# 1988 SEAMAP

GULF OF MEXICO



# MARINE DIRECTORY

GULF STATES MARINE FISHERIES COMMISSION

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# 1988 SEAMAP-GULF OF MEXICO MARINE DIRECTORY Fishery-Independent Survey Activities

SOUTHEAST AREA MONITORING AND ASSESSMENT PROGRAM
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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 operational are the SEAMAP-Gulf and SEAMAP-South Atlantic components; with the newly-formed SEAMAP-Caribbean in the Strategic Planning stage.

This Marine Directory, incorporated into the Thirty-eighth Annual Report of the Gulf States Marine Fisheries Commission, updates information contained in the 1983, 1984, 1985, 1986 and 1987 SEAMAP Marine Directories, and describes survey activities (ongoing programs, vessel schedules, etc.) throughout the Gulf of Mexico. The SEAMAP Program is managed through the office of the Gulf States Marine Fisheries Commission.

Agencies responding to the 1988 Directory were contacted in March 1988 and requested to provide current information or projected changes in their survey programs. Tables 1, 2 and 3 are condensed summaries of information submitted by responding agencies and organizations, indicated as either Federal, State or university activities.

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

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

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# TABLE 1. SUMMARY OF INFORMATION PROVIDED BY FEDERAL AGENCIES

			TYPES OF FIS			ANNUAL EFFORT FISHERY-INDEPEN BY ACTIVI	DENT SAMPLING		TYPES OF	GEAR		ANY VANALYPR	
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLED	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISH TRAW	ING.	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	ANTICIPATED CHANGES IN DIRECTION OF FISHERY-INDEPEND. ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENT UNABLE TO SAMP
NOAA NMFS/SEFC Mississippi Labs, Pascagoula (MS)	Groundfish (shrimp, spot, croaker, cat- fish, trout)	Subadults- adults	Gulf of Mexico South Atlantic	Territorial; open ocean (EEZ)	172' OREGON 11	107/yr toward target spec- ies; 102/yr total sea days	600/yr trawl sta- tions, 180 plankton/yr 180 neuston/ yr	sem loo High	dard 40' mibal- m trawl; m-opening mh trawl	Bongo array with .333-mm mesh nets; I x 2-m neuston net with .947mm mesh	Random (stratified) 5-60 fm	None	None
,	Reef fish (snap- er, grouper, tilefish)	Adults	Gulf of Mexico; South Atlantic; Caribbean	Territorial; open ocean (EEZ)	OREGON 11; 127' CHAP- MAN	87/yr toward target species	150 longline sets/yr	trap	line; s; nets	None	Yaries	None	None
	Latent resources (coastal her- ring, squid, butterfish)	Subadults- adults	Gulf of Mexico	Territorial; open ocean (EEZ)	CHAPMAN	145/yr toward target species 160/yr total sea days	400/yr trawl stations	ing wat	e-open- a & mid- er bottom ewls	None	Transects	Expansion	Kone
NOAA NMFS/SEFC Miami Lab (FL)	All recreation- ally & commer- cially impor- tant species; reef fish	Larvae; juvenile; adult	Gulf of Mexico; SW FL; SE FL	Territorial; open ocean (EEZ); internal	OREGON II; CHAPMAN; various small boats	120/уг	3500/yr	Fish	i traps	Bongo nets 60 & 20 cm with .333-mm mesh; neuston 1 x 2-m with .947-mm mesh	Systematic, grid basis; long-term station selection; estuary entrances; reefs	Continuation of SEAMAP; continuation of SE & SW FL monitoring	Billfishes; tunas
NOAA NMFS/SEFC Beaufort Lab (NC)	Atlantic croaker; spot	Subadults- adults	Charlotte Harbor; Tampa, Apa- lachicola, Escambia, Mobile, Barataria, Corpus Christi, Galveston, San Antonio Bays: MS Sound; MS Delta;	Territorial	133' FERREL	70/y <del>r</del>	130 fish per sampling site	30' (trai	otter wl	None	Samples representative of general contaminant levels at each sampling site (NOAA Status & Trends Program; National Benthic Surveillance Project; organic contaminants, trace metals, histopathology)	Project funded on yearly basis	None
NOAA NMFS/SEFC Galveston Lab (TX)	Penaeid shrimp; bottomfish; estuarine dependent spp.	Postlarvae- adults	Laguna Madre Gulf of Mexico	Internal; EEZ	OREGON II (Texas Closure); small boats	257/yr	1996/yr	10'- beam	r trawls -40'; trawl; sampler		Random stratified for Texas Closure; long-term studies for estuarine ecology	None	None
	Sea turtles	Juveniles	Gulf of Mexico	Internal; EEZ-oil and gas platforms	Bay boats; helicopters; crew boats; zodiac	12/yr 45/yr	96 Various	Otter 60'-8 None		None None	Random Random	None None	None None
	Kemp's ridley sea turtles	Hatchlings- yearlings	Gulf of Mexico (release of tagged turtles)	Territorial Sea; EEZ (Texas)	U.S. Coast Guard Cutter; Univ. Texas R/V LONGHORN	2	1-2 releases per year	None		Kone	None	None	None
	Sea turtles	Stranded juveniles- adults	SW LA; TX	Coastline beaches	All terraine vehicles; dirt bikes; outboard boats	50	Variable	None		None	stratified random sampling by heach strata	Hone	None
NOAA NMFS/SEFC Panama City Lab (FL)	King & Spanish mackerel	Subadults- adults; larvae	Gulf of Mexico; South Atlantic	Territorial; open ocean (EEZ)	OREGON II; CHAPMAN; small boats	50/yr	Various	Trawi	ls .	Bongo nets 60 & 20 cm with .333-mm mesh; neuston 1 x 2-m with .947-mm mesh	Systematic, grid basis; long-term station selection; oceanic discon- tinuities	Continuation of SEAMAP;	None

## TABLE 1. (CONTINUED)

								TYPES OF GEAR				
,	ARGET SPECIES	LIFE STAGES SAMPLED	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISHING, TRAWLING	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	ANTICIPATED CHANGES IN DIRECTION OF FISHERY-INDEPEND. ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIOPITY SPECIES PRESENTI UNABLE TO SAMPI
Interior, Fish im & Wildlife, es LSU, Baton de Rouge, LA fi	Il economically important estuarine- dependent fishes & crustaceans	Larvae- juveniles	SW LA; south central LA	Estuarine	35-hp outboard	Varies	Once every two weeks	Custom- designed shallow marsh trawl; traps;	None	Systematic, long-term station selection; short-term special studies	Depending on funding, will remain the same	None
Corps of 1y Engineers, at	ll commercial- ly & recrea- ationally im- portant species	All stages	Mobile Bay; MS Sound; Gulf of Mexico to the 20-fm contour	Internal; territorial	Charter research vessel; small boats	Varies with project	Varies with project	Varies	None	Systematic, random, short-term special studies	None	None
USDE MMS/GOM OCS Region New Orleans, LA	Projects are	as follows:										
	11 inverte- brates, fishes	A11	Whole MS/ AL shelf	Shelf to 200 m	R/V TOMMY MUNRO	10/yr for 3 yr	24 24	Trawl; grab		Winter & summer, 9 stations	Study program ends im 1989	None
FL Bay Sea Seagrass Mapping	eagrasses	A11	FL Bay	Shelf to 30 m	R/V BELLOWS	7	9	Diver; photo		One cruise	Study ends in 1988	None
Physical Non Oceano- graphy	one	None	Gulf-wide	slope	R/Y PELICAN; drift buoys; ships-of- oppor.	100's	•• `	Hydrographic records		Moorings; X-sects	Study ends in 1988	Mone
Sea Turtle All Study		Adult; juvenile	u	Shelf to 100 m	Aerial over flights	84	••	Photos; videos		Stratified X-sects	Sea turtle study conducted under Interagency Agree- ment with NMFS	None

# TABLE 2. SUMMARY OF INFORMATION PROVIDED BY STATE AGENCIES

			TYPES OF FIS			ANNUAL EFFORT FISHERY-INDEPEND BY ACTIV	DENT SAMPLING	TYPES OF	- GEAR			
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLED	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISHING, Trawling	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	ANTICIPATED CHANGES IN DIRECTION OF FISHERY-INDEPEND. ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENTLY UNABLE TO SAMPLE
Alabama Dept. of Conserva- tion & Nat. Resources	All penaeid shrimp; southern flounder; Gulf menhaden; spot; croaker; red- drum; seatrout; blue crab	Larvae- adults	AL marshes to territo- rial sea	Internal; territorial; EEZ	22' Tiara, (2) 90-hp; 23' Seacraft, (2) 150-hp; 32' Laffitte	110/yr	450/yr	50' bag seine; 16' otter trawl	6' beam plankton trawl; neuston	Long-term station selection, effort varies according to spawning season of target species	Increase effort to determine year-class strength of target species and determine habitat preference of juvenile target fish species	Increase level of sampling in AL territorial sea
Florida Dept. of Natural Resources	Red drum; spotted trout; snook; king mackerel; mullets; gag grouper; tarpon; stone crab; blue crab; spiny lobster; oysters; hard clam	All stages, larvae- adults	FL waters & offshore	Internal; territorial; EEZ	37' BONNIE "E": 24' T-craft inboard; 3 small out- boards used for inshore sampling; 5 mullet skiffs; 34' Allmand; 24' tunnel boat; 19' Monark; 2-17' Boston Whalers; 85' HERNAN CORTEZ II; 20' Boston Whaler; 25' Boston Whaler; 3-20' MAKO; 16' Monarch; 20' mullet skiff;	intervals	Varies with project	35' trawl 100' bag seine; benthic sled with net; 600' x 8' trammel net; lobster & crab traps	bongo array	Systematic, random (stratified), grid basis; long-term station selection, short- term special studies	As per Florida Marine Fisheries Commission	Mainly applies to implementation or research phases on current species or topics with additional personnel and increased funding
Louisiana Dept. of Wildlife & Fisheries	All penaeid shrimp; finfish; oysters	Larvae- adults	LA inshore waters; territorial seas; EEZ	Internal; territorial	16' skiff  13-17' out- boards for 6' trawl; 30' in- boards for 16' trawls; 85' vessel (LOOP) for 50' trawl  Leased vessel 40' trawl		Plankton, 528/yr; Benthos, 56/yr; Trawls: 800/yr 1288/yr 494/yr 72/yr 12/yr 96/yr 250/yr 1500/yr 100/yr 135/yr 144/yr	Otter Trawls: 6' (inshore) 16' (inshore) 16' (offshore) 50' (offshore) 50' (inshore) 40' (offshore) 50' bag seine; gill net; trammel net oyster: butlerplate sq. meter dredge	e) (.333363-mm) e) neuston (.948-mm)	Long-term station selection, LOOP monitoring, and stratified random sampling for SEAMAP (40' trawls and plankton)	Increase territorial sea sampling; increase emphasis on commercial finfish	Adult pelagic finfish in open Gulf waters
Mississippi Bureau of Marine Resources	All penaeid shrimp; speckled trout; redfish; mullet; black drum; flounder; snapper; grouper; white trout; so. kingfish; menhaden; blue crab; cobia; Spanish mackerel; king mackerel	Juveniles- adults	MS territo- rial sea	Internal; territorial; (EEZ)	32' Laffitte; 19' Proline; 65' oyster dredge boat; 24' Boston Whaler; 18' Boston Whaler	10/yr; 50-60/yr	Varies; oyster 6/mo; shrimp 10- 15/mo	16' trawl; oyster tongs and dredge; gill nets	None	Long-term station selection, varies with opening and closing of areas	Increase tagging activities	

# TABLE 2. (CONTINUED)

		-	TYPES OF FIS	SHERY- SAMPLING		ANNUAL EFFORT FISHERY-INDEPENT BY ACTIV	DENT SAMPLING	TYPES OF	GEAR			
AGENCY	TARGET SPECIES	LIFE STAGES SAMPLED	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISHING, TRAWLING	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	ANTICIPATED CHANGES IN DIRECTION OF FISHERY-INDEPEND. ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENTLY UNABLE TO SAMPLE
Texas Parks å Wildlife Dept.	All penaeid shrimp; all other species	Juveniles- adults	TX internal coastal waters; territorial sea	Internal; territorial	30'-45' inboards; 18' outboard skiffs	365/yr ;	1584/yr 1680/yr 960/yr 756/yr 5232/yr 504/yr	16' bag seines (shoreline); 20' trawl (bay, open water); 20' trawl (Gulf waters); gill nets for adult finfish (along shore); oyster dredge; beach seine		Random, grid basis	None	Adult finfish in open Gulf waters

## TABLE 3. SUMMARY OF INFORMATION PROVIDED BY UNIVERSITIES

			TYPES OF FISH INDEPENDENT S			ANNUAL EFFORT FISHERY-INDEPEND BY ACTIVI	ENT SAMPLING	TYPES OF	F GEAR			
UNIVERSITY	TARGET SPECIES	LIFE STAGES SAMPLED	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISHING. TRAWLING	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	ANTICIPATED CHANGES IN DIRECTION OF FISHERY-INDEPEND. ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENT UNABLE TO SAMP
						FL	ORIDA					
Florida State Tallahassee	Benthic in- fauna; epibenthic fishes å in- vertebrates	Larvae- adults	NE Gulf of Mexico	Internal; territorial	(3) 55-hp 25' skiffs; outboard	48/yr	Monthly samples, both trawl & environ.	Standard 5-m otter trawl	80-um plankton net	Systematic, random long-term station selection; short-term special studies	More environ- mental experi- mentation	Areas: Apalachi cola Bay syste & Apalachee Ba species: all species in the areas
Univ. West Florida Pensacola	Demersal vertebrates & invertebrates	Subadults- adults	NE Gulf of Mexico	Estuarine	18' skiff	7/yr trawl; 14/yr plankton neuston	50/yr; 140/yr	16' otter trawl	2 (1-m) bongos 3 (1-m) neustons	Systematic, random (stratified)	More environ- mental assess- assessment	None
Florida Sea Grant Gainesville	Oysters; spiny lobster; sword- fish; tilefish; snowy grouper; shark; clams; shrimp; scal- lops; golden crabs; snook	All stages	FL waters	Estuarine; offshore	Industry, NMFS and F.I.O. contract vessels	Yaries with project	Varies with project			Varies with project	None	None
Florida Institude of Ocean- ography St. Petersburg	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 with SEAMAP; Expanded environmental sampling	None ·
University of Florida Gainesville	Offshore: deep- water crabs & lobsters; nearshore: stone crabs	Offshore: adults, juveniles; nearshore: adults, sub- adults	Offshore & nearshore, eastern Gulf of Mexico	Offshore: continental slope nearshore: internal, territorial	Offshore: SEWARD JOHNSON; OREGON II; industry vessel; sumersible; nearshore: 24 inboard- outboard	Offshore: 7/yr; nearshore: 30+/yr	Offshore: 96 transects 2 trawl tows 5 trap lines nearshore: 5 transects/ day	Otter trawl; various traps; scuba and 250-m tran- sect line		Offshore & Nearshore: inten- sive sampling during mating season	None	None
						Α	LABAMA					
Marine Environmental Sciences Consortium (Dauphin Is. Sea Lab & U. Alabama)	Spotted sea- trout; white sand trout; croaker; red drum	All stages	MS Sound; Mobile Bay; Perdido Bay	Estuarine	40' DEBORAH "B"; I4' skiff; 23' outboard	monthly	Monthly at 4 sites & supplemental	Fyke net; drop net; bag seine	.505-mm mesh beam trawl	Target areas: grass beds	None	None
Mississippi- Alabama Sea Grant Consortium Ocean Springs (MS)	Red drum; blue crabs; stone crabs; oysters	Vertebrates: larvae; invertebrate: all stages	Northern Gulf of Hexico; MS Sound; Mobile Bay	Territorial; EEZ; estuarine; coastal	96' TOMMY MUNRO; skiffs; industry	Varies with project	Varies with project	Various types of crab pots; tonging for oysters; clos- ed, recircu- lating sea- water system for crabs; opening/clos- ing plankton trawl	Tucker trawl (.202-mm and .333-mm mesh nets); 60-cm bongo net	Varies with project	None	None

# TABLE 3. (CONTINUED)

			TYPES OF FISH			ANNUAL EFFORT FISHERY-INDEPEN							
UNIVERSITY	TARGET SPECIES	LIFE STAGES SAMPLED		GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	BY ACTIV	NUMBER OF		TYPES OF FISHING, TRAWLING	GEAR PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	ANTICIPATED CHANGES IN DIRECTION OF FISHERY-INDEPEND. ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORIT' SPECIES PRESEN UNABLE TO SAMI
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Mississippi a	Freshwater prawn; all estuarine finfish; centrarchids	All stages	MS estuarine; northern Gulf; Biloxi Bay		Various small skiffs (outboard)	Yaries	Biweekly to monthly		Standard basic equip- ment	Standard basic equipment	Short-term special studies	Increase develop- ment of a marine science program	None
Research Laboratory Ocean Springs	All penaeid shrimp; blue crab; croaker; spot; seatrout; catfish; Gulf menhaden; sea mullet; Atlan. bumper; butter- fish; cutlass- fish; red drum; squid; golden Gulf crabs	Larvae- adults	MS territor- ial sea; offshore to 300 fm	Internal; territorial; (EEZ)	96' TOMMY MUNRO; (5) 20' skiffs; 35' HERMES; 40' NEREUS;	Semimonthly and monthly	216 trawl stations/ yr		50' bag seine; 36' otter trawl; 16' otter trawl; 6' Renfro beam trawl; variable mesh gill net sampler; 40' shrimp trawl; 80' high-rise net; crab traps	Tucker trawl; neuston; bongo	Long-term station selection; stratified- random	Fishery Division anticipates its program of monitoring & assessment over the long term, with appropriate increases in intensity & scope if funds become available; longline for pelagic fishes; bottom longline; deepwater traps for crabs	None
Mississippi- Alabama Sea Grant Consortium Ocean Springs	Red drum; blue crabs; stone crabs; oysters	Vertebrates larvae; invertebrates: all stages	Northern Gulf of Mexico; MS Sound; Mobile Bay	Territorial EEZ; estuarine; coastal	; 96' TOMMY MUNRO; skiffs; industry	Varies with project	Varies with project		Various types of crab pots; tonging for oysters; clos- ed, recircu- lating sea- water system for crabs; opening/clos- ing ichthy. trawl	Tucker trawl (.202-mm and .333-mm mesh nets); 60-cm bongo net	Varies with project	None	None
					-	L	OUISIAN	A					-
Univ. New Orleans New Orleans	Blue crab; oysters; marine commercial finfish	All stages	Lake Pont- chartrain; Lake Borgne	Estuarine		Varies					Short-term special studies	Analyze commer- cial fish pop- ulations by use of electro- phoresis; studies of oyster nutri- tion and para- sitology	None
McNeese St. University Lake Charles	No sampling at	this time							15-m balloon otter trawl,	3-1 Van Dorn bottle; 67-cc bongo array; .333-mm å .505-mm mesh nitex nets; Ring net 1.0 m with .353 mesh	Short-term special studies	None	None
Nicholls St. University Thibodaux	Oysters	All stages	Terrebonne Bay; Barataria Ba	Estuarine y	21' skiff; 30' oyster dredge boa	48/yr t	144/yr		Oyster dredge		Random, long-term station selection	2 more years with oyster project before it ends	None
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		·	TYPES OF FISI INDEPENDENT S			ANNUAL EFFORT FISHERY-INDEPEND BY ACTIVE	ENT SAMPLING	TYPES	OF GEAR			
UNIVERSITY	TARGET SPECIES	LIFE STAGES SAMPLED	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	MUMBER OF DAYS	NUMBER OF SAMPLES	FISHING, TRAWLING	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	ANTICIPATED CHANGES IM DIRECTION OF FISHERY-INDEPEND. ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENT UNABLE TO SAMP
						LOU	JISIANA					
Louisiana St. University Baton Rouge	Red drum	Juveniles	Saltwater impound- ment near Grand Isle	Estuarine	None	10	more than 200/yr	Hook-and- line	Kone	Short-term, random at fixed station	Short-term special study to be applied to long- term tagging studies	None
	Red drum	Adults	Nearshore Gulf of Mexico off eastern LA	Coastal	Varies	Yaries	Yaries	Varies	Bongo nets	Sample in areas of historic fishing activity	Two additional years	None
	King mackerel; Spanish mackerel; black drum; tunas; snapper; grouper; red drum; striped mullet	Juveniles; adults	Louisiana	Estuarine; coastal	Yaries	Yaries	Yaries	Yaries	None	Areas of commer- cial and recrea- tional activity	On-going	None
	Drums; seatrouts; croaker; spot	Eggs; larvae	Western LA continental shelf	Coastal	Ocean-going SEAMAP vessels	150	185	None	Modified bongo net	Stratified, short- term station selection	Short-term special study	None
	Red drum; carangids; clupelds; scombrids	Larvae	Gulf of Mexico	Gu1f-wide	Ocean-going SEAMAP vessels	Yaries	Varies	None	Bongo array	Partially randomized stations Gulf-wide	Next want to look at MS River Delta plume effects on lar- va recruitment and transport	None
	Southern flounder; cobia; tarpon; black drum; greater amberjac	Juveniles; adults	Louisiana	Estuarine; coastal	Yaries	40-60	50-1000	Hook & line	None	Sample fish landed in rodeos	Beginning of a long-term program	Other species are being considered
Louisiana Universities Marine Consortium Cocodrie	Zooplankton; benthos; bottomfish	All stages	Terrebonne and Tim- balier Bays; Inner Cont. Shelf	Internal; territorial	110' PELICAN; 58' R/Y ACADIAMA; small out- boards; 19-m, 32-m vessels	Yaries	Yaries	5-m otter trawl	.333-mm & .505-mm mesh bongo nets	Fixed station transects	None	Kone
						T E	XAS					-1 ·
Univ. of TX, Austin Marine Science Institute, Port Aransas	Shelf & bay species	All stages	Internal; territorial waters	Internal; territorial; (EEZ)	105' LONGHORM 57' KATY	100/yr	Varies with project	42' semi- balloon shrimp trawl; 40' semi- balloon otter trawl	12' x 24" plankton net	Short-term special studies	Institute ex- pansion on all present programs	None
Texas A & I Kingsville	All inshore bay species	All stages	Corpus Christi to Brownsville	Internal; coastal		24/yr	150/yr			Short-term special studies	None	None

## TABLE 3. (CONTINUED)

					FISHERY-INDEPEND	DENT SAMPLING			# 1946 -		
TARGET SPECIES	LIFE STAGES SAMPLED	AREA SAMPLED	GEOGRAPHIC AREAS OF IMPORTANCE	TYPES OF PLATFORMS	NUMBER OF DAYS	NUMBER OF SAMPLES	FISHING, TRAWLING	PLANKTON	SAMPLE STRATEGY FOR DATA COLLECTION	ANTICIPATED CHANGES IN DIRECTION OF FISHERY-INDEPEND. ACTIVITIES OVER NEXT 5 YEARS	HIGH PRIORITY SPECIES PRESENT UNABLE TO SAMP
						TEXAS					
All macro- crustaceans and finfish	All stages	NW Gulf off LA & TX	Internal; territorial; (EEZ)	71' EXCEL- LENCE II; 47' ROAMIN EMPIRE	Varies	Varies with project	34' & 50' semi- balloon trawls	Bongo net with .333-mm & .505-mm mesh	Short-term special studies	None	None
All finfish of Laguna Madre, benthic macrofauna of Laguna Madre	All stages	Corpus Christi to Brownsville	Laguna Madre; Gulf near- shore	Shallow- draft bay boats	48/yr	Biweekly and monthly depending on project	Otter trawls å bag seines	Plankton tows	Long-term baseline studies	Intensive studies of individual species	None
										•	
	All macro- crustaceans and finfish  All finfish of Laguna Madre, benthic macrofauna of	All macro- crustaceans and finfish  All finfish of Laguna Madre, benthic macrofauna of	TARGET SPECIES  LIFE STAGES SAMPLED  AREA SAMPLED  All macro- crustaceans and finfish  All stages Of Laguna Madre, benthic macrofauna of	TARGET SPECIES LIFE STAGES SAMPLED AREA SAMPLED AREAS OF IMPORTANCE  All macro- crustaceans and finfish All stages LA & TX territorial; (EEZ)  All finfish All stages Corpus Laguna Christi to Madre; Madre, benthic macrofauna of Shore	INDEPENDENT SAMPLING  GEOGRAPHIC AREAS OF TYPES OF PLATFORMS  All macro-crustaceans and finfish  All stages All stages Corpus Christi to Madre; Madre, benthic macro-gauna of  INDEPENDENT SAMPLED  GEOGRAPHIC AREAS OF TYPES OF PLATFORMS  TYPES OF PLATFORMS  TYPES OF TYPES OF PLATFORMS  AREA SAMPLED IMPORTANCE  AREA SAMPLED IMPORTANCE  LA & TX territorial; LENCE II; 47' ROAMIN EMPIRE  Corpus Christi to Madre; Guif near-boats  Brownsville Guif near- shore	INDEPENDENT SAMPLING  FISHERY-INDEPENDENT SAMPLED  LIFE STAGES SAMPLED  AREA SAMPLED  AREA SAMPLED  AREA SAMPLED  AREA SAMPLED  IMPORTANCE  TYPES OF PLATFORMS  NUMBER OF DAYS  All macro- crustaceans and finfish  All stages LA & TX  LENCE II; 47' ROAMIN EMPIRE  All finfish of Laguna Christi to Madre; Madre, benthic macrofauna of  Brownsville Gulf near- shore	INDEPENDENT SAMPLING  FISHERY-INDEPENDENT SAMPLING BY ACTIVITY IN:  LIFE STAGES SAMPLED  AREA SAMPLED  AREA SAMPLED  TYPES OF PLATFORMS  TEXAS  TEXAS  All stages  NW Gulf off LA & TX  territorial; territorial; LENCE II; LENCE II; A7' ROAMIN EMPIRE  All stages  All stages  Corpus Christi to Madre; draft bay Madre, benthic Madre, benthic Macro-Gauna of Madre Shore  INDEPENDENT SAMPLING BY ACTIVITY IN:  NUMBER OF NUMBER OF NUMBER OF DAYS  NUMBER OF NUMBER	TARGET SPECIES  LIFE STAGES SAMPLED  AREA SAMPLED  AREA SAMPLED  AREA SAMPLED  AREA SAMPLED  TYPES OF PLATFORMS  AREA SAMPLES  TE X A S  All macro- crustaceans and finfish  All stages  LA & TX  CEEZ)  All finfish of Laguna Christi to Madre; draft bay boats  Madre, benthic macro-fauna of  Brownsville  Corpus Carpus Christi to Madre; Gulf near- shore  FISHING, TYPES OF PLATFORMS  NUMBER OF DAYS SAMPLES  TE X A S  TE X A S  All stages  Corpus Carpus Carpus draft bay depending on project  TYPES OF  NUMBER OF DAYS SAMPLES  FISHING, TRAMLING  TYPES OF  AUMBER OF DAYS SAMPLES  TRAMLING  TYPES OF  AVAILABLE Varies  Varies  With project  SO' semi- balloon trawls  Otter trawls S bag seines	INDEPENDENT SAMPLING  FISHERY-INDEPENDENT SAMPLING  FISHERY-INDEPENDENT SAMPLING  BY ACTIVITY IN:  TYPES OF GEAR  LIFE STAGES SAMPLED  AREA SAMPLES  TYPES OF GEAR   TYPES OF GEAR   THURMS  TYPES OF DAYS  ANUMBER OF DAYS  SAMPLES  TRANLING  PLANKTON  TE X A S  All stages  LA & TX  LENCE I;  AP' ROAMIN  EMPIRE  All finfish  All stages  Corpus  Christi to  Madre;  Madre;  Christi to  Madre;  Madre;  Madre;  Biweekly  And monthly  And monthly  A bag  A bag	TYPES OF FISHERY-INDEPENDENT SAMPLING  TYPES OF GEAR  ANNUAL EFFORT DEVOTED TO FISHERY-INDEPENDENT SAMPLING BY ACTIVITY IN:  TYPES OF GEAR  LIFE STAGES SAMPLED  AREA SAMPLED  AREA SAMPLED  AREA SAMPLED  AREA SAMPLED  TYPES OF MUMBER OF DAYS SAMPLES  TRAMLING  TYPES OF GEAR  NUMBER OF DAYS SAMPLES  TRAMLING  PLANKTOM  DATA COLLECTION  TEXAS  All macro- crustaceans and finfish and finfish and finfish CEEZ)  All stages Corpus Co	TYPES OF FISHERY- INDEPENDENT SAMPLING  ANNUAL EFFORT DEVOTED TO FISHERY-INDEPENDENT SAMPLING TYPES OF GEAR  ANTICIPATED  CHANGES IN DIRECTION OF FISHERY- INDEPENDENT  AREAS OF AREA SAMPLED  AREA SAMPLE STRATEGY FOR FISHERY- INDEPEND  AREA SAMPLE STRATEGY FOR FISHERY- INDEPEND  ANTICIPATED  CHANGES IN DIRECTION OF FISHER- INDEPEND  ANTICIPATED  CHANGES IN DIRECTION O

## APPENDIX A

MARINE AGENCY CONTACTS

#### FEDERAL AGENCIES

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APPENDIX B

SEAMAP DOCUMENTS

#### SEAMAP DOCUMENTS LIST, 1982 - CURRENT

- SEAMAP Strategic Plan, January 1981. The initial planning document describing the intent to develop the SEAMAP Program and outlining the preliminary goals and objectives, assessment requirements and priorities, research strategies, and funding requirements.
- 2) SEAMAP Quick-Reports (Data Summaries): six summaries, June-July 1981; seven summaries, June-July 1983; seven summaries, June-July 1984; five summaries, June-July 1985; five summaries, June-July 1986; six summaries, June-July 1987; five summaries, June-July 1988. 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 SEAMAP Marine Directories: May 1983, March 1984, March 1985, March 1986, and September 1987. Inventories of marine agency contacts (State, Federal and university) concerned with fishery research in the Gulf, and summaries of information provided by these organizations: target species, types of fishery-independent sampling gear and platforms, annual sampling effort and other material.
- 4) SEAMAP Information System Manual, Fall 1983. A description of the data management program supporting SEAMAP surveys and collecting activities, detailing the data processing and quick-report subsystems and presenting data formats for SEAMAP surveys and sample documentation and transmittal forms.
- 5) SEAMAP-Gulf Operations Plan, October 1983. A description of the SEAMAP Program, its goals and objectives, program accomplishments, survey and information systems operations, survey plans and schedules, program management, and funding requirements. Includes figures and tables detailing system functions, platform and funding needs, and information utilization.
- 6) <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, January 1985; February 1986; October 1986; June 1988. Compilations of information obtained from the 1982, 1983, 1984 and 1985 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 Ichthyoplankton Atlases. NOAA Technical Memoranda NMFS-SEFC-144 (1985) and NMFS-SEFC (1986) 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 and 1983.

#### 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.
- 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.
  Summaries of activities and proposed events for the SEAMAP-Gulf and SEAMAP-South Atlantic components.
- 11) Data Management System Requirements Document for Gulf and South Atlantic, November 1986.
- 12) Data Management System Design Study for Gulf and South Atlantic, March 1987. A result of the system design study, this 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. A manual presenting the procedures to be followed by all vessels that participate in SEAMAP surveys.

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).