GSMFC No.: 42

#### 1997 SEAMAP-GULF OF MEXICO MARINE DIRECTORY

**Fishery-Independent Survey Activities** 

## SOUTHEAST AREA MONITORING AND ASSESSMENT PROGRAM

Richard S. Waller, Chairman

#### **GULF STATES MARINE FISHERIES COMMISSION**

Post Office Box 726

Ocean Springs, Mississippi 39566-0726



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#### 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 1997 Directory were contacted in February 1997 and were 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 the current and 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 and other interested people.

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

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## APPENDIX A

MARINE AGENCY CONTACTS

#### **FEDERAL AGENCIES**

#### U.S. DEPARTMENT OF COMMERCE NOAA/National Marine Fisheris Service Southeast Fisheries Center

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

#### **Research Management Division**

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#### **Galveston Laboratory**

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#### Mississippi Laboratories

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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 joseph.powers@noaa.gov

#### Panama City Laboratory

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#### U.S. DEPARTMENT OF INTERIOR

#### Minerals Management Service Gulf of Mexico OCS Region

Dr. James Kendall Mail Stop 5430 1201 Elmwood Park Boulevard New Orleans, LA 70123-2394 (504) 736-2896

Dr. Alexis Lugo-Fernandez LA/TX Shelf Physical Oceanography (504) 736-2593, (504) 736-2901FAX/ alexis.lugo.fernandez@nmfs.gov

#### U.S. Fish and Wildlife Service

Mr. Bill Seawell c/o TAMU Corpus Christi State University Campus Box 338 6300 Ocean Drive Corpus Christi, TX 78412 (512) 994-9005, (504) 994-8262 FAX bill\_seawell@mail.fws.gov

Dr. William Kelso School of Forestry, Wildlife and Fisheries Forestry and Wildlife Building, Room 227 Louisiana State University Baton Rouge, LA 70803 (504) 388-4144, (504) 388-4144 FAX

Dr. Robert E. Stewart, Jr. NBS Southern Regional Office 700 Cajundome Boulevard Lafayette, LA 70506-3152 (318) 266-8501, 266-8610 FAX stewartb@nwrc.gov

#### U.S. DEPARTMENT OF DEFENSE

Dr. Susan Rees, PD-EC
U.S. Army Corps of Engineers
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P.O. Box 2288
Mobile, AL 36628
(334) 694-4141

#### NON-PROFIT ORGANIZATION

## GULF AND SOUTH ATLANTIC FISHERIES DEVELOPMENT FOUNDATION, INC.

Ms. Judy Jamison, Executive Director 5401 W. Kennedy Boulevard Suite 997
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#### STATE AGENCIES

## ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

Mr. Stevens R. Heath P.O. Drawer 458 Gulf Shores, AL 36542 (334) 968-7576, (334) 968-7307 FAX

#### FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION MARINE RESEARCH INSTITUTE

Dr. Mark Leiby 100 8th Avenue, S.E. St. Petersburg, FL 33701-5095 (813) 896-8626, (813) 823-0166 FAX

## LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES

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## MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

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## 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
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Gainesville, FL 32611-0400
(352) 392-5870, (352) 392-5113 FAX jcc@gnv.ifas.ufl.edu

#### Louisiana Sea Grant Office

Dr. Jack Van Lopik, Executive Director Mr. Ronald E. Becker, Associate Director Louisiana State University
Baton Rouge, LA 70803-7507
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#### **Texas A&M University Sea Grant Program**

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#### Mississippi-Alabama Sea Grant Consortium

Dr. Jesús Tupaz P.O. Box 7000 Ocean Springs, MS 39564-7000 (601) 875-9341, (601) 975-0528 FAX jtupaz@whale.st.usm.edu

#### ALABAMA UNIVERSITY PROGRAMS

## Marine Environmental Sciences Consortium

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#### Talladega College

Dr. Arthur Bacon Biology Department Talladega, AL 35160 (334) 362-0206

#### **University of South Alabama**

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#### FLORIDA UNIVERSITY PROGRAMS

#### Florida Institute of Oceanography

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#### University of Miami

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#### LOUISIANA UNIVERSITY PROGRAMS

#### Louisiana State University

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## Louisiana Universities Marine Consortium (LUMCON)

Dr. Michael Dagg, Executive Director 8124 Highway 56 Chauvin, LA 70344 (504) 851-2800 m.dagg@lumcon.edu

#### University of Southwestern Louisiana

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#### MISSISSIPPI UNIVERSITY PROGRAMS

#### Institute of Marine Science University of Southern Mississippi

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jgrimes@seahorse.ims.usm.edu

#### **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
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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. Wayne S. Gardner, Director Marine Science Institute 750 Channelview Drive Port Aransas, TX 78373 (512) 749-6730, (512) 749-6777 FAX

#### Texas A&M University at Corpus Christi

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#### TABLE 1. SUMMARY OF INFORMATION PROVIDED BY FEDERAL AGENCIES

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				RY-INDEPENDENT PLING		FISHERY-INDEPE	ANNUAL EFFORT DEVOTED TO FISHERY-INDEPENDENT SAMPLING BY ACTIVITY IN:		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												
Mississippi Labs	Bottomfish/shrimp species; all plankton species	Subadults-adults; eggs/larvae	Gulf of Mexico (Alabama to Texas)	Territorial; open ocean (EEZ)	172' OREGON II	83 sea days trawling; plankton piggybacked on trawl surveys	450 trawl; 100 plankton and 530 environmental	Standard 40' semiballoon trawl	Bongo array w/ .333-mm mesh nets; 1x2-m neuston net w/ .950-mm mesh nets	Trawling random stratified 5-60 fm; plankton systematic grid out to 100 fm	Continuation	Adult fish of many species (cobia, mullet, black drum, etc.)
	Reef fish (snapper, grouper) and plankton species	Subadults-adults; eggs/larvae	Gulf of Mexico	Territorial; open ocean (EEZ)	127' CHAPMAN	96 sea days	250 trap/camera/ ROV/Acoustic/ and Environmental	Traps, camera (ROV) and acoustic		Two stage random stratified 5 to 100 fm	Continuation	None
	Small pelagics (coastal herring, squid, butterfish)	Subadults- adults	Gulf of Mexico	Territorial; open ocean (EEZ)	CHAPMAN	48 sea days	200 trawl/acoustic 20 plankton and 220 environmental	high opening bottom trawls; acoustics	Bongo array w/.333mm mesh nets: 1x2m neuston w/.950mm mesh nets	by depth (10 to	Continuation	None
	Marine mammals (dolphins & whales)	Juveniles/adults	Gulf of Mexico	Territorial; open ocean (EEZ)	OREGON II; small boats; airplanes	55 sea days (piggybacked w/plankton); 160 days in small boats and airplanes	Numerous unknown sightings and environmental data at sightings	Visual w/binoculars	None	Line transect	Continuation	None
	All plankton species (primarily Bluefin, Mackerel and Red Drum) of commercial and recreational importance	Eggs/larvae	Gulf of Mexico	Territorial; open ocean (EEZ)	OREGON II and CHAPMAN	76 sea days with 41 days piggybacked on marine mammal survey	1000 plankton and environmental	Plankton Nets	60 cm bongo w/.333mm nets, 1x2m neuston w/.959 mm nets & 1m MOCNESS w/.333 mm nets	Systematic grid	Continuation	Nane
	Sharks	Juveniles/sub- adults	Gulf of Mexico	Territorial; open ocean; Mexico	OREGON II	61 sea days	200 longline and environmental	Monofiliment bottom longline 100 hooks/set	None	Random stratified by depth and statstical zone	Continuation	None
	Red drum	Subadults-adults	Gulf of Mexico	Territorial	CARRETA/charter airplane	60 sea days	50 purse seine sets and environmental	Purse seine	None	Directed sampling	Continuation	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/уг	3500/yr	Fish traps	Bongo nets 60 & 20-cm w/ .333-mm mesh; neuston 1x2- m w/ .947-mm mesh		Funding has been cut and may be further reduced next FY.	Billfishes; tunas; sharks

#### TABLE 1. (CONTINUED)

				RY-INDEPENDENT PLING		FISHERY-INDEPE	RT DEVOTED TO NDENT SAMPLING IVITY 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	CHANGESOF 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, Bag 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;	l2/yr	96	60' - 80' Otter trawls	None	Random	None	None
					,	45/yr	Varies		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	2	1-2 releases/yr	None	None	None	None	None
	turties	yearnigs	or tagged (urnes)	(TEXAS)	LONGHORN	Varies	10-20 turtles	Satellite	Geographic tracking	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	
	Groupers	Adults/larvae	NW Gulf of Mexico	40 fm contour off Apalachicola	CHAPMAN R/V	Variable	Variable	Hydroacoustics/ video	1x1 m Tucker Trawl (.333 mm mesh)/1x2 m neuston 0.547 mm mesh)	Spawning aggregation & systematic transects	Will be compledted in 1997	
	Gag and other groupers and snappers	Juveniles	NW Gulf of Mexico	Seagrass meadows of West Florida Shelf	Small boats	Variable	Variable	16' trawl/crab scrape	neuston/push net	systematic stations	None	
MINERALS MANAGEMENT SERVICE												
Inner Shelf Study	None	None	Gulf of Mexico inner continental shelf	Continental shelf	Moored & drifting buoys			None	None	Monitoring of major oceanographic features	Project to be completed in 1998	None
DeSoto Canyon Eddy Intrusion Study	None	None	DeSoto Canyon	Continental shelf	Satellite images and altimetry			None	None	Monitoring of major oceanographic features	Project to be completed in 2000	None
Meteorology	None	None	NE Gulf of Mexico	Continental shelf	NDBC buoys, C_MAN stations and NWS meteorological stations			None	None	Monitoring of major meteorological activities in the Gulf of Mexico	Project to be completed in 1999	None

#### TABLE 2. SUMMARY OF INFORMATION PROVIDED BY STATE AGENCIES

				RY-INDEPENDENT PLING		FISHERY-INDEPE	RT DEVOTED TO NDENT SAMPLING IVITY 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' & 19' Monark; 17',20' & 25' Boston Whalers; 85' HERNAN CORTEZ II; 20' Mako; 20' Electro shocker boat	Varies Weekly intervals (annually) 60/yr	Varies	35' trawl; 100' bag seine; benthic sled w/ net; 600' x '8 trammel net; lobster & crab traps; beach seines;Drop & gill nets;visual counts; underwater video		Systematic, random (stratified) grid basis; long- term station selection; short- term special studies	Increase sampling for baltifish distributed in spring; sampling for tarpon juveniles in nearshore water impoundments; grouper reproductive strategies; juvenile & adult life histories of grouper; icthyoplankton survey directed at clupeids, tarpon, snook & grouper; investigation of tropical reef fish life history & population dynamics	Mackerel, cobia, amberjack, reeffish (snapper, grouper)
ALABAMA DEPT. OF CONSERVA- TION & NAT. RESOURCES	All penaeid shrimp; southern flounder; Gulf menhaden; red drum; red snapper; blue crab; black drum; Spanish mackerel; mullet	Larvae-aduits	AL marshes to territorial sea; EEZ	Internal; territorial; EEZ	22' Tiara, (2) 90- hp; Seacraft, (2) 150-hp; 38' Bertram; 60' R/V A.E. VERRIL	40/yr	100/yr	50' 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	to determine yr- class strength of target species;	
MISSISSIPPI DEPARTMENT 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	50/yr 10/yr 50-60/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 6' trawl; 30' inboards for 16' trawl; 85' vessel (LOOP) for 50' trawl; leased vessel for 40' trawl	167/yr state 92/yr LOOP16/yr	Trawls: 800/yr 1288/yr 494/yr 12/yr 72/yr 96/yr Benthos: 48/yr 250/yr 1500/yr 100/yr 175/yr 135/yr 144/yr Plankton: 528/yr	6' (inshore) 16' (inshore) 16' (offshore) 50' (inshore) 50' (offshore) 40' (offshore)  50' bag seine gill net trammel net butler plate (oys) sq. meter (oys) oyster dredge	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; statified 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	60' 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			FISHERY-INDEPE	ANNUAL EFFORT DEVOTED TO FISHERY-INDEPENDENT SAMPLING BY ACTIVITY IN:		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	55-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	14' and 16' skiff; 22' center console	Varies	50/yr 140/yr 180/yr	16' otter trawl	1-m bongos; 1-m neuston	Systematic, random (stratified) visual survey	More environmental assessment	
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	192 visual fish samples/yr 672 benthic cores/yr	Otter trawl	None	Randomized sampling of experimental replicates	Increase experimental replicates & add disciplines & zooplankton	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)

				RY-INDEPENDENT PLING		FISHERY-INDEPE	RT DEVOTED TO NDENT SAMPLING TVITY 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
					A	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; red snapper	Larvae-adult	Shelf & mouth of Mobile Bay; NW FL; east AL	Shelf; estuaries; grassbeds	21' skiffs 50"R/V	22/24 episodic/mo 12/year	Several hundred	Fishing	Surface; demersal	Environmental impact/growth rate; Tag/Release	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, recir- culating 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
					N	IISSISSIPPI		_				
UNIVERSITY OF SOUTHERN MISSISSIPPI	All estuarine finfish;	All stages	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 development of marine & coastal biology program	None
GULF COAST RESEARCH LABORATORY	All penaeid shrimp; blue crab; croaker; spot; seatrout catfish; Gulf menhanden; 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; 6' 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)

				RY-INDEPENDENT PLING		FISHERY-INDEPE	RT DEVOTED TO NDENT SAMPLING TVITY 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
					L	OUISIANA						
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 LUMCON vessels (PELICAN, ACADIANA, skiffs)	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, light traps	Short-term special studies; long-term stations; tidal transport & re- cruitment	Estimate fish abundance & movement using hydroacoustics; examine growth rates & reproductive biology of important estuarine species; recruitment studies	None
LOUISIANA UNIVERSITIES MARINE CONSORTIUM	Zooplankton; benthos; bottomfish; anchovies	All stages	Terrebonne & Timbalier Bay; inner continential 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/уг	150/yr			Short-term special studies	None	None
TEXAS A&M UNIVERSITY	All macro- crusteceans & 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) <u>SEAMAP Strategic Plan</u>, 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) <u>SEAMAP Quick-Reports</u> (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 1990; five summaries, June-July 1991; six summaries, June-July 1992; six summaries, June-July 1993; six summaries, June-July 1994; and six summaries, June-July 1995; and six summaries, June-July 1996. 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, 1994, 1995 and 1996 SEAMAP Marine Directories: May 1983, March 1984, March 1985, March 1986, September 1987, July 1988, August 1989, June 1990, April 1991, April 1992, February 1993, March 1994, March 1995 and March 1996. 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) <u>SEAMAP Information System Manual</u>, 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) <u>SEAMAP-Gulf Operations Plan</u>, 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) <u>SEAMAP-Gulf Operations Plan Executive Summary</u>, 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, 1992 and 1993. January 1985; February 1986; October 1986; June 1988; April 1990; December 1990; March 1991; December 1991; December 1992; July 1993; December 1994; and January 1996. Compilations of information obtained from the 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992 and 1993 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,

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October 1, 1984 - September 30, 1985, October 1985;
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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;

October 1, 1993 - September 30, 1994, December 1994;

October 1, 1994 - September 30, 1995, December 1995; and

October 1, 1995 - September 30, 1996, December 1996.

Summaries of activities and proposed events for the SEAMAP-Gulf, SEAMAP-South Atlantic and SEAMAP-Caribbean components.

- 11) <u>Data Management System Requirements Document for Gulf and South Atlantic</u>, November 1986.
- 12) <u>Data Management System Design Study for Gulf and South Atlantic</u>, March 1987. A result of the system design study, this documents describes the high level design of the proposed system and presents a five year implementation plan.
- 13) <u>SEAMAP Operations Manual for Collection of Data</u>, May 1987; May 1990 (2nd revision); September 1993 (3rd revision). A manual presenting the procedures to be followed by all vessels that participate in SEAMAP surveys.
- 14) <u>SEAMAP Data Management System Users Manual</u>, August 1989. A manual outlining system operations and procedures needed to enter, edit, upload and download data on the PC- based system.
- 15) <u>Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 1990-1995</u>, July 1990. A detailed description of the SEAMAP program which outlines the program goals, objectives and management policies and procedures.
- 16) <u>Proceedings: Reef Fish Workshop for SEAMAP</u>, November 1995. A summary of presentations that were given at the workshop and recommendations developed by the group concerning sampling oil and gas structures in the Gulf of Mexico.
- 17) Southeast Area Monitoring and Assessment Program (SEAMAP) Executive Summary of the SEAMAP Management Plan: 1996-2000. An overview of the program achievements, information dissemination, goals and objectives, program operations, and potential future activities for the SEAMAP Program.

18) <u>Proceedings: General Session Concerning the Uses of Fishery-Independent Data for Fisheries Management</u>, October 1996, No. 35. Summary of presentations presented at the 46<sup>th</sup> Annual Fall Meeting of the Gulf States Marine Fisheries Commission regarding the value of fishery-independent data for use in fisheries management.

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).