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1999 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

www.gsmfc.org

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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 1999 Directory were contacted in January 1999 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:

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APPENDIX A

MARINE AGENCY CONTACTS

FEDERAL AGENCIES

U.S. DEPARTMENT OF COMMERCE

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Galveston Laboratory

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

Miami Laboratory

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Beaufort Laboratory

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

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. 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 Department of Defense P.O. Box 2288 Mobile, AL 36628 (334) 694-4141, 690-2721 FAX susan.i.rees@sam.usace.army.mil

NON-PROFIT ORGANIZATION

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 gulfsouthfdn@worldnet.att.net

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 sheath.amrddi@gulftel.com

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION MARINE RESEARCH INSTITUTE

Dr. Mark Leiby 100 8th Avenue, S.E. St. Petersburg, FL 33701-5095 (727) 896-8626, (727) 823-0166 FAX leiby_m@harpo.dep.state.fl.us

LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES

Mr. James Hanifen P.O. Box 98000 Baton Rouge, LA 70898-9000 (225) 765-2379, (225) 765-2624 FAX hanifen_j@wlf.state.la.us

MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

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TEXAS PARKS AND WILDLIFE DEPARTMENT Mr. Terry Cody 702 Navigation Circle Rockport, TX 78382 (512) 729-2328, (512) 729-1437 FAX terry.cody@tpwd.state.tx.us

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 (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 Executive Director Louisiana State University Baton Rouge, LA 70803-7507 (225) 388-6710, (225) 388-6331 FAX coslan@lsuvm.sncc.lsu.edu or jvanlop@unix1.sncc.lsu.edu

Texas A&M University Sea Grant Program

Dr. Robert R. Stickney, Director 1716 Briarcrest, Suite 702 Bryan, TX 77802-2700 (409) 845-1245, (409) 845-7525 FAX stickney@tamu.edu

Mississippi-Alabama Sea Grant Consortium

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ALABAMA UNIVERSITY PROGRAMS

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University of South Alabama

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FLORIDA UNIVERSITY PROGRAMS

Florida Institute of Oceanography

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Florida State University

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University of Florida

Dr. Ron Labisky Department of Wildlife Ecology and Conservation Gainesville, FL 32611-0430 (352) 846-0567; 392-6984 FAX rfla@gnv.ifas.ufl.edu Dr. William Lindberg Dept. of Fisheries and Aquatic Sciences 7922 NW 71st Street Gainesville, FL 32653 (352) 392-9617 ext. 239, 846-1088 FAX wil@nervm.nerde.ufl.edu

University of South Florida

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University of Miami

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Louisiana Universities Marine Consortium (LUMCON) Dr. Michael Dagg, Executive Director 8124 Highway 56 Chauvin, LA 70344 (504) 851-2800; 851-2874 FAX mdagg@lumcon.edu University of Southwestern Louisiana Dr. Darryl L. Felder Department of Biology, Box 42451 Lafayette, LA 70504-2451 (318) 482-6748 dlf4517@usl.edu

MISSISSIPPI UNIVERSITY PROGRAMS

University of Southern Mississippi Institute of Marine Sciences Gulf Coast Research Laboratory Dr. D. Jay Grimes, Director P.O. Box 7000 Ocean Springs, MS 39566-7000 (228) 872-4211, (228) 872-4279 FAX jay.grimes@usm.edu

TEXAS UNIVERSITY PROGRAMS

The University of Texas-Pan American

Dr. Don Hockaday, Acting Director Coastal Studies Laboratory 100 Marine Lab Drive South Padre Island, TX 78597 (956) 761-2644; (956) 761-2913 hockaday@panam.edu http://www.panam.edu/dept/csl/csl/html

Texas A & M University at Galveston

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Texas A & M University - Kingsville

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University of Houston

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The University of Texas at Austin

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				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
NOAA/NMFS/SEFSC												··
Mississippi Labs		Subadults-adults; eggs/larvae	Gulf of Mexico (Alabama to Texas)	Territorial; open ocean (EEZ)	172' OREGON II	80 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 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)	Subadults-adults	Gulf of Mexico	Territorial; open ocean (EEZ)	224' GORDON GUNTER; 133' FERREL	35 sea days; 17 sea days	250 trap/camera/ ROV/Acoustic/ and Environmental	Traps, camera/ acoustic		Random stratified 5 to 100 fm	Continuation	None
	Small pelagics (coastal herring, squid, butterfish)	Subadults- adults	Gulf of Mexico	Territorial; open ocean (EEZ)	224' GORDON GUNTER	48 sea days	240 trawl/acoustic 20 plankton and 260 environmental	90' high opening bottom trawls; 40' shrimp trawls; acoustics	Bongo array w/.333mm mesh nets; 1x2m neuston w/.950mm mesh nets	Random stratified by depth (10 to 160fm); plankton systematic grid	Continuation	None
	Marine mammals (dolphins & whales)	Juveniles/adults	Gulf of Mexico	Territorial; open ocean (EEZ)	OREGON II; small boats	72 sea days (piggybacked w/plankton); 10 days in small boats	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 GORDON GUNTER	72 sea days piggybacked on marine mammal survey	850 plankton and 300 environmental	Plankton Nets	60 cm bongo w/.333mm nets, 1x2m neuston w/.959 mm nets and 1m MOCNESS w/.333 mm nets	Systematic grid	Continuation	None
	Sharks	Juveniles/sub- adults	Gulf of Mexico; Caribbean	Territorial; open ocean; Cuba; Mexico	OREGON II	56 sea days	240 longline and environmental; 40 plankton; 20 trap camera	Monofiliment bottom longline 100 hooks/set	60 cm bongo w/.333mm nets, 1x2m neuston w/.959 mm nets	Random stratified by depth and statistical zone	Continuation	None
	Red drum	Subaduits-adults	Gulf of Mexico	Territorial	Charter airplane	60 sea days	Numerous unknown sightings	Visual	None	Line transect	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/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

TABLE 1. SUMMARY OF INFORMATION PROVIDED BY FEDERAL AGENCIES

TABLE 1. (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	CHANGESOF FISHERY- INDEPENDENT ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENTLY UNABLE TO SAMPLE
Galveston Lab (TX)	Penaeid shrimp; bottomfish; estuarine dependent spp.	Postlarvæ-adults	Gulf of Mexico	Internal; (EEZ)	Ship support provided by Pascagoula Lab, Bag Boats	257/yr	Varies	Otter trawls 10'-40'; bearn 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	None	Random	None	None
						45/yr	Varies		None	Random	None	None
	Kemp's ridley sea	Flatchlings-	Gulf of Mexico (release	Territorial; EEZ (Texas)	U.S. Coast Guard Cutter; R/V	2	1-2 releases/yr	None	None	None	None	None
	turiles	yearlings	of tagged turtles)	(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 turiles	Juveniles, Adults	TX, LA	Coastal shelf	Satellite	Varies	10-20 turtles	Satellite		Geographic Tracking	None	None
Panama City Lab (FL)	Sharks	Juvenile/adults	NE Gulf of Mexico	Inshore	Small boats	Variable	Variable	Gillnets & Longlines	None	Systematic grid	None	None
	Groupers	Adults/larvae	NE 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	None
	Gag and other groupers and snappers	Juveniles	NE Gulf of Mexico	Seagrass meadows of West Florida Shelf	Small boats	Variable	Variable	16' trawl/crab scrape	neuston/push net	systematic stations	None	Non ²
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

			TYPES OF FISHERY-INDEPENDENT SAMPLING			FISHERY-INDEPE	RT DEVOTED TO NDENT SAMPLING IVITY IN:	TYPES (DF 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 Whaters; 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	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; icthyoplankton survey directed at clupeids, tarpon, snook & grouper; investigation of tropical reef fish life history & population	Mackersi, 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; striped mullet	Larvae-adults	AL marshes to territorial sea; EEZ	Internal; territorial; EEZ	22' Tiara, (2) 90- hp; 25' Seahawk, (2) 150-hp; 38' Bertram; 60' R/V A.E. VERRIL; 21' Bushing 150-hp; 22' gillnet boat, 150-hp	80/yr	1,100/yr	50' bag seine; 16' otter trawl; 40' SEAMAP trawl; video camera; variable mesh gill net	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 DEPARTMENT OF MARINE RESOURCES	All penaeid shrimp; oysters; sciaenids; flounder: cobia; blackfish	Juveniles-adults	MS territorial sea	Internal; territorial; EEZ	28' Outboard; 22' Boston Whaler; 19' Proline; 18' Outboard 65' oyster dredge boat; 35' outboard	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; random grid sampling	Increase tagging activities; age & growth work; seasonal abundance due to Bonne Carre outflow	Juvenile Red Snapper

TABLE 2.(CONTINUED)

			TYPES OF FISHERY-INDEPENDENT SAMPLING			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
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 8enthos: 48/yr 250/yr 1500/yr 1500/yr 100/yr 576/yr 135/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; 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	2160/yr 1680/yr 960/yr 800/yr 1080/yr	60' bag seines 20' trawl (inshore) 20' trawl (offshore) gill nets oyster dredge	None	Random, grid basis	None	Adult finfish in open Gulf waters

TABLE 3. SUMMARY OF INFORMATION PROVIDED BY UNIVERSITIES

				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
						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	⊤wo 24' dive boats, 33' τrawler	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 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
					A	LABAMA				,	· · · · · · · · · · · · · · · · · · ·	/
MARINE ENVIRONMENTAL SCIENCES CONSORTIUM	Oysters; blue crab	Larvae-aduit	Mobile Bay; east MS Sound	Estuarine	26'-42' reseach vessels	Biweekly; 48 hour time series	Hundreds	None	Clark-Bumpers zooplankton	Distribution patterns; settle- ment 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/γear	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
					M	IISSISSIPPI						
UNIVERSITY OF SOUTHERN MISSISSIPPI/ INSTITUTE OF MARINE SCIENCES/GULF COAST RESEARCH LABORATORY	All estuarine finfish; All penaeid shrimp; blue crab; croaker; spot; seatrout catfish; Gulf menhanden; sea mullet; Atl. bumper; butterfish; cutlassfish; red drum; squid; golden Gulf crabs	All stages	MS estuarine; northern Gulf; Biloxi Bay; MS territorial sea; offshore to 300 m	Estuarine; territorial; Internal; EEZ	Various small skiffs (outboards); 96' TOMMY MUNRO; 20' skiffs; 38' BILL DEMORAN	Varies	Varies	Standard basic equipment; 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	Standard basic equipment; Tucker trawl, neuston; bongo	Short-term special studies; Stratified, random long-term station selection		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 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
					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	Oγster 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; territoriał	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 FISHEF SAMF			FISHERY-INDEPE	RT DEVOTED TO NDENT SAMPLING IVITY IN:	TYPES (DF 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&M UNIVERSITY - KINGSVILLE	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- 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
Texas A&M Universitγ - Corpus Christi	All species, shelf and bay	All stages	Sabine to Brownsville	Flower Gardens area; Corpus Christi; and Laguna Madre	Offshore oil and gas platforms; shallow bay boats	Varies	Varies	Gill nets; seines; other trawls; Scuba fish counts	Small, bays only	Both short-term special, and long- term; diving fish counts	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 1989; six summaries, June-July 1989; 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; six summaries, June-July 1995; six summaries, June-July 1996; six summaries, June-July 1997; and one summary, June 1998. 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. One summary, December 1998. Summary of catch rate information on red snapper in the northern Gulf of Mexico indicating stations sampled and catch rates.
- 3) <u>1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997 and 1998 SEAMAP Marine Directories</u>: 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, March 1996, March 1997, and February 1998. 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.

SEAMAP DOCUMENTS LIST, 1982 - CURRENT

- 7) <u>SEAMAP Environmental and Biological Atlases of the Gulf of Mexico, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995 and 1996</u>. January 1985; February 1986; October 1986; June 1988; April 1990; December 1990; March 1991; December 1991; December 1992; July 1993; December 1994; January 1996; March 1997; March 1997; and January 1998. Compilations of information obtained from the 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995 and 1996 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) <u>SEAMAP 1982, 1983, 1984 & 1985, 1986 Ichthyoplankton Atlases</u>. 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.
- 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; October 1, 1993 - September 30, 1994, December 1994; October 1, 1994 - September 30, 1995, December 1995; October 1, 1995 - September 30, 1996, December 1996; October 1, 1996 - September 30, 1997, December 1997; and October 1, 1997 - September 30, 1998, January 1998.

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

SEAMAP DOCUMENTS LIST, 1982 - CURRENT

- <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) 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.
- 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) Proceedings: General Session Concerning the Uses of Fishery-Independent Data for Fisheries Management, October 1996, No. 35. Summary of presentations presented at the 46th Annual Fall Meeting of the Gulf States Marine Fisheries Commission regarding the value of fisheryindependent 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 (228-875-5912).