



SEAMAP
MARINE DIRECTORY
1994

Gulf States Marine Fisheries Commission

March 1994

A PUBLICATION OF THE GULF STATES MARINE FISHERIES
COMMISSION PURSUANT TO THE NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION AWARD NO. NA47FS0038.



1994 SEAMAP-GULF OF MEXICO MARINE DIRECTORY
Fishery-Independent Survey Activities

SOUTHEAST AREA MONITORING AND ASSESSMENT PROGRAM

Walter M. Tatum, Chairman

GULF STATES MARINE FISHERIES COMMISSION

Post Office Box 726

Ocean Springs, Mississippi 39566-0726

INTRODUCTION

The Southeast Area Monitoring and Assessment Program (SEAMAP) is a cooperative State/Federal/university program for the collection, management and dissemination of fishery-independent data (data collected without direct reliance on any commercial or recreational fishery) and information in the southeast region. Presently, there are three components to the program: the SEAMAP-Gulf, SEAMAP-South Atlantic and SEAMAP-Caribbean (Puerto Rico and the U.S. Virgin Islands).

This Marine Directory updates information contained in past SEAMAP Marine Directories, and describes survey activities (ongoing programs, vessel schedules, etc.) throughout the Gulf of Mexico. The program is managed through the office of the Gulf States Marine Fisheries Commission.

Agencies responding to the 1994 Directory were contacted in January 1994 and requested to provide current information or projected changes in their survey programs. Tables 1, 2 and 3 are condensed summaries of information submitted by responding agencies and organizations, indicated as either Federal, State or university activities.

Representatives of agencies contributing information to past directories are listed alphabetically in Appendix A by organizational category. The SEAMAP Subcommittee would like to express its appreciation to all organizations responding to the request for information. Other organizations conducting fishery-independent marine or estuarine surveys are encouraged to contact the SEAMAP for inclusion in future listings. The Directory will be updated each year, with copies supplied to participating organizations.

Appendix B lists published documents which have been produced by the SEAMAP and are available through the Gulf States Marine Fisheries Commission. Questions and requests for detailed information concerning the Directory or the SEAMAP should be referred to:

David Donaldson
SEAMAP-Gulf Coordinator
Gulf States Marine Fisheries Commission
Post Office Box 726
Ocean Springs, Mississippi 39566-0726
(601) 875-5912
(601) 875-6604 FAX

APPENDIX A

MARINE AGENCY CONTACTS

FEDERAL AGENCIES

U.S. DEPARTMENT OF COMMERCE

NOAA/National Marine Fisheries Service

Southeast Fisheries Center

Dr. Brad Brown, Director
75 Virginia Beach Drive
Miami, Florida 33149
(305) 361-4284
(305) 361-4219 FAX

Galveston Laboratory

Dr. Roger Zimmerman
Laboratory Director
4700 Avenue "U"
Galveston, TX 77551-5997
(409) 766-3500
(409) 766-3508 FAX

Mississippi Laboratories

Dr. Scott Nichols, Director
Pascagoula Facility
P.O. Drawer 1207
Pascagoula, MS 39568-1207
(601) 762-4591
(601) 769-9200 FAX

Stennis Space Center

SSC, MS 39529
(601) 688-3650
(601) 688-1151 FAX

Miami Laboratory

Dr. Joseph Powers, Director
75 Virginia Beach Drive
Miami, FL 33149
(305) 361-4225
(305) 361-4515 FAX

Panama City Laboratory

Dr. Churchill Grimes
Laboratory Director
3500 Delwood Beach Road
Panama City, FL 32408
(904) 234-6541
(904) 234-6543 FAX

Beaufort Laboratory

Dr. Ford Cross, Director
101 Pivers Island Road
Beaufort, NC 28516
(919) 728-8724
(919) 728-8784 FAX

Research Management Division

Dr. Albert Jones, Director
75 Virginia Beach Drive
Miami, FL 33149
(305) 361-4259
(305) 361-4219 FAX

FEDERAL AGENCIES

U.S. DEPARTMENT OF INTERIOR

Minerals Management Service

Dr. James Kendall
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394
(504) 736-2896

Dr. Robert M. Avent
Marine Mammal and
Turtle Studies
(504) 736-2899

Dr. Robert Rogers
Flower Gardens Monitoring Study
(504) 736-2898

Dr. Murray Brown
LA/TX Shelf Physical
Oceanography Program
(504) 736-2901

U.S. Fish and Wildlife Service

Mr. Roy Perez
c/o Corpus Christi State University
Campus Box 338
6300 Ocean Drive
Corpus Christi, TX 78412
(512) 888-3346

Mr. Barton Rogers
School of Forestry,
Wildlife and Fisheries
Louisiana State University
Baton Rouge, LA 70803
(504) 388-4178

U.S. DEPARTMENT OF DEFENSE

Dr. Susan Rees, PD-EC
U.S. Army Corps of Engineers
Department of Defense
P.O. Box 2288
Mobile, AL 36628
(205) 694-4141

GULF AND SOUTH ATLANTIC FISHERIES DEVELOPMENT FOUNDATION, INC.

Ms. Judy Jamison, Executive Director
5401 W. Kennedy Boulevard
Suite 997
Tampa, FL 33609
(813) 286-8390
(813) 286-8261 FAX

STATE AGENCIES

ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

Mr. Walter M. Tatum
Drawer 458
Gulf Shores, AL 36542
(205) 968-7576
(205) 968-7307 FAX

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION MARINE RESEARCH INSTITUTE

Dr. Joseph Kimmel
100 8th Avenue, S.E.
St. Petersburg, FL 33701
(813) 896-8626
(813) 823-0166 FAX

LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES

Ms. Karen Jo Foote
P.O. Box 98000
Baton Rouge, LA 70898-9000
(504) 765-2372
(504) 765-2403 FAX

MISSISSIPPI DEPARTMENT OF WILDLIFE, FISHERIES AND PARKS

Mr. Tom Van Devender
Bureau of Marine Resources
2620 Beach Boulevard
Biloxi, MS 39531
(601) 385-5860
(601) 385-5864 FAX

TEXAS PARKS AND WILDLIFE DEPARTMENT

Mr. Gene McCarty
4200 Smith School Road
Austin, TX 78744
(512) 389-4857
(512) 389-4814 FAX

UNIVERSITIES

SEA GRANT PROGRAMS

Florida Sea Grant Office
Dr. James Cato, Director
Dr. Bill Seaman, Associate Director
University of Florida
Building 803, Room 5
P.O. Box 110400
Gainesville, FL 32611-0400
(904) 392-5870
(904) 392-5113 FAX

Texas A&M University Sea Grant Program
Dr. Feenan D. Jennings, Director
1716 Briarcrest, Suite 702
Bryan, TX 77802
(409) 845-1245
(409) 845-7525 FAX

Louisiana Sea Grant Office
Dr. Jack Van Lopik
Executive Director
Mr. Ronald E. Becker
Associate Director
Louisiana State University
Baton Rouge, LA 70803-7507
(504) 388-6710
(504) 388-6331 FAX

Mississippi-Alabama Sea
Grant Consortium
Dr. Jesús Tupaz
P.O. Box 7000
Ocean Springs, MS 39564-7000
(601) 875-9341
(601) 975-0528 FAX

ALABAMA UNIVERSITY PROGRAMS

Alabama Marine Environmental
Sciences Consortium
Dauphin Island Sea Lab
Dr. George F. Crozier
P.O. Box 369-370
Dauphin Island, AL 36528
(205) 861-2141

Talladega College
Dr. Arthur Bacon
Biology Department
Talladega, AL 35160
(205) 362-0206

University of South Alabama
Dr. Robert Shipp
Department of Marine Sciences
Life Sciences Building Room 25
Mobile, AL 36688-0002
(205) 460-6101
(205) 460-7357 FAX

FLORIDA UNIVERSITY PROGRAMS

Florida Institute of Oceanography
Dr. John C. Ogden
830 First St., South
St. Petersburg, FL 33701
(813) 893-9100

Florida State University
Dr. Robert Livingston
Department of Biological Sciences
Tallahassee, FL 32306
(904) 644-1466

UNIVERSITIES

FLORIDA UNIVERSITY PROGRAMS (CONTINUED)

University of Florida
Dr. Ron Labisky
Department of Wildlife Ecology
and Conservation
Gainesville, FL 32611-0430
(904) 392-4851

University of Florida
Dr. William Lindberg
Dept. of Fisheries and Aquatic Sciences
7922 NW 71st Street
Gainesville, FL 32606-0300

University of West Florida
Dr. Steve Bortone
College of Science and Technology
Dept. of Ecology & Evolutionary Biology
11000 University Parkway
Pensacola, FL 32514
(904) 474-3251

University of South Florida
Dr. Norman J. Blake
Department of Marine Science
140 Seventh Avenue, South
St. Petersburg, FL 33701
(810) 893-9130

University of Miami
Dr. Nelson M. Ehrhardt
Rosenstiel School of Marine
and Atmospheric Science
4600 Rickenbacker Causeway
Miami, FL 33149
(305) 361-4741

University of Florida
Florida Cooperative Fish and
Wildlife Research Unit
Gainesville, FL 32611-0430
(904) 392-1862

LOUISIANA UNIVERSITY PROGRAMS

Louisiana State University
Dr. Richard F. Shaw
Coastal Fisheries Institute
Center for Wetland Resources
Baton Rouge, LA 70803
(504) 388-6455

Louisiana Universities
Marine Consortium (LUMCON)
Dr. Paul W. Sammarco
Executive Director
8124 Highway 56
Chauvin, LA 70344
(504) 851-2800

Nicholls State University
Dr. Thomas M. Soniat
Dept. of Biological Sciences
Thibodaux, LA 70310
(504) 448-4700

University of Southwestern
Louisiana
Dr. Darryl L. Felder
Department of Biology
Box 42451
Lafayette, LA 70504
(318) 231-6748

UNIVERSITIES

MISSISSIPPI UNIVERSITY PROGRAMS

Gulf Coast Research Laboratory
Dr. Thomas McIlwain, Director
P.O. Box 7000
Ocean Springs, MS 39566-7000
(601) 872-4211
(601) 872-4279 FAX

University of Southern Mississippi
Dr. Steve Ross
Department of Biological Sciences
Hattiesburg, MS 29401
(601) 266-4928

University of Southern Mississippi
Dr. Don Redalje, Acting Director
Center for Marine Science
Stennis Space Center
SSC, MS 39529
(601) 688-3177

TEXAS UNIVERSITY PROGRAMS

University of Texas-Pan American
Dr. Frank W. Judd
Coastal Studies Laboratory
P.O. Box 2591
South Padre Island, TX 78597-2591
(512) 761-2644

Texas A & M University at Galveston
Dr. André M. Landry, Jr.
Department of Marine Biology
Institute of Marine Life Sciences
4700 Avenue U, Building 303
Galveston, TX 77553
(409) 740-4423
(409) 740-4717 FAX

Texas A & I University
Dr. Carl Wood
Department of Biology
Campus Box 158
Kingsville, TX 78363
(512) 595-3803

University of Houston
Dr. Al Loeblich
Department of Biology
Houston, TX 77204-5513
(713) 749-1011

The University of Texas at Austin
Dr. Terry Whitledge
Acting Director
Marine Science Institute
P.O. Box 1267
Port Aransas, TX 78373
(512) 749-6730

TABLE 1. SUMMARY OF INFORMATION PROVIDED BY FEDERAL AGENCIES

			TYPES OF FISHERY-INDEPENDENT SAMPLING			ANNUAL EFFORT DEVOTED TO FISHERY-INDEPENDENT SAMPLING BY ACTIVITY IN:		TYPES OF GEAR				
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLES	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISHING, TRAWLING	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	CHANGES OF FISHERY-INDEPENDENT ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENTLY UNABLE TO SAMPLE
NOAA/NMFS/SEFC												
Pascagoula Lab (MS)	Trawl catchable species; all plankton spp.	Subadults-adults; eggs/larvae	Gulf of Mexico	Territorial; open ocean (EEZ)	172' OREGON II; 127' CHAPMAN	73 days trawling and 148 days of plankton. Additional plankton piggybacked on trawl survey	450/yr trawl; 388 plankton/yr and 788 environmental stations per year	Standard 40' semiballoon trawl	Bongo mooney array w/ .333-mm mesh nets; 1x2-m neuston net w/ .950-mm mesh	Trawling random (stratified) 5 to 60 fm plankton systematic CRD from 5 to the EEZ	Continuation	Adult fish of many species (cobia, mullet, black drum, etc.)
	Reef fish (snapper, grouper, etc.)	Subadults-adults; eggs/larvae	Gulf of Mexico	Territorial; open ocean (EEZ)	CHAPMAN	42/yr total sea days	160 trap/camera; 30 plankton and environmental stations/yr	Traps; camera	Tucker trawl w/ .333 mm mesh	Random (stratified) 5 to 100 fm	Continuation	Unknown (experimental)
	Small pelagics (coastal herring, squid, butterfish)	Subadults-adults	Gulf of Mexico	Territorial; open ocean (EEZ)	CHAPMAN	80/yr total sea days	250/yr trawl and environmental stations	High-opening mid-water & bottom trawls; acoustics	None	Random (stratified) 10 to 170 fm	Continuation	None
	Marine mammals (porpoises & whales)	Adults-juveniles	Gulf of Mexico	Territorial; open ocean (EEZ)	OREGON II; small boats; air planes	94/yr sea days plus 160 days/year in small boats and air planes	Environmental at sightings	Visual w/ binoculars	None	Line transects	Continuation	Unknown (experimental)
	Marine turtles	Subadults-adults	Gulf of Mexico	Territorial; open ocean (EEZ)	Small boats	140 sea days/yr	160 sets and environmental stations	Purse seine	None	Opportunistic	Expansion	None
Miami Lab (FL)	All recreationally & commercially important species; reef fish; mackerels	Larvae; juveniles; adults	Gulf of Mexico; SW & SE FL	Territorial; open ocean (EEZ)	Ship support provided by Pascagoula Lab	120/yr	3500/yr	Fish traps	Bongo nets 60 & 20-cm w/ .333-mm mesh; neuston 1x2-m w/ .947-mm mesh	Systematic, grid basis; long-term station selection; estuary entrances; reefs	Funding has been cut and may be further reduced next FY.	Billfishes; tunas; sharks
Beaufort Lab (NC)	Atlantic croaker; spot; hardhead catfish	Subadults-adults	Charlotte Harbor; Tampa, Apalachicola, Pensacola, St. Andrews, Choctawhatchee, Mobile, Barataria, Calcasieu, Corpus Christi, Galveston, San Antonio Bays; MS Sound; MS Delta; Laguna Madre; Lavaca; Lake Ponchartrain; Arroyo	Territorial	133' FERREL	70/yr	130 fish/sampling site	30' otter trawl; gillnet	None	Sample representative of general contaminant levels at each sampling site (NOAA Status & Trends Program; National Benthic Surveillance Project; organic contaminants, trace metals, histopathology)	Funding has been cut and may be further reduced next FY.	None

TABLE 1. (CONTINUED)

			TYPES OF FISHERY-INDEPENDENT SAMPLING		ANNUAL EFFORT DEVOTED TO FISHERY-INDEPENDENT SAMPLING BY ACTIVITY IN:			TYPES OF GEAR				
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLED	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISHING, TRAWLING	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	CHANGES OF FISHERY-INDEPENDENT ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENTLY UNABLE TO SAMPLE
Galveston Lab (TX)	Penaeid shrimp; bottomfish; estuarine dependent spp.	Postlarvae-adults	Gulf of Mexico	Internal; (EEZ)	Ship support provided by Pascagoula Lab, Bay Boats	257/yr	Varies	Otter trawls 10'-40'; beam trawl; drop sampler		Random stratified for TX Closure; long-term studies for estuarine ecology	None	None
	Sea turtles	Juveniles-adults	Gulf of Mexico	Internal; EEZ (oil & gas platforms)	Bay boats; helicopters; crew boats; satellite zodiac;	12/yr	96	60' - 80' Otter trawls	None	Random	None	None
						45/yr	Varies	None	None	Random	None	None
	Kemp's ridley sea turtles	Hatchlings-yearlings	Gulf of Mexico (release of tagged turtles)	Territorial; EEZ (Texas)	U.S. Coast Guard Cutter; R/V LONGHORN	2	1-2 releases/yr	None	None	None	None	None
	Sea turtles	Stranded juveniles-adults	SW LA; TX	Coastal beaches	ATVs; dirt bikes; outboard boats	50	Varies	None	None	Twice-monthly stratified random sampling by beach strata	None	None
Sea turtles	Juveniles, Adults	TX, LA	Coastal shelf	Satellite	Varies	10-20 turtles	Satellite		Geographic Tracking	None	None	
Panama City Lab (FL)	Sharks	Juvenile/adults	NW Gulf of Mexico	Inshore	Small boats	Variable	Variable	Drift gillnet	None	Systematic grid	Will be completed in 1995	None
	Groupers	Adults/larvae	NW Gulf of Mexico	40 fm contour off Apalachicola	R/V CHAPMAN	Variable	Variable	Hydroacoustics/video	1x1 m Tucker Trawl (.333 mm mesh)/1x2 m neuston 0.547 mm mesh)	Spawning aggregation & systematic transects	Will be completed in 1997	None
	Gag and other groupers and snappers	Juveniles	NW Gulf of Mexico	Seagrass meadows of West Florida Shelf	Small boats	Variable	Variable	18' trawl/crab scrape	Neuston/push net	Systematic stations	None	None

TABLE 1. (CONTINUED)

			TYPES OF FISHERY-INDEPENDENT SAMPLING		ANNUAL EFFORT DEVOTED TO FISHERY-INDEPENDENT SAMPLING BY ACTIVITY IN:		TYPES OF GEAR					
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLES	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISHING, TRAWLING	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	CHANGES OF FISHERY-INDEPENDENT ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENTLY UNABLE TO SAMPLE
MINERALS MANAGEMENT SERVICE												
Movement & Behavior of Sea Turtles in Central & Western Gulf of Mexico	Sea turtles, primarily loggerhead and Kemp's ridleys	Subadults-adults	Central and western Gulf of Mexico Continental Shelf	Continental shelf & slope	Oil platforms, small boats and aircraft	60/yr	None	Tagging and tracking via acoustic, radio and satellite	None	N/A	Project to be completed in 1994	None
Distribution & Abundance of Marine Mammal in North-Central & Western Gulf of Mexico	All cetaceans, primarily great whales	All stages	Western Gulf of Mexico continental slope	U.S.-Mexico border to Mississippi Delta	Small aircraft and 20-50 meter ships	160-200/yr	None	Shipboard and aerial observational line transects; acoustics; tagging and satellite tracking	None	N/A	Project to be completed in two years	None
Flower Garden Monitoring Study	Corals	Mature colonies	East & West Flower Garden Banks	Reef	M/V FLING; motor vessels	5/yr	Photos; videos	None	None	Diver surveys	Projected to continue through 1995	None
LA/TX Shelf Program	None	None	LA/TX continental slope & shelf	Continental shelf	Moored & drifting buoys; ships & aircraft			None	None	Monitoring of major oceanographic features	Expected to continue	None

TABLE 2. SUMMARY OF INFORMATION PROVIDED BY STATE AGENCIES

			TYPES OF FISHERY-INDEPENDENT SAMPLING		ANNUAL EFFORT DEVOTED TO FISHERY-INDEPENDENT SAMPLING BY ACTIVITY IN:			TYPES OF GEAR				
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLES	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISHING, TRAWLING	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	CHANGES OF FISHERY-INDEPENDENT ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENTLY UNABLE TO SAMPLE
FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION	Red drum; spotted trout; snook; king mackerel; mullet; gag; grouper; tarpon; bonefish; pompano; baitfish; tropical fish; stone crab; blue crab; spiny lobster; oysters; hard clam	All stages	FL waters & offshore	Internal; territorial; EEZ	37' BONNIE E; 24' T-craft inboard; small outboards & skiffs; 20' mullet skiffs; 34' Allmand; 24' tunnel boat; 16' & 18' Monark; 17', 20' & 26' Boston Whalers; 86' HERNAN CORTEZ II; 80/yr 20' Mako; 20' Electro shocker boat	Varies Weekly intervals (annually)	Varies	35' trawl; 100' bag seine; benthic eled w/ net; 600' x '8 trammel net; lobster & crab traps; beach seines; Drop & gill nets; visual counts; underwater video	Bongo array; neuston nets	Systematic, random (stratified) grid basis; long-term station selection; short-term special studies	Increase sampling for baitfish distributed in spring; sampling for tarpon juveniles in nearshore water impoundments; grouper reproductive strategies; juvenile & adult life histories of grouper; ichthyoplankton survey directed at clupeids, tarpon, snook & grouper; investigation of tropical reef fish life history & population dynamics	Mackerel, cobia, amberjack, reef fish (snapper, grouper)
ALABAMA DEPT. OF CONSERVATION & NAT. RESOURCES	All penaeid shrimp; southern flounder; Gulf menhaden; red drum; red snapper; blue crab; black drum; Spanish mackerel; mullet	Larvae-adults	AL marshes to territorial sea; EEZ	Internal; territorial; EEZ	22' Tiara, (2) 90-hp; Seacraft, (2) 160-hp; 38' Bertram; 60' R/V A.E. VERRIL	40/yr	100/yr	60' bag seine; 16' otter trawl; 40' SEAMAP trawl; video camera	6' beam plankton trawl; neuston	Long-term station selection, effort varies according to spawning season of target species monitoring reef fish populations at randomly selected reef sites	Increase effort to determine yr-class strength of target species; conduct more age & growth work; explore means to sample offshore reef fish areas	King mackerel; cobia; red snapper
MISSISSIPPI BUREAU OF MARINE RESOURCES	All penaeid shrimp; oysters; sciaenids; flounder; cobia	Juveniles-adults	MS territorial sea	Internal; territorial; EEZ	28' Outboard; 22' Boston Whaler; 19' Proline; 18' Outboard 65' oyster dredge boat	60/yr 10/yr	Varies 6/mo (oyster) & 10-15/mo (shrimp) varies	16' trawl; oyster tongs & dredge; gill net	None	Long-term station selection, varies w/ opening & closing of areas	Increase tagging activities; age & growth work; seasonal abundance due to Bonne Carre outflow	Juvenile Red Snapper

TABLE 2. (CONTINUED)

			TYPES OF FISHERY-INDEPENDENT SAMPLING		ANNUAL EFFORT DEVOTED TO FISHERY-INDEPENDENT SAMPLING BY ACTIVITY IN:			TYPES OF GEAR					
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLES	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISHING, TRAWLING	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	CHANGES OF FISHERY-INDEPENDENT ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENTLY UNABLE TO SAMPLE	
LOUISIANA DEPT. OF WILDLIFE & FISHERIES	All penaeid shrimp; finfish; oysters	Larvae- adults	LA inshore waters; territorial seas; EEZ	Internal; territorial	17' outboards for 8' trawl; 30' inboards for 16' trawl; 85' vessel (LOOP) for 50' trawl; leased vessel for 40' trawl	167/yr state 92/yr LOOP	16/yr	Trawls: 800/yr 1288/yr 494/yr 12/yr 72/yr 96/yr Benthos: 48/yr 250/yr 1500/yr 100/yr 576/yr 135/yr 144/yr Plankton: 528/yr	6' (inshore) 18' (inshore) 18' (offshore) 50' (inshore) 50' (offshore) 40' (offshore)	1/2-m surface ring nets (.153-mm & .363-mm); 1-m surface ring (363-mm); 60-cm bongo nets (.333-.363-mm); neuston nets (.948-mm)	Long-term station selection; LOOP monitoring; stratified random sampling for SEAMAP	Increase territorial sea sampling; increase emphasis on finfish	Adult pelagic finfish in open Gulf waters
TEXAS PARKS & WILDLIFE DEPT.	All penaeid shrimp; all other species	Juveniles- adults	TX internal coastal waters; territorial sea	Internal; territorial	30'-55' inboards; 18'-25' outboards; skiffs	365/yr	2412/yr 2328/yr 960/yr 760/yr 1080/yr 252/yr	80' bag seines 20' trawl (inshore) 20' trawl (offshore) gill nets oyster dredge beach seine	None	Random, grid basis	None	Adult finfish in open Gulf waters	

TABLE 3. SUMMARY OF INFORMATION PROVIDED BY UNIVERSITIES

			TYPES OF FISHERY-INDEPENDENT SAMPLING		ANNUAL EFFORT DEVOTED TO FISHERY-INDEPENDENT SAMPLING BY ACTIVITY IN:			TYPES OF GEAR				
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLES	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISHING, TRAWLING	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	CHANGES OF FISHERY-INDEPENDENT ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENTLY UNABLE TO SAMPLE
FLORIDA												
FLORIDA STATE UNIVERSITY	Benthic infauna; epibenthic fishes & invertebrates	Larvae-adults	NE Gulf of Mexico	Internal; territorial	65-hp 25' skiffs; outboard	48/yr	Monthly samples, both trawl & environmental	Standard 5-m otter trawl	80-um plankton net	Systematic, random long-term station selection; short-term special studies	More environmental experimentation	Apalachicola & Apalachee Bay; and all species in those areas
UNIVERSITY OF WEST FLORIDA	Demersal vertebrates & invertebrates	Subadults-adults	NE Gulf of Mexico	Estuarine	18' skiff; 22' center console	7/yr (trawl) 14/yr (plankton) dive (fauna) 50/yr	50/yr 140/yr 180/yr	18' otter trawl	1-m bongos; 1-m neuston	Systematic, random (stratified) visual survey	More environmental assessment	Snapper
FLORIDA SEA GRANT	All species	All stages	Gulf; Caribbean; South Atlantic	Internal; territorial	Industry, NMFS & F.I.O. contract vessels	Varies	Varies			Varies	More recruitment	None
FLORIDA INSTITUTE OF OCEANOGRAPHY	All species	All stages	Gulf; Caribbean; South Atlantic	Internal; territorial	SUNCOASTER; BELLOWS	20-30/project	Varies	40' otter trawl; tucker trawl; shellfish dredge	Various plankton nets	Random, long-term station selection; short-term special studies	To continue w/ SEAMAP; expanded environmental sampling	None
UNIVERSITY OF FLORIDA	Reef fishes, epibenthic invertebrates, & benthic macrofauna	Juvenile to adults	Eastern Gulf of Mexico	Shallow Continental Shelf	Two 24' dive boats, 33' trawler	160/yr	182 visual fish samples/yr 672 benthic cores/yr	Otter trawl	None	Randomized sampling of experimental replicates	Increase experimental replicates & add disciplines	Primary producers
UNIVERSITY OF MIAMI	All species	All stages	Gulf; Caribbean; South Atlantic	Estuarine; offshore; inshore	Offshore: COLOMBUS ISELIN; inshore: CALANUS; estuarine: 25' I/O	240/yr; 200/yr; 150/yr	Varies; Varies; Varies	Hydroacoustics	Various plankton nets	Varies	More hydroacoustics	None

TABLE 3. (CONTINUED)

			TYPES OF FISHERY-INDEPENDENT SAMPLING		ANNUAL EFFORT DEVOTED TO FISHERY-INDEPENDENT SAMPLING BY ACTIVITY IN:			TYPES OF GEAR				
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLES	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISHING, TRAWLING	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	CHANGES OF FISHERY-INDEPENDENT ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENTLY UNABLE TO SAMPLE
ALABAMA												
MARINE ENVIRONMENTAL SCIENCES CONSORTIUM	Oysters; blue crab	Larvae-adult	Mobile Bay; east MS Sound	Estuarine	26'-42' reseach vessels	Biweekly; 48 hour time series	Hundreds	None	Clark-Bumpers zooplankton	Distribution patterns; settlement factors	None	None
UNIVERSITY OF SOUTH ALABAMA	Sciaenids; hard clam; blue crab	Larvae-adult	Shelf & mouth of Mobile Bay; NW FL; east AL	Shelf; estuaries; grassbeds	21' skiffs	22/24 episodic/mo	Several hundred	None	Surface; demersal	Environmental impact/growth rate	Shift toward management application	None
MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM	General	Vertebrates: larvae; invertebrates: all stages	Northern Gulf of Mexico; MS Sound; Mobile Bay	Territorial; EEZ; estuarine; coastal	96' TOMMY MUNRO; skiffs; industry	Varies	Varies	Crab pots; tongs; closed, recirculating seawater system; opening/closing plankton trawl	Various Plankton Nets	Varies	None	None
	Estuarine fish species	Juvenile-subadult	Weeks Bay, AL	Estuarine	14' skiffs	60/yr	180/yr	Block nets/seine	None	Random, concentrated in May, June & September	None	None
MISSISSIPPI												
UNIVERSITY OF SOUTHERN MISSISSIPPI	All estuarine finfish;		MS estuarine; northern Gulf; Biloxi Bay	Estuarine; territorial	Various small skiffs (outboards)	Varies	Varies	Standard basic equipment	Standard basic equipment	Short-term special studies	Increase develop-ment of marine & coastal biology program	None
GULF COAST RESEARCH LABORATORY	All penaeid shrimp; blue crab; croaker; spot; seatrout catfish; Gulf menhaden; sea mullet; Atl. bumper; butterfish; cutlassfish; red drum; squid; golden Gulf crabs	Larvae-adults	MS territorial sea; offshore to 300 m	Internal; territorial;	96' TOMMY MUNRO; 20' skiffs; 38' BILL DEMORAN	Semimonthly & monthly	216 trawl stations/yr	50' bag seine; 16' & 36' otter trawl; 8' Renfro beam trawl; variable mesh gill net sampler; 40' shrimp trawl; 80' high-rise net; crab traps	Tucker trawl; neuston; bongo	Stratified, random long-term station selection	Expansion of monitoring & assessment if funds become available; longline for pelagic fishes; bottom long-lining; deepwater traps for crabs	None
MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM	General	Vertebrates: juveniles; invertebrates: all stages	Northern Gulf of Mexico; MS Sound; Mobile Bay	Territorial; EEZ; estuarine; coastal	96' TOMMY MUNRO; skiffs	Varies	Varies	Varies	Various Plankton Nets	Varies	None	None

TABLE 3. (CONTINUED)

			TYPES OF FISHERY-INDEPENDENT SAMPLING		ANNUAL EFFORT DEVOTED TO FISHERY-INDEPENDENT SAMPLING BY ACTIVITY IN:			TYPES OF GEAR				
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLES	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISHING, TRAWLING	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	CHANGES OF FISHERY-INDEPENDENT ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENTLY UNABLE TO SAMPLE
LOUISIANA												
UNIVERSITY OF NEW ORLEANS	Blue crab; oyster; marine commercial finfish	All stages	Lake Pontchartrain; Lake Borgne	Estuarine		Varies				Short-term special studies	Analyze commercial fish populations using electrophoresis; studies of oyster nutrition & parasitology	None
NICHOLLS STATE UNIVERSITY	Oysters	Adult	Terrebonne Bay	Estuarine	16' skiff	52/yr	156/yr	Oyster dredge/tongs		Fixed Stations	None	None
UNIVERSITY OF SOUTHWESTERN LOUISIANA	Stone crab; penaeid shrimp; commercial finfish	All stages	Northern Gulf of Mexico	Coastal; estuarine	Various LUMCOM vessels	Varies	Varies	Trawl; dredge; traps; pots; seines		Varies by population	None	None
LOUISIANA STATE UNIVERSITY	Estuarine & marine finfish species; decapod crustaceans	All stages	Barataria, Terrebonne & Timbalier Bay; Lake Pontchartrain; MS River mouth; Atchafalaya	Estuarine; territorial	Small skiffs; PELICAN; ACADIANA; oil & gas structures	Varies monthly	Varies	Drop BOT sampler; gill net; hydro-acoustics trawl	MOCNESS opening & closing bongo nets; general plankton nets	Short-term special studies; long-term stations; tidal transport & recruitment	Estimate fish abundance & movement using hydroacoustics; examine growth rates & reproduction biology of important estuarine species; recruitment studies	None
LOUISIANA UNIVERSITIES MARINE CONSORTIUM	Zooplankton; benthos; bottomfish; anchovies	All stages	Terrebonne & Timbalier Bay; inner continental shelf	Estuarine; coastal	105' PELICAN; 58' R/V ACADIANA; small outboards	Varies	Varies	5-m otter trawl	.333 & .505 mesh; general plankton nets	Fixed station, transects, varies	None	None

TABLE 3. (CONTINUED)

			TYPES OF FISHERY-INDEPENDENT SAMPLING		ANNUAL EFFORT DEVOTED TO FISHERY-INDEPENDENT SAMPLING BY ACTIVITY IN:			TYPES OF GEAR				
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLES	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISHING, TRAWLING	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	CHANGES OF FISHERY-INDEPENDENT ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENTLY UNABLE TO SAMPLE
TEXAS												
UNIVERSITY OF TEXAS, MARINE SCIENCE INSTITUTE	Shelf & bay species	All stages	Internal; territorial waters	Internal; territorial	105' LONGHORN; 57' KATY; shallow-draft bay boats	100/yr	Varies	42' semiballoon shrimp trawl; 40' semiballon otter trawl	12' x 24" plankton net	Short-term special studies	Institute expansion on all present programs	None
TEXAS A&I UNIVERSITY	All inshore bay species	All stages	Corpus Christi to Brownsville	Internal; coastal		24/yr	150/yr			Short-term special studies	None	None
TEXAS A&M UNIVERSITY	All macro-crustaceans & finfish	All stages	NW Gulf off LA & TX	Internal; territorial	71' EXCELLENCE II; 47' ROMIN EMPIRE	Varies	Varies	34' & 50' semi-balloon trawls	Bongo net w/ .333-mm & .505-mm mesh	Short-term special studies	None	None
UNIVERSITY OF TEXAS-PAN AMERICAN	All finfish & benthic macrofauna of Laguna Madre;	All stages	Corpus Christi to Brownsville	Laguna Madre; Gulf inshore	Shallow-draft bay boats	48/yr	Biweekly & monthly depending on project	Otter trawls & bag seines	Plankton tows	Long-term baseline studies	Intensive studies of individual species	None

APPENDIX B
SEAMAP DOCUMENTS

SEAMAP DOCUMENTS LIST, 1982 - CURRENT

- 1) SEAMAP Strategic Plan, January 1981. The initial planning document describing the intent to develop the SEAMAP Program and outlining the preliminary goals and objectives, assessment requirements and priorities, research strategies, and funding requirements.
- 2) SEAMAP Quick-Reports (Data Summaries): six summaries, June-July 1981; seven summaries, June-July 1983; seven summaries, June-July 1984; five summaries, June-July 1985; five summaries, June-July 1986; six summaries, June-July 1987; five summaries, June-July 1988; six summaries, June-July 1989; six summaries, June-July 1990; five summaries, June-July 1991; six summaries, June-July 1992; and six summaries, June-July 1993. Summaries of catch rate information from the SEAMAP Summer Shrimp/Groundfish surveys (Squid/Butterfish Survey, 1985 only) in the northern Gulf of Mexico, indicating stations sampled, catch rates, assessment of shrimp and finfish yields, and synopses of hypoxic conditions in the survey areas.
- 3) 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993 SEAMAP Marine Directories: May 1983, March 1984, March 1985, March 1986, September 1987, July 1988, August 1989, June 1990, April 1991, April 1992, and February 1993. Inventories of marine agency contacts (State, Federal and university) concerned with fishery research in the Gulf, and summaries of information provided by these organizations: target species, types of fishery-independent sampling gear and platforms, annual sampling effort and other material.
- 4) SEAMAP Information System Manual, Fall 1983. A description of the data management program supporting SEAMAP surveys and collecting activities, detailing the data processing and quick-report subsystems and presenting data formats for SEAMAP surveys and sample documentation and transmittal forms.
- 5) SEAMAP-Gulf Operations Plan, October 1983. A description of the SEAMAP Program, its goals and objectives, program accomplishments, survey and information systems operations, survey plans and schedules, program management, and funding requirements. Includes figures and tables detailing system functions, platform and funding needs, and information utilization.
- 6) SEAMAP-Gulf Operations Plan Executive Summary, March 1984. A summary of the features of the Operations Plan.
- 7) SEAMAP Environmental and Biological Atlases of the Gulf of Mexico, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991. January 1985; February 1986; October 1986; June 1988; April 1990; December 1990; March 1991; December 1991; December 1992; July 1993. Compilations of information obtained from the 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, and 1991 SEAMAP surveys. Included are dominant finfish and invertebrate catches from the shrimp/groundfish surveys, results of the plankton surveys, environmental data taken during both surveys, and methodology used in SEAMAP surveys.
- 8) SEAMAP 1982, 1983, 1984 & 1985, 1986 Ichthyoplankton Atlases. NOAA Technical Memoranda NMFS-SEFC-144 (1985), NMFS-SEFC-167 (1986), NMFS-SEFC-317 (1993), NMFS-SEFC-245 (1990) summarizing in plots the larval distribution and abundance of the families Engraulidae, Carangidae, Clupeidae, Lutjanidae, Serranidae, Coryphaenidae, Xiphiidae, and Scombridae taken on SEAMAP surveys in 1982, 1983, 1984, 1985 and 1986.

SEAMAP DOCUMENTS LIST, 1982 - CURRENT

- 9) Proceedings: SEAMAP Shrimp and Bottomfish Sampling Gear Workshop, August 1985. A summary of seven technical papers and a panel discussion on shrimp/groundfish sampling gear, presented at the 33rd Annual Spring Meeting of the Gulf States Marine Fisheries Commission. Included are recommendations for standardizing and calibrating bottom trawl survey activities and for satisfying future research requirements.

- 10) Annual Report of the Southeast Area Monitoring and Assessment Program,
October 1, 1984 - September 30, 1985, October 1985;
October 1, 1985 - September 30, 1986, October 1986;
October 1, 1986 - September 30, 1987, December 1987;
October 1, 1987 - September 30, 1988, August 1989;
October 1, 1988 - September 30, 1989, March 1990;
October 1, 1989 - September 30, 1990, March 1991;
October 1, 1990 - September 30, 1991, December 1991;
October 1, 1991 - September 30, 1992, December 1992;
October 1, 1992 - September 30, 1993, December 1993.
Summaries of activities and proposed events for the SEAMAP-Gulf, SEAMAP-South Atlantic and SEAMAP-Caribbean components.

- 11) Data Management System Requirements Document for Gulf and South Atlantic, November 1986.

- 12) Data Management System Design Study for Gulf and South Atlantic, March 1987. A result of the system design study, this document describes the high level design of the proposed system and presents a five year implementation plan.

- 13) SEAMAP Operations Manual for Collection of Data, May 1987; May 1990 (1st revision); September 1993 (2nd revision). A manual presenting the procedures to be followed by all vessels that participate in SEAMAP surveys.

- 14) SEAMAP Data Management System Users Manual, August 1989. A manual outlining system operations and procedures needed to enter, edit, upload and download data on the PC- based system.

- 15) Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 1990-1995, July 1990. A detailed description of the SEAMAP program which outlines the program goals, objectives and management policies and procedures.

Biological and environmental data, and ichthyoplankton specimens sorted to the family level from SEAMAP surveys in the Gulf of Mexico, are available to researchers upon request to the SEAMAP Coordinator, Gulf States Marine Fisheries Commission (601-875-5912).