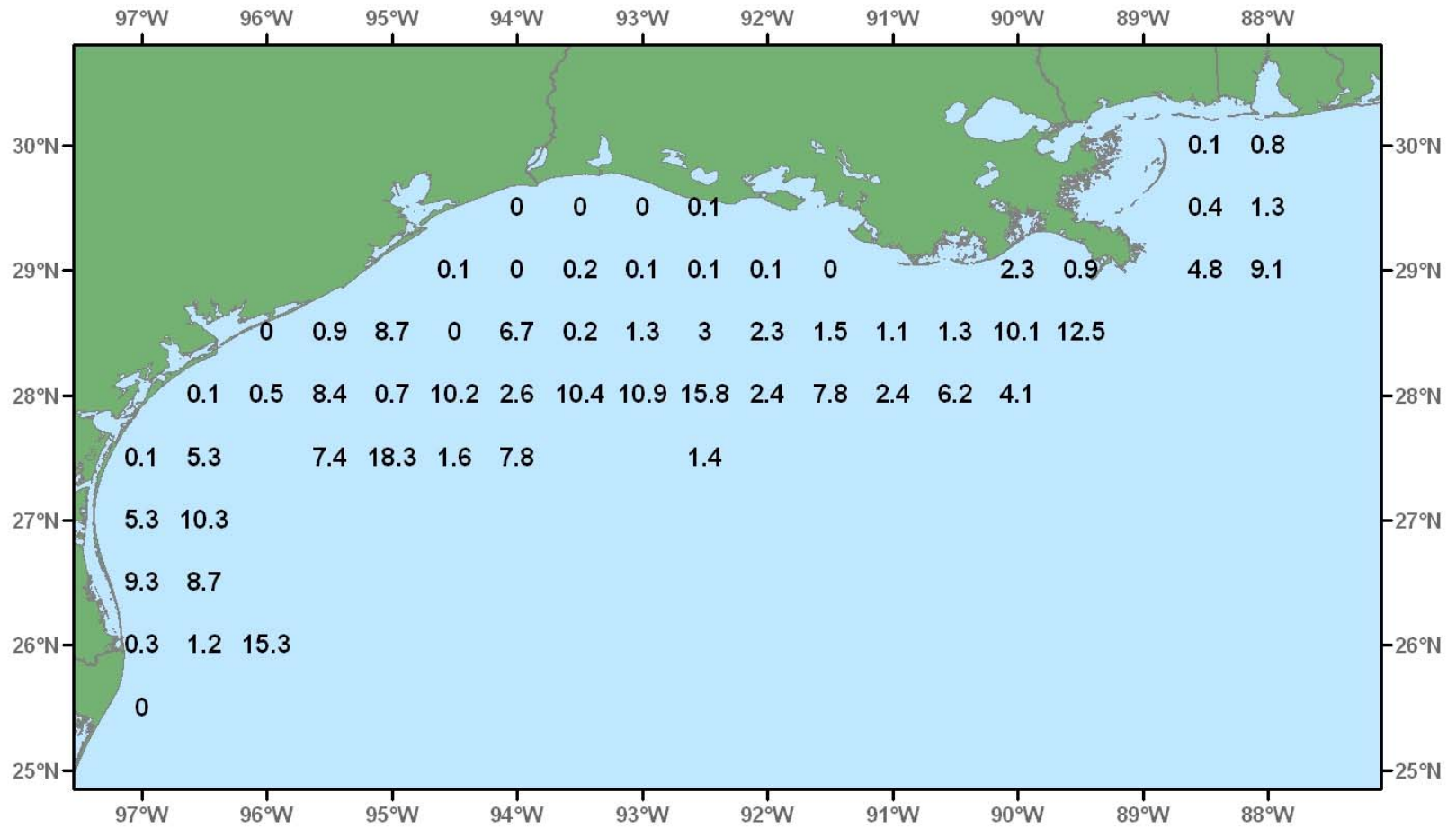


Figure 74. Brown shrimp, *Farfantepenaeus aztecus*, lb/hour for October-December 2005.

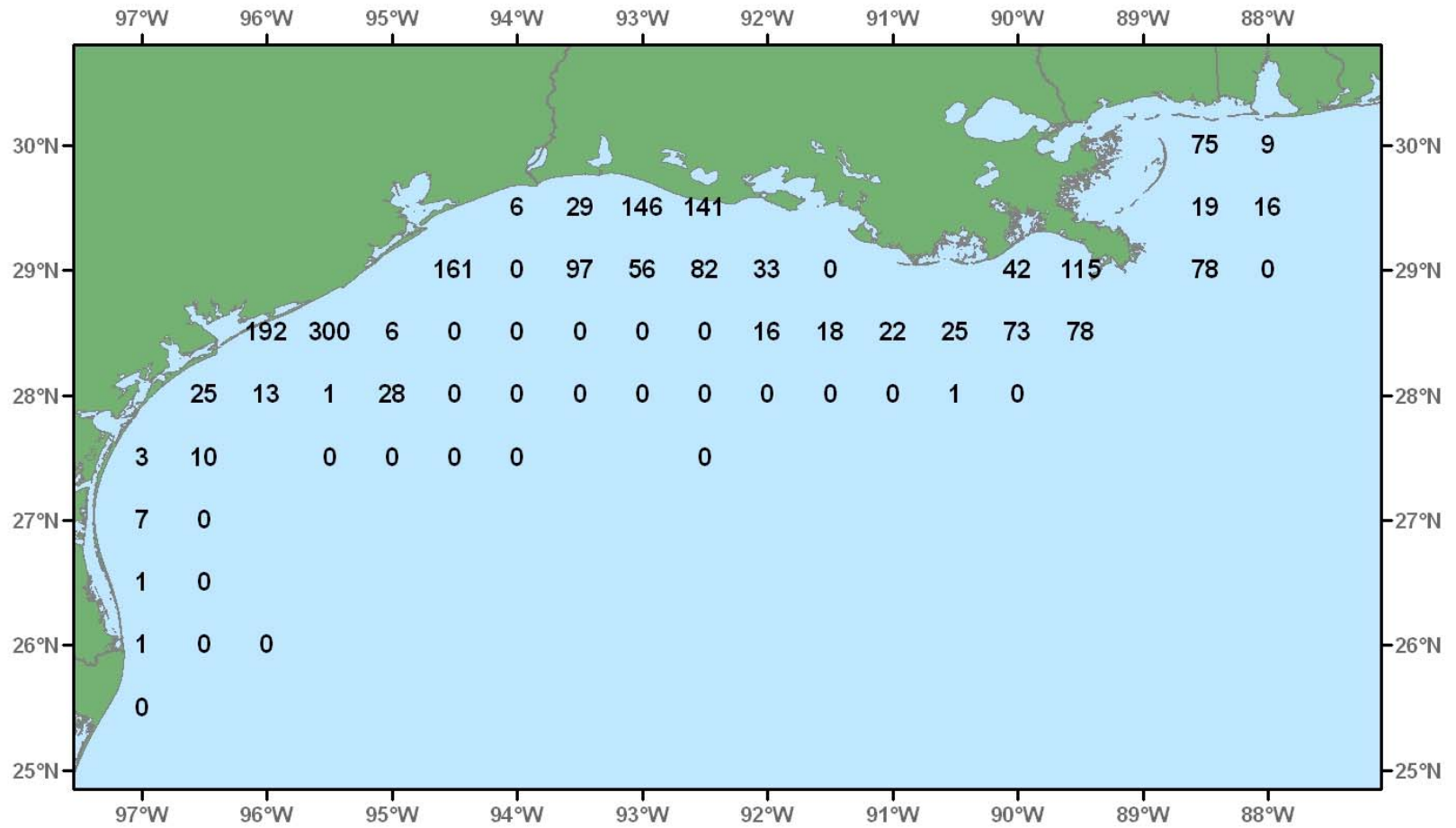


Figure 75. White shrimp, *Litopenaeus setiferus*, number/hour for October-December 2005.

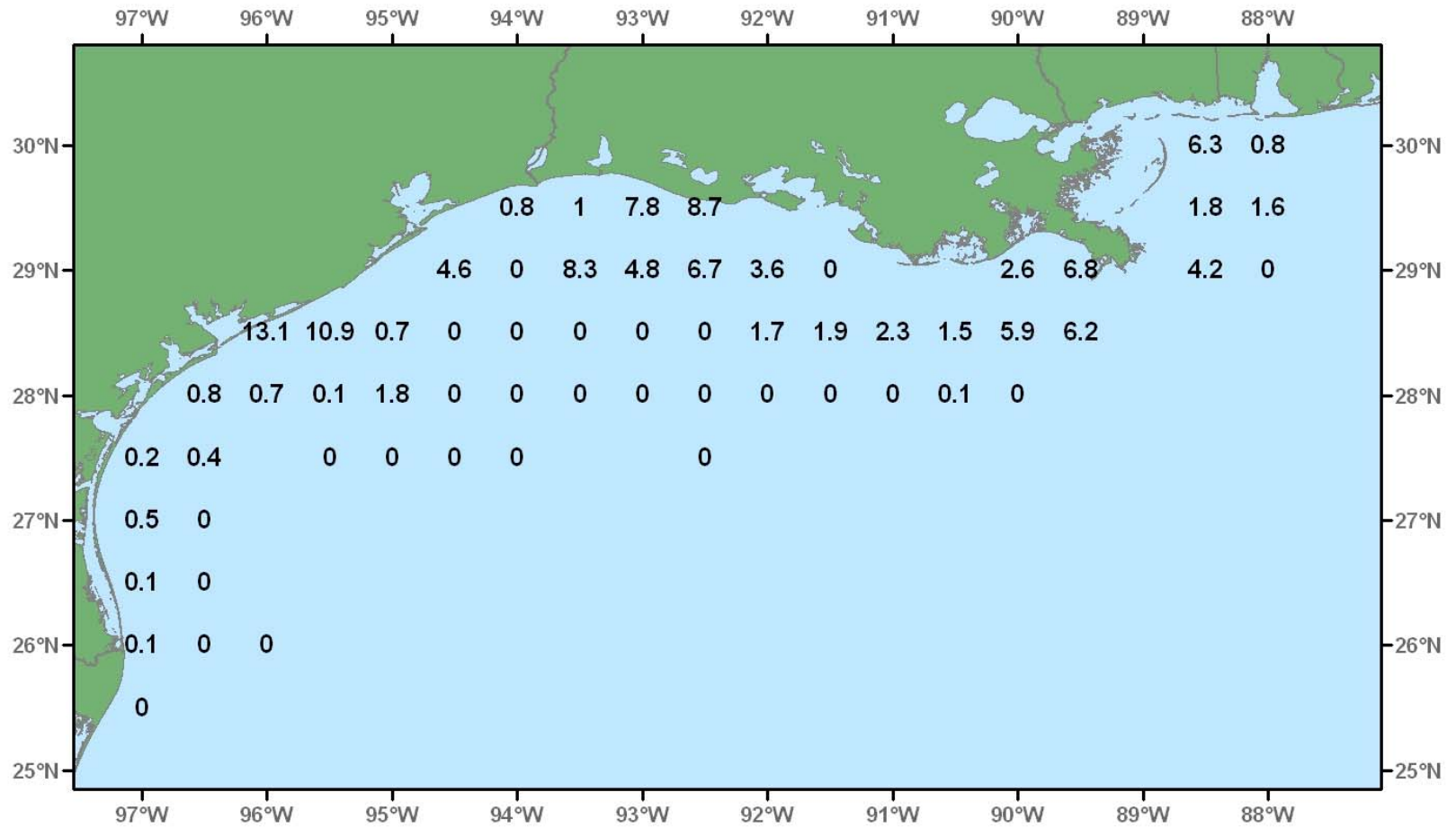


Figure 76. White shrimp, *Litopenaeus setiferus*, lb/hour for October-December 2005.

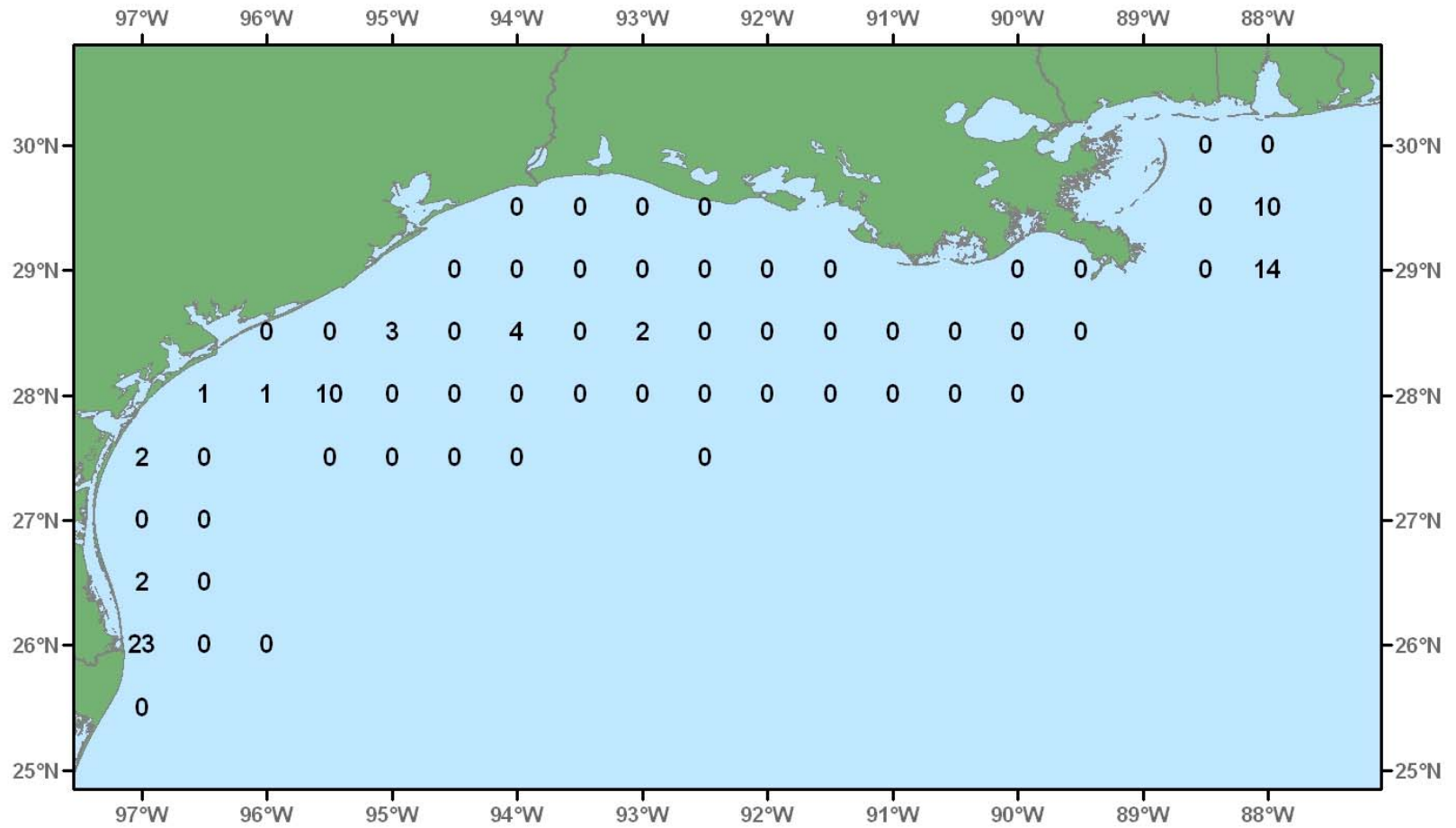


Figure 77. Pink shrimp, *Farfantepenaeus duorarum*, number/hour for October-December 2005.

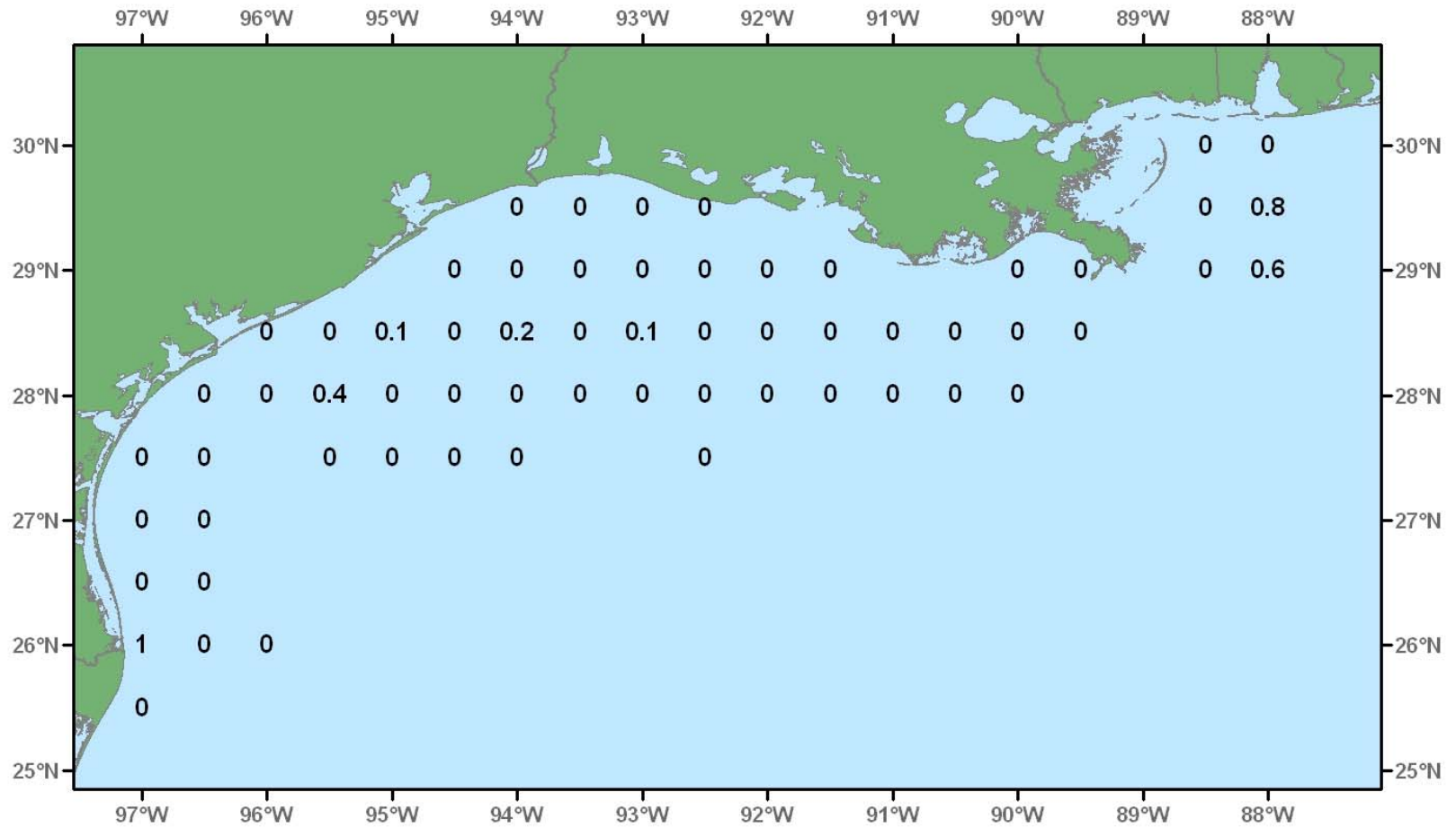


Figure 78. Pink shrimp, *Farfantepenaeus duorarum*, lb/hour for October-December 2005.

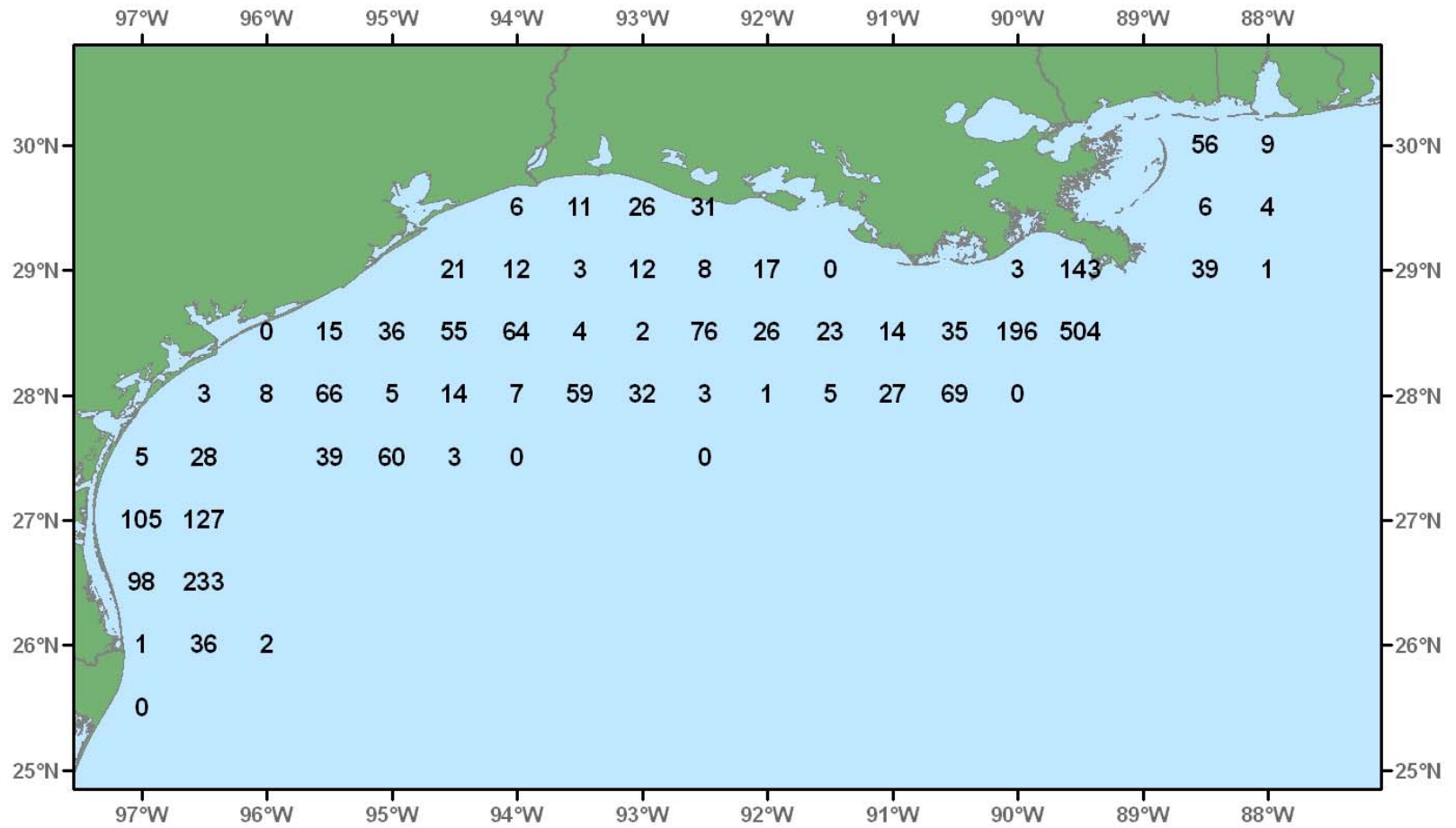


Figure 79. Lesser blue crab, *Callinectes similis*, number/hour for October-December 2005.

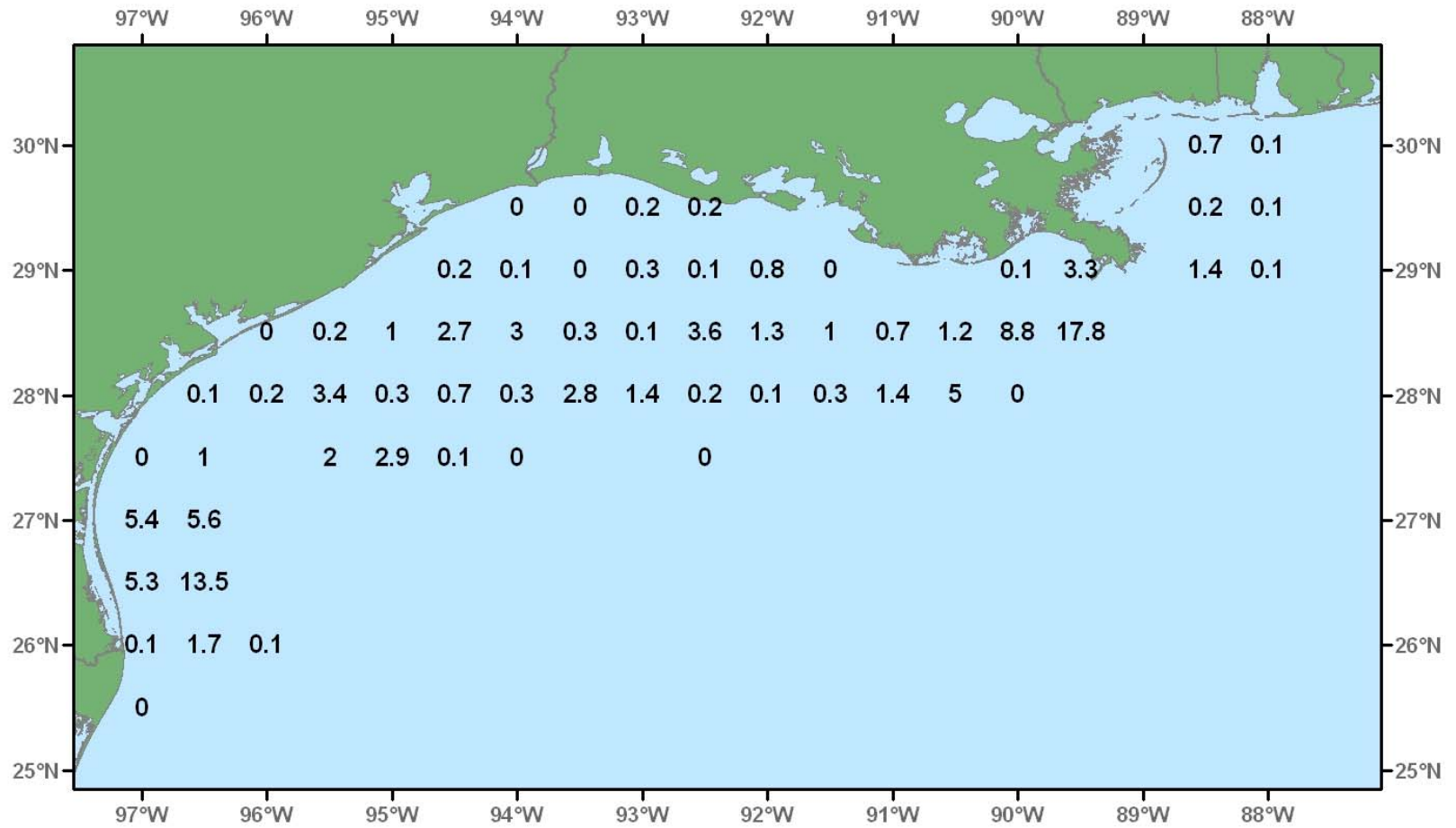


Figure 80. Lesser blue crab, *Callinectes similis*, lb/hour for October-December 2005.

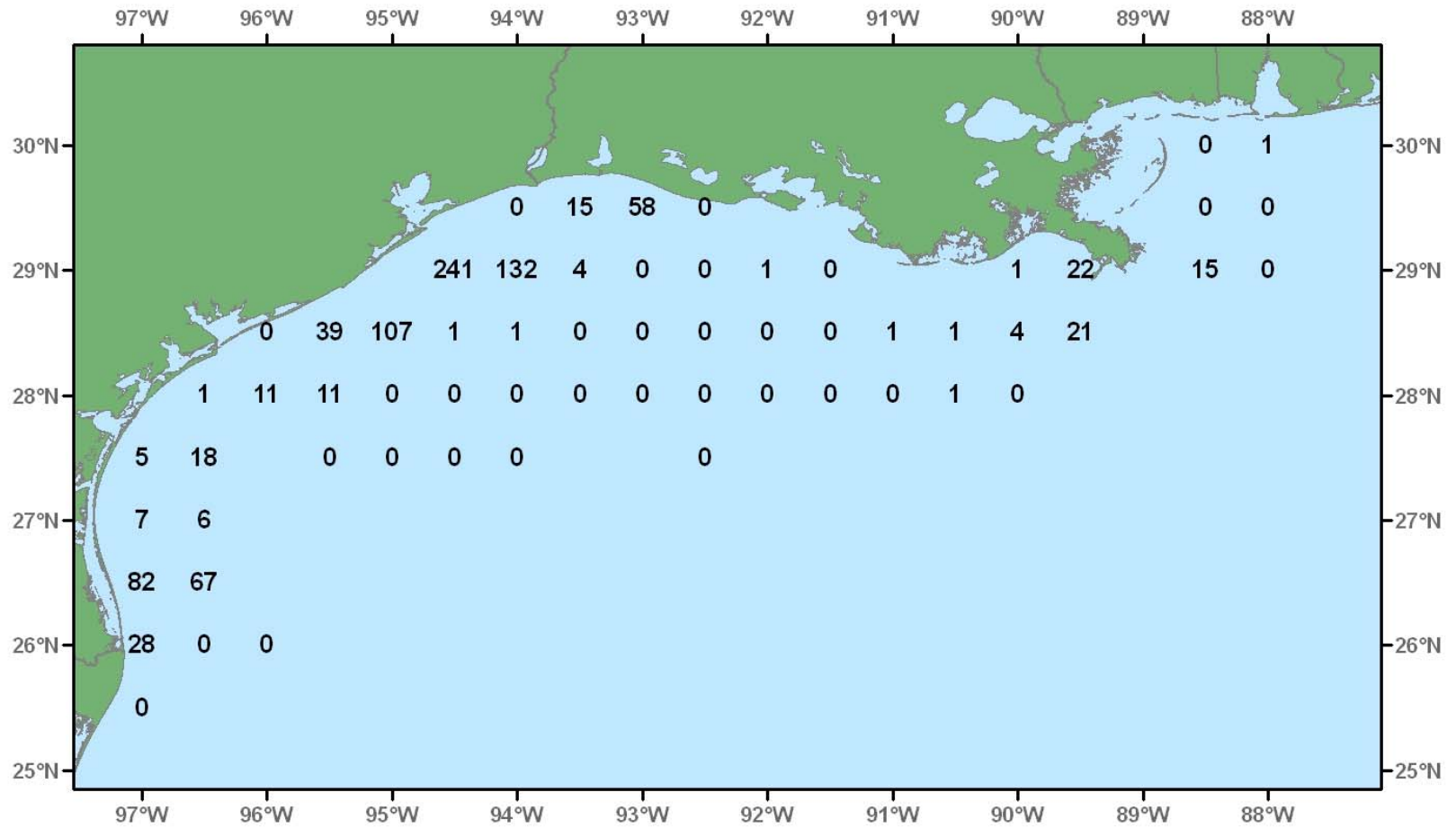


Figure 81. Roughback shrimp, *Trachypenaeus similis*, number/hour for October-December 2005.

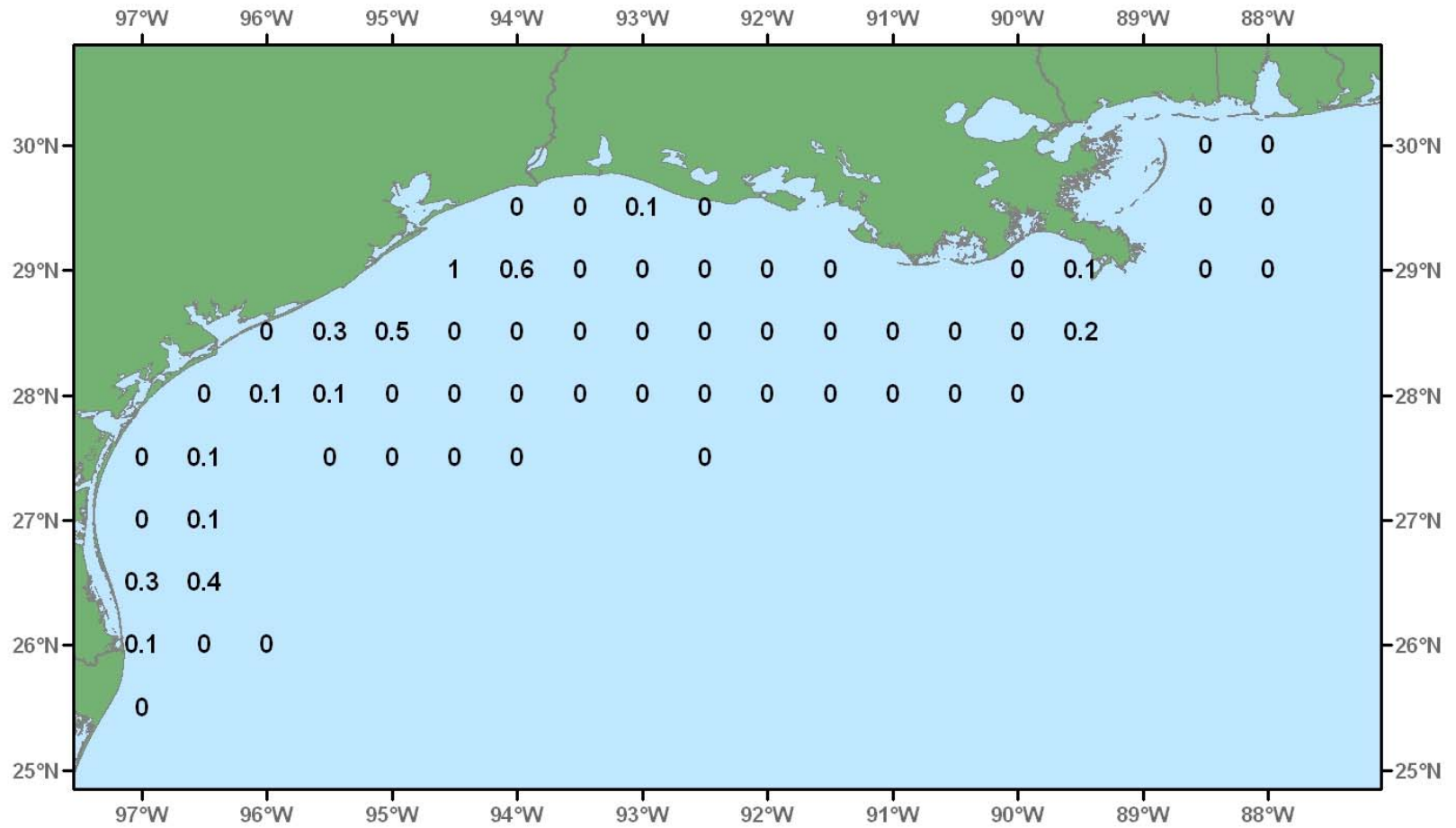


Figure 82. Roughback shrimp, *Trachypenaeus similis*, lb/hour for October-December 2005.

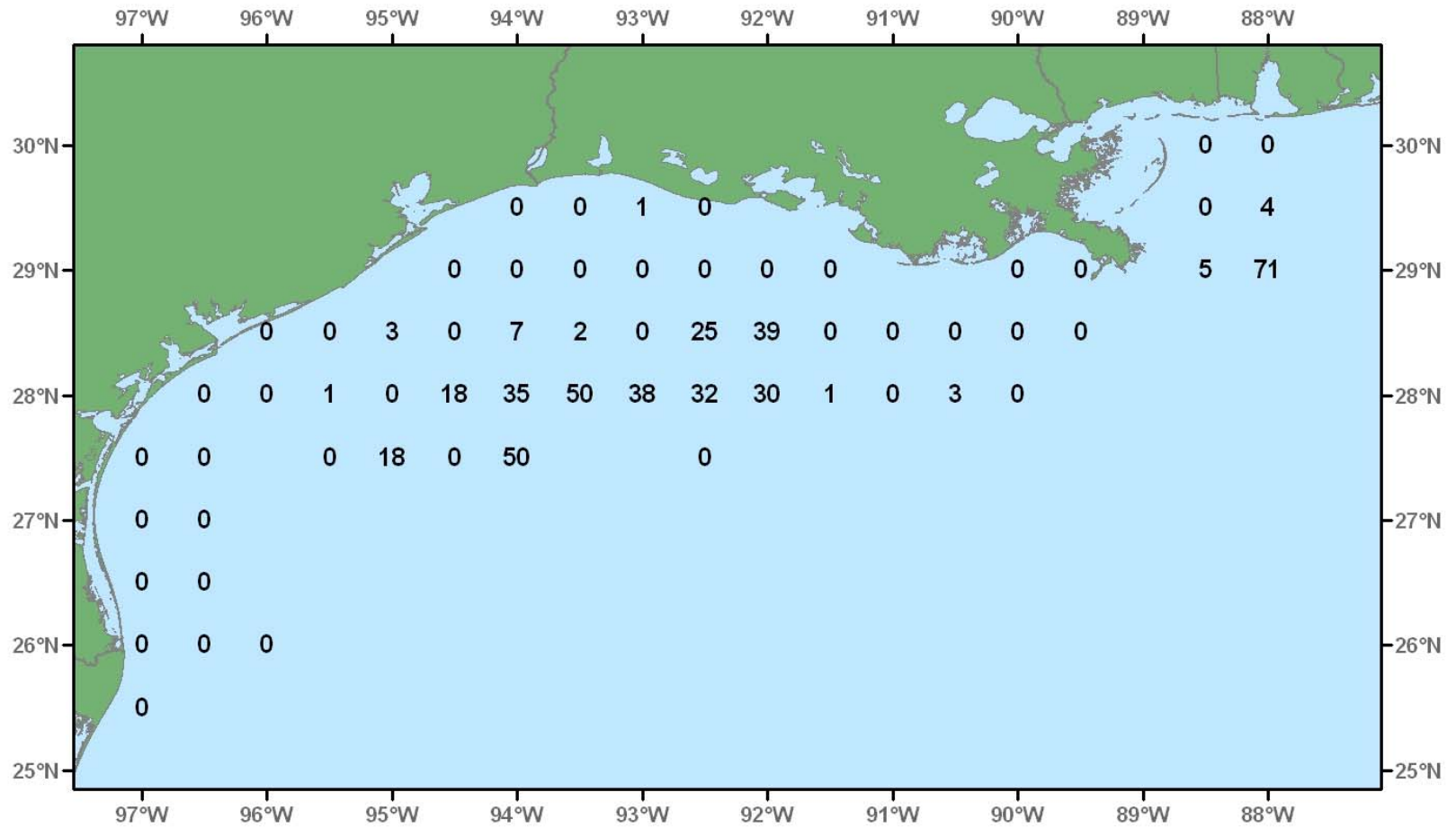


Figure 83. Brown rock shrimp, *Sicyonia brevirostris*, number/hour for October-December 2005.

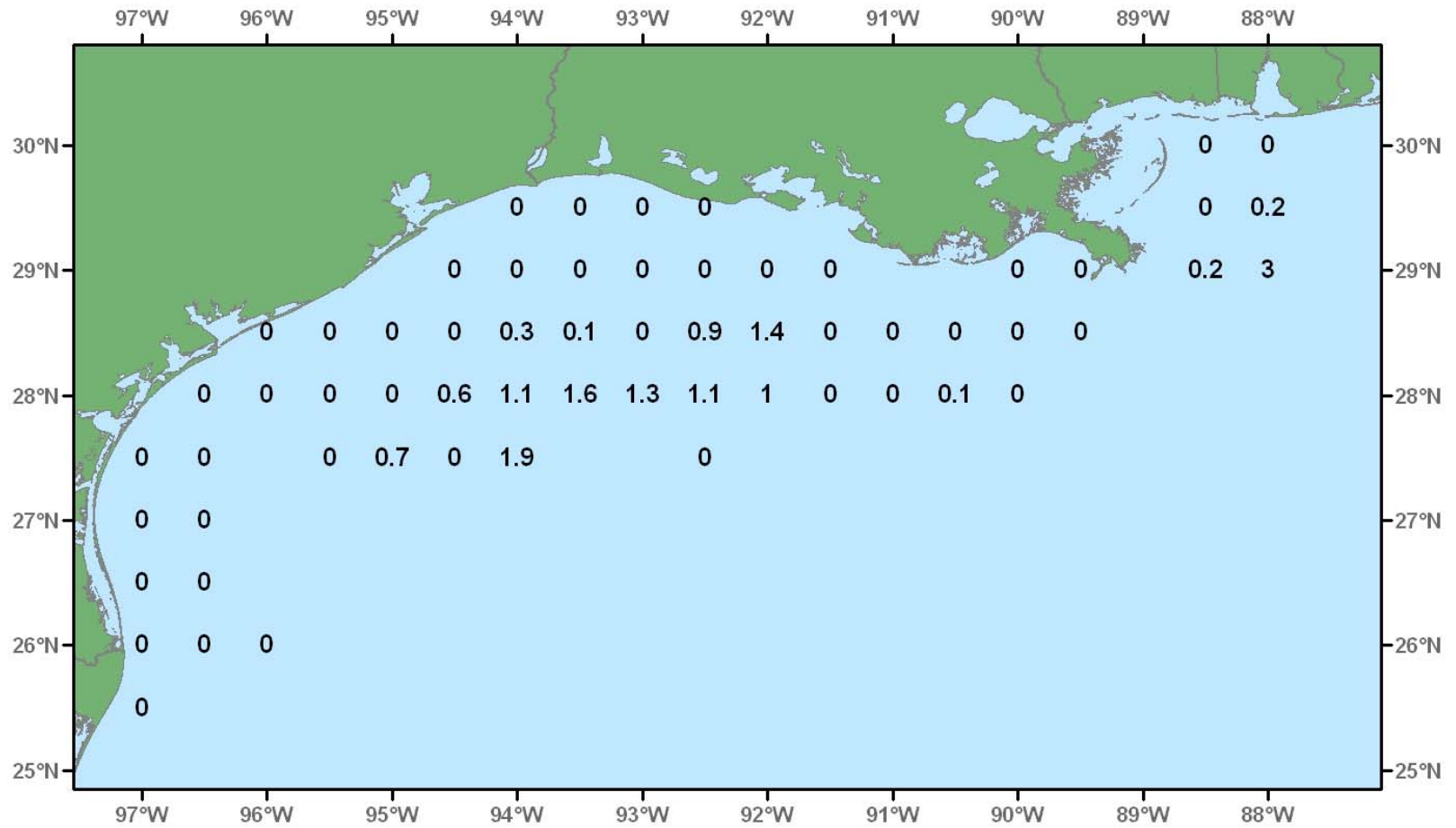


Figure 84. Brown rock shrimp, *Sicyonia brevirostris*, lb/hour for October-December 2005.

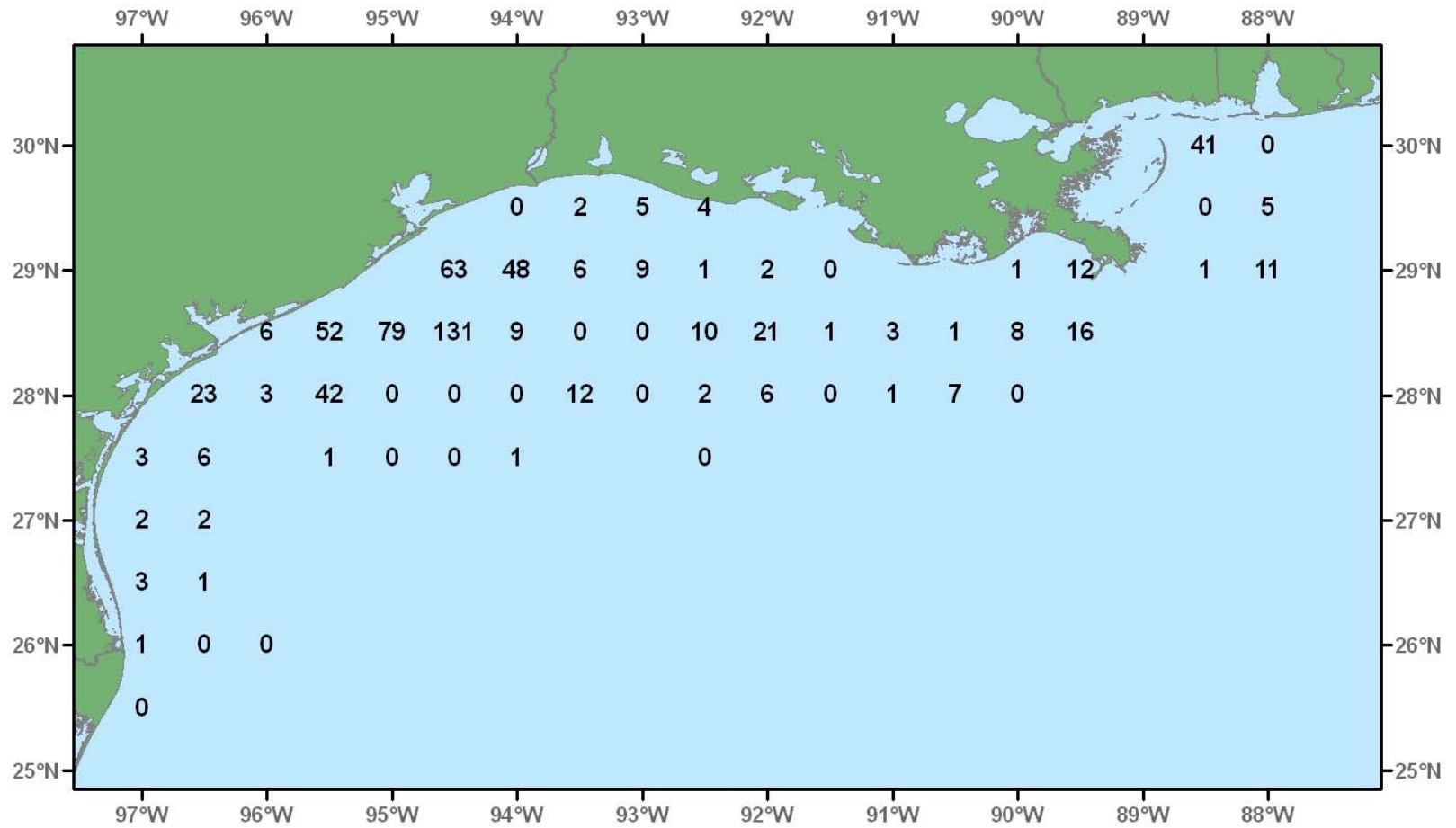


Figure 85. Mantis shrimp, *Squilla empusa*, number/hour for October-December 2005.

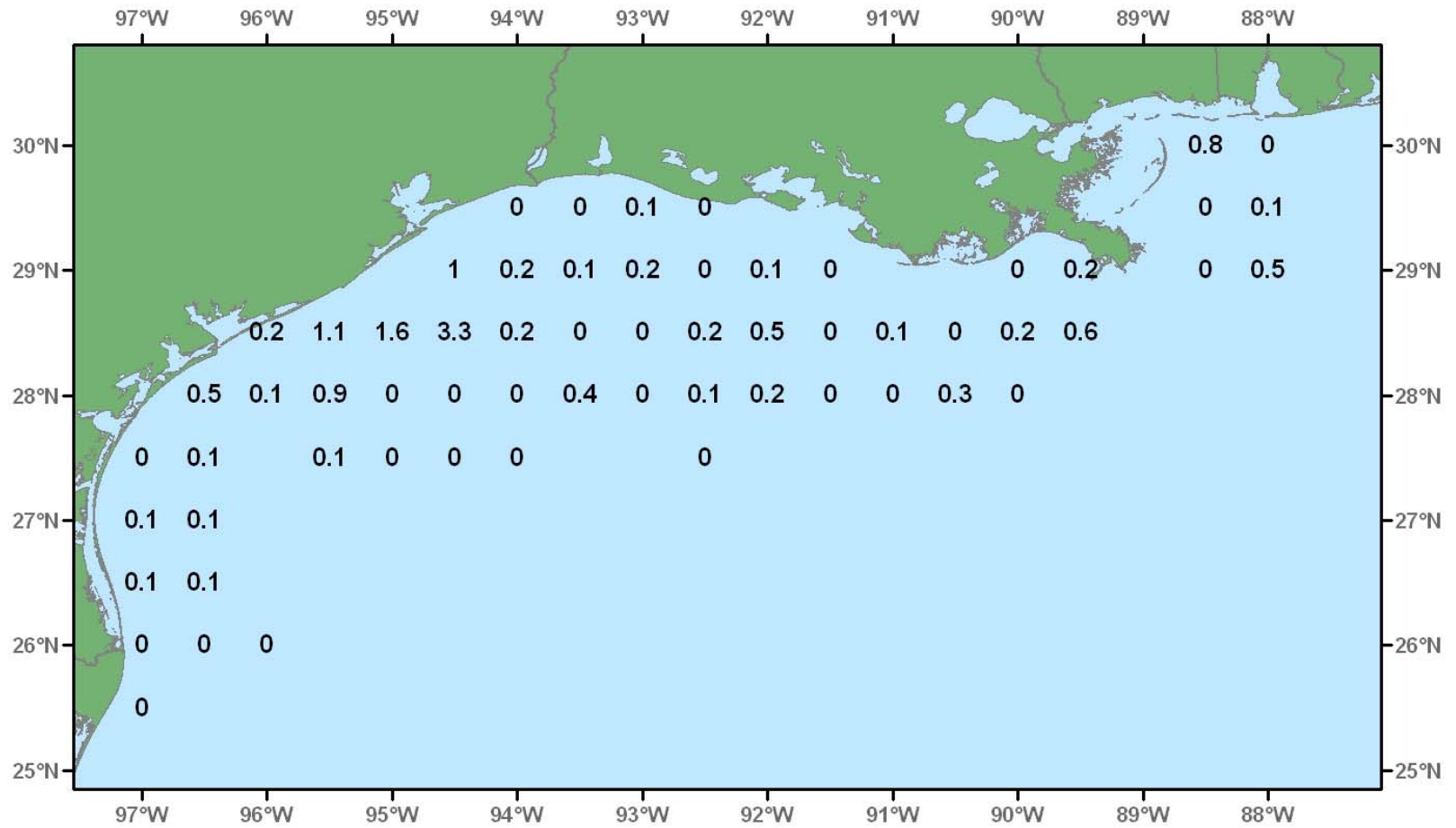


Figure 86. Mantis shrimp, *Squilla empusa*, lb/hour for October-December 2005.

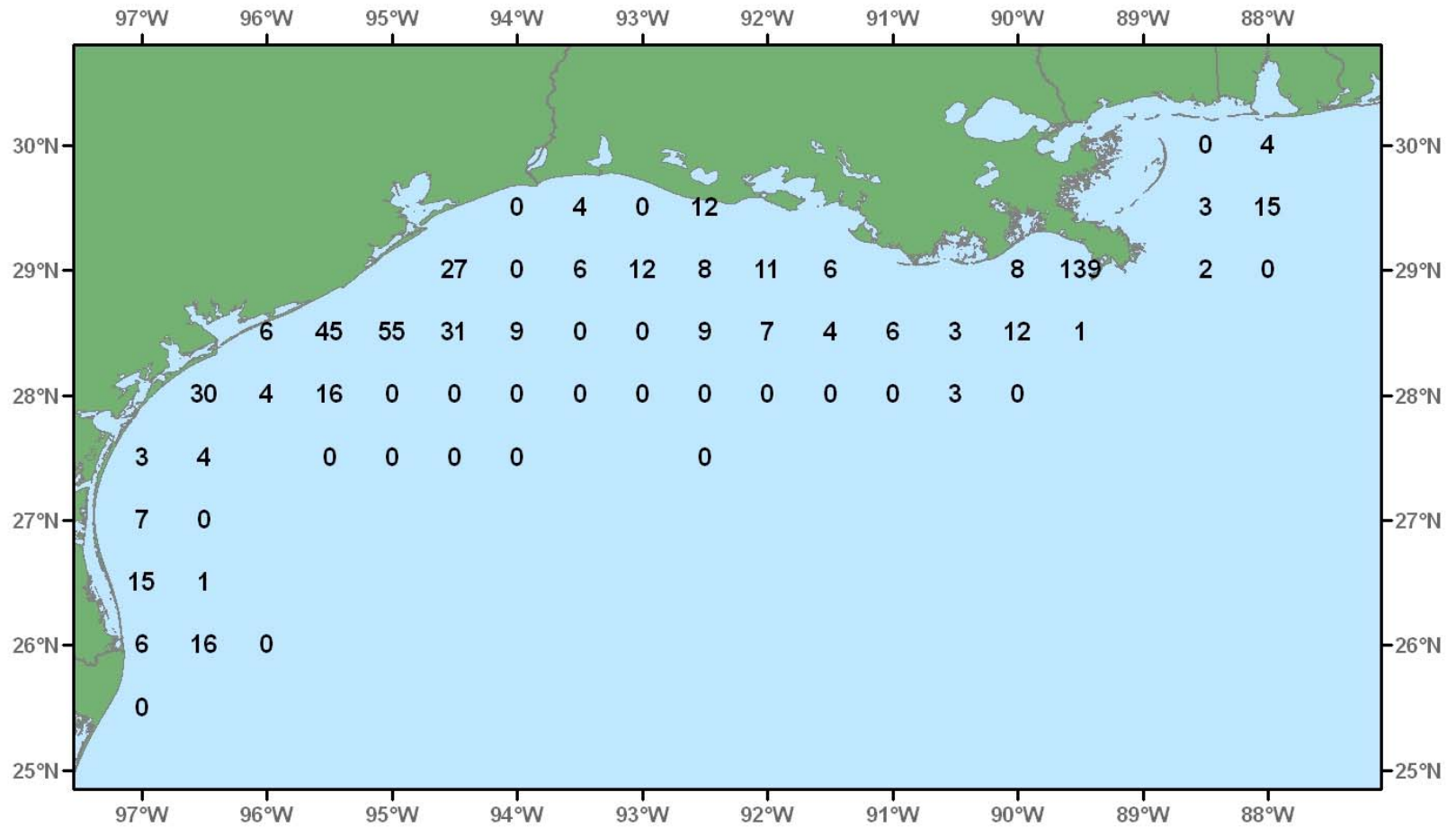


Figure 87. Iridescent swimming crab, *Portunus gibbesii*, number/hour for October-December 2005.

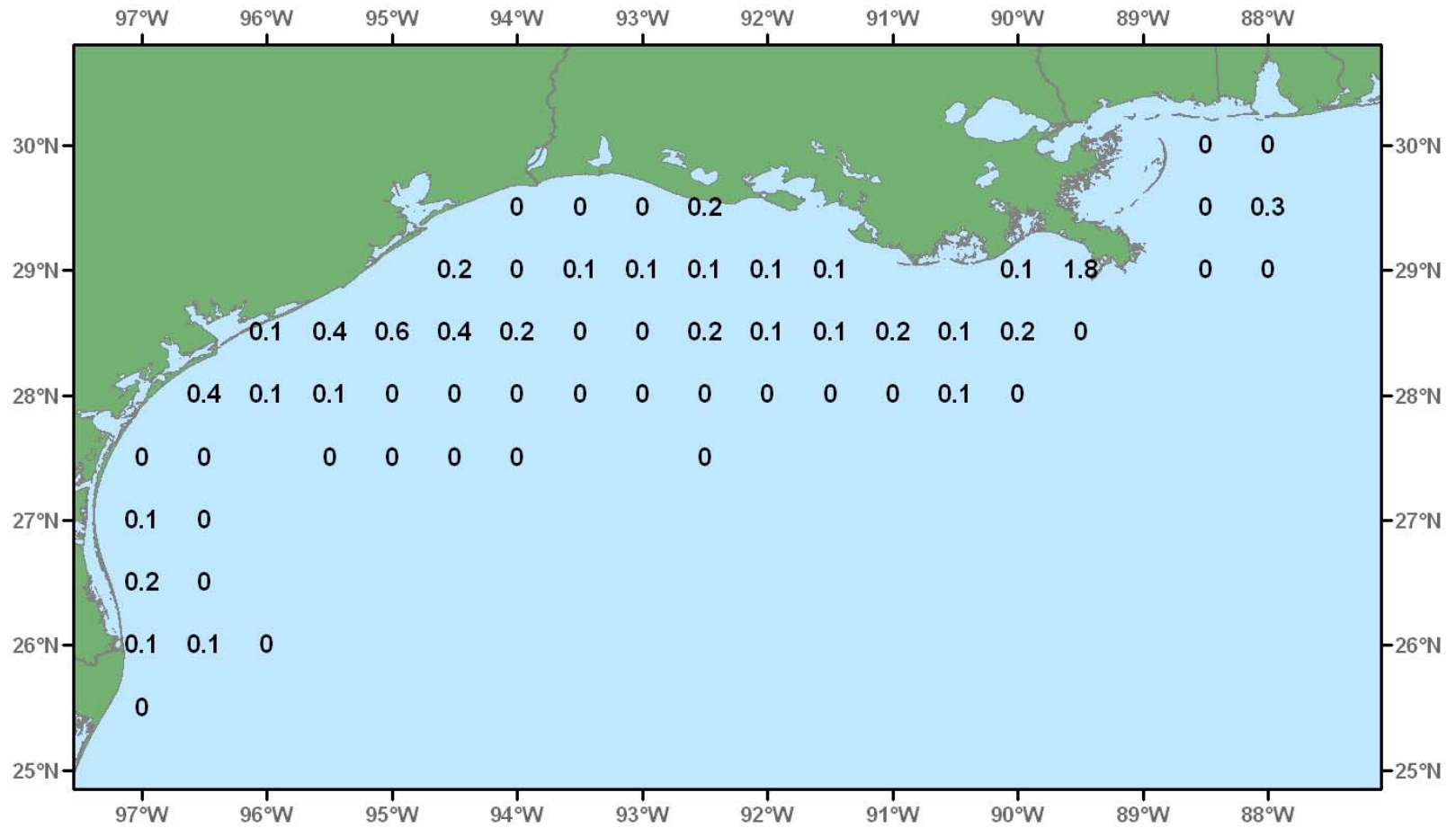


Figure 88. Iridescent swimming crab, *Portunus gibbesii*, lb/hour for October-December 2005.

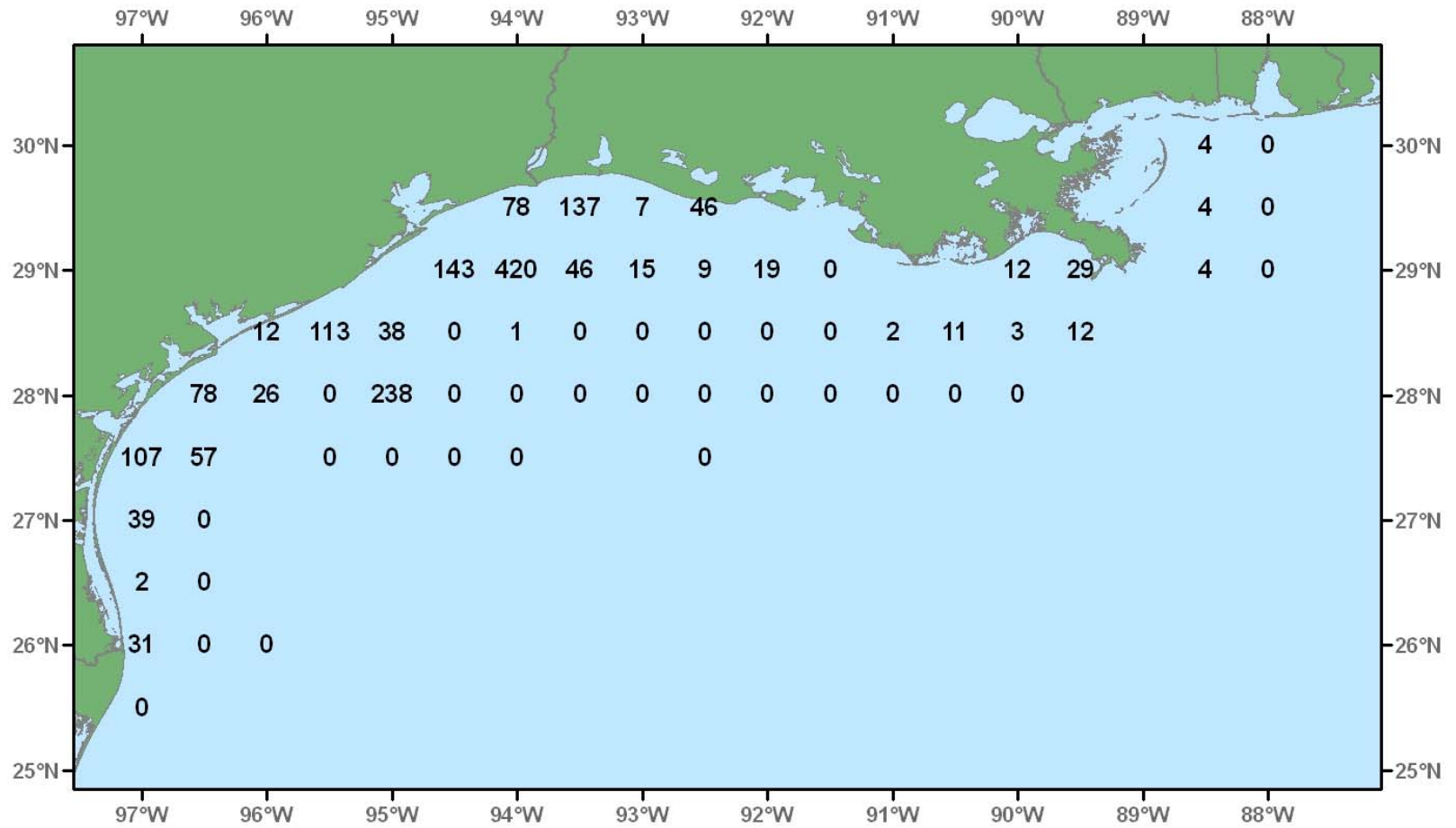


Figure 89. Atlantic brief squid, *Lolliguncula brevis*, number/hour for October-December 2005.

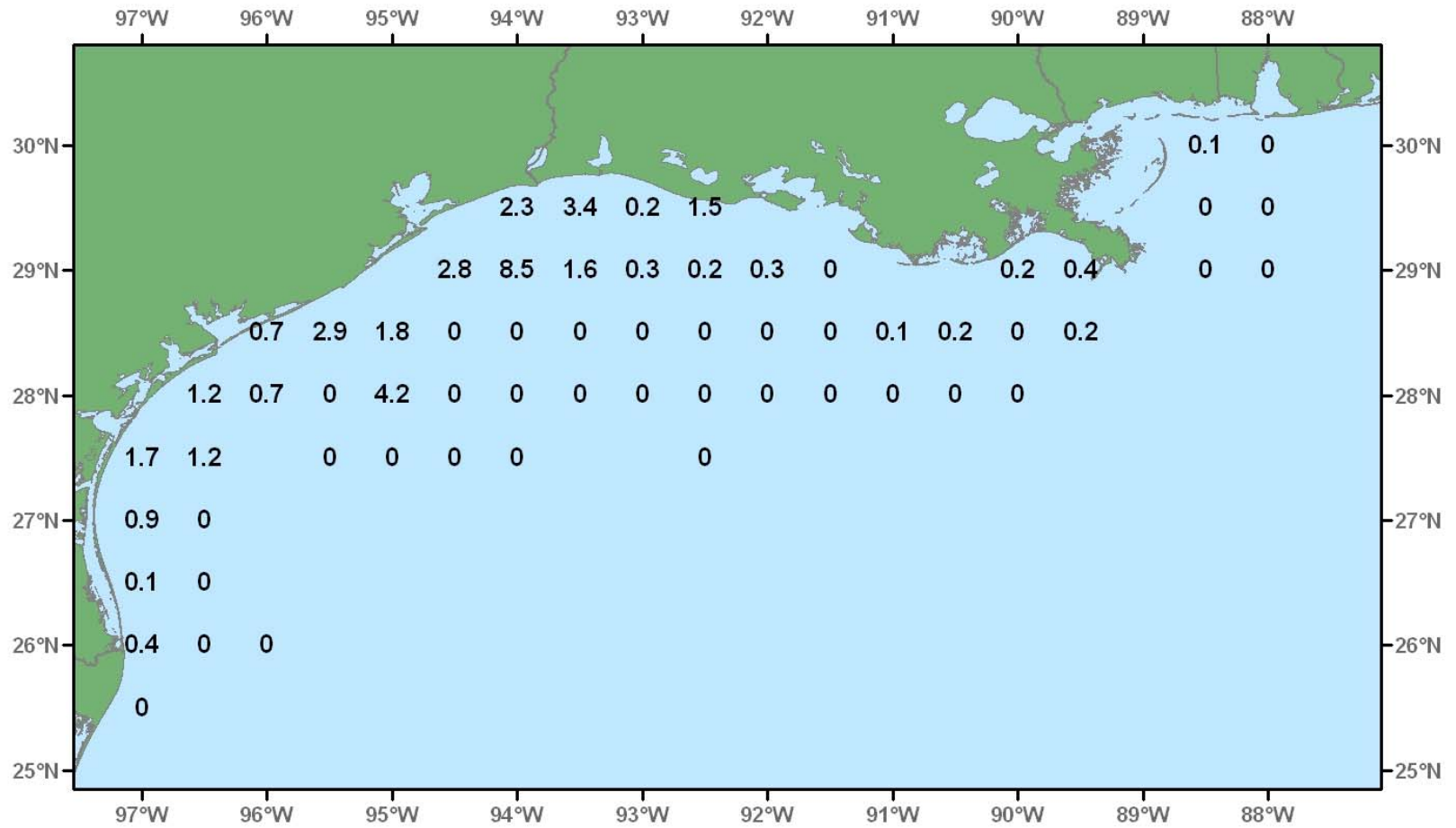


Figure 90 Atlantic brief squid, *Lolliguncula brevis*, lb /hour for October-December 2005.

LITERATURE CITED

- Atlantic States Marine Fisheries Commission. 2006. SEAMAP Management Plan: 2006-2010. Washington, DC: ASMFC.
- Center for Wetland Resources. 1980. Management plan and final environmental impact statement for the shrimp fishery of the Gulf of Mexico, United States waters. Louisiana State Univ., Baton Rouge, Louisiana. 185 p.
- Ditty, J.G. and R.F. Shaw. 1992. Larval development, distribution, and ecology of cobia *Rachycentron canadum* (Family: Rachycentridae), in the northern Gulf of Mexico. Fishery Bulletin. Vol. 90:668-677.
- Ditty, J.G. and R.F. Shaw. 1993. Larval development of tripletail, *Lobotes surinamensis* (Pisces: Lobotidae), and their spatial and temporal distribution in the northern Gulf of Mexico. Fishery Bulletin. Vol. 92:33-45.
- Ditty, J.G., R.F. Shaw, C.B. Grimes, and J.S. Cope. 1994. Larval development, distribution, and abundance of common dolphin, *Coryphaena hippurus*, and pompano dolphin, *C. equiselis* (Family: Coryphaenidae), in the northern Gulf of Mexico. Fishery Bulletin. Vol. 94:275-291.
- Donaldson, D.M., N.J. Sanders, and P.A. Thompson. 1993. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1991. Gulf States Marine Fisheries Commission. No. 29. 321 p.
- Donaldson, D.M., N.J. Sanders, and P.A. Thompson. 1994. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1992. Gulf States Marine Fisheries Commission. No. 30. 293 p.
- Donaldson, D.M., N.J. Sanders, P.A. Thompson and R. Minkler. 1996. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1993. Gulf States Marine Fisheries Commission. No. 34. 284 p.
- Donaldson, D.M., N.J. Sanders, P.A. Thompson and R. Minkler. 1997a. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1994. Gulf States Marine Fisheries Commission. No. 40. 277 p.
- Donaldson, D.M., N.J. Sanders, P.A. Thompson and R. Minkler. 1997b. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1995. Gulf States Marine Fisheries Commission. No. 41. 280 p.
- Donaldson, D.M., N.J. Sanders, P.A. Thompson and D. Hanisko. 1998. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1996. Gulf States Marine Fisheries Commission. No. 52. 263 p.

LITERATURE CITED

- Drass, D.M., K.L. Bootes, J. Lyczkowski-Shultz, B.H. Comyns, G.J. Holt, C.M. Riley, and R.P. Phelps. 2000. Larval development of red snapper, *Lutjanus campechanus*, with comparisons to co-occurring snapper species. Fishery Bulletin. Vol. 98(3):507-527.
- Eldridge, P.J. 1988. The Southeast Area Monitoring and Assessment Program (SEAMAP): A state-federal-university program for collection, management and dissemination of fishery-independent data and information in the southeast United States. Mar. Fish. Rev. 50(2): 29-39.
- Gledhill, C.T. and J. Lyczkowski-Shultz. 2000. Indices of larval king mackerel, *Scomberomorus cavalla*, for use in population assessment in the Gulf of Mexico. Fishery Bulletin. Vol. 98(4):684-691.
- Goodyear, C.P. 1997. An evaluation of the minimum reduction in the 1997 red snapper shrimp bycatch mortality rate consistent with the 2019 recovery target. GMFMC. 14 p. + appendix.
- Grace, M., K.R. Rademacher and M. Russell. 1994. Pictorial guide to the groupers (Teleostei: Serranidae) of the western North Atlantic. NOAA Tech. Report. NMFS 118. 46 p.
- Hanifen, J.G., W.S. Perret, R.P. Allemand and T.L. Romaine. 1995. Potential impacts of hypoxia on fisheries: Louisiana's fishery-independent data. In Proceedings of Gulf of Mexico Program's Hypoxia Conference. November 1995, New Orleans, LA.
- Jeffrey, S.W. and G.F. Humphrey. 1975. New spectrophotometric equations for determining chlorophylls a , b , c_1 and c_2 in higher plants, algae and natural phytoplankton. Biochem. Physiol. Pflanze Bpp. 167: 191-194.
- Kelley, S., T. Potthoff, W.J. Richards, L. Ejsymont and J.V. Gartner. 1985. SEAMAP 1983 - Ichthyoplankton. Larval distribution and abundance of Engraulididae, Carangidae, Clupeidae, Lutjanidae, Serranidae, Sciaenidae, Coryphaenidae, Istiophoridae, Xiphiidae and Scombridae in the Gulf of Mexico. NOAA Tech. Mem., NMFS-SEFC -167.
- Kelley, S., J.V. Gartner, Jr., W.J. Richards and L. Ejsymont. 1990. SEAMAP 1984 & 1985 - Ichthyoplankton. Larval distribution and abundance of Carangidae, Clupeidae, Coryphaenidae, Engraulididae, Gobiidae, Istiophoridae, Lutjanidae, Scombridae, Serranidae, and Xiphiidae in the Gulf of Mexico. NOAA Tech. Mem., NMFS-SESC-317.

LITERATURE CITED

- Kelley, S., J.V. Gartner, Jr., W.J. Richards and L. Ejsymont. 1993. SEAMAP 1986 - Ichthyoplankton. Larval distribution and abundance of Engraulididae, Carangidae, Clupeidae, Gobiidae, Lutjanidae, Serranidae, Coryphaenidae, Istiophoridae and Scombridae in the Gulf of Mexico. NOAA Tech. Mem., NMFS-SESC-245.
- Kramer, D., M.J. Kalin, E.G. Stevens, J.R. Thrailkill and J.R. Zweifel. 1972. Collecting and processing data on fish eggs and larvae in the California Current region. NOAA Technical Report. NMFS Circular 370. 38 p.
- Leming, T.D. and W.E. Stuntz. 1984. Zones of coastal hypoxia revealed by satellite scanning have implications for strategic fishing. *Nature*. 310 (5973): 131-138.
- Lyczkowski-Shultz, J. and R. Brasher. 1996. Ichthyoplankton data summaries from SEAMAP Summer Shrimp/Groundfish Surveys. Pages 27-42 in *Uses of Fishery-Independent Data*. General Session Proceedings, Gulf States Marine Fisheries Commission. No. 35.
- Nichols, S. 1982. Impacts of the 1981 and 1982 Texas closure on brown shrimp yields. NOAA, NMFS-SEFC. 44 p.
- Nichols, S. 1984. Impacts of the 1982 and 1983 closure of the Texas FCZ on brown shrimp yields. Report to the Gulf of Mexico Fishery Management Council.
- Nichols, S. and J.R. Poffenberger. 1987. Analysis of alternative closures for improving brown shrimp yield in the Gulf of Mexico. Report to the Gulf of Mexico Fishery Management Council.
- Posgay, J.A. and R.R. Marak. 1980. The MARMAP bongo zooplankton samplers. *J. Northw. Atl. Fish. Sci.* 1: 9-99.
- Rester, J.K., N.J. Sanders, P.A. Thompson and D. Hanisko. 1999. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1997. Gulf States Marine Fisheries Commission. No. 63. 254 p.
- Rester, J.K., N.J. Sanders, G. Pellegrin, Jr. and D. Hanisko. 2000. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1998. Gulf States Marine Fisheries Commission. No. 75. 243 p.
- Rester, J.K., N.J. Sanders, G. Pellegrin, Jr. and D. Hanisko. 2001. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1999. Gulf States Marine Fisheries Commission. No. 82. 247 p.

LITERATURE CITED

- Rester, J.K., N.J. Sanders, G. Pellegrin, Jr. and D. Hanisko. 2002. SEAMAP environmental and biological atlas of the Gulf of Mexico, 2000. Gulf States Marine Fisheries Commission. No. 101. Available on CD-ROM only.
- Rester, J.K., N.J. Sanders, G. Pellegrin, Jr., and D. Hanisko. 2004. SEAMAP environmental and biological atlas of the Gulf of Mexico, 2001. Gulf States Marine Fisheries Commission. No. 118. Available on CD-ROM only.
- Rester, J.K., N.J. Sanders, and G. Pellegrin, Jr. 2008. SEAMAP environmental and biological atlas of the Gulf of Mexico, 2002. Gulf States Marine Fisheries Commission. No. 156.
- Rester, J.K., N.J. Sanders, and G. Pellegrin, Jr. 2009. SEAMAP environmental and biological atlas of the Gulf of Mexico, 2003. Gulf States Marine Fisheries Commission. No. 172.
- Rester, J.K. 2009. SEAMAP environmental and biological atlas of the Gulf of Mexico, 2004. Gulf States Marine Fisheries Commission. No. 173.
- Richards, W.J., T. Potthoff, S. Kelley, M.F. McGowan, L. Ejsymont, J.H. Power and R.M. Olvera L. 1984. SEAMAP 1982 - Ichthyoplankton. Larval distribution and abundance of Engraulididae, Carangidae, Clupeidae, Lutjanidae, Serranidae, Sciaenidae, Coryphaenidae, Istiophoridae, Xiphiidae and Scombridae in the Gulf of Mexico. NOAA Tech. Mem., NMFS-SEFC-167.
- Russell, G.M. Unpublished report. Reef fish assessment methodology for SEAMAP surveys of hardbottom areas. National Marine Fisheries Service. 25 p.
- Sanders, N.J., P.A. Thompson and T. Van Devender. 1990a. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1986. Gulf States Marine Fisheries Commission. No. 20. 328 p.
- Sanders, N.J., P.A. Thompson and D.M. Donaldson. 1990b. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1987. Gulf States Marine Fisheries Commission. No. 22. 337 p.
- Sanders, N.J., D.M. Donaldson and P.A. Thompson. 1991a. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1988. Gulf States Marine Fisheries Commission. No. 23. 320 p.
- Sanders, N.J., D.M. Donaldson and P.A. Thompson. 1991b. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1989. Gulf States Marine Fisheries Commission. No. 25. 318 p.

LITERATURE CITED

- Sanders, N.J., D.M. Donaldson and P.A. Thompson. 1992. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1990. Gulf States Marine Fisheries Commission. No. 27. 311 p.
- Scott, G.P., S.C. Turner, C.B. Grimes, W.J. Richards, and E.B. Brothers. 1993. Indices of larval bluefin tuna, *Thunnus thynnus*, abundance in the Gulf of Mexico: modeling variability in growth, mortality, and gear selectivity. Bulletin of Marine Science. Vol. 53(2):912-929.
- Sherman, K., R. Lasker, W. Richards and A.W. Kendall, Jr. 1983. Ichthyoplankton and fish recruitment studies in large marine ecosystems. Mar. Fish. Rev. 45 (10, 11, 12): 1-25.
- Smith, P.E. and S.L. Richardson, eds. 1977. Standard techniques for pelagic fish egg and larva surveys. FAO Fish. Tech. Paper 175. 100 p.
- Southeast Area Monitoring and Assessment Program (SEAMAP) Strategic Plan. 1981. Report to the Gulf States Marine Fisheries Commission. 50 p.
- Strickland, J.D.H. and T.R. Parsons. 1972. A practical handbook of seawater analysis. Ottawa: Fish. Res. Bd. Can. 310 p.
- Stuntz, W.E., C.E. Bryan, K. Savastano, R.S. Waller and P.A. Thompson. 1985. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1982. Gulf States Marine Fisheries Commission. 145 p.
- Thompson, P.A. and N. Bane. 1986a. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1983. Gulf States Marine Fisheries Commission. No. 13. 179 p.
- Thompson, P.A. and N. Bane. 1986b. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1984. Gulf States Marine Fisheries Commission. No. 15. 171 p.
- Thompson, P.A., T. Van Devender and N.J. Sanders, Jr. 1988. SEAMAP environmental and biological atlas of the Gulf of Mexico, 1985. Gulf States Marine Fisheries Commission. No. 17. 338 p.