2008 SEAMAP-GULF OF MEXICO

MARINE DIRECTORY

Fishery-Independent Survey Activities

SOUTHEAST AREA MONITORING AND ASSESSMENT PROGRAM

James Hanifen, 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 Gulf States Marine Fisheries Commission's office.

Agencies responding to the 2008 Directory were contacted in January 2008 and were requested to provide current information or projected changes in their survey programs. Tables 1, 2, 3 and 4 are condensed summaries of information submitted by responding agencies and organizations, indicated as either Federal, State, university activities, or non-profit organizations.

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 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 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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Sustainable Fisheries Division

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Galveston Laboratory

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Mississippi Laboratories

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Panama City Laboratory

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Beaufort Laboratory

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U.S. DEPARTMENT OF INTERIOR

Minerals Management Service

Gulf of Mexico OCS Region Dr. Pasquale F. Roscigno Mail Stop 5430 1201 Elmwood Park Boulevard New Orleans, LA 70123-2394 (504) 736-2752 pasquale.roscigno@mms.gov

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U.S. Fish and Wildlife Service, Ecological Services

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U.S. Geological Survey, Biological Resources

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U.S. DEPARTMENT OF DEFENSE

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NON-PROFIT ORGANIZATION

GULF AND SOUTH ATLANTIC FISHERIES FOUNDATION, INC.

Ms. Judy Jamison, Executive Director 5401 W. Kennedy Boulevard Suite 740 Tampa, FL 33609 (813) 286-8390, (813) 286-8261 FAX judy.jamison@worldnet.att.net

THE CONSERVANCY OF SOUTHWEST FLORIDA IN NAPLES

Dr. David Ceilley Director, Environmental Science The Conservancy of Southwest Florida 1450 Merrihue Drive Naples, FL 34102 (941) 403-4232, (941) 262-5872 FAX dceilley@conservancy.org

SANIBEL-CAPTIVA CONSERVATION FOUNDATION

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STATE AGENCIES

ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

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FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION FISH AND WILDLIFE RESEARCH INSTITUTE

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LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES

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MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

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TEXAS PARKS AND WILDLIFE DEPARTMENT

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UNIVERSITIES

SEA GRANT PROGRAMS

Florida Sea Grant Office

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Mississippi-Alabama Sea Grant Consortium

Dr. LaDon Swann, Director P.O. Box 7000 Ocean Springs, MS 39566-7000 (228) 818-8841, (228) 818-8841 <u>swanndl@auburn.edu</u> www.masgc.org

Louisiana Sea Grant Office

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Texas A&M University Sea Grant Program

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University of South Alabama

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Florida Institute of Oceanography

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University of Florida

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University of South Florida

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University of Miami

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University of West Florida

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LOUISIANA UNIVERSITY PROGRAMS

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Nicholls State University

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Louisiana Universities Marine Consortium (LUMCON)

Dr. Nancy Rabalais, Executive Director 8124 Highway 56 Chauvin, LA 70344 (504) 851-2801; 851-2874 FAX nrabalais@lumcon.edu

University of Louisiana - Lafayette

Dr. Darryl Felder Professor and Head, Biology 251 Billeaud Hall, Box 42451 Lafayette, LA 70504-2451 (337) 482-6753, (337) 482-5834 <u>dfelder@louisiana.edu</u>

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TEXAS UNIVERSITY PROGRAMS

The University of Texas-Pan American

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The University of Texas at Austin

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		11	DLE I. SU					FEDERAL AGENCIES	•		
			TYPES OF FISHER SAME	RY-INDEPENDENT 'LING		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 STATIONS	TRAWLING , PLANKTON, TRAPS, ETC.	SAMPLE STRATEGY FOR DATA COLLECTION	STATUS OF FISHERY- INDEPENDENT SURVEYS OVER NEXT 5 YEARS	SPECIES PRESENTLY UNABLE TO SAMPLE
NOAA/NMFS/SEFSC											
Mississippi Labs	Bottomfish/ shrimp; pelagic with planktonic stages	Subadults-adults; eggs/larvae	Gulf of Mexico (Alabama to Texas)	Territorial	170' OREGON II and 224' GORDON GUNTER	121 sea days trawling; plankton in conjunction with trawl surveys	plankton and 530	40' semibalioon, 90' high opening bottom 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	OREGON II GORDON GUNTER CARETTA, and GANDY	101 sea days	400 trap/video camera; 60 ROV drops; environmental	Traps/video camera; ROV	Traps and longline- random stratified, 5 to 100 fm	Continuation	None
	Marine mammals (dolphins & whales)	Juveniles/adults	Gulf of Mexico/ Caribbean	Territorial; open ocean (EEZ); Puerto Rico to Virgin Islands	GORDON GUNTER	69 sea days	Approximately 750 sightings, 200 biopsies and environmental data at sightings	Visual with bigeye binoculars; cross bow, lagging	Mammals-line transect	Continuation	None
	All species with planktonic stages (primarily Bluefin, Mackerel and Red Drum) of commercial and recreational importance	Eggs/larvae/ juveniles	Gulf of Mexico	Territorial; open ocean (EEZ)	OREGON II and GORDON GUNTER	76 sea days	832 plankton and 396 environmental	Bongo array w/ .333-mm mesh nets; 1x2-m neuston w/ .950-mm mesh nets	Plankton - systematic grid	Continuation	Spring and summer shelf spawners; summer, fall and winter open Gulf spawners
	Coastal Sharks; Red Snapper	Juveniles/sub- adults-adults	Southeast Atlantic and Gulf of Mexico	Territorial	OREGON II	60 sea days	300 longline and environmental	Monofiliment bottom longline with 100 hooks per set, tagging sharks	Sharks/Snapper - random and statistical zone in South Atlantic and Gulf, 5 to 200 fm	Continuation	Pelagic sharks
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/ y r	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

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TABLE 1. SUMMARY OF INFORMATION PROVIDED BY FEDERAL AGENCIES

TABLE 1. (CONTINUED)

			TYPES OF FISHEF SAMP			FISHERY-INDEPE	RT DEVOTED TO ENDENT SAMPLING FIVITY IN:	TYPES OF GEAR			
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLED	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF STATIONS	TRAWLING, PLANKTON, TRAPS ETC.	SAMPLE STRATEGY FOR DATA COLLECTION	STATUS OF FISHERY- INDEPENDENT SURVEYS OVER NEXT 5 YEARS	SPECIES PRESENTLY UNABLE TO SAMPLE
Galveston Lab (TX)	Penaeid shrimp; bottomfish; estnarine 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	Random	None	None
					Zoulac,	45/yr	Varies		Random	None	None
	Kemp's ridley sea	Hatchlings-	Gulf of Mexico (release		U.S. Coast Guard	2	1-2 releases/yr	Satellite; Geographic tracking	None	None	None
	turtles	yearlings	of tagged turtles)	(Texas)	Cutter; R/V LONGHORN	Varies	10-20 turtles		None	None	None
	Sea turtles	Stranded juveniles- adults	SW LA; TX	Coastal beaches	ATVs; dirt bikes; outboard boats	50	Varies	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	Continuation	None
Panama City Lab (FL)	Sharks	Juvenile/adults	NE Gulf of Mexico	Inshore	Small boats, OREGON II	Variable	Variable	Gillnets & Longlines	Systematic grid	Continuation	None
	Reef Fish/Groupers	Adults/larvae	NE Gulf of Mexico	40 fm contour off Apalachicola and Florida Shelf	GORDON GUNTER	Variable	Variable	Hydroacoustics/ROV; 1x1 m Tucker Trawl (.333 mm mesh)/1x2 m neuston 0.547 mm mesh) Traps	Spawning aggregation & systematic transects	Continuation	None
	Groupers and snappers	Juveniles	NE Gulf of Mexico	Inshore; Seagrass meadows of West Florida Shelf	Small boats	Variable	Variable	16' trawl/crab scrape; neuston/push net	systematic stations	Funding Dependent	None
	Coral Restoration		Presently South Atlantic	Oculina banks	FERREL and OREGON II	Variable	Variable	Traps, ROV, Exp. Substrates	Onsite	Continuation	None
Beaufort Lab	All species associated with seagrasses	Targeting juveniles	West Florida Shelf	Coastal Shelf	OREGON II; FERREL	14 days	Trawl - 50/yr; Tucker Trawl - 50/yr; Beam Trawl - 50/yr; Gill net - 20	Trawl - 50/yr; Tucker Trawl - 50/yr; Beam Trawl - 50/yr; Gill net - 20	Target area specific	Continuation	None of targeted
	Mutton Snapper/all spp.	Larvae/Juveniles	Dry Tortugas	DT reef/seagrass	OREGON II; FERREL	50 days	Bongo nets - 50; Diver operated Seines - 30	Bougo nets - 50; Diver operated Seines - 30	Stratefied random	Continuation	None of targeted
	Red Snapper, Spotted Seatrout, all spp.	Juveniles/Adults	Florida Bay; within ENP	Seagrass areas of FB	Small research craft	40 days	Seines - 12; Trawls - 400; Bottom sled - 30	Seines - 12; Trawls - 400; Bottom sled - 30	Targeted and stratefied random	Funding dependent	None of targeted

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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 SAMPLED	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF STATIONS	TRAWLING, PLANKTON, TRAPS, ETC.	SAMPLE STRATEGY FOR DATA COLLECTION	STATUS OF FISHERY- INDEPENDENT SURVEYS OVER NEXT 5 YEARS	SPECIES PRESENTLY UNABLE TO SAMPLE
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION	Red drum; spotfed 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; 30' 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; Bongo array; ueuston 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 straregies; juvenile & adult life histories of grouper; icthyoplanktoo survey directed at clupeids, tarpon, snook & grouper; investigation of tropical reef fish life history & population dynamics	Mackerel, cobia, amberjack, reeffish (snapper, grouper)
ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES	All penaeid shrimp; southern flounder; Gulf menhaden; red drum; red snapper; blue crab; black drum; Spanish mackerel; striped mullet; spotted sea trout; oysters	Larvae-adults	AL marshes to territorial sea; EEZ	Intertidal; territorial; EEZ	22' Tiara, (2) 90-hp; 25' Seahawk, (2) 150- hp; 60' R/V A.E. VERRIL; 21' Buskins 150-hp; 22' gillnet boat, 150-hp; 27' Endurance, 2-200hp; 23' gill net boat	80/yr	Varies	50' bag seine; 16' orter trawl; 40' SEAMAP trawl; variable mesh gill net; 6' beam plankton trawl; neustou; oyster dredge	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	
MISSISSIPPI DEPARTMENT OF MARINE RESOURCES	All penaeid shrimp; oysters; sciaenids; flouuder; blue crrabs		MS territorial sea	Internal; territorial; EEZ	28' Outboard; 18' Outboard; 24' Outboard; 65' oyster dredge boat; 35' outboard; 23' skiff; 22' outboard	50/yr 10/yr 50-60/yr	Varies; 6/mo (oyster) & 10- 36/mo (shrimp) varies	16' trawl; oyster tongs & dredge; gill net, drop sampler	Long-term statiou selection, varies w/ opening & closing of areas; random grid sampling; sample night time recreational fishing	Increase tagging activities; age & growth work; seasonal abundance	Juvenile Red Snapper

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TABLE 2.(CONTINUED)

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			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 STATIONS	TRAWLING, PLANKTON, TRAPS, ETC.	SAMPLE STRATEGY FOR DATA COLLECTION	STATUS OF FISHERY- INDEPENDENT SURVEYS OVER NEXT 5 YEARS	SPECIES PRESENTLY UNABLE TO SAMPLE
LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES	All penaeid shrimp; blue crab; finfish; oysters	Larvae to adults	LA inshore waters; territorial seas; EEZ	Internal; territorial	17' outboard; 30' inboard; leased vessel (SEAMAP)	Siate: 167; SEAMAP: 15	Trawls: 800 1288 494 72 181 Finfish: 860 978 246 Oyster: 135 267 Plankton: 124 21 21	Trawks: 6' (inshore); 16' (offshore); 40' (inshore); Hex Mesb Trap Finfish: Finfish: 50' bag seine; gill net; rrammel net; Oyster: square meter; Dredge; Plankton: 1/2-m ring (.153-mm); 60cm bongo (.363-mm); 1x2m neuston (.948-mm)	stations; stratified random stations	Increase territorial sea sampling; increase emphasis on finfish	finfish in open
TEXAS PARKS AND WILDLIFE DEPARTMENT	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	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 SAMPLED	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF STATIONS	TRAWLING, PLANKTON, TRAPS, ETC.	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-aduits	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	No vessels owned - Depends on project	Varies	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	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)

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				RY-INDEPENDENT PLING		ANNUAL EFFOR FISHERY-INDEPER BY ACTI		TYPES OF GEAR			
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLED	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF STATIONS	TRAWLING, PLANKTON, TRAPS, ETC.	SAMPLE STRATEGY FOR DATA COLLECTION	STATUS OF FISHERY- INDEPENDENT SURVEYS OVER NEXT 5 YEARS	SPECIES PRESENTLY UNABLE TO SAMPLE
					A	LABAMA					
DAUPHIN ISLAND SEA LAB	Oysters; blue crab	Larvac-adult	Mobile Bay; east MS Sound	Estuarine	26'-42' reseach vessels	Biweekly; 48 hour time series	Hundreds	Clark-Bumpus 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/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, recirculating seawater system; opening/ closing plankton traw!; Block nets/seine Various Plankton Nets	Varies	None	None
	Estuarine fish species	Juvenile-subadult	Weeks Bay, AL	Estuarine	14' skiffs	60/yr	180/yr		Random, concentrated in May, June & September	None	None
					М	ISSISSIPPI					
UNIVERSITY OF SOUTHERN MISSISSIPPI/ COLLEGE OF MARINE SCIENCES/GULF COAST RESEARCH LABORATORY	All estuarine funfish; All penaeid shrimp; blue crab; croaker; spot; seatrout; catfish; Gulf menhanden; muller; All. bumper; butterfish; cutlassfish; red drum; squid; golden Gulf crabs/red crabs; jellyfish	All stages	MS estuarine; northern Gulf; Biloxi Bay; MS territorial sea; offshore to 2000 m; sargassum as critical habitat	Estuarine; territorial; EEZ	Various small skiffs; 96' TOMMY MUNRO; 20' - 30' outboards; 55' TOM MCILWAIN; 40' HERMES; 128' IX508 (ROV support)	Varies	Varies	Standard basic equipment; 50' bag seine; 16' & 36' otter trawi; 6' Renfro beam trawi; variable mesh gill net; 40' shrimp trawi; 80' high-rise net; crab traps; standard basic equipment for hydrologic sampling; Tucker trawi; neuston; bongo; Benthos ROV; Seabird CTD	Short-term special studies; Stratified, random long-term station selection; fixed station long- term	Increase development of marine & coastal biology program; Expansion of monitoring & assessment if funds become available; longline for pelagic fishes; bottom long- lining; deepwater traps for crabs; monitoring of essential fish habitat	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 SAMPLED	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF STATIONS	TRAWLING, PLANKTON, TRAPS, ETC.	SAMPLE STRATEGY FOR DATA COLLECTION	STATUS OF FISHERY- INDEPENDENT SURVEYS OVER NEXT 5 YEARS	SPECIES PRESENTLY UNABLE TO SAMPLE
					\mathbf{L}	OUISIANA					
UNIVERSITY OF NEW ORLEANS	Blue crab; oyster; marine commercial finfish	All stages	Lake Poutchartrain; Lake Borgue	Estuarine		Varies			Short-term special studies	Analyze commercial fish populations using electrophoresis; studies of oyster nutrition & parasitology	None
NICHOLLS STATE UNIVERSITY	Oysters	Post-Settlement (juvenile to adult)	Barataria Bay	Estuarine	24' bay boat	26-30 days (montly to bi-weekly)	5	Oyster dredgesample	Systematic/transect	Minimum of next two years	None
UNIVERSITY OF LOUISIANA - LAYFAYETTE	Stone crab; penaeid shrimp; commercial finfish	All stages	Northern Guif 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 finfisis 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 BOX sampier; gill net; hydro-acoustics trawl; MOCNESS opening & closing bongo nets; general plankton nets, light traps	Sbort-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; recruiment studies	None
LOUISIANA UNIVERSITIES MARINE CONSORTIUM	Zooplankton; benthos; bottomfish; anchovies	All stages	Terrebonne & Timbalier Bay; inner coutineutial shelf	Estuarine; coastal	116' R/V PELICAN; 58' R/V ACADIANA; small outboards	Varies	Varies	5-m otter trawl; .333 & .505 mesh; general plankton nets	Fixed station, transects, varies	Noue	None

TABLE 3.(CONTINUED)

				RY-INDEPENDENT PLING		FISHERY-INDEPE	RT DEVOTED TO NDENT SAMPLING TVITY IN:	TYPES OF GEAR			
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLED	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF STATIONS	TRAWLING, PLANKTON, TRAPS, ETC.	SAMPLE STRATEGY FOR DATA COLLECTION	STATUS OF FISHERY- INDEPENDENT SURVEYS OVER NEXT 5 YEARS	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 boars	100/уг	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 UNIVERSITY - 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

TABLE 4. NON-PROFIT ORGANIZATIONS

			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 STATIONS	TRAWLING, PLANKTON, TRAPS, ETC.	SAMPLE STRATEGY FOR DATA COLLECTION	STATUS OF FISHERY- INDEPENDENT SURVEYS OVER NEXT 5 YEARS	SPECIES PRESENTLY UNABLE TO SAMPLE
THE CONSERVANCY OF SOUTHWEST FLORIDA IN NAPLES	All fish species especially spotted seatrout; sea turtles, mangroves, and manatees		Southeastern Gulf of Mexico		35 hp, 19' skiff; 185 hp, 20' flats boat; twin 50 hp, 25' barge	100/yr	Varies	hook-and-line; dip nets; beach seines	Visual surveys, stratified, transects	Anticipate more underwater visual surveys, hook- and-line tagging studies for searrout, behavioral studies on dolphins using photography	Program to photograph dolphins is just beginning but are unable to sample more than 10 miles offshore with current capabilities
SANIBEL-CAPTIVA CONSERVATION FOUNDATION	Seagrasses, benthic vertebrates and invertebrates, mangroves, and estuarine fishes	All stages	Chiefly marine and estuarine habitars around Sanibel and Captiva Islands	Estuaries, beaches, and artificial reefs	25', 23', 17', 16', and 14' boats/trailerable	150/yr	8 multi-disciplinary, annually; others as per project	12' otter trawl, 180' seine, 70' seine (FMRI/FIM standards)	Stratified random, haphazard, fixed station	Increase in the number of FMRI/FIM stations	Large pelagic fishes, manuals

APPENDIX B

SEAMAP DOCUMENTS

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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 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; six summaries, June-July 1993; six summaries, June-July 1993; six summaries, June-July 1994; and six summaries, June-July 1995; six summaries, June-July 1996; six summaries, June-July 1997; one summary, June 1998; seven summaries, June-July 2000; six summaries, June-July 2001; seven summaries, June-July 2002; seven summaries, June-July 2003, seven summaries, June-July 2004, seven summaries, June-July 2005; six summaries, June-July 2006, and seven summaries, June-July 2007. 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 in December 1998, January 2000, January 2001, and January 2002, 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, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007 and 2008 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, February 1998, February 1999, February 2000, February 2001, February 2002, February 2003, February 2004, February 2005, February 2006, February 2007, and February 2008. 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) SEAMAP Environmental and Biological Atlases of the Gulf of Mexico, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000 and 2001. 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; January 1998; January 1999; July 2001; April 2002; and February 2004. Compilations of information obtained from the 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, and 2001 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;
 - October 1, 1997 September 30, 1998, January 1999;
 - October 1, 1998 September 30, 1999, December 1999;
 - October 1, 1999 September 30, 2000, December 2000;
 - October 1, 2000 September 30, 2001, December 2001;
 - October 1, 2001 September 30, 2002, December 2002;
 - October 1, 2002 September 30, 2003, December 2003;
 - October 1, 2003 September 30, 2004, December 2004;

SEAMAP DOCUMENTS LIST, 1982 - CURRENT

October 1, 2004 - September 30, 2005, December 2005; October 1, 2005 - September 30, 2006, December 2006; and October 1, 2006 - September 30, 2007, December 2007.

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); and April 2001 (4th 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: 2001-2005</u>, August 2001. A detailed description of the SEAMAP program which outlines the program goals, objectives and management policies and procedures.
- 16) <u>Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 2006-2010</u>, September 2007. A detailed description of the SEAMAP program which outlines the program goals, objectives and management policies and procedures.
- 17) <u>Proceedings: ReefFish 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.
- 18) <u>Southeast Area Monitoring and Assessment Program (SEAMAP) SEAMAP Management Plan:</u> <u>1996-2000</u>. An overview of the program achievements, information dissemination, goals and objectives, program operations, and potential future activities for the SEAMAP Program.
- 19) 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).