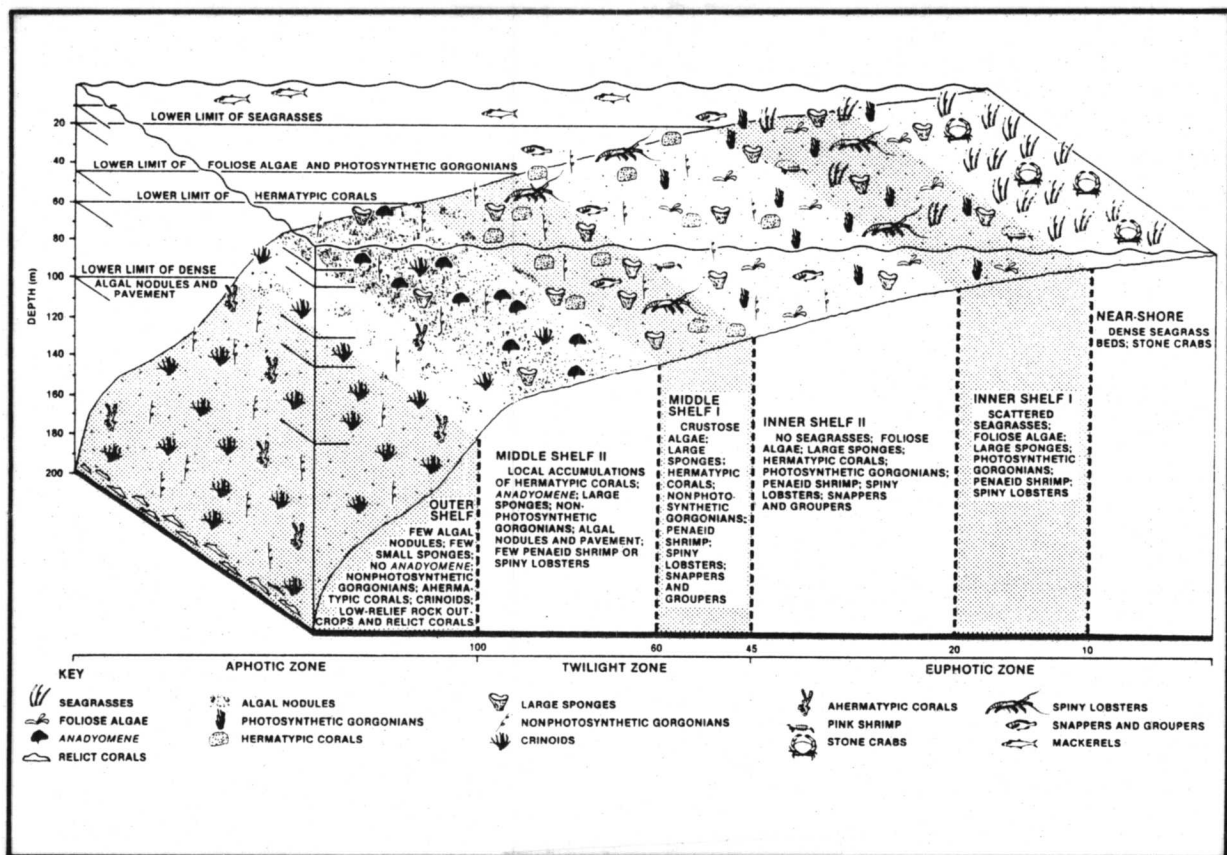


Southwest Florida Shelf Ecosystems Study

Volume III: Annotated Bibliography

Part B (L-Z)



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TABLE OF CONTENTS

VOLUME I--EXECUTIVE SUMMARY

VOLUME II--SYNTHESIS REPORT

VOLUME III--ANNOTATED BIBLIOGRAPHY

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
2.0 INFORMATION COLLECTION PLAN	2
3.0 INFORMATION SOURCES	5
4.0 INFORMATION TOPICS	9
5.0 ANNOTATED INFORMATION SYSTEM	12
6.0 NODC SUBMISSIONS AND DATA MANAGEMENT	15
7.0 SUMMARY	21
8.0 REFERENCES CITED	23
9.0 ANNOTATED BIBLIOGRAPHY	25

1.0 INTRODUCTION

The objective of the Southwest Florida Shelf Ecosystems Study was to synthesize all field data (collected during the 5-year field study) and data from other sources in order to produce a concise, coherent description of the biota conditions and processes in the study area. This description provided MMS with the information necessary to allow informed decisionmaking for critical offshore development issues that fall within MMS's offshore leasing responsibilities. Throughout the first five years of the program, approximately 24 volumes (8,000 to 10,000 pages) of information were provided to MMS. This information, although critical to the program, was somewhat limited in value to decisionmakers because of its sheer volume. Consequently, the objective of the Year 6 study was to summarize, interpret, and synthesize this large data set to provide detailed descriptions of the systems and processes on the Florida shelf, and use this information to assess potential impacts of offshore development that can be directly used for stipulations and guidelines for developing Florida's offshore resources. A further objective was to assure that all available data were identified and considered before final assessments were made, and that any differences or data gaps were identified before development plans were approved or finalized. The information collection task of the Year 6 study was implemented to meet this final objective.

The methods used in the information collection effort and a copy of the bibliography that resulted from this effort are presented in this volume. The synthesis methods and the results of the synthesis effort are described in Volumes I (Executive Summary) and II (Synthesis Report).

An Information Collection Plan was designed to ensure that relevant information was collected in an efficient and cost-effective manner and with the proper emphasis relative to the overall goals of the program.

This plan, the information sources, topics, a description of the Annotated Information System, and National Oceanographic Data Center (NODC) data submission procedures are discussed in the following sections.

2.0 INFORMATION COLLECTION PLAN

An inherent problem in any information collection effort is the tendency for that effort to get out of control, resulting in the depletion of available funds and yet not meet the original program goals. To avoid this problem, an Information Collection Plan was devised. The first phase of this plan was to conduct a Program Initiation Workshop where the Principal Investigators, as well as representatives from the Minerals Management Service (MMS), U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and the Florida Governor's Office, met to present and discuss possible valued ecosystem components (VECs) which would define the various conceptual submodels. The VECs chosen by the attendees of this meeting also were used to direct the information collection effort.

The next step of the Information Collection Plan was to determine the limits for information collection. Spatial, temporal, and topical limits were used to control information collection. The spatial or geographic limits were varied, depending on the topic. The geographic limits for meteorology or physical oceanography delineated a larger area than the limits for biology or geology, for example. The geographic limits for this program were set as follows:

1. Biology, fisheries/socioeconomics, and geology--Seaward from the west coast of Florida (excluding estuaries such as Charlotte Harbor) to the 200-m isobath and from 27°N latitude to just below the Florida Keys (approximate latitude--24°30'N);

2. Meteorology, physical oceanography, and chemical oceanography--From a line lying as far inland as 20 km (in the case of meteorology) to longitude 85°W and from latitude 27°N to an approximate latitude of 24°30'N.

Because the biological communities in a specific region were being described, the limits for biology (as well as for fisheries/socioeconomics and geology) were more specific and delineated a smaller area. The limits for physicochemical and meteorological information, however, delineated a larger and less specific area. This is because certain physical phenomena, important to the biological communities, must be examined on scales at which these phenomena exist (e.g., Loop Current eddies).

The geographic limits, however, had to have some flexibility because strict adherence to them could have resulted in data gaps critical to synthesis. For example, descriptions of unique biological communities exist for the study area [e.g., the MMS reports for Years 1 through 5 (Woodward Clyde Consultants, 1983; Woodward Clyde Consultants and Continental Shelf Associates, Inc, 1984; Woodward Clyde Consultants and Skidaway Institute of Oceanography, 1983; Continental Shelf Associates, Inc., 1987; Environmental Science and Engineering, Inc. and LGL Ecological Research Associates, Inc., 1985; and Danek and Lewbel, 1986)]. However, no data (other than laboratory tests) exist on the effects of drilling fluid discharges on these communities. Therefore, data from other locales were included, thus exceeding the geographic limits for certain topics.

Temporal limits extended from the earliest available information to the present. The Annotated Information System includes information from ongoing projects as well.

Topical limits were more difficult to set. Limits used in this study were based on the guidelines established by Mahadevan et al. (1984) in the preparation of their bibliography. These limits were that behavioral, morphological, or taxonomic studies of single species would be de-emphasized, unless these species were designated as VECs. Unlike Mahadevan et al. (1984), method descriptions were de-emphasized unless site specific. These topical limits precluded overloading the Annotated Information System with data that, although important, were not germane to the overall goals of this program.

As the information collection continued, the necessity for certain special inclusions and exclusions became evident. The geographic limits as set forth in the RFP, particularly the easternmost geographic limit (i.e., the west coast of Florida), required that marine, estuarine, or intertidal information for certain Florida counties be included. These counties included: Sarasota, Lee, Collier, Charlotte, Monroe (which includes the majority of the references on Florida Bay), and the gulf-side references for Dade.

Certain generic references were included because of their topical content and regardless of their geographic limits. These special inclusions included: any discussions of hydrocarbons in the marine environment (water column, sediments, and biota), the effects of drilling or drilling fluids and cuttings, the effects of offshore oil and gas development, discussions regarding biological processes or communities and the physical processes that affect each, important pelagic fishes (e.g., billfishes), and reports presenting the results of similar studies.

In an effort to contain the size of the Annotated Information System, certain topics were excluded unless geographically relevant, such as estuaries, mangroves, marshes, intertidal zones, and littoral zones. The exclusion of these references for all but the six counties (previously discussed) resulted in as much as 20% reduction in the size of the

Annotated Information System. This is particularly important because the Annotated Information System was installed on a microcomputer hard-disk drive to ensure greater flexibility for MMS.

An Information Collection Log was used by information collection personnel. The purpose of this log was threefold: (1) to ensure uniformity in collection techniques of the three contractors, (2) to ensure that all information that must accompany any references or data for submission to the Annotated Information System is obtained, and (3) to enable personnel to enter information into the Annotated Information System directly from the log.

The Information Collection Log contains the following information:

1. Author, publication date, and title;
2. Publication information;
3. Key words;
4. Abstract;
5. Geographic location for study (including latitude, longitude, Marsden squares, and geographic place names);
6. Type and time of data collection and number of stations;
7. Availability, location, and contact (primary and secondary) for data;
8. Description of data processing methods, format of data, and estimate of data quality; and
9. Project personnel making contact and how and when contact was made.

3.0 INFORMATION SOURCES

Numerous databases, agencies, institutions, private companies, and individuals were investigated as potential sources of relevant information. The majority of the information was obtained from existing databases or literature, although telephone calls and visits to specific individuals or agencies were occasionally used to collect information.

As expected, the majority of the site-specific information was contained in the reports authored by Woodward Clyde Consultants, Continental Shelf

Associates, Inc., Environmental Science and Engineering, Inc., and LGL Ecological Research Associates, Inc. for Years 1 through 5 of the Southwest Florida Shelf Ecosystems Program. In addition to these reports, other publications provided relevant information or lists of other publications that might be relevant. These publications included:

1. Mahadevan et al. (1984);
2. Barry A. Vittor and Assoc., Inc. (1985);
3. Florida Department of Administration (1975);
4. Science Applications International Corp. (1986);
5. Science Applications International Corp. (1987);
6. Alexander et al. (1977);
7. Jones et al. (1973);
8. The State University System of Florida Institute of Oceanography (1974);
9. Woodward Clyde Consultants and Continental Shelf Associates, Inc. (1982);
10. Boesch and Rabalais (1985); and
11. Minerals Management Service (1983).

The basis for this project's Annotated Information System was the references contained in the Tuscaloosa Trend's bibliography provided to Environmental Science and Engineering, Inc. by MMS on microcomputer diskettes. The 1,106 references contained on these diskettes were transferred into the Annotated Information System; 657 were deleted because they were considered not relevant to the Southwest Florida Shelf Ecosystems Program. Although approximately 60% of the references were deleted, the project was saved effort and cost because the 449 entries retained would have required a considerable amount of time to enter manually into the Annotated Information System.

In addition, 559 references from the Mote Marine Laboratory bibliography (Mahadevan et al., 1984) were added to the Annotated Information System. These references were chosen either because they were topically or geographically relevant to this program. Many of the county-specific references were obtained from this bibliography.

The remainder of the information was obtained from libraries, computerized literature searches, searches of existing agency databases, and visits to various agencies and institutions. A search of the various libraries produced nearly 200 additional references not included in the previously mentioned sources. The majority of these references included some of the most current information available.

Additional information was obtained from databases accessed using the Lockheed DIALOG Information Retrieval Service. DIALOG currently accesses more than 220 databases containing in excess of 110 million records. The databases accessed (and the number of "hits" using the key words gulf, Mexico, shelf) are presented below:

1. AQUATIC SCIENCE ABSTRACTS (186),
2. BIOSIS PREVIEWS (54),
3. CHEMICAL EXPOSURE (20),
4. DOE ENERGY (339),
5. ENVIROLINE (34),
6. ENVIRONMENTAL BIBLIOGRAPHY (7),
7. FEDERAL RESEARCH IN PROGRESS (10),
8. FLUIDEX (12),
9. GEOARCHIVE (258),
10. LIFE SCIENCES COLLECTION (24),
11. MET/GEOASTRO ABSTRACTS (55),
12. NTIS (176),
13. OCEANIC ABSTRACTS (159),
14. P/E NEWS (678),
15. POLLUTION ABSTRACTS (10),
16. SCISEARCH(39),
17. SSIE CURRENT RESEARCH (31),
18. TRIS (14),
19. WATER RESOURCES ABSTRACTS (137), and
20. ZOOLOGICAL RECORD (45).

Of these databases, Numbers 1, 3, and 7 produced no hits until the key word "shelf" was excluded. Additional key words (e.g., environmental) were used to reduce the total number of hits and increase the level of relevance for database Numbers 4, 9, 12, and 14. The remainder of the database references were printed as offline abstracts without any additional manipulation.

A special DIALOG search was conducted for information of the biological effects of offshore drilling. The key word used was "offshore drilling". The choice of databases rather than key words was used to increase the relevance of the articles retrieved. These databases included:

1. BIOSIS PREVIEWS (26),
2. SCISEARCH (83),
3. LIFE SCIENCES COLLECTION (13),
4. CA SEARCH (100), and
5. ZOOLOGICAL RECORD (6).

If a database such as P/E NEWS had been searched using the key word "offshore drilling," there would have been a large number of hits; however, the relevancy of the articles would have been quite low (presumably emphasizing the engineering aspects of offshore drilling rather than the environmental aspects).

Another special DIALOG search was conducted for any information regarding the physical oceanography of the Gulf of Mexico. No geographic restraint was placed on the search other than it be limited to articles on the Gulf of Mexico. The key words used to conduct this search included:

physical, oceanography, currents, waves, hurricane, density, loop, current, tides, and inertial. A search of the five most relevant databases (OCEANIC ABSTRACTS, NTIS, MET/GEOASTRO ABSTRACTS, DISSERTATION ABSTRACTS, and CONFERENCE PAPERS) yielded a total of 434 hits. A number of these articles were duplicated among these databases.

Computer or manual searches of various existing agency databases were conducted. The agencies included:

1. NODC;
2. National Climatic Data Center (NCDC);
3. National Geophysical Data Center (NGDC); and
4. U.S. Geological Survey (USGS).

Visits to various agencies, institutions, and private companies or organizations were conducted to obtain information not available from the previously described sources. These included:

1. U.S. Fish and Wildlife Service,
2. Minerals Management Service,
3. NOAA Atlantic Oceanographic and Meteorological Laboratories,
4. NOAA/NMFS Southeast Fisheries Center,
5. NOAA/NESDIS,
6. U.S. National Park Service,
7. U.S. Geological Survey,
8. Florida Department of Natural Resources,
9. Florida Institute of Oceanography,
10. University of South Florida,
11. Florida Department of Environmental Regulation,
12. Florida State University,
13. University of Florida,
14. University of Miami, and
15. Mote Marine Laboratory.

4.0 INFORMATION TOPICS

To meet the goals of this program, numerous data types or topics had to be synthesized. These data types included physical, geological, chemical, biological, and socioeconomic. The actual synthesis of information required slight differences in the delineation of categories to ensure goals were met. For information collection, the categories described previously were sufficient; discussions of each follow.

Physical Data

These data included meteorology, hydrography, and dynamic processes (atmospheric and marine phenomena). Specifically, meteorological data consisted of winds, temperature, barometric pressure, solar radiation, relative humidity, precipitation, and any other parameter considered essential for information synthesis. Hydrographic data included salinity, temperature, density, water transmissivity (e.g., depth of photic zone), and any other physical data germane to this program. The dynamic processes, both atmospheric and marine phenomena, included weather systems, winds, front propagation, storms, waves, ocean currents, upwellings, and dispersive and diffusive processes. Particular emphasis was placed on relatively short-time-scale phenomena such as Loop Current boundary perturbations and hurricanes. Although these last two phenomena

occur on a relatively short time scale in the study area, each can cause perturbations of considerable magnitude in the environment.

Chemical Data

These data included the dissolved gases (particularly oxygen), nutrients, yellow substance (Gelbstoff), trace and heavy metals, hydrocarbons, and other contaminants. In addition, chlorophyll and primary productivity data were collected, even though these data may be more properly considered biological. Chemical data for the atmosphere, water column, sediments, and biota were obtained.

Geological Data

Information topics included surface and subsurface geological features, the geologic history of the west Florida shelf, surficial sediment composition (grain size, percent carbonate, mineralogy, trace and heavy metals, hydrocarbon concentrations, etc.), and sediment dynamics (resuspension, bed load transport, etc.). The majority of the information specific to the study area was collected during the Years 1 through 5 investigations and, therefore, was readily accessible to the project team. Additional collections focused primarily on data that were useful for interpretation of benthic biological data and prediction of impacts related to oil and gas exploration and development--including information concerning spatial distribution patterns of different substrate types, dynamics of unconsolidated sediments, and sediment trace metals and hydrocarbon concentrations.

Biological Data

Topics for biological data collection included (1) benthic communities (infauna, epiflora, sessile epifauna, motile epifauna, and demersal fishes), (2) populations of commercially or economically important species (principal biota, many of which were designated VECs), (3) biologically sensitive areas, (4) finfish (including pelagic species) and shellfish populations, (5) endangered species, and (6) short-term

biological phenomena (e.g., red tides). Benthic biological data collection focused on spatial and seasonal patterns of species composition, abundance, and diversity, and relationships to environmental variables. Topics such as substrate affinities, trophic relationships, and sensitivity/tolerance to sedimentation--important factors through which oil and gas exploration and development impacts are likely to be mediated--received special attention during the collection process. Data concerning population locations of commercially or ecologically important species were compiled. These principal biota included major finfish and shellfish species harvested in the area as well as key habitat formers such as agariciid corals and seagrasses. Literature and data on locations of population centers and important habitat areas such as spawning or nursery grounds were identified for the key fish and shellfish species. Information concerning endangered or threatened species and critical habitats (e.g., nesting areas or migration routes) in and near the study area were compiled. Short-term biological phenomena, such as dinoflagellate blooms that are responsible for red tides, also were investigated. Records of total or near-total defaunation of reef communities have been reported following particularly intense red tides. The effects of these natural disasters (red tides, hurricanes, etc.) must be considered when discussing biological and physical processes on the southwest Florida shelf.

Socioeconomic Data

Information collection focused on fish and shellfish resources in relation to local economies. The most recent catch statistics available for southwest Florida coastal counties were compiled in terms of poundage and dollar values for major species landed. Data concerning locations and relative importance to local economies of major harvest areas in and near the study area were collected.

5.0 ANNOTATED INFORMATION SYSTEM

MMS required a system that could contain all available information collected during the data and literature search. This system must have the capability to:

1. Sort by key words, words in title, author, sampling location, and source;
2. Print out entire reference list as sorted above;
3. Print out only references that fit a series of criteria;
4. Count number of references that fit a series of criteria before printing them out; and
5. Have the ability to update.

Several existing formats for the database and manipulative programs, as well as the efficacy of developing a new format and manipulative program, were examined. Quantus, Inc., the Barry Vittor and Associates' subcontractor responsible for the Tuscaloosa Trend bibliography, was contacted to determine precisely which system they were using and whether it could be adapted to this project, thereby unifying two MMS databases. Quantus, Inc., had a database, but did not have a manipulative program (Farmer, 1985, personal communication). Because at that time MMS did not know which type of computer (microcomputer, minicomputer, or mainframe computer) onto which the system would be installed, Quantus Inc., had not developed specific software for MMS. During the interim period, Quantus, Inc., was using DBASE III to manipulate the database.

It was further determined that Quantus, Inc., was using the FAMULUS format. This format, part of the FAMULUS system, was developed in the 1960s and is still widely used by government agencies. FAMULUS (the program and format) was designed to process personal reference collections maintained by researchers. Nevertheless, its basic structure renders it suitable for a large number of other applications; for this purpose, FAMULUS can be regarded as a general-purpose text-handling system. FAMULUS will maintain many types of information files which can be broken into units or records with subcategories or fields that can be identified. The record may have up to 10 distinct fields. In

bibliographic files, the citation is the record, and fields are used for author, date, title, key words, abstracts, etc. The FAMULUS format requires that a record consist of 4,000 characters, regardless of the number of fields or actual characters required. Any unused characters become blanks.

FAMULUS was designed for minicomputers and had considerable power with respect to update capabilities, etc. Unfortunately, no program code could be located for FAMULUS. It is probable that FAMULUS cannot be adapted to a microcomputer. Because MMS had not specified the type of computer, the decision was made to model the Southwest Florida Shelf Ecosystems Program's information system after the one designed for the Tuscaloosa Trend. Therefore, although the FAMULUS format was chosen as the format for the database, a manipulative program compatible with a microcomputer was chosen. A microcomputer system was chosen because the hardware and software are less expensive than the hardware and software for a minicomputer or mainframe computer. For example, the cost for an off-the-shelf database program for a microcomputer is approximately \$600, whereas the cost for similar software for a minicomputer would have been approximately \$20,000. Existing software was chosen rather than attempting to develop software specific to this project. Mote Marine Laboratory had developed a microcomputer program for their bibliography (Mahadevan et al., 1984). The cost for this program, according to Mahadevan (1986, personal communication), was considerably more than anticipated (in the tens of thousands of dollars). Therefore, the decision was made to use off-the-shelf software instead of developing software specifically for the Southwest Florida Shelf Ecosystems Program.

After evaluating various available database manipulative programs, it was decided to use PCINFO rather than DBASE III. PCINFO was one of the few microcomputer data management systems capable of manipulating databases and records the size required by this project and the FAMULUS format, respectively. In addition, PCINFO was considered more user friendly

because it could be modified to use a variety of menus to guide the user through the system. Although PCINFO meets the minimum requirements of this project, improvements could be made. The edit features are cumbersome using this, or any microcomputer, database software. The problem results from the large size of the database (in excess of 6 megabytes) and the record size as dictated by the FAMULUS format (4,000 characters). These problems could be circumvented on a minicomputer or mainframe computer; this however, would have resulted in MMS purchasing expensive software and hardware. Therefore, the approach was considered the most cost-effective compromise. Although the system is somewhat awkward, it is reasonably inexpensive, and hardware in the form of drives and microcomputers was readily available.

The Annotated Information System currently consists of the database (in FAMULUS format), a modified menu-driven version of PCINFO, and a Seagate 20-megabyte external hard disk drive. This system was transferred to MMS where it can be connected with any compatible microcomputer.

The system's current capabilities include:

1. Addition of new records;
2. Deletion of unwanted records;
3. Editing of existing records;
4. Searching by accession number, author, date, and key word;
5. Sorting alphabetically by author or numerically by accession number; and
6. Printing of all or selected records in brief or extended format.

New records are added through manual keyboard entry. Deletion is accomplished using known accession numbers; however, this is a slow process because the system resorts the entire database after each deletion. The edit feature, as mentioned previously, is the most cumbersome. Currently, editing consists of re-entering entire lines within a field. The program as it exists cannot perform editing like a word processor (e.g., single deletions, insertions, type-overs, text moving, etc.). The search option provides considerable flexibility with

regard to the fields chosen to search and the format of key words. The maximum number of key words allowed is 15. The key words currently being used in the key word field of the system are presented in Table 5.1. After the search has been completed, the system will print out each record on a separate page (in the extended format) or four records per page in the brief format.

6.0 NODC SUBMISSIONS AND DATA MANAGEMENT

Data management and submission of relevant data to NODC were included as part of the Information Collection Task. This sub-task involved identification, evaluation, and procurement of data sets (provided that the data were amenable to conversion to NODC format). This criterion for submission to NODC was established to ensure that this subtask did not exhaust the budget for the entire project.

Potential data sets were identified from several sources, including the articles already contained in the Annotated Information System, the existing "Report of Observations/Samples Collected by Oceanographic Programs (ROSCOP) Second Edition" forms listed in Ralph Childers Associates (1984), and interviews conducted either in person or via telephone. Information collection personnel, using the Information Collection Log described previously, attempted to obtain the all of the following data-specific information:

1. Geographic location (in the form of latitude/longitude, place names, NEDRES codes, Marsden Squares),
2. Data type,
3. Sampling methods,
4. Number of stations,
5. Earliest and latest or completion date of sampling,
6. Sampling frequency,
7. Data availability (nonproprietary, proprietary, primary and secondary contact name, address, and telephone number),
8. Data processing and analysis methods,
9. Data quality estimate, and
10. Data format or products.

Table 5.1 Southwest Florida Shelf Ecosystems Program keyword list.

ABUNDANCE	BIOLOGY	COLLIER
AERIAL SURVEY	BIOMAGNIFICATION	COLONIZATION
AGARCIA	BIOMASS	COMMENSAL
AIR PRESSURE	BIOTA	COMMERCIAL FISHERY
AIR TEMPERATURE	BIRD	COMMUNITY
ALGAE	BLUE CRAB	COMMUNITY STRUCTURE
ALGAL NODULE	BOAT	CONTINENTAL MARGIN
ALIPHATIC COMPOUNDS	BOD	CONTINENTAL SHELF
ALKALINITY	BOTANY	CONTINENTAL SLOPE
ALLIGATOR	BOTTOM CURRENT	COPPER
AMINO ACIDS	BOTTOM PRESSURE	CORAL
AMMONIA	BOTTOM SEDIMENT	CORALLINE
ANADYOMENE	BREEDING	CRAB
ANCHOR DAMAGE	BREEDING CYCLE	CRINOID
ANNELIDA	BROWN SHRIMP	CRUDE OIL
ANNELID	CADMIUM	CRUSTACEA
AROMATIC COMPOUNDS	CALCIUM	CRUSTACEAN
ARTHROPOD	CALCIUM CARBONATE	CURRENTS
ARTHROPODA	CALICO SCALLOP	CUTTING
ARTIFICIAL HABITAT	CALORIC CONTENT	DADE
ARTIFICIAL REEF	CARBOHYDRATES	DECAPOD
ASSEMBLAGE	CARBON	DECAPODA
ATMOSPHERIC CIRCULAT	CARBON-14	DEFAUNATION
ATP	CARBONATE	DEMERSAL FISH
AVES	CAROTENOIDS	DEPOSITION
BACTERIA	CATCH STATISTICS	DEPTH
BARIUM	CETACEA	DETRITUS
BAROMETRIC PRESSURE	CETACEAN	DEVELOPMENT
BARRIER ISLAND	CHARLOTTE	DIAPIR
BASELINE STUDY	CHEMICAL	DISASTER
BATHYMETRY	CHEMICAL OCEANOGRAPH	DISEASE
BAY	CHEMISTRY	DISSOLVED OXYGEN
BED FORM	CHLORINE COMPOUNDS	DISTRIBUTION
BEHAVIOR	CHLOROPHYLL	DIVERSITY
BEHAVIORAL	CHROMIUM	DO
BENTHIC	CHRONOLOGY	DOLPHIN
BENTHIC COMMUNITY	CIRCULATION	DREDGE SPOIL
BENTHIC FAUNA	CLAY MINERALOGY	DREDGING
BENTHIC FLORA	CLIMATIC DATA	DRIFT ALGAE
BENTHOS	CLIMATOLOGY	DRIFT BOTTLE
BIBLIOGRAPHY	COASTAL	DRIFT CURRENTS
BILLFISH	COASTAL MORPHOLOGY	DRIFT MEASUREMENT
BIOACCUMULATION	COASTAL RESOURCE	DRIFT PATTERN
BIOASSAY	COASTAL WATER	DRILL CUTTING
BIOGEOGRAPHY	COASTAL ZONE	DRILLING
BIOLOGICAL	COELENTERATE	DRILLING FLUID

DRILLING IMPACT	FOOD CHAIN	ICHTHYOFAUNA
DRILLING MUD	FOOD HABIT	ICHTHYOPLANKTON
DRILLING PLATFORM	FORAMINIFERA	INDUSTRY
DRILLING RIG	FORECASTING	INFAUNA
DYNAMIC HEIGHT	FORMATION WATER	INFAUNAL
ECHINODERM	FOULING	INFAUNAL COMMUNITY
ECHINODERMATA	FOULING ORGANISM	INFECTIOUS DISEASE
ECOLOGICAL	FRACTURE PATTERN	INFRARED IMAGERY
ECOLOGY	GAS	INORGANIC COMPOUND
ECONOMICS	GEOCHEMICAL	INTERNAL WAVE
ECOSYSTEM	GEOCHEMISTRY	INTERTIDAL
EDDY	GEOGRAPHIC	INTRUSION
EDDY FORMATION	GEOGRAPHICAL	INVERTEBRATA
EDDY INTRUSION	GEOGRAPHY	INVERTEBRATE
EH	GEOLOGIC HISTORY	INVERTEBRATE LARVAE
ELECTRICAL CONDUCTIV	GEOLOGIC STRUCTURE	IRON
ENDANGERED SPECIES	GEOLOGICAL	IRRADIANCE
ENERGY FLUX	GEOLOGY	ISOTOPE RATIO
ENGINEERING	GEOMORPHOLOGY	JUVENILE
EPIBIOTA	GEOPHYSICAL	KAOLINITE
EPIFAUNA	GEOSYNCLINE	KING MACKEREL
EPIFLORA	GEO THERMAL	LAND-SEA BREEZES
EROSION	GLOBAL RADIATION	LANDINGS (POUNDS)
ESTUARY	GORGONIAN	LANDINGS (VALUE)
EUSTATIC CHANGE	GRAIN SIZE	LANDSAT
EVAPORATION	GRASSBED	LARVAE
EVOLUTION	GROUPEr	LARVAL
EXPLORATION	GROWTH	LARVAL DEVELOPMENT
FATTY ACID	GYRAL	LATITUDE
FAULT	GYRE	LATITUDINAL
FAUNA	HABITAT	LEAD
FECUNDITY	HEAT BUDGET	LEE
FEEDING HABIT	HEAT STORAGE	LENGTH
FISH	HEAVY METAL	LIFE CYCLE
FISH ATTRACTION	HEAVY MINERAL	LIFE HISTORY
FISH CATCH	HERBICIDE	LIGHT
FISH EGG	HERPETOFAUNA	LIGHT ATTENUATION
FISH HARVESTING	HISTOLOGY	LIGHT EXTINCTION
FISH KILL	HISTORIC	LIGHT INTENSITY
FISH LARVAE	HISTORIC GEOLOGY	LIGNIN
FISH STATISTICS	HOLE	LIPID
FISH STOCK	HolocENE	LITHOLOGY
FISH TAG	HORMONE	LIVE BOTTOM
FISH TRAP	HOURLASS	LOOP CURRENT
FISHERY	HURRICANE	MACROALGAE
FISHERY STATISTICS	HURRICANE DAMAGE	MACROFAUNA
FISHING	HYDROCARBON	MACROPHYTE
FISHING EFFORT	HYDROGRAPHIC	MAFLA
FISHING GEAR	HYDROGRAPHY	MAGNESIUM
FISHING GROUND	HYDROID	MAMMAL
FISHING INDUSTRY	HYDROLOGICAL	MAMMALIA
FISHING PRESSURE	HYDROLOGY	MANAGEMENT
FLATFISH	HYDROZOA	MANATEE
FLORA	HYPOXIA	MANGANESE

MARICULTURE	OIL AND GAS	POPULATION
MARINE	OIL EXPLORATION	POPULATION COMPOSITI
MARSH	OIL INDUSTRY	POPULATION DENSITY
MATHEMATICAL MODEL	OIL RESIDUE	POPULATION DYNAMICS
MEIOFAUNA	OIL SLICK	PORIFERA
MERCURY	OIL SPILL	PORIFERAN
METABOLISM	OIL TRANSPORT	PORPOISE
METAL	OIL WELL	PORT
METEOROLOGICAL	OPERATIONS	POTASSIUM
METEOROLOGY	ORGANIC CARBON	PRECAMBRIAN
MICROFAUNA	ORTHOPHOSPHATE	PRECIPITATION
MIGRATION	OXYGEN	PREDATION
MIGRATORY PATTERN	OYSTER FISHERY	PREHISTORIC
MINERAL	OYSTER	PRESSURE
MINERAL RESOURCE	PALEOZOIC	PRIMARY PRODUCTION
MINERALOGY	PARASITE	PRIMARY PRODUCTIVITY
MODEL	PATHOLOGY	PRODUCED WATER
MODIFICATION	PCB	PRODUCTION
MOLLUSC	PELAGIC FISH	PRODUCTION WATER
MOLLUSCA	PELECYPOD	PRODUCTIVITY
MOLLUSCAN	PELECYPODA	PROTEIN
MOLLUSK	PESTICIDE	PURSE SEINER
MONITORING	PETROLEUM	QUATERNARY
MONROE	PET HYDROCARBON	RADIOMETER
MONTMORILLONITE	PH	RATE
MORPHOLOGY	PHENOLOGY	RECREATION
MORTALITY	PHOSPHATE	RECREATIONAL BEACH
MUD	PHOSPHORUS	RECREATIONAL FISHERY
MULLET	PHOTODOCUMENTATION	RECREATIONAL FISHING
MULTIVARIATE ANALYSI	PHOTOGRAPH	RECRUITMENT
NEARSHORE	PHOTOSYNTHESIS	RED TIDE
NEKTON	PHTHALATE	REDFISH
NEPHELOID LAYER	PHYSICAL	REDOX
NESTING	PHYSICAL OCEANOGRAPH	REEF
NEUSTON	PHYSICAL PROCESS	REEFFISH
NICKEL	PHYSICAL PROPERTY	REHABILITATION
NITRATE	PHYSIOGRAPHY	RELATIVE HUMIDITY
NITRITE	PHYSIOLOGICAL	REMOTE SENSING
NITROGEN	PHYSIOLOGY	REPRODUCTION
NUMERICAL MODEL	PHYTOPLANKTON	REPRODUCTIVE
NURSERY AREA	PIGMENT	REPTILIA
NUTRIENT	PINK SHRIMP	RESERVE
OCEANOGRAPHIC	PINNIPED	RESOURCE
OCEANOGRAPHY	PIPELINE	RESPIRATION RATE
OCS	PLANKTON	RICHNESS
OCTOCORALLIA	PLANKTON BLOOM	RIVER DISCHARGE
OFFSHORE	PLATE TECTONICS	ROCK SHRIMP
OFFSHORE DRILLING	PLEISTOCENE	SALINITY
OFFSHORE EXPLORATION	POLLUTANT	SARASOTA
OFFSHORE LEASE	POLLUTION	SATELLITE
OFFSHORE MINERALS	POLLUTION CONTROL	SCLERACTINIA
OFFSHORE PLATFORM	POLLUTION DISTRIBUTI	SCLERACTINIAN
OFFSHORE WATER	POLYCHAETA	SCYPHOZOA
OIL	POLYCHAETE	SEA LEVEL

SEA STATE	STORM	WAVE HEIGHT
SEA TROUT	STORM EVENT	WAVE LENGTH
SEA WHIP	STORM SURGE	WAVE PERIOD
SEABIRD	STRATIGRAPHY	WAVE PRESSURE
SEAFOOD	STRESS	WAVE SPEED
SEAGRASS	STRESSED	WEATHER
SEAGRASS COMMUNITY	STRUCTURE	WEIGHT
SEASAT	SUBMARINE	WETLAND
SEASON	SUBSTRATE	WHALE
SEASONAL	SULFATE	WHITE GRUNT
SEASONAL VARIATION	SURF ZONE	WILDLIFE
SEASONALITY	SURFACE CURRENT	WIND
SEASONALLY	SURVEY	WIND DIRECTION
SECCHI DISC	SUSPENDED	WIND DRIFT CURRENT
SEDIMENT	SWFLA	WIND FORCE
SEDIMENT ANALYSIS	SYSTEMATIC	WIND SPEED
SEDIMENT DISTRIBUTIO	TAGGING	WIND STRESS
SEDIMENT FACIES	TAR	ZINC
SEDIMENT GRAIN SIZE	TAXONOMY	ZOOGEOGRAPHY
SEDIMENT STRUCTURE	TECTONIC	ZOOLOGY
SEDIMENT TEXTURE	TEMPERATURE	ZOOPLANKTON
SEDIMENT TRANSPORT	TEMPERATURE ANOMALY	
SEDIMENTARY DEPOSIT	TIDAL	
SEDIMENTATION	TIDE	
SEDIMENTOLOGY	TOPOGRAPHIC	
SEISMIC	TOPOGRAPHY	
SEISMIC REFLECTION	TOURISM	
SHARK	TOXICOLOGY	
SHELLFISH	TRACE ELEMENT	
SHIPWRECK	TRACE METAL	
SHRIMP	TRANSPORT	
SHRIMP FISHERY	TRANSPORTATION	
SIDE SCAN SONAR	TRAWL FISHERY	
SILICATE	TROPICAL STORM	
SIZE	TUMOR	
SNAPPER	TURBIDITY	
SNOOK	TURTLE	
SOCIOECONOMIC	UPWELLING	
SOCIOLOGY	UREA	
SOURCE	VANADIUM	
SPANISH MACKEREL	VERTEBRATA	
SPAWNING	VERTEBRATE	
SPAWNING AREA	VITAMIN	
SPECIES COMPOSITION	WATER BUDGET	
SPECIES DIFFERENTIAT	WATER COLUMN	
SPECIES LIST	WATER LEVEL	
SPINY LOBSTER	WATER MASS	
SPONGE	WATER MOVEMENT	
SPORT FISHERY	WATER POLLUTION	
SPORT FISHING	WATER QUALITY	
STANDING CROP	WATER TEMPERATURE	
STATISTICAL ANALYSIS	WAVE	
STATISTICS	WAVE AMPLITUDE	
STONE CRAB	WAVE ENERGY	

If this information could be obtained, it was appended to the existing article, if one existed. If no article existed, this information, as well as the principal investigator (author), current date (date), brief description of data type and sampling location (citation or title), a more detailed description of the same (abstract), and key words, was to be entered into the Annotated Information System in a manner similar to an article.

Based on the information obtained about a specific data set, the Data and the Program Managers, were to decide the level of effort (no action, ROSCOP submission only, or data submission) to be expended in submitting these data or a record of these data to NODC. A ROSCOP form identifies the study, geographic location, all data types and their status and disposition, and whom to query for more information on the data. Consequently, anyone searching the NODC system will learn that the data exist and will be told whom to contact to obtain the data or further information.

If the data could be obtained in a computer-compatible form (i.e., tape, disk, or cards), the data were to be reformatted (i.e., put into appropriate form with required headers and descriptions) to NODC format. A Data Documentation Form (DDF) was supposed to accompany any data submission. The DDF provides NODC and other users with required ancillary information that increases the utility of the data submitted. The information contained in a DDF includes: originator identification (project title, names, addresses, sampling time and location, and disposition), scientific content (data field, units, sampling methods, analytical methods, and data processing techniques), data format (record types, file organization, and precise data format), record format, and instrument calibration (calibration dates, organization providing calibration services, and calibration schedule).

Prior to submitting any data (accompanied by a DDF), an NESDIS data submission agreement must be prepared. This agreement is a letter drafted by the ESE Data Manager specifying data types (e.g., Eulerian current data), NODC File Types (e.g., File Type 015--Eulerian Currents), a statement agreeing to submit the data in NODC format (as specified by file type), an agreement to submit a test tape, and an agreement to submit a DDF with all data submitted to NODC. This draft letter is sent to NODC where the letter is reviewed, additional conditions are appended, and the letter is signed by the NODC Director and returned to ESE for the Program Manager's signature. This letter establishes an agreement between ESE and NODC for all subsequent data submissions.

Any data not in computer-compatible form were not supposed to be digitized to make them computer compatible. The approach of submitting ROSCOP forms for all located data sets and submitting only data that were computer compatible was considered the most cost-effective approach. It ensured that future investigators would be aware of data available in the study area, but would keep the project costs within the limits of the budget.

7.0 SUMMARY

Numerous relevant publications and a few unpublished limited data sets were located during information collection. As previously discussed, this information was used extensively by the project's Principal Investigators in the synthesis of southwest Florida shelf ecosystems data. In this respect, the information collection task was very successful. Nevertheless, because resources were limited, priorities had to be established. These priorities were (in decreasing order) as follows: (1) assimilation of all available information, (2) synthesis of these data, (3) preparation of a report that provided a comprehensive physical and biological description of southwest Florida shelf ecosystems, (4) development of an annotated information systems, and (5)

NODC submissions. In reality Items 1, 2 and 3 all had the same high priority, therefore, these tasks were completed first and required the majority of the project's resources.

As previously discussed, an annotated bibliographic system was completed. Because of hardware and software limitations, the system is somewhat cumbersome to use. Nevertheless, this system does meet the requirements of MMS and is readily usable. Recently, another microcomputer program (TEAM-UP) has been identified that appears to be more powerful than PCINFO. Although it is beyond the scope of this project, MMS may wish to eventually consider converting their annotated bibliography to this system.

The submission of data to NODC was the least successful. This was due, in part, to the limited resources; however, the primary reason was the difficulty in locating the original data sets. Very quickly, information collection personnel found that even the task of locating the researchers was very time consuming. Frequently, particularly with older data sets, the researcher had moved, retired or passed away. Even if the original researcher could be located, rarely could he or she provide the information necessary to complete a ROSCOP form. In addition, the disposition of the data, its format, and whether the data had been submitted to NODC were unknown. If data were located, usually they existed on log sheets only.

Based on this experience, the project team does not recommend that valuable project resources be expended in such efforts. The benefit-to-cost ratio is low. Project resources are probably better used in locating information and then using this information in a comprehensive and detailed synthesis. With respect to NODC submissions, it is recommended that all future federally funded oceanographic work require NODC submission of any data collected.

8.0 REFERENCES CITED

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- Environmental Science and Engineering, Inc. and LGL Ecological Research Associates, Inc. 1985. Southwest Florida shelf benthic communities study year 4 annual report. A final report by Environmental Science and Engineering, Inc., and LGL Ecological Research Associates, Inc., (Contract No. 14-12-0001-30071) submitted to the Minerals Management Service, New Orleans, Louisiana. Three volumes.
- Florida Department of Administration. 1975. A selection compilation of unpublished graduate theses, titles, abstracts, and review from Florida universities relating to marine and coastal environmental studies. Report DSP-DO-27-76. 219p.
- Jones, J.I., R.E. Ring, M.O. Rinkel, and R.E. Smith, (ed.). 1973. A summary of knowledge of the eastern Gulf of Mexico. The State University System of Florida Institute of Oceanography, St. Petersburg, Florida.

Mahadevan, S., J. Sprinkel, D. Heatwole, and D.H. Wooding. 1984. A review and annotated bibliography of benthic studies in the coastal and estuarine areas of Florida. Contr. Mote Marine Lab. V.2, No. 1. 576 p.

Minerals Management Service. 1983. Final regional environmental impact statement: Gulf of Mexico. Minerals Management Service, Metairie, LA. Two volumes.

Science Applications International, Corp. 1986. Gulf of Mexico physical oceanography program final report: Years 1 and 2. Prepared for Minerals Management Service, Metairie, LA (Contract No. 14-12-0001-29158). Two volumes.

Science Applications International, Corp. 1987. Gulf of Mexico physical oceanography program final report: Year 4. Prepared for Minerals Management Service, Metairie, LA (Contract No. 14-12-0001-29158). Two volumes.

The State University System of Florida Institute of Oceanography (SUSIO). 1974. Marine environmental implications of offshore drilling in the eastern Gulf of Mexico. Proceedings of a conference, Jan.-Feb. 1974, St. Petersburg, Florida. 455p.

Woodward Clyde Consultants and Continental Shelf Associates. 1983. Southwest Florida shelf ecosystems study - year 1. Prepared for Minerals Management Service (Contract No. 14-12-0001-29142), Metairie, Louisiana. Four volumes.

Woodward Clyde Consultants and Skidaway Institute of Oceanography. 1983. Southwest Florida shelf ecosystems study: year 2 modification, hydrography. Prepared for the Minerals Management Service, Metairie, Louisiana (Contract No. 14-12-0001-29144.1). Two volumes.

Woodward Clyde Consultants and Continental Shelf Associates. 1984. Draft southwest Florida shelf ecosystems study - year 2. Prepared for the Minerals Management Service, Metairie, Louisiana (Contract No. 14-12-0001-29144). Seven volumes.

Woodward Clyde Consultants and Continental Shelf Associates, Inc. 1982. Southwest Florida shelf ecosystems Study, marine habitat atlas. Report to Minerals Management Service. Two volumes.

9.0 ANNOTATED BIBLIOGRAPHY

This document represents a hard copy of the contents of the Annotated Information System contained on a microcomputer and associated hard disk system currently installed at the MMS Gulf of Mexico Regional Office located in New Orleans, Louisiana. The purpose of this Annotated Information System (Annotated Bibliography) is to provide MMS with a working tool for cataloging information on the oceanography of the Gulf of Mexico. This system and document are designed primarily for in-house MMS use and not for general distribution to the public. Nevertheless, a limited number of copies of this document are available for distribution through NTIS.

Because this hard copy of the Annotated Bibliography is an in-house document it does not follow, nor is it required to follow, the standard MMS format. Because of the shortcomings inherent in this microcomputer system (primarily the software and the FAMULUS format), text is truncated in all fields. This results in atypical and unhyphenated word splits. This was considered acceptable in light of the system's primarily in-house use.

06/10/1987

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ACC 423

TYPE

YEAR 1973

AUTH LACKEY, J.B.;DUNCAN, T.W.;FOX, J.L.;MARKEY, J.W.;SULLIVAN, J.H;

TITL A STUDY OF THE EFFECTS OF MAINTENANCE DREDGING IN MOBILE BAY, ALABAMA ON SE
LECTED BIOLOGICAL PARAMETERS.

BIBL WATER AND AIR RESEARCH, GAINESVILLE, FL. 54 PP.

KEYW BACTERIA
DREDGING
TURBIDITY

BENTHIC COMMUNITY
HYDROGRAPHY
SUSPENDED

BIOLOGY
PLANKTON
SEDIMENT

ABST

ANNO

06/10/1987

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ACC 1100
TYPE
YEAR 1974
AUTH LANDRY, G.C.;
TITL ANALYSIS OF CERTAIN ASPECTS OF SEAWATER FOAM.

BIBL MASTER'S THESIS. UNIVERSITY OF WEST FLORIDA, PENSACOLA, FL. 62 PP.

KEYW CHLORINE COMPOUNDS LIGNIN PH
 WATER QUALITY

ABST Weekly measurements of lignin, pH, chloride and sea foam tendency and stability were made at 11 stations in Perdido and Blackwater Bays, Florida from July to December, 1972. The purpose of the study was to describe the effects of pulp mill effluent on sea foam.

ANNO

06/10/1987

ACC 4081

TYPE P

YEAR 1980

AUTH LANDRU, P.D.;PROCHASKA, F.J.;

TITL THE FLORIDA COMMERCIAL BLUE CRAB INDUSTRY: LANDINGS, PRICES AND RESOURCE PR
ODUCTIVITY.

BIBL FLORIDA SEA GRANT REP. NO. 34:1-51.

KEYW BIOLOGY

CRUSTACEA

BLUE CRAB

COMMERCIAL FISHERY

SOCIOECONOMIC

LANDINGS (POUNDS)

LANDINGS (VALUE)

ABST Blue crab production in Florida ranked third in the U.S. in 1975 with an annual volume of approximately 17 million pounds and a value of \$2.2 million.

Dockside prices have historically been higher for the total U.S. blue crab fishery, especially from 1971 to 1977. In terms of value the blue crab fishery in Florida has been a growing industry worth over 1 million annually at dockside since 1959. However, total Florida landings, cycline approximately every five years, have been on an overall declining trend since 1964. Increases in dockside prices have more than compensated for the overall decline volume. Price per pound increased 115 percent on the east coast and 123 percent on the west coast since 1970. Productivity in terms of the volume of blue crabs landed per fisherman showed an overall increase from 1970. Number of fishermen decreased at a faster rate than volume of blue crabs landed. Both coasts show similar overall upward trends in productivity per fisherman. Productivity per trap decreased since 1962 but number of traps fished per fisherman increased enough to offset the declining catch per trap. Gross monetary returns to fishermen on both coasts increased rapidly due to increased dockside prices and increased productivity per fisherman since 1970. In summary, total blue crab production in Florida declined on both coasts during the last several years. The number of fishermen, firms and traps have also declined. However, productivity per fisherman on both coasts increased during this time period. The reduction in number of fishermen was greater than the reduction in volume landed.

ANNO

06/10/1987

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ACC 2224

TYPE P

YEAR 1957

AUTH LAPINSKI, W.J.;

TITL THE DISTRIBUTION OF FORAMINIFERA OFF PART OF THE FLORIDA PANHANDLE COAST.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL.

KEYW FORAMINIFERA

DISTRIBUTION

SEDIMENT

GRAIN SIZE

TEMPERATURE

SALILNITY

DEPTH

ABST The distribution of foraminiferal fauna in the shallow water beyond the barrier islands south of Carrabelle, Florida was studied and found to be composed of typically open Gulf species. No correlation was found between the distribution of the benthonic foraminifera and the factors of temperature, salinity and depth. The total number of benthonic foraminifera in one gram of sediment was found to be greater in areas where the median grain size is generally less than 0.2 mm and where limestone crops out or is covered by only a very thin veneer of sediment. These relationships were believed to be the results of an increased food supply in these areas. With the exception of three arenaceous species, the median grain size was found to have no consistent effect on the distribution of the most common species of benthonic foraminifera.

ANNO

06/10/1987

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ACC 2111

TYPE U

YEAR 1977

AUTH LAROCK, P.A.;

TITL ADENOSINE TRIPHOSPHATE (ATP) IN THE MAFLA TRACT AREA (1975-76). UNPUBL. RE
PT. U.S. DEPT. OF INT., BLM, WASHINGTON, DC. 35 P.

BIBL

KEYW	SEDIMENT	SEASONAL	GRAIN SIZE
	ORGANIC CARBON	WATER COLUMN	ATP
	MAFLA		

ABST This report presents the results of the sediment ATP study of the Bureau of Land Management sponsored program in the Mississippi, Alabama, Florida (MAFLA) outer continental shelf. The author summarized the significant findings of the study as follows: 1) This work indicates that the ATP method can be used to effectively characterize the sediment microbes and quantify seasonal and environmental variables. 2) Sediment ATP concentrations exhibit seasonal variations with the greatest concentrations encountered in the early fall (September) with decreasing amounts found in the winter (January) and the least present in the early summer (June). 3) ATP content of sediments is directly proportional to the mean grain size distribution. ATP was found to increase as the grain size increased. 4) In the MAFLA tract area, Transects I, II, III and IV (West Florida Shelf) are similar in their ATP-grain size relationship. 5) Transect V (Northwest Florida Shelf) showed no relationship to grain size, and organic carbon. In fact, stations of this transect appear to be independent of all of the parameters measured and might possibly be governed by the overlying water column. It is known that a gyre does split off from the eastward flow from the Mississippi and move northward over Transect V. 6) Transect VI (Mississippi-Alabama Shelf) is highly variable, and has a region of greatly elevated ATP concentrations, and showed marked variation over the year. It is suggested that Mobile Bay exerts significant influence over this portion of the transect. 7) Organic carbon was found to exhibit an inverse relationship to ATP. As the organic c

ANNO

06/10/1987

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ACC 2435

TYPE P

YEAR 1984

AUTH LARSON, D.K.; RAMUS, A.P.;

TITL DISTRIBUTION OF CARIDEAN SHRIMP (DECAPODA; NATANTIS; CARIDEA) IN THE SHALLO
W WATERS OF WESTERN FLORIDA BAY.

BIBL FLA. SCI. 47(SUPPL. 1):20.

KEYW MONROE
SEAGRASS

DISTRIBUTION

SHRIMP

ABST Caridean shrimp were collected from M2 quadrats in shallow seagrass habitat bordering mangrove islands of Johnson Key Basin since November 1983. Species richness, distribution and abundance were determined. *Thor floridanus*, *Hippolyte pleurocanthus* and *Palaemonetes intermedius* were the dominants of the six species collected. *Tozema carolinense* were observed to increase at offshore sites dominated by *Thalassia testudinum*. Preliminary results indicate the greatest species richness and peak abundance (as high as 322 shrimp/sq. meter) occur at the *Halodule wrightii* and *Thalassia* transition zone.

ANNO

06/10/1987

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ACC 61

TYPE

YEAR 1983

AUTH LASSUY, D.R.;

TITL SPECIES PROFILES: LIFE HISTORIES AND ENVIRONMENTAL REQUIREMENTS (GULF OF MEXICO) - GULF MENHADEN.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON, D.C. FWS/OBS- 82/11.2. 13 PP.

KEYW BIOLOGY

COASTAL ZONE

CONTINENTAL SHELF

ECOLOGY

FISHERY

LIFE HISTORY

FISH

PELAGIC FISH

ABST

ANNO

06/10/1987

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ACC 62

TYPE

YEAR 1983

AUTH LASSUY, D.R.;

TITL SPECIES PROFILES: LIFE HISTORIES AND ENVIRONMENTAL REQUIREMENTS (GULF OF MEXICO) - SPOTTED SEA TROUT.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON, D.C. FWS/OBS-82/11.4. 14 PP.

KEYW BIOLOGY

COASTAL ZONE

CONTINENTAL SHELF

ECOLOGY

FISHERY

LIFE HISTORY

SEA TROUT

FISH

PELAGIC FISH

ABST

ANNO

06/10/1987

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ACC 63

TYPE

YEAR 1983

AUTH LASSUY, D.R.;

TITL SPECIES PROFILES: LIFE HISTORIES AND ENVIRONMENTAL REQUIREMENTS (GULF OF MEXICO) - ATLANTIC CROAKER.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON, D.C. FWS/OBS-82/11.3.

KEYW BIOLOGY

COASTAL ZONE

CONTINENTAL SHELF

ECOLOGY

FISHERY

LIFE HISTORY

FISH

ABST

ANNO

06/10/1987

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ACC 64

TYPE

YEAR 1983

AUTH LASSUY, D.R.;

TITL SPECIES PROFILES: LIFE HISTORIES AND ENVIRONMENTAL REQUIREMENTS (GULF OF MEXICO) - BROWN SHRIMP.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON, D.C. FWS/OBS-82/11.1. 15 PP.

KEYW BIOLOGY	COASTAL ZONE	CONTINENTAL SHELF
ECOLOGY	FISHERY	LIFE HISTORY
BROWN SHRIMP	SHRIMP	SHRIMP FISHERY

ABST This series of profiles about coastal aquatic species of commercial, sport, and/or ecological significance is being jointly developed and funded by the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service. It is designed to provide coastal managers, engineers, and field biologists with an introduction to the subject species and a synopsis of the information necessary to relate expected changes (associated with coastal development) in the physiochemical characteristics of estuaries to changes in these selected biological populations. Each profile includes brief sections on taxonomy and identification followed by a narrative of life history, environmental requirements, ecological role, and (where applicable) the fishery of the subject species. A three-ring binder is used for this series to facilitate additions as new profiles are prepared.

ANNO

06/10/1987

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ACC 2225

TYPE P

YEAR 1976

AUTH LAUGHLIN, R.A.;

TITL FIELD AND LABORATORY AVOIDANCE REACTIONS OF BLUE CRABS (CALLINECTES SAPIDUS
) TO STORMWATER RUNOFF.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL. 102 P.

KEYW BLUE CRAB
DO
BEHAVIOR

TEMPERATURE
TURBIDITY

SALINITY
RIVER DISCHARGE

ABST Avoidance responses of blue crabs (*Callinectes sapidus*) to stormwater runoff were investigated in laboratory and field conditions in Apalachicola Bay, Florida. Laboratory experiments demonstrated significant avoidance of crabs to acidic runoff and experimentally-reduced pH test water. In the field, large crabs were absent from acidic runoff areas, but small crabs were abundant. Factors other than pH were believed to partially regulate field distribution of blue crabs.

ANNO

06/10/1987

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ACC 2226

TYPE P

YEAR 1978

AUTH LAUTHLIN, R.A.;CRIPE, C.R.;LIVINGSTON, R.J.;

TITL FIELD AND LABORATORY AVOIDANCE REACTIONS BY BLUE CRABS (CALLINECTES SAPIDUS) TO STORMWATER RUNOFF.

BIBL TRANS. AM. FISH. SOC. 107:78-86.

KEYW BLUE CRAB
DO
BEHAVIOR

TEMPERATURE
TURBIDITY

SALINITY
RIVER DISCHARGE

ABST Avoidance responses of blue crabs (*Callinectes sapidus*) to stormwater runoff were investigated in laboratory and field conditions in Apalachicola Bay, Florida. Laboratory experiments demonstrated significant avoidance of crabs to acidic runoff and experimentally-reduced pH test water. In the field, large crabs were absent from acidic runoff areas, but small crabs were abundant. Factors other than pH were believed to partially regulate field distribution of blue crabs.

ANNO

06/10/1987

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ACC 2268

TYPE P

YEAR 1983

AUTH LAWRENCE, J.M.;

TITL ABSORPTION OF NUTRIENTS OF THE CORAL POCILLOPORA DAMICORNIS (L.) BY THE ECHINOID EUCIDARIS THOUARSII (VAL.).

BIBL FLA. SCI. 46(SUPPL. 1):20-21.

KEYW NUTRIENT
REEF

CORAL

ECHINODERMATA

ABST The absorption efficiencies, levels, and rates for the echinoid, *Eucidaris thouarsii*, and the coral, *Pocillopora damicornis*, are given for carbohydrates, proteins, and lipids. Although the efficiency of digestion absorption of organic constituents of the coral ingested is high, *E. thouarsii* must consume relatively large quantities of the coral to meet its nutritional requirements.

ANNO

06/10/1987

ACC 4082

TYPE U

YEAR 1977

AUTH LEAK, J.C.;

TITL DISTRIBUTION AND ABUNDANCE OF CARANGIDAE (PISCES, PERCIFORMES) LARVAE IN THE EASTERN GULF OF MEXICO, 1971-1974.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI, MIAMI, FL. 83 P.

KEYW BIOLOGY

RECRUITMENT

ZOOPLANKTON

WATER COLUMN

FISH

REPRODUCTION

SPAWNING AREA

FISH LARVAE

ICHTHYOPLANKTON

SEASONALITY

DISTRIBUTION

ABST Larvae of the family Carangidae were studied from plankton collections made in 17 cruises to the eastern Gulf of Mexico from 1971 to 1974 to determine distribution and abundance, to delineate spawning areas and seasons, and to study some aspects of early life histories. *Decapterus punctatus* was the most abundant carangid larva in the eastern Gulf of Mexico. Its mean abundance ranged from 2.0 larvae under 10 sq. meter of sea surface in February 1972 to 43.0 larvae under 10 sq. meter in September 1972. *D. punctatus* spawns year-round at surface temperatures of 20-30 degrees C, over the entire West Florida Shelf from May to November, but only south of 26 degrees N during January-February. During spring-summer it spawns primarily from nearshore to the 100 m isobath and during fall-winter primarily between the 30 m and 100 m isobaths. Larvae of *Trachurus lathami*, *Chloroscombrus chrysurus*, and *Caranx* spp. were seasonally abundant. *T. lathami* spawns from November to May at surface temperatures of 20-25 degrees C beyond the 30 m isobath, where its maximum mean abundance was 4.3 larvae under 10 m square in 1973. *C. chrysurus* spawns from May to November at surface temperatures of 24-30 degrees C within the 50 m isobath where its maximum mean abundance was 4.3 larvae under 10 sq. meters in August 1971. *Caranx* spp. larvae occurred beyond the 50 m isobath year-round where its maximum mean abundance was 3.1 larvae under 10 sq. meters in June-July 1973. Larvae and juveniles of *Caranx crysos*, *Caranx hippos* or *latus*, *Caranx bartholomaei*, *Elagatis bipinnulata*, *Vomer setapinnis*, *Selene vomer*, *Alectis crinitus*, *Oligoplites saurus*, *S*

ANNO

06/10/1987

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ACC 2112

TYPE P

YEAR 1980

AUTH LEE, W.Y.; MORRIS, A. & BOATWRIGHT, D.;

TITL MEXICAN OIL SPILL: A TOXICITY STUDY OF OIL ACCOMMODATED IN SEA WATER ON MAR
INE INVERTEBRATES.

BIBL MAR. POLL. BULL. 11(8):231-234.

KEYW OIL SPILL

INVERTEBRATE

ZOOPLANKTON

ABST The blowout of the Mexican Ixtoc oil well on June 3, 1979, has resulted in the contamination of Texas coastal waters. Two series of laboratory experiments were carried out on the acute toxicity of oil accommodated in seawater (OAS) made from spilled Mexican oil. In one experiment, mixed natural zooplankton were immersed in the OAS for 96 hrs. A vital staining method was used to distinguish the dead from live individuals. In another experiment, a subtidal amphipod, *Parhyale hamaiensis* was exposed to the OAS for 1 week. Mortality was determined daily during the experiments. Results showed that even at concentrations of up to 40% OAS, the aged oil was not acutely toxic to the test invertebrate species.

ANNO

06/10/1987

.....
ACC 2239
TYPE P
YEAR 1971
AUTH LEFFLER, C.W.;
TITL SOME TEMPERATURE EFFECTS ON GROWTH AND METABOLISM OF JUVENILE BLUE CRABS, C
ALLINECTES SAPIDUS (RATHBUN).

BIBL MASTER'S THESIS. UNIVERSITY OF FLORIDA, GAINESVILLE, FL. 54 P.

KEYW BLUE CRAB TEMPERATURE SALINITY
 GROWTH METABOLISM

ABST Metabolic rate and blood osmolality was determined for juvenile blue crabs (*Callinectes sapidus*) grown in the laboratory under various temperature/salinity conditions. Growth increased with temperature, and increase in size per molt was found to be lower at higher temperatures. Growth was not affected by salinities between 15 and 27 ppt. Blood osmolality of juvenile blue crabs was more closely associated with temperature than salinity. Results were applied to the effects of heated discharge from electrical generators on blue crabs living in the impacted area.

ANNO

06/10/1987

.....
ACC 2240

TYPE P

YEAR 1974

AUTH LEFFLER, C.W.;

TITL IONIC AND OSMOTIC REGULATION, METABOLIC RESPONSE TO SALINITY, AND PHYSIOLOGICAL RESPONSE TO PESTICIDES OF JUVENILE CALLINECTES SAPIDUS RATHBUN.

BIBL PH.D. DISSERTATION. UNIVERSITY OF FLORIDA, GAINESVILLE, FL. 58 P.

KEYW SALINITY
PESTICIDE

BLUE CRAB
METABOLISM

SALINITY
POLLUTION

ABST This two part study investigated the osmotic and ionic regulation and the metabolic response to salinity of juvenile *Callinectes sapidus* and the effects of ingested DDT and Mirex. Hemolymph sodium and chloride concentrations increased with increasing external concentrations. Internal K⁺ concentrations were always higher than external concentrations within the range tested. Juveniles were found to be metabolic regulators. The crabs are sensitive to DDT and Mirex with results showing metabolic rate elevations, reduction in critical oxygen concentration, inhibition of the autotomy reflex, and reduced carapace thickness.

ANNO

06/10/1987

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ACC 4324

TYPE P

YEAR 1977

AUTH LEVERSON, V.H.; SINCLAIR, P.C.; GOLDEN, J.H.;

TITL WATERSPOUT WIND, TEMPERATURE, AND PRESSURE STRUCTURE DEDUCED FROM AIRCRAFT MEASUREMENTS.

BIBL MONTHLY WEATHER REVIEW, BOSTON 105(6):725-733.

KEYW WIND

PRESSURE

METEOROLOGY

ABST During Sept. 1974, in the Lower Florida Keys, the first successful penetration of mature waterspouts were accomplished by a specially instrumented research aircraft. Throughout the course of each penetration, the measurement system recorded the temperature, the pressure, and the three-dimensional velocity field near and within the visible funnel. Multiple penetrations of both cyclonic and anticyclonic waterspouts in various life-cycle stages were achieved. The results indicate that the waterspout funnel structure exhibits 1) a warm central core region, 2) positive vertical velocities of 5-10 m sec. SUPER-SUPER 1 outside of the warm core, and 3) tangential velocities and horizontal pressure gradients with characteristics similar to, but with magnitudes greater than those of the dust devil. A scale analysis of each term in the governing equations of motion suggests a simplified set of modelling equations. The simple Rankine-combined vortex model with cyclostrophic flow explains approximately 75% of the total measured pressure deficit. This compares favorably with Sinclair's (1966, 1973) earlier result for the dust devil vortex.

ANNO

06/10/1987

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ACC 645

TYPE

YEAR 1981

AUTH LEWIS, P.L.; SNYDER, C.;

TITL HABITAT MITIGATION AND RESTORATION: A COASTAL MANAGER'S DILEMMA.

IN: J.R. KELLY, ED. SYMPOSIUM ON MISSISSIPPI SOUND. P. 39-43.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP-81-007.

KEYW COASTAL ZONE
SOCIOECONOMIC

HABITAT
WETLAND

MANAGEMENT

ABST

ANNO

06/10/1987

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ACC 2436
TYPE P
YEAR 1980
AUTH LEWIS, R.R.; PHILLIPS, R.C.;
TITL EXPERIMENTAL SEAGRASS MITIGATION IN THE FLORIDA KEYS.

BIBL IN: D.P. COLE (ED.) WETLANDS RESTORATION AND CREATION. PROC. OF THE SEVENTH
ANNUAL CONFERENCE, 1980 MAY 16-17, TAMPA, FL. 294 P.
KEYW MONROE SEAGRASS

ABST Plugs and short shoots of *Thalassia testudinum*, *Halodule wrightii* and *Syringodium filiforme* were transplanted at Craig Key and were monitored for two years. In addition, seeds of *Thalassia* were planted in the field and laboratory, and laboratory reared seedlings were moved to the site. Results of the project are presented.

ANNO

ACC 2298

TYPE P

YEAR 1975

AUTH LINCER, J.L.;

TITL THE ECOLOGICAL STATUS OF DONA AND ROBERT'S BAYS AND ITS RELATIONSHIP TO COW
PEN SLOUGH AND OTHER POSSIBLE PERTURBATIONS.

BIBL MOTE MARINE LABORATORY, SARASOTA, FL. FINAL REPT. TO BOARD OF COUNTY
COMMISSIONERS, SARASOTA COUNTY. 264 P.

KEYW SARASOTA	HYDROGRAPHY	CHEMISTRY
SUSPENDED	CHLOROPHYLL	INVERTEBRATES ALGAE
DIVERSITY	TURBIDITY	SEAGRASS
TEMPERATURE	DO	DEPTH
REDOX		

ABST A study of Dona and Robert's Bays was conducted including the following parameters: hydrography, sedimentology, water chemistry, suspended solids, chlorophyll, and plankton, bacteria, aerial infrared and historic photography, pesticides, benthic invertebrates and plants (with emphasis on marine benthic algae). Species diversity of benthic invertebrates was shown to be directly correlated with salinity fluctuations. Freshwater runoff resulted in extremely low salinities and high suspended solids. The Intracoastal Waterway was also shown to provide an effective salinity buffer due to its contained volumes of seawater. It was determined that turbidity was caused, at least in part, by the lack of benthic seagrasses, which were absent due to wide fluctuations in salinity. The replacement of fringe plants (mangroves) by seawalls has also been a factor in the increased salinity.

ANNO

06/10/1987

.....
ACC 713
TYPE
YEAR 1977
AUTH LINDALL, W.H.; SALOMAN, C.H.;
TITL ALTERATION AND DESTRUCTION OF ESTUARIES AFFECTING FISHERY RESOURCES OF THE
GULF OF MEXICO.

BIBL MAR. FISH. REV.

KEYW BIOLOGY DREDGING ESTUARY
 FISHERY POLLUTION

ABST Both the commercial and recreational fishing industries of the Gulf of Mexico are overwhelmingly dependent on estuaries. About 90 percent of the commercial catch and 70 percent of the recreational catch are made up of species that are estuarine dependent. Man's alteration of estuaries is threatening these fishery resources. Data from recently published inventories of major natural and man-made estuarine features of the five gulf coastal states indicated that the total gulf estuarine area is 13,965,910 acres, including 7,891,611 acres of open-water area and 6,075,299 acres of emergent tidal vegetation. Submerged grass beds total 796,796 acres and live oyster beds amount to 158,611 acres. Major man-made alterations include 4,446 miles of federally maintained navigation channels, 138,458 acres of fill, and 795,609 acres closed to shell fishing because of pollution.

ANNO

06/10/1987

.....
ACC 2358

TYPE P

YEAR 1974

AUTH LINDALL, W.N., JR.; HALL, J.R.; FABLE, W.A., JR.; COLLINS, L.A.;

TITL FISHES AND COMMERCIAL INVERTEBRATES OF THE NEARSHORE AND ESTUARINE ZONE BETWEEN CAPE ROMANO AND CAPE SABLE, FLORIDA.

BIBL NTIS PB235-215.

KEYW COLLIER
INVERTEBRATE
DO
STONE CRAB

FISH
SALINITY
PINK SHRIMP
FISHERY

BENTHIC
TEMPERATURE
BLUE CRAB
COMMERCIAL FISHERY

ABST Quarterly samples of fish and benthic invertebrates were collected from the nearshore and estuarine zone between Cape Romano and Cape Sable, Florida, between May 1971 and February 1972. Six species of commercial invertebrates and 114 species of fish were collected with beach seine and otter trawl from 35 stations located in inland waters and to 10 miles in the Gulf of Mexico. Inshore stations exhibited higher yields than offshore stations. A systematic account of all species is provided.

ANNO

06/10/1987

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ACC 2437
TYPE P
YEAR 1974
AUTH LINDBERG, S.E.;HARRISS, R.C.;
TITL MERCURY-ORGANIC MATTER ASSOCIATIONS IN ESTUARINE SEDIMENT AND INTERSTITIAL
WATER.

BIBL ENVIR. SCI. TECHNOL. 8:459-462.

KEYW MONROE	SEDIMENT	ORGANIC CARBON
SALINITY	HEAVY METAL	MERCURY

ABST Significant associations between sediment Hg and sediment organic matter and between dissolved interstitial Hg and dissolved organic carbon were presented. Mercury in sediments and interstitial water occurs at higher concentrations in the Everglades than in Mobile Bay, which receives anthropogenic mercury effluents. When normalized to organic content of the sediment or dissolved organic carbon concentration in pore water, higher relative mercury concentrations were shown to occur in Mobile Bay.

ANNO

06/10/1987

.....
ACC 2438

TYPE P

YEAR 1977

AUTH LITTLE, E.J., JR.;

TITL OBSERVATIONS ON RECRUITMENT OF POSTLARVAL SPINY LOBSTERS, PANULIRUS ARGUS,
TO THE SOUTH FLORIDA COAST.

BIBL FLA. MAR. RES. PUBL. NO. 29, 35 P.

KEYW SPINY LOBSTER
SALINITY

RECRUITMENT
TEMPERATURE

FOULING

ABST Data on recruitment taken variously at several localities and an examination of natural fouling communities was summarized. Post larvae were collected during all months, but recruitment peaks were more frequent during spring and fall except in the lower Florida Keys where summer peaks were occasionally noted. Reduced salinity may have been a factor in recruitment decreases due to freshwater runoff. Most larvae were more abundant in nearshore shallow habitats than in deeper channels. It was suggested that the amount of light may exert an inhibitory effect upon recruitment, but that normal changes in temperature and salinities probably do not greatly affect recruitment magnitude.

ANNO

06/10/1987

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ACC 2439
TYPE P
YEAR 1980
AUTH LITTLE, E.J., JR.;MILANO, G.R.;
TITL TECHNIQUES TO MONITOR RECRUITMENT OF POSTLARVAL SPINY LOBSTERS, PANULIRUS A
RGUS, TO THE FLORIDA KEYS.

BIBL FLA. MAR. RES. PUBL. NO. 37. 16 P.

KEYW MONROE	RECRUITMENT	SPINY LOBSTER
FOULING	TEMPERATURE	SALINITY

ABST Monitoring recruitment of postlarval spiny lobster in the Florida Keys using floating artificial habitat collectors was most successful on collectors with at least two months accumulation of fouling organisms. Peak monthly settlement varied between new moon and first quarter periods. Sampling of two collectors at 2-3 day intervals was determined to sufficiently indicate peak recruitment and relative abundance at selected stations. Combination of several sites depicted recruitment trends better than single sampling sites. Significantly greater recruitment of spiny lobsters occurred during spring. Abnormally high recruitment followed a dramatic temperature decrease (to ca. 12.5 degrees C) during January 1977; an unusually low recruitment during June 1978 was unexplained. Other decapod crustaceans associated with the artificial habitats had no obvious effect on spiny lobster settlement.

ANNO

06/10/1987

.....
ACC 4084
TYPE P
YEAR 1972
AUTH LITTLE, E.J., JR.;
TITL TAGGING OF SPINY LOBSTERS (PANULIRUS ARGUS) IN THE FLORIDA KEYS, 1967-1969.

BIBL FLA. DEPT. NAT. RES. SPEC. SCI. REP. NO. 31, 23 P.

KEYW BIOLOGY CRUSTACEA SPINY LOBSTER
 COMMERCIAL FISHERY TAGGING

ABST A total of 2,415 *Panulirus argus* were tagged with vinyl "spaghetti" tags between November 1967 and August 1969 in the Florida Keys and 118 (4.8%) were recovered. Movements were generally of ten miles or less, usually towards offshore reefs, and no long distance migratory patterns were evident. Growth rate was quite variable and was greatest in small spiny lobsters.

ANNO

06/10/1987

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ACC 349

TYPE

YEAR 1974

AUTH LIVINGSTON, G.P.;

TITL EXAMINATION OF THE RECURRENT SPECIES GROUPS AND ABUNDANCES OF THE CALANOID
COPEPODA IN THE EPIPELAGIC WATERS OF THE GULF OF MEXICO.

BIBL MASTER'S THESIS. TEXAS A&M UNIVERSITY. COLLEGE STATION, TX. 100 PP.

KEYW ZOOPLANKTON

CRUSTACEAN

ABST Fifty-six stations in the epipelagic waters of the Gulf of Mexico were examined for adult calanoid copepods. Ninety-six species representing 45 genera in 19 families were collected in February and March, 1967 during cruise 12 by the R/V Geronomo. Data include frequency of occurrence of each species at each station.

ANNO

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ACC 752

TYPE

YEAR 1976

AUTH LIVINGSTON, R.J.; KIBYLINSKI, G.J.; LEWIS, F.G. III; SHERIDAN P.F.;

TITL LONG-TERM FLUCTUATIONS OF EPIBENTHIC FISH AND INVERTEBRATE POPULATIONS IN APALACHICOLA BAY, FL.

BIBL FISH. BULL. 74(2):311-321.

KEYW INVERTEBRATA
ECOLOGY

BENTHIC COMMUNITY
FISH

BIOLOGY
POPULATION

ABST A 3-yr study was made concerning seasonal changes in the biota of Apalachicola Bay. The Apalachicola River causes a temporal progression of changes of various environmental parameters in the bay such as salinity, turbidity, nutrients, and detritus levels. Fishes were more widespread in their distribution throughout the bay than invertebrates. This was thought to be related to trophic response and habitat preference. High levels of relative dominance prevailed for both groups with the top three species of each group accounting for more than 80% of the total number of individuals taken. Peak levels of monthly abundance of various dominant fish species tended not to overlap through a given 12-mo. period. Invertebrate species abundance usually reached peak levels during summer and fall periods. The seasonal appearance and distribution of organisms in the Apalachicola Bay system was comparable to that found in other estuaries in the northern Gulf of Mexico. The temporal and spatial distribution of estuarine fishes and invertebrates was associated with species-specific reproductive cycles, trophic relationships, and habitat preferences. The Apalachicola estuary was viewed as a seasonally stable system, with regular temporal fluctuations of the biota through each annual cycle.

ANNO

06/10/1987

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ACC 888

TYPE

YEAR 1972

AUTH LIVINGSTON, R.J.; ET AL.;

TITL THE EFFECTS OF DREDGING AND EUTROPHICATION ON MULAT - MULATTO BAYOU.

BIBL FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL. RESEARCH NO. 111308016.

KEYW CHLOROPHYLL

CURRENTS

DEMERSAL FISH

DISSOLVED OXYGEN

LIGHT ATTENUATION

BOD

DREDGING

TURBIDITY

ABST The effects of dredging and eutrophication of Mulat - Mulatto Bayou, off Escambia Bay, Pensacola, Florida, on water quality and biological populations was studied jointly by Florida State University and the University of Western Florida from May 1971 to June 1972.

ANNO

06/10/1987

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ACC 2227

TYPE P

YEAR 1976

AUTH LIVINGSTON, R.J.;CRIPE, C.R.;LAUGHLIN, R.A.;LEWIS, F.G., III;

TITL AVOIDANCE RESPONSES OF ESTUARINE ORGANISMS TO STORMWATER RUNOFF AND PULP MILL EFFLUENTS.

IN: ESTUARINE PROCESSES, VOL. 1. USES, STRESSES, AND ADAPTATION TO THE ESTUARY.

BIBL ACADEMIC PRESS, INC., NEW YORK. P. 313-331.

KEYW BLUE CRAB
BEHAVIOR
ESTUARY

POLLUTANT
POLLUTION

RIVER DISCHARGE
WATER QUALITY

ABST Laboratory experiments to test avoidance reactions of the blue crab (*Callinectes sapidus*) and pinfish (*Lagodon rhomboides*) to specific pollutants were correlated with field responses of these organisms to point sources of the pollutants in Apalachicola and Apalachee Bays. Juvenile and adult blue crabs avoid runoff stormwater with pH levels below 6.0 under laboratory conditions. In field studies, although adult crabs were not found in such affected areas, juveniles were actually more abundant in areas characterized by increased runoff and low pH. Pinfish demonstrated laboratory avoidance reactions to low concentrations of bleached kraft mill effluent (0.1% by volume), but did not exhibit expected field distributions. Factors other than a avoidance response, such as interspecific and intraspecific competition, predation, and habitat alteration, were considered to contribute to field distributions of experimental organisms.

ANNO

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ACC 4083
 TYPE P
 YEAR 1970
 AUTH LLEIPPER, D.F.;
 TITL A SEQUENCE OF CURRENT PATTERNS IN THE GULF OF MEXICO.

BIBL J. GEOPHYS. RES. 75:637-657.

KEYW CIRCULATION	CURRENTS	HYDROGRAPHY
EDDY FORMATION	INTRUSION	LOOP CURRENT
PHYSICAL	OCEANOGRAPHY	

ABST The primary current in the Gulf of Mexico is in the form of a loop entering through the Yucatan Channel and eventually leaving through the Florida Straits. It usually transports more than 25 million cubic meters/sec of water at 50 to 200 cm/sec. Although it retains its basic characteristics along the line of flow, it is known to be highly variable in position. Little information on the exact nature of the variations is published. A series of eight cruises of about 2-weeks duration each was conducted by the author over a 30-month period in the different seasons. The primary current was crossed forty times. Five of these cruises supplemented by three others having somewhat differing objectives provided a series of eight cruises in one 16-month period beginning in July 1965. A reasonable sequence of current patterns for the primary current loop is indicated by the observations. The variations in pattern are compared with those indicated by data available from other time periods. The flow is well represented year-around by the topographies of 22 degrees C isothermal surfaces. This permits a simplified analysis and allows conclusions about the current systems to be drawn from cruises on which only limited data were collected. From July 1965 through December an eastward flow along the coast of Cuba strengthened and became the start of a "spring intrusion" into the gulf. By August 1966 the intrusion had reached 760 km across the Gulf and a "fall spreading" into the western gulf had begun. In July and August 1965 the northern end of the loop became a separate eddy, a detached exterior flow.

ANNO

06/10/1987

.....
ACC 4085
TYPE P
YEAR 1941
AUTH LONGLEY, W.H.;HILDEBRAND, S.F.;
TITL SYSTEMATIC CATALOGUE OF THE FISHES OF TORTUGAS, FLORIDA.

BIBL PAPERS FROM THE TORTUGAS LABORATORY, CARNEGIE INSTITUTE, WASHINGTON,
DC. (34):331 P.

KEYW BIOLOGY	DEMERSAL FISH	PELAGIC FISH
REEF	ECOLOGY	SYSTEMATIC
REEFFISH	FISHERY	

ABST A systematic catalog of Tortugas fishes was assembled from twenty-five year
s of collections and observations. The investigations revealed several new
genera and 29 new species. One hundred and six families were discussed.
Important information pertaining to life history, color patterns and ecolog
y of shallow water fishes resulted from underwater observations.

ANNO

06/10/1987

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ACC 165
TYPE
YEAR 1982
AUTH LOPEZ, A.M.;PRISTAS, P.J.;
TITL RECREATIONAL BILLFISH SURVEY NEWSLETTER -- OCEANIC GAMEFISH INVESTIGATIONS.

BIBL NATIONAL MARINE FISHERIES SERVICE, SOUTHEAST FISHERIES CENTER, OCEAN PELAGICS TEAM, MIAMI, FL.

KEYW BILLFISH	BIOLOGY	CONTINENTAL SHELF
FISHERY	FISHERY STATISTICS	PELAGIC FISH
RECREATION	RECREATIONAL FISHERY	

ABST The National Marine Fisheries Service's (NMFS) Miami Laboratory has been conducting surveys of recreational billfishing in the Gulf of Mexico since 1971 and in the Atlantic Ocean and Caribbean Sea since 1972. These surveys were initiated to monitor trends in billfish catch and effort as part of a commitment by the United States to participate in cooperative international investigations through the International Commission for Conservation of Atlantic Tunas (ICCAT), centered in Madrid, Spain. The ICCAT is responsible for coordinating and guiding scientific investigations on stocks of tunas and tuna-like fishes, including billfishes, in the Atlantic Ocean and adjacent seas. Data collected through the NMFS surveys are used in population modeling and in annual assessments of the status of stocks of Atlantic billfishes, and these results are presented to the international scientific community at ICCAT each year. In addition to the annual monitoring of recreational billfishing throughout the Western North Atlantic, Caribbean Sea, and Gulf of Mexico, NMFS has initiated special surveys designed to determine the total catch of billfishes by U.S. recreational fishermen. One such survey was conducted in 1977 and 1978 and follow-up surveys were conducted in the Gulf of Mexico in 1981 and in the Atlantic, Caribbean Sea, and Gulf of Mexico in 1983. The recreational billfish surveys described in this newsletter are part of a larger research program conducted by the Miami Laboratory's Oceanic Pelagics Team.

ANNO

06/10/1987

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ACC 2243

TYPE P

YEAR 1975

AUTH LOWE, E.;

TITL ABSORPTION EFFICIENCIES, FEEDING RATES AND FOOD PREFERENCES OF LYTECHINUS V
ARIEGATUS (ECHINODERMATA: ECHINOIDEA) FOR SELECTED MARINE PLANTS.

BIBL MASTER'S THESIS, UNIVERSITY SOUTH FLORIDA, TAMPA, FL.

KEYW DRIFT ALGAE

ECHINODERM

FEEDING HABIT

ABST A feeding study of the sea urchin, *Lytechinus variegatus*, revealed that it consumes primarily substratum and various plant materials, particularly grass blade litter and drift algae. The absorption efficiencies of *L. variegatus* for various organic materials are summarized. The feeding rate of *L. variegatus* was found to be similar to that of other echinoids. It is considered a general list, selecting foods which are easily available and ingested.

ANNO

06/10/1987

.....
ACC 548
TYPE
YEAR 1964
AUTH LUDWICK, J.C.;
TITL SEDIMENTS IN NORTHEASTERN GULF OF MEXICO.

IN: R.L. MILLER, ED. PAPERS IN MARINE GEOLOGY. P. 204-238.

BIBL MACMILLAN COMPANY, NEW YORK, NY.

KEYW CONTINENTAL SHELF DISTRIBUTION GEOLOGY
GRAIN SIZE

ABST Investigators of continental shelf sediments in the northern Gulf of Mexico have concluded that changes in late Quaternary sea level have strongly influenced patterns and kinds of surficial sediments and fauna. The purpose of this paper is to describe and interpret the distribution pattern of modern surficial sediment deposits on the continental shelf and nearshore areas. Seafloor samples were taken along 11 sampling profiles from 1952 to 1954. Utilizing these cored and dredged samples a recent history of sedimentation is reconstructed.

ANNO

06/10/1987

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ACC 2360

TYPE P

YEAR 1975

AUTH LUGO, A.E.;EVINK, G.;BRINSON, M.M.;BRACE, A.;SNEDAKER, S.C.;

TITL DIURNAL RATES OF PHOTOSYNTHESIS, RESPIRATION, AND TRANSPIRATION IN MANGROVE
FORESTS OF SOUTH FLORIDA.

IN: TROPICAL ECOLOGICAL SYSTEMS, M.F.B. GOLLEY & E. MEDIA (EDS.).

BIBL SPRINGER-VERLAG, NEW YORK: 335-350.

KEYW COLLIER

COASTAL

PHOTOSYNTHESIS

PRIMARY PRODUCTIVITY

ABST The 4 Florida mangrove species, *Rhizophora mangle*, *Avicennia nitida* (germinans), *Laguncularia racemosa*, *Conocarpus erecta* were measured for carbon dioxide exchange and transpiration. Specimens were collected from Rookery Bay. Trees were divided into compartments and studied on a diurnal basis to identify magnitudes and possible zonation of photosynthesis, respiration, and transpiration rates. Results show that, in part, zonation is due to adaptations that take advantage of auxiliary energy sources thereby affecting respiration and transpiration rates.

ANNO

06/10/1987

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ACC 2359
TYPE P
YEAR 1974
AUTH LUGO, A.E.; SNEDAKER, S.C.;
TITL PROPERTIES OF A MANGROVE FOREST IN SOUTHERN FLORIDA.

IN: THE BIOLOGY AND MANAGEMENT OF MANGROVES. G.E. WALSH, S.C.
SNEDAKER & H.J. TEAS (EDS.). P. 170-212.

BIBL UNIVERSITY OF FLORIDA, GAINESVILLE, FL.

KEYW COLLIER	PHYSICAL	CHEMICAL
METEROLOGY	LIGHT	TEMPERATURE
DO	SALINITY	FLORA

ABST The ecology of a mangrove forest at Rookery Bay was studied from August 1971 to February 1973. Measurements were made of composition and growth of the vegetation, gas exchange, water flows, and the carbon budget. Many physical and chemical parameters were measured and correlated with the biological results. The forest was divided into 2 vegetation zones, the fringe and basin mangrove zones, according to physiological and morphological differences caused by environmental conditions.

ANNO

.....
ACC 119
TYPE
YEAR 1981
AUTH LUKENS, R.R.;
TITL ICHTHYOFAUNA COLONIZATION OF A NEW ARTIFICIAL REEF IN THE NORTHERN GULF OF MEXICO.

BIBL GULF RES. REP. 7(1):41-46.

KEYW ARTIFICIAL REEF BIOLOGY COLONIZATION
 FISH ATTRACTION FISH ICHTHYOFAUNA

ABST Ichthyofaunal colonization of a new artificial reef was monitored from June 1975 through September 1977. Direct observations were accomplished using SCUBA. Theories of colonization and species equilibrium of islands and islandlike habitats were applied to the colonization data from the artificial reef. Sixty species of fishes from 33 families were recorded at the reef. Fifty-two percent of these species were primary reef fishes and 48% were secondary. Colonization data were produced only from the occurrence of primary reef fish. Data indicate that ichthyofaunal communities in the northern Gulf of Mexico are heavily influenced by seasonal changes in temperature, and that colonization by reef fish in that area does not conform to theories of immigration and extinction for island biotas. These results concur with similar work conducted on reef ichthyofauna in the eastern Gulf of Mexico.

ANNO

06/10/1987

.....
ACC 172
TYPE
YEAR 1975
AUTH LUKENS, R.R.;
TITL THE SUCCESSION OF ICHTHYOFAUNA ON A NEW ARTIFICIAL REEF IN THE NORTHERN GULF OF MEXICO.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP-75-027.

KEYW ARTIFICIAL REEF BIOLOGY FISH
 STATISTICAL ANALYSIS ICHTHYOFAUNA

ABST A study was conducted from July, 1975, through October, 1977, to monitor the succession of ichthyofauna on a new artificial reef in the northern Gulf of Mexico. Sixty species of fish from 33 families were recorded at the study reef. The Shannon-Weiner species diversity index for the study ichthyofauna ranged from .407 to .937, exhibiting a positive correlation with seasonal changes in temperature. Values calculated for species richness, evenness and dominance support the Shannon-Weiner index results. Fifty-four species from that site ranged from 0.000 to 0.809. No pattern of increase or correlation with seasons was indicated at the control. Again the Shannon-Weiner index results were supported by indices of species richness, evenness, and dominance. Fifty-eight percent of the species reported from the experimental reef were primary reef fish. The control site revealed only 15 percent of species in the primary reef fish group. Secondary reef fish were predominant at the control site with 48 percent. Colonization at the experimental reef was effected by decreasing water temperatures in winter periods causing several species of fish to be seasonally absent from the reef fauna. The majority of those species returned with the advent of warmer water temperatures. The colonization-decolonization rate curves inadequately illustrated true colonization and decolonization when recurrent species were given the same importance as new species. If recurrent species are not considered, the colonization-decolonization curves more accurately describe actual colonization and decolonization. The modified colonization rate curve conforms to

ANNO

06/10/1987

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ACC 446

TYPE

YEAR 1981

AUTH LUNZ, J.D.;HORSTMANN, H.L.;

TITL ANIMAL SUBSTRATE RELATIONSHIPS AND PRODUCTIVITY OF INVERTEBRATE MACROBENTHOS OF MISSISSIPPI SOUND AND ADJACENT COASTAL AREAS; A BIBLIOGRAPHY WITH ABSTRACTS.

BIBL U.S. ARMY CORPS OF ENGINEERS, WATERWAYS EXPERIMENT STATION, VICKSBURG, MS.
MISCELLANEOUS PAPER EL-81-12.

KEYW INVERTEBRATA

BENTHIC COMMUNITY

BIBLIOGRAPHY

BIOLOGY

ECOLOGY

PRODUCTIVITY

SUBSTRATE

ABST

ANNO

06/10/1987

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ACC 795

TYPE

YEAR 1982

AUTH LUNZ, J.D.;KENDALL, D.R.;

TITL BENTHIC RESOURCES ASSESSMENT TECHNIQUE, A METHOD FOR QUANTIFYING THE EFFECTS OF BENTHIC COMMUNITY CHANGES ON FISH RESOURCES.

BIBL OCEANS, SEPTEMBER 1982: 1021-1027.

KEYW INVERTEBRATA
BIOLOGY
FISH

BENTHIC COMMUNITY
STATISTICS

BENTHOS
RESOURCE

ABST

ANNO

06/10/1987

.....
ACC 2440
TYPE P
YEAR 1966
AUTH LYNTS, G.W.;
TITL RELATIONSHIP OF SEDIMENT-SIZE DISTRIBUTION TO ECOLOGIC FACTORS IN BUTTONWOOD SOUND, FLORIDA BAY.

BIBL J. SEDIMENT. PETROL. 36:66-74.

KEYW MONROE	SEDIMENT	DEPTH
TEMPERATURE	SALINITY	

ABST Some ecological factors in Buttonwood Sound were studied in relation to the sediment-size distribution. Physical/chemical factors studied included depth, pH, temperature, salinity and Eh. Statistical analysis show that ecological factors were not linearly related to sediment-size nor amongst themselves. Sediment distribution is largely related to turtle grass occurrence.

ANNO

06/10/1987

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ACC 2441
TYPE P
YEAR 1971
AUTH LYNTS, G.W. ;
TITL DISTRIBUTION AND MODEL STUDIES ON FORAMINIFERA LIVING IN BUTTONWOOD SOUND,
FLORIDA BAY.

BIBL MIAMI GEOL. SOC. MEM. 1:73-115.

KEYW MONROE	FORAMINIFERA	DEPTH
TEMPERATURE	SALINITY	SEDIMENT
GRAIN SIZE		

ABST Environmental factors influencing foraminiferal species distribution in But
tonwood Sound, Florida Bay, were investigated using 74 samples from 19 stat
ions. Depth, temperature, salinity, pH and Eh were measured at the sedimen
t water interface. The foraminifera was determined to be controlled by a c
omplex interaction of physicochemical and biologic factors, which was only
partially revealed by the measured parameters.

ANNO

06/10/1987

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ACC 1086

TYPE

YEAR 1974

AUTH LYON, J.M.; BAXTER, K.N.;

TITL SAMPLE CATCHES OF PENAEID SHRIMP TAKEN BY TRAWLING IN THE NORTHWESTERN GULF
OF MEXICO, 1961-1965.

BIBL NATIONAL MARINE FISHERIES SERVICE, DATA REPORT 83:1-51.

KEYW BIOLOGY

SHRIMP FISHERY

COMMERCIAL FISHERY

SHRIMP

FISHERY

ABST

ANNO

06/10/1987

.....
ACC 2114
TYPE P
YEAR 1980
AUTH LYONS, W.G.;
TITL MOLLUSCAN COMMUNITIES OF THE WEST FLORIDA SHELF.

BIBL BULL. AM. MALACOL. UNION 1979(45):37-40.

KEYW MOLLUSC	HOURGLASS	COMMUNITY
TEMPERATURE	SALINITY	SUBSTRATE
DEPTH		

ABST The molluscan fauna of the west Florida shelf is characterized from the Dry Tortugas northward to Cape San Blas using data collected principally from the Hourglass Cruises. The inshore fauna varies from predominantly tropical Caribbean species in the south to warm-temperate continental species in the north. Several discernible communities are defined by temperature, salinity and substrate. Four vertical zones of faunal distribution have been differentiated seaward from the coastal estuaries: shoreward zones (0-10 m); shallow shelf (10-30 m); middle shelf (30-140 m); and outer shelf (140-200 m). The number of species, dominant molluscs and their supposed source are cited for each zone in addition to ambient abiotic parameters.

ANNO

06/10/1987

.....
ACC 2113
TYPE P
YEAR 1970
AUTH LYONS, W.G.;
TITL SCYLLARID LOBSTERS (CRUSTACEA: DECAPODA).

BIBL MEMOIRS OF THE HOURGLASS CRUISES. VOL. I, PT. IV, FLORIDA DEPARTMENT
NATURAL RESOURCES, MARINE RESEARCH LABORATORY. 74 P.
KEYW CRUSTACEA DECAPOD HOURGLASS
CURRENTS DISTRIBUTION

ABST Five species of scyllarid lobsters were captured offshore Florida. *Scyllarides nodifer* occurred from the Gulf of Mexico to North Carolina and Bermuda in depths of 2 to 91 m. The Florida current and Gulf Stream were suggested to be responsible for prohibiting the distribution of larvae southward. *Scyllarus americanus* had been collected from the Gulf of Venezuela to North Carolina in depths of 0 to 46 m, and was common at some inshore locations off west Florida. *Scyllarides aequinoctialis* occurred throughout the Caribbean and northward to Bermuda, but only rarely in the Gulf of Mexico. *Scyllarus chacei* ranged from Brazil to North Carolina in 11 to 320 m of water. Adult *Scyllarus depressus* were known from southern Brazil to North Carolina in depths of 29 to 265 m, with postlarvae usually occurring farther south.

ANNO

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ACC 2115

TYPE P

YEAR 1974

AUTH LYONS, W.G. & COLLARD, S.B.;

TITL BENTHIC INVERTEBRATE COMMUNITIES OF THE EASTERN GULF OF MEXICO, IN: R.E. SMITH (ED.) PROC. MAR. ENVIR. IMPLICATIONS OF OFFSHORE DRILLING IN THE EASTERN GULF OF MEXICO.

BIBL CONF./WORKSHOP STATE UNIV. SYST. FLA. INSTIT. OCEANOGR. ST. PETERSBURG, FLA., CONTRIB. NO. 233, FDNR/MRL. P. 157-165.

KEYW BENTHIC	INVERTEBRATE	COMMUNITY
GEOLOGICAL	HYDROGRAPHIC	CONTINENTAL SLOPE
TEMPERATURE	SALINITY	NUTRIENT

ABST A discussion was presented on the physical and biotic characteristics controlling composition of benthic invertebrate communities of the region. The communities were broken down into zones (geologic and hydrographic) and descriptions were presented. It was concluded that benthic invertebrates of the Eastern Gulf are a highly diverse group with several dissimilar zones of distribution ranging from the estuaries to the continental shelf.

ANNO

06/10/1987

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ACC 2169
TYPE P
YEAR 1981
AUTH LYONS, W.G.;
TITL POSSIBLE SOURCES OF FLORIDA'S SPINY LOBSTER POPULATION.

BIBL PROC. GULF CARIBB. FISH. INST. 33:253-266.

KEYW SPINY LOBSTER FISHERY RECRUITMENT
LARVAL

ABST The possible sources of Florida's lobster fishery was believed to be replenished by larvae recruited primarily from Caribbean spawning stocks, but some recent findings suggest that most recruitment may be directly from the spawn of the Florida population itself. However, Florida's year round larval recruitment cannot result from its 7 month (April-October) spawning period but may be derived from year round spawning of Caribbean populations. Abundance of larvae in transit from the Caribbean to south Florida via the Yucatan Channel during much of the year supports this hypothesis. Some contribution to recruitment by larvae spawned from the unfished Gulf of Mexico population is also probable. The author urged continued protection of Florida spiny lobsters by a closed season until irrefutable evidence indicates the population is derived from Caribbean stock.

ANNO

ACC 2442

TYPE P

YEAR 1981

AUTH LYONS, W.G.; BARBER, D.G.; FOSTER, S.M.; KENNEDY, F.S., JR.; MILANO, G.R.;

TITL THE SPINY LOBSTER, PANULIRUS ARGUS, IN THE MIDDLE AND UPPER FLORIDA KEYS: P
OPULATION STRUCTURE, SEASONAL DYNAMICS, AND REPRODUCTION.

BIBL FLA. MAR. RES. PUBL. NO. 38, 38 P.

KEYW MONROE
DISTRIBUTION

SPINY LOBSTER
SPAWNING

ABUNDANCE
FOULING

ABST Data on abundance, distribution, size, sex, mating, spawning, molting, incidence of fouling organisms, and injury rates were obtained from 19,180 spiny lobsters captured at 9 stations in the middle and upper Florida Keys fishery area during April 1978 through March 1979. Mean and modal carapace length (CL) were approximately 73 mm, slightly less than legal size (76 mm). Lobster sizes averaged 65.6 mm CL at shallow (3 m) bay stations, increasing gradually to 80.1 mm CL at inhabited southern Florida Bay stations, then gradually migrated to nearshore oceanside Keys stations; lobsters in year class 3+ moved seaward at onset of maturity or declining water temperature (late fall-early winter). Information on seasonal trends in sizes, numbers, and location of captured lobsters is summarized. Legal sized lobsters comprised 43.2% of total catch, 90% of which were caught at oceanside stations. Data are presented concerning sex ratio, duration of spawning season, location of mating, and size and proportion of spawning females. Little or no fouling organisms were found on most lobsters. Molting individuals averaged only 1% of the total population, with a maximum molting frequency of 2.7% in April. Trends in rates of injuries are explained.

ANNO

06/10/1987

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ACC 2443
TYPE P
YEAR 1981
AUTH LYONS, W.G.;KENNEDY, F.S., JR.;
TITL EFFECTS OF HARVEST TECHNIQUES ON SUBLEGAL SPINY LOBSTERS AND ON SUBSEQUENT
FISHERY YIELD.

BIBL PROC. GULF CARIBB. FISH. INST. 33:290-300.

KEYW MONROE SPINY LOBSTER FISHERY
MORTALITY TEMPERATURE

ABST To determine the effect of confining sublegal sized lobsters as attractants in lobster traps for extended durations, a total of 152 preweighed lobsters were caged in 40 traps (16 traps each containing 5 lobsters, 24 traps each containing 3 lobsters) for periods of up to 8 weeks. Two traps with 5 lobsters and 3 traps with 3 lobsters were removed from the field weekly and 1 lobster was in each of the 8 weekly test groups; average weight reduction was generally greater among those confined at 5 per trap than that of lobsters confined at 3 per trap. Trends of weight loss and mortality over the 8 week period are presented. Factors other than starvation, including handling, exposure, temperature, and predation are analyzed as potential causes of death. The impact on the fishery of using sublegal sized lobsters as bait is examined, and solutions to reduce fishery induced mortality are suggested.

ANNO

06/10/1987

ACC 4086

TYPE U

YEAR 1982

AUTH LYONS, W.G.; CAMP, D.K.;

TITL THE PRESENCE, LOCATIONS, AND SPECIES COMPOSITIONS OF ZONES OF FAUNAL SIMILARITY WITHIN THE HOURGLASS STUDY AREA, CENTRAL WEST FLORIDA SHELF. A REPORT FOR THE GOVERNOR OF THE STATE OF FLORIDA.

BIBL FLORIDA DEPARTMENT OF NATURAL RESOURCES, MARINE RESEARCH LABORATORY, ST. PETERSBURG, FL. 118 P.

KEYW BIOLOGY	EPIFAUNA	ECOLOGY
HOURGLASS	DEMERSAL FISH	ZOOGEOGRAPHY
INVERTEBRATE	CONTINENTAL SHELF	COMMUNITY
FISH		

ABST Taxa examined from collections taken during the Hourglass Cruises along two transects, each with 5 stations in depths of 6, 18, 37, 55, and 73 m, on the central West Florida Shelf were analyzed to discern zones of faunal similarity. The 221 species included 89 crustaceans, 52 fishes, 41 echinoderms, 20 stony corals, 17 mollusks, and two brachiopods. Eight Czekanoski indices were computed as follows: three qualitative (using 221, 142, and 53 spp.), two quantitative without logarithmic transformation of abundances (221, 142, and 53 spp.). Qualitative and log-transformed quantitative comparisons were each generally adequate to define faunal zones. However, severe elimination of species (by 76%) masked faunal differences in qualitative comparison. Quantitative comparisons using untransformed abundances were so sensitive to highly abundant species having a wide range of abundances between stations that local habitat differences were revealed, thereby masking broader zonal relationships. These comparisons were not suitable for determination of faunal zones. Three faunal zones involving stations at 6m, 18-37 m, and 55-73 m were revealed. Locations of these zones were in general agreement with the Shoreward Zone, Shallow Shelf Zone, and Middle Shelf I Zone previously proposed in the literature. In the majority of comparisons, the fauna at a given station in a particular depth was indicated to be more similar to that at a distant station in the same depth than to other stations geographically closer but in greater or lesser depths.

ANNO

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ACC 235
TYPE
YEAR 1983
AUTH LYTLE, J.S.;LYTLE, T.F.;
TITL POTENTIAL DAMAGE OF OIL WASTES IN COASTAL ESTUARY SEDIMENTS.

IN: PROCEEDINGS 1983 OIL SPILL CONFERENCE, FEBRUARY 28-MARCH 3,
SAN ANTONIO, TX.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP-82-024.

KEYW CHEMISTRY COASTAL WATER OIL
POLLUTION SEDIMENT ESTUARY
OIL SPILL

ABST Bayou Casotte, Mississippi, an estuarine waterway near the eastern end of Mississippi Sound, has been altered to accommodate an extensive industrial complex including a large oil refinery. Several small oil spill accidents recently occurred in the bayou; the most serious, on June 13, 1981, involved 600 barrels of asphaltic crude. The ecological effects of continued exposure to low level oily wastes were estimated by examining pollution levels in sediments both in 10-foot cores and surface samples. Petroleum hydrocarbons (PHC) and other hydrocarbons occur at levels as high as 12,300 micrograms per gram (ug/g or ppm to total hydrocarbons, dry weight) in surficial sediments and 1,000 ug/g at 120 centimeter sediment depths. Dredging operations have removed most polluted sediments very near the refinery site in the bayou, but dispersal of petroleum wastes has caused PHCs to be dominant pollutants in other regions where no dredging has occurred and where care is required if any dredging is permitted. Toxicological examination of sheepshead minnows, mysid shrimp and amphipods reveals significant mortalities to mysids from bioassay exposures to surficial sediments. Settling rate determinations, leachability, community structure vulnerability, and sediment disturbance probability are factors assimilated into an "environmental stress index" that indicates this to be a potentially harmful site to bottom feeders and, if sediments are disturbed, to free swimming organisms in sensitive life stages.

ANNO

06/10/1987

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ACC 449

TYPE

YEAR 1979

AUTH LYTLE, J.S.;LYTLE, T.F.;GEARING, J.N.;GEARING, P.J.;

TITL HYDROCARBONS IN BENTHIC ALGAE FROM THE EASTERN GULF OF MEXICO.

BIBL MAR. BIOL. 51:279-288.

KEYW BENTHIC FLORA
CONTINENTAL SHELF

BIOLOGY
HYDROCARBON

CHEMISTRY
ALGAE

ABST

ANNO

06/10/1987

.....
ACC 462
TYPE
YEAR 1979
AUTH LYTLE, T.F.;LYTLE, J.S.;
TITL SEDIMENT HYDROCARBONS NEAR AN OIL RIG.

BIBL ESTUARINE COASTAL MAR. SCI. 9:319-330.

KEYW	CHEMISTRY	COASTAL WATER	EXPLORATION
	HYDROCARBON	OCEANOGRAPHY	OIL
	POLLUTION	SEDIMENT	

ABST

ANNO

06/10/1987

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ACC 464
TYPE
YEAR 1976
AUTH LYTLE, T.F.;LYTLE, J.S.;
TITL ASSESSMENT OF HYDROCARBON POLLUTANTS IN GULF AND ESTUARINE ENVIRONMENTS.

BIBL J. MISS. ACAD. SCI. 21:128-147.

KEYW ALIPHATIC COMPOUNDS	AROMATIC COMPOUNDS	CHEMISTRY
CONTINENTAL SHELF	CRUDE OIL	OIL
POLLUTION	ESTUARY	HYDROCARBON

ABST

ANNO

06/10/1987

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ACC 644

TYPE

YEAR 1981

AUTH LYTLE, T.F.;LYTLE, J.S.;

TITL MONITORING OF POLLUTANTS IN MISSISSIPPI COASTAL WATERS.

IN: J.R. KELLY, ED. SYMPOSIUM ON MISSISSIPPI SOUND. P. 29-38.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP-81-007.

KEYW BIOLOGY

CHEMISTRY

POLLUTION

ABST

ANNO

06/10/1987

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ACC 2116

TYPE P

YEAR 1977

AUTH LYTTLE, J.S. & LYTTLE, T.F.;

TITL HIGH MOLECULAR WEIGHT HYDROCARBONS IN MAFLA SEDIMENTS AND BENTHIC ALGAE AND
RIG MONITORING SEDIMENTS. TECHNICAL REPORT. SUBMITTED TO BUREAU OF LAND
MANAGEMENT, WASHINGTON, DC. (MAFLA-OCS PROGRAM)./

BIBL

KEYW HYDROCARBON
DRILLING

ALGAE
BENTHIC

SEDIMENT

ABST Sediments and algae were collected from the West Florida Shelf and analyzed for high molecular weight hydrocarbons. Sediment was also collected before, during and after operation of a drilling rig at various distances from the rig. Deep water station samples are comprised chiefly of terrestrial hydrocarbons. Of 36 specimens of benthic algae, 15 contain oil-like hydrocarbons. Gravimetric and gas chromatographic data and cluster analysis reveal only minimal changes caused by the drilling rig operation.

ANNO

06/10/1987

.....
ACC 2117
TYPE P
YEAR 1977
AUTH LYTLE, J.S.;LYTLE, T.F.;
TITL SEDIMENT HYDROCARBONS AS ENVIRONMENTAL INDICATORS IN THE NORTHEAST GULF OF MEXICO.

IN: FATE AND EFFECTS OF PETROLEUM HYDROCARBONS IN MARINE ORGANISMS AND ECOSYSTEMS. D.A. WOLFE (ED.).
BIBL PERGAMON PRESS.

KEYW SEDIMENT HYDROCARBON SEASONAL
GRAIN SIZE CARBONATE

ABST Sediment samples were collected from 45 sites in the eastern Gulf of Mexico from Ft. Myers, Florida to Pensacola, Mississippi, and analyzed for hydrocarbons in a survey of man induced and seasonal effects on hydrocarbon levels. Three zones were distinguished by their aliphatic hydrocarbon distributions. Seasonal variation in hydrocarbon characteristics were minimal in all areas.

ANNO

06/10/1987

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ACC 2049
TYPE P
YEAR 1966
AUTH LINDER, M.J.;
TITL WHAT WE KNOW ABOUT SHRIMP SIZE AND THE DRY TORTUGAS FISHERY.

BIBL PROC. GULF CARIBB. FISH. INST. 18:18-26.

KEYW FISHERY POPULATION DYNAMICS PINK SHRIMP
 SOCIOECONOMIC SHRIMP FISHERY

ABST Analyses were made of the population dynamics of *Penaeus duorarum* in the Tortugas area and used in conjunction with information on the fishing industry to determine optimum shrimp size for harvesting in consideration of costs. Harvesting should occur at the 50-60 count level in order to least deplete the shrimp population while still maintaining maximum profits. Problems of how to harvest at this level are discussed as well as recommendations to shrimp fishermen.

ANNO

06/10/1987

ACC 4163

TYPE P

YEAR 1986

AUTH MACIALELS, N.;GRASSLE, J.F.;BOEHM, P.D.;DADE, B.;BROWN, B.; ET AL.;
TITL STUDY OF BIOLOGICAL PROCESSES ON THE U.S. MID-ATLANTIC SLOPE AND RISE.

SECOND INTERIM REPT. SUBMITTED BY BATTELLE NEW ENG. MAR. RES. LAB. &
WOODS HOLE OCEANOGRAPHIC INST. (CONTRACT #14-12-0001-30064).

BIBL PREPARED BY MINERALS MANAGEMENT SERVICE, VIENNA, VA.

KEYW DRILLING
SEDIMENT
POLLUTION

INFAUNA
ORGANIC CARBON

HYDROCARBON
GRAIN SIZE

ABST Samples collected on the first four of six cruises to the U.S. Mid-Atlantic as part of a study to evaluate potential effects of drilling have been analyzed for benthic infauna, hydrocarbons, sediment grain size, and total organic carbon, hydrogen and nitrogen. There is no evidence that the hydrocarbons in the sediments originate from sources associated with drilling activities. A very subtle change in the fauna at the drill site station in Block 372 was detected. Species diversity declined at Station 1 over time, but this trend is not statistically significant. The density of at least one dominant species was significantly lower in post-drilling samples compared to pre-drilling samples, but the density of this species was not significantly different at Station 1 compared to the majority of 2100 m stations for any sampling period. Thus, the changes seen at Station 1 are not considered to be a deleterious effect due to drilling. The results of the recolonization of azoic sediments deployed for six months or one year are discussed. Trays were deployed at two stations, Stations 2 and 4, which are positioned adjacent to and upcurrent of the drill site, respectively. Trays from both stations showed similar results after six months, but significantly different results after one year. However, the differences in the one-year trays are shown to be related to differences in the grain-size composition of sediments in the trays rather than to impacts of drilling activities.

ANNO

06/10/1987

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ACC 2118
TYPE P
YEAR 1982
AUTH MAHADEVAN, S.; ET AL.;
TITL SOFT BOTTOM BIOLOGY, SOUTHWEST FLORIDA SHELF ECOSYSTEM STUDY. YEAR 01-DRAFT FINAL REPORT. SUBMITTED TO CONTINENTAL SHELF ASSOC. BY MOTE MARINE LABORATORY, SARASOTA, FLORIDA. 181 P.

BIBL

KEYW	EPIBIOTA	INFAUNA	SEDIMENT
	EPIFAUNA	BIOLOGY	CONTINENTAL SHELF

ABST The epibiota and macroinfauna of the southwest Florida shelf were characterized to provide the Minerals Management Service with preliminary information for decisions on leasing activities and environmental stipulations. Areas of analysis include species composition, density, dominance, similarity, and sediment-infauna and epifauna-infauna relationships.

ANNO

06/10/1987

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ACC 2269

TYPE P

YEAR 1977

AUTH MAHADEVAN, S.;MURDOCH, J.D.;

TITL A STUDY OF THE RECOVERY OF BENTHIC INFAUNA AT APOLLO BEACH EMBAYMENT FOLLOWING A SILT-SPILL AND SUBSEQUENT DREDGING.

BIBL A FINAL REPT. SUB. TO ENVIR. PLAN. DIV., TAMPA ELECTRIC CO. (TAMPA, FL) BY CONSERVATION CONSULTANTS, INC., R.D. GARRITY (ED.). 37 P.

KEYW INFAUNA

BENTHIC

COMMUNITY

STRESS

DREDGING

CRUSTACEA

TURBIDITY

ABST A description of the benthic infauna studies at the Apollo Beach embayment was presented. A dredged site, an undredged site, and a control site were sampled following an accidental silt spill. Sampling was conducted once after dredging (clean-up) operations had ceased and once per year later in an attempt to evaluate the effects of silt spill and subsequent dredging. The 1976 sampling revealed that benthic communities at the dredged site were severely stressed. Follow-up sampling in 1977 showed that the dredged site had recovered to "normal" faunal conditions (similar to control site). Although low faunal density and the abundance of a pioneer species, *Streblospio benedicti*, indicated stressed conditions at the undredged (silted) site, these conditions appear to have resulted from natural population turnover patterns of the amphipod species, *Ampelisca vadorum*. Also, *Ampelisca vadorum* was the most dominant species at all three study sites, and therefore, no significant changes in the community are inferred due to the silt spill at the present time. A comparative analysis of silt-affected sites to the control site in April 1977 showed no significant differences in community structure between the sites. Therefore, environmental impact of the silt spill after one year is considered minimal.

ANNO

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ACC 2270

TYPE P

YEAR 1976

AUTH MAHADEVAN, S.;CULTER, J.;HOOVER, S.;MURDOCH, J.;REEVES, F.;SCHULZE, R.;

TITL A STUDY ON THE EFFECTS OF SILT-SPILL AND SUBSEQUENT DREDGING ON BENTHIC INF
AUNA AT APOLLO BEACH EMBAYMENT.

BIBL A REPT. TO ENVIR. PLAN. DIV., TAMPA ELECT. CO. (TAMPA, FL), R.D. GARRITY
AND W. J. TIFFANY, III (EDS.). 58 P.

KEYW BENTHIC	INFAUNA	COMMUNITY
BIOMASS	DIVERSITY	SEDIMENT
TEMPERATURE	SALINITY	DO
STRESS	TURBIDITY	DREDGING

ABST A description of the benthic communities at the dredged and undredged areas affected by a silt spill at Apollo Beach was presented. Twenty-six species that were absent in the dredged and undredged areas were found at the control site. *Capitella capitata*, a pollution indicator species, was found in greater numbers at the undredged site, while *Streblospio benedicti*, a pioneer species, was numerous at the dredged site. Oligomixity was more prevalent at the control and undredged sites. Faunal density and biomass were greatest at the control site and lowest at the dredged site. Species diversity and equitability were very similar (but low) at all three sites. Equitability, however, was highest at the dredged site. Based on a total community analysis, the dredged site was shown to be the most affected area, due to both the spill and subsequent dredging operations.

ANNO

06/10/1987

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ACC 2297

TYPE P

YEAR 1981

AUTH MAHADEVAN, S.;CULTER, J.K.;BLANCHET, R.E.;YARBROUGH, R.E.;MCCALLUM, G.;

TITL A PRELIMINARY ASSESSMENT OF THE EFFECTS OF TREATED SEWER DISCHARGE ON THE BENTHIC INFAUNAL COMMUNITIES OF WHITAKER BAYOU AND ADJOINING SARASOTA BAY (SARASOTA, FLORIDA).

BIBL REPT. SUB. BY MOTE MAR. LAB., SARASOTA, FL TO COAST ZONE MANAGEMENT DEPT., SARASOTA CO., FL.

KEYW SARASOTA
DIVERSITY
SALINITY

INFAUNA
POLLUTION
DO

SEDIMENT
TEMPERATURE
STRESS

ABST A Study of the benthic macroinfauna and sediments was conducted in and near Whitaker Bayour (Sarasota, Florida) to provide a preliminary assessment on the ecological effects of wastewater discharged into Sarasota Bay. Species composition and community parameters such as faunal density, species richness, diversity and equitability indicated that Sarasota Bay soft-bottom benthos were generally similar to adjacent bays and the Gulf. A faunal similarity analysis indicated that open bay communities were homogeneous. Whitaker Bayou benthic infauna was strikingly different than the open bay communities and was characterized by a preponderance of pollution indicator species, low faunal density and extremely low species richness. Adverse effects caused by the discharges are inferred to be limited to Whitaker Bayou.

ANNO

06/10/1987

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ACC 2190
TYPE P
YEAR 1970
AUTH MAHOOD, R.K. ET AL.;
TITL A REPORT ON THE COOPERATIVE BLUE CRAB STUDY--SOUTH ATLANTIC STATES.

BIBL U.S. BUR. COMM. FISH. 32 P.

KEYW BLUE CRAB	POPULATION	TEMPERATURE
DO	TURBIDITY	MORTALITY
PESTICIDE		

ABST Blue crab populations were studied at 20 South Atlantic sampling stations to determine the cause of massive mortalities occurring between 1966 and 1968. Histopathological testing revealed that lethal levels of pathogens were not present. In the laboratory, salinity and temperature tolerance studies showed crabs to be less tolerant at low salinity, high temperature and high salinity, low temperature conditions. Toxicity studies determined DDT and Toxaphene were increasingly lethal at low salinities and at temperatures varying from 15 degrees Celsius. The relationship between environmental conditions and crab survival time and metabolic rates is shown. Hydrological data is also included.

ulometry, organic carbon, nitrogen content, benthic surface metabolism, and microbial activity are summarized in addition to faunal biomass and density. It is concluded that the mid shelf benthos is generally impoverished due to sporadic and patchy nutrient inputs, while the shelf break and inner shelf benthos are enriched by nutrients from deep Gulf Stream intrusions and estuarine outwelling, respectively.

ANNO

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ACC 2444

TYPE P

YEAR 1975

AUTH MANKER, J.P.;

TITL DISTRIBUTION AND CONCENTRATION OF MERCURY, LEAD, COBALT, ZINC, AND CHROMIUM
IN SUSPENDED PARTICLES AND BOTTOM SEDIMENTS--UPPER FLORIDA KEYS, FLORIDA B
AY, AND BISCAYNE BAY.

BIBL PH.D. DISSERTATION. RICE UNIV., HOUSTON, TX. 114 P.

KEYW MONROE
METAL
SALINITY
WIND

SUSPENDE
SEAGRASS
CURRENT
TRACE METAL

SEDIMENT
TEMPERATURE
TURBIDITY

ABST Sediment samples from 39 stations in the upper Florida Keys, Florida Bay and Biscayne Bay, Florida were collected and analyzed for mercury, lead, cobalt, zinc, and chromium. The highest concentrations of toxic metals were found in the 4 um and suspended particulate fractions, and were correlated with areas of high population/human activity and with the Turkey Point nuclear power plant. Concentrations of lead and mercury in bottom sediments in certain areas were found to be approaching environmentally unacceptable levels. Seagrass and green algal populations were depleted in areas of maximum toxic metal concentrations.

ANNO

06/10/1987

.....
ACC 2445

TYPE P

YEAR 1971

AUTH MANKER, J.P.; GRIFFIN, G.M.;

TITL SOURCE AND MIXING OF INSOLUBLE CLAY MINERALS IN A SHALLOW WATER CARBONATE ENVIRONMENT, FLORIDA BAY.

BIBL J. SEDIMENT. PET. 41(1):302-306.

KEYW MONROE

CURRENTS

FORAMINIFERA

SALINITY

CARBONATE

DISTRIBUTION

ALGAE

SEDIMENT

MOLLUSC

TEMPERATURE

ABST Samples collected from Florida Bay and analyzed for sediment characteristics including clay minerals provide information on the depositional environment. Chlorite and smectite are the major components of the clay size insoluble residue. Water currents are different in various areas of the bay and are responsible for differences in distribution and composition of sediments. Molluscs, foraminifera, and some green algae but not corals are responsible for some of the calcium carbonate particles in the sediment.

ANNO

06/10/1987

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ACC 4278

TYPE P

YEAR 1981

AUTH MANKIEWICZ, P.J.;

TITL HYDROCARBON COMPOSITION OF SEDIMENTS, WATER, AND FAUNA IN SELECTED AREAS OF
THE GULF OF MEXICO AND SOUTHERN CALIFORNIA MARINE ENVIRONMENT.

BIBL PH.D. THESIS. UNIV. CALIFORNIA, LOS ANGELES, CA.

KEYW HYDROCARBON

FEEDING HABIT

SALINITY

SEDIMENT

BIOLOGICAL

POLLUTION

WATER COLUMN

TEMPERATURE

ABST Sediments, water column and faunal samples from the southern California continental shelf and Gulf of Mexico were analyzed for their hydrocarbon content using high resolution gas chromatography and gas chromatography/mass spectrometry. Seawater and geographic variability of faunal analyses appeared to be governed by feeding habit and source composition whereas water column analyses indicated a consistent petroleum component with biological contributions varying with temperature and salinity. In southern California the dominant source of hydrocarbons in intertidal sediments is petroleum derived from seepage. However, in the offshore areas dated cores and surficial sediment analyses suggest that while seepage-sourced petroleum is present, the dominant source of hydrocarbons is combustion-derived air pollution.

ANNO

06/10/1987

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ACC 1072
TYPE
YEAR 1973
AUTH MANN, K.H. ;
TITL SEaweeds: THEIR PRODUCTIVITY AND STRATEGY FOR GROWTH.

BIBL SCIENCE 182:975-981.

KEYW BIOLOGY
HERBICIDE
PESTICIDE

BOTANY
MACROPHYTE
POLLUTION

FLORA
MARINE

ABST

ANNO

06/10/1987

.....
ACC 2446
TYPE P
YEAR 1960
AUTH MANNING, R.B. ;
TITL SOME GROWTH CHANGES IN THE STONE CRAB, MENIPPE MERCENARIA (SAY).

BIBL QUART. J. FLA. ACAD. SCI. 23(4):273-277.

KEYW MONROE

STONE CRAB

GROWTH

ABST Morphological differences between juveniles and adults of *Menippe mercenaria* were investigated in specimens collected in Florida Bay. In juveniles the orbits are far apart, while in the adults they are close together. Juveniles differ from adults in not showing subdivisions of the submedian frontal lobes and the stridulating organ on the palm. The juvenile's lateral teeth are smoother and rounder, and coloration is dark. Juveniles do not form permanent burrows.

ANNO

06/10/1987

.....
ACC 4087
TYPE U
YEAR 1984
AUTH MANOOCH, C.S., III;MASON, D.L.;
TITL AGE, GROWTH, AND MORTALITY OF LANE SNAPPER FROM SOUTHERN FLORIDA.

BIBL N.E. GULF SCI. 7(1):109-115.

KEYW BIOLOGY	COMMERCIAL FISHERY	RECREATIONAL FISHERY
REEFFISH	POPULATION DYNAMICS	MANAGEMENT
RECRUITMENT	SNAPPER	MORTALITY
GROWTH		

ABST Rings on sectioned otoliths were used to determine ages of lane snapper, *Lutjanus synagris*, sampled from the south Florida headboat and commercial hand line and trap fisheries. Rings were identified and counted on 76% of the otoliths examined, and measurements were made on 61%. The oldest fish encountered was 10 years and 512 mm TL. Back-calculated mean lengths at annulus formation were 135, 196, 223, 261, 285, 310, 338, 367, 411 and 426 mm TL for age groups 1 to 10, respectively. The non Bertalanffy equation describing theoretical growth was $l_t = 501(1 - 6 \text{ to the } -0.1337(t+1.49)\text{th})$. The length-weight relationship was $W = 0.000102TL \text{ to the } 2.6524\text{th}$. The relationship of fork length to total length was $TL = -2.6252 + 1.0891FL$. Lane snapper were fully recruited to the hook-and-line fishery as 5 year old fish. A Beverton and Holt yield-per-recruit model suggests a maximum yield-per-recruit of 500 g when instantaneous fishing mortality was 0.5 and recruitment ages were 1.5 to 3.0 years.

ANNO

06/10/1987

ACC 680
TYPE
YEAR 1981

AUTH MAR. ENVIRON. SCI. CONSORTIUM; SOUTH ALABAMA REG. PLAN. COUNCIL;
TITL TRANSPORTATION OF OIL AND GAS IN THE COASTAL AREA OF THE STATE OF ALABAMA -
GENERAL ADVISORY INFORMATION - EMPHASIS ON LOCATION OF PIPELINES.

BIBL BUREAU OF LAND MANAGEMENT, GULF OF MEXICO OCS REGIONAL OFFICE, NEW ORLEANS,
LA. 14 P.

KEYW COASTAL ZONE	GAS	MANAGEMENT
OIL TRANSPORT	OIL	OPERATIONS
SOCIOECONOMIC	TRANSPORTATION	PIPELINE

ABST This report, including a narrative and accompanying map of coastal Alabama, is intended to be a guide for planning the location transportation systems for OCS produced oil and gas. Advisory information applies to the two coastal counties, Mobile and Baldwin, and the adjacent territorial waters of Alabama. Two categories for pipeline management are presented: (1) unsuitable; and (2) suitable with stipulations. Facilities capable of receiving oil and gas transported by barge and ship are identified and briefly described.

ANNO

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ACC 4088

TYPE P

YEAR 1981

AUTH MAR. RESOUR. RES. INST.; S.C. WILDL. MAR. RES. DEPT.; GA. DEPT. NAT. RESOUR.;

TITL SOUTH ATLANTIC OCS AREA LIVING MARINE RESOURCES STUDY.

BIBL A FINAL REPORT TO THE BUREAU OF LAND MANAGEMENT. ATLANTIC OCS OFFICE,
NEW YORK, NY.

KEYW BIOLOGY	PHOTODOCUMENTATION	LIVE-BOTTOM
EPIBIOTA	INVERTEBRATE	BASELINE STUDY
FISH	DEMERSAL FISH	BENTHIC
CONTINENTAL SHELF	CORAL	SPONGE
MOLLUSC		

ABST Studies were conducted to characterize invertebrate and fish communities associated with representative live-bottom areas from Cape Hatteras, North Carolina to northern Florida and to evaluate factors which might influence community structure. Live bottom areas were typified by expanses of sand-covered hard bottom and scattered outcrops and ledges of low to moderate relief. Bottom coverage by epibiota averaged 60 to 100% for most stations. The incidence of rock outcrops ranged from 5 to 40% and was highest at outer shelf stations, which are along a discontinuous series of relict reefs that extend from offshore North Carolina to northern Florida. A total of 1,175 invertebrate taxa were collected by dredge, trawl, suction, and grab sampling. Species richness and biomass of epibenthic organisms differed between stations and seasons, but not in a consistent pattern. At stations offshore South Carolina, Georgia, and Florida, sponges contributed the most biomass, and the most frequently collected organisms in dredges and trawls were species of bryozoans, hydroids, and sponges. At stations off North Carolina, macroalgae, hard corals, and molluscs contributed the most biomass, and species of macroalgae, molluscs, and decapod crustaceans were the most frequently collected organisms. Species composition varied in relation to depth, with inner and outer shelf biota being most dissimilar. Fish abundance, biomass, and community composition varied in relation to depth, season, and time of collection. The biomass and abundance of commercially important species were highest at middle shelf stations. Benthic crustaceans (decapods

ANNO

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ACC 4089

TYPE P

YEAR 1982

AUTH MAR. RESOURCE RES. INST., S.C. WILDL. & MAR. RESOURCES DEPT.;

TITL SOUTH ATLANTIC OCS AREA LIVING MARINE RESOURCES STUDY, YEAR 2.

BIBL A FINAL REPORT FOR THE U.S. DEPARTMENT OF THE INTERIOR, MINERALS MANAGEMENT SERVICE, WASHINGTON, DC. CONTRACT #AA551-CT1-18. FOUR VOLUMES.

KEYW BIOLOGY	EPIBIOTA	LIVE BOTTOM
DEMERSAL FISH	HYDROGRAPHY	BASELINE STUDY
CONTINENTAL SHELF	INVERTEBRATE	BENTHIC
PHOTODOCUMENTATION		

ABST Studies were conducted to characterize fish and invertebrate communities associated with representative live-bottom habitats; to characterize food habits of selected fish species; to assess the bottom topography and substrate type; and to evaluate potential impacts of oil- and gas-related activities on live bottom organisms on the outer continental shelf from North Carolina to Georgia. Live bottom areas were typified by expanses of sand-covered hard bottom and scattered outcrops and ledges of low to moderate relief. Bottom coverage by epibiota averaged 75 to 100% for most stations. The incidence of rock outcrops ranged from 5 to 40% and was highest at outer shelf stations, which are along a discontinuous series of relict reefs that extended from offshore North Carolina to northern Florida. Live-bottom cover was not related to the incidence of outcrops because most epibiota was attached to sand-covered hard bottom. A total of 1,307 invertebrate taxa were collected by dredge, trawl, suction, and grab sampling. Species richness and biomass of epibenthic organisms varied spatially but not seasonally. At stations offshore South Carolina, Georgia, and at the outer shelf station off North Carolina sponges contributed the most biomass. The most frequently collected organisms in dredges and trawls were species of cnidarians, barnacles, bryozoans, and echinoderms. Species composition varied in relation to depth, with inner and outer shelf biota being most dissimilar. Fish abundance, biomass, and community composition varied in relation to depth, season, and time of collection. Overall biomass and abundance were highest and l

ANNO

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ACC 4090
TYPE P
YEAR 1984
AUTH MAR. RESOUR. RES. INST., S.C. WILDL. & MAR. RESOURC. DEPT.;
TITL SOUTH ATLANTIC OCS AREA LIVING MARINE RESOURCES STUDY, PHASE III.

BIBL A FINAL REPORT FOR THE U.S. DEPARTMENT OF THE INTERIOR, MINERALS MANAGEMENT SERVICE, WASHINGTON, DC. CONTRACT #14-12-0001-29185. THREE VOLUMES.

KEYW BIOLOGY RECRUITMENT BASELINE STUDY
CONTINENTAL SHELF BENTHIC EPIBIOTA
INVERTEBRATE FEEDING HABIT SPONGE
CORAL ARTIFICIAL HABITAT FOULING

ABST Colonization of artificial hard substrata by invertebrates and fishes; effects of sediment depth on distribution and abundances of sponges and corals; and food habits of selected hard-bottom fishes were investigated on the South Carolina and Georgia outer continental shelf. Short-term colonization of sessile organisms was related to seasons with respect to biomass, percent cover, and species richness. Fouling plates deployed near natural hard bottom areas supported higher species numbers than those deployed near soft bottom areas. Total cover, biomass, and species number increased significantly on plates submerged for three to twelve months. Fishes were immediately attracted to structures placed near hard-bottom areas; the same species were attracted to structures placed on soft bottom, although colonization took longer. The number of fish species counted among existing structures (shipwrecks) ranged from 18 to 24, and number of individuals ranged from 7,911 to 24,965. Sediment thickness is an important variable dictating the distribution and abundance of attached invertebrates within the study area. Ninety-five percent of all sponges and 93% of all corals examined occurred in sediment depths less than 5.0 cm. Octocorals were more abundant than sponges at all stations, and hard corals were uncommon. Different groups of fishes studied fed on planktonic, epibenthic, and infaunal invertebrates. There was little indication of diet overlap among species groups.

ANNO

06/10/1987

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ACC 171

TYPE

YEAR 1973

AUTH MARINE ENVIRONMENTAL SCIENCES CONSORTIUM;

TITL THE ECOLOGICAL IMPACT OF A DEEPWATER PORT IN THE NORTHEASTERN GULF OF MEXIC
O.

BIBL MARINE ENVIRONMENTAL SCIENCES CONSORTIUM, DAUPHIN ISLAND, AL. 26 P.

KEYW BENTHIC COMMUNITY

HYDROGRAPHY

DREDGING

BIOLOGY

OCEANOGRAPHY

PORT

CONTINENTAL SHELF

PHYSICAL PROCESS

ABST

ANNO

06/10/1987

.....
ACC 892
TYPE
YEAR 1985
AUTH MARISCAL, R.N.;
TITL COELENTERATES AND CRUSTACEANS OF THE FLORIDA COAST.

BIBL FLORIDA STATE UNIVERSITY, DEPARTMENT OF BIOLOGICAL SCIENCES.

KEYW BEHAVIOR	BENTHIC FAUNA	FEEDING HABIT
HYDROID	CRUSTACEA	CRAB
COELENTERATE	STONE CRAB	

ABST Dr. Mariscal and his graduate students have collected data on various aspects of the biology of several coelenterates and crustaceans found in the Florida waters. Data on different organisms and programs have been presented in 2 master's theses and 1 PhD dissertation with 4 other master's theses in preparation. Studies have included work on life histories of hydroids, hydroids on hermit crabs, behavior and ecology of hermit crabs, predator prey relationships and symbiotic associations of stone crabs and hermit crabs, nematocyst biology and feeding and behavior of several coelenterates.

ANNO

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ACC 755
TYPE
YEAR 1975
AUTH MARKEY, J.W.;
TITL A STUDY OF THE EFFECTS OF MAINTENANCE DREDGING ON SELECTED ECOLOGICAL
PARAMETERS IN THE GULFPORT SHIP CHANNEL, GULFPORT, MA.

BIBL U.S. ARMY CORPS OF ENGINEERS, MOBILE DISTRICT, MOBILE, AL. 321 P.

KEYW BENTHOS	BIOLOGY	PHYTOPLANKTON
SALINITY	TRACE METALS	TURBIDITY
DREDGING	BACTERIA	SEDIMENT TRANSPORT
PORT		

ABST Environmental effects of maintenance dredging in the Gulfport Ship Channel were determined in 1974. Parameters measured during the period June 22, through December 11, 1974 included salinity, turbidity, suspended solids, sediment particle size distribution, trace metals (copper, cadmium, iron, lead, zinc) in the water column and sediments, phytoplankton abundance and diversity, coliform bacteria concentration, and abundance and diversity of benthic macro-invertebrates. Discharge plumes associated with the dredging operation were less than 800 feet wide and 2,000 feet long. No plume was visible 2 - 3 hours after discharge. Natural influence on suspended solids (ie., wind, wave action, tidal changes) were reported to be greater than the dredging operation. Sediment transport resulted in only a thin deposit, 3 to 12 inches deep, on the spoil banks within 2,000 feet of the point of discharge. There were no effects on trace metals in either the water column or in the sediments. No adverse impact on biological components of the study area was measured, although the study period did not allow for a seasonal re-examination of either benthic or pelagic communities.

ANNO

06/10/1987

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ACC 4091
TYPE P
YEAR 1982
AUTH MARMORINO, G.O.;
TITL WIND-FORCED SEA LEVEL VARIABILITY ALONG THE WEST FLORIDA SHELF (WINTER, 1978).

BIBL J. PHYS. OCEANOGR. 12:389-405.

KEYW PHYSICAL	OCEANOGRAPHY	WIND STRESS
LOOP CURRENT	METEOROLOGY	CURRENTS
NUMERICAL MODEL	CIRCULATION	TIDE

ABST Coastal tide gage and meteorological records from Pensacola to Key West for the period January-April 1978 have been examined for low-frequency fluctuations. The dominant 6-day period signals in sea level, alongshore wind stress, and atmospheric pressure were coherent over the entire shelf and propagated southward, consistent with the movement of cold fronts through the area. Sea level response lagged the local wind stress by 18 h (in the north) to 9 h (in the south). In response to a 1 dyn cm to the 2nd alongshore stress, sea-level amplitudes were largest (about 60 cm) where the shelf is widest (200 km) and undergoes an abrupt bend, and were about 30 cm elsewhere; large transient alongshore sea level slopes, on the order of 10 to the 6th h, were thus set up. A linear steady-state shelf circulation model (Hsueh, 1980) is used to explore the sea level distribution that is in frictional equilibrium with a wind stress of given orientation. For a bottom resistance coefficient of 0.014 cm s to the 1st, a value suggested by an analysis of February current measurements on the inner shelf, the model results resemble the observed response. Modeled responses are trapped to within the inner shelf (depths < 30 m) with an e-folding scale of about 60 km. Experimentation with open-ocean forcing, idealized as a shelfbreak sea level distribution induced by various hypothetical configurations of the Loop Current, shows that changes in the equilibrium coastal response are negligibly small.

ANNO

06/10/1987

.....
ACC 4245
TYPE P
YEAR 1983
AUTH MARMORINO, G.O.;
TITL VARIABILITY OF CURRENT, TEMPERATURE, AND BOTTOM PRESSURE ACROSS THE WEST FL
ORIDA CONTINENTAL SHELF, WINTER 1981-1982.

BIBL J. GEOPHYS. RES. (C. OCEANS ATMOS.) 88(C7):4439-4457.

KEYW CURRENT	TEMPERATURE	PRESSURE
MODEL	CIRCULATION	WIND

ABST Observations are analyzed from four current meter moorings deployed on the broad continental shelf in the northeastern Gulf of Mexico from November 29, 1981 to February 8, 1982 (71 days). Consistent with recent modeling studies, the shelf circulation responds within an inertial period to the alternating up-and-down-coast synoptic scale wind forcing. Average response to a $0.5 \text{ dyn cm super } (-2)$ alongshore wind stress (as measured at the coast) is similar to $20 \text{ cm s super } (-1)$ off Cedar Key and similar to $40 \text{ cm s super } (-1)$ in the north where the shelf narrows (off Cape San Blas). Lower layer currents veer counterclockwise with depth, as in a bottom Ekman layer (e-folding scale similar to 8 m). The pressure field decays offshore (e-folding scale similar to 160 km) and yields a geostrophic current in good agreement with the observed alongshelf flow.

ANNO

06/10/1987

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ACC 2513

TYPE P

YEAR 1945

AUTH MARSHALL, N.;

TITL THE MOULTING WITHOUT GROWTH OF SPINY LOBSTERS, PANULIRUS ARGUS, KEPT IN A LIVE CAR.

BIBL TRANS. AM. FISH. SOC. 75:267.

KEYW DADE
GROWTH

SPINY LOBSTER
WEIGHT

TAGGING
LENGTH

ABST A tagging study of captive spiny lobsters (*Panulirus argus*) revealed little growth increment (weight or length) between pre and posts molting. The lack of growth was attributed to captivity conditions rather than the tagging method. Caution is advised in applying growth rate data obtained from laboratory studies to field populations of *P. argus*.

ANNO

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 ACC 549
 TYPE
 YEAR 1978
 AUTH MARTIN, R.G. ;
 TITL NORTHERN AND EASTERN GULF OF MEXICO CONTINENTAL MARGIN: STRATIGRAPHIC AND S
 TRUCTURAL FRAMEWORK.

IN A.H. BOUMA, G.T. MOORE, AND J.M. COLEMAN, EDS. FRAMEWORK, FACIES, AND
 OIL TRAPPING CHARACTERISTICS OF THE UPPER CONTINENTAL MARGIN. P. 21-42.
 BIBL AM. ASSOC. PET. GEOL., TULSA, OK.

KEYW CONTINENTAL MARGIN	FAULT	GEOLOGIC HISTORY
GEOLOGY	SEDIMENTATION	STRATIGRAPHY
STRUCTURE		

ABST The continental margin of the northern Gulf of Mexico extends from DeSoto C
 anyon to northern Mexico and from more than 300 km inland in the central Gu
 lf Coast to the deep gulf floor. It is composed of a broad wedge of Mesozoi
 c and Cenozoic strata that accumulated almost continuously from Jurassic ti
 me to the present. Mesozoic and Cenozoic deposits are more than 15 km thick
 beneath the lower coastal plain and adjacent continental shelf. For the mo
 st part, the margin is a Cenozoic clastic embankment built by the inpouring
 of sediments from the continental interior after the late Cretaceous-Paleo
 cene laramide orogeny. Sediment supplies generally exceeded the subsidence
 rate, prograding the seaward face of the margin more than 400 km from the e
 dge of Cretaceous carbonate platform deposits under the coastal plain, to t
 he present position of the continental slope. Along the inner regions of th
 e coastal plain from Alabama to southwestern Texas, updip members of Mesozo
 ic and Cenozoic units rest unconformably on complexly folded and faulted Pa
 leozoic rocks of the Ouachita and Appalachian tectonic belts. Major structu
 ral anomalies affecting the Mesozoic-Cenozoic sequence of the coastal plain
 , shelf, and slope are salt diapirs, growth faults, and shale uplifts. Salt
 structures are concentrated in interior basins in the inner coastal plain,
 along the lower coast from central Texas to DeSoto Canyon, and across the
 continental shelf to the foot of the slope. Regional systems of growth faul
 ts slice through Cenozoic units beneath coastal Texas and Louisiana and in
 the adjacent shelf. Many of these faults formed as a response to sediment o
 ANNO clastic sediments of Ordovician, Silurian, and Devonian age. Triassic red b
 eds and associated diabase are common in the extensive graben systems that
 underlie northwestern Florida. Southern peninsular Florida is underlain by
 basement composed of volcanic and hypabyssal rocks of Triassic and Early Ju
 rassic age. Geophysical data suggest similar basement complexes beneath the
 West Florida Shelf and Slope.

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ACC 551
 TYPE
 YEAR 1978
 AUTH MARTIN, R.G.;BOUMA, A.H.;
 TITL PHYSIOGRAPHY OF GULF OF MEXICO.

IN A.H. BOUMA, G.T. MOORE, AND J.M. COLEMAN, EDS. FRAMEWORK, FACIES, AND
 OIL TRAPPING CHARACTERISTICS OF THE UPPER CONTINENTAL MARGIN. 3-20 P.

BIBL AM. ASSOC. PET. GEOL., TULSA, OK.

KEYW CONTINENTAL SHELF	DIAPIR	FAULT
GEOLOGY	GEOMORPHOLOGY	PHYSIOGRAPHY
SEDIMENTATION	TECTONIC	

ABST The Gulf of Mexico covers an area of more than 1,500,000 sq km, has a maximum depth of about 3,700 m, and includes many of the geomorphic features of large oceans. The continental shelf, slope, rise and abyssal plain comprise the major physiographic provinces of the gulf and contain a variety of sub provinces distinguished by topographic character and geomorphic history. The gulf shelf is a relatively smooth, gently sloping surface marked locally by low-relief features formed by sea-level fluctuation during the Pleistocene, reef growth, near-surface movement of diapiric salt and mud, and faulting. Shelf width varies from about 280 km off the Florida and Yucatan Peninsula as to less than 10 km at the Mississippi Delta. The continental slope consists of a considerable variety of physiographic features that encircle the deep gulf floor. The distinctive subprovinces of the gulf slope have evolved in response to reef building and constructional sedimentation on the Florida and Yucatan carbonate platforms; erosion, nondepositional sedimentation in the region off Texas and Louisiana; the large accumulation of mainly Pleistocene sediment on a former continental slope seaward of the Mississippi Delta; tectonic uplift and diapirism in the Golfo de Campeche; and shale mobilization off eastern Mexico. In contrast to the greatly varied, irregular topography of the continental slope, the deep seafloor of the gulf (composed of the continental rise and abyssal plain provinces) is an almost featureless plain smoothed by turbidite and pelagic sedimentation and marked locally by low-relief knolls, sedimentary aprons and small-leaved channels.

ANNO

06/10/1987

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ACC 2448

TYPE P

YEAR 1975

AUTH MARTIN, R.E.;

TITL DISTRIBUTION AND ECOLOGY OF THE FORAMINIFERA OF JOHN PENNEKAMP CORAL REEF STATE PARK, KEY LARGO, FLORIDA, WITH EMPHASIS UPON THE EFFECTS OF TURBID WATER PRODUCED BY DREDGING.

BIBL M.A. THESIS. UNIV. OF FLA. 205 P.

KEYW MONROE
FORAMINIFERA
CURRENTS
SEDIMENT
DO

DISTRIBUTION
REEF
DIVERSITY
SALINITY

ECOLOGY
WAVE
TURBIDITY
TEMPERATURE

ABST Studies were conducted on the distribution and ecology of the foraminifera in the reef environments of John Pennekamp Coral Reef State Park. It was found wave and current action cause a seaward decrease in general species diversity, richness, and equitability. Study of the effect of high, dredge induced turbidity showed no significant impact on populations of foraminifera. Also, phototactic testing of turbidity-induced decreases in light intensity showed little effect on photic responses.

ANNO

06/10/1987

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ACC 4092

TYPE P

YEAR 1979

AUTH MATHIS, K.;CATO, J.C.;DEGNER, R.L.;LANDRUM, P.D.;PROCHASKA, F.J.;

TITL COMMERCIAL FISHING ACTIVITY AND FACILITY NEEDS IN FLORIDA: DADE AND MONROE
COUNTIES.

BIBL FLORIDA AGRICULTURE MARKET RESEARCH CENTER, INDUSTRY REPT. 79-3.

KEYW BIOLOGY

LANDINGS (POUNDS)

COMMERCIAL FISHERY

SOCIOECONOMICS

LANDINGS (VALUE)

PORT

ABST Information on the commercial seafood industries of Dade and Monroe Counties was obtained from published reports and from a mail survey of commercial fishermen and seafood dealers. Total seafood landings in the two counties were valued at \$14.6 million in 1971. By 1976, landings had increased in value to \$26.6 million. About 950 people were engaged in commercial fishing and 50 firms were registered as dealers. Registrations of commercial boats declined in Dade County but increased in Monroe County from 1963-64 to 1977-78, while pleasure boat registrations nearly tripled in the two counties together. Fishermen and dealers noted improvements they felt were needed in facilities and services in the ports and landing areas used.

ANNO

06/10/1987

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ACC 303
TYPE
YEAR 1975
AUTH MATURO, F.J.; CALDWELL, J.W.; INGRAM, W.; HEARNE, F.L.;
TITL MULTIVARIATE ANALYSIS OF THE MAFLA (MISSISSIPPI, ALABAMA, FLORIDA) WATER COLUMN BASELINE DATA.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/YM/ES-75/2. 143 P.

KEYW METAL	OCEANOGRAPHY	PHYSICAL PROCESS
SALINITY	TEMPERATURE	ZOOPLANKTON
MAFLA	DEPTH	DISTRIBUTION

ABST In the MAFLA region, a strong correlation exists between the zooplankton community and its environment. Two general regimes of environmental factors weigh heavily in this strong correlation: (1) inshore-offshore factors, and (2) surface to bottom layering. Important components of inshore-offshore patterns include station depth, net range, and salinity range, all of which are associated with deeper, more offshore stations; whereas, net depth, temperature, and temperature and salinity range are associated with surface to bottom layering. In general, species assemblages found to be correlated with the environment are regulated either by depth factors or changes in salinity and temperature. The low correlation between the zooplankton community and suspended trace metals indicates that low trace metals in the MAFLA are not an important factor governing zooplankton community structure. However, the variation of trace metals within the zooplankters themselves is highly dependent on the species composition of the zooplankton community. This suggests that different organisms are affected differentially by hydrocarbons.

ANNO

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ACC 4093
 TYPE P
 YEAR 1977
 AUTH MAUL, G.A.;
 TITL THE ANNUAL CYCLE OF THE LOOP CURRENT PART I: OBSERVATIONS DURING A ONE-YEAR
 TIME SERIES.

BIBL J. MAR. RES. 35:29-47.

KEYW PHYSICAL	OCEANOGRAPHY	HYDROGRAPHY
CIRCULATION	CURRENTS	LOOP CURRENT
LANDSAT	REMOTE SENSING	INTRUSION

ABST The Gulf Loop Current is that portion of the Gulf Stream System which connects the Yucatan Current and the Florida Current in the eastern Gulf of Mexico. An experiment to cut the annual cycle proposed by Leipper (1970) was conducted from August 1972, through September 1972. Twelve pathlines of the 22 degrees C isotherm at 100 meters depth were made from Yucatan to the Florida Keys at 36-day intervals in conjunction with a satellite oceanography project. The sequence of pathlines shows an annual cycle of penetration into the eastern Gulf that is in phase with the historical annual cycle of current speeds and transports of the Gulf Stream, and is also reflected in tide gage sea-level records taken from Key West, Havana and Progreso. The data suggest that an excess inflow of Yucatan Current water of 4×10^{10} m³ to the Gulf over outflow of Florida Current water in the upper 500 meters is required to make the Loop Current grow; the outflow required to maintain static sea level conditions in the Gulf is postulated to be into the Caribbean Sea through the Yucatan Strait below this reference level. Separation of an anticyclonic eddy appears to be part of the annual cycle, which is shown to have great year-to-year variability.

ANNO

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ACC 4264

TYPE P

YEAR 1978

AUTH MAUL, G.A.;

TITL THE 1972-1973 CYCLE OF THE GULF LOOP CURRENT. PART 2: MASS AND SALT BALANCE
S OF THE BASIN.

PRESENTED AT SYMP. PROGRESS IN MARINE RESEARCH IN THE CARIBBEAN AND
ADJACENT REGIONS, CARACAS, VENEZUELA, 12 JULY 1976.

BIBL FAO, ROME (ITALY).

KEYW LOOP CURRENT
HYDROGRAPHY

EDDY
SALINITY

CONTINENTAL SHELF
TEMPERATURE

ABST Hydrographic sections were made across the Yucatan Strait and the Straits of Florida approximately every month from May 1972 to Sept. 1973. These data encompass a cycle of the Gulf Loop Current from eddy separation to eddy separation. The data suggest that the 5 C water near the bottom of the Yucatan Strait is forced out of the Gulf of Mexico when the Loop starts to form.

About mid-way through the growth phase, resident Gulf waters advect out the Straits of Florida between the continental shelf of the United States and the Florida Current. After separation of an eddy, the 5 C water flows back into the basin, continuity being maintained by continued flow along the Florida coast. In the upper 700 m, approximately 10% of the water flowing into the basin through the Yucatan Strait is exchanged with resident Gulf waters before flowing out the Straits of Florida. The eddy separation causes an injection of 10 SU-16 g of salt into the western Gulf, and accounts for approximately 75% of the total salt exchange between the Gulf Loop Current and resident Gulf waters. Even though the basin has an excess of evaporation over precipitation, river runoff more than accounted for the atmospheric loss of fresh water during the 1972-1973 cycle.

ANNO

06/10/1987

.....
ACC 2449
TYPE P
YEAR 1979
AUTH MAY, J.A.; PERKINS, R.D.;
TITL ENDOLITHIC INFESTATION OF CARBONATE SUBSTRATES BELOW THE SEDIMENT-WATER INTERFACE.

BIBL J. SEDIMENT. PETROL. 49(2):357-378.

KEYW MONROE	CARBONATE	SUBSTRATE
SEDIMENT	CORAL	REEF

ABST Carbonate substrates consisting of crushed conch shells and inorganic calcite were planted at and below the sediment-water interface in Florida Bay, Florida, Middle Marsh, North Carolina, and Carrie Bow Cay, Belize, to study endolithic infestation. The endolithic community of substrates beneath the sediment-water interface was less diverse than that at the sediment surface. Endolithic forms and activity are described through electron and light microscopic examinations. (This is the first known evidence of endolithic activity within buried marine sediments.) Endolithic heterotrophs may significantly affect the surrounding macroenvironment within sediments, possibly increasing sediment porosity.

ANNO

06/10/1987

.....
ACC 700

TYPE

YEAR NO D

AUTH MCAULIFFE, C.D.;SMALLEY, A.E.;GROOVER, R.D.;WELSH, W.M.;PICKLE, W.S.;JONES,
TITL CHEVRON MAIN PASS BLOCK 41 SPILL: CHEMICAL AND BIOLOGICAL INVESTIGATIONS.

BIBL CONFERENCE ON PREVENTION AND CONTROL OF OIL POLLUTION.

KEYW BENTHIC FAUNA
CHEMISTRY
OIL SPILL

BIOASSAY
HYDROCARBON
POLLUTION

BIOLOGY
SEDIMENT
WATER QUALITY

ABST

ANNO

06/10/1987

.....
ACC 799

TYPE

YEAR 1981

AUTH MCCAFFREY, P.M.;

TITL STUDIES ON THE COMPOSITION AND ORGANIZATION OF THE DEMERSAL ICHTHYOFAUNA OF
THE CONTINENTAL SHELF ZONE IN THE NORTHEASTERN GULF OF MEXICO.

BIBL FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION, TECHNICAL SERVICES VOLUME V
I. NO.1. 576 P.

KEYW BIOLOGY

DEMERSAL FISH

FISHERY

SPECIES COMPOSITON

ABST

ANNO

06/10/1987

.....

ACC 4177
TYPE P
YEAR 1969
AUTH MCCAULL, J.;
TITL THE BLACK TIDE.

BIBL ENVIRONMENT 11(9):2-16.

KEYW POLLUTION OFFSHORE DRILLING FISHERY
 ECOLOGY OIL SPILL

ABST

ANNO

06/10/1987

.....
ACC 2120
TYPE P
YEAR 1979
AUTH MCCORMICK, R.;
TITL THE SHRIMP INDUSTRY: GULF OF MEXICO TRAWLING.

BIBL FISH. NEWS INT. 18(10):77.

KEYW SHRIMP	LIFE HISTORY	DISTRIBUTION
PINK SHRIMP	BROWN SHRIMP	COMMERCIAL FISHERY
SOCIOECONOMIC		

ABST This general review article of the shrimp industry of the Gulf of Mexico summarizes information on the species caught, their life histories and their distributions. Seasonal variations in the abundance and distribution of the 3 *Penaeus* species are discussed.

ANNO

.....
ACC 2121
TYPE P
YEAR 1982
AUTH MCCOY, E.;BELL, S.;
TITL MARINE BIOGEOGRAPHIC BOUNDARIES ON FLORIDA'S WEST COAST.

PRESENTED AT ANNUAL MEETING OF FLORIDA FIELD BIOLOGISTS, TAMPA, FL.

BIBL

KEYW BIOGEOGRAPHY	FISH	CRUSTACEAN
POLYCHAETE	MOLLUSC	DISTRIBUTION

ABST The distribution of 5 major taxa (teleost fish, decapod crustaceans, polychaetous annelids, and bivalve and gastropod molluscs) on the west coast of Florida was examined from distributional literature to determine whether or not Tampa Bay serves as a biogeographic boundary between temperate and tropical fauna. Species distributions were compiled from 8 shallow water sites between Pensacola/Panama City and Florida Bay and analyzed with Pielou's coincident end point technique and Raup and Crick's probabilistic similarity technique. Although a large number of endemic species were recorded for Tampa Bay, no true boundary was detected. Several species present in Florida Bay but absent at sites immediately to the north may indicate a boundary in the vicinity of Cape Romano; however, many of these species may be found in deeper water offshore far north of the Cape Romano area.

ANNO

06/10/1987

.....
ACC 2122
TYPE P
YEAR 1982
AUTH MCCOY, E.D.; BELL, S.;
TITL TAMPA BAY: THE END OF THE LINE?

BIBL PRESENTED AT TAMPA BAY AREA SCIENTIFIC INFORMATION SYMPOSIUM, TAMPA, FL.

KEYW FISH	CRUSTACEAN	POLYCHAETE
MOLLUSC	BIOGEOGRAPHY	DISTRIBUTION

ABST The distribution of 5 major taxa (teleost fish, decapod crustaceans, polychaetous annelids, and bivalve and gastropod molluscs) on the west coast of Florida was examined from distributional literature to determine whether or not Tampa Bay serves as a biogeographic boundary between temperate and tropical fauna. Species distributions were compiled from 8 shallow water sites between Pensacola/Panama City and Florida Bay and analyzed with Pielou's coincident end point technique and Raup and Crick's probabilistic similarity technique. Although a large number of endemic species were recorded for Tampa Bay, no true boundary was detected. Several species present in Florida Bay but absent at sites immediately to the north may indicate a boundary in the vicinity of Cape Romano; however, many of these species may be found in deeper water offshore far north of the Cape Romano area.

ANNO

06/10/1987

.....
ACC 2123

TYPE P

YEAR 1983

AUTH MCCOY, E.D.;BELL, S.S.;WALTERS, K.;

TITL A SIMPLE TECHNIQUE FOR LOCATING FLORAL AND FAUNAL BOUNDARIES.

BIBL PRESENTED AT BENTHIC ECOLOG. MEETING., FLA. INSTITUTE OF TECHNOLOGY,
MELBOURNE, FL.

KEYW COMMUNITIES

MOLLUSCS

ABST A simple probabilistic Monte Carlo test is presented for locating boundaries among groups of animals or plants. Using data from the North Atlantic, the technique was compared to other methods for 3 examples: the location of faunal zones on the Gulf coast of Florida; the location of boundary layers in oceanic plankton communities; and the separation of mollusks on a tidal gradient. The application of the technique in the benthic environment is discussed.

ANNO

06/10/1987

.....
ACC 4094

TYPE P

YEAR 1981

AUTH MCCOY, E.D.;

TITL RARE, THREATENED, AND ENDANGERED PLANT SPECIES OF SOUTHWEST FLORIDA AND POTENTIAL OCS ACTIVITY IMPACTS.

BIBL U.S. FISH AND WILDLIFE SERVICE, BIOLOGICAL SERVICES PROGRAM, WASHINGTON, D. C, FWS/OBS-81/50. 83 P.

KEYW BIOLOGY

COASTAL

ECOLOGY

OIL AND GAS

ENDANGERED SPECIES

OIL SPILL

HURRICANE

ABST This report on rare, threatened, and endangered plants of southwest Florida is a compilation of all species so designated or considered for listing by Federal, State, and private agencies or organizations. Of 274 species in Pinellas, Hillsborough, Manatee, Sarasota, Charlotte, Lee, Collier, and Monroe Counties, 43 occurring in coastal habitats will be most affected by Outer Continental Shelf (OCS) development. The most serious potential effects of OCS activities on plants would result from oil spills. Under certain unfavorable conditions, offshore spills could adversely affect concentrations of coastal plants in predicted landfall areas. Rapid oil landfall is greater in summer, when onshore prevailing winds, thunderstorms and hurricanes occur. Potential damage to coastal habitats from OCS development can be lessened by centering activities at Port Manatee, relatively distant from concentrations of coastal plant species and already possessing developed facilities. Except for oil spills, adverse effects of OCS oil exploration and production on rare, threatened, and endangered plants in southwest Florida are minor. As part of the pervasive historical reduction of natural habitats, however, the potential effects should not be ignored.

ANNO

06/10/1987

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ACC 4190

TYPE P

YEAR 1980

AUTH MCCULLOCH, W.L.; NEFF, J.M.; CARR, R.S.;

TITL BIOAVAILABILITY OF SELECTED METALS FROM USED OFFSHORE DRILLING MUDS TO THE
CLAM RANGIA CUNEATA AND THE OYSTER CRASSOSTREA GIGAS.

BIBL PROC. SYMP./RES. ENVIRON. FATE EFF. DRILL. FLUIDS CUTTINGS 2:964-983.

KEYW METAL

HEAVY METAL

DRILLING FLUID

MOLLUSC

DRILLING MUD

OYSTER

ABST

ANNO

06/10/1987

.....
ACC 1102
TYPE
YEAR N/AO
AUTH MCDONALD, G.;
TITL WATER HEIGHTS ASSOCIATED WITH VARIOUS HURRICANES.

BIBL U.S. ARMY CORPS OF ENGINEERS, MOBILE DISTRICT, MOBILE, AL.

KEYW HURRICANE TIDE WATER LEVEL

ABST Several larger hurricanes occurring in the Gulf of Mexico were investigated and reported on. Water heights associated with each hurricane were included in these reports as well as patterns of movements and dates of occurrence from 1911 to the present time.

ANNO

06/10/1987

.....
ACC 4235

TYPE P

YEAR 1980

AUTH MCEACHRAN, J.D.; FINUCANE, J.H.; HALL, L.S.;

TITL DISTRIBUTION SEASONALITY AND ABUNDANCE OF KING MACKEREL SCOMBEROMORUS-CAVALLA AND SPANISH MACKEREL SCOMBEROMORUS-MACULATUS LARVAE IN THE NORTHWESTERN GULF OF MEXICO PISCES SCOMBRIDAE.

BIBL NORTHEAST GULF SCI. 4(1):1-16.

KEYW	DISTRIBUTION	SEASONALITY	ABUNDANCE
	KING MACKEREL	SPANISH MACKEREL	LARVAE
	SPAWNING		

ABST Larvae of king mackerel *S. cavalla* and Spanish mackerel *S. maculatus* were collected from 1975-1977 off the Texas coast (USA). Both species were captured from May-October. *S. cavalla* was relatively more abundant of the 2 spp. and occurred most abundantly over the middle and outer continental shelf (35-183 m). At least 35% of the larvae were captured in September of each year. *S. maculatus* larvae occurred most abundantly over the inner continental shelf (12-50 m). *S. cavalla* spawned from May-September to early October, with the greatest spawning intensity occurring over the middle and outer continental shelf during September. *S. maculatus* spawned from May-September to early October over the inner continental shelf, but spawning was less intensive and more irregular than for *S. cavalla*. Comparisons with other larval studies of *S. cavalla* and *S. maculatus* suggest that the northwestern and northeastern Gulf of Mexico and the coast off the southeastern USA are important spawning areas for *S. cavalla* and that the eastern and northeastern Gulf of Mexico are important spawning areas for *S. maculatus*.

ANNO

06/10/1987

.....
ACC 4095

TYPE P

YEAR 1963

AUTH MCERLEAN, A.J.;

TITL A STUDY OF THE AGE AND GROWTH OF THE GAG, MYCTEROPERCA MICROLEPIS GOODE AND
BEAN, ON THE WEST COAST OF FLORIDA.

BIBL ST. BD. CONSERV. TECH. SER. 41:1-29.

KEYW BIOLOGY

GROUPER

RECREATIONAL FISHERY

COMMERCIAL FISHERY

LIFE HISTORY

REPRODUCTION

COASTAL

ABST The age and growth of *M. microlepis* was studied by otolith method over a nine month period. Other aspects of the biology of this species were also studied. The following results were obtained: 1) the species on the Florida west coast can be aged by otolith methods, 2) linear growth was estimated by back calculation. The species attains a standard length of approximately seven inches during its first year of life. Increments of four and three inches are added during the second and third years. At this point, and to the age of six, growth increments average about three inches. 3) The species appears to be depth-size distributed. 4) Reproduction occurs offshore in the early spring. The eggs and larvae are probably demersal and pelagic.

ANNO

06/10/1987

.....
ACC 2450
TYPE P
YEAR 1955
AUTH MCGINTY, T.L.;
TITL NEW MARINE MOLLUSCS FROM FLORIDA.

BIBL PROC. ACAD. NAT. SCI., PHILADELPHIA, PA. CVII:75-97.

KEYW MONROE MOLLUSC DEPTH

ABST Twelve new species of marine molluscs were recovered and described from dredge samples taken from about 1400 stations adjacent to or in the Gulf Stream, from Jupiter to the Key West area in offshore depths varying from shallow water to greater than 150 fathoms. These species include: *Cryoturris enigma*, *Daphnella stegeri*, *Nitra noisei*, *Nitra olssoni*, *Fusilavirus pauli*, *Endolium thompsoni*, *Aceteon finlayi*, *Bullina exquiseta*, *Scaphander pilsbryi*, *Senele bellastriata donovani*, *Lini locklini*, *Aclistothyra atlantica*.

ANNO

06/10/1987

.....
ACC 313

TYPE

YEAR 1974

AUTH MCGRAW, K.A.;

TITL TWO ABERRANT FORMS OF THE MOON JELLYFISH, AURELIA AURITA (LINNE), IN THE NO
RTHEASTERN GULF OF MEXICO.

BIBL CHESAPEAKE SCI. 15(1):55-56.

KEYW HYDROZOA

COASTAL WATER

SCYPHOZOA

DISTRIBUTION

BIOLOGY

ABST The moon jellyfish, *Aurelia aurita* (Linne), is common in the coastal waters of the northeastern Gulf of Mexico from September through December, with infrequent occurrences in March and April. From April, 1971 to June, 1973 over 1500 normal specimens of *Aurelia aurita* were collected in a monthly sampling program, utilizing trawls and dip nets off the coasts of Mississippi, Alabama and Florida and one mile beach surveys on the barrier islands. Two aberrant *Aurelia aurita* were obtained during routine beach surveys.

ANNO

06/10/1987

.....
ACC 798

TYPE

YEAR 1972

AUTH MCGRAW, K.A.;GUNTER, G.;

TITL OBSERVATIONS ON KILLING OF THE VIRGINIA OYSTER BY THE GULF OYSTER BORER, THA
IS HAEMASTOMA, WITH EVIDENCE FOR A PARALYTIC SECRETION .

BIBL PROC. NATL. SHELLFISH. ASSOC. 62:95-97.

KEYW BIOLOGY
OYSTER

COMMERCIAL FISHERY
PREDATION

LIFE HISTORY
MOLLUSC

ABST Experiments conducted with adult *Thais haemastoma* indicate that this oyster borer utilizes a paralytic secretion in attacking oysters. Approximately 30% of the oysters eaten by *Thais* showed no evidence of drilling on the shell. Drilling appears to be a secondary process in many cases, but is seldom found inward of the area of occlusion, or outer margin of the oyster shell.

ANNO

06/10/1987

.....
ACC 762
TYPE
YEAR 1981
AUTH MCILWAIN, T.D.;
TITL FISHERY MONITORING AND ASSESSMENT.

BIBL GULF COAST RESEARCH LABORATORY, OCEAN SPRINGS, MS. COMPLETION REPORT TO NOA
A ON PROJECT 2-296-R.

KEYW BIOLOGY	COMMERCIAL FISHERY	FISH
SHRIMP	PLANKTON	NEKTON
PURSE SEINER	TRAWL FISHERY	

ABST This report consists of catch statistics during the fisheries monitoring and assessment program from January, 1977 to December, 1981. Plankton, nekton, trawl, seines and oyster collections were made. Physical measurements were taken at each station.

ANNO

06/10/1987

.....
ACC 2514
TYPE P
YEAR 1971
AUTH MCINTYRE, A.D.;
TITL OBSERVATIONS ON THE STATUS OF SUBTIDAL MEIOFAUNA RESEARCH.

BIBL SMITHSONIAN CONTRIB. ZOOLOG. NO. 76, 149-154 P.

KEYW DADE	MEIOFAUNA	ECOLOGY
DISTRIBUTION	SEASONAL	DEPTH

ABST The published data on quantitative aspects of subtidal meiofauna populations and their ecology was reviewed. The regional and vertical distribution, seasonal fluctuations, and composition of populations of subtidal meiofauna were considered in the review. It was concluded that geographic and depth range of sampling must be extended, seasonal changes in meiofauna must be studied in more detail, and sampling techniques must be refined.

ANNO

06/10/1987

.....
ACC 304

TYPE

YEAR 1975

AUTH MCKOWN, M.M.; MONTALVO, J.G.;

TITL THE QUALITY CONTROL OF TRACE METAL ANALYSIS FOR THE MAFLA (MISSISSIPPI, ALABAMA, FLORIDA) ENVIRONMENTAL SURVEY.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/YM/ES-75-3. 190 P.

KEYW BIOLOGY

FOOD CHAIN

METAL

OCEANOGRAPHY

CONTINENTAL SHELF

SEDIMENTATION

MAFLA

TRACE METAL

ABST A comprehensive quality control program was conducted by Gulf South Research Institute in support of the MAFLA Trace Metal Phase of the Baseline Environmental Survey. Five different types of marine environmental samples, chosen at random from the samples analyzed by the prime contractor were submitted for quality control verification of eight different trace metals.

ANNO

06/10/1987

.....

ACC 2515

TYPE P

YEAR 1978

AUTH MCLAUGHLIN, P.; THORHAUG, A.;

TITL RESTORATION OF THALASSIA TESTUDINUM: ANIMAL COMMUNITY IN A MATURING FOUR-YE
AR-OLD SITE--PRELIMINARY RESULTS.

BIBL IN: D.P. COLE (ED.), THE RESTORATION OF COASTAL VEGETATION IN FLORIDA: PROC
. OF THE FIFTH ANNU. CONF., MAY 13, 1978, TAMPA, FL.

KEYW DADE

SEAGRASS

ANNELID

MOLLUSC

SHRIMP

CRUSTACEAN

ABUNDANCE

DIVERSITY

ABST The fauna of a restored seagrass bed and an undisturbed natural seagrass be
d are compared. Marked differences were noted with respect to annelids, is
opods, molluscs, and penaeid shrimp. Restored areas versus controls prelim
inarily showed similar animal abundances and diversities.

ANNO

06/10/1987

.....
ACC 2516

TYPE P

YEAR 1961

AUTH MCNULTY, J.K.;

TITL ECOLOGICAL EFFECTS OF SEWAGE POLLUTION IN BISCAYNE BAY, FLORIDA: SEDIMENTS
AND THE DISTRIBUTION OF BENTHIC AND FOULING MACRO-ORGANISMS.

BIBL BULL. MAR. SCI. GULF. CARIBB. 11(3):394-447.

KEYW DADE
BENTHIC
DO

SEDIMENT
FOULING
INVERTEBRATE

DISTRIBUTION
POLLUTION
STRESS

ABST Harmful effects, fertilizing effects and indicator organisms of sewage pollution in Biscayne Bay were described. Three stations close to sewage outfalls indicated harmful effects. Fertilizing effects caused many species of attached vegetation and benthic animals to become more abundant. Indicator organisms of both harmful and fertilizing effects were evident. The dominance of tubicilous amphipods on glass panels exposed for one month was the major characteristic of the fouling complex in highly polluted areas.

ANNO

06/10/1987

.....
ACC 2517

TYPE P

YEAR 1962

AUTH MCNULTY, J.K.;WORK, R.C.;MOORE, H.B.;

TITL SOME RELATIONSHIPS BETWEEN THE INFAUNA OF THE LEVEL BOTTOM AND THE SEDIMENT
IN SOUTH FLORIDA.

BIBL BULL. MAR. SCI. GULF CARIBB. 12:322-332.

KEYW DADE
INFAUNA

SEDIMENT

INVERTEBRATE

ABST Detritus feeders were found to predominate in the finest sediments, and deposit and filter feeders at intermediate grades, but the latter were most abundant at a considerably greater particle size than that found by Sanders in Buzzards Bay. There was a very close correlation between the body size of the deposit feeders and the particle size, regardless of the type of animal concerned.

ANNO

06/10/1987

.....
ACC 2518

TYPE P

YEAR 1970

AUTH MCNULTY, J.K.;

TITL EFFECTS OF ABATEMENT OF DOMESTIC SEWAGE POLLUTION ON THE BENTHOS, VOLUMES OF ZOOPLANKTON AND THE FOULING ORGANISMS OF BISCAYNE BAY, FLORIDA.

BIBL STUD. TROP. OCENAOGR. MIAMI, 9:107 P. 19 FIGS.

KEYW DADE
FOULING
NUTRIENT

POLLUTION
BENTHIC
PHOSPHATE

ZOOPLANKTON
INVERTEBRATE

ABST A comparison of the benthos before and four years after pollution abatement was presented. The pollution consisted of 136 to 227 million liters per day of untreated domestic sewage. At distances of 2100 to 740 meters seaward from outfalls, in water depths of one to three meters, hard bottom populations of benthic macroinvertebrates had declined from abnormally large numbers of species and individuals to normal numbers of each, while soft bottom populations had changed qualitatively but not quantitatively. Adjacent to outfalls, populations had increased in numbers of species and numbers of individuals in hard sandy bottoms only. Volumes of zooplankton had decreased to about one-half the preabatement values in poorly flushed waters; elsewhere they remained about the same. Dissolved inorganic phosphate-phosphorus decreased similarly. Abundance of amphipod tubes declined markedly. No evidence of improved commercial and sport fishing followed abatement (probably from persistence of other forms of pollution and dredging).

ANNO

06/10/1987

.....
ACC 2451

TYPE P

YEAR 1969

AUTH MCPHERSON, B.F.;

TITL STUDIES ON THE BIOLOGY OF THE TROPICAL SEA URCHIN, ECHINOMETRA JUCUNTER AND
ECHINOMETRA VIRIDIS.

BIBL BULL. MAR. SCI. 19(1):194-213.

KEYW MONROE

REEF

REPRODUCTION

BIOLOGY

ECHINODERMATA

FEEDING HABIT

SPAWNING

GROWTH

BEHAVIOR

ABST The growth and reproduction of 2 echinoid species, *Echinometra lucunter* and *E. viridis* were studied at 5 locations in the Florida Keys. Gametogenesis was found to occur during spring and summer, with both species spawning in late summer or early fall. The reproductive cycles of *E. lucunter* from different habitats were similar, although relative gonad growth and test size were greater in individuals from inshore areas than those from offshore patch reefs. Variations in abundance and size of urchins between locations are cited. Feeding habits and behavior of both species are discussed.

ANNO

06/10/1987

.....

ACC 634

TYPE

YEAR 1980

AUTH MEISBURGER, E.;HULMES, L.J.;HANDS, E.B.;WILLIAMS, S.J.;EVERTS, D.H.;PRINS,
TITL BARRIER ISLAND SEDIMENTATION STUDIES PROGRAM.

IN PROCEEDINGS OF THE CONFERENCE COASTAL ZONE 80. 810-828 P.

BIBL AMERICAN SOCIETY OF CIVIL ENGINEERS, HOLLYWOOD, FL.

KEYW BARRIER ISLAND

EROSION

GEOLOGY

MODEL

PHYSICAL PROCESS

SEDIMENT TRANSPORT

SEDIMENTATION

ABST

ANNO

06/10/1987

.....
ACC 2228
TYPE P
YEAR 1972
AUTH MENZIES, R.J.;GEORGE, R.Y.;
TITL TEMPERATURE EFFECTS ON BEHAVIOR AND SURVIVAL OF MARINE INVERTEBRATES EXPOSE
D TO VARIATIONS IN HYDROSTATIC PRESSURE.

BIBL INT. LIFE OCEANS, COAST WAT. 13(2):155-159.

KEYW INVERTEBRATE PRESSURE TEMPERATURE
SALINITY STRESS

ABST The effect of hydrostatic pressure in living specimens of tropical stenothermal species was studied in order to evaluate the relationship between the high temperatures and organisms genetically and physiologically adapted to a warm water milieu. The effect of pressure on eurythermal stenobathial species physiologically acclimated to high and low temperatures was also studied. Generally, increasing temperature increases the pressure required to elicit reversible reactions such as "increased activity" and tetany, or paralysis, whereas increasing temperature generally evokes the irreversible response of death (LD 50) at a decreasing pressure. Tropical stenotherms tend to be more sensitive to hydrostatic pressure than eurythermal-temperate species at the same or similar temperatures.

ANNO

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ACC 4096
 TYPE P
 YEAR 1983
 AUTH MENZIES, R.J.; KRUCZYNSKI, W.L.;
 TITL ISOPOD CRUSTACEA (EXCLUSIVE EPICARIDEA): MEMOIRS OF THE HOURGLASS CRUISES.
 VOL. VI, PART I.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. 126 P.

KEYW	ECOLOGY	CRUSTACEA	SYSTEMATIC
	DISTRIBUTION	BIOLOGY	ZOOGEOGRAPHY
	EPIFAUNA	HOURGLASS	BENTHIC
	CONTINENTAL SHELF		

ABST Thirty-two species in 26 genera of marine isopod crustaceans (excluding Epicaridea) were captured in a 28-month program at ten stations (6 to 73 m) along two transects on the central west Florida shelf. Two new species in new genera [*Tropedotea lyonsi* (Idotheidae), *Edwinjoycea horologium* (Arcturidae)] are described, as are eight new species in previously known genera [*Arcturella spinata* and *Arcturella bispinata* (Arcturidae), *Gnathia floridensis* (Gnathiidae), *Mesanthura floridensis* and *Skuphonura lindae* (Anthuridae), *Paranthura floridensis* (Paranthuridae), *Lironeca tropicalis* (Cymothoidae), *Carpas floridensis* (Janiridae)]. High incidence of new taxa reflects little previous study of Gulf of Mexico and Caribbean shelf isopods. Previously known species were predominantly of West Indian Faunal Province affinity, but several temperate and a few boreal species were present. Coincidence of species from three west Florida estuaries with Hourglass shelf species ranged from 18 to 41 percent; only 25 percent of the shelf species have been reported from any west Florida estuary. Fourteen species comprised 92 percent of all specimens. Habitat partitioning by depth, apparent for many species, was probably related to substrate and associated organisms. Checklists and analytical keys are provided for all marine isopod species (except Epicaridea) known previously or expected to occur in the Gulf of Mexico and Caribbean Sea from depths less than 600 m.

ANNO

06/10/1987

.....
ACC 4180
TYPE P
YEAR 1983
AUTH MENZIE, C.A.;
TITL ENVIRONMENTAL CONCERNS ABOUT OFFSHORE DRILLING--MUDDY ISSUES.

BIBL OCEANUS 26(3):32-38.

KEYW DRILLING MUD	DRILL CUTTING	OIL AND GAS
POLLUTION	PRODUCED WATER	OFFSHORE

ABST Drilling fluids (muds), drill cuttings, and produced waters (the discharge associated with oil-production operations) are the most significant discharges associated with offshore oil and gas operations. The quantities of these discharges vary. During exploration, drilling is conducted to determine the nature and extent of potential oil and gas reserves. These operations are usually short, involve a small number of wells, and are generally conducted from mobile platforms or vessels. Drilling muds and cuttings are discharged during exploration. Once oil and gas is found, development begins, which involves the drilling of 10 to 30 wells, usually from a fixed platform. Since more wells are drilled, a larger volume of drilling muds and cuttings are discharged during development than during exploration.

ANNO

06/10/1987

.....
ACC 2170

TYPE P

YEAR 1975

AUTH MESSING, C.G.;

TITL THE SYSTEMATICS AND DISTRIBUTION OF THE CINOIDEA COMAATULIDA (EXCLUSIVE OF
THE MACROPHREATINA) COLLECTED BY THE R/V CERDA IN THE STRAITS OF FLORIDA AN
D ADJACENT WATERS.

BIBL M.S. THESIS. UNIV. OF MIAMI.

KEYW CRINOID
MORPHOLOGY

GEOGRAPHIC
SUBSTRATE

DISTRIBUTION

ABST Comatulid crinoids from 8 genera were studied from samples collected from t
he Straits of Florida. Observations were made on morphological variations
and distributions. Analysis of geographic and bathymetric distributions re
vealed 5 distinct patterns of horizontal distribution. Cirrus morphology a
nd substrate preference were investigated. Geographic ranges were extended
and new species were described.

ANNO

06/10/1987

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ACC 4097
TYPE P
YEAR 1982
AUTH METZ, S.;
TITL PROVENANCE AND PARTITIONING OF FE, MN, AND SR IN WEST FLORIDA SHELF SEDIMENTS AS A FUNCTION OF GRAIN SIZE AND CARBONATE CONTENT.

BIBL M.S. THESIS. FLA. INST. TECH. 161 P.

KEYW CHEMISTRY	MAFLA	TRACE METAL
SEDIMENT	MINERALOGY	GRAIN SIZE
GEOCHEMISTRY	METAL	CARBONATE

ABST A chemical leaching technique has been developed to selectively remove the carbonate phase with associated trace metals from marine sediments. This technique combines use of a sodium acetate-acetic acid buffer (ph 5) with careful addition of 1 ml aliquote of 1 N HNO₃. Results from the carbonate leaching experiments have been combined with sediment grain-size, carbonate and organic carbon data, mineralogy, and total trace metal concentrations to describe the distribution and provenance of trace metals in the carbonate-rich West Floridas Self sediments. As a function of the predominant grain-size fraction present in the sediments, the West Florida Shelf can be divided into three bands which run parallel to the Florida coastline; nearshore, fine sand grading into coarse and followed by fine sand with increasing distance offshore. Carbonate is the major component within each one of the predominant grain-size fractions (> 85%), except for the quartz-bearing fine sands of some nearshore samples. The carbonate grains found on the shelf also can be divided into the following bands parallelling the Florida coastline; mollusks, coralline algae, ooids, and foraminifers with increasing distance offshore. The minor noncarbonate phase of the West Florida Shelf sediment (generally less than 20% of the total) ranges from quartz in nearshore samples fo kaolinite and montmorillonite clays in offshore samples. An alysis of Fe, Mn and Sr in both the carbonate and noncarbonate phase revealed that Fe is predominantly associated with the non-carbonate phase (> 95% of the total Fe), while the carbonate phase is the major Mn and Sr-bearing

ANNO

06/10/1987

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ACC 305

TYPE

YEAR 1976

AUTH MEYERS, P.A.;

TITL AN EXTENSION OF THE BASELINE COMPOSITIONS OF HYDROCARBONS IN BENTHIC EPIFAUNA OFF THE OUTER CONTINENTAL SHELF OF THE EASTERN GULF OF MEXICO.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/YM/ES-76/02. 44 P.

KEYW BENTHIC COMMUNITY HYDROCARBON CONTINENTAL SHELF
POLLUTION EPIFAUNA BENTHIC
ALIPHATIC COMPOUNDS

ABST Twenty-four samples of benthic macrofauna collected during the MAFLA baseline survey under contract 08550-CT4-11 were analyzed for indigenous hydrocarbons. The procedures used are specified in contract 08550-CT5-30 and involve separating the extracted hydrocarbons into aliphatic and unsaturated fractions and analyzing each fraction by gas chromatography on two different columns. Data obtained from these analyses show that the ratio of odd to even alkanes is close to unity in all the samples. This appears to be a natural characteristic of marine organisms. A homologous series of n-alkanes peaking around C25 to C27 is found in many of the samples. In most samples, the unsaturated fraction of hydrocarbons is at a greater concentration than the aliphatic fraction. These organisms display no obvious evidence of oil contamination.

ANNO

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ACC 4111
 TYPE P
 YEAR 1981
 AUTH MEYERS, A.A.;
 TITL AMPHIPOD CRUSTACEA I. FAMILY AORIDAE. MEMOIRS OF THE HOURGLASS CRUISES.
 VOL. V, PART V.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. 75 P.

KEYW CRUSTACEA	CONTINENTAL SHELF	BREEDING CYCLES
BIOLOGY	SYSTEMATIC	ZOOGEOGRAPHY
HOURGLASS	ECOLOGY	EPIFAUNA
BENTHIC	DISTRIBUTION	

ABST Thirteen species of aorid amphipods [*Lembos tigrinus* Myers, *L. tempus* Myers, *L. spinicarpus inermis* Myers, *L. unicornis* Bynum and Fox, *L. unifasciatus reductus* Myers, *L. brunneomaculatus mackinneyi* Myers, *L. ovalipes* Myers, *L. smithi* (Holmes), *Microdeutopus myersi* Bynum and Fox, *Rildardanus laminosa* (Pearse), *Liocuna caeca* new genus and species, *Unicola serrata* Shoemaker and *Acuminodeutopus naglei* (Bousfield)] were collected during a 28-month sampling programme at ten stations (6-73 metres depth) along two east-west transects on the central West Florida Shelf. Two further species (*Lembos setosus* Myers and *L. rectangulatus* Myers), not collected during the Hourglass programme but collected subsequently in the survey area, are included in the review. These species are diagnosed and figured, and their bathymetric distribution within the study area discussed. Relationships of families within the superfamily Corophioidea are discussed, and a new family, Neomegamphopidae, is erected to include *Neomegamphopus*, *Knoatopus*, *Maragopsis*, *Pseudomegamphopus* and *Varohios*. Zoogeographic analysis of Hourglass Aoridae revealed three species with Transshatteran affinities, seven species with West Atlantic Tropical affinities, and five species known only from the West Atlantic Warm-Temperate. None were strictly Carolinian species. Breeding cycles of selected species were investigated. *Lembos tigrinus* and *L. tempus* had breeding peaks between August and November, whereas *L. smithi* had a breeding peak between March and May.

ANNO

06/10/1987

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ACC 4174

TYPE P

YEAR 1978

AUTH MEYERS, P.A.;

TITL MONITORING OF HYDROCARBONS IN BENTHIC CRUSTACEANS DURING OFFSHORE DRILLING
AND PETROLEUM EXPLORATION.

BIBL CHEMOSPHERE 7(5):385-391.

KEYW HYDROCARBON

OFFSHORE DRILLING

BENTHIC

PINK SHRIMP

CRUSTACEAN

ABST

ANNO

06/10/1987

.....
ACC 4202

TYPE P

YEAR 1981

AUTH MIDDLEDITCH, B.S.;

TITL BIOCIDES (IN ENVIRONMENTAL EFFECTS OF OFFSHORE OIL PRODUCTION).

BIBL MAR. SCI. 14:55-57.

KEYW OFFSHORE DRILLING

POLLUTION

BIOLOGICAL

ABST

ANNO

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ACC 4204
TYPE P
YEAR 1980
AUTH MIDDLEDITCH, B.S.;BASILE, B.;
TITL ALKANES IN BENTHIC ORGANISMS FROM THE BUCCANEER OIL FIELD.

BIBL BULL. ENVIRON. CONTAM. & TOXICOL. 24:945-952.

KEYW BENTHIC	CORAL	MOLLUSC
PETROLEUM	HYDROCARBON	SEDIMENT
POLLUTION	HYDROID	

ABST Alkane profiles of 48 benthic organisms from the Buccaneer oil field are reported. Coral samples contained biogenic alkanes in the C22 to C32 region (Koons et al. 1965). Hydroid specimens exhibited similar profiles which were also ascribed a biogenic origin. Samples of one species of mollusc, *Pleuroploea gigantea*, from the production and quarters platforms contained petroleum alkanes, while corresponding samples from the well jacket did not contain these compounds. Some specimens of another mollusc, *Pteria colymbus*, contained petroleum hydrocarbons, while there was no evidence for petroleum hydrocarbons in any of the other species examined: *Arbacia unctulata*, *Chloea viridis*, *Murex fulvescens*, *Pagurus floridanus*, and *Fasciolaria hunteria*. Molluscs have been shown to sequester petroleum hydrocarbons after long periods of exposure. In the present study, however, petroleum alkanes were found only in *Pleuroploea gigantea* and *Pteria colymbus* but even in these organisms such hydrocarbons were generally present in concentrations lower than those of the biogenic hydrocarbons. (Sinha-OEIS)

ANNO

06/10/1987

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ACC 4292

TYPE P

YEAR 1981

AUTH MIDDLEDITCH, B.S.;

TITL HYDROCARBONS AND SULFUR (ENVIRONMENTAL EFFECTS OF OFFSHORE OIL PRODUCTION:
THE BUCCANEER GAS AND OIL FIELD STUDY).

BIBL MAR. SCI. 14:15-54.

KEYW HYDROCARBON
POLLUTION

OIL
GEOCHEMISTRY

PETROLEUM
SEDIMENT

ABST

ANNO

06/10/1987

.....
ACC 2344

TYPE P

YEAR 1978

AUTH MIKKELSON, P.S.;

TITL A COMPARISON OF INTERTIDAL DISTRIBUTION GROWTH RATES, AND SHELL POLYCHROMISM BETWEEN TWO FLORIDA POPULATIONS OF THE COQUINA CLAM, DONAX VARIABILIS SAY, 1882 (BIVALVE: DONACIDAE).

BIBL M.S. THESIS. FLA. INST. OF TECH.

KEYW LEE	POPULATION	SALINITY
SEDIMENT	GRAIN SIZE	WAVE
DISTRIBUTION	GROWTH	MOLLUSCA
BEHAVIOR		

ABST Population density, shell coloration, and migratory behavior of *Donax variabilis* were compared in two populations collected from Sanibel Island and In diatlantic Beach, Florida, during the summer of 1976. The influence of certain environmental factors, such as salinity, rainfall, sediment grain size, organic leptopel and wave impact, on population distribution and shell coloration was examined. Differences in population size, distribution, shell color, growth rate, and migratory movements were found between the 2 populations. The adaptive effects of polychromism are discussed.

ANNO

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ACC 709
TYPE
YEAR 1980
AUTH MILLER, J.M.;DUNN, M.L.;
TITL FEEDING STRATEGIES AND PATTERNS OF MOVEMENT IN JUVENILE ESTUARINE FISHES.

BIBL IN V.S. KENNEDY, ED. ESTUARINE PROSPECTIVES. ACADEMIC PRESS, NEW YORK, NY.

KEYW BIOLOGY COASTAL WATER ECOLOGY
FEEDING HABIT FISH JUVENILE
ESTUARY

ABST Juvenile fishes in estuaries are trophic generalists; there is little evidence of their dependence on specific prey populations. The energetic costs of obtaining food are unknown since food habit data are rarely coupled with prey availability data, but it appears that locating prey may be more important than prey abundance. Cues for locating prey may be either prey abundance or environmental correlates of prey abundance. Juvenile fish may respond to the environmental rigors of the estuary by 1) increased breadth of tolerance limits or 2) inter- or intra-habitat movements. In hopes of encouraging the development of a data base on juvenile estuarine fishes, the authors list critical research needs.

ANNO

06/10/1987

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ACC 4098
TYPE P
YEAR 1984
AUTH MILLER, J.E.; PAWSON, D.L.;
TITL HOLOTHURIANS (ECHINODERMATA; HOLOTHUROIDEA). MEMOIRS OF THE HOURGLASS CRUISES. VOL. VII, PART I.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. 79 P.

KEYW ECHINODERMATA	SYSTEMATIC	BENTHIC
EPIFAUNA	DISTRIBUTION	BIOLOGY
HOURGLASS	ZOOGEOGRAPHY	ECOLOGY
CONTINENTAL SHELF		

ABST A total of 213 holothurians, representing 16 species, was collected during Project Hourglass, a 28-month systematic survey of ten stations along two transects (6-73 m) off central western Florida. This material, supplemented with 81 additional Gulf of Mexico specimens supplied by the Florida Department of Natural Resources, brings the total number of species reported in this paper to 20. Of these species, 19 have previously been reported from the Gulf of Mexico. One, *Allothyone mexicana*, can be considered endemic to the Gulf of Mexico, and another, *Thyone crassidisca*, was recently described from material including Hourglass specimens. Systematic accounts, pertinent ecological data and line drawings of taxonomically important skeletal elements are included for each species. Keys to all 60 holothurian species known from the Gulf of Mexico are provided. Range extensions for several species are noted.

ANNO

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ACC 178
 TYPE
 YEAR 1983
 AUTH MINERALS MANAGEMENT SERVICE;
 TITL REGIONAL ENVIRONMENTAL ASSESSMENT--GULF OF MEXICO PIPELINE ACTIVITIES.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE, LA.

KEYW DREDGING	EXPLORATION	OIL
CONTINENTAL SHELF	PIPELINES	PRODUCTION

ABST Pipeline construction, operation, and maintenance on the OCS causes minimal impacts to onshore air quality. Water quality may be adversely affected by suspension of sediment during construction or trenching operations; such impacts are localized and of short duration, however. Animal and plant life may be adversely affected by the physical disturbance and turbidity, but the nonburied pipelines furnish a substrate for encrusting organisms and result in increased diversity in the biological community in the vicinity of the pipelines. Impacts on shipping and navigation through collisions are negligible due to the low number of vessels involved in pipeline construction. Some 25 acres per mile of seafloor are involved in pipeline rights-of-way, although only a small portion of that acreage is physically disturbed by pipeline emplacement. At present, pipelines do cause a significant adverse impact on other commercial fisheries. Cultural resources on the OCS could be impacted by physical disturbance caused by anchoring, pipeline construction, or jetting. These potential impacts are mitigated through the requirement of pre-lay surveys. Although most breaks in offshore pipelines have resulted in only minimal amounts of oil spilled, eight pipeline breaks since 1964 have resulted in spills greater than 1,000 bbls. To date, no major spill from OCS pipelines in the Gulf has resulted in catastrophic short-term environmental degradation. Impacts of pipeline emplacement on coastal habitats include destruction of vegetation and sessile and slow-moving animals, habitat alteration, changes in salinity and hydrologic regimes, and increased ma

ANNO

06/10/1987

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ACC 403

TYPE

YEAR 1983

AUTH MINERALS MANAGEMENT SERVICE;

TITL DRAFT ENVIRONMENTAL IMPACT STATEMENT, GULF OF MEXICO PROPOSED OCS OIL AND GAS LEASE OFFERINGS CENTRAL GULF OF MEXICO (APRIL 1984), WESTERN GULF OF MEXICO (JULY 1984).

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE, LA. 357 P.

KEYW BIOLOGY

CHEMISTRY

EXPLORATION

GEOLOGY

INDUSTRY

OIL

CONTINENTAL SHELF

PHYSICAL PROCESS

SOCIOECONOMIC

ABST

ANNO

06/10/1987

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ACC 404
TYPE
YEAR 1982
AUTH MINERALS MANAGEMENT SERVICE;
TITL DRAFT REGIONAL ENVIRONMENTAL IMPACT STATEMENT--GULF OF MEXICO.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE,
LA. 730 P.

KEYW BIOLOGY	CHEMISTRY	EXPLORATION
GEOLOGY	INDUSTRY	OIL
CONTINENTAL SHELF	PHYSICAL PROCESS	SOCIOLOGY

ABST

ANNO

06/10/1987

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ACC 405
TYPE
YEAR 1983
AUTH MINERALS MANAGEMENT SERVICE;
TITL FINAL REGIONAL ENVIRONMENTAL IMPACT STATEMENT--GULF OF MEXICO, VOLUME 1.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE,
LA. 527 P.

KEYW CHEMISTRY	EXPLORATION	GEOLOGY
INDUSTRY	OIL	CONTINENTAL SHELF
PHYSICAL PROCESS	SOCIOECONOMIC	

ABST This document discusses the purpose and background of the proposed actions, the alternatives, including the proposed actions, the description of the affected environment, and the environmental impacts of the proposed central Gulf of Mexico Sale 72, Western Gulf of Mexico Sale 74, and Eastern Gulf of Mexico Sale 79.

ANNO

06/10/1987

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ACC 406

TYPE

YEAR 1983

AUTH MINERALS MANAGEMENT SERVICE;

TITL FINAL REGIONAL ENVIRONMENTAL IMPACT STATEMENT--GULF OF MEXICO, VOLUME 2.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE,
LA.

KEYW CHEMISTRY

EXPLORATION

GEOLOGY

INDUSTRY

OIL

CONTINENTAL SHELF

PHYSICAL PROCESS

SOCIOECONOMIC

ABST

ANNO

06/10/1987

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ACC 674

TYPE

YEAR 1983

AUTH MINERALS MANAGEMENT SERVICE;

TITL MINERAL REVENUES: THE 1982 REPORT ON RECEIPTS FROM FEDERAL AND INDIAN LEASES, WITH SUMMARY DATA FROM 1920 TO 1982.

BIBL U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 68 P.

KEYW MINERAL RESOURCE
RESOURCE

OIL
SOCIOECONOMIC

CONTINENTAL SHELF

ABST This document is prepared by the Royalty Management Program of the Minerals Management Service as a summary report presenting data on the mineral leasing revenues generated from Federally owned offshore and onshore lands and Indian tribal lands and allotments. The royalties collected in 1982 totaled \$9.3 billion for the entire United States. Offshore Louisiana revenues contributed nearly \$3.2 billion.

ANNO

06/10/1987

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ACC 987
TYPE
YEAR 1984
AUTH MINERALS MANAGEMENT SERVICE;
TITL RECAP OF BIDS FOR OCS SALE 81 AND RELATED INFORMATION.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO REGIONAL OFFICE, METAIRIE, LA.
95 P.

KEYW	EXPLORATION	GAS	INDUSTRY
	OFFSHORE LEASE	OFFSHORE MINERAL	OIL
	CONTINENTAL SHELF	SOCIOECONOMIC	

ABST This is a compilation of bids for OCS lease from OCS sale 81 held on April 24, 1984. Information presented includes the amount offered on each tract, the company name and whether the bid was accepted.

ANNO

06/10/1987

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ACC 1022
TYPE
YEAR 1983
AUTH MINERALS MANAGEMENT SERVICE;
TITL QUARTERLY REPORT--JANUARY - FEBRUARY - MARCH - 1983.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE,
LA. 69 P.

KEYW	EXPLORATION	GAS	OIL WELL
	OIL	OPERATIONS	CONTINENTAL SHELF
	SOCIOECONOMIC		

ABST

ANNO

06/10/1987

.....
ACC 1023
TYPE
YEAR 1983
AUTH MINERALS MANAGEMENT SERVICE;
TITL QUARTERLY REPORT--OCTOBER - NOVEMBER - DECEMBER - 1983.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE,
LA. 76 P.

KEYW EXPLORATION	GAS	OIL WELL
OIL	OPERATIONS	CONTINENTAL SHELF
SOCIOECONOMIC		

ABST

ANNO

06/10/1987

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ACC 1024
TYPE
YEAR 1984
AUTH MINERALS MANAGEMENT SERVICE;
TITL QUARTERLY REPORT--JANUARY - FEBRUARY - MARCH - 1984.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE,
LA. 77 P.

KEYW EXPLORATION	GAS	OIL WELL
OIL	OPERATIONS	CONTINENTAL SHELF
SOCIOECONOMIC		

ABST

ANNO

06/10/1987

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ACC 4203

TYPE P

YEAR 1981

AUTH MINERALS MANAGEMENT SERVICE;

TITL PROCEEDINGS: 2ND ANNUAL GULF OF MEXICO INFORMATION TRANSFER MEETING.

BIBL TECH. REPT. NO. 81-5-T. 108 P.

KEYW FISH

POLYCHAETE

OCEANOGRAPHY

OIL SPILL

CIRCULATION

ECOLOGY

GEOLOGY

BIOLOGICAL

ABST The meeting discussed here was held in order to provide a forum for exchange of current data and information generated through environmental studies in the Gulf of Mexico. Topics discussed include: topographic features; effects of oil and gas activities on reef fish populations; assessment of the IXTOC oil spill damage; economic aspects of the IXTOC I spill and BURMA AGATE spill; geology studies; recreational fisheries investigations; marine ecological mapping projects; deep sea biology; polychaete studies; southwest Florida shelf ecosystems studies; satellite oceanography; southwest Florida shelf circulation; coastal ecological characterizations; and endangered species studies. (Halterman-PTT)

ANNO

06/10/1987

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ACC 1027

TYPE

YEAR 1984

AUTH MINERALS MANAGEMENT SERVICE;

TITL DRAFT ENVIRONMENTAL IMPACT STATEMENT--PROPOSED OIL AND GAS LEASE SALES 94,
98, AND 102, GULF OF MEXICO REGOIN.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE,
LA. 512 P.

KEYW BIOLOGY

CHEMISTRY

EXPLORATION

GAS

GEOLOGY

OIL

CONTINENTAL SHELF

PHYSICAL PROCESS

SOCIOECONOMIC

ABST This document discusses the purpose and background of the proposed actions,
the alternatives including the proposed actions, the description of the af
fected environment, and the environmental impacts of the proposed Central G
ulf of Mexico Sale 98 (May 1985), Western Gulf of Mexico Sale 102 (July 198
5), and Eastern Gulf of Mexico Sale 94 (November 1985).

ANNO

06/10/1987

.....
ACC 140

TYPE

YEAR 1982

AUTH MISSISSIPPI DEPARTMENT OF WILDLIFE CONSERVATION;

TITL MISSISSIPPI COASTAL WATERS MINERAL LEASE SALE AREA NUMBER 1. ENVIRONMENTAL
PROFILE AND GENERIC ENVIRONMENTAL GUIDELINES FOR ACTIVITIES ASSOCIATED WITH
OIL AND GAS DRILLING RIGS AND PRODUCTION PLATFORMS.

BIBL MISSISSIPPI DEPARTMENT OF WILDLIFE CONSERVATION, BUREAU OF MARINE RESOURCES
, LONG BEACH, MS.

KEYW BIOLOGY

COASTAL WATER

EXPLORATION

FISHERY

OIL

POLLUTION

ABST Recently oil and gas industries and the Mississippi State Government have i
ncreased their interest and initiatives in investigating potential oil and
gas resources in the coastal waters of the State of Mississippi and in deve
loping and producing these resources under conditions which are mutually be
neficial to both parties. In developing these resources in Mississippi's co
astal waters, appropriate resource management requires that environmental a
nd socioeconomic factors be considered and evaluated. These considerations
and evaluations will provide information which can be utilized to render de
cisions aimed at maximizing benefits to the citizens of the state regarding
oil and gas development in Mississippi's coastal waters.

ANNO

06/10/1987

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ACC 1006
TYPE
YEAR 1983
AUTH MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES;
TITL 1982 ANNUAL REPORT.

BIBL MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES, JACKSON, MS. 25 P.

KEYW COASTAL WATER	DATA	POLLUTION CONTROL
RECREATION	RESOURCE	SOCIOECONOMIC
TOURISM		

ABST This is the annual report of the Mississippi Department of Natural Resources. The report summarizes the activities of the department, including annual expenditures and revenues. Bureaus discussed are the Bureau of Pollution Control, the Bureau of Geology, the Bureau of Land and Water Resources, and the Bureau of Recreation and Parks.

ANNO

06/10/1987

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ACC 2027
TYPE P
YEAR 1981
AUTH MITCHELL-TAPPING, H.J.;
TITL PARTICLE BREAKDOWN OF RECENT CARBONATE SEDIMENT IN CORAL REEFS.

BIBL FLORIDA SCI. 44(1):21-29.

KEYW CARBONATE	CORAL	REEF
SEDIMENT	WAVE	GRAIN SIZE

ABST Carbonate sediment of reef shoal environments from the Bahamas, Dry Tortugas, Lower Florida Keys, Grand Cayman Island and U.S. Virgin Islands were examined with a scanning electron microscope. Particle-size abundances (or no des) for each site were found to be a product of the sorting potential of wave energy. This sorting potential is the major part in the breakdown of sand sized skeletal particles rather than micro-architectural structure as proposed by the Sorby principle.

ANNO

06/10/1987

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ACC 4099
TYPE P
YEAR 1978
AUTH MITCHUM, R.M., JR.;
TITL SEISMIC STRATIGRAPHIC INVESTIGATION OF WEST FLORIDA SLOPE, GULF OF MEXICO.

IN A.H. BOUMA, G.T. MOORE, AND J.M. COLEMAN, EDS. BEYOND THE SHELF BREAK. 1
93-223 P.

BIBL AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS, MARINE GEOLOGY COMMITTEE SHOR
T COURSE, VOL. 2.

KEYW SEISMIC CONTINENTAL SHELF BATHYMETRY
SEDIMENT GEOLOGY GEOPHYSICAL
GEOLOGIC HISTORY

ABST The post-Early Cretaceous geologic development of the West Florida Slope wa
s studied by analysis of 2,500 n.m. (4,630 km) of seismic lines and 7 core
holes. Slope deposition was not a simple, continuous process, but was inte
rupted by significant depositional breaks that appear in the faunal record
and as reflective events on seismic profiles. Sediments between these bre
aks are interpreted as genetically related sequences that can be mapped and
used to interpret slope stratigraphy. At the end of the Early Cretaceous
the present slope area was a broad shallow-water shelf which probably exten
ded westward to the present West Florida Escarpment. This escarpment is in
terpreted as mostly a constructional shelf margin forming a gulfward extens
ion of the Washita-Fredericksburg trend of Louisiana and Texas. The role o
f major faulting as a controlling factor in producing the escarpment was no
t investigated in this study, although we failed to observe majro faults on
our sparker data. Late Cretaceous subsidence of the shell produced a rapi
d transition from shallow- to deep-water carbonates, with water depths in t
he order of 3,000 to 6,000 ft (900 to 1,800 m) on the outer slope by the en
d of the Cretaceous. Deep-water conditions prevailed throughout the Cenozo
ic as the area gradually filled to its present bathymetric configuration.
Lowermost Tertiary beds along the outer slope commonly are crumpled and dis
torted. Post-Eocene topographic lows tend to be filled with Oligocene and
early Miocene beds. During the middle Miocene large clinofolds of argillac
eous carbonate built as progradational features from shallow-water areas on

ANNO

06/10/1987

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ACC 2452

TYPE P

YEAR 1978

AUTH MITTERER, R.M.;

TITL AMINO ACID COMPOSITION AND METAL BINDING CAPABILITY OF THE SKELETAL PROTEIN
OF CORALS.

BIBL BULL. MAR. SCI. 28(1):173-180.

KEYW MONROE
METAL

CORAL
GROWTH

SCLERACTINIAN

ABST Live corals were collected from Bermuda, Jamaica, and the Florida Keys and analyzed for amino acid composition of the skeletons. The protein composition was found to be dominated by aspartic acid. Aspartic acid comprises about 70% of alcyonarian skeletal protein and about 35% of the organic matrix of scleractinians. A binding study indicated the capability of spicules to bind metal ions. Results suggest the calcified organic matrix acts as a template which initiates and controls crystal growth.

ANNO

06/10/1987

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ACC 2453

TYPE P

YEAR 1977

AUTH MITTERER, R.M.; CARTER, P.W.;

TITL SOME ANALYTICAL AND EXPERIMENTAL DATA ON OXYGEN-CARBONATE INTERACTION.

BIBL PROC. THIRD INTERNAT. CORAL REEF SYMP., MIAMI, FLORIDA, MAY 1977.

KEYW MONROE
GEOCHEMISTRY

CARBONATE
ORGANIC CARBON

SEDIMENT
GRAIN SIZE

ABST Differences between the organic matter of carbonate and noncarbonate sediments were investigated in sediment samples from Florida Bay and the Flower Garden Reef, offshore Texas. Results showed that the carbonate fraction as compared to the noncarbonate fraction has: 1) coarser size; 2) less total organic matter; 3) greater proportion of organic matter as amino acids; and 4) a higher aspartic acid content. Organic matter from Florida Bay sediments, which has approximately 40% aspartic acid content, was able to bind calcium, confirming the hypothesis that an aspartic acid-rich proteinaceous fraction is necessary for calcification. Aspartic acid-rich organic matter in carbonate sediments was concluded to play an instrumental role in carbonate geochemistry of marine waters.

ANNO

06/10/1987

.....
ACC 448

TYPE

YEAR 1981

AUTH MODDE, T.;ROSS, S.T.;

TITL SEASONALITY OF FISHES OCCUPYING A SURF ZONE HABITAT IN THE NORTHERN GULF OF MEXICO.

BIBL FISH. BULL. 78(4):911-922.

KEYW BIOLOGY
SURF ZONE

FISH
SEASONALITY

SPECIES COMPOSITION

ABST The ichthyofauna occupying the surf zone habitat of Horn Island, Mississippi, between 1975 and 1977 was dominated by immature clupeiform fishes. The dusky anchovy, *Anchoa lyolepis*, and the scaled sardine, *Harengula jaguana*, together constitute 80.2% of the 154,469 fishes collected. The greatest number of fishes were collected in the late spring and summer, followed by a secondary peak in late winter. Occurrence of the fishes within the surf zone is divided into three categories according to seasonal utilization; spring and summer, summer only, and winter. Factors affecting numerical abundance within the surf zone differed among the most frequently appearing species. Differences in the numbers of clupeiform fishes--*A. lyolepis*; *A. hepsetus*, striped anchovy; and *H. jaguana* - were more closely associated with diel changes including tidal stage and time of day. The abundance of the Florida pompano, *Trachinotus carolinus*, and the gulf kingfish, *Menticirrhus littoralis*, were more dependent upon seasonal effects such as temperature.

ANNO

06/10/1987

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ACC 4100
TYPE P
YEAR 1963
AUTH MOE, M.A., JR.;
TITL A SURVEY OF OFFSHORE FISHING IN FLORIDA.

BIBL PROF. PAP. SER. FLA. ST. BD. CONSERV. 4:1-117.

KEYW RECREATIONAL FISHERY	COMMERCIAL FISHERY	FISHING EFFORT
LIVE-BOTTOM	KING MACKEREL	SOCIOECONOMIC
GROUPEP	SNAPPER	RED TIDE

ABST This generalized survey of offshore fishing in Florida is presented to provide valuable background information for future research and to report the present development of the offshore fisheries of each coastal county. The operators of vessels in the categories of commercial, party, charter, and private were contacted and were requested to report on their local offshore fishing activity. During the course of this survey 16.4% of the commercial boats, 31.9% of the party boats, 12.8% of the charter boats, and 3.4% of the private boats throughout the state reported. In all, information was obtained from a total of 4,706 boat operators. A one to two hour personal interview was conducted with the operators of the commercial, party and charter vessels. Ten percent of the registered private boat owners were contacted by a post card questionnaire and 33.6% were returned. The location, depth, bottom composition and topography, fishes taken, seasonality, and a subjective estimate of the fishing effort are reported for the major offshore fishing grounds throughout the littoral waters of Florida. The techniques and equipment used in the offshore hire and commercial fisheries throughout the State are described. The existing development of the offshore fisheries, their relationship to the geography, coastal population, and operational facilities of the coastal counties are discussed. The fishing effort in fisherman days expended by the commercial, party, and charter boats is broken down to surface and bottom effort and tabulated for each coastal county. The major offshore fishes are listed by primary common name, scientific name

ANNO

06/10/1987

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ACC 4101

TYPE P

YEAR 1969

AUTH MOE, M.A., JR.;

TITL BIOLOGY OF THE RED GROUPER, EPINEPHELUS MORIO (VALENCIENNES), FROM THE EASTERN GULF OF MEXICO.

BIBL FLA. DEPT. NAT. RES. PROF. PAP. SER. 10. 95 P.

KEYW BIOLOGY
REEFFISH

COMMERCIAL FISHERY
GROUPER

RECREATIONAL FISHERY

ABST Monthly and aperiodic samples of otoliths and gonads were collected from sport and commercial catches of red grouper taken off the Florida central west coast from May 1963 through August 1967. Age was determined for 1176 fish and histological sections were prepared from 692 gonads. An additional 98 ripe fish were sexed in the field. Otoliths were cleared, stored in glycerol, and read under reflected light with a dissecting microscope. Gonads were fixed in Bouin's fluid, embedded in paraffin, sectioned transversely at 6 to 10 μ and stained with Harris' hematoxylin and eosin and Masson's trichrome. Oogenesis and spermatogenesis are each described in 5 stages of development. Zonation and rejuvenilization of oocytes and formation of atretic bodies in post-spawning ovaries are described and discussed. Seasonal and developmental gonadal changes are described in 10 classes; immature female, mature resting female, mature active female, postspawning female, transitional, immature male, mature inactive male, ripening male, ripe male, and postspawning male. The relationship of otolith radius to SL is linear, $r=0.986$. Time of annulus formation was determined from the variation of mean marginal increment of otoliths from each age group during all months. Age groups 1 through 4 form the annulus from March to May and age groups 5 through 10 form the annulus from May to July. Spawning and associated physiological processes seem to be the primary cause of annulus formation. Growth curves developed from empirical data, back-calculation of body length and the von Bertalanffy growth equation $l_t=672(1-e^{-0.179(t+0.449)})$ agree

ANNO

06/10/1987

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ACC 4102
TYPE P
YEAR 1977
AUTH MOFJELD, H.O.; WIMBUSH, M.;
TITL BOTTOM PRESSURE OBSERVATIONS IN THE GULF OF MEXICO AND CARIBBEAN SEA.

BIBL DEEP-SEA RES. 42:987-1004.

KEYW	CURRENTS	PRESSURE	PHYSICAL
	OCEANOGRAPHY	TIDE	METEOROLOGY

ABST During 1971 to 1974, offshore pressure gages were deployed in the Gulf of Mexico and the Caribbean Sea to measure tides and bottom pressure continuum. The observations indicate that the Gulf of Mexico has a Helmholtz resonance with a period of 1.56d. While the lack of confidence limits on theoretical cotidal charts hinders the comparison between theory and observation, the latter tend to support a model with direct astronomical forcing. The observations in the Caribbean Sea verify the general features of theoretical cotidal charts. At a six-month long station in the Eastern Caribbean, bottom pressure fluctuations with 4 to 5-d period are coherent and in phase with atmospheric waves in the Easterlies. The inverse barometer compensation appeared to be less complete in this semienclosed sea, spanned by weather systems, than in the open ocean. An appendix gives corrections to the response method of tidal analysis, the procedure for converting the results to harmonic constants with error estimates, and tables of analytical results.

ANNO

06/10/1987

.....
ACC 4105
TYPE 0
YEAR 1978
AUTH MOLINARI, R.J.;FESTA, J.F.;BEHRINGER, D.W.;
TITL THE CIRCULATION IN THE GULF OF MEXICO DERIVED FROM ESTIMATED DYNAMIC HEIGHT
FIELDS.

BIBL J. PHY. OCEANOGR. 8(6):987-996.

KEYW CIRCULATION	LOOP CURRENT	PHYSICAL
OCEANOGRAPHY	HYDROGRAPHY	DYNAMIC HEIGHT
SEASONALITY		

ABST Monthly mean dynamic height topographies for the upper 500 m of the Gulf of Mexico, seasonal mean topographies for the upper 1000 m and annual topographies for the deep flow are presented. The dynamic height values on a 1 degree x 1 degree grid were determined from observed temperature values and salinities derived from mean T-S relations. The seasonal intrusion of the Loop Current is observed and found to vary directly with the geostrophic transport through the Yucatan Straits. At the Straits, the transport in the upper 500 m is a maximum in June. The transports in the upper 500 m of an anticyclone in the western Gulf are a maximum in winter and summer, and a minimum in spring and fall. There is a permanent westerly flow on the Texas Shelf. After turning cyclonically, this flow joins the eastward transport of the northern limb of the anticyclone in the western Gulf of Mexico. Most of this eastward flow recirculates in the anticyclone; however, a portion flows east across the central Gulf to become entrained in the Loop Current. The deep circulation between 1500 and 3000 m is dominated by an anticyclonic gyre which fills the entire deep basin.

ANNO

06/10/1987

.....
ACC 4103

TYPE P

YEAR 1977

AUTH MOLINARI, R.L.;BAIG, S.;BEHRINGER, MAUL; G.A.;LEGECKIS, R.;

TITL WINTER INTRUSTIONS OF THE LOOP CURRENT.

BIBL SCIENCE 198:505-507.

KEYW INTRUSION

PHYSICAL

HYDROGRAPHY

LOOP CURRENT

OCEANOGRAPHY

TEMPERATURE

CIRCULATION

REMOTE SENSING

ABST Sea-surface temperature data obtained from satellie and subsurface temperat
ure data obtained from ships are used to determine the intrustion of the Lo
op Current into the Eastern Gulf of Mexico from November 1974 to the presen
t. The Loop Current extended considerably farther to the north during the
last three winters than has been observed previously.

ANNO

06/10/1987

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ACC 4104
TYPE P
YEAR 1976
AUTH MOLINARI, R.L.; BEHRINGER, D.W.; FESTA, J.F.;
TITL MODEL STUDIES OF THE CIRCULATION IN THE GULF OF MEXICO.

BIBL A FINAL REPORT TO THE U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAG
EMENT. CONTRACT NO. 08550-IA5-26. 144 P.

KEYW PHYSICAL OCEANOGRAPHY CIRCULATION
NUMERICAL MODEL

ABST The Atlantic Oceanographic and Meteorological Laboratories of the National Oceanic and Atmospheric Administration have completed the first year of a proposed two-year study for the Bureau of Land Management "to develop the capability to predict the currents in the Gulf of Mexico for use in pollutant trajectory computation". The objectives of the study were: (1) to modify an existing numerical model for application in the Gulf of Mexico; (2) to evaluate the ability of the model to simulate the Gulf circulation using various types and distributions of data as input information; and (3) to describe the Gulf of Mexico circulation using the results of the model. The formulation of the numerical model and the modifications made are given in the portion of this report entitled "A Guide to a General Circulation Model of the Gulf of Mexico." The data used by the model as interior and boundary conditions were obtained from the National Oceanographic Data Center, and from cruises conducted as part of the present study. The manipulations used to put the data into a form suitable for input to the model are described in the section called "Model Studies of the Circulation in the Gulf of Mexico." The ability of the numerical model to simulate the observed circulation is demonstrated through a series of comparisons of its solutions with solutions from a geostrophic model. These comparisons are made over a wide range of input and boundary conditions. Therefore, the use of the numerical model results to describe the currents of the region is justified. The circulation of the Gulf of Mexico at monthly increments is simulated by both model

ANNO

06/10/1987

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ACC 4262

TYPE P

YEAR 1977

AUTH MOLINARI, R.L.;FESTA, J.F.;

TITL OCEAN THERMAL PROPERTIES IN RELATION TO THE BIOFOULING AND CORROSION EXPERIMENT IN THE GULF OF MEXICO.

PRESENTED AT OCEAN THERMAL ENERGY CONVERSION (OTEC) BIOFOULING AND CORROSION SYMPOSIUM, SEATTLE, WA (USA).

BIBL PACIFIC NORTHWEST LABORATORY, RICHLAND, WA.

KEYW FOULING

WATER MASS

DIVERSITY

LOOP CURRENT

STORM

UPWELLING

TEMPERATURE

CHEMISTRY

NUTRIENTS

ABST Ocean thermal properties at a Gulf of Mexico biofouling and corrosion test site are reviewed in relation to their potential effects on biofouling rates. Primary biological differences in water masses affecting the site are discussed. Deep basin waters have less productivity, greater species diversity, and different dominant species than shelf and estuarine waters. Thermal characteristics of various water masses are included to aid interpretation of biofouling results. Frequency of occurrence of several events affecting the site are also given. Loop current eddies which transport deep basin chemical and biological species to the site have been observed from 2 to 4 times in 10 different yr. A table is presented showing number of monthly occurrences of tropical storms and hurricanes which can upwell deep chemical and biological species to the surface.

ANNO

06/10/1987

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ACC 1034
TYPE
YEAR 1982
AUTH MOLINARI, R.L.;MAYER, D.A.;
TITL CURRENT METER OBSERVATIONS ON THE CONTINENTAL SLOPE AT TWO SITES IN THE EASTERN GULF OF MEXICO.

BIBL J. PHYS. OCEANOGR. 12:1480-1492.

KEYW LOOP CURRENT	BOTTOM CURRENT	CONTINENTAL SLOPE
CURRENTS	METEOROLOGY	PHYSICAL OCEANOGRAPH
TIDE	WIND	SEASONALITY

ABST Current-meter observations obtained at two sites on the continental slope of the eastern Gulf of Mexico, at nominal positions of 29 N, 88 W (the Mobile site) and 27.5 W (the Tampa site) are presented. Data were collected at three levels at Mobile (90, 190, and 980 m) from July 1977 through August 1978 and at four levels at Tampa (150, 250, 550 and 950 m) from June 1978 through June 1979. At 90 and 190 m, the flow at Mobile was on the average to the east. Sustained periods of flow to the west were observed during the summer 1977 and spring 1978. During the periods of eastward flow the wind was generally out of the north and during the periods of westward flow, the wind was out of the east. The flow at the top meter at Tampa was on the average to the west, in the same direction as the average wind. At both sites, the motions are perturbed by events associated with the Loop Current. These events make it difficult to define any seasonal variability in the upper layers. The flow at the bottom meters is strongly aligned with the bottom topography and lacks a strong seasonal signal. Little barotropic tidal energy was observed at either site. At both sites, maximum diurnal energy occurred near the local inertial frequency at the upper levels. These motions are probably induced by either cold-front passages or other atmospheric events. At the bottom meters, maximum diurnal-band energy occurred near the K1-tidal constituent. These motions are strongly time-dependent and they may be related to internal tides.

ANNO

06/10/1987

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ACC 4193

TYPE P

YEAR 1977

AUTH MONAGHAN, P.H.;MCAULIFFE, C.D.;WEISS, F.I.;

TITL ENVIRONMENTAL ASPECTS OF DRILLING MUDS AND CUTTINGS FROM OIL AND GAS EXTRAC
TION OPERATIONS IN OFFSHORE AND COASTAL WATERS.

BIBL PROC. ANNU. OFFSHORE TECHNOL. CONF. 9(1):251-260.

KEYW DRILL CUTTING
DRILLING MUD

POLLUTION
DRILLING FLUID

OFFSHORE DRILLING

ABST

ANNO

06/10/1987

.....
ACC 4195

TYPE P

YEAR 1975

AUTH MONTALVO, J.G., JR.;MCKOWN, M.M.;

TITL ENVIRONMENTAL IMPLICATIONS OF SEDIMENT BULK ANALYSIS TECHNIQUES FOR TRACE METALS IN OFFSHORE WELL-DRILLING OPERATIONS.

BIBL ENVIRON. ASPECTS CHEM. USE WELL-DRILL. OPER. CONF. PROC. 357-385.

KEYW SEDIMENT
POLLUTION

TRACE METAL

OFFSHORE DRILLING

ABST

ANNO

06/10/1987

.....
ACC 2454

TYPE P

YEAR 1978

AUTH MONTGOMERY, R.T.;

TITL ENVIRONMENTAL AND ECOLOGICAL STUDIES OF THE DIATOM COMMUNITIES ASSOCIATED WITH THE CORAL REEFS IN THE FLORIDA KEYS, VOL. I.

BIBL PH.D. THESIS. FLA. STATE UNIV.

KEYW MONROE
SUBSTRATE
DISTRIBUTION

GEOGRAPHIC
REEF
SEASONALITY

SEASONAL
CORAL

ABST The geographic and seasonal variations, and various aspects of the substrates of the benthic diatom floras of reefs in the keys region were investigated. Results of studies on the effects of coral species, complexity and substrate, period of colonization, and area of substrate on diatom community structure are discussed. Similar diatom communities from different substrates varied only in density. There was a direct relationship between diversity and habitat complexity.

ANNO

06/10/1987

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ACC 2455

TYPE P

YEAR 1977

AUTH MONTGOMERY, R.T.; MILLER, W.I.; COLLIER, A.W.;

TITL A PRELIMINARY INVESTIGATION OF THE STRUCTURE OF THE DIATOM COMMUNITIES ASSO
CIATED WITH THE REEF HABITATS OF THE FLORIDA KEYS.

BIBL PROC. THIRD INTERNAT. CORAL REEF SYMP. 1:357-363.

KEYW MONROE

COMMUNITY

REEF

HABITAT

BENTHIC

DIVERSITY

SEAGRASS

SUBSTRATE

NUTRIENT

PHYTOPLANKTON

ABST The structures of benthic diatom communities associated with coral reefs in the Florida Keys were analyzed and compared. The species richness and diversity of diatom floras from the coral sand bottom, adjacent seagrass beds, and different zones of the reef structure were compared at 3 different reefs. Diatom density was high in all substrates. The number of species was directly related to the degree of habitat complexity. Diatom communities from similar substrates exhibited a high degree of similarity. It was suggested that because of the continual replenishment of nutrients by bacterial populations associated with reef surfaces, benthic diatom populations may not be nutrient limited.

ANNO

06/10/1987

.....
ACC 2199
TYPE P
YEAR 1981
AUTH MOOK, D.;
TITL REMOVAL OF SUSPENDED MATERIALS BY FOULING COMMUNITIES.

BIBL MAR. ECOL. PROG. SER. 5:279-281.

KEYW FOULING	SPONGE	SUSPENDED
COMMUNITY	TEMPERATURE	SALINITY
HYDROIDS		

ABST Fouling communities from the Indian River, consisting primarily of barnacles (*Balanus eburneus*), bryozoans (*Bugula* sp.), tube building amphipods (*Corophium lacustre*), hydroids, and sponges were studied to determine their role in removal of suspended particles. Particle consumption rates and particle size preference were measured with a coulter counter. Suspended particles of all sizes between 1 and 40 μm were removed by the fouling communities with no size preference. Fecal particles emitted by some fouling species in the size range 1.5-5.5 μm and >25 μm may serve as a food source for other species of the community.

ANNO

06/10/1987

.....
ACC 2552
TYPE P
YEAR 1976
AUTH MOOK, D.;
TITL FOULING STUDIES, CHAPTER 9.

BIBL IN: HARBOR BRANCH CONSORTIUM INDIAN RIVER COASTAL ZONE STUDY. 1975-1976. A
NNU. REPT. 1.

KEYW FOULING SEASONALITY GROWTH
SEAGRASS

ABST A review of the fouling studies in the Indian River region was presented.
The majority of fouling invertebrates on the Indian River were inventoried.
The seasonality of settlement was described for many animals. The growth
and settlement of some fouling animals were found to be inhibited in seagra
ss beds, and experiments are underway to determine the reason for this appa
rent inhibition. Preliminary experiments have shown that non-selective art
ificial predation increased species diversity but not the ranking of chief
species, and that selective natural predation did not change species divers
ity, but did alter the rank order of dominant species. More comprehensive
experiments are being conducted on effects of predation.

ANNO

06/10/1987

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ACC 2555

TYPE P

YEAR 1977

AUTH MOOK, D.;

TITL STUDIES ON FOULING INVERTEBRATES IN THE INDIAN RIVER, FLORIDA 2: EFFECT OF
MODULUS MODULUS (PROSOBRANCHIA: MODULIDAE).

BIBL THE NAUTILUS 91(4):134-136.

KEYW FOULING

SEAGRASS

MOLLUSC

ABST The build up of fouling invertebrates on tiles placed among seagrass blades was determined to be considerably less than on tiles placed in adjacent areas devoid of seagrass. Snail counts and the results of caging experiments suggested that the grazing action of *Modulus modulus* may retard the buildup of fouling organisms on surfaces within the grassbeds.

ANNO

06/10/1987

.....
ACC 2200
TYPE P
YEAR 1981
AUTH MOOK, D.H.;
TITL EFFECTS OF DISTURBANCE AND INITIAL SETTLEMENT ON FOULING COMMUNITY STRUCTUR
E.

BIBL ECOLOGY 62(3):522-526.

KEYW COMMUNITY FOULING PREDATION

ABST The community structure of fouling organisms which settled on ceramic tiles in the Indian River, Florida was examined from November 1976 to October 1978. Treatments in which predation pressure was artificially increased or initial species composition was varied had no effect on community structure. Predator exclusion experiments altered the species composition of the fouling community, increasing the abundance of species which are normally eliminated by grazing.

ANNO

06/10/1987

.....
ACC 2124

TYPE P

YEAR 1980

AUTH MOON, R.E.; KRUMREI, T.N.; & MARTIN, D.F.;

TITL AN INVESTIGATION OF COMPOUNDS CYTOLYTIC TOWARD THE RED TIDE ORGANISM PTYCHODISCUS BREVIS (DAVIS) STEIDINGER, FROM FLORIDA MARINE SEDIMENTS.

BIBL MICROBIOS. LETT. 14:7-15.

KEYW SEDIMENT
RED TIDE

CHEMICAL
BACTERIA

BIOLOGICAL

ABST Analysis of sediment samples from 15 stations along Florida's west coast revealed similar chemical and biological characteristics to aponin, a substance produced by the cyanobacteria *Gonphosphaeria aponina* which is cytolytic towards the Florida red tide organism *Ptychodiscus brevis*. Chemical activity was demonstrated by two chromatographic techniques and biological activity of sediment extracts was examined with cytolytic and fungicidal bioassays. The widespread distribution of cytolytic agents in marine sediments and their potential use in controlling *P. brevis* proliferation are discussed.

ANNO

06/10/1987

.....
ACC 333

TYPE

YEAR 1970

AUTH MOORE, D.;BRUSHER, H.A.;TRENT, L.;

TITL RELATIVE ABUNDANCE, SEASONAL DISTRIBUTION AND SPECIES COMPOSITION OF DEMERSAL FISHES OFF LOUISIANA AND TEXAS, 1962-1964.

BIBL BIOLOGICAL LABORATORY, BUREAU OF COMMERCIAL FISHERIES, GALVESTON, TX. CONTR IB-303.

KEYW BIOLOGY

CATCH STATISTICS

COASTAL WATER

FISHERY

TRAWL FISHERY

DEMERSAL FISH

SEASONALITY

ABST

ANNO

06/10/1987

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ACC 2028
TYPE P
YEAR 1963
AUTH MOORE, D.R.;
TITL DISTRIBUTION OF THE SEAGRASS, THALASSIA, IN THE UNITED STATES.

BIBL BULL. MAR. SCI. GULF CARIBB. 13(2):329-342.

KEYW SEAGRASS	TEMPERATURE	DEPTH
TURBIDITY	SALINITY	WAVE
DISTRIBUTION		

ABST A discussion of the distribution of *Thalassia testudinum* in the U.S. was presented. Ecological factors limiting the distribution of turtle grass include temperature, water depth, turbidity, salinity, and wave action. Gaps in distribution were determined to be due to one or more unfavorable conditions. Aquatic populations derive both food and shelter from grassy areas.

ANNO

06/10/1987

.....
ACG 2125
TYPE U
YEAR 1965
AUTH MOORE, D.R.;
TITL MICROMOLLUSCS.

BIBL REPT. .TO BLM ON SMALL MOLLUSCS COLLECTED IN THE MAFLA AREA DURING 1975-76.
UNPUBL. REPT. U.S. DEPT INT., BLM, WASHINGTON, DC. 48 P.

KEYW MOLLUSC	CONTINENTAL SHELF	PRODUCTIVITY
SEDIMENT	DEPTH	TEMPERATURE
SALINITY	DO	DISTRIBUTION

ABST This report present the results of the micromolluscs study of the Bureau of Land Management sponsored program in the Mississippi-Alabama-Florida (MAFLA) outer continental shelf. A total of 317 live specimens and 24,443 dead specimens were collected from small subsampling cores. The author summarizes the results as follows: Live collected micromolluscs were no abundant in the subsamples due to the small surface area of the cores. Enough material was collected, however, to make some basic assumptions: 1) Small molluscs are relatively abundant in shallow water (<50 m) in the northeastern Gulf of Mexico (about 700/square meters). 2) Small molluscs are uncommon on the deeper shelf (50 to 186 m) in this area (about 125 per square meter). 3) The continental shelf from Cape San Blas, Florida, to the Chandeleur Islands is an area of low productivity for molluscs. 4) Live bivalves are more abundant than live gastropods. 5) Browsing gastropods are rare in depths of more than 50 m. 6) Browsing gastropods are extremely rare in areas with such fine sediment. 7) Two most important factors influencing abundance and distribution of small molluscs are sediment type and depth of water.

ANNO

06/10/1987

.....
ACC 2519

TYPE P

YEAR 1972

AUTH MOORE, H.B.;

TITL AN ESTIMATE OF CARBONATE PRODUCTION BY MACROBENTHOS IN SOME TROPICAL SOFT B
OTTOM COMMUNITIES.

BIBL MAR. BIOL. 17(2):145-148.

KEYW DADE

INVERTEBRATE

CARBONATE

PRODUCTIVITY

COMMUNITY

ABST Studies of the soft bottom macrobenthos of Biscayne Bay, Florida have provided productivity figures in the form of the ratio of annual somatic production to standing crop for most resident species. In this paper, the values were converted to carbonate productivity ratios, which were used to calculate carbonate production per square meter per year. The values ranged from less than 1 g to nearly 400 g for subtidal communities and approximately 1 kg for one intertidal area.

ANNO

06/10/1987

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ACC 2547

TYPE P

YEAR 1962

AUTH MOORE, D.R.;

TITL NOTES ON THE DISTRIBUTION OF THE SPINY LOBSTER PANULIRUS IN FLORIDA AND THE
GULF OF MEXICO.

BIBL CRUSTACEANA 3(4):318-319.

KEYW SPINY LOBSTER

REEF

DISTRIBUTION

ABST Observations of many Panulirus living in caves and holes in the rocky reefs of the east coast, (primarily Palm Beach and also Hobe Sound) were reported. The common species is *P. argus* and it is abundant throughout the year. *P. guttatus*, quite rare, was never found living in areas occupied by *P. argus*. Although only occasionally seen, it was present year round. *P. laevis*, not seen until April 1949, became almost as common as *P. argus* but after the 1949 invasion no more specimens were found. Panulirus is not fished commercially in the Palm Beach area. Records show *P. argus* as far north as North Carolina, but there are no records for the northern Gulf of Mexico. It is suggested that there are considerable numbers of *P. argus* on suitable rocky bottom in the northern Gulf of Mexico, but in deep water too deep and too far offshore to be fished commercially.

ANNO

06/10/1987

.....
ACC 4106

TYPE P

YEAR 1984

AUTH MOORE, C.M.; LABISKY, R.F.;

TITL POPULATION PARAMETERS OF A RELATIVELY UNEXPLOITED STOCK OF SNOWY GROUPER IN
THE LOWER FLORIDA KEYS.

BIBL TRANS. AM. FISH. SOC. 113:322-329.

KEYW BIOLOGY

FISH

LIFE HISTORY

GROWTH

COMMERCIAL FISHERY

ECOLOGY

REPRODUCTION

MORTALITY

DEMERSAL FISH

GROUPER

COASTAL

ABST Age, growth, mortality, and reproduction of a relatively unexploited stock of snowy grouper *Epinephelus niveatus* from the lower Florida Keys, were studied during April 1978-July 1981. Biological statistics were derived from 309 snowy grouper. Ages, determined by otolith sectioning, ranged from 0 to XXCII. Back calculated mean total lengths (TL) ranged from 209 mm at the end of year 1 to 909 mm at the end of year 15. The von Bertalanffy growth equation for snowy grouper was $L = 1,320(1 - \exp\{-0.087(t + 1.013)\})$, where L = total length (mm) and t = age (years). Annual mortality, determined by catch-curve analysis, was 16%. Full recruitment into the fishery occurred at 575-600 mm TL and at age VIII. The snowy grouper exhibited protogynous hermaphroditism. Most females (81%) were sexually mature by age IV to V. Males did not appear until age VI, but they comprised 40% of all fish of ages VIII or older. These biological findings preliminarily suggest that snowy grouper stocks in the Florida Keys cannot support an extensive and sustained commercial fishery.

ANNO

06/10/1987

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ACC 4107
TYPE P
YEAR 1951
AUTH MOORE, J.C.;
TITL THE RANGE OF THE FLORIDA MANATEE.

BIBL QUART. J. FLA. ACAD. SCI. 14(1):1-19.

KEYW MIGRATION	MANATEE	DISTRIBUTION
MAMMAL	ENDANGERED SPECIES	COASTAL

ABST Using previous accounts and direct observation during the years 1941 to 1951, the range of the Florida manatee is charted. The status of the animal population is evaluated throughout its range.

ANNO

06/10/1987

.....
ACC 2299

TYPE P

YEAR 1968

AUTH MORRILL, J.B.;

TITL REPORT ON A BIOLOGICAL SURVEY OF THE TIDAL FLATS AND SHORELINE OF THE BAY POINT AREA.

BIBL ENVIR. STUD. PROG. REPT. NEW COLLEGE OF UNIV. SOUTH FLA.

KEYW SARASOTA
DREDGING

POLLUTION

TURBIDITY

ABST The vegetational patterns of the Bay Shore area indicate that as a result of natural processes, there has been and continues to be stabilization and land building along the shore and filling in of the tidal zone adjacent to the shore. The absence of many typical tidal flat organisms in the cove and along the Bay front may be due to: pollution or enrichment from effluents entering the Grand Canal immediately to the south and Coconut Bayou to the north; freshwater flow into the Cove via drainage ditches; relatively weak tidal flushing and circulatory patterns in the Cove; high turbidity in the inshore water resulting from the dredged Intracoastal Waterway channel; plus intensive boat traffic in and adjacent to the waterway.

ANNO

06/10/1987

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ACC 2300

TYPE P

YEAR 1968

AUTH MORRILL, J.B.;

TITL REPORT ON A BIOLOGICAL SURVEY OF THE TIDAL FLATS AND SHORELINE OF ICARD ISL
AND, EMERALD ISLES AREA, BOWLEES CREEK, SARASOTA BAY, FLORIDA.

BIBL ENVIR. STUD. PROG. REPT. NEW COLLEGE OF UNIV. SOUTH FLA.

KEYW SARASOTA

INVERTEBRATE

BENTHIC

ALGAE

SEAGRASS

OYSTER

ABST The intertidal zone within the Manatee County bulkhead line surrounding Icard Island was determined to consist mainly of a sandy mud bottom with the snail *Batillaria minima* being the most abundant macroinvertebrate. In addition, the zone was populated by small oyster bars, scattered clumps of coon oysters and patches of Cuban shoal grass. The greatest numbers of invertebrate species appeared to occur in the turtle grassbeds outside the bulkhead line or in the shoal grassbeds in the lower levels of the intertidal zone. In general, the intertidal zone between the south side of the Island and the oyster bars bordering Bowless Creek and the intertidal zone between the north side of the Island and the channel to the north produced less benthic invertebrates than the shoal grass areas to the west and north of the Island. Turtle grass, occurring mainly outside the bulkhead line and below the mean low water, had a greater dry weight per unit bottom surface area than did the shoal grass that occurred in the intertidal zone. The latter grass displayed a tidal zonation in which the size of the grass patches and the dry weight per unit area were markedly reduced in the higher intertidal areas within the bulkhead line. Fish species which graze on the bottom invertebrates and sessile algae attached to oyster shells were reported. Birds of the area were also listed. A hydrographic survey was conducted.

ANNO

06/10/1987

.....
ACC 2301

TYPE P

YEAR 1970

AUTH MORRILL, J.B.;

TITL BIOLOGICAL SURVEY OF SUBMERGED LANDS IN THE VICINITY OF THE PROPOSED WATERG
ATE CENTER BOATEL, SARASOTA BAY, CITY OF SARASOTA, SARASOTA COUNTY, FLORIDA

BIBL ENVIR. STUD. PROG. REPT. NEW COLLEGE OF UNIV. SOUTH FLA.

KEYW SARASOTA
SEAGRASS

CURRENTS
OYSTER

ALGAE

ABST A description of the proposed Watergate Center boatel in Sarasota Bay was p
resented with attention to existing grass flats, tidal currents and seawall
communities. It was suggested that the fringe of coon oysters and marine
grases woud be eliminated, there would be a considerable growth of bacteria
and blue-green algae below the oyster zone, the bottom would become a rich
, organic silt, and that development of anaerobic conditions, at depths gre
ater than five to seven feet would occur. The consequences of developing m
arinas and recommendatons for amintaining and improving the quality of the
marine environmental in the boatel area were presented.

ANNO

06/10/1987

.....
ACC 2302

TYPE P

YEAR 1970

AUTH MORRILL, J.B.

TITL NEW COLLEGE ENVIRONMENTAL STUDIES CLASS PROJECT ON OTTER KEY AND DEVILFISH
KEY, FLORIDA.

BIBL ENVIR. STUD. PROG. REPT. NEW COLLEGE OF THE UNIV. SOUTH FLA.

KEYW SARASOTA

INVERTEBRATE

SEAGRASS

ABST New College (University of South Florida) Environmental Studies Class Project on Otter Key (Sarasota Bay) and Devilfish Key (Charlotte Harbor) presented data on numbers of invertebrate species, species of seagrass and maps of seagrasses.

ANNO

06/10/1987

.....
ACC 2303

TYPE P

YEAR 1972

AUTH MORRILL, J.B.;

TITL BAYSIDE FIELD LAB; APPROACHES TO A MODEL ECOSYSTEM.

STUDENT REPORTS AVAILABLE ONLY THROUGH J.B. MORRILL, NEW COLLEGE AT UNIVERSITY OF SOUTH FLORIDA ENVIRONMENTAL STUDY PROGRAM.

BIBL ENVIR. STUD. PROG. REPT. NEW COLLEGE OF UNIV. SOUTH FLA.

KEYW SARASOTA

INVERTEBRATE

TEMPERATURE

SALINITY

DO

NUTRIENT

TIDE

ABST A compilation student-collected biological data for the Bayside Club, Siesta Key, Sarasota, Florida is presented. Specieslists for benthic invertebrates are included.

ANNO

06/10/1987

.....
ACC 2304
TYPE P
YEAR 1972
AUTH MORRILL, J.B.;
TITL SOUTH COCONUT BAYOU RESEARCH PROJECT.

BIBL ENVIR. STUD. PROG. REPT. NEW COLLEGE OF UNIV. SOUTH FLA.

KEYW SARASOTA BENTHIC ABUNDANCE
 TEMPERATURE DO

ABST A compilation of data collected from Coconut Bayou was presented. Benthic data included species lists and abundances.

ANNO

06/10/1987

.....
ACC 2305

TYPE P

YEAR 1974

AUTH MORRILL, J.B.;

TITL THE SUBMERGED AND SHORELINE VEGETATION OF THREE CANAL SYSTEMS, SIESTA KEY,
FLORIDA, PRELIMINARY OBSERVATIONS AND RECOMMENDATIONS.

BIBL PROC. OF THE FIRST ANNU. CONF. ON RESTORATION OF COAST. VEGETATION IN FLA.
P. 39.

KEYW SARASOTA
SEAGRASS

CURRENTS
WATER QUALITY

DEPTH

ABST Three manmade canals in Siesta Key were studied in 1972 for distribution of
grasses and water quality. Recommendations for management are: canal desi
gn for optimal tidal flushing; pruning of vegetated shorelines; removal of
aquatic plants and floating debris; and aeration of bottom waters in dead e
nd canals.

ANNO

06/10/1987

.....
ACC 2306
TYPE P
YEAR 1978
AUTH MORRILL, J.B.;
TITL SOUTH LIDO KEY STUDIES.

BIBL ENVIR. STUDIES PROGRAM REPORT. NEW COLLEGE OF UNIV. SOUTH FLA.

KEYW SARASOTA SEAGRASS CURRENTS

ABST Student collected data on benthic studies in Brushy Bayou, South Lido Key, Florida are presented and include information on seagrass dry weights, current measurements, and grassbed mappings.

ANNO

06/10/1987

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ACC 2307

TYPE P

YEAR 1969

AUTH MORRILL, J.B.;BLAIR, C.;

TITL A BIOLOGICAL AND ECOLOGICAL SURVEY OF THE SUBMERGED LANDS IN THE PROPOSED BAY HARBOR DEVELOPMENT, SIESTA KEY, FLORIDA.

BIBL ENVIR. STUDIES PROGRAM REPORT. NEW COLLEGE OF THE UNIV. SOUTH FLA.

KEYW SARASOTA
NUTRIENT
SEA GRASS

INVERTEBRATE
TEMPERATURE
MULET

BLUE CRAB
SALINITY
OYSTER

ABST The survey of the submerged lands in the proposed Bay Harbor Development, Sarasota, Florida included descriptions, diagrammatic maps and aerial photographs of the mangrove swamps and submerged lands. Overall, the sandy mud bottom and grass flats in the lagoon were found to have fewer and less diverse macrobenthic invertebrates than similar areas on the tidal flats in Roberts Bay, indicating that the biological productivity of the lagoon is less than the bay. Other than intertidal coon oysters, commercial shellfish were not observed in the lagoon. Blue crabs, killifish and mullet were present.

It was concluded that the lagoon's major role in the Bay's economy is to furnish nutrients. Recommendations for preserving and restoring the marine environment relative to the proposed development were presented.

ANNO

06/10/1987

.....
ACC 2308
TYPE P
YEAR 1968
AUTH MORRILL, J.B.; DONALDSON, S.;
TITL OBSERVATIONS OF A SEAWALL COMMUNITY.

BIBL ENVIR. STUD. PROG. REPT. NEW COLLEGE OF UNIV. SOUTH FLA.

KEYW SARASOTA FOULING CURRENTS
 SUBSTRATE TIDES

ABST Collections and observations of organisms in the fouling community as well as data on currents, substrate, tides, and illumination are reported. Vertical zonation is discussed.

ANNO

06/10/1987

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ACC 2309

TYPE P

YEAR 1974

AUTH MORRILL, J.B.;DENARVAEZ, C.;FOSTER, R.;AYER, F.B.;CONNOR, E.;

TITL HYDROGRAPHY OF TE GRAND CANAL AND HERON LAGOON WATERWAYS, SIESTA KEY, FLORI
DA.

BIBL REPT. BY DIV. NAT. SCI., NEW COLLEGE AT UNIV. SO. FLA., SARASOTA. FLORIDA.
47 P.

KEYW SARASOTA
POLLUTION
DO
NUTRIENT

HYDROGRAPHY
TEMPERATURE
CURRENTS
PHYSIOGRAPHY

BATHYMETRY
SALINITY
TURBIDITY

ABST Informtion on the history of the two lagoonal sites, the physiography and bathymetry, sources of pollution and hydrography were reported. Of the two canal systems studies, the overall water quality and diversity of marine life was found to be greater in the Heron Lagoon system than in the Grand Canal system. It was determined that the primary cause of "undesirable" water quality conditions (the development of organically rich, soft bottom sediments and their communities of macro and microorganisms) was poor tidal circulation.

ANNO

06/10/1987

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ACC 2328

TYPE P

YEAR 1969

AUTH MORRILL, J.W.; NEEDHAM, N.;

TITL A BIOLOGICAL SURVEY OF THE SUBMERGED LANDS IN THE PROPOSED PORTOFINO DEVELOPMENT. CAPE HAZE-PLACIDA, CHARLOTTE COUNTY, FLORIDA.

BIBL ENVIR. STUD. PROG. REPT. NEW COLLEGE OF UNIV. SOUTH FLA.

KEYW CHARLOTTE
INVERTEBRATE

MOLLUSC
SALINITY

FISHERY
SEAGRASS

ABST The immediate consequences of the proposed Portofino development include:
1) loss of some existing mangroves; 2) loss of some Spartina grass patches and sandy beach; 3) loss of the sandy, mud beach zone; 4) loss of some Cuban shoal weed inside the bulkhead line; and 5) loss of some turtle grass areas. Recommendations to minimize damage to the surrounding bottoms and waters are made for the three areas. The presence of a relatively rich mollusc fauna north and to a lesser extent south of the spoil area demonstrates the waters of Placida Harbor are not polluted and that these grassflats continue to function as a fishery resource.

ANNO

06/10/1987

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ACC 4108
TYPE P
YEAR 1977
AUTH MORRISON, J.M.;NOWLIN, W.D.;
TITL REPEATED NUTRIENT, OXYGEN, AND DENSITY SECTIONS THROUGH THE LOOP CURRENT.

BIBL J. MAR. RES. 35(1):105-128.

KEYW PHYSICAL	OCEANOGRAPHY	NUTRIENT
HYDROGRAPHY	CIRCULATION	CURRENTS
LOOP CURRENT	CHEMICAL	

ABST Based on observations made in May 1972, the nutrient and dissolved-oxygen concentrations in the offshore waters of the eastern Gulf of Mexico are described and related to the Loop Current and anticyclonic current rings, which are the principal circulation features of this region. The characteristic relationships of oxygen and nutrients to density parameters are presented, and the following water masses are characterized in the Gulf: Subtropical Underwater, 18 degrees C Sargasso Sea Water, upper subtropical oxygen minimum, Antarctic Intermediate Water, and North Atlantic Deep Water. Repeated sections through the Loop Current allow some estimation of variability within a period of weeks, as well as descriptions of spatial variations of properties. The relative geostrophic flow within the Loop is described. Transport estimates are compared to previous estimates of the Loop and to estimates through the Yucatan and Florida Straits based on measurements also made during May 1972. The results are in good agreement; values for the total transport of the current are approximately 30×10^{10} to the 6th cubic meter sec to the -1st, while for the waters above it - $27.0 \text{ mg cubic centimeter a value near } 23 \times 10^{10}$ to the 6th cubic meter sec to the -1st is obtained.

ANNO

06/10/1987

.....
ACC 1096
TYPE
YEAR N/AH
AUTH MOSHIRI, G.B.;
TITL BAYOU TEXAR PROJECT.

BIBL UNIVERSITY OF WEST FLORIDA, WATER RESOURCES RESEARCH CENTER.

KEYW AMMONIA	CARBOHYDRATES	COPPER
ORGANIC CARBON	DISSOLVED OXYGEN	EH
BOD	WATER QUALITY	

ABST Bayou Texar, off Pensacola Bay, Florida, was studied extensively from March , 1971 to May, 1976. Water quality analyses were carried out biweekly at 31 to 6 stations in the bayou. Other analyses include measurements of phytoplankton populations, photosynthetic and heterotrophic rates, and water and sediment microbiota. Generally, water samples were filtered before analyses were made of the various parameters.

ANNO

06/10/1987

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ACC 1097
TYPE
YEAR N/AH
AUTH MOSHIRI, G.A.;
TITL MULATTO BAYOU STUDY.

BIBL UNIVERSITY OF WEST FLORIDA, WATER RESOURCES RESEARCH CENTER.

KEYW AMMONIA	CARBOHYDRATES	CARBON
COPPER	ORGANIC CARBON	DISSOLVED OXYGEN
EH	WATER QUALITY	

ABST Mulatto Bayou, off Escambia Bay, Florida, was monitored with respect to water quality from June, 1972 to April, 1975. Fourteen water quality parameters were measured biweekly at 3 stations from surface and bottom water samples. Samples were filtered before analyses were made, except for field measurements. Limited sediment data also exists.

ANNO

06/10/1987

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ACC 4109
TYPE P
YEAR 1983
AUTH MOTE MARINE LABORATORY;
TITL CHARLOTTE HARBOR HYDROCARBON STUDY, YEAR 2.

BIBL FINAL REPORT TO THE FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG
, FL. 136 P.

KEYW BIOLOGY	MOLLUSCA	OIL SPILL
COASTAL	HYDROCARBON	POLLUTION
CHEMISTRY	OYSTER	WATER COLUMN
SEDIMENT		

ABST Hydrocarbon content and characterization was obtained for surficial sediment, oysters and water from four areas in Charlotte Harbor. Each area represents a different type of land use activity including residential development canals; municipal and industrial impact; commercial fishing and marine industry facilities; and a nondeveloped control area. Residential canal systems contained petroleum contamination resulting from marinas and a highway service station area. This contamination was indicative of crankcase oil which diminished with distance from the source. Total hydrocarbon content of canal sediment ranged from over 50 mg/g sediment at a marina to less than 5 ug/g at nonimpacted areas. Biogenic hydrocarbons exhibiting chromatographic patterns that mimic some petroleum characteristics were observed in certain areas, showing the importance of obtaining pre-oil spill data for accurate interpretation of oil spill impact. The highest contamination was observed at commercial fishing docking areas. This contamination was indicative of a low to mid boiling range fuel oil and attained a concentration of 142 ug/g sediment, relative to less than 5 ug/g in unimpacted areas. Oyster samples generally reflected the contamination observed in sediment. Water samples contained different hydrocarbon patterns than oysters or sediment. Inferences drawn from water data would be more reliable had funds been available for repetitive sampling over several tidal cycles. This investigation has characterized hydrocarbon contamination from specific land use activities around Charlotte Harbor, as well as background hydrocarbon data from

ANNO

06/10/1987

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ACC 715

TYPE

YEAR 1973

AUTH MULKANA, M.S.; ABBOTT, W.;

TITL NUTRITIONAL COMPONENTS OF THE STANDING PLANKTON CROP IN MISSISSIPPI SOUND.

BIBL GULF RES. REP. 4(2):300-317.

KEYW BIOLOGY
PLANKTON

BIOMASS
PRODUCTIVITY

CALORIC CONTENT

ABST

ANNO

06/10/1987

.....
ACC 873

TYPE

YEAR 1968

AUTH MULKANA, M.S.;

TITL SEASONAL CHANGES IN THE NUTRITIONAL COMPONENTS OF THE STANDING PLANKTON BIOMASS IN MISSISSIPPI SOUND.

BIBL PH.D. DISSERTATION. MISSISSIPPI STATE UNIVERSITY. 87 P.

KEYW CARBOHYDRATES

LIPID

PHYTOPLANKTON

PROTEIN

SALINITY

TEMPERATURE

ZOOPLANKTON

ABST Studies on seasonal changes in the nutritional components of plankton biomass in Mississippi Sound were made from April, 1965, to September, 1966. Standing biomass and nutrition available from net plankton and from nanoplankton were estimated.

ANNO

06/10/1987

.....
ACC 2229
TYPE P
YEAR 1959
AUTH MULLINS, A.T.;
TITL A STUDY OF MARINE TERRIGENOUS SEDIMENTS FROM THE GULF OF MEXICO.

BIBL M.S. THESIS. FLA. STATE UNIV., TALLAHASSEE, FL.

KEYW SEDIMENT GRAIN SIZE HEAVY METAL

ABST Thirty eight sediment samples were collected from a 45 sq. mi. area south of St. George Island, Florida, and analyzed for composition and grain size parameters. Fourteen types of heavy metals were identified, two of which were authigenic. Sediment size and content differed between the ridges and troughs which characterize the area. Statistical comparisons were made between the sediments of the study area and an eastern area off Dog Island.

ANNO

06/10/1987

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ACC 4161
TYPE P
YEAR 1985
AUTH MULTER, R.;
TITL A NUMERICAL MUD DISCHARGE PLUME MODEL FOR OFFSHORE DRILLING OPERATIONS.

BIBL FINAL REPORT BY U.S. ARMY CORPS OF ENGINEERS SUBMITTED TO THE MINERALS MANAGEMENT SERVICE, NEW ORLEANS, LA. CONTRACT #14-12-0001-30012. 12 PP.

KEYW DRILLING MUD MODEL NUMERICAL MODEL
OIL AND GAS PHYSICAL

ABST This study involved the modification and subsequent application of a generic plume model developed by the Walden Division of Labor, Inc. under contract to the US Army Corps of Engineers. The mathematical basis of the model is a unidirectional, steady, Reynolds type diffusion equation. To close the governing equation, coefficients of eddy diffusion are introduced and a hypothesis of similar mass and momentum diffusion invoked to define them. Also made is an assumption that the velocity may be replaced by its mean over the depth. This substitution facilitates separation of the original equation into two partial differential equations. One equation models the effect of lateral diffusion and is solved analytically. The other models the interaction of settling, longitudinal transport, and vertical diffusion and is solved numerically. The effect of this separation of variables is a substantial reduction in the computational labor. As part of the study a new computer program was written to perform the numerical computations. A second program which sets up the data needed by the numerical computation program was also written. This program asks the modeler a series of questions and stores the responses in a data file which is subsequently used by the numerical plume model. The combination of the two programs form an interactive, easy to use, tool for studying mud plumes.

ANNO

06/10/1987

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ACC 429

TYPE

YEAR 1983

AUTH MUNCY, R.J.; WINGO, W.M.;

TITL SPECIES PROFILES, LIFE HISTORIES AND ENVIRONMENTAL REQUIREMENTS OF COASTAL
FISHES AND INVERTEBRATES (GULF OF MEXICO). SEA CATFISH AND GAFFTOPSAIL CAT
FISH.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C. FWS-OBS-82-115. 17 PP.

KEYW BIOLOGY

COMMERCIAL FISHERY

ECOLOGY

FISHERY

LIFE HISTORY

SOCIOECONOMIC

ABST

ANNO

06/10/1987

.....
ACC 1087
TYPE
YEAR 1981
AUTH MURPHY, M.D.;
TITL ASPECTS OF THE LIFE HISTORY OF THE GULF BUTTERFISH, PEPRILIS BURTI.

BIBL M.S. THESIS. TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. 77 P.

KEYW BIOLOGY	ECOLOGY	FISH
LIFE CYCLE	LIFE HISTORY	ZOOLOGY

ABST

ANNO

06/10/1987

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ACC 4110

TYPE P

YEAR 1975

AUTH MURPHY, E.B.;STEIDINGER, K.A.;ROBERTS, B.S.;WILLIAMS, J.;JOLLEY, J.W.;

TITL AN EXPLANATION FOR THE FLORIDA EAST COAST GYMNOIDIUM BREVE RED TIDE OF NOVEMBER 1972.

BIBL LIMNOL. OCEANOGR. 20(3):481-486.

KEYW BIOLOGY

REMOTE SENSING

PHYTOPLANKTON

RED TIDE

LOOP CURRENT

ABST The first documented Florida east coast *Gymnodinium breve* red tide is attributed to an unusual Loop Current pattern. Satellite and ground data indicate that the November incident was seeded by a red tide detected in late September 1972 in southwest Florida waters; southwest inshore waters flowed directly south through the Florida Keys, carrying low to moderate concentrations of *G. breve* which were concentrated and transported to the east coast by unusual current configurations.

ANNO

.....
ACC 81
TYPE
YEAR 1975
AUTH MURRAY, S.P.;
TITL WIND AND CURRENT EFFECTS ON LARGE SCALE OIL SLICKS.

BIBL IN 7TH ANNUAL OFFSHORE TECHNOLOGY CONFERENCE, MAY 5-8, 1975. HOUSTON, TX.
P. 523-533.

KEYW CURRENTS HYDROGRAPHY METEOROLOGY
OIL SPILL PHYSICAL PROCESS

ABST The relative effect of local winds and near-surface currents in determining the movement of oil slicks in coastal and shelf waters was determined from 39 surveys by Raydist-equipped helicopters during the Main Pass 41C spill off the Mississippi Delta in March 1970. Orientation of oil slicks is closely controlled by local wind direction; slicks usually form 10o-40o to the right of the wind. Wind shifts associated with various sectors of migrating high-pressure cells quickly realign new slicks and actively dissipate old ones. Density fronts, both ambient and quasi-stationary, also play important roles in determining slick movement and size. An easily utilized regression model for slick area and orientation as a function of wind velocity and local conditions is also presented.

ANNO

06/10/1987

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ACC 90

TYPE

YEAR 1976

AUTH MURRAY, S.P.; WISEMAN, W.J.;

TITL CURRENT DYNAMICS AND SEDIMENT DISTRIBUTION IN THE WEST MISSISSIPPI DELTA AREA.

BIBL IN CONFERENCE ON MARINE AND FRESHWATER RESEARCH IN SOUTHERN AFRICA, PORT ELIZABETH, SOUTH AFRICA. JULY 1976. 7 P.

KEYW CONTINENTAL SHELF CURRENTS OCEANOGRAPHY
PHYSICAL PROCESS

ABST The dynamical oceanography of the coastal bight west of Southwest Pass, an area extending roughly 50 km offshore and 70 km alongshore, was studied over the hydrologic year 1973-1974. Analysis of current observations from moored current meters and monthly anchor stations isolated clockwise-rotating tidal currents having amplitudes of 10-30 cm/sec, depending on location and vertical density gradients. Extremely strong tidal currents in the vicinity of Southwest Pass appear to be related to the early arrival of high water locally. Current profiles at the anchor stations often show significant vertical shear in speed and direction which is probably controlled by the density stratification. The spatial pattern of the tidal currents consists predominantly of reversing along shore flow with significant shear in the onshore-offshore direction. Drogue tracks, combined with satellite imagery and surface salinity patterns, frequently show a trapped vortex west of the delta with onshore flows in the western extremity of the study area. Conversely, monthly hydrographic cruises on a dense grid suggest that heavy Gulf water persistently intrudes at depth into the central core of the curved bight. Although subject to strong dispersive processes by the marked spatial variability in the tidal current field, the sediment pattern nevertheless appears to be largely controlled by the mean current field produced by seasonal wind and river discharge effects.

ANNO

06/10/1987

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ACC 564

TYPE

YEAR 1960

AUTH MURRAY, G.E.;

TITL GEOLOGIC FRAMEWORK OF GULF COASTAL PROVINCE OF UNITED STATES.

IN F.P. SHEPARD, F.B. PHLEGER, AND T.H. VAN ANDEL, EDS. RECENT SEDIMENTS, NORTHWEST GULF OF MEXICO. AM. ASSOC. PET. GEOL., TULSA, OK. P. 5-33.

BIBL AM. ASSOC. PET. GEOL., TULSA, OK.

KEYW PALEOZOIC
GEOLOGY
STRUCTURE

PRECAMBRIAN
GEOSYNCLINE
GEOLOGIC HISTORY

COASTAL WTER
STRATIGRAPHY

ABST The Gulf Coastal province of the United States is a segment of the Mesozoic-Cenozoic coastal geosyncline of eastern North America which can be traced continuously from Newfoundland to Guatemala. The geosyncline is roughly lens-shaped in cross section; approximately equal parts exist (1) submerged beneath the waters of the Atlantic Ocean and Gulf of Mexico, and (2) partly emerged adjacent to the shores. The Gulf Coastal portion of the geosyncline has an area of more than 150,000 square miles and contains about 50,000 feet of predominately arenaceous-argillaceous, marginal to shallow marine strata, although calcareous materials predominate in the Florida Peninsula and in the Cretaceous in Texas. The geosynclinal mass overlies Precambrian-Paleozoic rocks of variable facies, structure, and degree of metamorphism; their top surface possesses an overall slope toward the Gulf of Mexico.

ANNO

06/10/1987

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ACC 2361

TYPE

YEAR 1976

AUTH MURRAY, P.J.;

TITL THE TRANSPLANTATION OF THE SEAGRASS THALASSIA TESTUDINUM AND HALODULE WRIGH
TII INTO A MARCO ISLAND CANAL SYSTEM.

BIBL RES. PROG. REPT. MACRO APP. MAR. ECOL. STA. 9 P.

KEYW COLLIER
SALINITY
LIGHT

SEAGRASS
DO
NUTRIENT

TEMPERATURE
TURBIDITY

ABST The success of transplanting *Thalassia testudinum* and *Halodule wrightii* in the berm and trough of a modified canal system was monitored. Sprigs were transplanted with only a rhizome fragment attached and not an active apex to determine whether or not the rhizome planted without the apex will grow. Long term results had not yet been evaluated.

ANNO

06/10/1987

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ACC 818

TYPE

YEAR 1967

AUTH N/A

TITL ANTIMICROBIAL ACTIVITY OF BACTERIA ISOLATED FROM MARINE MUD.

BIBL GULF COAST TECHNICAL SERVICES UNIT TECHNICAL REPORT 67.5. 10 P.

KEYW MICROFAUNA

SEDIMENT

BACTERIA

ABST Bacteria capable of exhibiting antimicrobial activity were isolated from marine mud so as to gain knowledge regarding the estuarine environment as a potential source of antimicrobial agents. Samples of mud were taken from 5 stations in Mobile Bay during a 1 year period beginning in August, 1965.

ANNO

06/10/1987

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ACC 819
TYPE
YEAR 1971
AUTH N/A
TITL COLIFORM BACTERIAL GROWTH IN HARVESTED OYSTERS.

BIBL GULF COAST TECHNICAL SERVICES UNIT TECHNICAL REPORT 71-1.

KEYW TEMPERATURE MICROFAUNA OYSTER
 BACTERIA

ABST An attempt was made to determine the cause of an increase in coliform bacteria counts between harvesting and arrival of oysters at wholesale and retail markets. Samples were collected in November, 1970.

ANNO

06/10/1987

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ACC 397
TYPE
YEAR 1983
AUTH NATIONAL CLIMATIC DATA CENTER;
TITL CLIMATIC SUMMARIES FOR NOAA DATA BOUYS.

BIBL NATIONAL WEATHER SERVICE, NOAA DATA BOUY CENTER, NSTL STATION, MS. 214 P.

KEYW AIR TEMPERATURE	METEOROLOGY	PHYSICAL PROCESS
WATER TEMPERATURE	WAVE HEIGHT	WAVE PERIOD
WIND DIRECTION	WIND SPEED	

ABST

ANNO

06/10/1987

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ACC 398

TYPE

YEAR 1972

AUTH NATIONAL CLIMATIC DATA CENTER;

TITL ENVIRONMENTAL GUIDE FOR THE U.S. GULF COAST.

BIBL NATIONAL CLIMATIC DATA CENTER, ASHEVILLE, NC. 177 P.

KEYW METEOROLOGY
TEMPERATURE

OCEANOGRAPHY
WAVE

PHYSICAL PROCESS

ABST

ANNO

06/10/1987

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ACC 688

TYPE

YEAR 1984

AUTH NATIONAL CLIMATIC DATA CENTER;

TITL LOCAL CLIMATOLOGICAL DATA, ANNUAL SUMMARY WITH COMPARATIVE DATA - 1983, MOBILE, AL.

BIBL NATIONAL CLIMATIC DATA CENTER, ASHEVILLE, NC. 4 P.

KEYW CLIMATIC DATA
PRECIPITATION

METEOROLOGY

AIR TEMPERATURE

ABST This is an annual NOAA publication which includes a local narrative climatological summary, the meteorological data for the current year and normals, means and extremes. In addition to this data, monthly average temperatures, and precipitation are presented.

ANNO

06/10/1987

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ACC 783
TYPE
YEAR 1980
AUTH NATIONAL FISH AND WILDLIFE LABORATORY;
TITL AMERICAN ALLIGATOR.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C. FWS 10BS-80101.39. 9 P.

KEYW ALLIGATOR BIOLOGY BREEDING
 ECOLOGY FEEDING HABIT LIFE HISTORY
 REPRODUCTION

ABST This paper is one in a series of accounts on threatened and endangered species. The purpose is to provide resource managers and the public with information about federally listed endangered and/or threatened vertebrate species that occur along or within 100 km of the sea coast of the United States. Information on life history, distribution, requirements and conservation of the subject species is included.

ANNO

06/10/1987

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ACC 58

TYPE

YEAR 1980

AUTH NATIONAL FISH AND WILDLIFE LABORATORY;

TITL SELECTED VERTEBRATE ENDANGERED SPECIES OF THE SEA COAST OF THE UNITED STATES.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON, D.C. FWS/OBS-80101.

KEYW BIOLOGY	COASTAL ZONE	ENDANGERED SPECIES
LIFE HISTORY	DISTRIBUTION	VERTEBRATE

ABST The purpose of this series of species accounts is to provide resource managers and the public with information about federally listed endangered and/or threatened vertebrate species that occur along, or within 100 kilometers of, the seacoast of the United States. Information about life history, distribution, requirements and conservation of the subject species is included (range maps and other distributional data are not necessarily equivalent to critical habitat as defined in the Endangered Species Act of 1973, as amended). This series of accounts is intended to complement the computerized Sensitive Wildlife Information System (SWIS) developed by the U.S. Army Corps of Engineers in coordination with the Offices of Endangered Species and Biological Services of the Fish and Wildlife Service.

ANNO

06/10/1987

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ACC 877

TYPE

YEAR 1973

AUTH NAT. MAR. FISH. SERV.;SOUTHEAST FISH. CENTER;FISH ENGINEER. LABORATORY;
TITL SKYLAB OCEANIC GAMEFISH PROJECT, INTERIM DATA REPORT.

BIBL NATIONAL MARINE FISHERIES SERVICE, SOUTHEAST FISHERIES CENTER, FISHERIES EN
GINEERING LABORATORY.

KEYW AIR PRESSURE AIR TEMPERATURE CAROTENOIDS
 CHLOROPHYLL IRRADIANCE PRECIPITATION
 RELATIVE HUMIDITY SALINITY REMOTE SENSING
 FISHERY

ABST A joint effort by private, professional fishermen, NASA and NOAA's NMFS too
k place on August 4 and 5, 1973, in the northern Gulf of Mexico to acquire
gamefish data, pigment data, chlorophyll A, B, and C along with carotenoids
were measured using color filters.

ANNO

06/10/1987

.....
ACC 407
TYPE
YEAR 1982
AUTH NATIONAL MARINE FISHERIES SERVICE;
TITL FISHERIES OF THE UNITED STATES, 1981.

BIBL NATIONAL MARINE FISHERIES SERVICE, WASHINGTON, D.C. CURRENT FISHERY STATIST
ICS NO. 8200. 131 P.
KEYW BIOLOGY COASTAL WATER MANAGEMENT
FISHERY FISHERY STATISTICS CONTINENTAL SHELF
SOCIOECONOMIC

ABST

ANNO

06/10/1987

.....
ACC 677
TYPE
YEAR 1983
AUTH NATIONAL MARINE FISHERIES SERVICE;
TITL PROGRAM DEVELOPMENT PLAN FOR MARINE RECREATIONAL FISHERIES IN THE SOUTHEAST
REGION.

BIBL NATIONAL MARINE FISHERIES SERVICE, SOUTHEAST REGIONAL OFFICE AND SOUTHEAST
FISHERIES CENTER, ST. PETERSBURG, FL. 35 P.
KEYW COASTAL WATER RECREATION SOCIOECONOMIC
SPORT FISHING

ABST

ANNO

06/10/1987

.....
ACC 678

TYPE

YEAR 1980

AUTH NATIONAL MARINE FISHERIES SERVICE;

TITL MARINE RECREATIONAL FISHERY STATISTICS SURVEY, ATLANTIC AND GULF COASTS, 1979. CURRENT FISHERY STATISTICS NUMBER 8063.

BIBL NATIONAL MARINE FISHERIES SERVICE, WASHINGTON, D.C. 137 P.

KEYW COASTAL WATER
SPORT FISHING

RECREATION

STATISTICAL ANALYSIS

SOCIOECONOMIC

FISH

ABST The 1979 survey is the first in a series of planned surveys to obtain estimates of participation, catch and effort by recreational fishermen in marine waters of the United States. This report covers the Atlantic and Gulf Coasts for a one year period from January through December, 1979. The data collection methodology consisted of two complementary surveys, a combination household survey and intercept (creel) survey.

ANNO

06/10/1987

.....
ACC 879

TYPE

YEAR N/AI

AUTH NATIONAL MARINE FISHERIES SERVICE, ATLANTIC ESTUARINE FISHERIES CENTER;
TITL SURVEY OF GULF MENHADEN.

BIBL NATIONAL MARINE FISHERIES SERVICE, ATLANTIC ESTUARINE FISHERIES CENTER, BEA
UFORT, NC.

KEYW COMMERCIAL FISHERY FISH SALINITY
SECCHI DISC WATER TEMPERATURE

ABST Ten year survey of Gulf menhaden from Florida to Texas.

ANNO

06/10/1987

.....
ACC 880

TYPE

YEAR N/AI

AUTH NATIONAL MARINE FISHERIES SERVICE, ATLANTIC ESTUARINE FISHERIES CENTER;
TITL CATCH RECORDS OF GULF MENHADEN.

BIBL NATIONAL MARINE FISHERIES SERVICE, ATLANTIC ESTUARINE FISHERIES CENTER, BEA
UFORT, NC.

KEYW COMMERCIAL FISHERY FISH

ABST

ANNO

06/10/1987

.....

ACC 881

TYPE

YEAR N/AI

AUTH NATIONAL MARINE FISHERIES SERVICE, ATLANTIC ESTUARINE FISHERIES CENTER;
TITL AGE AND SIZE OF GULF MENHADEN.

BIBL NATIONAL MARINE FISHERIES SERVICE, ATLANTIC ESTUARINE FISHERIES CENTER, BEA
UFORT, NC.

KEYW COMMERCIAL FISHERY FISH LENGTH

ABST Age and size study of Atlantic menhaden throughout the geographical and sea
sonal range of the Gulf menhaden fishery. Samples from commercial catch.

ANNO

06/10/1987

.....
ACC 882

TYPE

YEAR UNKN

AUTH NATIONAL MARINE FISHERIES SERVICE, ATLANTIC ESTUARINE FISHERIES CENTER;
TITL TAGGING AND MIGRATION STUDIES OF ADULT GULF MENHADEN.

BIBL NATIONAL MARINE FISHERIES SERVICE, ATLANTIC ESTUARINE FISHERIES CENTER, BEA
UFORT, NC.

KEYW COMMERCIAL FISHERY FISH LENGTH
MIGRATION TAGGING

ABST Tagging and migration studies of adult Gulf menhaden from Florida to Texas.
Field notes on fish conditions.

ANNO

06/10/1987

.....
ACC 883

TYPE

YEAR N/AI

AUTH NATIONAL MARINE FISHERIES SERVICE, ATLANTIC ESTUARINE FISHERIES CENTER;
TITL TAGGING JUVENILE GULF MENHADEN.

BIBL NATIONAL MARINE FISHERIES SERVICE, ATLANTIC ESTUARINE FISHERIES CENTER, BEA
UFORT, NC.

KEYW COMMERCIAL FISHERY FISH LENGTH
MIGRATION TAGGING

ABST Tagging study of juvenile Gulf menhaden. Field notes on habitat, condition,
water quality.

ANNO

06/10/1987

.....
ACC 884

TYPE

YEAR N/AI

AUTH NATIONAL MARINE FISHERIES SERVICE, ATLANTIC ESTUARINE FISHERIES CENTER;
TITL AGE AND SIZE OF ATLANTIC THREAD HERRING.

BIBL NATIONAL MARINE FISHERIES SERVICE, ATLANTIC ESTUARINE FISHERIES CENTER, BEA
UFORT, NC.

KEYW COMMERCIAL FISHERY FISH LENGTH

ABST Age and size studies of Atlantic thread herring in Gulf of Mexico.

ANNO

06/10/1987

.....
ACC 897
TYPE
YEAR 1975
AUTH NATIONAL MARINE FISHERIES SERVICE;
TITL FRV GEORGE M. BOWERS CRUISE REPORT.

BIBL SOUTHEAST FISHERIES CENTER.

KEYW COMMERCIAL FISHERY DEMERSAL FISH PELAGIC FISH
TAGGING

ABST The FRV George M. Bowers was assigned to determine, through tagging, the feasibility of assessing the bull croaker populations associated with offshore platforms in the northern gulf of Mexico. Initially fishing operations were scheduled around four platforms east of the Mississippi River, however, inclement weather forced operations to the East Bay and West Delta area.

ANNO

06/10/1987

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ACC 980
TYPE
YEAR 1984
AUTH NATIONAL MARINE FISHERIES SERVICE;
TITL END-OF-YEAR REPORTS: ANNUAL LANDINGS BY DISTANCE CAUGHT FROM SHORE - SOUTHEAST REGION FOR 1983 (PRELIMINARY).

BIBL NATIONAL MARINE FISHERIES SERVICE, SOUTHEAST FISHERIES CENTER, STATISTICAL SURVEYS BRANCH, MIAMI, FL. UNPAGINATED.
KEYW COMMERCIAL FISHERY CONTINENTAL SHELF FISH CATCH
FISHERY FISHERY STATISTICS SOCIOECONOMIC

ABST This is a compilation of annual commercial fisheries catch organized by fish species, ex vessel value, weight, and state, with the distance from shore

ANNO

06/10/1987

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ACC 1018
TYPE
YEAR 1984
AUTH NATIONAL MARINE FISHERIES SERVICE;
TITL GULF COAST CHARTER BOAT LISTING.

BIBL NATIONAL MARINE FISHERIES SERVICE, SOUTHEAST FISHERIES CENTER, ST. PETERSBURG, FL. UNPAGINATED.

KEYW BOAT FISHERY RECREATION
 SOCIOECONOMIC SPORT FISHERY

ABST This is a continuously revised listing of charter boats along the Gulf coast. Information listed includes the captain's name, the boat's name, the boat's location, and a contact mailing address.

ANNO

06/10/1987

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ACC 4207

TYPE P

YEAR 1979

AUTH NATIONAL MARINE FISHERIES SERVICE;

TITL ENVIRONMENTAL ASSESSMENT OF AN ACTIVE OIL FIELD IN THE NORTHWESTERN GULF OF MEXICO 1977-1978. VOLUME I--SYNOPSIS.

BIBL ANNU. REPT. TO EPA. JUNE 1979. 78 P.

KEYW BIOLOGICAL
POLLUTANT
POLLUTION

CHEMICAL
COMMUNITY

PHYSICAL
OIL SPILL

ABST Volume I--Synopsis is the first of three volumes in an annual report. It is designed to be used as a briefing document and as a key to more detailed scientific and technical information contained in the other volumes. The area selected for study is the operational Buccaneer Oil Field located approximately 49.6 km from Galveston Sea Buoy off Galveston, Texas. Objectives of the project are: (1) to identify and document the types and extent of biological, chemical and physical alterations of the marine ecosystem associated with Buccaneer Oil Field, (2) to determine specific pollutants, their quantity and effects, and (3) to develop the capability to describe and predict fate and effects of Buccaneer Oil Field contaminants. The Buccaneer Field has been in production for about 15 years thus allowing for the full development of oil-field-associated marine communities. There have been no major oil spills from this field although there have undoubtedly been losses of small amounts of oil. This project provides a unique opportunity for continued study of effects of chronic, low-level contamination of the marine ecosystem associated with oil and gas production in an established field.

ANNO

06/10/1987

.....
ACC 4209
TYPE P
YEAR 1979
AUTH NATIONAL MARINE FISHERIES SERVICE;
TITL ENVIRONMENTAL ASSESSMENT OF AN ACTIVE OIL FIELD IN THE NORTHWESTERN GULF OF
MEXICO 1977-1978. VOLUME III: CHEMICAL AND PHYSICAL INVESTIGATIONS.

BIBL ANNU. REPT. EPA. 710 P.

KEYW CHEMICAL	PHYSICAL	BIOLOGICAL
SEDIMENT	HEAVY METAL	CIRCULATION
POLLUTANT	HYDROCARBON	

ABST Volume III of a three volume annual report contains detailed scientific and technical information on the results of chemical and physical investigations of the operating Buccaneer Oil Field off Galveston, Texas. The tasks of the various work units are as follows: To identify and document the extent and types of biological, chemical, and physical alterations in the marine ecosystem that are associated with the development of and production of discharges from an oil field; to describe the fine sediments and nepheloid layer of the oil field, focusing upon their relationship to heavy metal adsorption; to determine levels, pathways, and bioaccumulation of heavy metals; to describe seasonal circulation patterns in the oil field; to determine the specific pollutants, their quantity and effects on the various components of the marine ecosystem; to determine levels, pathways, and bioaccumulation of selected discharge constituents (non-metals) in the marine ecosystem in the oil field; and to construct a hydrocarbon model.

ANNO

06/10/1987

.....
ACC 694
TYPE
YEAR 1984
AUTH NATIONAL MARINE FISHERIES SERVICE;
TITL OCEANIC PELAGICS PROGRAM SUMMARY - 1983.

BIBL NATIONAL MARINE FISHERIES SERVICE, SOUTHEAST FISHERIES CENTER, MIAMI, FL. 6
7 P.

KEYW RECREATION	SOCIOECONOMIC	SPORT FISHING
BILLFISH	TAGGING	GROWTH

ABST This report presents the results of the 1983 recreational billfish survey, gamefish tagging activity, and research on fish age and growth rates. In conducting the billfish survey 111 tournaments and 20 docks were monitored, and 102,919 hours of effort were recorded.

ANNO

06/10/1987

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ACC 859
TYPE
YEAR N/AI
AUTH NATIONAL MARINE FISHERIES SERVICE, PASCAGOULA LABORATORY;
TITL SHRIMP DISCARD FILE.

BIBL NATIONAL MARINE FISHERIES SERVICE, PASCAGOULA, MS.

KEYW BENTHIC FAUNA COMMERCIAL FISHERY DEMERSAL FISH
 PELAGIC FISH SHRIMP

ABST Data is collected from a number of shrimp trawlers regarding what is discarded from their nets. Some methods vary from shrimps to shrimps as does the completeness and accuracy of discard data. To date, data has been collected from about 700 stations. Descriptive data is also available on gear size and type.

ANNO

06/10/1987

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ACC 860
TYPE
YEAR N/AI
AUTH NATIONAL MARINE FISHERIES SERVICE, PASCAGOULA LABORATORY;
TITL CATCH EFFORT (LOG BOOK) DATA.

BIBL NATIONAL MARINE FISHERIES SERVICE, PASCAGOULA MS.

KEYW COMMERCIAL FISHERY DEMERSAL FISH

ABST Daily catch data from captain's log book have been collected since 1970 in an effort to monitor the industrial bottom fish fishery off the north central Gulf of Mexico coast. Data is also available on vessel characteristic and gear type. Although no specific data is recorded on species composition of the catches, it can be estimated according to the time of year.

ANNO

06/10/1987

.....
ACC 861

TYPE

YEAR N/AI

AUTH NATIONAL MARINE FISHERIES SERVICE, PASCAGOULA LABORATORY;
TITL BIOLOGICAL SAMPLES FROM THE INDUSTRIAL BOTTOM FISH SURVEYS.

BIBL NATIONAL MARINE FISHERIES SERVICE, PASCAGOULA, MS.

KEYW COMMERCIAL FISHERY DEMERSAL FISH LENGTH
 WEIGHT REPRODUCTION

ABST Samples of catches from the industrial bottom fish fishery in the north central Gulf of Mexico are collected monthly. Data are taken on length, weight, sex, and reproductive stage of the 5 to 7 dominant species.

ANNO

06/10/1987

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ACC 864

TYPE

YEAR N/AI

AUTH NATIONAL MARINE FISHERIES SERVICE, PASCAGOULA LABORATORY;

TITL GROUND FISH LENGTH FREQUENCY DATA.

BIBL NATIONAL MARINE FISHERIES SERVICE, PASCAGOULA, MS.

KEYW COMMERCIAL FISHERY

DEMERSAL LFISH

PELAGIC FISH

LENGTH

WEIGHT

REPRODUCTION

HYDROGRAPHY

WATER QUALITY

ABST Data on length, weight, sex and gonadal condition has been collected on the dominant species of the groundfish fishery in the northern Gulf of Mexico. Measurement are usually taken on most of the following species: Micropogon undulatus, Leiostomus xanthurus, Cynoscion arenarius, Cynoscion nothus, Mentidion americanus, Stellifer lanceolatus, Stenotomus caprinus, Peprilus burti, Trichiurus lepturus, and Arius felis. The station data collected in conjunction with these fishery data are on punched cards in the total fisheries data file in Pascagoula and are retrievable by station number or species. Station data usually, but not always include air and water temperature (some surface and bottom), depth, barometric pressure, wind direction and speed, sea state, water color, bottom type, ID of other animals caught and catch/effort of station.

ANNO

06/10/1987

.....
ACC 875
TYPE
YEAR N/AI
AUTH NATIONAL OCEAN SURVEY;
TITL YEARLY SUMMARIES OF CONTROL TIDAL STATIONS.

BIBL NATIONAL OCEAN SURVEY, ROCKVILLE, ML.

KEYW TIDE WATER LEVEL

ABST Summaries of data taken at control tide stations are included in this file. Parameters described are monthly means and extremes, highest tides, lowest tides, high water interval (greenwich), low water interval (greenwich), high water, low water, range, tide level, sea level, difference between tide level and sea level, and highest daily sea level. The data is presented in tabular form with each page containing one parameter measured over a number of years.

ANNO

06/10/1987

.....
ACC 145

TYPE

YEAR 1983

AUTH NATIONAL PARK SERVICE;

TITL NORTHERN GULF OF MEXICO ESTUARIES AND BARRIER ISLANDS RESEARCH CONFERENCE,
PROGRAM AND ABSTRACTS, JUNE 13-14, 1983, BILOXI, MS.

BIBL GULF COAST RESEARCH LABORATORY, J.L. SCOTT MARINE EDUCATION CENTER, BILOXI,
MS. NATIONAL PARK SERVICE, COASTAL FIELD RESEARCH LABORATORY, OCEAN SPRING

KEYW BARRIER ISLAND	BIOLOGY	ECOSYSTEM
FISHERY	OCEANOGRAPHY	MOLLUSC
FISH	MODEL	GEOLOGY

ABST Abstracts are presented from some 44 papers presented at this conference. Subjects include benthic communities, fishes, pelecypods, ground fish surveys, hydrodynamic modeling, geology and oil exploration impacts.

ANNO

06/10/1987

.....
ACC 2345

TYPE P

YEAR 1980

AUTH NEALE, M.J.;

TITL A SEDIMENTOLOGICAL STUDY OF THE GULF COASTS OF CAYO-COSTA AND NORTH CAPTIVA ISLANDS, FLORIDA.

BIBL M.S. THESIS. FLA. STATE UNIV., TALLAHASSEE, FL.

KEYW LEE

BATHYMETRY

SEDIMENT

DISTRIBUTION

TRANSPORT

GRAIN SIZE

ABST Analysis of sediment grain size parameters from 103 sediment samples collected along the Gulf beaches of Cayo-Costa and North Captiva Islands, Florida, indicated local erosion of beach material. Sediment transport to offshore areas was indicated with no continuous longshore transport. The bathymetry and sediment distribution of the study area are described.

ANNO

06/10/1987

.....
ACC 4171
TYPE P
YEAR 1981
AUTH NEFF, J.M.;CARR, R.S.;MCCULLOCH, W.L.;
TITL ACUTE TOXICITY OF A USED CHROME LIGNO SULFONATE DRILLING MUD TO SEVERAL SPECIES OF MARINE INVERTEBRATES.

BIBL MAR. ENVIRON. RES. 4(4):251-266.

KEYW DRILLING MUD	ANNELID	CRUSTACEAN
MOLLUSK	PINK SHRIMP	PATHOLOGY
PHYSIOLOGY		

ABST The acute toxicity of used seawater chrome lignosulfonate drilling mud to several species of marine annelids, crustaceans and mollusks was evaluated. Medium density mud (13.4 lb/gal, 1.57 kg/l) was composed primarily of seawater, bentonite clay, chrome lignosulfonate, lignite, NaOH and BaO₄S. The toxicity of 4 mud/seawater preparations was determined. These were: layered solids phase (LSP), suspended solids phase (SSP), unfiltered mud aqueous fraction (MAF) and filtered mud aqueous fraction (FMAF). Four species of marine annelids and bivalve mollusks and 5 spp. of marine crustaceans were evaluated. LC50 (96 h) of MAF varied from 32 to > 100% MAF for the different species. The FMAF was slightly less toxic than MAF. Adult polychaetes, *Neanthes arenaceodentata* and *Ctenodrilus serratus*, 1 day old juveniles of opossum shrimp, *Mysidopsis almyra* and 4-day zoeae of grass shrimp, *Palaemonetes pugio*, were the most sensitive to MAF. Juvenile *N. arenaceodentata*, adult polychaetes, *Ophryotrocha labronica* and 3 bivalve mollusks were highly tolerant to MAF. SSP preparation at concentrations of 10-20 ml/l was toxic to post-larvae and juveniles of commercial shrimp, *Penaeus duorarum* and *P. aztecus*, respectively. Exposure to LSP preparation caused >50% mortality among adult *N. arenaceodentata*, juvenile and adult coquina clams, *Donax variabilis texasiana* and adult scallops, *Aequipecten amplicostatus*. Other species tested were tolerant. A sublethal response observed was the inhibition of reproduction in marine annelids, *Dinophilis* sp. and *C. serratus*. Toxicity of mud aqueous fractions was due primarily to volatile soluble organic

ANNO

06/10/1987

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ACC 2029

TYPE P

YEAR 1980

AUTH NELSON, W.G.;

TITL A COMPARATIVE STUDY OF AMPHIPODS IN SEAGRASSES FROM FLORIDA TO NOVA SCOTIA.

BIBL BULL. MAR. SCI. 30(1):80-89.

KEYW SEAGRASS
TEMPERATURE

CRUSTACEA

SALINITY

ABST No significant differences in mean density, number of species, diversity, and evenness of seagrass-associated amphipods were found between samples from 3 faunal provinces (12 sites) from Florida to Nova Scotia. Values of density, number of species, and evenness were lower in *Thalassia testudinum* sites than samples from *Halodule wrightii* or *Zostera marina*. Amphipod density decreased with increasing latitude in *Zostera* beds. Significant differences in the size and relative abundance of epifaunal species between most northern sites and most southern sites are believed to be due to differences in predation intensities.

ANNO

06/10/1987

.....
ACC 2201
TYPE P
YEAR 1981
AUTH NELSON, W.G.;
TITL THE ROLE OF PREDATION BY DECAPOD CRUSTACEANS IN SEAGRASS ECOSYSTEMS.

BIBL KIEL MEERESFORSCH. 5:529-536.

KEYW CRUSTACEAN	SEAGRASS	FISH
POLYCHAETE	MODEL	PINK SHRIMP
BLUE CRAB		

ABST Seagrass associated macrobenthic invertebrates were exposed to various densities of natural fish (*Lagodon rhomboides*) and decapod (*Penaeus duorarum*, *Palaeonetes intermedius*, *Callinectes sapidus*) predators in laboratory and field predation experiments in the Indian River. Densities of amphipods, gastropods, bivalves, polychaetes, sipunculids, and tanaids had a negative exponential relationship with the total density of decapod crustaceans present; isopods and nemertean showed no such relationships. A warning is given that oversimplification of intermediate trophic levels in trophic models may allow important regulatory pathways for seagrass community structure to be ignored.

ANNO

06/10/1987

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ACC 2566
TYPE P
YEAR 1981
AUTH NELSON, W.G.;
TITL EXPERIMENTAL STUDIES OF DECAPOD AND FISH PREDATION ON SEAGRASS MACROBENTHOS

BIBL MAR. ECOL. PROG. SER. 5(2):141-150.

KEYW SEAGRASS FISH CRUSTACEAN
 PINK SHRIMP BLUE CRAB

ABST Predation experiments on seagrass macrobenthos conducted under laboratory and field conditions in the Indian River Lagoon, Florida, produced similar results. Macrofaunal abundances were not greatly affected by the fish *Lagodon rhomboides* or the crab *Callinectes sapidus*, however, the shrimp *Palaemonetes intermedius* and *Penaeus duorarum* caused significant decreases in macrobenthic densities. The effect of decapod crustaceans in regulating densities of seagrass macrobenthos is discussed.

ANNO

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ACC 4112
 TYPE P
 YEAR 1979
 AUTH NEURAUTER, T.W.;
 TITL BED FORMS OF THE WEST FLORIDA SHELF AS DETECTED WITH SIDE SCAN SONAR.

BIBL M.S. THESIS, UNIV. OF SOUTH FLA., TAMPA, FL. 144 P.

KEYW CONTINENTAL SHELF	GEOPHYSICAL	GEOLOGY
BENTHIC	BED FORM	SIDE SCAN SONAR

ABST A side-scan sonar investigation on the west Florida shelf reveals a multitude of bed form types. A nongenetic classification based on wavelength and ripple index (wavelength/wave height) divided the types into four groups; giants, large, small-scale ripples and low-relief swells. The last term is here defined as sediment hills of extremely long wavelength (usually >300 m) with comparatively low relief; they are often strongly asymmetric. Five major zones are delineated according to the distribution of bed form types.

These zones roughly parallel the coast line and extend seaward to approximately 200 meter depths. Zone A, which parallels the west Florida peninsula out to approximately 20 m, is characterized by giant to large-scale bed forms. These features are oriented almost normal to the coast line and are believed to be longitudinal bed forms generated by major storms. Zone B encompasses the shallow region of the Big Bend area and extends down the mid-shelf parallel to the coast. Low-relief swells and scattered patches of giant to large-scale bed forms characterize this zone. The latter type appears to be "current lineations," a type of longitudinal bed form probably owing its origin to strong wind and/or wave generated currents created during a hurricane. Zone C is subdivided into two zones extending north and south of the Middle Ground. Zone C1 includes the Middle Ground and the area to the north while C2 extends south into water depths of 60 m. Both zones are characterized by small-scale features formed either by internal waves or currents set up on the summer thermocline or by intrusion of Loop Current water

ANNO

06/10/1987

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ACC 467

TYPE

YEAR 1981

AUTH NEW ENGLAND COASTAL ENGINEERS;

TITL PROCEEDINGS OF THE GULF CIRCULATION STUDIES WORKSHOP, MAY 14-15, NEW ORLEANS,
S, LA.

BIBL BUREAU OF LAND MANAGEMENT, GULF OF MEXICO OCS REGIONAL OFFICE, NEW ORLEANS,
LA. 96 P. (ALSO NTISP-881-248254).

KEYW CIRCULATION
OCEANOGRAPHY

CURRENTS
PHYSICAL PROCESS

LOOP CURRENT
POLLUTANT

ABST

ANNO

06/10/1987

.....
ACC 4113
TYPE P
YEAR 1982
AUTH NEW ENGLAND COASTAL ENGINEERS, INC.;
TITL SOUTHWEST FLORIDA SHELF CIRCULATION MODEL.

BIBL A FINAL REPT. TO THE U.S. DEPT. OF INTER., MINERALS MGMT. SERV., GULF OF MEX. OUTER CONT. SHELF OFFICE, NEW ORLEANS, LA. CONTRACT #AA851-CT0-71.

KEYW PHYSICAL OCEANOGRAPHY NUMERICAL MODEL
WIND STRESS LOOP CURRENT CIRCULATION
EDDY FORMATION SEASONALITY

ABST This report summarizes 18 months study funded by the Minerals Management Service. Motivation for the study arose from the Services intention to grant leases for oil exploration, and the attendant need to estimate the probable destination of water-borne pollutants originating from drilling and for predicting seasonal water circulation on the southwest continental shelf. Because of modelling considerations, the study area was expanded to include the contiguous West Florida Shelf (WFS) extending from the Florida Keys in the south to Apalachicola in the north, and the 200 m isobath to the west. The study involved four phases: literature review and data search; model modifications and sensitivity studies; model verification and tuning; and prediction of seasonal circulation patterns.

ANNO

06/10/1987

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ACC 332

TYPE

YEAR 1982

AUTH NICHELSON, R.;

TITL PROCEEDINGS OF THE ANNUAL TROPICAL AND SUBTROPICAL FISHERIES TECHNOLOGICAL
CONFERENCE OF THE AMERICAS (7TH).

BIBL TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. TAMU-SG-82-110. 399 P.

KEYW BIOLOGY
PRODUCTIVITY

FISHERY
SHARK

CONTINENTAL SHELF

ABST

ANNO

06/10/1987

.....
ACC 2209

TYPE P

YEAR 1981

AUTH NICKELS, J.S.;BOBBIE, R.J.;MARTZ, R.F.;SMITH, G.A.;WHITE, D.C.; ET AL.;

TITL EFFECT OF SILICATE GRAIN SHAPE, STRUCTURE, AND LOCATION ON THE BIOMASS AND
COMMUNITY STRUCTURE OF COLONIZING MARINE MICROBIOTA.

BIBL APPL. ENVIRON. MICROBIOL. 41(5):1262-1268.

KEYW BIOMASS
GRAIN SIZE
BENTHIC

COMMUNITY
ALGAE

SEDIMENT
MICROFAUNA

ABST Silica grains of the same size and water pore space, but with different micropography, support microbiota with differences in biomass and community structure after 8 weeks in running seawater. Smooth silica grains had significantly less total microbial biomass than grains with cracks and crevices. Smoothness of sand grain surface was inversely related to abundance of prokaryotes and algal microeucaryotes and directly related to microeucaryotic grazer abundance. A comparison of microbial biomass and community structure is made between experimental treatments and the actual benthic population of a sediment core from the sea floor (32 m) off Panama City, Florida.

ANNO

06/10/1987

.....
ACC 2456
TYPE P
YEAR 1976
AUTH NICKELSEN, G.L.;
TITL COMPOSITION AND DISTRIBUTION OF EPIFAUNA ON PROP ROOTS OF RHIZOPHORA MANGLE
L. IN LAKE SURPRISE, FLORIDA.

BIBL MASTER'S THESIS. FLORIDA ATLANTIC UNIVERSITY. BOCA RATON, FL.

KEYW MONROE	EPIFAUNA	SPONGE
ALGAE	POLYCHAETE	TEMPERATURE
SALINITY	DO	TURBIDITY
LIGHT	CRUSTACEAN	

ABST A total of 108 species were collected from the prop roots of the red mangrove. Fringe roots hosted greater numbers of species and individuals and a greater abundance of sponges and epiphytes than roots in the interior of the strand. The root community was characterized by three assemblages. The algae-amphipod-tanaiidacean assemblage was prominent on fringe roots. The sponge-polychaete assemblage (excluding serpulids) was represented well in both areas, but was more prominent at the fringe. The bare root serpulid assemblage dominated much of the interior. Overall mean diversity (H_s) and equitability (E) were 2.60 and 0.65, respectively. Faunal density was 13,200 ind/sq. meter of root surface.

ANNO

06/10/1987

.....
ACC 4114
TYPE P
YEAR 1976
AUTH NILER, P.P.;
TITL OBSERVATIONS OF LOW-FREQUENCY CURRENTS ON THE WEST FLORIDA CONTINENTAL SHELF.
F.

BIBL MEM SOC. ROYALE DES SCIENCES DE LIEGE 6(10):331-358.

KEYW CIRCULATION	LOOP CURRENT	CURRENTS
WIND STRESS	PHYSICAL	OCEANOGRAPHY
EDDY		

ABST From August, 1973, to April, 1974, VACM's were emplaced on taut wire moorings in an array on the West Florida continental shelf. Time series of horizontal currents and surface winds have been analyzed for the character of sub-tidally varying motions. At the 150 meter depth, the energetic, 12-15 day period signal in the longshore current propagates to the north along the shelf break at 50 cm/sec and in the onshore currents at 100 cm/sec. A model of Loop Current eddies imbedded in along meander is proposed for a kinematic description of the motions. At the 100 meter depth, there is a marked seasonal change in the pattern of variability which, in winter, becomes strongly correlated with the wind stress over a selected frequency band. The bi-monthly average currents show strong vertical shear; a summertime undercurrent to the north is found.

ANNO

06/10/1987

.....
ACC 478

TYPE

YEAR 1981

AUTH NISSAN, E.;WILLIAMS, D.C.;BRISTER, B.M.;NELSON, R.G.;HARDY, W.E.;

TITL ECONOMIC - ECOLOGIC MODEL FOR MISSISSIPPI-ALABAMA COASTAL COUNTIES.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP. 31 PP.

KEYW COASTAL ZONE
SOCIOECONOMIC

MANAGEMENT
MODEL

RESOURCE

ABST

ANNO

06/10/1987

.....
ACC 479

TYPE

YEAR 1979

AUTH NISSAN, E.; WILLIAMS, D.C.;

TITL A DECISION MODEL FOR THE TRADE-OFF BETWEEN THE BENEFITS OF ECONOMIC GROWTH
AND ITS ENVIRONMENTAL COST.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP-79-031.
16 PP.

KEYW MATHEMATICAL MODEL SOCIOECONOMIC

ABST

ANNO

06/10/1987

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ACC 483

TYPE

YEAR 1981

AUTH NISSAN, E.;WILLIAMS, D.C.;CAVENY, R.;

TITL A LINEAR PROGRAMMING MODEL OF ECONOMIC GROWTH AND THE ENVIRONMENT.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP-79-030.

KEYW SOCIOECONOMIC MODEL

ABST

ANNO

06/10/1987

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ACC 651

TYPE

YEAR 1981

AUTH NISSAN, E.; WILLIAMS, D.C.;

TITL A DECISION MODEL FOR THE TRADE-OFF BETWEEN THE BENEFITS OF ECONOMIC GROWTH,
AND ITS ENVIRONMENTAL COST. PAGES 88-98.

IN: SYMPOSIUM ON MISSISSIPPI SOUND. J.R. KELLY, ED.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP-81-007.

KEYW ECOLOGY
SOCIOECONOMIC

ECONOMICS

MODEL

ABST

ANNO

06/10/1987

.....
ACC 2520

TYPE P

YEAR 1967

AUTH NOE, C.D.;

TITL CONTRIBUTIONS TO THE LIFE HISTORY OF THE STONE CRAB MENIPPE MERCENARIA SAY
WITH EMPHASIS ON THE REPRODUCTIVE CYCLE.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI, MIAMI, FL. 55 P.

KEYW DADE

STONE CRAB

SPAWNING

GROWTH

SALINITY

TEMPERATURE

DEPTH

ABST Specimens of *Menippe mercenaria* were collected from grassflats near Key Biscayne from May 1965 to June 1966 to study spawning and growth cycles. Fecundity results revealed an annual egg production of 2 to 2 1/2 million eggs per female. Spawning was highest from July through September. Sex ratios varied greatly over the 13 months of study, which is probably due to changes in relative activity, not abundances. Temperature and salinity influence molting and spawning cycles, with peak molting occurring at lowest spawning.

ANNO

06/10/1987

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ACC 4317

TYPE P

YEAR 1978

AUTH NORSE, E.A.;

TITL AN EXPERIMENTAL GRADIENT ANALYSIS: HYPOSALINITY AS AN "UPSTRESS" DISTRIBUTI
ONAL DETERMINANT FOR CARIBBEAN PORTUNID CRABS.

BIBL BIOL. BULL 155(3):586-598.

KEYW DISTRIBUTION
CORAL

CRAB
REEF

SALINITY
STRESS

ABST Ecological distributions are examined in a guild of Caribbean demersal crab
s (family Portunidae) on a gradient in terrestrial influence on aquatic cli
mate, along which the major monotonic physicochemical variable is salinity
. Distributions were established by sampling in fresh lotic waters and bay
s with highly restricted exchange with the sea, which, for marine groups, a
re constantly and unperdictably climatically severe, respectively, through
climatically equable waters around coral reefs. The 16 demersal portunid s
pecies collected in Jamaica (the main study area), the Florida Keys, Colomb
ia, and Curacao all occur in undiluted seawater, but progressively fewer ar
e found as salinity decreases. Hyposaline biotopes are virtually monopoliz
ed by members of the genus *Callinectes*, while *Arenaeus*, *Portunus*, and *Croni
us* spp. were found only in higher salinities. *Callinectes* spp. display ser
ial replacement along the gradient; crab stages of *C. maracaiboensis*, *C. bo
courti*, and *C. sapidus* occur mainly in fresh waters, while dominance peaks
occur in progressively higher salinities for *C. exasperatus*, *C. danae*, *C. m
arginatus*, and *C. ornatus*. Acute hyposalinity tolerances of the common spe
cies were determined experimentally and follow the same order as upstress l
imits and dominance peaks. The species composition of the guild changes fr
om domination by the most to the least euryhaline species as likelihood of
severe dilution decreases.

ANNO

06/10/1987

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ACC 4115
TYPE P
YEAR 1966
AUTH NOWLIN, W.D., JR.;MCLELLAN, H.J.;
TITL A CHARACERIZATION OF THE GULF OF MEXICO WATERS IN WINTER.

BIBL J. MAR. RES. 25(1):29-59.

KEYW CIRCULATION	CURRENTS	HYDROGRAPHY
INTRUSION	LOOP CURRENT	PHYSICAL
OCEANOGRAPHY		

ABST The results of a rapid survey of the Gulf of Mexico in the winter of 1962 are presented. Variations in the characteristics of the water in several core layers are described. Circulation has been examined on the basis of dynamic computations and G.E.K. measurements. In the eastern Gulf, water enters through Yucatan Strait and leaves through Florida Strait, flowing in an anticyclonic loop that extends well into the Gulf. In the western Gulf, circulation is anticyclonic around an elongated cell oriented NE-SW over the Gulf Basin. Sufficient similarities are seen in data obtained in other years to suggest that this pattern is typical of the circulation in the winter. The complexity of the circulation pattern deduced from this survey is considerably less than that of patterns presented by others.

ANNO

06/10/1987

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ACC 253

TYPE

YEAR 1980

AUTH NUMMEDAL, D.;PENLAND, S.;GERDES, R.;SCHRAMM, W.;KAHN, J.;ROBERTS, H.;

TITL GEOLOGIC RESPONSE TO HURRICANE IMPACT ON LOW PROFILE GULF COAST BARRIERS.

BIBL TRANS., GULF COAST ASSOC. GEOL. SOC. 30:183-195.

KEYW BARRIER ISLAND
GEOLOGY

COASTAL ZONE
HURRICANE

EROSION

ABST Hurricane Frederic made landfall near Pasagoula, Mississippi at midnight September 13, 1979. At the time of landfall the central pressure had dropped to 946 mb, onshore winds in excess of 200 km/hr were lashing the Alabama coastline and the open coast storm tide peaked at 365 cm at Gulf Shores, Alabama. Vertical aerial photography obtained in 1976 and again 9 days after Frederic made landfall, combined with multiple reconnaissance overflights and ground surveys by the authors provided the data base for determination of shoreline erosion and the distribution of hurricane scour and sedimentary deposits. Erosion of the Gulf beach at Dauphin Island proved to follow a predictable pattern controlled by nearshore bathymetry whereas retreat of the shoreline of the Mississippi Sound margin was an unexpected occurrence, apparently due to a hydraulic jump as washover currents entered the deep water of Mississippi Sound. Large scale sediment redistribution on Dauphin Island proper was a consequence of the storm surge flood. However, the ebb surge was responsible for the reopening of three inlets across Little Dauphin Island. Hurricane Frederic also had a major impact on the Chandeleur Islands, Louisiana. Even though the maximum surge height on the left side of the hurricane track was only 1.3 m, pre-existing hurricane channels and washovers acted as conduits for the flood and ebb surge.

ANNO

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ACC 544

TYPE

YEAR 1983

AUTH NUMMEDAL, D.;

TITL RATES AND FREQUENCIES OF SEA-LEVEL CHANGES: A REVIEW WITH AN APPLICATION TO
PREDICT FUTURE SEA-LEVELS IN LOUISIANA.

BIBL TRANS., GULF COAST ASSOC. GEOL. SOC. 33:361-366.

KEYW BIBLIOGRAPHY

COASTAL ZONE

EUSTATIC CHANGE

GEOLOGY

MANAGEMENT

SEA LEVEL

TECTONIC

GEOLOGIC HISTORY

CLIMATOLOGY

ABST The relative elevation of sea and land has been changing throughout time in response to two fundamentally different groups of factors operating globally and locally. (1) Global factors include changes in the volume of the ocean basins due to variable sea floor spreading rates, oceanic sedimentation, continental accretion, and the opening and closing of marginal seas. Furthermore, the mass of oceanic water has changed in response to glaciations, and the specific volume of the water is temperature dependent. (2) Local factors influencing relative sea level at any measurement station include subsidence of continental margins, fault displacements, compaction due to dewatering of sediments, and a range of atmospheric factors. This review has identified nine groups of factors which control relative sea level. These factors operate at distinctly different time scales ranging from $10^{(8)}$ years (sea floor spreading) to hours (storms). These same groups of factors also have characteristic rates of sea-level change, ranging from $5 \times 10^{(-4)}$ cm/year for sea floor spreading to 30 cm/year for seasonal effects due to continental run-off and steric expansion of seawater. As one application of the data in this review an attempt has been made to predict the trend of relative sea level along the coast of Louisiana for the coming decades. Currently, the global (eustatic) sea level appears to be rising at a rate of 1.2 mm per year. The local rate of land surface sinking along the central Louisiana coast appears to be about 9 mm per year.

ANNO tide inundation. The economic impact on south Louisiana due to local sea-level rise is already severe and it is likely to increase in magnitude. It is imperative that plans for coastal development and protection consider these long-term trends.

06/10/1987

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ACC 4116

TYPE P

YEAR 1973

AUTH O'BRIEN, J.J.; WROBLEWSKI, J.W.;

TITL A SIMULATION OF THE MESOSCALE DISTRIBUTION OF THE LOWER MARINE TROPHIC LEVELS OF WEST FLORIDA.

BIBL INVEST. PESQUERA. 37(2):193-233.

KEYW BIOLOGY

ECOLOGY

FOOD HABIT

HYDROGRAPHY

NUTRIENT

ORGANIC CARBON

NUMERICAL MODEL

PHYTOPLANKTON

ZOOPLANKTON

PELAGIC FISH

ABST A simulation model of the flow of the biologically limiting nutrients through the lower trophic levels (phytoplankton, zooplankton, pelagic fish, detritus, and limiting nutrient dissolved in the water column) of a marine ecosystem over a continental shelf is presented. Interrelated processes of this time dependent, spatial, non linear, physical-chemical-biological model include advection, diffusion, several biotic and abiotic environmental conditions, and numerous biological processes. The necessity of including the effect of advection upon the spatial distribution of the biotic components in an upwelling situation is demonstrated. The maximum rate of nutrient uptake by phytoplankton, V_m , is found to be a fundamental time scale to which both physical and biological processes can be related. A nondimensional parameter S , evolved from the formulation of the model, scales the effects of advection and diffusion relative to the rate of biological turnover in determining the spatial solutions. The magnitude of S is dependent on the value of V_m . The spatial distributions of the biotic components are calculated for both phosphate and nitrate limiting situations. Localities of greater upwelling of nutrient rich waters into the euphotic zone show greater phytoplankton and zooplankton standing stocks. The rates of the system are explored. Sensitivity analyses conducted on the model formulation determine the most important controlling factors in the system dynamics to be herbivore grazing and excretion rates.

ANNO

06/10/1987

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ACC 747
TYPE
YEAR 1971
AUTH ODUM, E.P.;
TITL FUNDAMENTALS OF ECOLOGY. 3RD EDITION.

BIBL W.B. SAUNDERS CO., PHILADELPHIA, PA. 573 PP.

KEYW BENTHIC COMMUNITY	BIOLOGY	COASTAL WATER
ECOLOGY	FEEDING HABIT	MACROFAUNA
MEIOFAUNA		

ABST This text presents the fundamental concepts and logic behind ecological theory. It examines the interrelationship between animal communities and their environment. It is used as a textbook in a number of introductory ecology courses.

ANNO

06/10/1987

.....
ACC 212

TYPE

YEAR 1982

AUTH O'NEIL, P.E.;METTEE, M.F., EDS.;

TITL ALABAMA COASTAL REGION ECOLOGICAL CHARACTERIZATION. VOLUME 2. A SYNTHESIS OF ENVIRONMENTAL DATA.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON, D.C. FWS/OBS-82/42. 346 PP.

KEYW	BIOLOGY	COASTAL ZONE	ECOLOGY
	ECOSYSTEM	ESTUARY	GEOLOGY
	HYDROLOGY	METEOROLOGY	MODEL

ABST The Environmental Synthesis report consists of two parts. The first contains a detailed description of the natural environment of coastal Alabama relative to its biological, geological, and hydrological resources and processes. The second part presents a conceptual model of energy flow through major coastal ecosystems (freshwater, coastal terrestrial, estuarine and outer continental shelf) and interrelates them to modified and manipulated systems (urban, industrial, and agricultural) in Mobile and Baldwin Counties. Also included are detailed discussions and models of the estuarine ecosystem and one of its components, the marsh, as it relates to coastal Alabama.

ANNO

06/10/1987

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ACC 2362
TYPE
YEAR 1977
AUTH OLEXA, M.T.;FREEMAN, T.E.;
TITL RED MANGROVE: A PLANT PATHOLOGICAL-ENVIRONMENTAL STUDY.

BIBL IN: PROC. OF THE FOURTH ANNU. CONF. ON THE RESTORATION OF COAST. VEGETATION
IN FLA. P. 138-150.

KEYW COLLIER COASTAL FLORA
 PATHOLOGY STRESS

ABST A survey of the red mangrove, *Rhizophora mangle*, for foliar disease was conducted along Florida's coastal and inshore marine areas between June 1974 and June 1975. Three species of pathogenic fungi (*Cercospora rhizophorae*, *Anthostomella rhizomorphae*, *Pestalotia disseminata*) were isolated from mangrove leaves. Evidence indicated that fungi promoted early leaf fall. Closer investigation of affected mangroves at five sites in the Ten Thousand Islands area revealed a significant correlation between incidence/severity of foliar disease and certain environmental parameters.

ANNO

06/10/1987

.....
ACC 4267

TYPE P

YEAR 1977

AUTH OPENHEIMER, C.H.;

TITL THE OFFSHORE ECOLOGY INVESTIGATION 1972-1974. PRESENTED AT PETROLEUM HYDROCARBONS IN THE MARINE ENVIRONMENT (ICES WORKSHOP) ABERDEEN (UK) 9 SEPTEMBER 1975.

BIBL 171, 147.

KEYW BIOLOGY
PHYSICAL
UPWELLINGS

CHEMISTRY
OCEANOGRAPHY
DRILLING

GEOLOGY
BASELINE STUDY

ABST The paper described a 2-year investigation of offshore ecology by the Gulf Universities Research Consortium designed to answer the question, what is the measurable impact of drilling for oil, and later producing it, on the estuarine and marine environment of the Louisiana shelf? Twenty-three projects in biology, chemistry, geology and physical oceanography were involved and sampling stations were included both adjacent to drilling and production locations, and in control areas in the same region where oil had never been drilled. Based on the data analysed so far, the following general conclusions were reached. (1) The universal necessity for conducting a "before-the-fact" baseline study to subsequently determine the environmental impact of this type of man's activity is questioned. (2) Natural phenomena such as seasonality, floods, upwellings, and turbid layers have much greater impact upon the ecosystem than do petroleum drilling and production activities. (3) Concentrations of all compounds of Offshore Ecological Investigation interest which are in any way related to drilling or production are sufficiently low to present no known persistent biological hazards. (4) Every indication of good ecological health is present. The region of the sampling sites is a highly productive one from the biological standpoint, more so than other regions thus far studied in the eastern and open Gulf of Mexico. (5) Timbalier Bay has not undergone significant ecological change as a result of petroleum drilling and production since just prior to 1952 when other more limited baseline data were generated.

ANNO

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ACC 4183
TYPE P
YEAR 1977
AUTH OPPENHEIMER, C.H.;
TITL THE OFFSHORE ECOLOGY INVESTIGATION 1972-1974.

BIBL RAPP, P.-V. REUN. CONS. INT.EXPLOR. MER. 171:147.

KEYW BIOLOGY CHEMISTRY GEOLOGY
 PHYSICAL OCEANOGRAPHY BASELINE STUDY
 POLLUTION OFFSHORE DRILLING

ABST The paper described a two-year investigation of offshore ecology by the Gulf Universities Research Consortium designed to answer the question, what is the measureable impact of drilling for oil, and later producing it, on the estuarine and marine environment of the Louisiana shelf? Twenty-three projects in biology, chemistry, geology and physical oceanography were involved and sampling stations were included both adjacent to drilling and production locations, and in control areas in the same region where oil had never been drilled. Based on the data analyzed so far, the following general conclusions were reached: (1) The universal necessity for conducting a 'before-the-fact' baseline study to subsequently determine the environmental impact of this type of man's activity is questioned. (2) Natural phenomena such as seasonality, floods, upwellings, and turbid layers have much greater impact upon the ecosystem than do petroleum drilling and production activities. (3) Concentrations of all compounds of Offshore Ecological Investigation interest which are in any way related to drilling or production are sufficiently low to present no known persistent biological hazards. (4) Every indication of good ecological health is present. The region of the sampling sites is a highly productive one from the biological standpoint, more so than other regions thus far studied in the eastern and open Gulf of Mexico. (5) Timbalier Bay has not undergone significant ecological change as a result of petroleum drilling and production since just prior to 1952 when other more limited baseline data were generated.

ANNO

06/10/1987

.....
ACC 2521
TYPE P
YEAR 1973
AUTH OPRESKO, D.C.;
TITL ABUNDANCE AND DISTRIBUTION OF SHALLOW WATER GORGONIANS IN THE AREA OF
MIAMI, FLORIDA.

BIBL BULL. MAR. SCI. 22(3):535-558.

KEYW DADE	GORGONIAN	DISTRIBUTION
HABITAT	DIVERSITY	REEF
TEMPERATURE	SALINITY	LIGHT
CURRENTS	SEDIMENT	

ABST The composition of the gorgonian fauna in the Miami area was examined. Collections totaling 2,550 specimens were analyzed as to number of species, number of colonies of each species, relative abundance of various taxonomic groups, and average height and weight of each species. Species were categorized according to patterns of distribution, and the ecological factors limiting the distribution of species were examined. The scleraxions had the most restricted distribution and the gorgonid holoxonians occurred in the widest range of habitats. The plexaurids showed the greatest species diversity and the greatest intraspecific ecological variability. The gorgonids, however, had a greater distributional range and were individually more adapted to distinct habitats. The gorgonids showed special adaptations to fluctuating environmental conditions and modified growth forms to meet the demands of the environment. Most species of shallow-water gorgonians appeared to show some degree of habitat preference. Inshore species were often found in reef areas, but reef species were rarely found in areas where temperature, salinity and sedimentation were variable.

ANNO

06/10/1987

.....

ACC 2522

TYPE P

YEAR 1974

AUTH OPRESKA, D.M.;

TITL RECOLONIZATION AND REGROWTH OF A POPULATION OF THE GORGONIAN PLEXAURA HOMOMALLA.

BIBL STUD. TROP. OCEANOGR. MIAMI 12:101-110.

KEYW DADE
RECRUITMENT

GORGONIAN
REEF

GROWTH

ABST The size and structure of a population of the gorgonian *Plexaura homomalla* at a small patch reef near Miami, Florida were investigated. The population density, standing crop, and colony size of *P. homomalla* were determined. The growth rate of individual colonies and rate of recruitment for populations on cleared and uncleared reef areas were estimated. Age of individual colonies appeared to be closely correlated with the number of concentric rings on the basal part of the axis.

ANNO

06/10/1987

.....

ACC 2457
TYPE P
YEAR 1975
AUTH OREMLAND, R.S.;
TITL METHANE PRODUCTION IN SHALLOW WATER TROPICAL MARINE SEDIMENTS.

BIBL APPL. MICROBIOL. 30(4):602-608.

KEYW MONROE	SEDIMENT	CORAL
REEF	SEAGRASS	METABOLISM

ABST Production of methane in *Thalassia testudinum* and *Syringodium* sp. beds located in Caesar Creek, Florida Keys, was measured. *T. testudinum* beds showed higher methane production than either *Syringodium* sp. beds or two coral reefs. Methane production rates seem to be influenced by a wide range and type of benthic metabolic processes.

ANNO

06/10/1987

.....
ACC 2218

TYPE P

YEAR 1979

AUTH OSBORNE, N.M.;

TITL THE INFLUENCE OF SEDIMENT CHARACTERISTICS AND SEAGRASS SPECIES ON THE DISTRIBUTION AND ABUNDANCE OF POLYCHAETOUS ANNELIDS IN NORTH FLORIDA SEAGRASS BEDS.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL.

KEYW SEDIMENT
GRAIN SIZE

SEAGRASS

POLYCHAETE

ABST The distribution and abundance of polychaetes in seagrass beds was investigated in St. Josephs Bay, Florida, in relation to seagrass species composition and leaf area, sediment organic content, and sediment stability. Of 3 polychaete communities from adjacent *Thalassia testudinum* beds with different sediment characteristics 2 were affected by sediment composition, while the third community was influenced by leaf biomass. Infaunal trophic structure did not vary significantly between sites. In a separate study phase, polychaete species composition and infaunal trophic structure varied sharply along a transect through a seagrass bed containing 3 species of seagrasses. Variations in community structure were related to plant density, seagrass species composition, and sediment stability.

ANNO

06/10/1987

.....
ACC 2329

TYPE P

YEAR 1979

AUTH OSBORNE, S.W.;

TITL THE SEASONAL DISTRIBUTION OF LUIDIA CLATHRATA (SAY) IN CHARLOTTE HARBOR WITH
REFERENCE TO VARIOUS PHYSICAL-CHEMICAL PARAMETERS.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL.

KEYW CHARLOTTE	SEASONAL	DISTRIBUTION
GROWTH	ECHINODERMATA	DEPTH
TEMPERATURE	DO	SALINITY

ABST The distribution of the sea star *Luidia clathrata* in Charlotte Harbor, Florida was determined from monthly collections at 23 stations during 1976 and 1977. Seasonal variations in the distribution of *L. clathrata* was influenced primarily by sporadic larval settlement during January through August, and by decreased oxygen conditions in late summer associated with increased flow of the Peace River. An annual population of *L. clathrata* was identified in upper Charlotte Harbor. A monthly growth rate of 13.3 mm/30 d indicated an annual breeding cycle.

ANNO

06/10/1987

.....
ACC 2126
TYPE P
YEAR 1976
AUTH OSTERLING, M.J.;
TITL REPRODUCTION, GROWTH, AND MIGRATION OF BLUE CRABS ALONG FLORIDA'S
GULF COAST.

BIBL MAR. ADVIS. PROG., FLA. SEA GRANT PUBL. SUSF-SG-76-003. 19 P.

KEYW REPRODUCTION	GROWTH	MIGRATION
BLUE CRAB	TAGGING	POPULATION
DECAPOD		

ABST The reproduction, growth, and migration of blue crabs along Florida's Gulf coast were studied from November 1974 through December 1975. It was determined that male crabs remained in their general home estuary after tagging. Female crabs did travel further than males, relative to their home estuary. Migrations of females were determined to be directly linked to reproduction. It was observed that the blue crab population along Florida's Gulf coast behaves in an onshore/along shore pattern rather than an onshore/offshore pattern as formerly believed.

ANNO

06/10/1987

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ACC 588

TYPE

YEAR 1984

AUTH OTVOS, E.G.;

TITL ALTERNATE INTERPRETATIONS OF BARRIER ISLAND EVOLUTION, APPALACHICOLA COAST,
NORTHWEST FLORIDA.

BIBL LITORALIA 1(1). (IN PRESS).

KEYW FORAMINIFERA
BARRIER ISLAND
GEOLOGY

HOLOCENE
COASTAL WATER
GEOLOGIC HISTORY

QUATERNARY
EVOLUTION

ABST

ANNO

.....

ACC 114
 TYPE
 YEAR 1982
 AUTH OVERSTREET, R.M.; HEARD, R.W.;
 TITL FOOD CONTENTS OF SIX COMMERCIAL FISHES FROM MISSISSIPPI SOUND.

BIBL GULF RES. REP. 7(2):137-150.

KEYW	BIOLOGY	COASTAL WATER	ECOLOGY
	FEEDING HABIT	FISH	CRUSTACEAN
	SHRIMP	MOLLUSC	POLYCHAETE
	BLUE CRAB		

ABST Specific dietary contents from six fishes collected in Mississippi Sound are recorded. In order of their importance, primary components grouped in major taxonomic categories were fishes, penaeid shrimps, and other crustaceans for *Cynoscion nebulosus*; crustaceans and fishes for *C. arenarius*; fishes and crustaceans for *C. nothus*; crustaceans, pelecypods, and polychaetes for *Pogonias cromis*; crustaceans, molluscs, polychaetes, and fishes for *Archosargus probatocephalus*; and fishes and penaeid shrimps for *Paralichthys lethostigma*. Principal items in the diets of most of the fishes included *Anchoa mitchilli*, *Penaeus aztecus*, *P. setiferus*, and *Callinectes sapidus*. Those crustaceans show that competition exists for commercial shellfishes in Mississippi Sound. Ratios among the different dietary items vary, according at least to species of fish, length of fish, season, specific location, and abundance of available prey. Some of these variations are documented and are additionally related to selected findings by other authors sampling different localities. We suggest that examination of food items in *Archosargus probatocephalus* can serve as a practical means to sample and assess seasonal prevalence and abundance of a wide range of invertebrates throughout different habitats in Mississippi Sound and elsewhere.

ANNO

06/10/1987

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ACC 156

TYPE

YEAR 1982

AUTH OVERSTREET, R.M.;

TITL ABIOTIC FACTORS AFFECTING MARINE PARASITISM. P. 36-39.

IN: D.F. METTRICK AND D.F. DRESSER, EDS. FIFTH INTERNATIONAL CONGRESS
OF PARASITOLOGY PROCEEDINGS AND ABSTRACTS. AUGUST 7-14, 1982,
TORONTO, CANADA.

BIBL FIFTH INTERNATIONAL CONGRESS OF PARASITOLOGY.

KEYW BIOLOGY

COASTAL ZONE

FISH

INFECTIOUS DISEASE

PARASITE

PATHOLOGY

STRESS

ABST

ANNO

06/10/1987

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ACC 161

TYPE

YEAR 1976

AUTH OVERSTREET, R.M.; EDWARDS, R.H.;

TITL MESENCHYMAL TUMORS OF SOME ESTUARINE FISHES OF THE NORTHERN GULF OF MEXICO.
II. SUBCUTANEOUS FIBROMAS IN THE SOUTHERN FLOUNDER, PARALICHTHYS LETHOSTIGMA AND THE SEA CATFISH, ARIUS FELIS.

BIBL BULL. MAR. SCI. 26(1):41-48.

KEYW BIOLOGY
TUMOR

FISH
PATHOLOGY

HISTOLOGY

ABST We describe benign subcutaneous mesenchymal fibromas in the southern flounder and in the sea catfish collected in estuarine and marine water of Mississippi. Under the gular membrane of the flounder occurred two pseudoencapsulated tumors, whereas only a single deeply-embedded non-encapsulated one occupied an area at the base of the catfish's anal fin. Because the latter tumor had a chondromatous component, we consider it a chondrofibroma. Tumors from both fish displayed morphological similarities, including tumor cell characteristics. They contained abundant collagen, and both incorporated bony and cartilaginous spicules. The etiology of those from the flounder could be related to a philometrid nematode or a didymozoid trematode. This report represents the first describing tumors from *Paralichthys lethostigma* and *Arius felis* and one of the few involving tumors from any fishes in the Gulf of Mexico.

ANNO

06/10/1987

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ACC 891
TYPE
YEAR N/AR
AUTH OVERSTREET, R.M.;
TITL AN UNDEREXPLOITED GULF COAST FISHERY: SOFT SHELL CRABBING.

BIBL GULF COAST RESEARCH LABORATORY, OCEAN SPRINGS, MS.

KEYW BENTHIC FAUNA COMMERCIAL FISHERY PARASITE
 BLUE CRAB PATHOLOGY

ABST The potential use of soft shell crabs as a major food source was analyzed. Parasites which inhabit soft shell crabs were reported on as well as methods for food preparation.

ANNO

06/10/1987

.....
ACC 4260

TYPE P

YEAR 1980

AUTH OVERTONA, E.B.; LASETTER, J.L.;

TITL DISTRIBUTION OF AROMATIC HYDROCARBONS IN SEDIMENTS FROM SELECTED ATLANTIC,
GULF OF MEXICO, AND PACIFIC OUTER CONTINENTAL SHELF AREAS.

PRESENTED AT 176 MEETING AMERICAN CHEMICAL SOCIETY, MIAMI BEACH, FL.
USA 13 SEPT 1978.

BIBL AMERICAN CHEMICAL SOCIETY, WASHINGTON, D.C.

KEYW DISTRIBUTION
POLLUTION

HYDROCARBON
ALIPHATIC COMPOUNDS

SEDIMENT

ABST Approximately 100 near-surface sediments from selected Atlantic, Gulf of Mexico, and Southern California OCS areas were analyzed. Hydrocarbon components were extracted by reflux with hexane and benzene. The aromatic components were isolated by silica gel absorption chromatography and were analyzed by high-resolution gas chromatography and GC-MS methods. Total aromatics ranged from 9.0 to 1080 ng/g dry weight of sediment. Aliphatics were present from 3 to 5 times higher in concentration than aromatics. Pristane:phytane ratios were generally 1:6 in samples that were rich in aromatic components. In terms of relative abundance, two-ring PAHs were more abundant than three rings, which were more abundant than four rings. Alkyl substitution was common in the two- and three-ring PAHs. Little alkyl substitution was observed in the four or more ring systems. Correlations of aromatic types with geographic distribution and contemporary petroleum sources are discussed.

ANNO

06/11/1987

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ACC 402

TYPE

YEAR 1983

AUTH PALMER, C.R.;KELLY, P.L.;

TITL AMERICA'S FIVE YEAR OFFSHORE LEASING PLAN - IT'S IMPORTANCE IN INCREASING D
OMESTIC PETROLEUM RESERVES.

IN 23RD ANNUAL INSTITUTE ON PETROLEUM EXPLORATION AND ECONOMICS,
DALLAS, TX, MARCH 10, 1983. 28 P.

BIBL NA

KEYW DRILLING	EXPLORATION	INDUSTRY
OFFSHORE WATER	OIL	RESERVE
SOCIOECONOMIC		

ABST

ANNO

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ACC 4281
 TYPE P
 YEAR 1979
 AUTH PAMATMAT, M.M. ;
 TITL BENTHIC COMMUNITY METABOLISM ON THE CONTINENTAL SHELF OF THE NORTHERN GULF
 OF MEXICO (BASELINE STUDY TO DETERMINE EFFECTS OF OFFSHORE OIL RIG OPERATIO
 NS).

BIBL DEPT. OF FISHERIES AND APPLIED AQUACULTURES, AUBURN UNIV, AL. 8 P.

KEYW BENTHIC	COMMUNITY	CONTINENTAL SHELF
OIL	ATP	TURBIDITY
SEDIMENT	METABOLISM	POLYCHAETE
MOLLUSC	OFFSHORE	OPERATIONS

ABST Rates of oxygen uptake on the continental shelf indicate large temporal changes and significant differences between stations. Similar measurements at 10, 50, and 100 m distance from an operating oil rig revealed rates of benthic community metabolism that have no apparent effect from the oil rig presence and operation. Anaerobic experiments on pure cultures of *Clostridium sporogenes* and *Bacteroides* sp. and on a mixed culture of mostly *Bacteroides* with an unidentified coccus, showed highly significant correlations between various measures of metabolic activity and standing stock. The excellent correlations between ATP, turbidity, total dehydrogenase activity, and rate of heat production hold through the stationary phase of growth; thereafter the correlation breaks down. Highly significant but variable regressions of heat production rate on ATP concentration in sediments may be a fairly good estimate of living microbial biomass but the same concentration of ATP in different locations at various times could represent different levels of metabolic activity. Anaerobic metabolism of bivalves and a polychaete is a linear function of body size. There is no significant difference between species. The pooled average weight-specific heat production rate is 1.77×10^{-4} W g⁻¹ of dry tissue. Anaerobic metabolism is about 5% of aerobic metabolism in two bivalve species and indicates an energy saving during anaerobiosis.

ANNO

06/11/1987

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ACC 379

TYPE

YEAR 1956

AUTH PARKER, R.H.;

TITL MACROINVERTEBRATE ASSEMBLAGES AS INDICATORS OF SEDIMENTARY ENVIRONMENTS IN
EAST MISSISSIPPI DELTA REGION.

BIBL AM. ASSOC. PET. GEOL. BULL. 40(2):295-376.

KEYW BENTHIC COMMUNITY
SEDIMENTARY DEPOSIT

BIOLOGY
SEDIMENT

MACROFAUNA
GRAIN SIZE

ABST

ANNO

.....

ACC 380

TYPE

YEAR 1960

AUTH PARKER, R.H.;

TITL ECOLOGY AND DISTRIBUTIONAL PATTERNS OF MARINE MACROINVERTEBRATES, NORTHERN GULF OF MEXICO. P. 302-337.

IN: F.P. SHEPHARD, ED. RECENT SEDIMENTS NORTHWEST GULF OF MEXICO.

BIBL AM. ASSOC. PET. GEOL., TULSA, OK.

KEYW BENTHIC COMMUNITY	BIOLOGY	MACROFAUNA
SEDIMENTARY DEPOSIT	ASSEMBLAGE	CURRENTS
OYSTER	SEDIMENT	GEOLOGIC HISTORY
DISTRIBUTION	SALINITY	TEMPERATURE
TURBIDITY		

ABST As a result of a study based on three years of biological sampling in the east Mississippi Delta region, eight macro-invertebrate assemblages are recognized, each characteristic of a specific sedimentary environment ranging from the Mississippi Delta marshes to the edge of the continental shelf northeast of the Delta proper. The eight assemblages and their corresponding environments are: (1) the delta marshes, (2) delta front and lower distributaries, (3) lower Breton Sound and lower pro-delta clayey slopes, (4) upper Breton Sound, (5) inlets, or areas of strong currents, (6) the shallow continental shelf of the Gulf of Mexico from 0 to 12 fathoms, (7) the deeper part of the continental shelf from approximately 13 fathoms to 60 fathoms, and (8) the living oyster reefs of the shallow protected bays of the Delta region. The boundaries of these environments were established by plotting the distributions of both living and dead representatives of species of invertebrates furnishing hard parts plus the distributions of living soft-bodied animals which were so abundant as to characterize regions where animals with hard parts were scarce though present. Comparison of the distribution of the hydrographic factors with the physiography of the landmasses in this area with the macro-organism distributions made it possible to formulate criteria for the interpretation of ancient environments as far back as the Miocene on the Gulf and Atlantic coasts. Paleontologic literature shows that most of the present-day delta species have been found in the Pliocene, and most of the diagnostic forms have existed since the lower Miocene. The primary

ANNO

06/11/1987

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ACC 444

TYPE

YEAR 1971

AUTH PARKER, J.C.;

TITL BIOLOGY OF THE SPOT (LEIOSTOMUS XANTHURUS) AND ATLANTIC CROAKER (MICROPOGON
UNDULATUS) IN TWO GULF OF MEXICO NURSERY AREAS.

BIBL AGRICULTURAL EXTENSION SERVICE, TEXAS A&M UNIVERSITY, SEA GRANT PUBLICATION
TAMU-56-71-210.

KEYW BIOLOGY
FISH

ECOLOGY
SPAWNING

FEEDING HABIT

ABST

ANNO

06/11/1987

.....
ACC 2127
TYPE P
YEAR 1981
AUTH PARKER, P.L. ;
TITL ORGANIC GEOCHEMISTRY IN THE NATURAL SETTING OF THE GULF OF MEXICO.

IN: PROCEEDINGS OF A SYMPOSIUM ON ENVIRONMENTAL RESEARCH NEEDS IN THE
GULF OF MEXICO, KEY BISCAYNE, FL. 30 SEPT-OCT 1979. D.K. ATWOOD.
(CONVENER).

BIBL NOAA/ERL, ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LAB., MIAMI, FLA. VOL.
IIC, P. 103-130.

KEYW GEOCHEMISTRY SEAGRASS SEDIMENT
 CARBONATE ALGAE

ABST This summary paper reviews the state of knowledge on the organic geochemist
ry of particulate and dissolved organic matter, blue green algal mats, mars
h and seagrass environments, coastal sediments, carbonates, and amino acids
, and deep sea sediments of the Gulf of Mexico. Scarcity of available data
is noted and recommendations for future studies provided.

ANNO

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ACC 4117

TYPE P

YEAR 1983

AUTH PARKER, R.O., JR.; COLBY, D.R.; WILLIS, T.D.;

TITL ESTIMATED AMOUNT OF REEF HABITAT ON A PORTION OF THE U.S. SOUTH ATLANTIC AND GULF OF MEXICO CONTINENTAL SHELF.

BIBL BULL. MAR. SCI. 33(4):935-940.

KEYW REEF
BIOMASS
HABITAT
SPONGE

COMMUNITY
DISTRIBUTION
LIVE BOTTOM

FISH
BIOLOGY
CORAL

ABST The amount of reef habitat (rock, coral, and sponge) on the continental shelf of the South Atlantic and Gulf coasts of the U.S. was estimated by viewing the seafloor using an underwater television lowered at randomly selected points within five strata: (1) Cape Hatteras to Cape Fear, North Carolina; (2) Cape Fear, North Carolina to Cape Canaveral, Florida; (3) Key West to Pensacola, Florida; (4) Pensacola, Florida to Pass Cavallo, Texas; and (5) Pass Cavallo to Rio Grande, Texas. The water depth range of the observations was 27 to 101 m along the Atlantic coast and 18 to 91 m in the Gulf of Mexico. Of the total area surveyed (251,000 sq. kilometers), 22.8% was reef habitat. The highest incidence of reef habitat (38.0%) was on the continental shelf between Key West and Pensacola, Florida. The Florida Middle Grounds was the only area where vertical reef exceed 1 m.

ANNO

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ACC 4118
TYPE P
YEAR 1981
AUTH PARRA, C.G.; FORSYTHE, R.G.; PARSONS, C.L.;
TITL GULF OF MEXICO SATELLITE RADAR ALTIMETRY.

BIBL NASA TECHNICAL ME. 73295. 230 P.

KEYW DYNAMIC HEIGHT PHYSICAL OCEANOGRAPHY
 REMOTE SENSING SEASAT TOPOGRAPHY
 WIND WAVE

ABST The radar altimeter aboard both GEOS-3 and Seasat provided direct measurements of the sea surface with an accuracy of plus or minus 20 cm for one second averaging. This offers a direct way to measure the dynamic topography by subtracting such values from a gravimetric geoid. These measurements, when combined with those from many passes, yield average ocean topographies which can be mapped. Seasonal deviations from a three year mean topography are presented here. The altimeters are also instrumented with sample and hold gates which provide information about the shape and amplitude of the return waveform. This information can be used to determine a number of interesting and useful parameters including ocean surface wind speed and the significant wave height. One hundred eighty-six wind speed and significant wave height histograms are presented here.

ANNO

06/11/1987

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ACC 2191

TYPE P

YEAR 1981

AUTH PAWSON, D.L.; MILLER, J.E.; HOSKIN, C.M.;

TITL DISTRIBUTION OF HOLOTHURIA LENTIGINOSA ENODIS MILLER AND PAWSON IN RELATION
TO A DEEP-WATER OCULINA CORAL REEF OFF FORT PIERCE, FLORIDA (ECHINODERMATA
: HOLOTHUROIDEA).

BIBL INTERNATIONAL ECHINODERM CONFERENCE, TAMPA, FL.

KEYW REEF
CURRENTS

CORAL
ECHINODERM

DISTRIBUTION

ABST A population of *Holothuria lentiginosa enodis* is associated with a reef of the ahermatypic coral *Oculina varicosa* Lesueur in a depth of 75 m approximately 30 km northeast of Fort Pierce Inlet, Florida. Transects 2 m wide by 80 m long were run in 3 directions from each of 4 permanent markers near the reef 11 times over a 2 year period, counting holothurians in 10 m increments. A patchy distribution was found with a maximum density of 2.2 individuals per square meter. There was no apparent correlation of distribution with prevailing Gulf Stream currents. Holothurians usually occurred in areas where organic content of substratum averaged 4.4 (dry weight) they were usually absent in areas where organic content averaged 3.3% or less.

ANNO

06/11/1987

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ACC 2346

TYPE P

YEAR 1969

AUTH PAYNE, R.G.;

TITL A COMPARATIVE STUDY OF POPULATION DYNAMICS OF THE ESTUARINE ISOPOD CYATHURA
POLITA (STIMPSON) FROM FLORIDA AND GEORGIA.

BIBL MASTER'S THESIS. EMORY UNIVERSITY.

KEYW LEE

TEMPERATURE

CURRENTS

POPULATION DYNAMICS

SALINITY

DISTRIBUTION

DO

ABST A comparative study was made of two latitudinally separate populations of the estuarine isopod *Cyathura polita* to obtain information about the substratum preference of this species and about other factors which affect the densities and distributions of the populations within areas of preferred substratum. Distribution with respect to substratum type was determined for both populations. A new index of the stability of the substratum was used to characterize the types of substrata found in both habitats. Population factors studied included: a) density; b) internal distribution; and c) size class distribution. Routine measurements of physical parameters were made in both locations. In the Fort Myers location, the short term tolerance limit of Cyathurans to high levels of salinity was determined. Both populations of the present study occurred only in stable substratum although the composition of substrata in the two locations was quite different. Both populations exhibited random internal distributions but the Fort Myers population was somewhat denser than the Brunswick population. The size distribution of the Fort Myers population exhibited a decided peak at 17 mm, but no predominance of one size was evident at the Brunswick population. The values of physical parameters of the present study fell within the ranges of values obtained in previous studies of physical parameters in Cyathuran habitats. Biotic factors studied in both habitats included: a) predation; b) incidence of parasitism; c) food; and d) other associated fauna. Relative abundance of food elements, predatory species and other associated fauna were su

ANNO

06/11/1987

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ACC 2523

TYPE P

YEAR 1936

AUTH PEARSON, J.F.W.;

TITL STUDIES OF THE LIFE ZONES OF MARINE WATERS ADJACENT TO MIAMI. I. THE DISTRI
BUTION OF THE OPHIUROIDEA.

BIBL PROC. FLA. ACAD. SCI. 1:66-72.

KEYW DADE
ABUNDANCE

DISTRIBUTION
ECHINODERMATA

HABITAT

ABST A general survey of the distribution of ophiuroids was conducted in Biscayne Bay and the upper Florida Keys. Five zones were identified and their habitats described. The ophiuroid species of each zone and their general abundances were noted.

ANNO

06/11/1987

.....
ACC 4119
TYPE P
YEAR 1975
AUTH PEARMAN, A.L.; STAFFORD, J.W.;
TITL FLORIDA COASTAL POLICY STUDY: IMPACT OF OFFSHORE OIL DEVELOPMENT.

BIBL A FINAL REPORT FOR THE FLORIDA ENERGY OFFICE AND THE STATE UNIVERSITY SYSTEM OF FLORIDA. 273 P.
KEYW SOCIOECONOMIC OIL AND GAS COASTAL
MANAGEMENT

ABST The purpose of this study was to investigate the impacts of possible offshore oil and gas discoveries upon the coastal areas of Florida. Offshore oil and gas developments are examined from a number of perspectives: economic, environmental, legal, and social. The study was designed to identify a set of policy alternatives which can be implemented to guide and regulate onshore developments so as to minimize the adverse impacts upon the areas most directly affected. The analysis of onshore impacts is based, in part, upon a review of similar developments in other coastal areas. The development of an information base which can be applied to potential developments in Florida is viewed as an essential element of this study. This report presents the final results of the research efforts undertaken during this project. The report is structured so that introductory material is presented prior to more detailed analysis and discussion. The main report consists of ten chapters that present the major findings and recommendations of the study.

ANNO

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ACC 169

TYPE

YEAR 1983

AUTH PEQUEGNAT, W.E.;

TITL THE ECOLOGICAL COMMUNITIES OF THE CONTINENTAL SLOPE AND ADJACENT REGIMES OF
THE NORTHERN GULF OF MEXICO.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE,
LA.

KEYW BENTHIC COMMUNITY	BIOLOGY	CHEMISTRY
COASTAL ZONE	CONTINENTAL SLOPE	FAUNA
GEOLOGY	DEMERSAL FISH	ECHINODERM
CRUSTACEAN	DISTRIBUTION	

ABST This report deals in part with the macrofaunal assemblages that exist in th
at part of the offshelf Gulf of Mexico that lies north of the 25th parallel
and west of the eastern wall of DeSoto Canyon. The study was based on 264
oceanographic stations occupied by R/V ALAMINOS in depths ranging from 150
to 3850 m. Statistical analyses support subdividing the principal megabenthic
components (echinoderms, crustaceans, and demersal fishes) of the assemblages
into five well-defined faunal zones, four of which (Shelf-Slope Transition,
Archibenthal, Upper Abyssal, and Mesoabyssal) are on the continental slope,
and the fifth, the Lower Abyssal, occupies the continental rise and abyssal plain.
The faunal assemblages comprising the zones are described in considerable detail
and the numerically dominant species among important systematic groups are
designated within each zone and its subdivisions. The geological, physicochemical,
and biological bases for existence of zones and zonal subsets are discussed in
detail, including an attempt to account for faunal differences between the eastern
and western parts of the Gulf. Taking the area of the study as the deep Gulf
ecosystem, the report also deals with the energy relationships among the biotic
components of the system. Tentative explanations of the sources of energy that
can balance the energy budget on the abyssal plain are advanced and discussed.
The report contains three substantial appendices. Appendix A is an atlas of
bottom photographs selected to depict some of the biological constituents,
physiography and surficial sediments of the five faunal zones. Appendix B
contains a list of

ANNO

06/11/1987

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ACC 486

TYPE

YEAR 1978

AUTH PEQUEGNAT, W.E.; SMITH, D.D.; DARNELL, R.M.; PRESLEY, B.J.; REID, R.O.;

TITL AN ASSESSMENT OF THE POTENTIAL IMPACT OF DREDGED MATERIAL DISPOSAL IN THE OPEN OCEAN.

BIBL U.S. ARMY CORPS OF ENGINEERS WATERWAYS EXPERIMENT STATION, VICKSBURG, MS. 6
45 PP.

KEYW BENTHIC COMMUNITY	BIOLOGY	CHEMISTRY
COASTAL WATER	CONTINENTAL SHELF	DREDGE SPOIL
DREDGING	ECOSYSTEM	FISHERY
NEUSTON	GEOLOGY	METEOROLOGY

ABST geology;meteorology;neuston;

ANNO

06/11/1987

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ACC 2128

TYPE P

YEAR 1983

AUTH PEQUEGNAT, W.E.; ET AL.;

TITL ECOLOGICAL COMMUNITIES OF THE CONTINENTAL SLOPE AND ADJACENT REGIMES OF THE
NORTHERN GULF OF MEXICO. EXECUTIVE SUMMARY.

BIBL MINERALS MANAGEMENT SERVICE, U.S. DEPT. INT., WASHINGTON, DC. REPORT NO.: M
MS-GM-PT-83-018:46 P.

KEYW INFAUNAL

EPIFAUNAL

PHOTODOCUMENTATION

CONTINENTAL SLOPE

OIL EXPLORATION

BENTHIC

COMMUNITY

ABST A comprehensive overview of the deep sea benthic environment of the Gulf of Mexico from the continental slope to the abyssal plain is presented. Macroinfaunal and megaepifaunal samples and accompanying photographic documentation were acquired and analyzed from 1964-1973. An assessment was made of the potential impacts of gas and oil exploration and production on the benthic communities.

ANNO

06/11/1987

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ACC 2129

TYPE P

YEAR 1983

AUTH PEQUEGNAT, W.E.; ET AL.;

TITL ECOLOGICAL COMMUNITIES OF THE CONTINENTAL SLOPE AND ADJACENT REGIMES OF THE
NORTHERN GULF OF MEXICO: TEXT, PHOTOGRAPHIC ATLAS, AND APPENDICES (FINAL
REPORT).

BIBL MINERALS MANAGEMENT SERVICE, U.S. DEPT. INT., WASHINGTON, DC. REPORT NO. M
MS-GM-PT-83-017:675 P.

KEYW BENTHIC

CONTINENTAL SLOPE

INFAUNAL

EPIFAUNAL

PHOTODOCUMENTATION

OIL EXPLORATION

COMMUNITY

ABST A comprehensive overview of the deep sea benthic environment of the Gulf of Mexico from the continental slope to the abyssal plain is presented. Macroinfaunal and megaepifaunal samples and accompanying photographic documentation were acquired and analyzed from 1964-1973. An assessment was made of the potential impacts of gas and oil exploration and production on the benthic communities.

ANNO

06/11/1987

.....
ACC 2210
TYPE P
YEAR 1968
AUTH PEQUEGNAT, W.D.; PEQUEGNAT, L.H.;
TITL ECOLOGICAL ASPECTS OF MARINE FOULING IN THE NORTHEASTERN GULF OF MEXICO.

BIBL TEXAS A&M RESEARCH FOUND., A&M PROJ. 286-6, REF. 68-22T. 80 P.

KEYW DEVELOPMENT	FOULING	ASSEMBLAGE
DEPTH	DIVERSITY	WATER MASS
TEMPERATURE	SALINITY	CURRENTS

ABST The progressive development and reorganization of potential fouling assemblages in the northeastern Gulf of Mexico was followed. Differences in both species composition and diversity existing among the stations (located 2, 11, and 25 miles offshore) and at different origins and histories. The placement of the 25-mile fouling station in a region thought to be devoid of natural hard surfaces revealed the presence of pelagic larvae of epifaunal species that do not exist along the shore of Panama City. Oceanographic data indicated the possibility that some of these larvae may have been carried by currents from points as distant as Yucatan (about 400-500 nautical miles).

ANNO

06/11/1987

.....
ACC 2211

TYPE P

YEAR 1967

AUTH PEQUEGNAT, W.D.;GAILLE, R.S.;PEQUEGNAT, L.H.;

TITL BIOFOULING STUDIES OFF PANAMA CITY, FLORIDA. II. THE TWO-MILE OFFSHORE STATION.

BIBL TEXAS A&M RESEARCH FOUND., A&M PROJ. 286-6, REF. 67-18T. 51 P.

KEYW FOULING
TEMPERATURE

DEPTH
SALINITY

SEASON

ABST Two arrays of plastic floats were installed at a station 2 miles offshore, one unprotected, the other with an organotin compound. Differences in the accumulations were accounted for through the influences of temperature, salinity, and organotin. The influences of distance from shore, depth, and season upon temperature and salinity were also evaluated.

ANNO

06/11/1987

.....
ACC 4228
TYPE P
YEAR 1971
AUTH PEQUEGNAT, W.E.;
TITL THE IMPACT OF WATER DEVELOPMENT ON ECOLOGY OF THE GULF OF MEXICO.

BIBL IN: WATER FOR TEXAS; PROC. 15TH ANNU. CONF. ON WATER FOR TEXAS. P. 91-113.

KEYW	ECOLOGY	BIOLOGICAL	CHEMICAL
	OCEANOGRAPHY	BIOLOGY	HEAVY METAL
	HYDROCARBON	POLLUTION	OIL SPILL
	FISH		

ABST The impact of water development on the ecology of the Gulf of Mexico is discussed. Emphasis is on those characteristics of the Gulf that affect its biological nature and that in the final analysis either accentuate or ameliorate those activities of man that impinge upon its continuing viability. These characteristics are discussed under the subheads of physiography, physicochemical oceanography, and biology. A possible way to minimize the deleterious effects of the rising trend to dispose of dangerous wastes in the coastal waters of all our shores is outlined. Potentially industrial wastes pose the most serious threat to the welfare of coastal waters. The multiplication of oil drilling towers on the shelf in the Gulf appears to be destined for unabated increases. There will be increasing deposits of heavy metals and a variety of chlorinated and other hydrocarbons. Marine organisms through and because of the nature of the food web can concentrate and become relatively immune to some bacteria, viruses, heavy metals, and some hydrocarbons having carcinogenic properties. This can result in two things: 1) the list of marine organisms killed will increase, and 2) a larger reservoir of inedible species will be created.

ANNO

06/11/1987

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ACC 771
TYPE
YEAR 1969
AUTH PEREZ-FARFANTE, I.;
TITL WESTERN ATLANTIC SHRIMPS OF THE GENUS PENAEUS.

BIBL FISH. BULL. 67(3):461-591.

KEYW	BIOLOGY	COMMERCIAL FISHERY	ECOLOGY
	SHRIMP	SPECIES COMPOSITION	DISTRIBUTION

ABST Four subgenera of the genus *Penaeus* are described. Eight species and subspecies are recognized as occurring in the Western Atlantic. Synonymies are given. Diagnosis, descriptions and illustrations are presented for each species and subspecies. Geographic and bathymetric distributions are given. A brief appraisal of the commercial importance of each form is also given.

ANNO

06/11/1987

.....

ACC 2031

TYPE P

YEAR 1975

AUTH PERKINS, T.H.; SAVAGE, T.;

TITL A BIBLIOGRAPHY AND CHECKLIST OF POLYCHAETOUS ANNELIDS OF FLORIDA, THE GULF
OF MEXICO, AND THE CARIBBEAN REGION.

BIBL FLA. MAR. RESEARCH PUBL. NO. 14, 62 P.

KEYW BIBLIOGRAPHY

POLYCHAETE

ABST A bibliography and checklist of polychaete species recorded from northern Brazil to northern Florida, including the West Indies, the Bahama Islands, northern South America, eastern Central America, and the Gulf of Mexico were reported. The checklist was annotated to update the taxonomy of the species included, and species names were cross-referenced to bibliographic citations.

ANNO

06/11/1987

.....
ACC 331
TYPE
YEAR 1980
AUTH PHARES, P.L.;
TITL ESTIMATES OF NATURAL AND FISHING MORTALITY FOR WHITE SHRIMP IN THE GULF OF MEXICO.

BIBL NATIONAL MARINE FISHERIES SERVICE, SOUTHEAST FISHERIES CENTER, MIAMI, FL. N
OAA-TM-NMFS-SEFC-58. 25 PP.

KEYW	BIOLOGY	COASTAL WATER	FISHERY
	MORTALITY	SHRIMP	STATISTICS
	MANAGEMENT		

ABST

ANNO

06/11/1987

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ACC 871

TYPE

YEAR 1968

AUTH PHILLIPS, P.J.;

TITL SUBSTRATE AS A FACTOR IN HABITAT ISOLATION OF MISSISSIPPI SOUND MUDSHRIMPS,
CALLIANASSA JAMAICENSE LOUISIANENIS SCHMITT AND CALLIANASSA ISLAGRANDE SCH
MITT, WITHIN MISSISSIPPI SOUND.

BIBL MASTER'S THESIS. MISSISSIPPI STATE UNIVERSITY. 65 PP.

KEYW BENTHIC FAUNA
WATER LEVEL

SALLINITY
CRUSTACEAN

SEDIMENT TEXTURE
DISTRIBUTION

ABST The purpose of this study was to determine whether substrate type is a fact or influencing distribution of the thalassinid crustaceans, *Callianassa jam aicense louisianensis* Schmitt and *Callianassa islagrande* Schmitt, within Mi ssissippi Sound. This was a 6 month study which began in December, 1966.

ANNO

06/11/1987

.....
ACC 2032

TYPE P

YEAR 1981

AUTH PHILLIPS, R.C.;MCMILLAN, C.;BRIDGES, K.W.;

TITL PHENOLOGY AND REPRODUCTIVE PHYSIOLOGY OF THALASSIA TESTUDINUM FROM THE WEST
ERN TROPICAL ATLANTIC.

BIBL AQUAT. BOT. 11(3):263-277.

KEYW PHENOLOGY
PHYSIOLOGY

REPRODUCTIVE
TEMPERATURE

SEAGRASS

ABST Phenological investigations of *Thalassia testudinum* from seagrass beds at 5 sites in Texas, Florida, and St. Croix, U.S. Virgin Islands, and laboratory reproductive physiology studies indicate that flowering occurs in response to temperature patterns following winter minimum temperatures. Phenological analyses showed that flowering of *T. testudinum* may be nearly synchronous at all sites, but temperature responses of St Croix plants are probably genetically different from those of Florida and Texas. No significant site differences that were related to latitude were found for the five phenophases investigated. Seagrass from all locations produced flowers under continuous light, indicating that photo period is not a significant controlling factor in flowering phenology.

ANNO

06/11/1987

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ACC 2244

TYPE P

YEAR 1960

AUTH PHILLIPS, R.C.; SPRINGER, V.G.;

TITL OBSERVATIONS ON THE OFFSHORE BENTHIC FLORA IN THE GULF OF MEXICO OFF PINELLAS COUNTY, FLORIDA.

BIBL AM. MIDLAND NAT. 64(2):362-381.

KEYW ALGAE
FLORA

TEMPERATURE
REEF

DEPTH
DISTRIBUTION

ABST Collections of marine algae from the limestone reefs 9 to 20 miles offshore Pinellas County in 35 to 60 ft of water were studied. Eleven species were newly reported for the state and 47 species represented northward range extensions from the Dry Tortugas. A somewhat constant relationship between the various algae groups was seen. The factors that might regulate the relationships were reported undetermined.

ANNO

06/11/1987

.....
ACC 2347
TYPE P
YEAR 1960
AUTH PHILLIPS, R.C.; SPRINGER, V.G.;
TITL A REPORT ON THE HYDROGRAPHY, MARINE PLANTS AND FISHES OF THE CALOOSAHATCHEE
RIVER, LEE COUNTY, FLORIDA.

BIBL FLORIDA BOARD OF CONSERVATION. SPEC. SCI. REPT. NO. 5. 34 P.

KEYW LEE	HYDROGRAPHY	FISH
TEMPERATURE	SALINITY	TURBIDITY
FLORA	FAUNA	

ABST The marine plants and fishes of the Caloosahatchee River are surveyed in May 1958 and in February 1959. A total of 45 taxa of algae and 6 taxa of aquatic flowering plants were found. Fifty three fish species were collected. In general the fish fauna of the river was poor in numbers and species. Species lists of marine plants and fish are presented.

ANNO

06/11/1987

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ACC 2458
TYPE P
YEAR 1959
AUTH PHILLIPS, R.C.;
TITL NOTES ON THE MARINE FLORA OF THE MARQUESAS KEYS, FLORIDA.

BIBL QUART. J. FLA. ACAD. SCI. 22(3):155-162.

KEYW MONROE	ALGAE	SEAGRASS
SUBSTRATE	DEPTH	FLORA

ABST A single sampling of six stations in depths less than 14 ft around the Marquesas Keys was conducted to describe the local marine flora. Dense growths of *Thalassia testudinum* were present at all stations in depths generally less than 7 ft. *Diplanthera wrightii* was found at 3 stations, and sparse patches of *Syringodium filiforme* occurred at 2 stations. *Halimeda* grew in large clumps around the Keys, both inside on mudflats and offshore, at least to the 3 to 7 ft depth at spring low tide. The bottom of the shoreline of the Keys was composed of finely ground *Halimeda* segments. Twenty three species of algae were reported, 12 of which are epiphytic. A species list of the plants is included.

ANNO

06/11/1987

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ACC 2130

TYPE P

YEAR 1983

AUTH PIERCE, R.H.;BROWN, R.C.;

TITL HYDROCARBON ANALYSIS OF SURFICIAL SEDIMENT IN SUPPORT OF SOUTHWEST FLORIDA
SHELF REGIONAL BIOLOGICAL COMMUNITIES SURVEY CRUISE II, 1982 AND CRUISE III
, 1983.

BIBL FINAL REPORT PREPARED FOR: MINERAL MANAGEMENT SERVICE CONTRACT #AA851-
CT2-48, SUBCONTRACT FROM: CONTINENTAL SHELF ASSOC., TEQUESTA, FL.

KEYW SEDIMENT	BIOLOGICAL	COMMUNITY
HYDROCARBON	DRILLING	PETROLEUM
POLLUTION		

ABST Hydrocarbons from soft bottom sampling sites on the Southwest Florida shelf were analyzed to determine predrilling conditions and to provide cause and effect relationships with biological community surveys for assessing impacts from future oil drilling operations. Petroleum contamination in the area studied was not apparent.

ANNO

06/11/1987

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ACC 2310
TYPE P
YEAR 1984
AUTH PIERCE, R.H.;BROWN, R.C.;
TITL COPROSTANOL DISTRIBUTION FROM SEWAGE DISCHARGE INTO SARASOTA BAY, FLORIDA.

BIBL BULL. ENVIRON. CONTAM. TOXICO. 32:75-79.

KEYW SARASOTA SEDIMENT POLLUTION
 WATER QUALITY PHYSICAL PROCESS

ABST Distribution of the fecal sterol, coprostanol, was determined in sediment from forty-one sites throughout Sarasota Bay. This project was part of a water quality study to estimate the impact of sewage effluent discharged from the City of Sarasota's wastewater treatment plant. Coprostanol is one of the principal sterols found in the feces of man and other mammals and has been shown to be a reliable marker of fecal pollution. A contour of coprostanol concentrations in Sarasota Bay showed very high concentrations at the site of the sewage outfall, indicating short-range deposition of sewage-derived particulate matter. Tidal action appeared to be the dominant influence on distribution of sewage derived particulate matter. Tidal action appeared to be the dominant influence on distribution of sewage-derived particulates in the Bay.

ANNO

06/11/1987

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ACC 2330
TYPE P
YEAR 1983
AUTH PIERCE, R.H.;VANVLEET, E.S.;
TITL CHARLOTTE HARBOR HYDROCARBON STUDY, YEAR-2. FINAL REPORT. JANUARY 1, 1983-
NOVEMBER 15, 1983.

BIBL SUBMITTED TO FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FLORIDA.

KEYW CHARLOTTE	HYDROCARBON	SEDIMENT
MOLLUSC	OYSTER	WATER COLUMN
POLLUTION		

ABST Hydrocarbon content and characterization was obtained for surficial sediment, oysters and water from four areas in Charlotte Harbor, Florida. The areas represent different types of land use activity. The data characterize hydrocarbon contamination around Charlotte Harbor and provide information for predicting the impact for future development.

ANNO

06/11/1987

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ACC 270
TYPE
YEAR 1981
AUTH PILGER, R.H.;
TITL THE OPENING OF THE GULF OF MEXICO: IMPLICATIONS FOR THE TECTONIC EVOLUTION
OF THE NORTHERN GULF COAST.

BIBL TRANS., GULF COAST ASSOC. GEOL. SOC. 31:377-381.

KEYW GEOLOGIC HISTORY GEOLOGY PLATE TECTONICS
 STRUCTURE

ABST Several lines of evidence suggest that the Gulf of Mexico opened synchronously with and in the same, northwest-southeast, direction as the central North Atlantic, from about 180 to 130 Ma. The Atlantic and Gulf spreading centers were linked by left-lateral transform faults across the Florida-Bahamas platform. To the west, spreading was accommodated by left-lateral transform faults (megashears) across Mexico. The basin and uplift structure of the northern Gulf Coast can be interpreted in terms of northwest-southeast rifting before Gulf and Atlantic opening began. Alternatively, early rifting could have been a result of north-south motion between North America and Africa-South America. The latter inference is suggested by correlations between pre-Mesozoic Florida and Africa basement terranes as well as the crustal fabric of the northern Gulf Coast. Basin formation in the northern Gulf Coast probably involved shallow, close-spaced graben-horst formation combined with larger scale ductile thinning of the lower crust during rifting. Following the end of rifting the sedimentary record indicates that the basin subsided in an exponential manner, as would be predicted from thermal models of sedimentary basin formation.

ANNO

06/11/1987

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ACC 942
TYPE
YEAR 1973
AUTH POAG, C.W. ;
TITL LATE QUATERNARY SEA LEVELS IN THE GULF OF MEXICO.

BIBL TRANS., GULF COAST ASSOC. GEOL. SOC. 23:394-400.

KEYW QUATERNARY GEOLOGY SEA LEVEL
 EUSTATIC CHANGE

ABST

ANNO

06/11/1987

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ACC 330

TYPE

YEAR 1973

AUTH POLLARD, J.F.;

TITL EXPERIMENTS TO REESTABLISH HISTORICAL OYSTER SEED GROUNDS AND TO CONTROL THE SOUTHERN OYSTER DRILL.

BIBL LOUISIANA WILDLIFE AND FISHERIES COMMISSION, DIVISION OF OYSTERS, NEW ORLEANS, LA. TECHNICAL BULLETIN 6. 89 PP.

KEYW BIOLOGY

COASTAL WATER

HYDROLOGY

OYSTER FISHERY

OYSTER

PREDATOIN

MANAGEMENT

ABST

ANNO

06/11/1987

.....

ACC 613

TYPE

YEAR 1982

AUTH POPENOE, P.;COWARD, L.;CASHMAN, K.V.;

TITL A REGIONAL ASSESSMENT OF POTENTIAL ENVIRONMENTAL HAZARDS TO AND LIMITATION
ON PETROLEUM DEVELOPMENT OF THE SOUTH-EASTERN U.S. ATLANTIC CONTINENTAL SHE
LF, SLOPE AND RISE, OFFSHORE NORTH CAROLINA.

BIBL U.S. GEOLOGICAL SURVEY, OPEN-FILE REPORT NO. 82-136. 67 PP.

KEYW SEDIMENT
GEOLOGY
PETROLEUM

CONTINENTAL SHELF
PHYSICAL PROCESS
DEVELOPMENT

CONTINENTAL SLOPE
STRATIGRAPHY

ABST

ANNO

06/11/1987

ACC 4120

TYPE P

YEAR 1970

AUTH POTTHOFF, T.; RICHARDS, W.J.;

TITL JUVENILE BLUEFIN TUNA, THUNNUS THYNNUS (LINNAEUS), AND OTHER SCOMBRIDS TAKEN BY TERNS IN DRY TORTUGAS, FLORIDA.

BIBL BULL. MAR. SCI. 20(2):389-413.

KEYW BIOLOGY

DISTRIBUTION

ICHTHYOPLANKTON

FISH

FOOD HABIT

PELAGIC FISH

BIRD

PREDATION

LIFE HISTORY

ABST The identification and seasonal distribution of juvenile scombrids in the waters near the Dry Tortugas, Florida, are described. Specimens were collected (1960 through 1967) from regurgitated food of terns. Fishes identified were *Thunnus thynnus*, *Thunnus atlanticus*, *Euthynnus alletteratus*, *Auxis* sp. p., and *Katsuwonus pelamis*; sizes ranged from 24 to 146 mm, standard length. For the first time, juvenile bluefin tunas are reported in the Dry Tortugas region; their presence may indicate that spawning of the species takes place in that area. Identification methods are discussed, with special emphasis on features of the axial skeleton and the number of gill-rakers over the ceratobranchial bone of the first gill arch. A method is presented for estimating the standard length of damaged specimens on the basis of the length of the vertebral column.

ANNO

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ACC 775
 TYPE
 YEAR 1984
 AUTH POWELL, J.A.;RATHBUN, G.B. ;
 TITL DISTRIBUTION AND ABUNDANCE OF MANATEES ALONG THE NORTHERN COAST OF THE GULF
 OF MEXICO.

BIBL NORTHEAST GULF SCI. 7(1):1-28.

KEYW BIOLOGY	ECOLOGY	LIFE HISTORY
MANATEE	MIGRATION	SPECIES COMPOSITION
ENDANGERED SPECIES	DISTRIBUTION	MORTALITY

ABST A review of historical and recent records of manatee (*Trichechus manatus*) sightings along the coast of the northern Gulf of Mexico indicates that their numbers have declined in Texas, but increased in Louisiana and Mississippi. This is due to their extirpation in Mexico and dramatic increase along the southern Big Bend coast of Northwestern peninsular Florida. The distribution of manatees along the southern Big Bend coast is related to their need for warm water and the distribution of fresh water and submerged aquatic and marine food plants. The spring-fed headwaters of Crystal and Homosassa rivers are important warm water winter refuges; nearly 90% of the same individuals return each winter. The estuaries and grass beds associated with these two rivers and the Suwannee, Withlacoochee, and Chassowitzka rivers are the principal summer habitats. The Suwannee and Crystal rivers are "high-user" rivers, whereas the other three are "low-user" rivers. Low human-caused mortality, high fecundity, some immigration, and high site fidelity are responsible for the increasing numbers of manatees using the southern Big Bend coast. Since this region of Florida has experienced relatively little development compared with the rest of the state, the best long-term future for this endangered marine mammal in the United States lies along the southern Big Bend coast.

ANNO

06/11/1987

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ACC 4121

TYPE P

YEAR 1986

AUTH POWELL, G.V.N.;SOGARD, S.M.;HOLMQUIST, J.G.;

TITL ECOLOGY OF SHALLOW-WATER BANK HABITATS IN FLORIDA BAY.

BIBL A FINAL REPORT FOR THE SOUTH FLORIDA RESEARCH CENTER. CONT. # CX5280-3-2339
. 260 P.

KEYW BIOLOGY

BIOMASS

ECOLOGY

FISH

CRUSTACEA

INVERTEBRATE

MIGRATION

TIDE

SEAGRASS

COASTAL

ABST Report not available for abstracting at this time.

ANNO

06/11/1987

.....
ACC 4259

TYPE P

YEAR 1977

AUTH POWLES, H.;

TITL LARVAL DISTRIBUTIONS AND RECRUITMENT HYPOTHESES FOR SNAPPERS AND GROUPERS OF THE SOUTH ATLANTIC BIGHT. PRESENTED AT 31ST ANNUAL CONFERENCE OF THE SOUTHEASTERN ASSOCIATION OF FISH AND WILDLIFE AGENCIES SAN ANTONIO, TX (USA) 9 OCTOBER 1977.

BIBL PECHES ET SCI. MER. CP 15500, QUEBEC, QUE. G1K 7X7 CANADA 31:362-371.

KEYW DISTRIBUTION

GROUPER

CURRENTS

RECRUITMENT

LARVAE

NEUSTON

SNAPPER

NEUSTON

ABST Present taxonomic status permits discussion of larvae of vermilion snapper (*Rhomboplites aurorubens*), other snappers combined (*Lutjanidae*), and all groupers combined (*Serranidae* subfamily *Epinephelinae*). Larvae of these groups together comprise less than 1% of the total larval fish catch from neuston and bongo samplers, in shelf waters of the South Atlantic Bight. Larvae of groupers and snappers are most abundant in spring and in summer respectively. Larvae are distributed in outer shelf and upper slope waters, where current is northerly. Northerly current may predominate in affecting larval drift (in which case populations may primarily be recruited from Caribbean Gulf of Mexico) or a significant proportion of larvae spawned in the Bight may be retained by currents throughout development to settling.

ANNO

06/11/1987

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ACC 1103

TYPE

YEAR 1967

AUTH PRESNELL, M.W.; ET AL.;

TITL CLOSTRIDIUM BOTULINUM IN MARINE SEDIMENTS AND IN THE OYSTER (CRASSOTREA VIRGINICA) FROM MOBILE BAY.

BIBL APPLIED MICROBIOLOGY 15:668-669.

KEYW BENTHIC FAUNA
OYSTER

MICROFAUNA
SEDIMENT

BACTERIA
DISTRIBUTION

ABST From August, 1965 to June, 1966, 74 marine sediment samples and 74 oyster samples were examined from 5 stations. An attempt was made to show a correlation between the occurrence and distribution of clostridium botulinum and natural variation in the estuarine environment.

ANNO

06/11/1987

.....
ACC 2131
TYPE P
YEAR 1977
AUTH PRESLEY, B.J.; DOBSON, M.C.; SHOKES, R.F.; TREFRY, J.H.;
TITL HEAVY METAL ANALYSIS OF BOTTOM SEDIMENT ON THE WEST FLORIDA SHELF.

BIBL TECHNICAL REPORT SUBMITTED TO THE BUREAU OF LAND MANAGEMENT, WASHINGTON,
D.C. (MAFLA-OCS PROGRAM).

KEYW SEDIMENT	HEAVY METAL	TRACE METAL
MAFLA	CARBONATE	GRAIN SIZE

ABST Sediments were collected from the MAFLA lease area and analyzed for heavy metals. Of 42 stations 21 were sampled on two different occasions. Wide variations were found in the % Fe, % CaCO₃ and % fine-grained material not only in the MAFLA area but even within transects. Trace metals showed similar variability. Fundamental sediment characteristics were shown to correlate with metal concentrations. Data show that Fe may be used as an index for predicting trace metal concentration, thus providing a means for assessing possible future anthropogenic input.

ANNO

06/11/1987

.....
ACC 2311
TYPE P
YEAR 1975
AUTH PRICE, G.B.;
TITL AN INTRODUCTION TO THE MARINE FLORA AND FAUNA OF THE SARASOTA AREA.

BIBL BACHELORS THESIS, NEW COLLEGE OF THE UNIVERSITY OF SOUTH FLORIDA.

KEYW SARASOTA	GEOLOGY	COASTAL MORPHOLOGY
INVERTEBRATE	FLORA	FAUNA

ABST This general overview of the marine flora and fauna of the Sarasota, Florida area includes sections on the regional geology, coastal morphology, mangrove and beach ecosystems, and the benthic macroinvertebrates of Sarasota Bay. The extent of manmade alterations to the shoreline are cited and species lists of benthic invertebrates and marsh flora are given.

ANNO

06/11/1987

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ACC 532

TYPE

YEAR 1962

AUTH PRIDDY, R.R.;

TITL MISSISSIPPI SOUND HEAVY MINERALS AS COMPARED TO OTHER "HEAVIES" OF THE GULF
COAST AND SOUTH ATLANTIC COAST.

BIBL J. MISS. ACAD. SCI. 8:102-103.

KEYW SEDIMENT
RESOURE

COASTAL WATER
HEAVY METAL

GEOLOGY

ABST

ANNO

.....
ACC 163
TYPE
YEAR 1982
AUTH PRISTAS, P.J.;
TITL BIG GAME FISHING IN THE NORTHERN GULF OF MEXICO DURING 1981.

BIBL NOAA TECH. MEM. NO. NMFS-SEFC-90. 34 PP.

KEYW BILLFISH BIOLOGY CONTINENTAL SHELF
 FISHERY FISHERY STATISTICS RECREATION
 RECREATIONAL FISHERY DISTRIBUTION SOCIOECONOMIC

ABST Big game fishing for oceanic pelagic fishes (i.e., marlins, sailfish, sword fish, tunas, etc.) was a relatively infrequent event in the northern Gulf of Mexico prior to the mid-1950's. Research by the federal government contributed to the increase in popularity of this activity. The U.S. Fish and Wildlife Service conducted exploratory longline fishing off the Louisiana coast in the mid-1950's to determine the abundance of tuna stocks. The longline catches included impressive numbers of blue marlin, Makaira nigricans, and white marlin, Tetrapterus albidus, which intensified the interest in recreational big game fishing. This new recreational fishery continued to expand throughout the northern Gulf Coast area in the 1960's and 1970's. In the late 1960's, the federal government began preliminary investigations from their Panama City, Florida laboratory to gather information about this oceanic pelagic fishery resource in the northern Gulf. In 1970-71, the National Marine Fisheries Service (NMFS) began a study of the distribution, abundance, biology, and ecology of billfishes (i.e., marlins and sailfish, Istiophorus platypterus). In 1972, responsibility for this study was transferred to the Miami Laboratory, Southeast Fisheries Center (SEFC). In 1977, responsibility for data collection was assigned to the Fishery Surveys Task of the SEFC's Office of Technical and Information Management Services. The best (i.e., cost per data unit) means of data collection was determined to be a public-contract survey. Since 1970, port samplers have interviewed big game fishing participants to obtain data concerning catch and effort (i.e., hours

ANNO

06/11/1987

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ACC 164
TYPE
YEAR 1981
AUTH PRISTAS, P.J.;
TITL BIG GAME FISHING IN THE NORTHERN GULF OF MEXICO DURING 1980.

BIBL NOAA TECHNICAL MEMORANDUM NUMBER NMFS-SEFC-77. 34 P.

KEYW BILLFISH	BIOLOGY	CONTINENTAL SHELF
FISHERY	FISHERY STATISTICS	RECREATION
RECREATIONAL FISHERY	SOCIOECONOMIC	DISTRIBUTION

ABST In 1970, the Panama City Laboratory of the National Marine Fisheries Service (NMFS) began a study on big game fishes (blue marlin, *Makaira nigricans*; white marlin, *Tetrapterus albidus*; and sailfish, *Istiophorus platypterus*) in the northern Gulf of Mexico. This study subsequently became part of the Southern Fisheries Center's Oceanic Pelagics Program, the statistics for which are collected by the Fishery Survey Task of the Office of Technical and Information Management Services. Data have been collected through the cooperation of recreational fishermen who wished to learn more about big game fishes. This annual report, the tenth, is furnished to: (1) answer general questions such as: where was the best fishing? what was the best bait? how was the fishing season? etc.; and (2) provide scientific data about the distribution, abundance, and biology of marlins and sailfish in the Gulf of Mexico.

ANNO

06/11/1987

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ACC 667

TYPE

YEAR 1977

AUTH PRISTAS, P.J.;

TITL BIG GAME FISHING IN THE NORTHERN GULF OF MEXICO DURING 1976, WITH A BRIEF S
UMMARIZATION FOR THE YEARS 1971-1976.

BIBL NATIONAL MARINE FISHERIES SERVICE, SOUTHEAST FISHERIES CENTER, PANAMA CITY,
FL. 7 PP.

KEYW FISHERY
RECREATION

FISHERY STATISTICS
SOCIOECONOMIC

CONTINENTAL SHELF
RECREATIONAL FISHERY

ABST

ANNO

06/11/1987

.....
ACC 306

TYPE

YEAR 1975

AUTH PYLE, T.E.;HENRY, V.J.;MCCARTHY, J.C.;GILES, R.T.;NEURAUTER, T.W.;

TITL BASELINE MONITORING STUDIES, MISSISSIPPI, ALABAMA, FLORIDA, OUTER CONTINENT
AL SHELF, 1975-1976. VOLUME 5. GEOPHYSICAL INVESTIGATIONS FOR BIOLITHOLOGIC
MAPPING OF THE MAFLA-OCS LEASE AREA.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/ST-78/34. 267 PP.

KEYW BATHYMETRY

GEOLOGY

REEF

CARBONATE

LITHOLOGY

SEDIMENT MAFLA

GEOLOGIC STRUCTURE

CONTINENTAL SHELF

ABST A multi-sensor geophysical survey including over 3700 km of high resolution geophysical profiles was completed on the Outer Continental Shelf areas from 26 degrees N latitude to south of Horn Island, Mississippi. On the basis of data collected, the Mississippi, Alabama, Florida (MAFLA) continental shelf area was divided into five major zones on the basis of rock outcrop distribution and dominant sediment texture (i.e., fine, medium, coarse) and into a number of subzones on the basis of textural variability or patchiness. A review is also provided on the bathymetry and shallow structure of the region as well as a summarization of new results of seismic reflection studies on the west-central Florida shelf.

ANNO

06/11/1987

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ACC 4122

TYPE P

YEAR 1975

AUTH QUICK, J.A., JR.; HENDERSON, G.E.;

TITL EVIDENCE OF NEW ICHTHYOINTOXICATIVE PHENOMENA IN GYMNOIDIUM BREVE RED TIDES
. IN V.R. LOCICERO, ED. PROC. FIRST INTL. CONF. ON TOXIC DINOFLAGELLATE BL
OOMS, NOVEMBER 1974, BOSTON, MASSACHUSETTS.

BIBL MASS. SCI. AND TECH. FOUNDATION, WAKEFIELD, MA.

KEYW BIOLOGY
FISH
STRESS

PHYTOPLANKTON
COASTAL

RED TIDE
PATHOLOGY

ABST A red tide caused by the toxic dinoflagellae *Gymnodinium breve* Davis occurred intermittently along the west coast of peninsular Florida from October 1973 through June 1974. Distress behavior of fishes in the red tide area was observed and 129 severely distressed or freshly dead specimens were collected and subjected to immediate necroptic examination. The 16 consistently observed pathologies suggest that many fishes die in red tides from chronic tissue damage rather than by previously recognized neurointoxication. Some species seem to succumb to neurointoxication under the same conditions that produce lethal hemopathy and histopathology in others. The observed signs complexes are indicative of dehydration, hemolysis, and interference in the blood clotting mechanisms.

ANNO

06/11/1987

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ACC 142
TYPE
YEAR 1982
AUTH RACAL-DECCA SURVEY, INC.;
TITL A PRE-DRILLING SITE SPECIFIC BENTHIC SURVEY WITHIN STATE OF ALABAMA LEASE T
RACT 115 FOR EXXON COMPANY, U.S.A.

BIBL RACAL-DECCA SURVEY, INC., HOUSTON, TX. 51 PP.

KEYW BENTHIC COMMUNITY BIOLOGY CONTINENTAL SHELF
 INFAUNA EPIBIOTA FISH
 REMOTE SENSING

ABST The objectives of this present study were to qualitatively and quantitative
ly document the distribution of the benthic epibiota, benthic infauna and f
ishes in the vicinity (300 m) of the proposed drill site within the State o
f Alabama Lease Tract 115. The intent of this study is to provide a physica
l and biological description of the proposed surface location and to docume
nt whether any unique or significant biological assemblages are present.

ANNO

06/11/1987

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ACC 328
TYPE
YEAR 1971
AUTH RAMSEY, R.C.;
TITL MARINE RESOURCES SPECTROMETER EXPERIMENT.

BIBL TRW SYSTEMS GROUP, REDONDA BEACH, CA. 85 PP.

KEYW BIOLOGY FISHERY REMOTE SENSING
 RESOURCE

ABST

ANNO

06/11/1987

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ACC 2459
TYPE P
YEAR 1964
AUTH RANDALL, J.E.;SCHROEDER, R.E.;STARCK, W.A.;
TITL NOTES ON THE BIOLOGY OF THE ECHINOID DIADEMA ANTILLARUM.

BIBL CARIB. J. SCI. 4(2&3):421-433.

KEYW MONROE	HABITAT	ABUNDANCE
GROWTH	SPAWNING	CORAL
SEAGRASS	ECHINODERMATA	

ABST Studies on the chinoid, *Diadema antillarum*, in the Florida Keys and Virgin Islands yielded information on the habitats, abundance, growth, spawning and predators of the echinoid. Habitats of *D. antillarum* included rock, coral reef, mangrove roots, seagrass beds, and sand. Abundance of the echinoid averaged 1.2 individuals per sq. meter in *Thalassia* beds in the Florida Keys and 13.4 per sq. meter on a rocky shore in the Virgin Islands. Monthly growth rates of caged specimens in the Virgin Islands are given. *Thalassia* was found to be the primary food source of echinoids in the Florida Keys. Spawning behavior and periodicity of Virgin Islands echinoids are discussed. Predators of *D. antillarum* are listed.

ANNO

06/11/1987

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ACC 846
TYPE
YEAR 1974
AUTH RANKIN, J.G.;
TITL CHEMICAL AND PHYSICAL CHARACTERISTICS OF DISSOLVED ORGANIC MATTER ISOLATED
FROM THE MISSISSIPPI RIVER DELTA AND GULF OF MEXICO.

BIBL PH.D. DISSERTATION. TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. 125 PP.

KEYW CARBOHYDRATE	DISSOLVED OXYGEN	FATTY ACID
HYDROCARBON	PROTEIN	SALINITY
SILICATE	WATER TEMPERATURE	DEPTH

ABST Samples of dissolved organic matter were collected from 2 sites in the Mississippi River delta between February and October, 1971 during cruises 71-A-3 and 71-A-12 of the R/V Alaminos. Data collected concern silicate, carbohydrate, protein, fatty acid, methanol and acetone levels. Observations were made on depth, salinity, dissolved oxygen and temperature. Methods of isolation and extraction and references to previous worldwide investigations into chemical analyses between 1969 and 1973 are included.

ANNO

06/11/1987

.....
ACC 2192
TYPE P
YEAR 1976
AUTH REED, T.L.;
TITL HEAVY METAL CONCENTRATIONS IN THE SEDIMENTS OF A PORTION OF THE EAST FLORIDA CONTINENTAL SHELF.

BIBL MASTER'S THESIS. FLORIDA INSTITUTE. MELBOURNE, FL.

KEYW HEAVY METAL	GEOCHEMICAL	SEDIMENT
GRAIN SIZE	POLYCHAETE	CRUSTACEAN
ECHINODERM	COELENTERATE	CALICO SCALLOP

ABST A discussion of the heavy metal geochemical aspects of the sediments of a portion of the east Florida continental shelf is presented. Baseline concentrations of six environmentally active heavy metals were established. A clear relationship between grain size distribution of sediments and heavy metal concentrations was not seen. An inverse correlation was seen between trace metals and quartz content of the sediments. Such an inverse correlation was also noted for lead and zinc in quartz rich sediment. Included in the benthic biota were polychaetes, crustaceans (mostly barnacles and crabs), echinoderms (sea stars, sea cucumbers and sand dollars), slipper shells (*Crepidula* spp.), chitons and some bryozoans and coelenterates (anemones). Calico scallop shells were very common, but living individuals were present only on the outer continental shelf. Vegetation cover was mostly lacking.

ANNO

06/11/1987

.....
ACC 4123
TYPE P
YEAR 1967
AUTH REHRER, R.; JONES, A.C.; ROESSLER, M.A.;
TITL BOTTOM WATER DRIFT ON THE TORTUGAS GROUNDS.

BIBL BULL. MAR. SCI. 17(3):563-575.

KEYW CIRCULATION	CURRENTS	RECRUITMENT
SPAWNING AREA	MIGRATION	PINK SHRIMP
COMMERCIAL FISHERY		

ABST The pink shrimp, *Penaeus duorarum*, spawns on the Tortugas fishing grounds. The planktonic larvae are for the most part subject to passive transport with the prevailing currents. The juvenile stages occur in the Everglades nursery area. Previous work indicated that the currents in the upper waters flow in a westerly direction away from the nursery ground. To determine whether shrimp could be transported by bottom currents to the Everglades nursery area, a sea-bed drifter program was established. Five hundred and ninety Woodhead sea-bed drifters (U.S. version) were released on and near the Tortugas shrimp fishing grounds in February, March, and October 1964. Analysis of the recovery data indicates a general southwestward bottom drift of at least 0.4 nautical mile per day across the grounds. Variation in the direction of drifter movement in the western section suggests greater meandering in this region than in the eastern section. We conclude that pink shrimp cannot be transported eastward across the Tortugas grounds to the nursery area by bottom currents. A likely alternative route is through Rebecca Channel, along the western margin of the Florida Current, and through the Florida Keys to Florida Bay and the Everglades nursery area.

ANNO

06/11/1987

.....
ACC 2033
TYPE P
YEAR 1969
AUTH REINSHMIDT, D.C.;
TITL REGENERATION IN THE SEA CUCUMBER THYONELLA GENMATA (POURTALES).

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL.

KEYW STRESS	DISSOLVED OXYGEN	TEMPERATURE
ECHINODERMATA	AMMONIA	REPRODUCTION

ABST Results indicate that *Thyonella gennata* has several interesting regeneration abilities. First, evisceration does not occur under low oxygen, high temperature, or high ammonia stresses, but if removed manually, the viscera will be regenerated. As little as 5% of the posterior end, or 70% of the anterior end are required for regeneration of a complete animal. Anterior tip removal allows wound healing and regeneration in segments as small as 12.5%. Gonads can regenerate from nonreproductive tissue. The reproductive system regenerates last and seems to be enhanced by abundance of food supply.

ANNO

06/11/1987

ACC 4172

TYPE P

YEAR 1976

AUTH RELINI, G.; GERACI, S.; MONTANARI, M.; ROMAAIRONE, V.;

TITL SEASONAL VARIATION IN FOULING OF THE OFFSHORE DRILLING PLATFORMS NEAR RAVENNA AND CROTONE ITALY.

BIBL BOLL. PESCA PISCIC IDROBIOL. 31(1-2):227-256.

KEYW OFFSHORE DRILLING	FOULING	DEPTH
SEASONAL	DEVELOPMENT	PHYSIOLOGY
PATHOLOGY	MOLLUSCA	ANNELIDA
CRUSTACEA		

ABST The settlement of fouling organisms on non-toxic substrates, immersed under CH₄ extraction platforms off Ravenna and Crotona, were studied over 1 yr and at different depths. Seasonal variation and the development and amount of fouling was investigated. At Ravenna panels were immersed at depths of 0, 5 and 11 m and 6 km from the shore, while at the 2nd site, they were submerged at depths of 0, 9, 20 and 18 km offshore. At Crotona panels were exposed at 0, 14, 20 and 65 m and 6 km from the shore. At Ravenna, where the waters are very eutrophic, the main fouling organism was *Mytilus galloprovincialis*, which was dominant on panels exposed for 3-6 mo., to a depth of 10 m. The final community is characterized by mussels which attain a weight of 12 kg/panel (100 kg/m²). At depths greater than 10 m and after 1 yr exposure, the most common species were *Tubularia mesembryanthemum*, *Balanus improvisus* and *Pomatoceros triqueter* along with mussels. At Crotona where the water is clear and nutrients are limited, fouling was not as heavy as at Ravenna, especially on 1 and 3 mo. panels. At Ravenna the heaviest settlement of fouling organisms occurred during the summer (up to 25 g/dm²), while at Crotona maximum settlement occurred in the autumn and spring, the weight of fouling not exceeding 2.9 g/dm². Mussels were dominant at Crotona after 1 yr exposure of the panels near the surface, while the bivalve *Picnodonta cochlear* was the main organism at 65 m depth. At 14 and 20 m in the panels were chiefly settled by *Salmacina dysteri* with bryozoans (*Microporella ciliata*, *Savignyella lagfontii*, *Callopora dumerili*) and bivalves (*Saxic*

ANNO

06/11/1987

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ACC 996
TYPE
YEAR 1982
AUTH RESTREPO AND ASSOCIATES;
TITL IXTOC I OIL SPILL ECONOMIC IMPACT STUDY - EXECUTIVE SUMMARY.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. 16 PP.

KEYW COMMERCIAL FISHERY OIL SPILL OIL
POLLUTION RECREATIONAL BEACH RECREATION
SOCIOECONOMIC

ABST This is an executive summary of the assessment of the economic impacts of the 1979 IXTOC I oil spill to the south Texas coastal economy. Economic impacts include those related to tourism, recreation, commercial fishing, and cleanup costs. Over \$6 million were lost by the tourism and recreation industries, while no significant impact was documented to commercial fisheries.

ANNO

06/11/1987

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ACC 621

TYPE

YEAR 1983

AUTH REZAK, R.; BRIGHT, T.J.; MCGRAIL, D.W.;

TITL REEFS AND BANKS OF THE NORTHWESTERN GULF OF MEXICO: THEIR GEOLOGICAL, BIOLOGICAL, AND PHYSICAL DYNAMICS.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE, LA. 501 PP. (ALSO DEPARTMENT OF OCEANOGRAPHY, TEXAS A&M UNIVERSITY, COLLEGE

KEYW BIOLOGY	CONTINENTAL SHELF	CONTINENTAL SLOPE
GEOLOGY	OCEANOGRAPHY	PHYSICAL PROCESS
SEDIMENTOLOGY	REEF	LIVE BOTTOM

ABST The purpose of this report is to provide synthesis of scientific information regarding the geology, biology and physical oceanography of the Texas-Louisiana Outer Continental Shelf, especially scientific knowledge and data related to the topographic features extending above the seafloor. A considerable portion of the data collected on the shelf is the result of a series of studies funded by the Bureau of Land Management (BLM; now Minerals Management Service, MMS) and conducted principally by investigators at Texas A&M University. This report relies primarily on data generated during these investigations, which started in 1974. However, it also incorporates the scientific literature generated by other studies before and during these BLM-sponsored investigations. This chapter documents the early work which described topographic features of the Texas-Louisiana Shelf, describes the structure of this report, and summarizes the chief conclusions.

ANNO

.....
ACC 4124
TYPE P
YEAR 1972
AUTH REZAK, R.; EDWARDS, G.S.;
TITL CARBONATE SEDIMENTS OF THE GULF OF MEXICO.

IN: CONTRIBUTIONS ON THE GEOLOGICAL OCEANOGRAPHY OF THE GULF OF MEXICO.

BIBL TEXAS A&M UNIV. OCEANOGRAPHIC STUDIES V, VOL. 3. GULF PUBLISHING CO., HOUSTON, TX.

KEYW SEDIMENT CARBONATE CONTINENTAL SHELF
GEOLOGY REEF CORAL
BIOLOGY DISTRIBUTION

ABST The carbonate deposits of the Gulf of Mexico may be grouped into four general categories: 1) carbonate shelves, 2) coral-algal reefs, 3) lagoonal carbonate and evaporite muds and 4) deep-water carbonates. The West Florida Shelf and the Yucatan Shelf are examples of open, inclined shelves on which sediments of biogenic and nonbiogenic carbonates are accumulating. The distribution patterns of these sediments are a large degree relict Pleistocene and Holocene patterns. Coral-algal reefs occur on both carbonate and terrigenous shelves in the Gulf of Mexico. Reefs such as the Flower Gardens in the northwestern Gulf occur on prominences near the shelf edge. They differ from the emergent reefs in the southern Gulf in that they do not rise to levels shallower than 60 ft and are populated by the Diploria-Montastrea-Porites community. This is equivalent to Logan's submerged reefbank stage of development in his Reef Model 1. Lagoonal carbonates, including evaporite muds, occur in several areas of the southern and western Gulf. Laguna Madre, along the south Texas coast, typifies a terrigenous lagoonal environment that contains deposits of skeletal carbonates, oolites and nonbiogenic carbonates along with the evaporite minerals salts and gypsum. Deep-water carbonates are primarily pelagic oozes consisting of globigerinids, coccolithophorids and pteropods. Deep-water coral "reefs" have been reported on the lower continental shelf slope of the northern Gulf. Carbonate turbidites form an important part of the sediment column in the abyssal plain.

ANNO

06/11/1987

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ACC 4277
TYPE P
YEAR 1981
AUTH REZAK, R.;BRIGHT, T.J.;
TITL NORTHERN GULF OF MEXICO TOPOGRAPHIC FEATURES STUDY: EXECUTIVE SUMMARY. FIN
AL REPORT 1978.

BIBL DEPARTMENT OF OCEANOGRAPHY, TEXAS A&M UNIVERSITY., COLLEGE STATION, TX.

KEYW TOPOGRAPHIC	GEOLOGICAL	CHEMICAL
PHYSICAL	GEOPHYSICAL	BIOLOGIC

ABST The main purpose of the study was to gather data in order to characterize s
elected topographic features in the Gulf of Mexico. Geological, chemical,
physical, geophysical, and biological oceanographic data were collected fro
m the Florida Middle Ground, off the west Florida coast, and from twelve to
pographic features off the Louisiana-Texas coast.

ANNO

06/11/1987

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ACC 4307

TYPE P

YEAR 1981

AUTH REZAK, R.;BRIGHT, T.J.;

TITL NORTHERN GULF OF MEXICO TOPOGRAPHIC FEATURES STUDY. VOL. 2: METHODS, FOSSIL COCCOLITHS, CHEMICAL ANALYSES.

BIBL FINAL REPT. BUREAU OF LAND MANAGEMENT NO. TR-81-2-T; BLM-YM-P/T-81-008-3331
. 162 P.

KEYW TOPOGRAPHIC
HYDROCARBON

SEDIMENT
ORGANIC CARBON

TRACE METAL

ABST This study characterized selected topographic features in descriptive reconnaissance studies were completed in 1978-79 for the Florida Middle Ground and Alderdice, Coffee Lump, Diaphus, Elvers, Fishnet, Geyer, Jakkula, and Rezak-Sidner Banks. Chemical analysis of sediments for trace metals, high molecular weight hydrocarbons, Delta C-13, and total organic carbon was conducted for Coffee Lump and the East and West Flower Garden Banks. The study of the distribution of reworked fossil coccoliths on the South Texas Outer Continental Shelf was continued.

ANNO

06/11/1987

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ACC 2271
TYPE P
YEAR 1980
AUTH RICE, S.A.;SIMON, J.L.;
TITL INTRASPECIFIC VARIATION IN THE POLLUTION INDICATOR POLYCHAETE POLYDORA LIGNI (SPIONIDAE).

BIBL OPHELIA 19(1):79-115.

KEYW POLLUTION	POLYCHAETE	MORPHOLOGY
BIOLOGY	REPRODUCTION	TEMPERATURE
SALINITY	DISSOLVED OXYGEN	

ABST The extent of intraspecific variation in the pollution indicator *Polydora ligni* was assessed on evidence from morphology, reproductive biology, physiological response, and population genetics. Five populations from Florida were compared morphologically and genetically; three of them were also analyzed for differences in reproduction and physiological response; morphological differences were observed between populations with respect to the setae of the fifth setiger and the presence of the nuchal antenna, both important taxonomic characteristics. Significant differences were observed in gametic distribution in mature individuals, egg size, and spermatophore morphology. Interpopulation crosses suggested the possibility of incipient reproductive isolation between some of the populations. Physiological responses, expressed as survival and growth rate, were compared between populations using a central composite factorial design experiment consisting of three levels each of temperature, salinity and dissolved oxygen. Experimental results were analyzed using response surface methodology and revealed highly significant differences in both five-day survival and growth rates between populations. Gene frequencies were determined by use of horizontal starch gel electrophoresis. Standard genetic distance, based upon ten loci, was not significantly different between most populations. However, one population varied from all others at a level corresponding to sibling species. For all populations pooled, 90% of all loci were polymorphic. The study concluded that this cosmopolitan pollution indicator has undergone considerable divergence

ANNO

06/11/1987

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ACC 2287

TYPE P

YEAR 1981

AUTH RICE, S.A.; PATTON, G.W.; MAHADEVAN, S.

TITL AN ECOLOGICAL STUDY OF THE EFFECTS OF OFFSHORE DREDGED MATERIAL DISPOSAL WITH SPECIAL REFERENCE TO HARD-BOTTOM HABITATS IN THE EASTERN GULF OF MEXICO.

BIBL REPT. SUBMITTED BY MOTE MARINE LABORATORY, SARASOTA, FLORIDA TO MANATEE COUNTY CHAMBER OF COMMERCE, BRADENTON, FL. 45 P.

KEYW SEDIMENT

CHEMISTRY

GRAIN SIZE

SPONGE

LIVE BOTTOM

DRILLING MUD

STRESS

ABST Data was collected to assess the ecological effect of offshore disposal of fine sediments. Diver observations (including photography) and sediment chemistry and grain size analysis data were utilized to discern ecological effects. The study concluded that the disposal operations had imparted a helterious effect on the hard-bottom communities of the study area.

ANNO

06/11/1987

.....
ACC 2524
TYPE P
YEAR 1978
AUTH RICE, K.J.;
TITL STRUCTURE AND FUNCTION OF A TROPICAL, SUBTIDAL SANDBAR COMMUNITY.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI. MIAMI, FL.

KEYW DADE	COMMUNITY	BIOMASS
SEASONALITY	POLYCHAETE	CHLOROPHYLL
INVERTEBRATE		

ABST The benthos of a sandbar off Miami was studied from October 1976 to September 1977. Abundances and biomass varied seasonally and spatially. Macrofauna diversity variation was correlated with the abundance of *Tivela floridana*. Bivalve seasonal variations in abundance were much greater than the polychaetes. Other investigations included studies of survivorship, respiration, standing stock of chlorophyll 'a', and the effect of carbonate particles on sediment porosity and permeability. The sandbar exhibited characteristics hypothesized to exist within a physically controlled or immature ecosystem.

ANNO

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ACC 2461
TYPE P
YEAR 1983
AUTH RICH, E.R.;GREENFIELD, L.J.;
TITL COMPARISON OF BENTHIC COMMUNITIES IN KEY LARGO WATERWAYS.

BIBL PRESENTED AT BENTHIC ECOLOGY MEETING, FLORIDA INSTITUTE OF
TECHNOLOGY, MELBOURNE, FL.
KEYW MONROE BENTHIC COMMUNITY
DEVELOPMENT SEASONALITY

ABST The benthic communities of 5 artificial basins (3 cut from limestone and 2 cut from mangrove peat) in upper Key Largo, Florida were studied for up to 8 years. Abiotic parameters of the water column and associated terrestrial environment were monitored and related to variations in benthic fauna and flora. Patterns of community development varied with substrate type. Initial colonization was rapid with first algal production occurring within 6 weeks. Seasonality of macrophytes was evident within the first year. Given adequate exchange with ambient waters, benthic communities approached maturity with the establishment of seagrass within 3 years.

ANNO

06/11/1987

.....
ACC 711

TYPE

YEAR 1984

AUTH RICHARDS, W.J.; POTTHOFF, T.; KELLEY, S.; MCGOWAN, M.F.; ET AL.;

TITL SEAMAP 1982 - ICHTHYOPLANKTON LARVAL DISTRIBUTION AND ABUNDANCE OF ENGRAULI
DAE, CARANGIDAE, CLUPEIDAE, LUTJANIDAE, SERRANIDAE, CORPHAENIDAE, ISTIOPHOR
IDAE, XIPHIIDAE, AND SCOMBRIDAE IN THE GULF OF MEXCIO.

BIBL NOAA TECH. MEM. NMFS-SEFC-144. 55 PP.

KEYW BIOLOGY

SPECIES COMPOSITION

ABUNDANCE

FISH LARVAE

ICHTHYOPLANKTON

SNAPPER

PLANKTON

DISTRIBUTION

ABST

ANNO

06/11/1987

.....
ACC 4125

TYPE P

YEAR 1979

AUTH RICHARDS, W.J.; POTTHOFF, T.;

TITL LARVAL DISTRIBUTIONS OF SCOMBRIDS (OTHER THAN BLUEFIN TUNA) AND SWORDFISH I
N THE SPRING OF 1977 AND 1978.

BIBL ICCAT WORKING DOCUMENT SCRS/79. 6 P.

KEYW BIOLOGY
BILLFISH
NEUSTON

ICHTHYOPLANKTON
DISTRIBUTION
LARVAE

PELAGIC FISH
RECRUITMENT

ABST Based on ichthyoplankton surveys conducted in the Gulf of Mexico in the spring of 1977 and 1978, larval distributions for the following taxa are given : *Thunnus* spp., *Auxis* spp., *Katsuwonus pelamis*, *Euthynnus alletteratus*, *Thunnus atlanticus*, and *Xiphias gladius*. *K. pelamis* and *T. atlanticus* larvae were the most abundant in these cruises which took place at the end of April and May in 1977 and in May of 1978. Both bongo nets and neuston nets were employed. Larvae were most abundant in the eastern Gulf and no *Xiphias gladius* larvae were taken in the western Gulf.

ANNO

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ACC 4168
TYPE P
YEAR 1984
AUTH RICHARDSON, C.A.;
TITL EFFECTS OF DRILLING CUTTINGS ON THE BEHAVIOR OF THE NORWAY LOBSTER NEPHROPS
NORVEGICUS.

BIBL MAR. POLLUT. BULL 15(5):170-174.

KEYW DRILL CUTTING	HYDROCARBON	PHYSIOLOGY
CRUSTACEA	PATHOLOGY	BEHAVIOR
POLLUTION		

ABST Small quantities of drilling cuttings (100 g/250 cm²) affected the survival and general behavior of *N. norvegicus* held in experimental aquaria. In 1 experiment volatile hydrocarbons released from the cuttings caused a significant decrease ($P < 0.05$) in the beat of the exopodite on the 3rd maxilliped. Flicking rates of the antennule and the time taken to identify and capture food introduced into the tanks were unaffected by exposure to cuttings. When the water flow through the tanks was interrupted for 12 h, 58% of animals died after exposure to the highest concentration of cuttings but those at the lower concentrations survived. After the water flow was restored the remaining survivors showed disorientated behavior and uncoordinated movements which lasted for approximately 36 h. In this condition animals will be more vulnerable to predators. This unusual behavior may have serious implications for natural populations exposed to cuttings discharge in the close vicinity of offshore drilling platforms.

ANNO

06/11/1987

.....
ACC 2363
TYPE
YEAR 1961
AUTH RICHEY, J.M.;
TITL THE SEDIMENTARY ENVIRONMENTS OF THE BEACH, SWAMP, AND SHOALS OF CAPE ROMANO
, FLORIDA.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL.

KEYW COLLIER DISTRIBUTION SEDIMENT
 TOPOGRAPHY GRAIN SIZE

ABST Trends in the distribution of sediment types near Cape Romano, Florida, were determined from 130 sediment samples collected during June 1960. The sediment types identified were quartz sand, carbonate shell material, and silt/clay. Relationships between local topography and sediment characteristics were described and 3 sources of sediment supply were identified.

ANNO

06/11/1987

.....
ACC 725
TYPE
YEAR 1967
AUTH RILEY, G.A.;
TITL THE PLANKTON OF ESTUARIES. P. 316-326.

IN: G.H. LAUFF, ED. ESTUARIES.

BIBL AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, PUBLICATION NO. 83, WASHINGTON, D.C.

KEYW	BIOLOGY	COASTAL WATER	CURRENTS
	ESTUARY	NUTRIENT	PLANKTON
	SALINITY	TEMPERATURE	ZOOPLANKTON

ABST

ANNO

06/11/1987

.....
ACC 2462
TYPE P
YEAR 1972
AUTH RIO PALENQUE, INC.;
TITL BIOLOGICAL STUDY OF THE WATERS OF THE KEY HAVEN DEVELOPMENT.

BIBL PREPARED FOR KEY HAVEN ASSOCIATED ENTERPRISES, INC.

KEYW MONROE	SEAGRASS	BASELINE STUDY
CIRCULATION	PRODUCTIVITY	FLORA
FAUNA		

ABST Baseline information on the existing situation in and around the Key Haven development was collected. The existing canal bottoms were determined to be highly productive, despite the fact that they were dead-ended and the circulation was limited to tidal ebb and flow and to wind induced water movement. The shallow open area was less productive than the canals; however, the bands of rocky substratum occupied by Sargassum and the sediment filled depression which support Thalassia were relatively productive. In general, the shallow shelf area was more productive than the slightly deeper waters to the north and to the east of the Key Haven property. Floral and faunal species lists were presented.

ANNO

06/11/1987

.....
ACC 668
TYPE
YEAR 1973
AUTH RIVAS, L.R.;
TITL BIG GAME FISHING IN THE GULF OF MEXICO DURING 1972.

BIBL NATIONAL MARINE FISHERIES SERVICE, PANAMA CITY, FL. 18 PP.

KEYW FISHERY	FISHERY STATISTICS	CONTINENTAL SHELF
RECREATION	SOCIOECONOMIC	FISH
RECREATIONAL FISHERY		

ABST

ANNO

06/11/1987

.....
ACC 2463
TYPE P
YEAR 1979
AUTH ROBBIN, D.M.;STIPP, J.J.;
TITL DEPOSITIONAL RATE OF LAMINATED SOILSTONE CRUSTS, FLORIDA KEYS.

BIBL J. OF SED. PETRO. 49(1):0175-0180.

KEYW MONROE CARBONATE SEDIMENT
 GEOLOGIC HISTORY GEOLOGY

ABST Laminated calcium carbonate crust "calcrete" from Key Largo, Florida was sampled and 5 layers of laminate identified. The layers were radiocarbon dated and ranged from 5680 years B.P. at the bottom to 400 years B.P. at the top. The data indicate the crust developed in the last 5,000-6000 years. Samples from Big Pine Key produced similar results.

ANNO

06/11/1987

.....
ACC 721
TYPE
YEAR 1977
AUTH ROBERTS, T.W.;
TITL AN ANALYSIS OF DEEP-SEA BENTHIC COMMUNITIES IN THE NORTHEAST GULF OF MEXICO
.

BIBL PH.D. DISSERTATION, TEXAS A&M UNIVERSITY, COLLEGE STATION, TX.

KEYW BENTHIC COMMUNITY BIOLOGY

ABST

ANNO

06/11/1987

.....
ACC 2171

TYPE P

YEAR 1982

AUTH ROBERTS, H.H.; ROUSE, L.J., JR.; WALKER, N.D.; HUDSON, J.H.;

TITL COLD WATER STRESS IN FLORIDA BAY AND NORTHERN BAHAMAS: A PRODUCT OF WINTER
COLD-AIR OUTBREAKS.

BIBL J. SEDIMENT. PETROL. 52(1):145-155.

KEYW STRESS

CORAL

WIND SPEED

MORTALITY

TEMPERATURE

BATHYMETRY

REMOTE SENSING

FISH

METEOROLOGICAL

DEVELOPMENT

DEPTH

REEF

ABST In situ water temperatures, meteorological data, and thermal infrared data from the NOAA-5 meteorological satellite were used to study the thermal evolution of Florida Bay and Bahama Bank waters during January 1977 when 3 consecutive cold fronts crossed south Florida and the northern Bahamas, reducing shallow water temperatures below the lethal limit for most reef corals.

Florida Bay water was depressed below 16 degrees Celcius, a thermal stress threshold for most reef corals, for 8 days. Minimum in situ temperature recorded was 12.6 degrees Celcius. Bathymetry controlled routes of cold water masses are described and their effort noted. Coral and fish kills were recorded along the Florida Reef Tract and northern Bahamas, with up to 91% mortality at Dry Tortugas. This provides evidence that cold water stress conditions can exist over vast shallow water areas for periods of days, resulting in restriction of reef community development throughout the study area.

ANNO

06/11/1987

.....
ACC 2464
TYPE P
YEAR 1977
AUTH ROBERTS, H.H.;WHELAN, T.;SMITH, W.G.;
TITL HOLOCENE SEDIMENTATION AT CAPE SABLE, SOUTH FLORIDA.

BIBL SED. GEOL. 18:25-60.

KEYW MONROE	CARBONATE	SEDIMENT
HOLOCENE	GEOLOGIC	HISTORY
MOLLUSC	SEAGRASS	

ABST A variety of sedimentary environments at Cape Sable were investigated to determine depositional history and compare the seven types of environments. Radiocarbon dating shows three different dates for the formation of the three capes existing at this time. Cores reveal a carbonate-mud sequence similar to present subtidal sediments. Results of analysis indicate a typical marine carbonate-mineral suite, with numerous molluscs and Thalassia roots.

ANNO

06/11/1987

.....
ACC 2465
TYPE P
YEAR 1963
AUTH ROBERTSON, P.B.;
TITL A SURVEY OF THE MARINE ROCK-BORING FAUNA OF SOUTHEAST FLORIDA.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI. MIAMI, FL.

KEYW MONROE SPONGE REEF
 EROSION

ABST The rock boring fauna as a whole was determined to be typical of the West Indian faunal province and was comparable to that of other tropical regions. The boring sponge *Cliona truitti* was recorded for the first time from southeast Florida. It was extremely common in the intertidal zone. *Cliona caribbea* was shown to be the dominant boring sponge in the back reef environment. The sipunculid genus *Lithacrosiphon* represented by a single species, 4 species of the genus *Aspidosiphon*, and *Phascolosoma dentigerum* were recorded for the first time from Florida waters. The contribution of boring animals to the erosion of intertidal rock was determined to be slightly above the mid-tide level, but considerable in a zone extending for several centimeters above mean low water. Erosion by organisms appeared to be intense on the reef patches. Boring lamellibranchs were not prominent in the intertidal zone, but they were the most conspicuous boring animals in the back reef environment. The burrows of the gastrochaenids reported in this paper were distinctive and may easily be identified as to the species which formed them. The boring mechanisms of the majority of rock boring animals have yet to be clearly demonstrated.

ANNO

06/11/1987

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ACC 430

TYPE

YEAR 1983

AUTH ROBINETTE, H.R.;

TITL SPECIES PROFILES: LIFE HISTORIES AND ENVIRONMENTAL REQUIREMENTS OF COASTAL
FISHES AND INVERTEBRATES (GULF OF MEXICO). BAY ANCHOVY AND STRIPED ANCHOVY

BIBL U.S. FISH AND WILDLIFE SERVICES, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON D
.C. FWS-OBS-82-11.14. 15 PP.

KEYW BIOLOGY

COMMERCIAL FISHERY

ECOLOGY

FISHERY

LIFE HISTORY

SOCIOECONOMIC

FISH

ABST

ANNO

06/11/1987

.....
ACC 2466
TYPE P
YEAR 1963
AUTH ROBINSON, R.K.;DIMITRIOU, D.E.;
TITL THE STATUS OF THE FLORIDA SPINY LOBSTER FISHERY, 1962-1963.

BIBL FLA. ST. BD. CONSERV. MAR. LAB TECH. SER. NO. 42, 30 P.

KEYW MONROE	SPINY LOBSTER	SPAWNING
LARVAE	PLANKTON	FISHERY
STRESS		

ABST A reported decline in the landings of Florida spiny lobsters was investigated. Additionally, the occurrence of phyllosoma larvae from plankton samples collected in Florida Bay and on the Tortugas fishing grounds was noted. It was concluded that the lobster stocks of south Florida were not depleted in the biological sense. It was suggested that the decline in catch per unit effort was a reflection of increasing fishing pressure upon relatively stable stocks. It was observed that some spawning occurred throughout the year. Less than 7 percent of the lobster larvae were identified as Panulirus

ANNO

06/11/1987

.....
ACC 4173
TYPE P
YEAR 1980
AUTH ROBINSON, W.E.;WEHLING, W.E.;MORSE, M.P.;
TITL TURBIDITY EFFECTS ON PLACOPECTEN MAGELLANICUS GILL MORPHOLOGY.

BIBL AM. ZOOL. 20(4):892.

KEYW TURBIDITY	MORPHOLOGY	OFFSHORE DRILLING
OIL	PHYSIOLOGY	PATHOLOGY
MOLLUSCA	SUSPENDED	SEDIMENT
DRILL CUTTING	DRILLING MUD	

ABST

ANNO

06/11/1987

.....
ACC 2172

TYPE P

YEAR 1971

AUTH ROESSLER, M.A.; REHRER, R.G.;

TITL RELATION OF CATCHES OF POSTLARVAL PINK SHRIMP IN EVERGLADES NATIONAL PARK,
FLORIDA, TO THE COMMERCIAL CATCHES ON THE TORTUGAS GROUNDS.

BIBL BULL. MAR. SCI. 21(4) (IN PRESS).

KEYW PINK SHRIMP
TEMPERATURE
ABUNDANCE

POPULATION
SALINITY

TIDE
CURRENTS

ABST Sampling of postlarval pink shrimp populations at Buttonwood Canal and Little Shark River, Everglades National Park, Florida was undertaken from July 1965 to December 1967. Environmental effects on postlarval catches were observed and the catches of immigrating *Penaeus* were compared with commercial catches of *Penaeus* on the Tortugas grounds. Postlarval *Penaeus* were more plentiful at night, during flood tides, in bottom samples, during new and first quarter lunar periods and during the summer. An index of abundance was chosen at the Everglades station with which it was possible to predict 61% of the monthly variation in commercial Tortugas catches.

ANNO

06/11/1987

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ACC 2525

TYPE P

YEAR 1975

AUTH ROESSLER, M.A.; BEARDSLEY, G.L.; REHRER, R.; GARCIA, R.;

TITL EFFECTS OF THERMAL EFFLUENTS ON THE FISHES AND BENTHIC INVERTEBRATES OF BISCAYNE BAY, CARD SOUND, FLORIDA.

BIBL UNIV. MIAMI ROSENTHAL SCHOOL OF MAR. ATMOS. SCI. UM-RSMAS NO. 75027.

KEYW DADE
INVERTEBRATE
STRESS
ECHINODERM

FISH
TEMPERATURE
SALINITY

BENTHIC
COMMUNITY
DO

ABST Maximum summer temperatures of 32 degrees C were found to cause harmful changes in the environment which are reversible in the winter, while temperatures above 33 degrees C caused damage which did not recover during the cooler months. Intermittent flow of discharge water was not as damaging as constant flow. Card Sound was occupied by a sponge-brittle star community but many organisms were common to both the Sound and Biscayne Bay. The discharge into Card Sound lasted about one year and temperatures in excess of 33 degrees C were uncommon. Only a few indicator species showed stress and higher abundance of others offset their decrease. Generally no lasting damage occurred in Card Sound.

ANNO

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ACC 381
TYPE
YEAR 1977
AUTH ROGERS, R.M.;
TITL TROPHIC INTERRELATIONSHIPS OF SELECTED FISHES ON THE CONTINENTAL SHELF OF THE NORTHERN GULF OF MEXICO.

BIBL PH.D. DISSERTATION. TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. 244 PP.

KEYW BIOLOGY FEEDING HABIT FISH
GEOLOGY DEMERSAL FISH LIFE HISTORY
DISTRIBUTION FISH LARVAE ZOOPLANKTON
PREDATION

ABST The present study surveys the trophic interrelationships of 26 demersal fishes inhabiting the continental shelf of the northern Gulf of Mexico. Volume tric stomach content analyses were carried our on 4,550 specimens. Fishes were collected at 128 stations between Brownsville, Texas and St. Andrew's Bay, Florida in depths of approximately 3 to 200 meters. Within each species, fish were grouped by size, depth, and geographical location in order to compare variations in food habits due to these factors. Food habits of the individual species are discussed emphasizing trends in diet by food categories, transitions associated with growth, and variations associated with geographical location. Feeding periodicity is discussed for those species where data were available. From this detailed information, trends in the life history and food habits of continental shelf fishes are proposed. Larger individuals of a species are indicated to spawn in deeper waters. Larval and juvenile fishes subsequently enter the water column, especially the supra-benthic zone, where they undergo a planktonic stage as they are transported by currents toward shallower waters. They eventually settle to the bottom to lead a demersal existence gradually moving offshore to complete the life cycle. This trend in life history pattern is reflected in the ontogenetic food habit transitions. Larvae and juveniles feed largely on zooplankton. The importance of zooplankton decreases with ontogenetic development except in certain planktivorous species. As the importance of zooplankton decreases, benthic organisms increase in importance.

ANNO nkton including larvae and juveniles of higher consumers is eaten largely by small fishes and planktivorous adults. Eggs and larvae of many demersal fishes leave the benthic zone assuming a planktonic existence and escaping predation from this lower zone. Organic detritus enters the benthic food chain largely through assimilation by micro-bottom animals and benthic consumers as well as browsers from the water column. Larger macrocrustaceans and macrobenthic organisms readily utilize these benthic and pelagic browsers. Trophic energy is lost from the benthic zone to larger pelagic fishes acting as top predators.

ACC 2526
TYPE P
YEAR 1977
AUTH RONA, D.C.;
TITL REMOTE SENSING OF TURBIDITY IN BISCAYNE BAY, FLORIDA.

BIBL FLA. SCIENTIST 40(2):174-178.

KEYW DADE	REMOTE SENSING	TURBIDITY
LANDSAT	SUSPENDED	SEDIMENT

ABST This report describes the utility of the multispectral scanner (MSS) from the N.A.S.A. LANDSAT Satellite in detecting and monitoring both man-made and natural suspended sediment. MSS data were used to observe turbidity derived from dredging in Government Cut and from a carbonate bank in Biscayne Bay under variable tidal conditions. The technique employed provided repetitive synoptic data over large areas and greatly reduces the volume of "in situ" measurements required to accurately describe turbidity in a nearshore environment.

ANNO

06/11/1987

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ACC 2149
TYPE P
YEAR 1972
AUTH ROPP, R.W.;HOFF, F.H. JR.;
TITL FLATFISHES (PLEURONECTIFORMES).

BIBL MEM. HOURGLASS CRUISES, IV(II):135.

KEYW HOURGLASS	DISTRIBUTION	SEASONALITY
REPRODUCTION	HABITAT	BEHAVIOR
ZOOGEOGAPHY	FISH	

ABST Eighteen flatfish species were collected by trawl and box dredge off southern western Florida. Keys to the genera and species known to occur on the Florida shelf were given. The following information was presented for each species, based on Hourglass material, various museum collections and published reports: a list of recent literature; descriptive data; geographical distribution; environmental correlatives; seasonality; diurnality; food and feeding; reproduction; size; abundance; and commercial importance. An "ecological key" illustrates those attributes allowing the 18 species (plus *Trinectes maculatus*) to coexist along the same shelf segment. Primary differences in species were recognizable in food and feeding, habitat, and behavior. Zoogeography of Gulf of Mexico flatfishes was examined using a modified analysis of faunal coincidence in which relative species abundance was considered. The flatfish fauna of the Gulf of Mexico (including the Florida Keys) was determined to be more closely related to the fauna of the eastern United States than to that of the Caribbean.

ANNO

06/11/1987

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ACC 2467
TYPE P
YEAR 1979
AUTH ROSENFELD, J.K.;
TITL INTERSTITIAL WATER AND SEDIMENT CHEMISTRY OF TWO CORES FROM FLORIDA BAY.

BIBL J. SED. PETROL. 49(3):989-994.

KEYW MONROE	SEDIMENT	CHEMISTRY
DEPTH	ORGANIC CARBON	NUTRIENT

ABST Mangrove swamp and submerged mud bank cores from Florida Bay were analyzed for differences in interstitial water and sediment chemistry characteristic s. Sulfate reduction was observed in the samples. The sulfate concentration profile is atypical of other anoxic environments because sulfate concentrations increase below 20 cm, possibly as a result of a balance between the mixing of the interstitial water with overlying seawater. Also, organic decomposition rates decrease with depth. Profiles of other chemical factors are discussed.

ANNO

06/11/1987

.....
ACC 2527
TYPE P
YEAR 1975
AUTH ROSENERG, R. ;
TITL STRESSED TROPICAL BENTHIC FAUNAL COMMUNITIES OFF MIAMI, FLOR

BIBL OPHELIA 14:93-112.

KEYW DADE	STRESS	BENTHIC
COMMUNITY	ABUNDANCE	BIOMASS
DIVERSITY	TEMPERATURE	TURBIDITY
SALINITY		

ABST An investigation of the benthic faunal communities in Biscayne Bay was conducted. The results were compared to an earlier (1957-1959) investigation in the same area. Changes were found to have occurred in the number of species, abundance, biomass, diversity and spatial dispersion. Low specialization in many species and a low diversity indicated that the communities were disturbed. The reasons for these changes were suggested to be occasionally low winter temperatures, high turbidity and influence by man.

ANNO

06/11/1987

.....
ACC 228

TYPE

YEAR 1973

AUTH ROSS, B.E.;

TITL THE HYDROLOGY AND FLUSHING OF THE BAYS, ESTUARIES, AND NEARSHORE AREAS OF THE EASTERN GULF OF MEXICO.

IN: J.I. JONES, R.E. RING, MO.O. RINKEL, AND R.E. SMITH, EDS. A SUMMARY OF KNOWLEDGE OF THE EASTERN GULF OF MEXICO.

BIBL STATE UNIVERSITY SYSTEM OF FLORIDA, INSTITUTE OF OCEANOGRAPHY, ST. PETERSBURG, FL.

KEYW BAY	ESTUARY	HYDROLOGY
MATHEMATICAL MODEL	NEARSHORE	OCEANOGRAPHY
TIDE	GYRE	HURRICANE
SALINITY	TEMPERATURE	

ABST This paper presents pertinent data concerning drainage areas, fresh-water flow, and tidal range for the bays, estuaries, and nearshore areas of the eastern Gulf of Mexico. The paper suggests that tidal prisms, tidal exchange, and fresh-water replacement times are not sufficient criteria upon which to judge the flushing of a bay, estuary, or near-shore area. The existence of gyres within a bay or estuary or nearshore area is shown to be the important factor in the capability of a body of water to flush a contaminating substance to the open Gulf. A demonstration of the use of mathematical models in the understanding and quantifying of phenomena for the Tampa Bay System is given in this paper. Results are shown for the calculation and confirmation of salinities, temperature, hurricane tides, normal tide heights, current flows, water quality, and the effects of mechanical changes in Tampa Bay.

ANNO

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ACC 447
 TYPE
 YEAR 1983
 AUTH ROSS, S.T.;
 TITL SURF ZONE ICHTHYOFAUNAS OF THE GULF OF MEXICO, BIOLOGICAL IMPORTANCE AND MANAGEMENT IMPLICATIONS.

BIBL PROCEEDINGS OF RESEARCH CONFERENCE ON NORTH GULF OF MEXICO BARRIER ISLANDS AND ESTUARIES. NATIONAL PARK SERVICE. IN PRESS.

KEYW	BIOLOGY	FISH	LIFE HISTORY
	SPECIES COMPOSITION	ICHTHYOFAUNA	MORPHOLOGY
	SEASONALITY	PHYSICAL PROCESS	MULLET

ABST High energy surf zone habitats bordering the Gulf of Mexico provide an important resource, from both a recreational and biological perspective. Because of the overriding effect of high wind-driven wave energy, such areas show well defined physical characteristics and form a broad filtration system, removing detrital and planktonic components from the water column and concentrating nutrients along the swash zone. Organisms capable of utilizing these regions often show high degrees of morphological, physiological or behavioral specialization and form a very characteristic assemblage. Biological knowledge of surf zone ichthyofaunas in the Gulf of Mexico is still limited, with Horn Island in the northern Gulf and Mustang Island in the western Gulf being the most studied. Surf zone fish faunas are dominated numerically by relatively few species, although over 76 species, most of them rare, have been recorded from the south shore of Horn Island. The faunas are temporally dynamic on both a seasonal and daily basis. Since the surf zone area is utilized by a species often only during part of its life cycle, a strong seasonal periodicity occurs. In general, young fishes occur off high energy beaches in the spring and summer, remaining into early fall. By October and November, in the Northern Gulf, few fishes remain in the habitat, but by early spring numbers begin increasing again. The importance of the region to larger fishes is less well known, in part because of sampling problems. Daily variation also occurs, with the greatest biomass generally before dawn.

ANNO sh zone, and energy transfer in the surf ecosystem, is needed. It is important to emphasize, however, that the value of a habitat to a species should not be judged solely by the duration that an organism occupies it, but by how critical a role the habitat plays in the life cycle of the species. Temporally dynamic surf zones utilized by various fishes and invertebrates, especially during portions of their early life history, may have a much greater role in the life cycles of the coastal organisms than previously realized.

06/11/1987

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ACC 2245
TYPE P
YEAR 1975
AUTH ROSS, R.;
TITL SEDIMENTARY STRUCTURES AND ANIMAL-SEDIMENT RELATIONSHIPS: OLD TAMPA BAY, FL
ORIDA.

BIBL MASTER'S THESIS. UNIVERSITY OF SOUTHERN FLORIDA.

KEYW	SEDIMENT	DISTRIBUTION	WAVE
	MATHEMATICAL MODEL	GRAIN SIZE	TIDE
	CURRENTS	MACROFAUNA	

ABST Sediment samples from 41 stations in Old Tampa Bay, Florida were analyzed to determine the textural type and distribution, characteristic sedimentary structures and modes of origin, distribution of geologically significant macrofauna, and nature and amount of bioturbation. Four sedimentary facies were identified in Old Tampa Bay based on physical and biogenic characteristics; clean sand, muddy sand, mud, and marginal sand. The tidal circulation and wave types of each facies area are described. A mathematical model was constructed using sediment distribution data to predict circulation patterns in the bay.

ANNO

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ACC 2272
TYPE P
YEAR 1975
AUTH ROSS, R.W.;MAYOW, T.V.;
TITL SEDIMENTARY STRUCTURES AND ANIMAL-SEDIMENT RELATIONSHIPS IN OLD TAMPA BAY,
FLORIDA.

BIBL FLA. SCI. 38 (SUPPL. 1):13.

KEYW	SEDIMENT	PHYSICAL	DISTRIBUTION
	GRAIN SIZE	MACROFAUNA	STRUCTURE

ABST In order to describe potentially preservable physical and biogenic structures produced in Old Tampa Bay, superficial subtidal sediments were studied in terms of 1) textural type and distribution of sediment being deposited; 2) characteristic sedimentary structures and their modes of origin; 3) distribution of geologically significant macrofauna; and 4) animal-sediment relationships and effects of organisms upon sediments, including intensity of bioturbation. These sedimentary characteristics are potentially useful for deciphering estuarine depositional environments in the rock record. Three laterally gradational sedimentary facies defined on both physical and biological parameters were distinguished in Old Tampa Bay: 1) clean sand facies; 2) muddy sand facies; and 3) mud facies.

ANNO

06/11/1987

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ACC 4126
TYPE P
YEAR 1983
AUTH ROSS, S.T.;
TITL SEAROBINS (PISCES: TRIGLIDAE). MEMOIRS OF THE HOURGLASS CRUISES. VOL. VI,
PART IV.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. 76 P.

KEYW BIOLOGY	BENTHIC	SYSTEMATIC
DISTRIBUTION	FOOD HABIT	DEMERSAL FISH
HOURGLASS	FISH	ECOLOGY
CONTINENTAL SHELF		

ABST Eleven species of searobins were collected during Project Hourglass, a series of monthly collections (August 1965-November 1967) in 6 to 73 m depths on the central West Florida Shelf. Two of these species, *Prionotus scitulus* and *P. tribulus*, were also collected during a 15-month study (1972-73) in Tampa Bay, Florida. Three of the 11 species, *Prionotus stearnsi*, *Bellator brachyichir* and *B. egretta*, were collected only rarely and were excluded from detailed analyses. Major searobin prey were small crustaceans (especially pasiphaeid shrimp), polychaetes and lancelets. Fishes, principally *Bregmaceros atlanticus*, were eaten by *P. roseus*, *P. alatus* and *P. salmonicolor*. Feeding activity of *P. roseus*, *P. alatus* and *Bellator militaris* was greatest during daylight hours. *Prionotus scitulus*, *P. martis*, *P. roseus*, *P. salmonicolor*, and *P. alatus* reproduced primarily during spring and late summer. *Prionotus tribulus* spawned between fall and spring. *Bellator militaris* and *P. ophryas* apparently had greatly protracted spawning activity. The eight species showed distinct differences in bathymetric distribution. *Prionotus scitulus*, a year-round inhabitant of Tampa Bay, was also collected at the 6 m stations of Project Hourglass. *Prionotus tribulus* occurred in the shallow Hourglass Stations (6-18 m), and also in Tampa Bay. *Prionotus martis*, *P. ophryas*, and *Bellator militaris* were abundant between 37 and 55 m; and *P. alatus* and *B. militaris* were abundant at 73 m. Searobins were more abundant along the northern Hourglass transect off Tampa Bay than the southern transect off Fort Myers.

ANNO

06/11/1987

.....
ACC 91
TYPE
YEAR 1976
AUTH ROUSE, L.J.; COLEMAN, J.M.;
TITL CIRCULATION OBSERVATIONS IN THE LOUISIANA BIGHT USING LANDSAT IMAGERY.

BIBL REMOTE SENSING ENVIRON. 5:55-66.

KEYW CIRCULATION	PHYSICAL PROCESS	SATELLITE
TURBIDITY	REMOTE SENSING	LANDSAT
WATER MASS	SUSPENDED	SEDIMENT
WIND		

ABST A method for quantifying the turbidity of offshore water masses using LANDSAT imagery is discussed and the results of a laboratory experiment correlating radiance with concentrations of suspended Mississippi River sediment are presented. The results of the experiment are used to plot suspended sediment contours on eight LANDSAT images of the Louisiana Bight. These contours are observed to depend on the speed and direction of the wind as well as the amount of fresh water discharged by the Mississippi River. The presence of a clockwise circulation in the bight is also indicated by the contours.

ANNO

06/11/1987

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ACC 445
TYPE
YEAR 1975
AUTH ROUSSEL, J.E.;KILGEN, R.H.;
TITL FOOD HABITS OF YOUNG ATLANTIC CROAKER (MICROPOGON UNDULATUS) IN BRACKISH PI
PELINE CANALS.

BIBL LOUISIANA ACAD. SCI. 38:70-74.

KEYW BIOLOGY	ECOLOGY	FEEDING HABIT
FISH	PIPELINE	ESTUARY

ABST

ANNO

06/11/1987

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ACC 2364
TYPE P
YEAR 1970
AUTH ROUSE, W.L.;
TITL LITTORAL CRUSTACEA FROM SOUTHWEST FLORIDA.

BIBL QUART. J. FLA. ACAD. SCI. 32(2):127-152.

KEYW COLLIER CRUSTACEA DECAPOD
ESTUARY

ABST An annotated checklist of decapods, stomatopods, and isopods is presented from studies of the Everglades marshes.

ANNO

06/11/1987

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ACC 2034
TYPE U
YEAR 1974
AUTH ROWE, G.T.; POLLONI, P.T.; & HOMER, S.G.;
TITL BENTHIC BIOMASS ESTIMATES FROM THE NORTHWESTERN ATLANTIC OCEAN AND THE NORTH
HERN GULF OF MEXICO.

BIBL

KEYW BENTHIC	BIOMASS	DEPTH
PHYTOPLANKTON	WATER COLUMN	ZOOPLANKTON
DISTRIBUTION		

ABST Deep sea life was found to be more abundant in the Atlantic Ocean than in the Gulf. The abundance of life followed an exponential decline with depth. The rate of decline could be related to the rate of decrease in phytoplankton production in an offshore direction and the efficiency of water column heterotrophs at utilizing sinking organic matter. The regressions also indicate that both benthos and zooplankton follow similar exponential decays in quantity of life with depth.

ANNO

06/11/1987

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ACC 2132
TYPE P
YEAR 1971
AUTH ROWE, G.T.; MENZEL, D.W.;
TITL QUANTITATIVE BENTHIC SAMPLES FROM THE DEEP GULF OF MEXICO WITH SOME COMMENTS ON THE MEASUREMENT OF DEEP SEA BIOMASS.

BIBL BULL. MAR. SCI. 21(2):556-566.

KEYW BENTHIC	INFAUNA	BIOMASS
DEPTH	WATER COLUMN	ORGANIC CARBON
SEDIMENT		

ABST Benthic samples and photographic survey of 23 stations in the deep Gulf of Mexico revealed a depauperate benthic fauna compared with other basins. In faunal biomass and abundance decreased logarithmically with depth, indicating a loss of energy along a complex food chain through the water column. An attempt is made to explain east-west differences in biomass with organic carbon in the sediment.

ANNO

06/11/1987

.....
ACC 2230
TYPE P
YEAR 1976
AUTH RUDELL, J.M. ;
TITL A QUANTITATIVE COMPARISON OF MEIOFAUNA DISTRIBUTIONS IN AN OPEN SAND AREA AND A SEAGRASS BED (THALASSIA TESTUDINUM).

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL.

KEYW MEIOFAUNA	SEAGRASS	DISTRIBUTION
COMMUNITIES	TEMPERATURE	SALINITY
SEDIMENT		

ABST This study quantitatively compared the distribution of meiofauna from a subtidal seagrass bed and an adjacent sand area in the northeastern Gulf of Mexico. Three extraction techniques, Ulig sea ice, Boisseau and decanting were evaluated for extraction efficiency and variability. Only the decanting procedure provided adequate quantitative results for samples collected in this study area. Total meiofauna densities were not significantly different at any of the stations at a sampling frequency of 16 sampling units per station. At the major group level, a variety of distribution patterns were evident. The results suggest that numbers alone, even at the major group level, may not be sufficient to distinguish distribution patterns. Analysis at the species level using Harpacticoids as an example revealed two distinct communities (grass, sand) and a transitional zone.

ANNO

06/11/1987

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ACC 2312
TYPE P
YEAR 1977
AUTH RUSHTON, B.;TULLAI, J.;
TITL A CASE STUDY OF ALTERED NEUTRAL ESTUARY: NORTH SIESTA KEY, FLORIDA.

BIBL NEW COLLEGE OF THE UNIVERSITY OF SOUTHERN FLORIDA, ENVIRONMENTAL
STUDIES PROGRESS REPORT.

KEYW SARASOTA	POLLUTION	SEAGRASS
ESTUARY	WATER QUALITY	DREDGING
GEOMORPHOLOGY	PLANKTON	SEASONALITY

ABST The first part of this report compared water quality and marine life in the four altered bayous and adjacent bays. The second part investigated the attitudes of the local residents. Geomorphology (soils) history, dredge, and fill history, and pollution history were discussed in detail. Mangroves, seagrasses, the benthos and plankton were sampled and studied. Due to small sample sizes, no patterns emerged to demonstrate or deny seasonal flux of individuals or species, however, consistency of species composition over time was demonstrated. No correlation between species and vegetation type or taxonomic group and vegetation type was found. Rarity-abundance trends did appear (a small number of common species and a large number of rare species).

ANNO

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ACC 772
TYPE
YEAR 1965
AUTH RUSSELL, R. ;
TITL SOME NOTES ON THE LIFE HISTORY OF SHRIMPS OF COMMERICAL IMPORTANCE IN THE G
ULF OF MEXICO - A LITERATURE REVIEW.

BIBL GULF COAST RESEARCH LABORATORY, OCEAN SPRINGS, MS. (UNPUBLISHED REPORT).

KEYW BIOLOGY	COMMERCIAL FISHERY	LIFE HISTORY
SHRIMP	RESOURCE	REPRODUCTION
POPULATION DYNAMICS	PARASITE	SPAWNING
LARVAE	FOOD HABIT	

ABST This report is a cumulative work on the shrimp resources of the United States Gulf coast to 1965. Sections include notes on reproduction, spawning, larval development, food, parasites, population dynamics, fishery data and regulation of shrimping season based on size of the individuals caught.

ANNO

06/11/1987

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ACC 2528
TYPE P
YEAR 1981
AUTH RUSSELL, M.A.C.;
TITL INGESTION AND ASSIMILATION OF CORAL MUCUS PARTICLES BY GORGONIAN SOFT CORAL
S.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI. MIAMI, FL

KEYW DADE CORAL GORGONIAN
REEF COMMUNITY FEEDING HABIT

ABST The possibility that coral mucus serves as an energy source for the reef community was studied. The utilization of detrital mucus by *Pseudoplexaura porosa* was examined using radioisotope labelling. Results showed that *P. porosa* utilized mucus particles which suggests that mucus is a nutritional resource.

ANNO

06/11/1987

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ACC 4127
TYPE P
YEAR 1982
AUTH RUTHERFORD, E.S.;
TITL AGE, GROWTH, AND MORTALITY OF SPOTTED SEATROUT, CYNOSCION NEBULOSUS, IN EVERGLADES NATIONAL PARK, FLORIDA.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI. MIAMI, FL.

KEYW BIOLOGY	COMMERCIAL FISHERY	FISH
LIFE HISTORY	SEA TROUT	RECRUITMENT
GROWTH	LENGTH	MORTALITY
WEIGHT		

ABST Age, growth and mortality were studied of 570 spotted seatrout taken from sportfishermen catches in Everglades National Park from November 1978 to January 1980. Fish ranged in length from 220 to 680 mm and in weight from 0.10 to 2.24 kg. Ages of the catch, determined from scale readings, were mainly 3 and 4 years old. Males lived to at least six years, females to at least seven years. The sex ratio favored females (1.67/1). Fish lengths at age were back calculated from scale annuli. Fish length varied between sexes and among areas of capture. Males were larger than females at age 1 but smaller at ages 3-6. Calculated fish length and length at capture were largest in seasonally brackish areas and smallest in the hypersaline area of the Park. There was no significant differences in length-weight relationship between sexes or among areas of capture. Annual mortality rate of all fish was 77%. Male spotted seatrout had higher annual mortality and conditional fishing mortality than females. Conditional natural mortalities were the same for both sexes. Exploitation ratio was higher for males than for females. Yield per recruit for both male and female spotted seatrout was at or near maximum given the 12 inch minimum size limit. Comparison of the results of this study with an earlier study (Stewart, 1961) of Park spotted seatrout showed apparent changes in age distribution, age at full recruitment and mortality since 1959 although yield per recruit and mean sizes at age of fish have not changed. Dominant ages shifted from 2 and 3 year old, to three and four year old fish.

ANNO

06/11/1987

ACC 4128

TYPE P

YEAR 1983

AUTH RUTHERFORD, E.S.;THUE, E.B.;BUKER, D.G.;

TITL POPULATION STRUCTURE, FOOD HABITS, AND SPAWNING HABITS OF GRAY SNAPPER, LUT
JANUS GRISEUS, IN EVERGLADES NATIONAL PARK, FLORIDA.

BIBL SOUTH FLORIDA RESEARCH CENTER REPORT SFRC - 83/02. 41 P.

KEYW BIOLOGY	FISH	SNAPPER
LIFE HISTORY	REPRODUCTION	FOOD HABIT
RECREATIONAL FISHERY	SPAWNING AREA	COASTAL
RECRUITMENT	LENGTH	GROWTH

ABST Population structure, food habits, and spawning activity of 1026 gray snapper, *Lutjanus griseus*, were studied in Everglades National Park from November 1978 through January 1980. Fish were sampled from sportfishermen catches and ranged in length from 111-451 mm F.L. (mean = 257 plus or minus 3.2 mm) and in weight from 0.05-1.6 kg (mean = 0.33 plus or minus .02 kg). There was no difference in mean length between sexes. Fish aged from scale annuli ranged from 1 to 7 years. Two- and 3-year old fish dominated the catch. Recruitment was complete by age 3. The mean age of all fish was 3.0 plus or minus 0.1 years. There was no difference in mean age between sexes. Fish taken from Cape Sable area were significantly older than fish taken from other areas. Calculated growth of gray snapper was greatest in the first year and relatively linear before increasing in the fifth year. Calculated growth varied between sexes and among areas of capture. Females were significantly larger than males at ages 1 and 2. Fish taken from hypersaline areas near the Gulf of Mexico were larger at ages 1 through 4 than fish taken from seasonally brackish waters. Males in the Shark River area did not show as great an increase in weight with length as did all fish in other areas. Females in the Coot Bay and Whitewater Bay area were heavier at a given length than all fish in other areas. Annual survival rate of all fully recruited fish was $s = 0.28$ plus or minus .03. Survival of males was higher than females. Gray snapper survival was higher in the hypersaline waters near the Gulf than in other areas.

ANNO

06/11/1987

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ACG 4221
TYPE P
YEAR 1974
AUTH SACKETT, W.M.;
TITL SIGNIFICANCE OF LOW MOLECULAR WEIGHT HYDROCARBONS IN EASTERN GULF WATERS.

BIBL IN: SUMMARY REPORT. IDOE RESEARCH. P. 253-267.

KEYW HYDROCARBON	POLLUTION	DRILING
BASELINE STUDY	GAS	REMOTE SENSING

ABST It appears that both natural and man-derived sources of petroleum hydrocarbons give rise to anomalously high concentrations of the low molecular weight components over areas and volumes much larger than the visible manifestation of bubbles from natural seeps or the effluent from offshore platforms and ships. As much of the mass of the bubbles from natural gas seeps goes into solution on rising through the water column, near-bottom concentrations should be most indicative of the presence of these seeps. On the other hand, near-surface concentrations of low molecular weight hydrocarbons should be indicative of man's contributions. The impending environmental baseline program on the outer continental shelf of Florida presents an ideal opportunity to determine the hydrocarbon history of an offshore area, from a relatively virgin to a highly developed state. It is recommended that a detailed near-bottom and near-surface low molecular weight hydrocarbon survey be made concomitantly with an acoustical profiling program for seep detection as soon as possible. Following this initial study a more leisurely seasonal monitoring program for just the near-bottom and near-surface hydrocarbon concentrations during the entire outer continental shelf drilling and production operation is recommended. These periodic surveys should allow an early warning of possible damage to the Eastern Gulf Coast ecosystem.

ANNO

06/11/1987

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ACC 2133

TYPE P

YEAR 1975

AUTH SALOMAN, C.H.;

TITL A SELECTED BIBLIOGRAPHY OF THE NEARSHORE ENVIRONMENT: FLORIDA WEST COAST.

BIBL ARMY CORPS ENGR., COAST ENG. RES. CTR., MISC. PAP. NO. 5-75. 268 P.

KEYW BIBLIOGRAPHY
ENGINEERING

ECOLOGY

COASTAL

ABST A collection of over 2,900 references on ecological and coastal engineering subjects related to the nearshore environment of the Florida west coast was presented. References were grouped by subject and alphabetized by author within each subject heading.

ANNO

06/11/1987

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ACC 2173

TYPE P

YEAR 1968

AUTH SALOMAN, C.H.; ALLEN, D.M.; COSTELLO, T.J.;

TITL DISTRIBUTION OF THREE SPECIES OF SHRIMP (GENUS PENAEUS) IN WATERS CONTIGUOUS TO SOUTHERN FLORIDA.

BIBL BULL. MAR. SCI. 18(2):343-350.

KEYW DISTRIBUTION

BROWN SHRIMP

DECAPOD

ABUNDANCE

PINK SHRIMP

ABST Shrimp of the genus *Penaeus* were collected from southern Florida and western Bahama waters, and were identified to determine species distribution and composition. *Penaeus duorarum* was the dominant species in southern Florida waters and, together with *P. aztecus*, occurred along the lower east and west coasts of the state. *P. brasiliensis* was found to occur near the Florida Keys and along the east coast of southern Florida, and was apparently the dominant species in the western Bahamas. In Biscayne Bay, Florida, *P. duorarum* was more abundant than *P. brasiliensis* in all catches examined.

ANNO

06/11/1987

.....
ACC 2212
TYPE P
YEAR 1982
AUTH SALOMAN, C.H.;NAUGHTON, S.P.;TAYLOR, J.L;
TITL BENTHIC COMMUNITY RESPONSE TO DREDGING BORROW PITS, PANAMA CITY BEACH,
FLORIDA.

BIBL FOR U.S. ARMY CORPS OF ENGINEERS, MISC. REPT. NO. 82-3.

KEYW BENTHIC	COMMUNITY	HYDROLOGY
SEDIMENT	SALINITY	TEMPERATURE
DREDGING	FAUNA	RICHNESS

ABST The major short-term environmental effects of offshore dredging on benthic faunaat Panama City Beach were studied through analyses of the hydrology, s ediments, and benthos of the area. Pre-and post-dredging sediments showed many of the same characteristics. Fauna were compared between dredged and undredged areas on the basis of species richness and abundance. The result s showed that recovery began quickly and was nearly complete within 1 year from the time of dredging.

ANNO

06/11/1987

.....
ACC 2273
TYPE P
YEAR 1965
AUTH SALOMAN, C.H.;
TITL BAIT SHRIMP PENAEUS DORARUM IN TAMPA BAY, FLORIDA -- BIOLOGY, FISHERY ECONOMICS AND CHANGING HABITAT.

BIBL U.S. FISH AND WILDLIFE SERVICE. SPEC. SCI. REPORT FISH. NO. 520. 16 P.

KEYW FISHERY	TEMPERATURE	SALINITY
PINK SHRIMP	SOCIOECONOMIC	SHRIMP FISHERY
DREDGING		

ABST From October 1961 to April 1962, 6.2 million individuals of *Penaeus duorarum*, with a retail value of more than \$155,000 were produced by the fishery. Females outnumbered males by a narrow margin and were of larger average size than males. Shrimp taken from the two major shrimping areas of Tampa Bay were of different sizes. The smallest specimens were caught toward the headwaters of the estuary, in water relatively low in salinity. About 184 more shrimp were retained per boat-hour in lower Tampa Bay than Old Tampa Bay. Dredge and fill operations were concluded to have measurably reduced the amount of available habitat for shrimp and other estuarine dependent species since 1940.

ANNO

06/11/1987

.....
ACC 2275
TYPE P
YEAR 1979
AUTH SANTOS, S.L.;
TITL CYCLIC DISTURBANCE, RECOLONIZATION AND STABILITY IN AN ESTUARINE SOFT BOTTO
M INFAUNAL MACROBENTHIC COMMUNITY.

BIBL PH.D. DISSERTATION. UNIVERSITY SOUTHERN FLORIDA.

KEYW INFAUNA	BENTHIC	DEFAUNATION
TEMPERATURE	SALINITY	DO
SEASONALITY	RECRUITMENT	ESTUARY

ABST An ecological study of the soft-bottom macrobenthic community was conducted . A portion of the Hillsborough Bay was found to undergo an annual summer defaunation, with recolonization proceeding in the ensuing months. Whether the community was established by adults or juveniles appeared to be taxon-specific. Settlement was determined to be not exclusively performed by one group of species, and most of the species found were capable of colonizing barren sediment. Regardless of which species colonized initially, by the fourth month following defaunation, some members of the core species group attained high densities and numerically dominated the community until the next defaunation.

ANNO

06/11/1987

.....
ACG 2276
TYPE P
YEAR 1980
AUTH SANTOS, S.L.;BLOOM, S.A.;
TITL STABILITY IN AN ANNUALLY DEFAUNATED ESTUARINE SOFT BOTTOM COMMUNITY.

BIBL OECOLOGIA 46:290-294.

KEYW DEFAUNATION SEDIMENT ESTUARY
 FAUNA

ABST A working definition of stability was proposed and data was collected from a soft bottom community in Hillsborough Bay to test stability. The community underwent annual natural catastrophic defaunation. Results supported the working definition and described the stability in the community.

ANNO

06/11/1987

.....
ACC 2277
TYPE P
YEAR 1983
AUTH SANTOS, S.L.;BLOOM, S.A.;
TITL EVALUATION OF SUCCESSION IN AN ESTUARINE MACROBENTHIC SOFT-BOTTOM COMMUNITY
NEAR TAMPA, FLORIDA.

BIBL INT. REVUE GES. HYDROBIOL. 68(5):617-632.

KEYW BENTHIC	DEFAUNATION	DO
TEMPERATURE	SALINITY	RECRUITMENT
FAUNA		

ABST Macrobenthos in a subtidal area was sampled monthly for 42 months. During the study period complete defaunation occurred 3 times. Recovery and successional patterns were investigated by quantitative and qualitative normal and inverse classification analysis and by rank-order analysis of the dominant species. No consistent patterns were observed.

ANNO

06/11/1987

.....
ACC 2278
TYPE P
YEAR 1980
AUTH SANTOS, S.L.; SIMON, J.L.;
TITL MARINE SOFT-BOTTOM COMMUNITY ESTABLISHMENT FOLLOWING ANNUAL DEFAUNATION: LARVAL AND ADULT RECRUITMENT?

BIBL MAR. ECOL. PROG. SER. 2:235-241.

KEYW DEFAUNATION	RECRUITMENT	POLYCHAETE
MOLLUSC	LARVAE	CRUSTACEAN

ABST Recolonization, following annual summer defaunation of a large areal soft-bottom community in Hillsborough Bay, Tampa, Florida, was investigated to determine whether adult or larval recruitment was primarily responsible for reestablishing the community. Two quantitative sampling designs were employed: 1) samples of the natural bottom were collected one month after each defaunation during 1975, 1976, and 1977 and washed through a 0.5 mm sieve; 2) containers of azoic sediment were placed and collected weekly during a 10 week period immediately following 1978 defaunation and washed through a 0.25 mm sieve. The weekly samples contained almost all newly settled larvae (99.7%), while the monthly samples contained only 41% newly settled larvae. Whether the community was established by adult or larval settlement appeared to be taxon specific. Polychaetes and molluscs were mostly present as newly metamorphosed larvae. Amphipods, cumaceans and flatworms were initially present as adults. The discrepancies in the results stem from differences in methodologies of the two designs. The conclusion follows that methodologies must be tailored to the specific question posed, and that in this study, the majority of the initial community was established by larval rather than adult settlement.

ANNO

06/11/1987

.....
ACC 2279

TYPE P

YEAR 1980

AUTH SANTOS, S.L.; SIMON, J.L.;

TITL RESPONSE OF SOFT BOTTOM BENTHOS TO ANNUAL CATASTROPHIC DISTURBANCE IN A SOUTH FLORIDA ESTUARY.

BIBL MAR. ECOL. PROG. SER. 3:347-355.

KEYW DEFAUNATION
MOLLUSC
DO

POLYCHAETE
TEMPERATURE
RECRUITMENT

CRUSTACEAN
SALINITY

ABST Monthly collections of benthic macrofauna from Hillsborough Bay, a secondary embayment of Tampa Bay, Florida, between February 1975 and July 1978, revealed annual summer defaunations of the soft bottom community. The defaunations were attributed to hypoxia. Recolonization during intervening periods was described. The eight numerically dominant species (3 polychaetes; 3 crustaceans; 2 molluscs), which accounted for 95% of the total density during the study period were classified as rapid colonizers (r-strategists).

ANNO

06/11/1987

.....
ACC 2174
TYPE P
YEAR 1971
AUTH SASTRAUSUMAH, S. ;
TITL A STUDY OF THE FOOD OF MIGRATING PINK SHRIMP. PENAEUS DUORARUN BURKENROD.

BIBL SEA GRANT TECH. BULL. NO. 9. UNIV. OF MIAMI SEA GRANT PROG. 36 P.

KEYW PINK SHRIMP	MIGRATION	CRUSTACEAN
POLYCHAETE	SEAGRASS	FORAMINIFERA
FEEDING HABIT	SEASONALITY	

ABST Investigation was made into the food and feeding habits of juvenile pink shrimp, *Penaeus duorarum*, during migration out of an estuary near Flamingo, Everglades National Park during 1963. Feeding activity was lowest in the late winter and summer, while it was highest in September. Crustaceans and polychaetes were preferred food, while seagrasses, diatoms, and foraminifera were not preferred. There seemed to be no seasonal differences in kinds of food taken. Size classes showed no differences in diet or feeding activity.

ANNO

06/11/1987

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ACC 2313

TYPE P

YEAR 1980

AUTH SAUERS, S.C.;

TITL SEASONAL GROWTH CYCLES AND NATURAL HISTORY OF TWO SEAGRASSES (HALODULE WRIG
HTII ASCHERS, AND THALASSIA TESTUDINUM KANIG) IN SARASOTA BAY, FLORIDA

BIBL ENVIRONMENTAL STATUS OF SARASOTA BAY: SELECTED STUDIES, W.J. TIFFANY, III (ED.), P. A1-A78. MOTE MARINE LAB. SARASOTA, FL. REPT.

KEYW SEAGRASS	BIOMASS	SEASONALITY
TURBIDITY	TEMPERATURE	SALINITY
DEPTH	GROWTH	LIFE CYCLE
DISTRIBUTION		

ABST Biomass, shoot densities, and leaf areas of two seagrasses were evaluated on a seasonal basis. Various abiotic parameters were related to the floral characteristics. Tidal exposure and turbidity were found to be the major abiotic factors that influence growth and distribution. Flowering by *Thalassia* was reported (for the first time) in Sarasota Bay.

ANNO

06/11/1987

.....
ACC 4185

TYPE P

YEAR 1981

AUTH SAUER, T.C., JR.;

TITL VOLATILE LIQUID HYDROCARBON CHARACTERIZATION OF UNDERWATER HYDROCARBON VENT
S AND FORMATION WATERS FROM OFFSHORE PRODUCTION OPERATIONS.

BIBL ENVIRON. SCI. TECHNOL. 15(8):917-923.

KEYW HYDROCARBON

FORMATION WATER

POLLUTION

OFFSHORE WATER

ABST

ANNO

06/11/1987

.....
ACC 4129
TYPE P
YEAR 1969
AUTH SAUNDERS, R.P.;GLENN, D.A.;
TITL DIATOMS. MEMOIRS OF THE HOURGLASS CRUISES. VOL. I, PART III.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. 119 P.

KEYW PHYTOPLANKTON BIOLOGY HOURGLASS
SEASONALITY CONTINENTAL SHELF WATER COLUMN

ABST Identifications, enumerations, and surface area estimates were made from 216 unpreserved water samples collected from August 1965 through July 1966. Surface, middle, and bottom levels were sampled monthly at six stations located 3, 5, 21, 22, and 42 (two stations) nautical miles (5.6, 9.3, 38.9, 40.7, and 77.8 km) from shore in the Gulf of Mexico between St. Petersburg and Ft. Myers, Florida. The abundance levels, cellular surface areas, and species composition of diatom populations at these stations were examined from the standpoints of seasonality, sampling depths, and salinity; 186 taxa were recorded. Stations located near shore produced the heaviest cell concentrations; those offshore the least. Diatoms (all depths combined) averaged 1.4×10^8 to the 7th μ square/l surface area offshore, 13.6×10^8 to the 7th μ square/l at intermediate locations, and 13.0×10^8 to the 8th μ square/l inshore. Average cell numbers per liter were 8,570, 169,600, and 1,096,600. The average numbers of taxa recorded were 22, 31, and 42. Species with the greatest total surface area per liter of sample were: *Rhizosolenia alata*, *R. setigera*, *R. stolterfothii*, *Skeletonema costatum*, *Leptocylindrus danicus*, *Rhizosolenia fragilissima*, *Hemidiscus hardmanianus*, *Guinardia flaccida*, *Bellerophon malleus*, and *Cerataulina pelagica*.

ANNO

06/11/1987

.....
ACC 2134
TYPE P
YEAR 1975
AUTH SAVAGE, T.;SULLIVAN, J.R.;KALMAN, C.E.;
TITL AN ANALYSIS OF STONE CRAB (MENIPPE MERCENARIA) LANDINGS ON FLORIDA'S WEST C
OAST, WITH A BRIEF SYNOPSIS OF THE FISHERY.

BIBL FLA. MAR. RES. PUBL. NO. 13. 37 P.

KEYW STONE CRAB FISHERY GROWTH

ABST Claws of the stone crab, *Menippe mercenaria*, from the west coast of Florida were examined for handedness, claw type (major or minor) and stridulatory pattern during the 1970-1971 and 1973-1974 commercial seasons. Of the 13,497 claws inspected, 48.4% were right handed major claws. Data is summarized on the proportion of regenerated claws, their sizes, and succession of stridulatory patterns during claw regeneration. A hypothesis is presented to explain the progression of sizes of crabs contributing claws to the fishery through the season.

ANNO

06/11/1987

.....
ACC 2246
TYPE P
YEAR 1971
AUTH SAVAGE, T.;
TITL MATING OF THE STONE CRAB, MENIPPE MERCENARIA (SAY) (DECAPODA; BRACHYURA).

BIBL CRUSTACEANA 20(3):315-316.

KEYW STONE CRAB

BEHAVIOR

REPRODUCTION

ABST The mating of a pair of captive stone crabs, *Menippe mercenaria*, is described. The two crabs were found in the hole of a concrete block in the mating position with the male in the superior position, cradling the female with its walking legs; the female, freshly molted, was inverted in the inferior position with its telson curved over the male's carapace. Both crabs were missing one chela, the absence of which did not appear to prevent either crab from mating successfully. The mating position was maintained for at least 4.5 hr. Another mating pair of stone crabs was observed in the same position in the field.

ANNO

06/11/1987

.....
ACC 2247

TYPE P

YEAR 1968

AUTH SAVAGE, T.;MCMAHAN, M.R.;

TITL GROWTH OF EARLY JUVENILE STONE CRABS, MENIPPE MERCENARIA (SAY, 1819).

BIBL FLA. BD. CONSERV. MAR. RES. LAB., SPEC. SCI. REPT. NO. 21. 17 P.

KEYW STONE CRAB
SALINITY

DEVELOPMENT
GROWTH

TEMPERATURE

ABST Eighty stone crabs (*Menippe mercenaria*) ranging in size from 1.40 to 33.28 mm carapace width were collected from Tampa Bay, Florida, from October 1965 to October 1966 and raised under laboratory conditions. Ecdysis, claw development, pleopod development, and regeneration of appendages were observed daily. Carapace width and length, frontal-orbital width, and frontal width were measured at termination of the study in August 1967. Descriptions are given of carapace growth, cheliped development, and molting frequency.

ANNO

06/11/1987

.....
ACC 2248
TYPE P
YEAR 1978
AUTH SAVAGE, T.; SULLIVAN, J.R.;
TITL GROWTH AND CLAW REGENERATION OF THE STONE CRAB, MENIPPE MERCENARIA.

BIBL FLA. MAR. RES. PUBL. NO. 32. 23 P.

KEYW STONE CRAB GROWTH

ABST Incremental growth of carapace width and length and major and minor claws was measured for laboratory-maintained and feral stone crabs. Morphometric relationships were derived for male and female carapace width against major and minor claw sizes. All slopes were significantly different at the 95% confidence levels except for carapace width against female major and male minor claw sizes. Incremental growth of feral male crabs was greater than that of feral female crabs for all measurements. Laboratory females averaged more carapace width growth but less claw growth than did laboratory males. Laboratory growth of all parameters was more uniform but incrementally less than corresponding field growth. Sexual maturity and legal size are attained at 10 and 30 months, respectively, according to a hypothetical growth plot constructed from incremental growth of several crabs. Stone crab claw regeneration is pictorially described. Minor claws regenerated to a larger size after one and two molts (73.5% and 96.5% of preautotomized sizes) than did major claws (68.6% and 89.0%). Intermolt interval of laboratory crabs increased with larger carapace width sizes. Claw loss decreased or increased the intermolt duration depending upon whether the claw was removed shortly after a molt or later in the cycle.

ANNO

06/11/1987

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ACC 2249

TYPE P

YEAR 1974

AUTH SAVAGE, T.;SULLIVAN, J.R.;KALMAN, C.E.;

TITL CLAW EXTRACTION DURING MOLTING OF A STONE CRAB, MENIPPE MERCENARIA (DECAPODA; BRACHYURA; XANTIDAE).

BIBL FLA. MAR. RES. PUBL. NO. 4. 5 P.

KEYW STONE CRAB

BEHAVIOR

ABST Observations on the molting behavior of a captive adult stone crab, *Menippe mercenaria*, are reported. Sutural structures on proximal claw segments, which allow extraction of larger diameter distal segments during molting, are described. In a survey of 24 brachyuran species, most species with subequal diameter (subcylindrical) claws were found to lack these sutural structures. Those with claws having distally larger diameters (subtriangular) possess sutural structures. Exceptions are noted.

ANNO

06/11/1987

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ACC 874

TYPE

YEAR 1968

AUTH SCAFE, D.W.;

TITL A CLAY MINERAL INVESTIGATION OF SIX CORES FROM THE GULF OF MEXICO.

BIBL PH.D. DISSERTATION. TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. 73 PP.

KEYW MINERAL

SEDIMENT TEXTURE

GRAIN SIZE

CLAY MINERALOGY

ABST Six gravity cores were taken from nearshore and deep sea areas of the Gulf of Mexico between the Mississippi Delta and Sigsbee Deep in an attempt to determine physical, chemical, and mineralogical properties of clay minerals and their geological significance. Tables are included which show particle size distribution for all samples. This study was conducted during 1964.

ANNO

06/11/1987

.....
ACC 603
TYPE
YEAR 1978
AUTH SCHAPERY, R.A.;DUNLAP, W.A.;
TITL PREDICTION OF STORM INDUCED SEA BOTTOM MOVEMENT AND PLATFORM FORCES.

BIBL PROCEEDINGS OFFSHORE TECHNICAL CONFERENCE HOUSTON, TX. PAPER 3259: 1789-1796.

KEYW	GEOLOGY	MODEL	SEDIMENT TRANSPORT
	SEDIMENT	OFFSHORE PLATFORM	STORM
	WAVE		

ABST

ANNO

06/11/1987

.....
ACC 2250

TYPE P

YEAR 1980

AUTH SCHLIEDER, R.A.;

TITL EFFECTS OF DESSICATION AND AUTOSPASY ON EGG HATCHING SUCCESS IN STONE CRABS
, MENIPPE MERCENARIA.

BIBL U.S. FISH. WILDL. SERV. FISH. BULL. 77(3):695-700.

KEYW STONE CRAB

SALINITY

NUTRIENT

MANAGEMENT

STRESS

TEMPERATURE

LARVAE

FISHERY

DO

MORTALITY

ABST Desiccations of eggs by air exposure of ovigerous female stone crabs reduce d larval hatching success in direct relationship to duration of exposure. Experimental claw removal resulted in 34.4% mortality of carbs exposed 2 hrs and 52.9% of crabs exposed 5 hrs. Normal crab autotomic muscular reflex was weakened by desiccation. The compound effects of desiccation with stress from autospasy or claw loss on egg and larval mortality are discussed. Adverse effects on the stone crab fishery by exposure of ovigerous female crabs are noted and protection methods are proposed.

ANNO

06/11/1987

.....
ACC 184
TYPE
YEAR 1981
AUTH SCHMIDLEY, D.J.;
TITL MARINE MAMMALS OF THE SOUTHEASTERN UNITED STATES COAST AND THE GULF OF MEXI
CO.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON D
.C. FWS/OBS-80/41. 163 PP.

KEYW	CETACEAN	MAMMAL	PINNIPED
	BIOLOGY	FAUNA	MARINE
	WHALE	DISTRIBUTION	ABUNDANCE
	SEASONALITY		

ABST All of the available data from a 1979 study/survey on the distribution and abundance of marine mammals in the study area was synthesized for this report. The information for cetaceans and pinnipeds is presented in two sections: an analysis of observations and individual species accounts. The former compares the frequency of strandings, sightings, and captures for each species each month. The species accounts present distribution, abundance, status, seasonal movements, and life history for 35 species.

ANNO

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ACC 2175

TYPE P

YEAR 1979

AUTH SCHMIDT, T.W.;

TITL ECOLOGICAL STUDY OF FISHES AND THE WATER QUALITY CHARACTERISTICS OF FLORIDA BAY, EVERGLADES NATIONAL PARK, FLORIDA.

BIBL U.S. NATL. PARK SERV., SO. FLA. RES. CTR., EVERGLADES NATL. PARK, FINAL PROJ. REPT. RSP-EVER N-36.

KEYW DISTRIBUTION	FISH	SEAGRASS
COMMUNITY	BIOMASS	DIVERSITY
SALINITY	TEMPERATURE	DO
TURBIDITY	ALGAE	WATER QUALITY

ABST An ecological study in Florida Bay from May 1973 to October 1976 was conducted to understand the distribution of Florida Bay fishes in relation to changing environmental conditions. The 1066 square kilometer Florida Bay system was found to support benthic seagrass and macroalgae communities composed primarily of *Thalassia testudinum*, *Diplanthera (Halodule) wrightii* and the carbonate-precipitating green algae *Penicillus* sp. Mixed stands of *T. testudinum* and *D. wrightii* made up nearly 70% of the principal benthic macrofloral communities in the sampled areas of Florida Bay. Ecological studies on the Florida Bay fishes were directed toward acquiring baseline information on their relative abundance by number and biomass, habitat types and the effect of environmental conditions on their distribution. A total of 182,530 fishes representing 128 species and 50 families were collected throughout Florida Bay. Their total biomass was 764.9 kg. An additional 21 species were identified from sport fish surveys and supplemental observations. In general, the greatest numbers and biomass of the fishes occurred during the wet season (summer and fall months) whereas the lowest numbers and biomass appeared during the dry season (winter and spring months). The greatest abundance and diversity of fishes existed in western Florida Bay followed by eastern and central Bay regions, respectively. Certain species and agesizes of fish were abundant only in particular macrobiotic communities and habitats. Salinity was the major environmental limiting factor affecting fish distribution.

ANNO

06/11/1987

.....
ACC 2176
TYPE P
YEAR 1979
AUTH SCHMIDT, T.W.;
TITL SEASONAL BIOMASS ESTIMATES OF MARINE AND ESTUARINE FISHES WITHIN THE WESTER
N FLORIDA BAY PORTION OF EVERGLADES NATIONAL PARK, MAY 1973 TO JULY 1974, P
. 665-672.
IN: PROC. 1ST CONF. SCI. RES. NATL. PARKS. VOL. 1, R.M. LINN (ED.).

BIBL NATL. PARK SER. TRANS. PROC. SER. NO. 5.

KEYW SEASONALITY	BIOMASS	FISH
HYDROGRAPHY	HYDROLOGY	ESTUARY

ABST A total of 95,344 individuals, distributed among 109 species and 45 familie
s were collected by seine and otter trawl. An additional 17 species were o
bserved or collected in preliminary or supplemental studies. The quantitat
ive distribution of marine and estuarine fishes in western Florida Bay was
determined to undergo considerable fluctuation, not only in relation to the
biological features of each unique habitat but were importantly, as they a
re influenced by the cyclicity of the hydroperiods.

ANNO

06/11/1987

.....
ACC 2177

TYPE P

YEAR 1978

AUTH SCHMIDT, T.W.;DAVIS, G.E.;

TITL A SUMMARY OF ESTUARINE AND MARINE WATER QUALITY INFORMATION COLLECTED IN EVERGLADES NATIONAL PARK, BISCAYNE NATIONAL MONUMENT, AND ADJACENT ESTUARIES FROM 1879 TO 1977.

BIBL U.S. NATL. PARK SERV., SO. FLA. RES. CTR., EVERGLADES NATL. PARK, REPT. T-5
19, 79 P.

KEYW HYDROGRAPHIC

ESTUARY

WATER QUALITY

ABST This report summarizes several published and unpublished reports of water quality information in Everglades National Park, Biscayne National Monument, and adjacent estuaries as the first step in the design, development, and implementation of a comprehensive monitoring system. Most of these data were collected in conjunction with short term multidisciplinary investigations. A total of 55 hydrographic studies were conducted in Florida Bay; 17 in the Everglades estuary; 16 in southern Biscayne Bay; 14 in Card-Barnes Sound; 7 in the Big Cypress estuary; and 5 in the area of the northern coral reef tract. A summary of the water quality parameters minimum and maximum was also presented.

ANNO

ACC 2529
TYPE P
YEAR 1980
AUTH SCHMAHL, G.P.;TILMANT, J.T.;
TITL AN INITIAL CHARACTERIZATION OF MACROINVERTEBRATE POPULATIONS ASSOCIATED WITH PATCH REEFS OF BISCAYNE NATIONAL MONUMENT.

BIBL FLA. SCI. 43(SUPPL 1):23.

KEYW DADE	INVERTEBRATE	REEF
DIVERSITY	MOLLUSC	SPONGE
INVERTEBRATE		

ABST Benthic macroinvertebrates, excluding corals, on patch reefs of Biscayne National Monument were studied in an assessment of the impact of recreational use on the reefs. Eight reefs were sampled semiannually beginning in the summer of 1978 with 25-40 one square meter quadrants along a transect. Invertebrate populations were found to be highly variable both spatially and temporally. Density values ranged from 4.8 to 27.0 mean # individuals/sq. meter. Shannon-Weaver diversity indices ranged from 2.26 to 3.22. Molluscs had the highest diversity; sponges exhibited the highest density. A long term monitoring program of invertebrate populations is planned.

ANNO

06/11/1987

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ACC 4132

TYPE P

YEAR 1986

AUTH SCHMIDT, T.W.;

TITL FOOD OF YOUNG LEMON SHARKS, NEGAPRION BREVIROSTRIS (POEY), NEAR SANDY KEY,
WESTERN FLORIDA BAY.

BIBL FLA. SCI. 49(1):7-10.

KEYW COASTAL
FISH
SEAGRASS
SHARK

BIOLOGY
PREDATION
BENTHIC
DEMERSAL FISH

FOOD HABIT
PINK SHRIMP
INVERTEBRATE

ABST The food habits of the lemon shark, *Negaprion brevirostris*, were investigated by examining the stomach contents of juveniles between 58 and 100 cm in total length from shallow grass flats near Sandy Key in western Florida Bay, Everglades National Park, Florida. Small demersal fish, mainly *Opsanus beta* and *Lagodon rhomboides*, and the commercially important pink shrimp, *Penaeus duorarum*, were the most common dietary items of *N. brevirostris* in the coastal marine waters. Small, fast-moving pelagic fishes were also found in the shark's diet.

ANNO

06/11/1987

.....
ACC 2365
TYPE P
YEAR 1963
AUTH SCHOLE, D.W.;
TITL SEDIMENTATION IN MODERN COASTAL SWAMPS, SOUTHWESTERN FLORIDA.

BIBL BULL. AM. ASSOC. PETR. GEO. 47(8):1581-1603.

KEYW COLLIER	PHYSICAL	CHEMICAL
BIOLOGICAL	SEDIMENT	COASTAL
CURRENTS	SALINITY	ESTUARY

ABST Fundamental physical, chemical, mineralogical, and biological characteristics of the sediments in the coastal mangrove swamps of the study area were reported. Surface sediments of the Ten Thousand Islands area were mainly calcareous (shelly) or organic rich (peaty) calcareous quartz sands and silts. Deposits in White Water Bay were principally organic rich shell debris. Surface sediments of the two areas differed chiefly because the prominent source of detrital quartz and strong tidal currents which exist in the Ten Thousand Islands were essentially lacking in White Water Bay.

ANNO

06/11/1987

.....
ACC 4130

TYPE P

YEAR 1982

AUTH SCHOMER, N.S.;DREW, R.D.;

TITL AN ECOLOGICAL CHARACTERIZATION OF THE LOWER EVERGLADES, FLORIDA BAY AND THE
FLORIDA KEYS.

BIBL U.S. FISH AND WILDLIFE SERVICE, FWS/OBS-8258.1. 246 P.

KEYW HYDROGRAPHY

ECOLOGY

SEAGRASS

COASTAL

ESTUARY

GEOLOGY

HABITAT

REEF

COMMUNITY

CORAL

BIOLOGY

MANAGEMENT

BENTHIC

MODEL

ABST A conceptual model of the study area identifies four major ecological zones ; 1) terrestrial and freshwater wetlands, 2) estuarine and saltwater wetlands, 3) Florida Bay and mangrove islands and 4) the Florida Keys. These zones are delineated by differences in basic physical-chemical background factors which in turn promote characteristic ecological communities. The terrestrial and freshwater wetlands support pinelands, sawgrass marshes, wet prairies, sloughs and occasional tree islands. The estuarine and saltwater wetlands support mangrove forests, salt marshes and oscillating salinity systems. Florida Bay exhibits oscillating meso- to hypersaline waters over grass beds on marine lime mud sediments surrounding deeper "lake" areas. The exposed tips of the mud banks frequently support mangrove or salt prairie vegetation. The Florida Keys support almost all of the above communities to some small degree but are characterized by extensive coral reefs. The productivity of these communities with regard to fish and wildlife reflects 1) the diversity and type of habitats available to species that are potentially capable of exploiting them, 2) the degree of alteration of these habitats by man and natural forces, and 3) historical, biogeographic and random factors that restrict organisms to specific environments or prohibit them from exploiting a potential habitat.

ANNO

06/11/1987

.....
ACC 4133
TYPE P
YEAR 1974
AUTH SCHROEDER, W.W.;BERNER, L., JR.;NOWLIN, W.D.;
TITL THE OCEANIC WATERS OF THE GULF OF MEXICO AND YUCATAN STRAIT DURING JULY 1969.

BIBL BULL. MAR. SCI. 24(1):1-19.

KEYW	HYDROGRAPHY	CIRCULATION	CURRENTS
	PHYSICAL	OCEANOGRAPHY	SALINITY
	EDDY	DYNAMIC HEIGHT	

ABST The summer hydrography of the Gulf of Mexico is examined on the basis of R/V Alaminos Cruise 69-A-10 during July 1969, and 127 stations occupied by the USNS Kane during the same summer. The T-S relationships observed indicate three water masses: (1) a single uniform deep-water system; (2) inflowing warmer water of Caribbean type with a high salinity maximum at the Subtropical Underwater core; and (3) Gulf water with a reduced salinity maximum. The waters of the surface mixed layer showed spatial differences reflecting total conditions of inflow and runoff. The horizontal current pattern has been inferred from the depth distribution of the 22 degrees C isothermal surface, from the lateral distribution of salinity at the Subtropical Underwater core, and from the dynamic topography of the sea surface relative to the 750-db surface. During July, two detached rings, a young ring in the north central gulf and the remnant of an older ring in the far western gulf, were present.

ANNO

06/11/1987

.....
ACC 2366

TYPE P

YEAR 1973

AUTH SEAMAN, W.; ADAMS, C.A.; SNEDAKER, S.C.;

TITL THE ROLE OF MANGROVE ECOSYSTEMS: BIOMASS DETERMINATIONS IN SHALLOW ESTUARIE
S--TECHNIQUE EVALUATION AND PRELIMINARY DATA.

BIBL U.S. DEPT. OF INT., BUR. OF SPORT FISH. & WILDL., SO. FLA. ENVIR. PROJ.: EC
OL. REPT. NO. EI-SFEP-74-41, 25 P.

KEYW COLLIER

BIOMASS

FISH

ESTUARY

ABST A new type of portable drop net was developed and used to quantitatively harvest fishes from sample areas in shallow estuaries. The technique was shown to be suitable for sedentary benthic and vegetation inhabiting fishes, including eels, gobies, gerriads, syngnathids and juvenile pinfish, sciaenids, and flatfishes. The technique and preliminary results were evaluated and compared with reports in the literature describing techniques to estimate fish biomass.

ANNO

06/11/1987

.....
ACC 4175

TYPE P

YEAR 1976

AUTH SEESMAN, P.A.; WALKER, J.D.; COLWELL, R.R.;

TITL BIODEGRADATION OF OIL BY MARINE MICROORGANISMS AT POTENTIAL OFFSHORE DRILLING SITES.

BIBL AMER. INSTIT. OF BIOLOGICAL SCIENCES: WASHINGTON, D.C. 293-297.

KEYW OFFSHORE DRILLING
MICROFAUNA

OIL
HYDROCARBON

BACTERIA

ABST

ANNO

06/11/1987

.....
ACC 4131
TYPE P
YEAR 1979
AUTH SERAFY, D.K.;
TITL ECHINOIDS (ECHINODERMATA: ECHINOIDEA). MEMOIRS OF THE HOURGLASS CRUISES.
VOL. V, PART III.

BIBL MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. 120 P.

KEYW ECHINODERMATA	EPIFAUNA	POPULATION DYNAMICS
FOOD HABIT	BIOLOGY	SYSTEMATIC
DISTRIBUTION	HOURGLASS	BENTHIC
LIFE HISTORY	ECOLOGY	CONTINENTAL SHELF

ABST Twenty-five echinoid species including more than 44,000 specimens were collected during Project Hourglass, a 28-month survey of ten stations along two transects (depths 6-73 m) off the west Florida shelf. Differential diagnoses and information on distributions and substrate affinities are provided for all species; notes on diet, growth and reproduction, population dynamics, gear selectivity and morphometric and meristic relationships are provided for more common species. Keys to orders and 91 species and/or subspecies from the Gulf of Mexico or adjacent waters are provided; there is also a glossary of terms. Species and stations clustered into an inner shelf group at 6-18 m, a transitional group of stations at 37 m, and an outer shelf group at 55-73 m. The Gulf of Mexico has few endemic echinoid species; the fauna is composed primarily of species with tropical origins which have invaded the Gulf to varying degrees.

ANNO

06/11/1987

.....
ACC 802

TYPE

YEAR 1983

AUTH SHABICA, S.V.;CATER, N.B.;CAKE, E.W., EDS.;

TITL PROCEEDINGS OF THE NORTHERN GULF OF MEXICO ESTUARIES AND BARRIER ISLANDS RE
SEARCH CONFERENCE, JUNE 13-14, 1983, BIOLOXI, MS.

BIBL NATIONAL PARK SERVICE, SOUTHEAST REGIONAL OFFICE, ATLANTA, GA. 119 PP.

KEYW BARRIER ISLAND
DEVELOPMENT

ESTUARY

OFFSHORE MINERALS

ABST These proceedings include papers given at the Northern Gulf of Mexico Estua
ries and Barrier Islands Research Conference. This conference was held to b
ring together much of the current knowledge of barrier islands and estuarie
s of the northern Gulf. Fifteen of the forty-four presentations given at th
e conference are published here as format papers. The volume is divided int
o four sections; estuaries, offshore petroleum exploration and development,
barrier islands, and resources management.

ANNO

06/11/1987

.....
ACC 4188

TYPE P

YEAR 1980

AUTH SHARP, J.M.;BENDER, M.;APPAN, S.G.;REISH, D.J.;WARD, C.H.;

TITL ECOLOGICAL MONITORING AND ITS APPLICATION TO OFFSHORE DRILLING AND PRODUCTI
ON.

BIBL PROC. WORLD PET. CONGR. 10(5):13-22.

KEYW OFFSHORE DRILLING POLLUTION

ABST

ANNO

06/11/1987

.....
ACC 4289

TYPE P

YEAR 1982

AUTH SHARP, J.M.; APPAN, S.G.;

TITL THE CUMULATIVE ECOLOGICAL EFFECTS OF NORMAL OFFSHORE PETROLEUM OPERATIONS C
ONTRASTED WITH THOSE RESULTING FROM CONTINENTAL SHELF OIL SPILLS.

BIBL PHILOS. TRANS. R. SOC. LOND. SER. B. BIOL. SCI. (LONDON) 297(1087):309-322.

KEYW CONTINENTAL SHELF OIL SPILL PETROLEUM
POLLUTION

ABST

ANNO

06/11/1987

.....
ACC 4301

TYPE P

YEAR 1981

AUTH SHERIDAN, P.F.;RAY, S.M.;

TITL REPORT OF THE WORKSHOP ON THE ECOLOGICAL INTERACTIONS BETWEEN SHRIMP AND BOT-
TOMFISHES, APRIL 1980.

BIBL REPT. NO. NOAA-TM-NMFS-SEFC-63; NOAA-83110310. 140 P.

KEYW SHRIMP

FISHERY

DEMERSAL FISH

FISH

MANAGEMENT

SOCIOECONOMIC

COMMUNITY

DISTRIBUTION

ABST The Shrimp and Bottomfish Workshop was convened in an attempt to determine the best research approach to understanding and defining the interactions between penaeid shrimp and bottomfish communities in the Gulf of Mexico. The shrimp fishery of the Gulf of Mexico is the most valuable fishery in the continental United States. The fisheries are not mutually exclusive, since each takes incidental catches of the other. Shrimp and bottomfishes are found at different abundance levels on the inshore and offshore fishery grounds but utilize similar inshore nursery areas. The impacts of the inshore and offshore shrimp fisheries on bottomfish biomass are unknown. Furthermore, at this time the predatory/prey relationships between shrimp and bottomfishes on the continental shelf are poorly understood. For the above reasons and the need to implement fishery management plans for both shrimp and bottomfishes, it is imperative to develop a firm understanding of the ecology of these two major species groups.

ANNO

06/11/1987

ACC 4229

TYPE P

YEAR 1985

AUTH SHERIDAN, P.F.;TRIMM, D.L.;BAKER, B.M.;

TITL REPRODUCTION AND FOOD HABITS OF 7 SPECIES OF NORTHERN GULF OF MEXICO FISHES

BIBL MAR. SCI. 27(0):175-204.

KEYW REPRODUCTION	FOOD HABIT	FISH
SEA TROUT	SHRIMP	POLYCHAETE
CRUSTACEAN	EPIFAUNA	INFAUNA
GROWTH	CRAB	

ABST Sex ratios, length-weight relationships, maturation, fecundity and food habits were determined from 7400 individuals of 7 spp. of inner continental shelf fishes. Samples were taken from trawl catches at depths of 9-91 m from Pensacola Bay, Florida and Brownsville, Texas (USA) and from the Campeche Bank, Mexico during October 1980-June 1982. Sex ratios favored males in silver seatrout, *Cynoscion nothus*, and Atlantic cutlassfish, *Trichiurus lepturus*, favored females in Atlantic croaker, *Micropogonias undulatus*, hardhead catfish *Arius felis* and longspine porgy, *Stenotomus caprinus*, but were equal in sand trout, *C. arenarius*, and spot, *Leliostomus xanthurus*. Peak gonadal development was found during spring in longspine porgy, summer seatrouts, spring through fall in Atlantic cutlassfish, and fall in spot and Atlantic croaker. The first Gulf of Mexico fecundity data for 6 of these species (2nd record for hardhead catfish) indicated the following maximum fecundities: hardhead catfish 104 eggs; Atlantic maximum fecundities; hardhead catfish-104 eggs; Atlantic cutlassfish-42,100; longspine porgy-43,100; spot 514,400; and Atlantic croaker-1,075,000. Food habits on either side of the Mississippi Delta were related to age, location and time of capture. Atlantic cutlassfish were piscivorous. Sand silver seatrouts preyed on a mixture of fishes and shrimps, and although sand seatrouts did not vary with age and location. Silver seatrouts diets did. The remaining species were benthic feeders. Spot fed primarily on polychaetes and detrital matter and secondarily on crustaceans.

ANNO

06/11/1987

.....
ACC 4244
TYPE P
YEAR 1983
AUTH SHERMAN, K.;LASKER, R.;RICHARDS, W.;KENDALL, A.W., JR.;
TITL ICHTHYOPLANKTON AND FISH RECRUITMENT STUDIES IN LARGE MARINE ECOSYSTEMS.

BIBL MAR. FISH REV. 45(10-12):1-26

KEYW ICHTHYOPLANKTON	FISH	RECRUITMENT
MANAGEMENT	FISH EGG	FISH LARVAE
SPAWNING		

ABST Within the Fishery Management Zone of the United States, seven large marine ecosystems (LME's)--Insular Pacific, Eastern Bering Sea, Gulf of Alaska, California Current, Gulf of Mexico, Southeast Atlantic Shelf, and Northeast Atlantic Shelf--support multibillion dollar fisheries, operating at different levels. To improve abundance forecasts of recruitment success of incoming year classes, two assessment strategies are used by NMFS in the LME's: 1) Fisheries independent surveys of fish eggs and larvae on mesoscale grids of 20-100 km at frequencies of two to 12 times a year to obtain estimates of the size of the spawning adult stocks, and 2) other studies within the meso scale survey matrix aimed at discovering the processes controlling the annual recruitment success of new year classes.

ANNO

06/11/1987

.....
ACC 886

TYPE

YEAR 1965

AUTH SHIER, C.F.;

TITL A TAXONOMIC AND ECOLOGICAL STUDY OF SHALLOW WATER HYDROIDS OF THE NORTHEAST
ERN GULF OF MEXICO.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL. 170 PP.

KEYW BENTHIC FAUNA

BENTHIC FLORA

SEDIMENT

SALINITY

TEMPERATURE

HYDROID

ABUNDANCE

ABST Monthly samples of shallow water hydroids were collected from 6 station in the northeastern Gulf of Mexico for one year beginning in July, 1963. Environmental notes on temperature, salinity, abundance, and bottom type were kept.

ANNO

06/11/1987

.....
ACC 2367
TYPE P
YEAR 1969
AUTH SHIER, D.E.;
TITL VERMETID REEFS AND COASTAL DEVELOPMENT IN THE TEN THOUSAND ISLANDS, SOUTHWE
ST FLORIDA.

BIBL GEOL. SOC. AM. BULL. 80:485-508.

KEYW COLLIER	SEDIMENT	REEF
TEMPERATURE	WAVE	TIDE
CURRENTS	SALINITY	GEOLOGIC HISTORY
SEA LEVEL	EUSTATIC CHANGE	

ABST Sediments underlying the Ten Thousand Islands have been deposited over the past 5000 years during a marine transgression. Macrofauna and microfauna were used to interpret the depositional environment for these sediments. With the transgression of marine waters into the area about 3000 years ago, a chain of gastropod (*Vernetus nigricans*) reefs formed along the coastline. During a 6 ft. increase in sea level, the reefs have grown larger and more numerous to form a barrier reef which has greatly influenced sedimentation throughout the Ten Thousand Islands. A system of bay bottom sands and silts, tidal pass sands, oyster bars, and mangrove peats has accumulated behind the reef barrier. Wave resistant reef cores, consisting of fused vermetid tubes, were built up as much as 9 ft thick during the period of sea level rise. The ecology of *V. (Thyleodus) nigricans* is discussed.

ANNO

06/11/1987

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ACC 2178

TYPE P

YEAR 1977

AUTH SHINN, E.A.; HUDSON, J.H.; HALLEY, R.B.; LIDZ, B.;

TITL TOPOGRAPHIC CONTROL AND ACCUMULATION RATE OF SOME HOLOCENE CORAL REEFS: SOUTH FLORIDA AND DRY TORTUGAS.

BIBL IN: PROC. THIRD INTERNAT. CORAL REEF SYMP., MIAMI, FLA. 2:1-7.

KEYW REEF

CORAL

MORPHOLOGY

GEOLOGIC HISTORY

ABST Examination of cores drilled on 6 reef sites in the Florida Reef Tract and Dry Tortugas showed that reef morphology is determined primarily by underlying topography. Reef accumulation rates, determined from carbon-14 dating of coral, ranged from 0.38 m/1000 years in thin Holocene reefs to 4.85 m/1000 years in thicker reefs. Areas of slow accumulation rates were characterized by a higher incidence of cementation and alteration of corals than in areas of rapid accumulation rates. The primary reef builder in Florida, *Acropora palmata*, was absent at most reef sites, including the 13 m thick Holocene reef at Dry Tortugas. Instead, the chief reef builders are the same as those contained in the Pleistocene Key Largo formation, which has been considered a fossilized patch reef complex.

ANNO

06/11/1987

.....
ACC 2470
TYPE P
YEAR 1963
AUTH SHINN, E.A. ;
TITL SPUR AND GROOVE FORMATION ON THE FLORIDA REEF TRACT.

BIBL J. SEDIMENT. PETROL. 33(2):291-303.

KEYW MONROE	REEF	ALGAE
WAVE	CORAL	GROWTH
MORPHOLOGY		

ABST The internal structure of submarine reef spurs (10-12 ft high, <50 ft wide) from two Key Largo coral reefs was investigated by explosive dissection. The spurs were composed mainly of *Acropora palmata* encrusted by *Millepora* and calcareous algae. A theory of spur and groove formation is proposed based on oriented growth of *A. palmata*. On the seaward slope of reefs the branches of *A. palmata* orient in the direction of prevailing seas to withstand wave thrust. Continued unidirectional growth results in coalescence of individual colonies into fingerlike spurs that project up to 200 ft into oncoming seas. The corals die from crowding when they reach the surface and later become encrusted with *Millepora* and calcareous algae. Coral growth in the grooves between spurs is prevented by moving sand.

ANNO

06/11/1987

.....
ACC 2471
TYPE P
YEAR 1966
AUTH SHINN, E.A.;
TITL CORAL GROWTH-RATE, AN ENVIRONMENTAL INDICATOR.

BIBL J. PALEONTOL. 40(2):233-240.

KEYW MONROE	CORAL	GROWTH
TEMPERATURE	REEF	SEASONALITY

ABST The growth rate of the branching coral, *Acropora cervicornis* transplanted into two areas of Key Largo Dry Rocks reef where they do not normally grow, was measured 12 times between December 1960 and February 1961 and compared to a control group living on a healthy reef. Growth of transplanted corals averaged less than half that of controls, which grew 10 cm/yr. One transplanted group grew as fast as the control group for 2 months, but died after 10 months when water temperature declined to 13.3 degrees C. Seasonal variation in coral growth at all stations generally corresponded to temperature fluctuations. Growth rate was highest when temperature ranged from 28 to 30 degrees C. This transplanting method is proposed for use in determining growth tolerances of other reef building organisms.

ANNO

06/11/1987

.....
ACC 2472
TYPE P
YEAR 1972
AUTH SHINN, E.A.;
TITL CORAL REEF RECOVERY IN FLORIDA AND IN THE PERSIAN GULF.

BIBL ENVIRON. CONSERV. DEPT., SHELL OIL CO., HOUSTON, TX. 9 P.

KEYW MONROE CORAL REEF
 TEMPERATURE GROWTH STORM EVENT
 HURRICANE

ABST A long term study (1960-1975) in the Florida Keys showed rapid recovery of coral reefs after large scale destruction by hurricanes. Widespread scattering of live fragments initiated new colonies, promoting rapid recovery. Recovery of reefs from low temperature-induced death in the Persian Gulf was compared with reef recovery from storm destruction in Florida. Rapid *Acropora cervicornis* recovery was due to a high rate of growth (10 cm/yr) and branch formation, confirmed by 10 years of serial underwater photographs. It is suggested that standing crops of restocked or transplanted reefs could be predicted with more precise growth measurements of *A. cervicornis* and other common reef building corals.

ANNO

06/11/1987

.....
ACC 2473
TYPE P
YEAR 1980
AUTH SHINN, E.A.;
TITL GEOLOGIC HISTORY OF GRECIAN ROCKS, KEY LARGO CORAL REEF MARINE SANCTUARY.

BIBL BULL. MAR. SCI. 30(3):646-656.

KEYW MONROE	MORPHOLOGY	CORAL
GEOLOGY	GEOLOGIC HISTORY	GROWTH

ABST Seven core holes (8-13 m deep) were drilled across the major ecological zones of Grecian Rocks in Key Largo Coral Reef Marine Sanctuary to determine the internal morphology and age. Coral facies in the Holocene reef were found to correspond closely to facies in the underlying Pleistocene material. The five major ecologic zones and their characteristic coral compositions are described. Cores showed that all zones except the massive coral head zone are thin layers overlying an accumulation of carbonate sand and rubble. Carbon 14-dating indicated that growth of the reef began about 6,000 years before present.

ANNO

.....
ACC 2474
TYPE P
YEAR 1981
AUTH SHINN, E.A.;HUDSON, J.H.;ROBBIN, D.M.;LIDA, B.;
TITL SPURS AND GROOVES REVISITED: CONSTRUCTION VERSUS EROSION, LOOE KEY REEF, FLORIDA.

BIBL FLORIDA INTERNAT. CORAL REEF SYMP.

KEYW MONROE CARBONATE REEF
CORAL TOPOGRAPHY MORPHOLOGY
GEOLOGIC HISTORY SEA LEVEL

ABST Six core holes drilled into a spur and groove system at Looe Key Reef, Florida, indicated that there was at least 5 meters of underlying carbonate reef sand, the base of which was flat and therefore could not affect the initiation or spacing of spurs and grooves. Only the seaward ends of the spurs were attached to underlying bedrock. *Acropora palmata*, a coral formerly abundant on the reef, composed the interior of the *Millepora* encrusted spurs. It is proposed that the most shallow spurs and grooves in active coral reef areas of the Caribbean are not initiated or regulated by bedrock topography, but are constructional in origin. Spurs and grooves in non-coral reef areas adjacent to shorelines, which have distinctly different spacing are believed have an erosional origin. Spurs and grooves in deeper fore-reef areas off Florida with a morphology similar to that of nearshore systems, therefore, formed from erosion during periods of lower sea level.

ANNO

06/11/1987

.....
ACC 4189

TYPE P

YEAR 1980

AUTH SHINN, E.A.; HUDSON, J.H.; ROBBIN, D.M.; LEE, C.K.;

TITL DRILLING MUD PLUMES FROM OFFSHORE DRILLING OPERATIONS: IMPLICATIONS FOR CORAL SURVIVAL.

BIBL ELSEVIER OCEANOGR. SER. (AMSTERDAM) 27A(VI):471-496,531-568.

KEYW CORAL

DRILLING MUD

POLLUTION

DRILLING FLUID

TURBIDITY

ABST

ANNO

06/11/1987

.....
ACC 826
TYPE
YEAR N/AP
AUTH SHIPP, R.L.;
TITL THE BULLDOZER LOBSTER, SYLLARIDES, OF THE NORTHEASTERN GULF.

BIBL N/A

KEYW BENTHIC FAUNA TEMPERATURE CRUSTACEAN
 BEHAVIOR FOOD HABIT

ABST This study is designed to determine the population size and distribution of bulldozer lobsters, *Syllarides*, in the northeastern Gulf of Mexico. Data collection began in 1972. Trawl studies, traps and submarine observations have been utilized to date. Laboratory observations of feeding preferences and social behavior have been made. Trawl data including species lists of vertebrates and invertebrates, depth and temperature are available.

ANNO

06/11/1987

.....
ACC 1054
TYPE
YEAR 1979
AUTH SHIPP, R.L.;BORTONE, S.;
TITL CHAPTER 19. DEMERSAL FISH. P. 861-867.

IN: THE MISSISSIPPI, ALABAMA, FLORIDA OUTER CONTINENTAL SHELF
BASELINE ENVIRONMENTAL SURVEY.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C.

KEYW BIOLOGY	FISH	SPECIES COMPOSITION
TAXONOMY	ZOOLOGY	DEMERSAL FISH
MAFLA	LENGTH	WEIGHT

ABST Demersal fishes from the MAFLA lease area were collected during four sampling periods: summer 1976, summer 1977, fall 1977, winter 1978. All specimens were identified, weighed, measured, and archived. Data were submitted to the data management group of Dames & Moore for analysis, which were then interpreted. Initial indications are of significant range extensions of fishes in the northeastern Gulf of Mexico, especially in the vicinity of the northeast segment of the De Soto Canyon. Several undescribed species were discovered during the effort period. Families containing species of special concern to the MAFLA goals are discussed. Data analysis techniques are utilized describing various biological parameters. In addition, samples collected during 1975-1976 as a component of an earlier MAFLA effort were incorporated into the analysis.

ANNO

06/11/1987

.....
ACC 2135
TYPE P
YEAR 1978
AUTH SHIPP, R.L.;BORTONE, S.A.;
TITL DEMERSAL FISHES OF THE MAFLA LEASE AREA. VOL. II, CHAPT. 19.

IN: MAFLA FINAL REPORT (THE MISSISSIPPI, ALABAMA, FLORIDA OUTER
CONTINENTAL SHELF BASELINE ENVIRONMENTAL STUDY), 1977/1978.

BIBL PREPARED BY DAMES AND MOORE, INC. FOR BLM CONTRACT #AA550-CT7-34. P. 848-8
88.

KEYW	DEMERSAL FISH	MAFLA	DISTRIBUTION
	FISH	WEIGHT	LENGTH

ABST Demersal fishes from the MAFLA lease area were collected, identified, weighed, measured and archived. Initial indications are of significant range extensions of fishes in the northeastern Gulf of Mexico. Several undescribed species were collected. Species associations were analyzed and a complete species list compiled.

ANNO

06/11/1987

.....
ACC 2136

TYPE P

YEAR 1978

AUTH SHOKES, R.F.;HANSEN, N.;ABUSAMARA, A.;REED, J.;

TITL BARIUM AND VANADIUM IN SURFICIAL SEDIMENTS. MAFLA BENCHMARK SURVEY, 1977-1978. FINAL REPORT. VOL. II, CHAPT.4.

IN: MAFLA FINAL REPORT (THE MISSISSIPPI, ALABAMA, FLORIDA OUTER CONTINENTAL SHELF BASELINE ENVIRONMENTAL STUDY), 1977/1978.

BIBL PREPARED BY DAMES AND MOORE, INC., FOR BLM CONTRACT #AA550-CT7-34. P. 375-405.

KEYW BARIUM	CONTINENTAL SHELF	DISTRIBUTION
SEDIMENT	POLLUTION	OFFSHORE DRILING
DRILLING MUD	METAL	TRACE METAL

ABST Concentration data for total and leachable sedimentary barium and vanadium on the outer continental shelf were obtained. No anthropogenic influences on the distribution of these two elements were observed. The low amounts of leachable barium found over the study area make it a potentially sensitive monitoring tool to safeguard the area during oil and gas production.

ANNO

06/11/1987

.....
ACC 2137

TYPE P

YEAR 1978

AUTH SHOKES, R.F.;SIMS, R.R.;HANSEN, N.;ABUSAMARA, A.;REED, J.;

TITL BARIUM AND VANADIUM IN DEMERSAL FISH AND MACROEPIFAUNA. MAFLA FINAL REPORT
. (THE MISSISSIPPI, ALABAMA, FLORIDA OUTER CONTINENTAL SHELF BASELINE ENVI
RONMENTAL STUDY 1977/1978).

BIBL PREPARED BY DAMES AND MOORE, INC. FOR BLM CONTRACT #AA550-CT7-34. P. 464-49
3.

KEYW BARIUM

DEMERSAL FISH

EPIFAUNA

SEASONALITY

GEOGRAPHIC

SPONGE

MOLLUSC

CRUSTACEAN

ECHINODERM

METAL

TRACE METAL

ABST Barium and vanadium concentration data from demersal fish and macroepifauna
from the southwest Florida shelf are presented. Macroepifauna demonstrate
d no observable seasonal or geographic trends. Syacium papillosum, the onl
y demersal fish sampled extensively, revealed no geographic trends for eith
er metal, but experienced lower barium tissue burdens in the winter than in
the summer. This may have been caused by specimen maturity, feeding habit
s, or some combination of the two.

ANNO

06/11/1987

.....
ACC 433
TYPE
YEAR 1982
AUTH SIKORA, W.B.; SIKORA, J.P.;
TITL HABITAT SUITABILITY INDEX MODELS: SOUTHERN KINGFISH.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C. FSW-OBS-82-10.31 22 PP.

KEYW	BIOLOGY	ECOLOGY	FISH
	MANAGEMENT	RESOURCE	HABITAT
	LIFE HISTORY	MODEL	FISHERY

ABST

ANNO

06/11/1987

.....
ACC 2348

TYPE P

YEAR 1979

AUTH SILBERMAN, L.Z.;

TITL A SEDIMENTOLOGICAL STUDY OF THE GULF BEACHES OF SANIBEL AND CAPTIVA ISLANDS
, FLORIDA.

BIBL FLA. STATE UNIV. M.S. THESIS.

KEYW LEE
TRANSPORT

SEDIMENT
DISTRIBUTION

GRAIN SIZE

ABST One hundred and sixty sediment samples collected along the Gulf of Mexico beaches of Captiva and Sanibel Islands, Florida were used to characterize the sediments of the upper and mid beach, swash zone, and offshore bar. Statistical analysis of grain size parameters indicated a net sediment transport to the south and east. Detailed descriptions are given of local sediment distribution and transport processes.

ANNO

06/11/1987

.....
ACC 1095
TYPE
YEAR 1972
AUTH SIMMONS, A.T.;
TITL THE DYNAMICS OF NITROGEN AND PHOSPHORUS IN A BAYOU ESTUARY.

BIBL MASTER'S THESIS. UNIVERSITY OF WEST FLORIDA, PENSACOLA, FL. 46 PP.

KEYW AMMONIA	DISSOLVED OXYGEN	NITRATE
NITRITE	NITROGEN	ORTHOPHOSPHATE
PHOSPHORUS	PHOTOSYNTHESIS	SALINITY
TEMPERATURE	NUTRIENT	ESTUARY

ABST The nitrogen and phosphorus cycles and dynamics were described for Bayou Texar, Florida, by monitoring levels of nitrate, nitrite, ammonia, orthophosphate, organic nitrogen, organic phosphorus at five stations from June, 1971 to February, 1972.

ANNO

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ACC 2251
TYPE P
YEAR 1982
AUTH SIMON, J.L.;MAHADEVAN, S.;
TITL BENTHIC MACROINVERTEBRATES.

BIBL PRESENTED AT TAMPA BAY AREA SCIENTIFIC INFORMATION SYMPOSIUM. TAMPA, FLORIDA.

KEYW INVERTEBRATE	SEAGRASS	COMMUNITY
LIFE HISTORY	ABUNDANCE	DIVERSITY
POLLUTION	PINK SHRIMP	STONE CRAB

ABST Approximately 70 publications on benthic macroinvertebrates from Tampa Bay were reviewed. Subjects of the studies were diverse, including commercially important species (*Penaeus duorarum*, *Crassostrea virginica*, *Menippe mercenaria*), seagrass associated fauna, and large scale benthic infaunal communities. Principal objectives of these investigations included life history studies, studies on recolonization and repopulation, and evaluations of dredge/fill, sewage, phosphoric wastes, and thermal effects. Based on these studies, the following general conclusions were reached: 1) approximately 1,200 infaunal and epifaunal benthic species inhabit Tampa Bay; 2) seasonal fluctuations in the abundance and diversity of benthic macroinvertebrates are pronounced; 3) long term (about 5 yrs) cyclic defaunation occurs regularly; 4) seagrass beds have declined with a subsequent decrease in faunal diversity; 5) opportunistic and "pollution indicator" species are abundant at several locations, particularly in Hillsborough Bay; 6) faunal distribution appears to be controlled by sediment type; 7) species richness increases and abundance decreases on a north to south gradient in the bay. Reasons for this gradient are proposed and directions for future research in the bay are recommended.

ANNO

06/11/1987

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ACC 2280

TYPE P

YEAR 1972

AUTH SIMON, J.L.; DAUER, D.M.;

TITL A QUANTITATIVE EVALUATION OF RED TIDE INDUCED MASS MORTALITIES OF BENTHIC I
NVERTEBRATES IN TAMPA BAY, FLORIDA.

BIBL ENVIRON. LETT. 3(4):229-234.

KEYW RED TIDE

MORTALITY

DISSOLVED OXYGEN

BENTHIC

FISH

INVERTEBRATE

INFAUNA

ABST Infaunal invertebrate mortalities with a *Gymnodium breve* outbreak and fish kill were reported. The results indicated that the normal pre-red tide assemblage was essentially destroyed. Of the most abundant 22 original species, only 5 remained (the polychaetes *Travisia*, *Scolelepis*, and *Laeonereis*; the brachiopod *Glottidia*). All but *Laeonereis* were present in reduced numbers compared to before the outbreak. Subsequent sampling in September indicated that some species were still dying off. It was believed that not all invertebrate infaunal species are equally affected by the red tide toxins or anaerobiosis. Laboratory studies were determined to be needed to confirm the field observations reported and to determine whether the mortality recorded is caused directly by *G. breve* toxins or by the anaerobiosis accompanying the fish kill.

ANNO

06/11/1987

.....
ACC 2281

TYPE P

YEAR 1977

AUTH SIMON, J.L.; DAUER, D.M.;

TITL REESTABLISHMENT OF A BENTHIC COMMUNITY FOLLOWING NATURAL DEFAUNATION.

BIBL BELLE W. BARUCH SYMP. MAR. SCI., 6TH, UNIV. SO. CAROLINA. 1977. ECOLOGY OF
MARINE BENTHOS. P. 139-154.

KEYW BENTHIC	COMMUNITY	DEFAUNATION
INFAUNA	POLYCHAETE	MOLLUSC
CRUSTACEA	TEMPERATURE	SALINITY
SEDIMENT		

ABST A general overview of the process of repopulation following a natural defaunation and a comparison of responses shown by different taxa of benthic in fauna was presented. The fauna made a rapid recovery in terms of species numbers and composition, returning to much the same assemblage as prior to the red tide outbreak. Polychaetes were the most rapid colonists both in terms of the number of species and number of individuals. Molluscs and amphipods appeared later and also were significantly affected by seasonal patterns of reproduction, and thus dispersal. Only the polychaetes, other crustacea, and the total fauna showed species colonization patterns indicative of equilibrium.

ANNO

06/11/1987

.....
ACC 2035
TYPE P
YEAR 1966
AUTH SIMS, H.W., JR.;
TITL THE FLORIDA SPINY LOBSTER.

BIBL FLA. BD. CONSERV. MAR. LAB., SALT WATER FISH. LEAFL. NO. 7. 5 P.

KEYW DISTRIBUTION SPINY LOBSTER FISHERY
 FISHING GEAR CRUSTACEA

ABST This leaflet, intended for public distribution, is a general review of the Florida spiny lobster, *Panulirus argus*, and the spiny lobster fishery. *P. argus* and similar species in Florida waters are described and a brief history of the spiny lobster is given. The fishing gear and methods of the lobster industry are summarized and the possibility of future lobster cultivation is discussed.

ANNO

06/11/1987

.....
ACC 4329
TYPE P
YEAR 1978
AUTH SINCLAIR, P.C.;
TITL VORTEX STRUCTURE AND DYNAMICS OF FLORIDA KEYS WATERSPOUTS: 1974 FIELD EXPERIMENT.

BIBL FINAL REPT. FOR NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION. 107 P.

KEYW MODEL METEOROLOGICAL

ABST From direct penetrations of the waterspout funnel by specially instrumented aircraft, a quantitative description of the dynamic-thermodynamic structure of the waterspout has been developed. The Navier-Stokes equations of motion for the waterspout vortex are simplified by an extensive order of magnitude analysis of each term in the equations. The reduced set of equations provides a realistic mathematical model of the waterspout vortex. Further simplification shows that the cyclostrophic-Rankine combined vortex model accounts for, on the average, approximately 63% of the measured pressure drop from the environment to the waterspout core. The penetration measurements show that the waterspout funnel consists of a strong rotary and vertical field (radial component is smaller) of motion which results in a combined flow pattern similar to that of a helical vortex. In general, the measurements indicate that this one-cell vortex structure is the dominant configuration. The temperature and pressure structure show that the waterspout, like the dust devil, is a warm core, low pressure vortex.

ANNO

06/11/1987

.....
ACC 714

TYPE

YEAR 1969

AUTH SKUD, B.E.; WILSON, W.B.;

TITL ROLE OF ESTUARINE WATERS IN GULF FISHERIES.

BIBL TRANS., 25TH NORTH AM. WILDLIFE NAT. RESOUR. CONF. 25:320-326.

KEYW BIOLOGY
PRODUCTIVITY

ESTUARY

FISHERY

ABST

ANNO

06/11/1987

.....
ACC 2036
TYPE P
YEAR 1958
AUTH SMITH, F.G.W.;
TITL THE SPINY LOBSTER INDUSTRY OF FLORIDA.

BIBL FLA. BD. CONSERV. MAR. LAB., EDUC. SER. NO. 11. 34 P.

KEYW SPINY LOBSTER	LIFE HISTORY	HABITAT
MIGRATION	FISHERY	CRUSTACEA
SOCIOECONOMIC		

ABST This review summarizes information on the spiny lobster, *Panulirus argus*, and the spiny lobster industry in Florida. A classification and description of *P. argus* is given and a key to the western Atlantic spiny lobsters is provided. The life history, habitat, migrations, and sexual characteristics of *P. argus* are summarized. The possibility of cultivating spiny lobsters and the fishing methods used in the industry are discussed. The economic value of the spiny lobster fishery in Florida is given and the regulations governing the fishery are presented.

ANNO

06/11/1987

.....
ACC 2138
TYPE P
YEAR 1954
AUTH SMITH, F.G.W.;
TITL GULF OF MEXICO MADREPORARIA.

IN: GULF OF MEXICO, ITS ORIGIN, WATERS, AND MARINE LIFE.

BIBL FISH. BULL. U.S. 55(89):291-295.

KEYW	BIOLOGY	DISTRIBUTION	GROWTH
	TEMPERATURE	SALINITY	TURBIDITY
	CURRENTS	LIGHT	CORAL

ABST The general biology of Madreporaria in the Gulf of Mexico is discussed. Features studied included distribution, growth rates, and limiting factors including temperature, salinity, turbidity, current velocity, and light intensity. Both hermatypic and ahermatypic corals are described. Species lists are given of both types of corals found in the Gulf of Mexico.

ANNO

06/11/1987

.....
ACC 2139
TYPE P
YEAR 1954
AUTH SMITH, F.G.W.;
TITL BIOLOGY OF SPINY LOBSTER.

IN: GULF OF MEXICO, ITS ORIGIN, WATERS, AND MARINE LIFE.

BIBL FISH. BULL. U.S. 55(89):463-465.

KEYW SPINY LOBSTER	BIOLOGY	DISTRIBUTION
HABITAT	LIFE HISTORY	MIGRATION
GROWTH	FOOD HABIT	

ABST The biology of *Panulirus argus* (in the Gulf of Mexico) is discussed. Several aspects of the distribution and the factors determining distribution are described. Other major categories that are discussed include sexual characters, habitat characteristics, food and enemies, breeding habits and life history, molting, migrations, and growth rates.

ANNO

06/11/1987

.....
ACC 2140
TYPE P
YEAR 1954
AUTH SMITH, F.G.W.;
TITL BIOLOGY OF THE COMMERCIAL SPONGES.

IN: GULF OF MEXICO, ITS ORIGIN, WATERS, AND MARINE LIFE.

BIBL FISH. BULL. U.S. 55(89):263-266.

KEYW BIOLOGY	SPONGE	REPRODUCTION
DEVELOPMENT	MORPHOLOGY	PHYSIOLOGY
DISTRIBUTION	COMMUNITY	

ABST General aspects of the biology of sponges found in Gulf of Mexico waters are described. Discussion includes reproduction, development, morphology, physiology, distribution, and roles in the community. Particulars of each area of discussion are drawn from work by other researchers.

ANNO

06/11/1987

.....
ACC 2141
TYPE P
YEAR 1978
AUTH SMITH, G.;
TITL ECOLOGY AND DISTRIBUTION OF MID-EASTERN GULF OF MEXICO REEF FISHES.

BIBL PH.D. DISSERTATION. UNIVERSITY OF SOUTHERN FLORIDA.

KEYW ECOLOGY	DISTRIBUTION	REEFFISH
ICHTHYOFAUNA	SEASONALITY	DIVERSITY
RED TIDE	MODEL	

ABST A study of reef fish in the eastern Gulf of Mexico between May 1970 and August 1976 yielded 102 species, representing 38 families. The ichthyofauna of the eastern Gulf was compared with those of the western Gulf and western Atlantic. Spatial trends in species composition and abundance were cited. Seasonal variations in diversity and abundance were limited, except during a dinoflagellate bloom (red tide) which occurred in the summer of 1971. Reef fish colonization data were analyzed for applicability to the MacArthur-Wilson species equilibrium model developed for insular biotas.

ANNO

06/11/1987

.....
ACC 2142
TYPE P
YEAR 1976
AUTH SMITH, G.B.;
TITL ECOLOGY AND DISTRIBUTION OF EASTERN GULF OF MEXICO REEF FISHES.

BIBL FLA. DEPT. NAT. RESOUR. MAR. RES. LAB. PUBL. 19. 78 P.

KEYW ECOLOGY DISTRIBUTION REEFFISH
 ICHTHYOFAUNA

ABST One hundred one reef fish species representing 38 families were collected and/or observed at 12-40 m depths in the eastern Gulf of Mexico. Comparisons of the eastern Gulf and other western Atlantic ichthyofaunas revealed greater intra-Gulf homogeneity and Caribbean-West Indian affinity than previously suspected. Preliminary observations at the Florida Middle Ground indicate a diverse and abundant resident tropical ichthyofauna including numerous insular (West Indian) elements rare or absent at other studied Gulf reefs.

ANNO

06/11/1987

.....
ACC 2282

TYPE P

YEAR 1983

AUTH SMITH, S.J.;SCHUSTER, B;BROS, W.E.;

TITL COMPARISON OF TWO SAMPLING TECHNIQUES FOR FOULING COMMUNITY STUDIES.

BIBL FLA. SCI. 46(SUPPL. 1):21.

KEYW FOULING

FAUNA

ABST Quadrant and point sampling methods were compared in their estimation of percent cover and species richness of fouling communities. The quadrant sampling technique was found to determine species richness more accurately than the point sampling method. Species richness was determined for total organisms and for 3 subgroups based on motility; motile, sessile, and semi-sessile. Both methods were compared to a planimetric control for estimates of percent cover for sessile species.

ANNO

06/11/1987

.....
ACC 2314
TYPE P
YEAR 1975
AUTH SMITH, G.B.;
TITL RED TIDE AND ITS IMPACT ON CERTAIN REEF COMMUNITIES IN THE MID EASTERN GULF
OF MEXICO.

BIBL ENVIRON. LETT. 9(2):141-152

KEYW SARASOTA	RED TIDE	REEF
COMMUNITY	SEASONALITY	RECRUITMENT

ABST An investigation was made of the effect of the 1971 red tide to reef communities off Sarasota, Florida. Under appropriate environmental conditions, local extinctions may occur due to the effects of red tide. Some groups recolonize quickly, while others may take several years. Seasonal progression and succession may temporarily result in floral and faunal communities quite different from those prior to the red tide. It is suggested that the periodic occurrence of red tide may prevent the evolution of an equilibrium reef community.

ANNO

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ACC 4134

TYPE P

YEAR 1979

AUTH SMITH, G.B.;

TITL RELATIONSHIP OF EASTERN GULF OF MEXICO REEF-FISH COMMUNITIES TO THE SPECIES
EQUILIBRIUM THEORY OF ISLAND BIOGEOGRAPHY.

BIBL J. BIOGEOGR. 6:49-61.

KEYW BIOLOGY

REEF

FISH

ECOLOGY

REEFFISH

BIOGEOGRAPHY

RED TIDE

LIVE BOTTOM

BENTHIC

ABST A 1971 summer red tide (*Gymnodinium breve* Davis) and associated stress conditions resulted in mass mortalities and near extirpation of reef biotas from at least 1536 km square of central West Florida Shelf. An estimated 77% of the recent fish species perished at shallow-water (12-18 m depths) reefs. Reef-fish colonization was monitored irregularly (1-6 month intervals) at two reefs for 3 years after the red tide. In addition, species censuses were taken 4 years after defaunation at one reef and 5 year later at both reefs. Since eastern Gulf of Mexico reefs occur as isolated patches, reef-fish colonization data were analysed in light of MacArthur and Wilson's species equilibrium model developed for insular biotas. Certain features of reef-fish colonization appeared consistent with the MacArthur-Wilson model:

(1) an increasing convex colonization curve, (2) an observed immigration (colonization) rate decreasing with time, (3) differences between colonization and decolonization (observed extinction) rate decreasing through time, and (4) attainment and maintenance of a rather stable species richness after 15 months colonization similar to the pre-defaunation level. However, other aspects of reef-fish colonization did not seemingly fulfill basic requirements of the model: (1) an erratic decolonization rate indicating no tendency to increase through time, (2) an observed species turnover rate considerably less than theoretical predictions, and (3) development of a compositionally stable community nearly identical with that existing prior to the red tide.

ANNO

06/11/1987

.....
ACC 4135
TYPE U
YEAR 1979
AUTH SMITH, M.W.;HUNT, J. L.;
TITL MARQUESAS KEY WELL SITE SURVEY REPORT.

BIBL U.S. DEPARTMENT OF INTERIOR, BUREAU OF LAND MANAGEMENT, NEW ORLEANS
OCS OFFICE. 37 P.

KEYW OIL EXPLORATION	DRILLING IMPACT	DRILL CUTTING
OFFSHORE DRILLING	REEF	DRILLING MUD
SEAGRASS	ALGAE	ARTIFICIAL HABITAT

ABST An exploratory drill site off Marquesas Key, Florida, was inspected by diving scientists on 17 and 16 May 1979 to determine if any significant environmental alterations had occurred due to recent well drilling and attendant activities. The drill site was elevated three or four feet relative to the surrounding bottom and appeared as a white sand patch. Hauled-in fill rock contributed to the drill pad elevation. The drill site was covered by sea grasses and macroalgae. A pile of 106 concrete sacks found near the drill site attracted a variety of reef fishes. Sediment samples from near the drill site did not reveal elevated barium concentrations. Oceanographic and substrate factors, not toxic agents, prohibited the development of a reef-type community on the drill pad. Debris, including a drill bit were strewn about the drill site.

ANNO

06/11/1987

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ACC 4136

TYPE P

YEAR 1974

AUTH SMITH, R.E., ED.;

TITL PROCEEDINGS OF MARINE ENVIRONMENTAL IMPLICATIONS OF OFFSHORE DRILLING IN THE EASTERN GULF OF MEXICO, CONFERENCE/WORKSHOP.

BIBL STATE UNIVERSITY SYSTEM OF FLORIDA INSTITUTE OF OCEANOGRAPHY, ST. PETERSBURG, FL.

KEYW OIL EXPLORATION

OIL AND GAS

PHYSICAL

OCEANOGRAPHY

CHEMISTRY

GEOLOGY

BIOLOGY

BASELINE STUDY

ABST A conference was conducted during January-February 1974 in response to impending oil and gas exploration activities in the eastern Gulf of Mexico. This volume contains the proceedings of the conference, including papers describing baseline, physical, chemical, geological, and biological conditions in the area and a set of statements prepared for the proceedings by various agency representatives and interested parties.

ANNO

06/11/1987

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ACC 2530
TYPE P
YEAR 1976
AUTH SNEDAKER, S.C.;BROOK, I.M.;
TITL ECOLOGY AND THE FOOD WEB OF BISCAYNE BAY.

IN: BISCAYNE BAY; PAST/PRESENT/FUTURE. PAPERS PRESENTED FOR
BISCAYNE BAY SYMPOSIUM 1.

BIBL UNIV. MIAMI SEA GRANT SPEC. REPT. NO. 5, P. 227-233.

KEYW DADE	ECOLOGY	SEAGRASS
PRIMARY PRODUCTION	CRUSTACEAN	STONE CRAB
PINK SHRIMP	ESTUARY	

ABST A review concerning the ecology and food web relationships in Biscayne Bay revealed that relatively few studies describe the interactions between organisms and their environment. Biscayne Bay was described to be highly productive, with 43.8% of the bay bottom being covered with nutrient contributing seagrasses. Other forms of primary production, as well as the detrital input from the fringing mangroves, contribute to a broad base for higher level consumers such as game fishes, commercial crustacean species, including the stone crab (*Menippe mercenaria*) and pink shrimp (*Penaeus* spp.).

ANNO

06/11/1987

.....
ACC 2143

TYPE P

YEAR 1981

AUTH SOCCI, A.;DINKELMAN, M.G.;

TITL SEDIMENTS AND SEDIMENTATION IN THE GULF OF MEXICO--A REVIEW. IN: PROC. OF
A SYMP. ON ENVIRON. RESEARCH NEEDS IN THE GULF OF MEXICO, KEY BISCAYNE, FLA
. , 30 SEPT.-5 OCT. 1979. D.K. ATWOOD (CONVENER).

BIBL NOAA/ERL, ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LAB., MIAMI, FLA. VOL.
IIC. P. 33-101.

KEYW SEDIMENT

GEOCHEMISTRY

ABST This summary paper reviews the state of knowledge on the geographic setting
, sediments, geochemistry and animal-sediment relationships in the Gulf of
Mexico. An extensive reference list accompanies the paper. Scarcity of av
ailable data is noted and several recommendations for future studies in the
Gulf of Mexico are provided.

ANNO

06/11/1987

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ACC 4241
TYPE P
YEAR 1976
AUTH SONNIER, F.;TEERLING, J.;HOESSE, H.D.;
TITL OBSERVATIONS ON THE OFFSHORE REEF AND PLATFORM FISH FAUNA OF LOUISIANA USA.

BIBL COPEIA 1976(1):105-111.

KEYW REEF FISH ARTIFICIAL REEF
 OFFSHORE PLATFORM

ABST Observations, photographs and collections of fishes on the western reefs of the outer Louisiana (USA) continental shelf and around oil platforms have verified the presence of an extensive tropical fish fauna. Of 105 spp. recorded, about 50% were tropical species either unreported or rarely reported from the NW Gulf of Mexico. Reefs contained more species than oil platforms, although a number were common to both, and 12 spp. were found only around platforms. The 67 spp. of fishes found at the deeper reefs were all typical Caribbean-West Indian forms.

ANNO

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ACC 77
 TYPE
 YEAR 1971
 AUTH SONU, C.J.;MURRAY, S.P.;SMITH, W.G. ;
 TITL ENVIRONMENTAL FACTORS CONTROLLING THE SPREAD OF OIL.

BIBL NAV. RES. REV. 24(8):11-19.

KEYW	ECOLOGY	HYDROGRAPHY	METEOROLOGY
	OCEANOGRAPHY	OIL SLICK	OIL SPILL
	PHYSICAL PROCESS	POLLUTION	CURRENTS
	WIND		

ABST Increasing oil spill incidents in recent years have generated considerable interest among the scientific community in the little-known mechanics of the spread of oil on water. The unpredictability of the timing of this type of incident has provided few situations in which field investigations could be readied in time for detailed in situ studies of air-sea-oil interaction. While the Coastal Studies Institute, Louisiana State University, under contract to the Office of Naval Research, is not primarily involved in studies of pollution, it is interested in the dynamics of air-sea interaction and the behavior of currents in the water column. The oil spill provided the opportunity to measure these phenomena on a large scale. In response to requests from the Coast Guard and with approval of the Geography Programs of ONR, the Institute was able to send an experienced team of investigators to the site of the Chevron oil spill in the Gulf of Mexico. The team monitored oil diffusion in response to atmospheric and hydrologic conditions present at the time. Excerpts from the team's findings are summarized here. When Chevron production platform MP41C, in the Mississippi Delta, caught fire on February 10, 1970, the stage was set for a major spill which would involve as much as 1,000 barrels a day after the fire was extinguished. The well field lay only several miles from the Breton and Delta National Wildlife refuges and about 8 nautical miles from the nearest shore. Two field studies were carried out; one between March 5 and 11 and the other between March 15 and 21.

ANNO

06/11/1987

.....
ACC 887

TYPE

YEAR 1972

AUTH SOTO, L.A.;

TITL DECAPOD SHELF FAUNA OF THE NORTHEASTERN GULF OF MEXICO - DISTRIBUTION AND ZOOGEOGRAPHY.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL. 129 P.

KEYW BENTHIC FAUNA

SEDIMENT

SALINITY

TEMPERATURE

DEPTH

ZOOGEOGRAPHY

DECAPOD

ABST The distribution and zoogeography of the decapod fauna of the continental shelf of the northeastern Gulf of Mexico was studied by sampling 108 stations on 14 cruises of the R/V Tursiops from October, 1970 to October, 1971. Specimens were identified, sexed and counted. Associated data includes temperature, salinity, depth and bottom type.

ANNO

06/11/1987

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ACC 2179
TYPE P
YEAR 1978
AUTH SOTO, L.A.;
TITL FAUNISTIC STUDY OF THE DEEP WATER CRABS OF THE STRAITS OF FLORIDA (DECAPODA
: BRACHYURA).

BIBL PH.D. DISSERTATION. UNIVERSITY OF MIAMI, MIAMI, FL.

KEYW ZOOGEOGRAPHY	CRAB	DISTRIBUTION
TEMPERATURE	DEPTH	SUBSTRATE

ABST Benthic trawl collections from the Straits of Florida between 1962 and 1972 were used in an ecological and zoogeographical study of deep water brachyuran crabs. Sixteen families were represented by 87 brachyuran species, 6 recorded for the first time. The horizontal and vertical distribution of the brachyuran fauna was related to water temperature, depth, and substrate type. Four distributional patterns in the straits were identified. The zoogeography, origin, and paleogeography of deep water brachyurans are discussed.

ANNO

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ACC 26

TYPE

YEAR 1981

AUTH SOUTHWEST RESEARCH INSTITUTE;

TITL ECOLOGICAL INVESTIGATIONS OF PETROLEUM PRODUCTION PLATFORMS IN THE CENTRAL GULF OF MEXICO. VOLUME I. POLLUTANT FATE AND EFFECTS STUDY.

BIBL BUREAU OF LAND MANAGEMENT, GULF OF MEXICO OCS REGIONAL OFFICE, NEW ORLEANS, LA. 223 PP.

KEYW CONTINENTAL SHELF	HYDROCARBON	HYDROGRAPHY
MACROFAUNA	OIL	TRACE METAL
MEIOFAUNA	INFAUNA	EPIFAUNA
DEMERSAL FISH	POLLUTION	

ABST Twenty-four sites on the continental shelf of the Louisiana coast have been studied for long-term cumulative effects of petroleum production in the region of offshore platforms. Four primary study platforms and four control sites were visited in May, 1978, August/September, 1978 and January 1979. Sixteen secondary platforms were sampled August/September, 1978. Sampling and analysis included hydrography and hydrocarbons of the water column; sediment physical characterization, hydrocarbons, trace metals, and contamination with depth; and populations of the meiofauna, macroinfauna, macroepifauna, demersal fishes and species associated with "artificial reefs" brought about by the platform. Bottom studies extended from 100 to 2000 m away from platforms and were therefore indicative of regional as opposed to localized contamination. Sites were located from 5 km (3mi) to 115 km (73 mi) from shore and extended from the west shore of the Mississippi delta (89°32'W) to a line south of Marsh Island (91°44'W). Results confirm widespread, chronic contamination with hydrocarbons and metals with some apparent incorporation of pollutants into biota found at platforms. Over the entire study area absolute amounts of contaminants vary widely showing a general concentration in the nearshore and eastern portions where the Mississippi River apparently contributes more contaminants than petroleum production platforms. Platforms vary widely in the types and amounts of pollutants traced to them. A distinctive pattern of expected contamination with platform operating type is not seen.

ANNO

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ACC 2331
 TYPE P
 YEAR 1978
 AUTH SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT;
 TITL SUMMARY OF REPT.: SOUTHWEST FLA. WATER MNGT. DIST. CONSUMPTIVE USE PERMIT T
 O GEN. DEV. UTILITIES, INC., FOR PEACE RIVER REG. WATER TREATMENT PLANT.

BIBL

KEYW CHARLOTTE	PRIMARY PRODUCTION	BENTHIC
INFAUNA	SHRIMP	CRAB
FISH	SALINITY	DO
PREDATION		

ABST Studies from Boca Grande Pass to the nontidal portion of the Peace River we re initiated to collect data concerning influence of river flow on the ecosystems in Charlotte Harbor. Increased river flow during the wet season was determined to result in vertical salinity stratification of the harbor water column, and also in lowered salinity levels in Charlotte Harbor. Vertical stratification reduced mixing and gradual depletion of DO occurred in bottom waters. Primary production in surface layers was found to be stimulated by enrichment with essential nutrients from increased flows. Benthic infauna flourished on the increased food supply (provided in part by photosynthesis in the surface layers), and benefited from reduced predation. Mobile predators are forced by decreased dissolved oxygen and salinity levels to leave the stratified part of the harbor. In the fall when decreased river flow and higher surface winds cause vertical mixing and increased bottom oxygen, mobile predators, such as juvenile shrimp, crabs, and fish were noted to move into the upper harbor to feed upon the abundant benthic food supply that developed during the preceding period of stratification.

ANNO

06/11/1987

.....
ACC 4137
TYPE P
YEAR 1985
AUTH SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL;
TITL SOURCE DOCUMENT FOR THE SWORDFISH FISHERY MANAGEMENT PLAN.

BIBL SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL, CHARLESTON, SC. 87 PP.

KEYW BIOLOGY MANAGEMENT BILLFISH
 COMMERCIAL FISH RECREATIONAL FISHERY LANDINGS (POUNDS)

ABST The Magnuson Fishery Conservation and Management Act (16 U.S.C. 1801 et seq .) gives responsibility to the Regional Fishery Management Councils to prepare and submit fishery management plans for fisheries within their geographical area. The South Atlantic, New England, Mid-Atlantic, Gulf of Mexico and Caribbean Fishery Management Councils, in accordance with their legislative mandate, are preparing a joint plan for the swordfish fishery. This source document contains the detailed scientific, technical and other supportive documentation on which the Fishery Management Plan for Swordfish is based.

ANNO

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ACC 4138
TYPE P
YEAR 1983
AUTH SOUTHWEST FLORIDA REGIONAL PLANNING COUNCIL;
TITL OUTER CONTINENTAL SHELF ONSHORE FACILITIES SITING STUDY.

BIBL SOUTHWEST FLORIDA REGIONAL PLANNING COUNCIL, FORT MYERS, FL. 61 P.

KEYW OIL AND GAS SOCIOECONOMIC OFFSHORE

ABST A study was conducted to evaluate the need and possible locations for onshore facilities for offshore oil and gas development off southwestern Florida. The study was conducted by the Southwest Florida Regional Planning Council, one of eleven such agencies in Florida that advise and coordinate constituent local governments in regional, metropolitan, county, and municipal planning matters such as land use, water resources, and transportation. Four scenarios were evaluated. Under the "no strike" and "low-volume strike" scenarios, no onshore facilities would be required. Under a "mean volume strike" scenario, onshore facilities might include two pipeline landfalls, a marine terminal, and other, perhaps temporary support facilities. Under a "maximum strike" scenario, onshore facilities might include a permanent service base for development/production activities, a temporary service base for exploratory activities, a repair and maintenance yard, two pipeline landfalls, one or two marine terminals, other general support services, and perhaps a pipe-coating yard. The "no strike" or "low-volume strike" scenarios are the most likely outcomes of current offshore exploratory activities. Three potential sites for onshore facilities were evaluated: San Carlos Island, Port Boca Grande, and the Caloosahatchee River. The first two sites were judged to have potential as onshore support bases, but only to a limited degree. Neither site would be suitable for large-scale development associated with a major oil strike.

ANNO

06/11/1987

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ACC 4302
TYPE P
YEAR 1981
AUTH SOUTHWEST RESEARCH INSTITUTE;
TITL ECOLOGICAL INVESTIGATIONS OF PETROLEUM PRODUCTION PLATFORMS IN THE CENTRAL
GULF OF MEXICO: VOLUME III, EXECUTIVE SUMMARY.

BIBL FINAL REPT. BUREAU OF LAND MANAGEMENT. NO. BLM-YM-P/T-01-018-3331. 36 P.

KEYW CONTINENTAL SHELF	HYDROGRAPHY	HYDROCARBON
WATER COLUMN	SEDIMENT	PHYSICAL
TRACE METAL	FISH	ARTIFICIAL REEF

ABST Twenty-four sites on the continental shelf of the Louisiana coast have been studied for long-term cumulative effects of petroleum production in the region of offshore platforms. Sampling and analysis included hydrography and hydrocarbons of the water column; sediment physical characterization, hydrocarbons, trace metals, and contamination with depth; and populations of the fauna, demersal fishes and species associated with the "artificial reef" brought about by the platform. This report presents a concise summary of the study.

ANNO

06/11/1987

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ACC 4303

TYPE P

YEAR 1981

AUTH SOUTHWEST RESEARCH INSTITUTE;

TITL ECOLOGICAL INVESTIGATIONS OF PETROLEUM PRODUCTION PLATFORMS IN THE CENTRAL GULF OF MEXICO: VOLUME I, PART 8.

BIBL FINAL REPT. BUREAU OF LAND MANAGEMENT. NO. BLM-YM-P/T-01-018-3331. 840 P.

KEYW CONTINENTAL SHELF

HYDROGRAPHY

WATER COLUMN

SEDIMENT

HYDROCARBON

TRACE METAL

FISH

ARTIFICIAL REEF

ABST This part of the report on Ecological Investigations of Petroleum Production Platforms in the Central Gulf of Mexico contains the data summaries of all information gathered during the study. Twenty-four sites on the continental shelf of the Louisiana coast have been studied for longterm cumulative efforts of petroleum production in the region of offshore platforms. Sampling and analysis included hydrography and hydrocarbons of the water column; sediment physical characterization, hydrocarbons, trace metals and contamination with depth; and populations of fauna and demersal fishes and species associated with the "artificial reef" brought about by the platform.

ANNO

06/11/1987

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ACC 4304

TYPE P

YEAR 1981

AUTH SOUTHWEST RESEARCH INSTITUTE;

TITL ECOLOGICAL INVESTIGATIONS OF PETROLEUM PRODUCTION PLATFORMS IN THE CENTRAL
GULF OF MEXICO: VOLUME I, PARTS 6 AND 7.

BIBL FINAL REPT. BUREAU OF LAND MANAGEMENT. NO. BLM-YM-P/T-01-018-3331. 522 P.

KEYW CONTINENTAL SHELF

BENTHIC

BIOLOGY

ABST Twenty-four sites on the continental shelf of the Louisiana coast have been studied for long-term cumulative effects of petroleum production in the region of offshore platforms. Four primary study platforms and four control sites were visited in May 1978, August/September, 1978, and January 1979. Sixteen secondary platforms were sampled August/September 1978. This volume presents the findings of the benthic biology/histology study efforts.

ANNO

06/11/1987

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ACC 4305

TYPE P

YEAR 1981

AUTH SOUTHWEST RESEARCH INSTITUTE;

TITL ECOLOGICAL INVESTIGATIONS OF PETROLEUM PRODUCTION PLATFORMS IN THE CENTRAL GULF OF MEXICO: VOLUME I, PART 4 AND 5.

BIBL FINAL REPT. BUREAU OF LAND MANAGEMENT. NO. BLM-YM-P/T-01-018-3331. 210 P.

KEYW CONTINENTAL SHELF TRACE METAL

ABST Twenty-four sites on the continental shelf of the Louisiana coast have been studied for long-term cumulative effects of petroleum production in the region of offshore platforms. Four primary study platforms and four control sites were visited in May 1978, August/September, 1978, and January 1979. Sixteen secondary platforms were sampled August/September 1978. This volume presents the findings of the trace metal and microbiological study efforts.

ANNO

06/11/1987

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ACC 4306
TYPE P
YEAR 1981
AUTH SOUTHWEST RESEARCH INSTITUTE;
TITL ECOLOGICAL INVESTIGATIONS OF PETROLEUM PRODUCTION PLATFORMS IN THE CENTRAL
GULF OF MEXICO: VOLUME I, PART 1, 2, AND 3.

BIBL FINAL REPT. BUREAU OF LAND MANAGEMENT. NO. BLM-YM-P/T-01-018-3331. 218 P.

KEYW	HYDROGRAPHY	HYDROCARBON	WATER COLUMN
	SEDIMENT	PHYSICAL	TRACE METAL
	FISH	ARTIFICIAL REEF	

ABST Twenty-four sites on the continental shelf of the Louisiana coast have been studied for long-term cumulative effects of petroleum production in the region of offshore platforms. Four primary study platforms and four control sites were visited in May 1978, August/September, 1978, and January 1979. Sixteen secondary platforms were sampled August/September 1978. Sampling and analysis included hydrography and hydrocarbons of the water column; sediment physical characterization, hydrocarbons, trace metals, and contamination with depth; and populations of the fauna and demersal fishes and species associated with the "artificial reef" brought about by the platform. Bottom studies extended from 100 to 2000 m away from platforms and were therefore indicative of regional as opposed to localized contamination.

ANNO

06/11/1987

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ACC 684

TYPE

YEAR 1984

AUTH SPORT FISHING INSTITUTE;

TITL THE MARINE RECREATIONAL FISHING INDUSTRY AND OPPORTUNITIES FOR DEVELOPMENT.
FINAL REPORT PHASE II.

BIBL SPORT FISHING INSTITUTE, WASHINGTON D.C. 83 PP.

KEYW DEVELOPMENT

SOCIOECONOMIC

FISHING INDUSTRY

SPORT FISHING

RECREATION

RECREATIONAL FISHERY

ABST

ANNO

06/11/1987

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ACC 807

TYPE

YEAR 1983

AUTH SPORT FISHING INSTITUTE;

TITL ECONOMIC ACTIVITY ASSOCIATED WITH MARINE RECREATIONAL FISHING IN 1980, PREPARED FOR THE NATIONAL MARINE FISHERIES SERVICE.

BIBL SPORT FISHING INSTITUTE, WASHINGTON, D.C. 171 PP.

KEYW RECREATION

SOCIOECONOMIC

SPORT FISHING

RECREATIONAL FISHING

ABST The purpose of this study was to estimate the economic activity associated with marine recreational fishing in 1980. The specific goals of the project were the following: (1) Determine the value of goods and services purchased by recreational fishermen in association with saltwater sportfishing during 1980; (2) Determine the value added, employment, wages and salaries, and capital expenditures associated with purchases by marine recreational fishermen in 1980; (3) Determine the number of establishments in the individual economic sectors serving marine recreational fishermen; (4) Project the multiplier effects of expenditures for saltwater sportfishing as determined using input-output analysis; (5) Document the distribution of the national economic impacts associated with saltwater sportfishing for the various coastal states under the jurisdictions of the regional Fishery Management Councils. This report follows a similar 1977 study by Centaur Associates where the economic activity associated with marine recreational fishing in 1972 and 1975 was estimated.

ANNO

06/11/1987

.....
ACC 2475
TYPE P
YEAR 1962
AUTH SPRINGER, V.G.;MCKERLEAN, A.J.;
TITL SEASONALITY OF FISHES ON A SOUTH FLORIDA SHORE.

BIBL BULL. MAR. SCI. GULF CARIBB. 12:39-60.

KEYW MONROE SEASONALITY FISH
 TEMPERATURE

ABST Monthly collections on a grassy shore on Matecumbe Key, Florida Keys, were made from March 1960 through February 1961 with a 100 foot bag seine with three-eighths inch mesh. One hundred and six species of fishes were taken. Number of species and specimens were greatest during summer and fall. Approximately one third of the species were represented only by young.

ANNO

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ACC 4222
TYPE P
YEAR 1975
AUTH STAFFORD, J.W. ;
TITL ENVIRONMENTAL IMPACTS OF OCS OIL AND GAS ACTIVITY.

BIBL IN: FLA. COASTAL POLICY STUDY: THE IMPACT OF OFFSHORE OIL DEVELOPMENT. 131
-162.

KEYW DRILLING	PHYSICAL	GEOPHYSICAL
POLLUTION	OIL SPILL	FISHERY
EXPLORATION		

ABST Development of outer continental shelf oil and gas fields involves geophysical exploration, exploratory drilling, production, transportation, storage and processing. Each of these activities has environmental impacts associated with it. The impacts on the physical environment are usually negligible during geophysical exploration. However, the impacts associated with the various other phases of oil and gas activities can be very significant. The Department of Interior lists eight impact-producing factors and ten impact-sustaining factors resulting from OCS operations. In anticipation of possible discoveries of major oil and gas deposits in the eastern Gulf of Mexico off the Florida coast each of these impact-producing and impact-sustaining factors should be considered. Certain aspects of oil and gas operations can cause adverse environmental effects which may be considered unavoidable with current operation practices, technology and regulations. Included in this category are the environmental effects on air and water quality, marine organisms, wetlands, beaches, and aesthetic values; damage to historical and archaeological sites, structures and objects; interference with commercial fishing operations and ship navigation, and conflict with other uses of land.

ANNO

06/11/1987

.....
ACC 2476
TYPE P
YEAR 1970
AUTH STAIGER, J.C.;
TITL THE DISTRIBUTION OF BENTHIC FISHES FOUND BELOW TWO HUNDRED METERS IN THE STRAITS OF FLORIDA.

BIBL PH.D. DISSERTATION. UNIVERSITY OF MIAMI.

KEYW MONROE BENTHIC FISH
DISTRIBUTION

ABST Over 5,200 specimens were collected from below 200 meters in the Straits of Florida and were determined to represent 189 species of 58 families of fishes. Most of these specimens were obtained from 477 bottom trawl stations. Six distributional patterns were found to exist among the Straits of Florida benthic fishes. The occurrence of the species were compared using the Recurrent Groups Analysis method developed by Fager.

ANNO

06/11/1987

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ACC 4320

TYPE P

YEAR 1971

AUTH STARCK, W.A., II;

TITL BIOLOGY OF THE GRAY SNAPPER, LUTJANUS GRISEUS (LINNAEUS), IN THE FLORIDA KEYS. II. HABITAT; TOLERANCE TO TEMPERATURE AND SALINITY; PREDATORS; PARASITES; DISEASES, AND MALFORMATIONS; ABUNDANCE.

BIBL UNKNOWN. PP. 24-39.

KEYW SNAPPER
HABITAT

TEMPERATURE
PREDATION

SALINITY
PARASITES

ABST

ANNO

.....

ACC 307

TYPE

YEAR 1975

AUTH STATE UNIVERSITY SYSTEM OF FLORIDA, INSTITUTE OF OCEANOGRAPHY;
 TITL COMPILATION AND SUMMATION OF HISTORICAL AND EXISTING PHYSICAL OCEANOGRAPHIC
 DATA FROM THE EASTERN GULF OF MEXICO IN SUPPORT OF THE MAFLA SAMPLNG PROGR
 AM.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/YM/ES-75-1. 292 PP.

KEYW	BIOLOGY	CIRCULATION	CURRENTS
	FISHERY	GEOLOGY	INFRARED IMAGERY
	LOOP CURRENT	METEOROLOGY	CONTINENTAL SHELF
	PHYSICAL	REMOTE SENSING	MAFLA

ABST Physical oceanography has a dual role in determining the environmental implications of development of the Outer Continental Shelf (OCS). It is intrinsically important to determine physical parameters to predict dispersion of materials in OCS waters, but the role of physical oceanography is equally important in the support it must give to other oceanographic disciplines. In fact, it is highly unlikely that meaningful interpretations of biogeochemical data, or the ecosystem structure can be made without adequate knowledge of the advective field, for instance. Cognizant of the importance of understanding the circulation of the eastern Gulf of Mexico, the Bureau of Land Management (BLM) commissioned a group of oceanographers familiar with the area: (a) to "assemble the historical and contemporary physical and associated meteorological data of the northeast Gulf of Mexico...for submission to the National Oceanographic Data Center (NODC)"; (b) to "construct a zero-order synthesis of oceanographic conditions in the northeast Gulf of Mexico and have them graphically displayed"; (c) to "describe the general circulation and oceanographic conditions on the continental shelf area of the northeast Gulf of Mexico and in the Loop Current of the deeper Gulf areas"; (d) to "describe qualitatively the interaction between the shelf circulation of the northeast Gulf of Mexico and the Loop Current"; (e) to "describe the seasonal distribution of the intensity of fish spawning and zooplankton productivity on the western Florida continental shelf and relate these to temperature and salinity data"; (f) to "develop a first-order understanding of th

ANNO

06/11/1987

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ACC 308

TYPE

YEAR 1975

AUTH STATE UNIVERSITY SYSTEM OF FLORIDA, INSTITUTE OF OCEANOGRAPHY;

TITL COMPILATION AND SUMMATION OF HISTORICAL AND EXISTING PHYSICAL OCEANOGRAPHIC
DATA FROM THE EASTERN GULF OF MEXICO IN SUPPORT OF THE MAFLA SAMPLING PROGRAM.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/YM/ES-75-1. 292 PP.

KEYW BIOLOGY

FISHERY

LOOP CURRENT

PHYSICAL

CIRCULATION

GEOLOGY

METEOROLOGY

MAFLA

CURRENTS

INFRARED IMAGERY

CONTINENTAL SHELF

REMOTE SENSING

ABST A group of oceanographers were commissioned to compile and summarize meteorological data, raw data, describe the eastern Gulf circulation including the Loop Current and the interaction with the shelf, describe the intensity of fish spawning and zooplankton and make recommendations for future biological, chemical and physical oceanography investigations. The report is a summary of statements of the group's individual and/or collective thoughts on the objectives.

ANNO

06/11/1987

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ACC 309

TYPE

YEAR 1978

AUTH STATE UNIVERSITY SYSTEM OF FLORIDA, INSTITUTE OF OCEANOGRAPHY.;

TITL BASELINE ENVIRONMENTAL SURVEY OF THE MAFLA LEASE AREAS.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. BLM/YN/SR-78/02. 201 PP.

KEYW INVERTEBRATA

BIOLOGY

CARBONATE

GEOLOGY

HYDROCARBON

OCEANOGRAPHY

CONTINENTAL SHELF

PHYSICAL PROCESS

PLANKTON

SEDIMENT

MAFLA

ABST The Bureau of Land Management deemed it necessary to conduct a baseline environmental survey on the MAFLA shelf of the eastern Gulf of Mexico, extending from approximately 89 degrees W, south to Pascagoula, Mississippi, to a tract west of Clearwater, off Tampa Bay, Florida. This task included design and conducting a field sampling program for geological, biological, chemical, and physical oceanographic samples; analysis of samples, including establishment of analytical quality control procedures; archiving of samples for future analysis; development of data management procedures; and a comprehensive final report.

ANNO

06/11/1987

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ACC 4240

TYPE P

YEAR 1976

AUTH STEELE, P.; COLLARD, S.B.;

TITL NEUSTON COMMUNITIES OF THE EASTERN GULF OF MEXICO CONTINENTAL SHELF.

BIBL FLA. SCI. 39(SUPPL.):2.

KEYW NEUSTON
ALGAE

COMMUNITY

TEMPERATURE

ABST

ANNO

06/11/1987

.....
ACC 2180
TYPE P
YEAR 1977
AUTH STEINKER, D.C.;
TITL FORAMINIFERAL STUDIES IN TROPICAL CARBONATE ENVIRONMENTS - SOUTH FLORIDA AND BAHAMAS.

BIBL FLA. SCI. 40(1):46-61.

KEYW FORAMINIFERA CARBONATE WAVE
CURRENTS DISTRIBUTION

ABST This paper reviews studies on the distribution of foraminifera in carbonate sediments of the south Florida-Bahama region and proposes improved methods for further investigations. It is suggested that rose bengal stain is an unreliable indicator of living specimens and that direct observation should be used to distinguish between live and dead foraminifers. Living populations are more abundant on marine vegetation than in the sediments of the area. Those populations associated with sediments generally are sorted by waves and currents and therefore do not accurately reflect the biocoenosis of an area. It is suggested that foraminifera investigations should be more biologically oriented in order to better understand conditions of their natural habitat.

ANNO

06/11/1987

.....
ACC 4139
TYPE P
YEAR 1973
AUTH STEIDINGER, K.A.;
TITL PHYTOPLANKTON ECOLOGY: A CONCEPTUAL REVIEW BASED ON EASTERN GULF OF MEXIC
O RESEARCH.

BIBL CRIT. REV. MICROBIOL. 3(1):49-68.

KEYW PHYTOPLANKTON PRIMARY PRODUCTION RED TIDE
 ECOLOGY WATER COLUMN SEASONALITY

ABST The ecology of marine phytoplankton is reviewed on the basis of data from t
he eastern Gulf of Mexico. Topics covered include methodology for measurin
g standing stock and productivity; zonation of phytoplankton diversity, sta
nding stock, and productivity; seasonality; and the phenomenon of red tides
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ANNO

06/11/1987

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ACC 4140
TYPE P
YEAR 1973
AUTH STEIDINGER, K.A.;JOYCE, E.A., JR.;
TITL FLORIDA RED TIDES.

BIBL MAR. RES. LAB., FLA. DEPT. NAT. RES. ED. SER. 17. 26 P.

KEYW RED TIDE	COASTAL	ECOLOGY
FISH	PHYTOPLANKTON	BIOLOGY

ABST The first documented fish kill associated with discolored seawater in Florida occurred in 1844 but the causative organism, *Gymnodinium breve*, was not identified until 1948. Red tides and research results over the last 20 years are discussed and summarized. Red tide is a natural occurrence. Control is not presently feasible and may not be ecologically advisable even if available. Present research is directed toward a better understanding of red tides and their effects.

ANNO

06/11/1987

.....
ACC 2368
TYPE P
YEAR 1976
AUTH STELLER, D.L. ;
TITL FACTORS AFFECTING THE SURVIVAL OF TRANSPLANTED THALASSIA TESTUDINUM.

BIBL PROC. OF THE THIRD ANNU. CONF. ON RESTORATION OF COAST. VEGETATION IN FLA.
P. 2-22.

KEYW COLLIER SEAGRASS TEMPERATURE
DEPTH CURRENTS SEDIMENT

ABST Transplantation of *Thalassia testudinum* around Marco Island from July 1975 through January 1976 showed that minimum temperature and depth played the greatest role in determining percent survival. Transplant plots varied in temperature, depth, current conditions, and sediment types. The transplanting method was deemed unuseful on a large scale because it is too labor intensive and too destructible to the parent grassbeds.

ANNO

06/11/1987

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ACC 2477
TYPE P
YEAR 1950
AUTH STEPHENSON, T.A.;STEPHENSON, A.;
TITL LIFE BETWEEN TIDE MARKS IN NORTH AMERICA. I. THE FLORIDA KEYS.

BIBL J. ECOL. 38(2):354-402.

KEYW MONROE	PHYSICAL	CHEMICAL
BIOLOGICAL	ECOLOGY	GEOGRAPHICAL
FLORA	FAUNA	

ABST A broad study was made of the physical, chemical, and biological aspects of the intertidal zone in the Florida Keys area. Zonation, ecology, and geographical relations of the common fauna and flora were determined. The intertidal flora and fauna are tropical; distinct from temperate flora and fauna.

ANNO

06/11/1987

.....
ACC 853
TYPE
YEAR 1973
AUTH STEVENSON, W.H.; PASTULA, E.J.;
TITL INVESTIGATION USING DATA FROM ERTS-1 TO DEVELOP AND IMPLEMENT UTILIZATION OF LIVING MARINE RESOURCES.

BIBL NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

KEYW AIR TEMPERATURE	BATHYMETRY	CHLOROPHYLL
CURRENTS	PHOTOGRAPH	RELATIVE HUMIDITY
SALINITY	WATER TEMPERATURE	WIND DIRECTION
WIND SPEED	REMOTE SENSING	SATELLITE

ABST Beginning in June, 1972 a 15 month ERTS-1 investigation was conducted to investigate correlations between satellite, aircraft, menhaden fisheries and environmental sea truth data from the Mississippi Sound. Selected oceanographic and meteorological parameters were used as indirect indicators of the resource. The surface area and location of menhaden schools are reported from areal photography. The environmental parameters chosen were based on: 1) the probability of demonstrating a relationship between the fishery and its environment and 2) those capable of being measured through remote sensing.

ANNO

06/11/1987

.....
ACC 1071

TYPE

YEAR 1978

AUTH STEVENSON, J.C.; CONFER, N.M.;

TITL SUMMARY OF AVAILABLE INFORMATION ON CHESAPEAKE BAY SUBMERGED VEGETATION.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C. FWLSOBS-78/66.

KEYW BIOLOGY

HERBICIDE

PESTICIDE

POLLUTION

FLORA

ABST

ANNO

06/11/1987

.....
ACC 431

TYPE

YEAR 1982

AUTH STICKNEY, R.R.; CUENCO, M.L.;

TITL HABITAT SUITABILITY INDEX MODELS: JUVENILE SPOT.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON
, D.C. FWS-OBS-82-10.20. 12 PP.

KEYW BIOLOGY

ECOLOGY

FISH

MANAGEMENT

RESOURCE

HABITAT

LIFE HISTORY

MODEL

FISHERY

ABST

ANNO

06/11/1987

.....
ACC 741

TYPE

YEAR 1966

AUTH STIEGLITZ, W.O.;

TITL UTILIZATION OF AVAILABLE FOODS BY DIVING DUCKS ON APALACHEE BAY, FL. PAGES
42-50 IN PROCEEDINGS 20TH ANNUAL CONFERENCES, SOUTHEASTERN ASSOCIATION OF G
AME AND FISH COMMISSIONERS.

BIBL LOUISIANA WILDLIFE AND ASSOCIATION OF GAME AND FISH COMMISSIONERS.

KEYW AVES

BIOLOGY

ECOLOGY

FEEDING HABIT

BIRD

ABST A study was designed to determine the vegetative composition and production
of that portion of Apalachee Bay, Florida included within the St. Marks Na
tional Wildlife Refuge. The study was conducted in 1964. Gizzards and gulle
ts of 14 diving ducks were collected to correlate feeding activities with a
vailable food.

ANNO

06/11/1987

.....
ACC 2478

TYPE P

YEAR 1967

AUTH STOCKMAN, K.W.; GINSBURG, R.N.; SHINN, E.A.;

TITL THE PRODUCTION OF LIME MUD BY ALGAE IN SOUTH FLORIDA.

BIBL J. SEDIMENT. PETROL. 37(2):633-648.

KEYW MONROE
CORAL

ALGAE
TRANSPORT

MOLLUSC
SEDIMENT

ABST Comparison of the annual production of fine aragonite mud (<15 u) by post mortem disintegration of algae showed the algae, *Penicillus*, to be a major sediment contributor, accounting for all the fine aragonite mud in inner Florida Reef Tract and 1/3 of the same material in northeastern Florida Bay. The contribution of 3 other abundant algal species is assessed as well as the significance of mechanical breakdown of skeletons, molluscs, and corals. Transport of fine lime muds from their production sources to areas of accumulation is discussed.

ANNO

06/11/1987

.....
ACC 107
TYPE
YEAR 1976
AUTH STONE, J.H.;
TITL ENVIRONMENTAL FACTORS RELATING TO LOUISIANA MENHADEN HARVEST.

BIBL CENTER FOR WETLAND RESOURCES, LOUISIANA STATE UNIVERSITY, BATON ROUGE, LA.
LSU-T-76-004.

KEYW	BIOLOGY	COASTAL ZONE	CONTINENTAL SHELF
	FISH CATCH	FISH STATISTICS	FISH STOCK
	FISHERY	TEMPERATURE	

ABST The relationship between selected environmental factors of coastal Louisiana to Louisiana menhaden harvest and effort was studied by analyzing the factors separately, by factor analysis, by multiple regression, and by cross correlations. The environmental factors were air temperatures, water temperatures, rainfall data, tide data, and wind speeds and directions applicable to coastal Louisiana from 1950 through 1971; these data were reduced to weekly and monthly statistics. The menhaden catch and effort data were for the Louisiana harvest during 1950 through 1971 expressed as weekly and monthly totals. Only tide range data showed significant changes during the last 20 years, namely an increase of mean tide range, which is probably related to the rise in sea level noted by other Louisiana researchers. Factor analysis and multiple regressions both indicate that the same general type of data have a significant relationship to menhaden harvest, namely effort, time effects, water or air temperature, and some interactions among them. Significant relationships still exist between menhaden catch and selected environmental data when the effects of effort and time are removed; however, time effects are probably masking important environmental effects. A variety of variables can be used to produce a significant predictive relationship; examples are effort; minimum air temperature interacting with month, both not lagged and lagged for 12 months; wind direction at New Orleans interacting with month; wind direction at Baton Rouge interacting with minimum air temperature and lagged for 12 months; wind direction at New Orleans; mean air te

ANNO

06/11/1987

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ACC 2037

TYPE P

YEAR 1974

AUTH STONE, R.B.;

TITL A BRIEF HISTORY OF ARTIFICIAL REEF ACTIVITIES IN THE UNITED STATES.

BIBL PROC. INT. CONF. ARTIFICIAL REEFS, TAMU-SG-74-103. P. 24-27.

KEYW ARTIFICIAL REEF
FISH

REEF
HABITAT

TAGGING

ABST The history of artificial reefs within U.S. waters was briefly discussed. In addition, 10 reefs were constructed to provide technical assistance to states and other groups. Two projects in particular were discussed: one in cooperation with the South Carolina Wildlife Resources Dept. on a reef off Murrells Inlet, SC; and the other was a cooperative study with the National Park Service comparing a small tire reef in Biscayne National Monument with a similar size adjacent patch reef. Preconstruction surveys to determine the species and number of fishes living on reef sites were conducted. These surveys were continued once the reefs were constructed, and also trapping and tagging were used to gather information on species composition, relative abundance, and movement of fishes on and between reefs. In addition a number of nontoxic scrap materials were evaluated (including car bodies, building rubble, concrete culverts, ships and barges, and tires). It was found that by increasing the amount of reef habitat, artificial reefs provide the potential for increasing the stock sizes of fishes. It was suggested that artificial reefs could be an effective management tool that states or other management agencies could use to develop fisheries which benefit both anglers and the economy of coastal communities and conserve the resource by increasing habitat.

ANNO

06/11/1987

.....
ACC 2144
TYPE P
YEAR 1957
AUTH STORR, J.F.;
TITL PROGRESS OF RECOVERY OF THE COMMERCIAL SPONGE BEDS OF FLORIDA.

BIBL PROC. GULF & CARIBB. FISH. INST. NOV. 1956.

KEYW SPONGE DISTRIBUTION GROWTH
 CURRENTS PRODUCTIVITY

ABST The results to date are reported on the recovery of commercial sponge beds located between Tampa Bay and Carrabelle. Past and present distribution studies are discussed and data is given on sponge productivity, growth rates, and factors affecting distribution. Using the results of these investigations, estimates were made on the probable distribution in 5 and 10 years.

ANNO

06/11/1987

.....
ACC 2145
TYPE P
YEAR 1964
AUTH STORR, J.F.;
TITL ECOLOGY OF THE GULF OF MEXICO COMMERCIAL SPONGES AND ITS RELATION TO THE FISHERY.

BIBL U.S. FISH WILDL. SERV. SPEC. SCI. REPT. FISHERIES 466.

KEYW ECOLOGY	SPONGE	GROWTH
DISTRIBUTION	FISHERY	PORIFERA
TEMPERATURE	SALINITY	DEPTH
CURRENTS		

ABST A 2 year study of the ecology of commercial sponges was conducted on the west coast of Florida. Reproduction of sponges and the effects of temperature and population density are discussed. The growth rate of wool sponges was determined and a growth formula was calculated. Environmental parameters are related to sponge distribution. The sponge industry from 1936 to 1958 is reviewed, as well as the present stature of the fishery. Recommendations for increasing the sponge harvest are stated.

ANNO

06/11/1987

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ACC 2146

TYPE P

YEAR 1976

AUTH STORR, J.F.;

TITL ECOLOGICAL FACTORS CONTROLLING SPONGE DISTRIBUTION IN THE GULF OF MEXICO AND THE RESULTING ZONATION. P. 261-276. IN: F.W. HARRISON AND R.R. COWDEN (EDS.) "ASPECTS OF SPONGE BIOLOGY".

BIBL ACADEMIC PRESS, NEW YORK. 354 P.

KEYW SPONGE
REPRODUCTION
TEMPERATURE
NUTRIENT

DIVERSITY
WAVE
DEPTH
TIDE

GROWTH
DISTRIBUTION
CURRENTS

ABST Sponge diversity and abundance along the northwestern coast of Florida in the Gulf of Mexico were found to be controlled by a combination of ecological factors. The rapid decline in mean low temperatures northward was of major importance to overall decline in diversity. Zone by zone, however, it was found that factors such as rock bar abundance, lower wave activity and the presence of the influx of nutrients from rivers, increased abundance and diversity. These factors augmented growth, reproduction rates, and sponge diversities. Limiting factors were excessive algal growth, which killed sponges; wide sandy areas, which inhibited sponge distribution because of the limited life span of sponge larvae; and high sedimentation rates resulting from strong tidal or wave activity which depleted energy of the sponges. From the sponge diversity it was possible to establish zones of sponge distribution, which correspond closely with the sponging grounds of the commercial sponges.

ANNO

06/11/1987

.....
ACC 2315
TYPE P
YEAR 1979
AUTH STUART, M.;TADDIO, P.;
TITL HYDROLOGIC AND BIOLOGICAL MONITORING OF LOWER SARASOTA BAY, 1975-1978.

BIBL SARASOTA HIGH SCHOOL, SARASOTA, FL. ADVANCED MAR. SCI. REPT. NO. 1, 134 P.

KEYW SARASOTA ZOOPLANKTON FISH
INVERTEBRATE TEMPERATURE SALINITY
DO TURBIDITY TIDE
WIND WAVE NUTRIENT
SEAGRASS

ABST This study of lower Sarasota Bay includes water quality, zooplankton and grassflat monitoring for the years 1975-1978. The water quality monitoring program provided data defining seasonal variations for a variety of physical and chemical factors. Monthly and annual averages were computed. Since less than one full year of data had been collected, only limited conclusions from the zooplankton data could be drawn. Indications were that the average annual count of individuals was fairly high -- about 60,000 individuals/m³. Data indicated that all of the grassflats were productive at some time and probably contribute significantly to the bay food chains. One site appeared most stressed, probably due to frequent anoxia problems.

ANNO

06/11/1987

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ACC 4236

TYPE P

YEAR 1979

AUTH STUCK, K.C.;PERRY, H.M.;HEARD, R.W.;

TITL RECORDS AND RANGE EXTENSIONS OF MYSIDACEA FROM COASTAL AND SHELF WATERS OF
THE EASTERN GULF OF MEXICO USA.

BIBL GULF RES. REP. 6(3):239-248.

KEYW DISTRIBUTION

CRUSTACEAN

ABST Records of 17 spp. of Mysidacea from the Gulf of Mexico are presented [including *Anchialina typica* (Kroeyer), *Bowmaniella portoricensis* (Bacescu), *B. floridana* (Holmquist), *B. brasiliensis* (Bacescu), *Pseudomma* sp., *Siriella thompsonii* (H. Milne-Edwards), *Promysis atlantica* (W.M. Tattersall), *Metamysis idopsis swifti* (Bacescu), *Bathymysis renocolata* (W.M. Tattersall), *Mysidopsis bigelowi* (W.M. Tattersall), *M. furca* (Bowman), *M. bahia* (Molenock), *M. almyra* (Bowman), *Brazilomysis castroi* (Bacescu), *Heteromysis formosa* (S.I. Smith), *Taphromysis louisianae* (Banner) and *T. bowmani* (Bacescu)]. *B. portoricensis*, *Pseudomma* sp., *S. thompsonii* and *B. renocolata* are recorded from the gulf for the first time. Range extensions within the gulf are established by *A. typica* and *M. furca*. Records of *B. castroi* and *M. almyra* from the Atlantic coast of the United States are reported.

ANNO

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ACC 240

TYPE

YEAR 1973

AUTH STURSA, M.L.;

TITL RECREATION AND INDUSTRY -- COASTAL RESOURCES. IN J.I. JONES, R.E. RING, M. O. RINKEL, AND R.E. SMITH, EDS. A SUMMARY OF KNOWLEDGE OF THE EASTERN GULF OF MEXICO.

BIBL STATE UNIVERSITY SYSTEM OF FLORIDA, INSTITUTE OF OCEANOGRAPHY, ST. PETERSBURG, FL.

KEYW RESOURCE	COASTAL ZONE	INDUSTRY
RECREATION	SOCIOECONOMIC	

ABST The recreational resources of the eastern Gulf support a tourist industry that adds over \$5 billion per year to the economy of the region in addition to providing recreational facilities for residents of the three states. Over 10 million tourists per year visit the Gulf Coast of Florida. The Mississippi "Gold Coast" is also a popular tourist area. Tourism has little effect on the economy of Alabama. Recreational facilities on the Gulf Coast do not presently meet the demand for public recreation; beach facilities are in especially short supply. Florida has 15 state parks and recreational facilities on the Gulf Coast; Alabama has 4; Mississippi has 3. Resort and lodging facilities are big business in Florida and on the Mississippi Gold Coast. Vacation homes have developed on the coastal and estuarine beach areas of all states. Several areas of the eastern Gulf Coast are manufacturing centers. In Florida, the Tampa Bay area, Port St. Joe, Panama City, and Pensacola are the primary industrial centers. Mobile is industrialized. Some industry is now moving into the Mississippi coastal zone, encouraged by the ports at Pascagoula and Gulfport. Florida's Gulf Coast has 5 deep-water ports; Mobile is one of the largest, most important ports on the Gulf of Mexico; Pascagoula and Gulfport provide deepwater facilities for Mississippi. The Gulf Intracoastal Waterway provides protected shipping lanes for smaller craft in most of the region. Coastal zone land use and planning is currently being studied in Florida by the Florida Coastal Coordinating Council. Mississippi and Alabama have made little progress in planning for coastal zone manage

ANNO

06/11/1987

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ACC 241
TYPE
YEAR 1973
AUTH STURSA, M.L.;
TITL ENVIRONMENTAL QUALITY PROBLEMS. IN J.I. JONES, R.E. RING, M.O. RINKEL, AND
R.E. SMITH, EDS. A SUMMARY OF KNOWLEDGE OF THE EASTERN GULF OF MEXICO.

BIBL STATE UNIVERSITY SYSTEM OF FLORIDA, INSTITUTE OF OCEANOGRAPHY, ST. PETERSBURG, FL.

KEYW FLORIDA	COASTAL ZONE	HABITAT
INDUSTRY	POLLUTION	SOCIOECONOMIC
WATER QUALITY		

ABST Storms and hurricanes are the most important of the natural environmental quality problems affecting the eastern Gulf Coast. Wind, flooding, and storm surges are shown to have caused extensive damage to coastal areas over the years. These destructive elements have taken their toll on beaches, vegetation, development, and water supplies. Dredge and fill operations are one of the artificial environmental factors that have caused problems in the eastern Gulf. Statewide, Florida has lost 796,000 acres of original habitat to dredge and fill; 23,521 acres of Florida's Gulf Coast were filled through 1967. Dredging and filling have destroyed many grass beds and much marine habitat in Florida. Many wetlands in Mobile Bay have been filled, and the extensive dredging necessary for the maintenance of the harbor has caused much turbidity and sediment in the Bay. Industrial pollution and sewage contamination on the eastern Gulf Coast coexist generally with large communities and concentrations of industry. It is estimated that 31 percent of the area of Florida's west coast estuaries is polluted. Tampa Bay and Pensacola Bay have both had large, pollution-associated fish kills. In Alabama, Mobile Bay is extensively polluted, and there is some pollution on the Gulf Coast and near Dauphin Island. Mississippi has a number of bays and estuaries that are undergoing hyperfertilization because of sewage. Industrial wastes have not yet caused major pollution problems in that state. Beach erosion is both a natural and man-made environmental problem. In Florida 351 miles of Gulf and estuarine shoreline are critically eroded; in Alabama, 32 miles, and

ANNO

06/11/1987

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ACC 4141

TYPE P

YEAR 1983

AUTH STURGES, W.;EVANS, J.C.;

TITL ON THE VARIABILITY OF THE LOOP CURRENT IN THE GULF OF MEXICO.

BIBL J. MAR. RES. 41:639-653.

KEYW CIRCULATION

REMOTE SENSING

CURRENTS

PHYSICAL

LOOP CURRENT

OCEANOGRAPHY

ABST It is of considerable interest to know to what extent offshore currents may drive flows on the continental shelf. We have used the northernmost position of the Loop Current, from hydrographic data, to piece together a time series 13 years long. This record samples the lowest frequencies well but undersamples the amplitude of variations with periods of about 8 months by a factor of 2. The "annual" variation of the Loop Current appears to be a relatively broad spectral peak rather than a sharp spectral line. We find as much power at periods near 30 months as at periods near a year; this is a new result. Both bands seem to be, at least in part, wind forced. There are also fluctuations having periods near 8 months, and this may be a beat frequency. As the 30-month and annual signals drift in and out of phase over about 5 years, the envelope of the 8-month signal varies from zero to a maximum of about 2.5 degrees of latitude, peak-to-peak, which is the same as the range of the 30-month signal. Our primary finding is that the north-south fluctuations in Loop Current position are correlated with sea level at the coast and presumably with coastal currents. The results are essentially the same using tidal data at either St. Petersburg or Key. The phase delay is such that the inferred southerly flowing currents on the shelf reach a maximum before Loop Current position reaches its maximum northern position, by 1 to 3 months. If the Loop Current is inherently unstable, as the numerical model of Hurlburt and Thompson (1980) suggests, the wind forcing may merely set the frequency of the variability.

ANNO

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ACC 4254

TYPE P

YEAR 1979

AUTH STURGES, W.; HOROTN, C.;

TITL CIRCULATION IN THE GULF OF MEXICO. SYMPOSIUM ON ENVIRONMENTAL RESEARCH NEEDS IN THE GULF OF MEXICO (GOMEX) KEY BISCAYNE, FL (USA) 30 SEPT. 1979.

BIBL PROC. SYMP. ENVIRON. RES. NEEDS IN THE GULF OF MEXICO (GOMEX), KEY BISCAYNE, FL. 30 SEPTEMBER-5 OCTOBER 1979.

KEYW CIRCULATION LOOP CURRENT NUTRIENT
CURRENTS

ABST The strongest single feature in the Gulf of Mexico is the Loop Current. This flow enters the Caribbean and eventually becomes the Gulf Stream. The path that it takes, however, is highly time-dependent, and this portion of the pre-Florida Current is known as the Loop Current. This current is important, not only in its own regard, but also in that it injects pinched-off rings to the interior of the Gulf. These rings carry with them momentum, salt, and nutrients, which are major contributions to the balances of the interior and western portions of the Gulf. The Loop Current and its variability is likely to be important to understanding the exchange of deep water between the Gulf and the Caribbean. The Loop Current also may act as a significant external driving mechanism for adjacent areas of the west Florida shelf. It is not well known what forcing mechanisms control the position, growth, or decay of the Loop Current. But the information required for a real understanding of Loop Current variability is enormous. A summary is provided on recent and ongoing programs in which the data is not yet in the open literature.

ANNO

06/11/1987

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ACC 2050

TYPE P

YEAR 1971

AUTH SUGIRI, G.K.A.;

TITL A DESCRIPTION OF THE TORTUGAS SHRIMP FISHERY AND ITS MAXIMUM SUSTAINABLE YIELD.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI. MIAMI, FL.

KEYW FISHERY

PINK SHRIMP

SOCIOECONOMIC

ABST Data on the shrimp fishery efforts in the Tortugas was compiled to obtain figures on production, relative abundance, size composition, and distributions. Several sources were used including interviews, Bureau of Commercial Fisheries and Vessel listings. Various statistics are given and implications for the fishery industry are discussed.

ANNO

06/11/1987

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ACC 98

TYPE

YEAR 1976

AUTH SUHAYDA, J.N.;WHELAN, T.;COLEMAN, J.M.;BOOTH, J.S.;GARRISON, L.E.;

TITL MARINE SEDIMENT INSTABILITY: INTERACTION OF HYDRODYNAMIC FORCES AND BOTTOM
SEDIMENTS. PAGES 29-40 IN 8TH ANNUAL OFFSHORE TECHNOLOGY CONFERENCE, MAY 3
-6, 1976,HOUSTON, TX. OTC-2426.

BIBL OFFSHORE TECHNOLOGY CONFERENCE.

KEYW GEOLOGY
WAVE SPEED

SEDIMENTATION
WAVE

WAVE HEIGHT
SEDIMENT TRANSPORT

ABST Simultaneous measurements of bottom oscillations and wave characteristics have been made in a study of the interaction of fine-grained sediments and surface waves. Wave staffs, pressure sensors, and an electromagnetic current meter were placed 150 ft from a bottom-emplaced accelerometer package at East Bay, Louisiana. Measurements were made in about 64 ft of water from an oil platform in an area having a fine-grained clay bottom. Sediment core samples were taken to a depth of 180 ft. The accelerometer package consisted of three solid-state accelerometers mounted at right angles, and had a response of 3 v/g. The package was placed about 1 ft below the mudline. The results of the experiments indicate that bottom motions under wave action show well-defined periodic features. Bottom oscillations on the order of 1 in. in amplitude occurred for seas having a significant wave height of about 3 ft and period of 5 sec. The bottom appears to be undergoing an elastic wave response to bottom pressures, so that the bottom is depressed under a surface wave crest. Comparison of wave height measurements and pressure measurements indicate that bottom pressures are not predicted by linear theory for a rigid bottom. Pressures were larger than predicted by up to 35% in many cases.

ANNO

ACC 591

TYPE

YEAR 1982

AUTH SUHAYDA, J.N.;COLEMAN, J.M.;WHELAN, T.;GARRISON, L.E.;

TITL OSCILLATION OF CONTINENTAL SHELF SEDIMENTS CAUSED BY WAVES. PAGES 57-76 IN
A.K. FANNING AND F.T. MANHEIM, EDS. THE DYNAMIC ENVIRONMENT OF THE OCEAN
FLOOR.

BIBL LEXINGTON BOOKS, LEXINGTON, MA.

KEYW CONTINENTAL SHELF
WAVE ENERGY
WAVE

GEOLOGY
WAVE PRESSURE

SEDIMENT
SEDIMENT TRANSPORT

ABST Measurements have been made of the oscillations of bottom sediments on the continental shelf induced by the passage of surface waves. A wave staff and pressure sensor were placed 45 m from a bottom-emplaced accelerometer in East Bay, Louisiana. Measurements were made in 20 m of water in an area where the bottom sediments were composed of clay and silts. A sediment core was taken to a depth of 40 m. The results of the experiments indicate that these fine-grained bottom sediments move in a wave-like fashion under surface-wave action. Bottom oscillations on the order of 2 to 3 cm occurred under waves having a height of 1 m and a period of 5 seconds. The bottom motion appears to be an elastic-like response to wave pressure. Estimates of the amount of wave energy lost in forcing the mud wave indicate that the interaction can significantly affect surface-wave characteristics and the stability of bottom sediments.

ANNO

06/11/1987

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ACC 2181
TYPE P
YEAR 1979
AUTH SULLIVAN, J.R.;
TITL THE STONE CRAB, MENIPPE MERCENARIA, IN THE SOUTHWEST FLORIDA FISHERY.

BIBL FLA. MAR. RES. PUBL. NO. 36. 37 P.

KEYW STONE CRAB MIGRATION FISHERY
 CRUSTACEA

ABST During the 1975-76 commercial trapping season in southwest Florida, 14,343 stone crabs were tagged and during the summer closed season, 4,563 additional crabs were tagged. The 4.4% tagged crabs returned indicated inshore movement in fall and offshore migration in spring with little movement by spawning females in summer. Spawning females were found during every month but most frequently from March to September. Ovigerous females were of similar size to nonovigerous females. Gravid females weighed more than similar nonovigerous females. Other morphometric relationships for males and females are summarized. The proportion of each size class composing the population is given and claw growth and regeneration rates were determined. Twenty to 25% of legal sized crabs were in the process of claw regeneration implying intense fishery pressure, but indicating survival of declawed crabs. Population size was estimated at 9,057 to 32,036 legal sized crabs available to a trap line during one week. Approximately 3 to 8% of the available population was caught each time traps were checked, indicating that most legal sized crabs were captured during each commercial season.

ANNO

06/11/1987

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ACC 325
TYPE
YEAR 1980
AUTH SUTHERLAND, D.F.; FABLE, W.A.;
TITL RESULTS OF A KING MACKEREL (SCOMBEROMORUS CAVALLA) AND ATLANTIC SPANISH MACKEREL (SCOMBEROMORUS MACULATUS) MIGRATION STUDY.

BIBL NATIONAL MARINE FISHERIES SERVICE, PANAMA CITY, FL. NOAA-TM-NMFS-SEFC-12. 2
7 PP.

KEYW BIOLOGY	COASTAL WATER	FISHERY
MIGRATION	KING MACKEREL	SPANISH MACKEREL

ABST

ANNO

06/11/1987

.....
ACC 391
TYPE
YEAR 1983
AUTH SUTTER, F.C.;CHRISTMAS, J.Y.;
TITL MULTILINEAR MODELS FOR THE PREDICTION OF BROWN SHRIMP HARVEST IN MISSISSIPPI WATERS.

BIBL GULF RES. REP. 7(3):205-210.

KEYW BIOLOGY COASTAL WATER FISHERY STATISTICS
FISHERY MATHEMATICAL MODEL SHRIMP
BROWN SHRIMP

ABST A multilinear regression analysis of water temperature, salinity, and number of postlarval brown shrimp in nursery areas was used to predict the June and July commercial harvest of brown shrimp in Mississippi waters. A total of 80.2% of the variation in harvest was accounted for by this model. When an effort variable was added to the equation, the amount of variation explained by these parameters increased to 85.4%. The coefficients of the two multilinear equations were recalculated exclusive of the data set for the last year to test the predictive capabilities of the models. For that year, the first model showed, a percent error of 38.2%, and the second model, 35.3%.

ANNO

06/11/1987

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ACC 2479
TYPE P
YEAR 1968
AUTH SWEAT, D.E.;
TITL GROWTH AND TAGGING STUDIES ON PANULIRUS ARGUS (LATREILLE) IN THE FLORIDA KEYS.

BIBL FLA. BD. CONSERV. MAR. RES. LAB., TECH. SER. NO. 57. 30 P.

KEYW MONROE	SPINY LOBSTER	GROWTH
PLANKTON	MIGRATION	TAGGING
TEMPERATURE	SALINITY	TIDE
WIND		

ABST Juvenile spiny lobsters (*Panulirus argus*) were studied in the Florida Keys from March 1966 to August 1968. Various sampling devices and artificial habitats were tested in different locations throughout the Keys to determine the best areas and most efficient techniques for collecting postlarval lobsters. Plankton samples indicated that metamorphosis of the phyllosome larvae probably occurs offshore, followed by a postlarval migration inshore. Results are reported from a tagging study of 2500 lobsters released near Key West.

ANNO

06/11/1987

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ACC 745
TYPE
YEAR 1964
AUTH SWEDMARK, B. ;
TITL THE INTERSTITIAL FAUNA OF MARINE SAND.

BIBL BIOL. REV. 39:1-42.

KEYW BENTHIC COMMUNITY	BIOLOGY	COASTAL WATER
FEEDING HABIT	MEIOFAUNA	TAXONOMY

ABST This article discusses the interstitial environment and adaptations by the interstitial fauna to this unique environment. The biology of these organisms (locomotion, nutrition and reproduction) is discussed, along with a systematic survey of the interstitial fauna.

ANNO

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ACC 614
 TYPE
 YEAR 1971
 AUTH SWIFT, D.J.P.; STANLEY, D.J.; CURRAY, J.R.;
 TITL RELICT SEDIMENTS ON CONTINENTAL SHELVES: A RECONSIDERATION.

BIBL J. GEOL. 79:322-346.

KEYW HOLOCENE
 GEOLOGY

PLEISTOCENE
 SEDIMENT

CONTINENTAL SHELF

ABST Relict sediments on shelves, originally defined as "remnant from different earlier environment," are recognized by petrographic criteria (grain size, iron staining, etc.), fauna, and topography. Recent studies have revealed a second set of attributes which indicate that these deposits, although originating in an earlier environment are dynamic systems which are undergoing modification in response to their present environment, especially the hydraulic regime, and are approaching a state of equilibrium with this environment. The modification may be simulated by means of a stochastic process model. A spectrum of modern shelf regimes and the resulting deposits is considered. The high-energy, tide-dominated shelf seas of western Europe have extensively reworked their Pleistocene and Holocene transgressive substrates, producing a constructional topography and regional textural gradients. Similar topography and textural gradients are reported from the tide-swept shoals and banks off northeastern North America and from farther south in the Middle Atlantic Bight, a wave-dominated shelf. Reworking in lower-energy environments such as the Gulf of Mexico may result only in textural mixing of the products of deposition of different periods of time and different sources. The reworked portions of relict sediments are thus a facies in transition, physically induced analogues of the chemically induced soil profiles of subaerial surfaces. While "relict sediment" is a valuable genetic name for the unreworked sediment type, "palimpsest sediment" is a convenient operational descriptive term for the reworked parts.

ANNO

06/11/1987

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ACC 625

TYPE

YEAR 1972

AUTH SWIFT, D.J.P.;DUANE, D.B.;PILKEY, O.H., EDS.;

TITL SHELF SEDIMENT TRANSPORT.

BIBL STROUDSBURG, DOWDEN, HUTCHINSON AND ROSS.

KEYW CONTINENTAL SHELF
SEDIMENT TRANSPORT

GEOLOGY

PHYSICAL PROCESS

ABST

ANNO

06/11/1987

.....
ACC 2182
TYPE P
YEAR 1972
AUTH SYKES, J.E. ;
TITL REPORT TO THE NATIONAL MARINE FISHERIES SERVICE BIOLOGICAL LABORATORY, ST.
PETERSBURG BEACH, FISCAL YRS. 1970 AND 1971.

BIBL NATL. OCEANIC ATMOS. ADMIN. TECH. MEM. NMFS SER-2. 13 P.

KEYW FISHERY RESOURCE FISH
ESTUARY DEVELOPMENT

ABST A biological report from the National Marine Fisheries Service presented the following conclusions concerning Florida's marine resources from 1970-1971 studies. Most of the major coastal and offshore fisheries of the United States depend upon species related to rearing and nursery areas in estuaries and the nearshore zone. To maintain and increase coastal shell fisheries, it is necessary to provide continuing biological production near shore. Such provision requires a thorough ecological knowledge of the nursery and rearing area. Currently, over 6,000 engineering proposals for estuarine areas are reviewed by federal agencies each year. In view of relentless pressures affecting estuaries, this laboratory works with other federal agencies and the Gulf states to provide data directly applicable to the preservation, maintenance, and enhancement of nursery areas that generate valuable commercial and recreational species.

ANNO

06/11/1987

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ACC 2283

TYPE P

YEAR 1967

AUTH SYKES, J.E.;

TITL REPORT OF THE BUREAU OF COMMERCIAL FISHERIES BIOLOGICAL LABORATORY, ST. PETERSBURG BEACH, FLORIDA. FISCAL YEAR 1966.

BIBL U.S. DEPT. INTER., FISH WILFL. SERV. CONTRIB. NO. 32, CIRC. 257. 18 P.

KEYW RED TIDE
MANAGEMENT

ESTUARY

PRODUCTIVITY

ABST Progress in estuarine and red tide research programs was described. The application of biological information toward the maintenance and conservation of estuarine zones was stressed. The programs were designed to document the relatively unknown scope of biological productivity in the coastal zones of the eastern Gulf of Mexico, to measure the effect of changes in these zones, and to develop methods of increasing marine resources which can be used by man.

ANNO

06/11/1987

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ACC 2284
TYPE P
YEAR 1968
AUTH SYKES, J.E.;
TITL REPORT TO THE BUREAU OF COMMERCIAL FISHERIES BIOLOGICAL LABORATORY, ST. PETERSBURG BEACH, FLORIDA.

BIBL U.S. DEPT. INTERIOR, FISH WILDL. SER., CONTRIB. NO. 39, CIRC. 290.17 P.

KEYW FISHERY	PLANKTON	FISH
PHYSICAL	BIOLOGICAL	RED TIDE

ABST The major goals of the Laboratory were discussed: to explore the relatively unknown scope of biological productivity in the coastal zone of the eastern Gulf of Mexico; to measure the effect of changes in that zone; and to develop methods of increasing estuarine fishery resources. The report described current research on projects in the estuarine and red tide programs. The projects included studies of sediments and organisms in bay bottoms, plankton crops and fish residing in and transferring between estuaries and the Gulf of Mexico, toxicity of the red tide organism, and experimental rearing of pompano in an impounded lagoon. A physical, hydrological, biological and sedimentological inventory of Florida estuaries was also in progress. A systematic and ecological study of benthos in Tampa Bay was reported.

ANNO

06/11/1987

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ACC 2285

TYPE P

YEAR 1970

AUTH SYKES, J.E.;

TITL REPORT OF THE BUREAU OF COMMERCIAL FISHERIES BIOLOGICAL LABORATORY, ST. PETERSBURG BEACH, FLORIDA. FISCAL YEAR 1969.

BIBL U.S. DEPT. INTERIOR, FISH WILDL. SER., CONTRIB. NO. 55, CIRC. 342. 22 P.

KEYW TEMPERATURE
NUTRIENT

SALINITY
TURBIDITY

DO

ABST Highlights of research for the 6 year period included analysis and publication of data related to effect of engineering on the estuarine resource and completion of field work on the Florida portion of the cooperative Gulf of Mexico estuarine inventory. In addition, data supplied through testimony to the Florida legislature assisted in establishment of an aquatic preserve; and after a local hearing in which laboratory data were presented, a municipality disapproved a potentially damaging engineering project.

ANNO

06/11/1987

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ACC 2286

TYPE P

YEAR 1966

AUTH SYKES, J.E.; FINUCANE, J.H.;

TITL OCCURRENCE IN TAMPA BAY, FLORIDA OF IMMATURE SPECIES DOMINANT IN GULF OF MEXICO COMMERCIAL FISHERIES.

BIBL FISH. BULL. 65(2):369-379.

KEYW COMMERCIAL FISHERY	SEASONAL	DISTRIBUTION
FISHERY	SALINITY	BLUE CRAB
PINK SHRIMP	BROWN SHRIMP	

ABST Species inhabiting the Tampa Bay estuary in early life & entering Gulf fisheries as adults were discussed. Twenty three species of major importance in Gulf of Mexico commercial fisheries were found inhabit Tampa Bay during immaturity. Seasonal and aerial distribution was described for the species common to Tampa Bay biological collection and catches in the Gulf. Although most of these species were distributed throughout the Bay system, Old Tampa Bay harbored greater numbers than any other area. Hillsborough Bay, an area of the system similar to Tampa Bay in salinity regime harbored fewer important species than any other area. Its relatively low production was attributed to the loss of the natural habitat through human alteration. The role of the estuary on producing species important in Gulf fisheries was discussed, and the need for preservation of estuarine nursery areas was stressed.

ANNO

06/11/1987

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ACC 2183
TYPE P
YEAR 1962
AUTH TABB, D.C.;DUBROW, D.L.;JONES, A.E.;
TITL STUDIES ON THE BIOLOGY OF THE PINK SHRIMP, PENAEUS DUORARUM BURKENROAD, IN
EVERGLADES NATIONAL PARK, FLORIDA.

BIBL ST. BD. CONSER., UNIV. MIAMI MAR. LAB. TECH. SER. NO. 37, 2\1-32 P.

KEYW BIOLOGY PINK SHRIMP TIDE
 TEMPERATURE SALINITY

ABST Studies in the Everglades National Park indicated that populations of Penaeus duorarum postlarvae peaked during the spring and early summer and reached low points in the late summer and fall. Peak numbers of postlarvae generally coincided with the peak velocity of the flooding tides. Juvenile P. duorarum abundance peaked from June to September and were lowest in December and January. P. duorarum were determined to be sensitive to sudden cold temperatures and were observed to respond by entering deeper water. Carapace length-frequency distributions demonstrated time and characteristics of periods of juvenile immigration into the nursery and size during emigration to offshore grounds. Pink shrimp were determined to be tolerant of diverse salinity ranges.

ANNO

06/11/1987

.....
ACC 2480

TYPE P

YEAR 1962

AUTH TABB, D.C.; DUBROW, D.L.; MANNING, R.B.;

TITL THE ECOLOGY OF NORTHERN FLORIDA BAY AND ADJACENT ESTUARIES.

BIBL MAR. LAB., UNIV. OF MIAMI, TECH. SER. NO. 39, 81 P.

KEYW MONROE

FISH

BENTHIC

DO

SEAGRASS

ECOLOGY

INVERTEBRATE

CURRENTS

TIDE

TURBIDITY

SEDIMENT

SALINITY

WIND

ABST Florida Bay was characterized by turbidity, shallow waters and dominant cover (Thalassia). Fauna and flora of the offshore regions were found to be related to the major substratum types. A large influx of fishes and invertebrates into the study area in the late fall, corresponding to lower salinities, was noted. Analysis of bottom sediments provided an estimate of the character of the bottom as a substratum for benthic organisms and gave an indication of the nature of deposition of the various sediment size fractions in relation to currents, wind transport and fresh water source.

ANNO

06/11/1987

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ACC 2481
TYPE P
YEAR 1974
AUTH TABB, D.C.;HEALD, E.J.:(TROPICAL BIOINDUSTRIES DEV. CO.);
TITL ENVIRONMENTAL SURVEY AND COMMENTARY ON PHASE 1--HARBOR COURSE DEVELOPMENT P
LAN.

BIBL IN: ENVIRONMENTAL, BIOLOGICAL, AND HYDROLOGICAL REPORTS TO ACCOMPANY PLANS
FOR PHASE I-HARBOR COURSE DEVELOPMENT...OCEAN REEF CLUB. P.1-17, SEC. 1

KEYW MONROE BIOLOGICAL HYDROLOGICAL
COMMUNITY SALINITY

ABST A survey of environmental conditions to accompany plans for a proposed expansion of the Ocean Reef Club on Key Largo was conducted. An examination was made of the Dispatch Slough area, and the mangrove communities occupying the Slough were described. A determination was made whether or not these communities are effectively intertidal, irrespective of their elevation in relation to surveyed mean sea level. Additionally, an assessment of the importance of the mangrove communities of the slough as contributors to adjacent biological systems was presented. Comments were given on the impact of the proposed development plan on the slough and adjacent coastal areas.

ANNO

06/11/1987

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ACC 2482
TYPE P
YEAR 1962
AUTH TABB, D.C.; JONES, A.C.;
TITL EFFECT OF HURRICANE DONNA ON THE AQUATIC FAUNA OF NORTH FLORIDA BAY.

BIBL TRANS. AM. FISH. SOC. 91(4):375-378.

KEYW MONROE	OXYGEN	MORTALITY
SALINITY	DISSOLVED OXYGEN	FISH
PINK SHRIMP	STORM EVENT	HURRICANE

ABST A report on the effects of Hurricane Donna on aquatic fauna in North Florida Bay was presented. In December 1960, Hurricane Donna caused heavy mortality among aquatic fauna in North Florida Bay. The depletion of oxygen due to the decomposition of organic material resulted in subsequent mortality. Within 6 weeks, salinities were normal; however, dissolved oxygen concentrations remained unusually low for a longer period. In regions of greatest oxygen depletion, aquatic fauna were scarce for many months. Sport fish catches declined right after the hurricane, but recovered within 1 to several months, depending upon the area. Moreover, juvenile pink shrimp moved from their estuarine nursing grounds into deeper water approximately 60 miles offshore.

ANNO

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ACC 2483

TYPE P

YEAR 1961

AUTH TABB, D.C.;MANNING, R.B.;

TITL A CHECKLIST OF THE FLORA AND FAUNA OF NORTHERN FLORIDA BAY AND ADJACENT BRACKISH WATERS OF THE FLORIDA MAINLAND COLLECTED DURING THE PERIOD JULY 1957 THROUGH SEPTEMER 1960.

BIBL BULL. MAR. SCI. GULF & CARIBB. 11(4):552-649.

KEYW MONROE

PHYSICAL

TEMPERATURE

FAUNA

INVERTEBRATE

DISTRIBUTION

SALINITY

FISH

ABUNDANCE

FLORA

ABST Collections from the marine and brackish water areas of northern Florida Bay and adjacent estuaries resulted in 432 species of plants, invertebrate animals and fish. Notes on their abundance, tolerance to changes in the physical environment, and distribution in relation to habitat were included. Fluctuations in distribution and abundance in a natural environment were studied.

ANNO

06/11/1987

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ACC 2205
TYPE P
YEAR 1978
AUTH TAGATZ, M.E.; TOBIA, M.;
TITL EFFECT OF BARITE (BASO₄) ON DEVELOPMENT OF ESTUARINE COMMUNITIES.

BIBL ESTUAR. COAST. MAR. SCI. 7:401-407.

KEYW DRILLING MUD LARVAE BARIUM
 ANNELID

ABST Barite, the primary component of oil drilling muds, was placed in aquaria with flowing estuarine water, and communities developing from planktonic larvae were observed. Aquaria contained: sand only; 1 part barite and 10 parts sand; 1 part barite and 3 parts sand; or sand covered by 0.5 cm barite. After 10 weeks exposure fewer animals were found in barite covered sand and the 1 barite:3 sand aquaria. Annelids were particularly affected. Data indicate large quantities of barite could affect the colonization of benthic animals. barium;

ANNO

06/11/1987

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ACC 2206

TYPE P

YEAR 1978

AUTH TAGATZ, M.E.; IVEY, J.M.; LEHMAN, H.K.; OGLESBY, J.L.;

TITL EFFECTS OF A LIGNOSUFONATE-TYPE DRILLING MUD ON DEVELOPMENT OF EXPERIMENTAL
ESTUARINE MACROBENTHIC COMMUNITIES.

BIBL NE GULF SCI. 2(1):35-42.

KEYW DRILLING MUD
POLYCHAETE

LARVAE

COELENTERATE

ABST Communities developing from planktonic larvae in aquaria containing flowing estuarine water and various proportions of sand and drilling mud were evaluated. Annelids and coelenterates were fewer in aquaria containing drilling mud than aquaria with sand only. Exposures to drilling mud reduced both numbers of individuals and species. These and other data suggest large discharges of drilling mud could adversely affect the colonization of substrata by benthic animals.

ANNO

06/11/1987

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ACC 2207

TYPE P

YEAR 1979

AUTH TAGATZ, M.E.; IVEY, J.M.; OGLESBY, J.L.;

TITL TOXICITY OF DRILLING-MUD BIOCIDES TO DEVELOPING ESTUARINE MACROBENTHIC COMMUNITIES.

BIBL NORTHEAST GULF SCI. 3(2):88-95.

KEYW COMMUNITY
MOLLUSC

DRILLING MUD
POLYCHAETE

DRILLING

ABST The effects of the biocides Surflo B33 (25% dichlorophenol and other chlorophenols) and Aldacide (91% paraformaldehyde), which are used in drill muds for oratory drilling for oil offshore, on developing macrobenthic communities were examined from laboratory treatments lasting 7 weeks. Thirty seven species from 6 phyla were represented among the 1.941 animals developed from planktonic larvae. Abundance of chordates, molluscs, and anelids were significantly reduced in treatments of 819 ug Surflo-B33/l as compared to controls; molluscs were also significantly fewer in treatments of 41 ug/l. Aldacide concentrations of 15 and 300 ug/l did not significantly affect average numbers of animals or species, indicating that paraformaldehyde should be considered as an alternative biocide to highly toxic chlorophenols for use in natural waters.

ANNO

06/11/1987

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ACC 2208
TYPE P
YEAR 1978
AUTH TAGATZ, M.E.; IVEY, J.M.; LEHMAN, H.K.; OGLESBY, J.L.;
TITL EFFECTS OF A LIGNOSULFONATE TYPE DRILLING MUD (AS USED IN EXPLORATORY DRILLING FOR OIL OFFSHORE) ON THE DEVELOPMENT OF ESTUARINE MACROBENTHIC COMMUNITIES.

BIBL

KEYW DRILLING MUD	DRILLING	COELENTERATE
MOLLUSC	POLYCHAETE	CRUSTACEAN

ABST Effects of a lignosulfonate type drilling mud (as used in exploratory drilling for oil offshore) on the development of estuarine macrobenthic communities was studied. Specifically, the effects on the community composition were: 1) annelids and coelenterates were significantly fewer in aquaria containing drilling mud than in the control aquaria, and 2) arthropods were significantly affected by mud cover over sand. Molluscs were also diminished in this environment but not significantly. Overall, it was concluded that the discharge of large quantities of drilling mud at levels tested in the laboratory will adversely affect the colonization of various substrata by benthic animals in nature.

ANNO

06/11/1987

.....
ACC 2558

TYPE P

YEAR 1968

AUTH TAGATZ, M.D.;

TITL BIOLOGY OF THE BLUE CRAB, CALLINECTES SAPIDUS RATHBUN, IN THE ST. JOHNS RIVER, FLORIDA.

BIBL FISH. BULL. 67(1):17-33.

KEYW BLUE CRAB
FISH
SALINITY

SPAWNING
CRUSTACEAN

MOLLUSC
TEMPERATURE

ABST A description of the biological characteristics of *Callinectes sapidus* in the St. Johns River was presented. Blue crabs commonly mated from March to July and from October to December in the St. Johns River. The proportion of males and females that matured at a small size was larger in saltwater than in freshwater. Blue crabs spawned in the first 30 km of river above the mouth and the eggs hatched in the ocean within 6 km of shore. Spawning began as early as February and continued through October. Some blue crabs of both sexes migrated from the St. Johns River to the Intracoastal Waterway, to 4 other rivers, and to the ocean. Many females tagged in the ocean were recaptured in inland waters throughout the year. During the spawning season some reentered the St. Johns River for a second spawning within 15 days after their eggs hatched. Blue crabs 5 to 200 mm wide fed principally upon molluscs (primarily clams and mussels), fish, and crustaceans (amphipods and crabs). They ate the same type of food regardless of crab size, area, and season.

ANNO

06/11/1987

.....
ACC 2559
TYPE P
YEAR 1969
AUTH TAGATZ, M.E.;
TITL GROWTH OF JUVENILE BLUE CRAB, CALLINECTES SAPIDUS RATHBUN, IN THE ST. JOHNS
RIVER, FLORIDA.

BIBL FISH. BULL. 67(2):281-288.

KEYW GROWTH BLUE CRAB TEMPERATURE
SALINITY

ABST Molt intervals of the blue crab *Callinectes sapidus* were similar at fresh and salt water sites, but the average growth was determined to be generally more per molt in salt water. From April to mid-November the mean molt interval was 11 days for crabs 20 to 29 mm wide; it increased to 41 days for crabs 130 to 139 mm wide. Frequency of molting decreased in winter, but most juveniles 20 to 59 mm wide molted 2 or 3 times. Growth increments per molt varied from 7.8 to 50%. Mean growth increments, by 10 mm width groups, was 20.9 to 34.2%. Estimates indicated that most blue crabs in the St. Johns River reach harvestable size (width of 120 mm) within one year after hatching.

ANNO

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ACC 553
 TYPE
 YEAR 1976
 AUTH TANNER, W.R. ;
 TITL OIL PROSPECTS IN THE GULF OF MEXICO REGION.

BIBL TRANS., GULF COAST ASSOC. GEOL. SOC. 26:345-348.

KEYW COASTAL WATER	EXPLORATION	GEOLOGY
OIL	RESOURCE	SEDIMENTOLOGY

ABST Assessment of the relative merits of poorly explored regions can be made on the basis of a structural-sedimentological analysis of information from as few wells as one per region. The pertinent variables are (1) mean grain size, (2) sorting or clay content, (3) organic matter, and (4) rate of burial. This information is readily available from cores or samples, and reasonably good estimates can be made from modern log suites. For a "Most Attractive" rating, the possible reservoir beds in a well to be studied should have the mean size in the sand category, and sorting should be good-to-excellent (very little clay or fine silt); associated rocks should have a relatively high content of organic matter; and the indicated burial rate should be high. A less satisfactory assessment, using these same concepts, can be made on the basis of general geological knowledge without well data. Under these circumstances, the required sedimentological information can be estimated on the basis of regional geological knowledge. These techniques do not apply in dominantly carbonate or evaporite sections and hence cannot be used in the Florida and Yucatan areas. For the rest of the coastal plain and continental shelf of the Gulf of Mexico region, application of the four basic ideas indicates that the most attractive targets are in the state of Louisiana and Tabasco (and immediately adjacent areas), and that lesser production can be expected as one moves along the coast away from these prime targets.

ANNO

06/11/1987

.....
ACC 718
TYPE
YEAR N/AN
AUTH TANNER, W.F. ;
TITL FLORIDA GULF COAST SURF ZONE WAVE POWER DATA.

BIBL DEPARTMENT OF GEOLOGY. FLORIDA STATE UNIVERSITY, TALLAHASSEE, FL.

KEYW MINERALOGY	SEDIMENT TEXTURE	SEDIMENT
WAVE AMPLITUDE	WAVE LENGTH	WAVE PERIOD
WAVE SPEED	MODEL	SEDIMENT TRANSPORT

ABST Surf zone wave power data along the Gulf coast of Florida, has been collected by the Geology Department of Florida State University since 1971. Measurements of surf zone waves have been made along the coast at intervals of approximately 800 meters or less. These data have been correlated with ocean wave data for the same time periods, and computer models have been generated. Associated sediment data, including size analysis and mineralogy for 60 stations along the coast, has been collected to verify computer model theorized areas of erosion and deposition.

ANNO

06/11/1987

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ACC 2147
TYPE P
YEAR 1959
AUTH TANNER, W.F.;
TITL NEARSHORE STUDIES IN SEDIMENTOLOGY AND MORPHOLOGY ALONG THE FLORIDA PANHANDLE COAST.

BIBL J. SEDIMENT. PET. 29(4):564-574.

KEYW SEDIMENT	CHEMICAL	GRAIN SIZE
ASSEMBLAGE	MICROFAUNA	

ABST A general survey of the nearshore (<10 miles offshore) sediments of the Florida panhandle region was conducted from 1955 to 1958. Sedimentological parameters investigated included chemical composition, grain size and roundness, heavy mineral content, microfaunal assemblage, and ripple marks and related features. Quartz was found to be dominant while heavy minerals were rare within the study area. Sediment grain size increased in a seaward direction. Sedimentation was thought to be regulated by small changes in bathymetry. Shell fragments were uncommon in most locations, although fauna containing hard parts were abundant.

ANNO

06/11/1987

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ACC 4232

TYPE P

YEAR 1982

AUTH TAPANES, J.J.;GONZALEZ-OOYA, F.;

TITL CAUSES AND PREDICTION OF ROUGH SEAS IN THE GULF OF MEXICO CAMPECHE BANK
AND CUBAN SHELF WATERS AND THEIR EFFECT ON FISHERIES.

BIBL REV. INVEST. MAR. 2(2):3-108.

KEYW WIND
METEOROLOGY

WAVE

FISHERY

ABST Wind fields in the Gulf of Mexico, Campeche Bank and Cuban shelf waters are presented, due principally to cold fronts, trade and southern winds, and its influence on wave generation. The influence of such winds upon fishery activities in the shelf waters is also outlined.

ANNO

06/11/1987

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ACC 4253

TYPE P

YEAR 1981

AUTH TAPANES, J.J.;GONZALEZ-COYA, F.;

TITL WAVE GENERATION AND PREDICTION IN THE GULF OF MEXICO, CAMPECHE BANK AND WAT
ERS OF THE CUBAN PLATFORM AND THEIR INFLUENCE ON FISHERIES.

BIBL REV. INVEST. MAR. 2(2):3-108.

KEYW WAVE

FISHERY

WIND

METEOROLOGY

ABST Wind fields in the Gulf of Mexico, Campeche Bank and Cuban shelf waters are presented, due principally to cold fronts, trade and southern winds, and its influence on wave generation. Finally, the influence of such winds upon fishery activities in our shelf waters is also outlined.

ANNO

06/11/1987

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ACC 320

TYPE

YEAR 1975

AUTH TATUM, W.M.;

TITL EXPERIMENTS IN OVERWINTERING FLORIDA POMPANO AND WINTER CULTURE OF RAINBOW
TROUT.

BIBL ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, MONTGOMERY, AL. N
OAA-75092905. 22 PP.

KEYW BIOLOGY

COASTAL WATER

FISHERY

MARICULATURE

FISH

ABST

ANNO

ACC 239

TYPE

YEAR 1973

AUTH TAYLOR, J.L.; FEIGENBAUM, D.L.; STURSA, M.L.;

TITL UTILIZATION OF MARINE AND COASTAL RESOURCES. IN J.I. JONES, M.E. RING, M.O
. RINKEL, AND R.E. SMITH, EDS. A SUMMARY OF KNOWLEDGE OF THE EASTERN GULF
OF MEXICO.

BIBL STATE UNIVERSITY SYSTEM OF FLORIDA, INSTITUTE OF OCEANOGRAPHY, ST. PETERSBU
RG, FL.

KEYW COMMERCIAL FISHERY	RESOURCE	SOCIOECONOMIC
SPORT FISHERY	ESTUARY	SNAPPER
GROUPER	STONE CRAB	SPINY LOBSTER
MULLET	SEA TROUT	BLUE CRAB

ABST This article is a review of commercial and sport fisheries in the Gulf of M
exico with particular attention to those in the eastern region between Tort
ugas and the Mississippi Delta. Estuarine dependence of these fisheries is
emphasized, and data are presented on fishery production and the fishing in
dustry. Production potential and the future of Gulf fisheries are discussed
together with prospects for rearing selected species by techniques of aqua
culture. Important aspects of state fisherise are summarized for eastern Lo
uisiana, Mississippi, Alabama, and Florida. The most important fisheries in
the eastern Gulf are described in detail. These include fisheries for shri
mp menhaden, industrial bottom fish, snappers and groupers, mackerel, mulle
t, seatrout, oyster, blue crab, stone crab, and spiny lobster. The impact o
f these fisheries on such wet land resources as tidal flats, mangrove swamp
s, salt marshes, and contiguous fresh-water marshes is also covered, and a
brief discussion of barrier beaches is presented.

ANNO

06/11/1987

.....
ACC 756

TYPE

YEAR 1978

AUTH TAYLOR, J.L.;

TITL EVALUATION OF DREDGING AND OPEN WATER DISPOSAL ON BENTHIC ENVIRONMENTS: GULF INTRACOASTAL WATERWAY - APALACHICOLA BAY, FLORIDA TO LAKE BORGNE, LA.

BIBL U.S. ARMY CORPS OF ENGINEERS, MOBILE DISTRICT, MOBILE, AL. 51 PP.

KEYW BENTHIC COMMUNITY
BENTHIC

BIOLOGY
FAUNA

DREDGING
PRODUCTIVITY

ABST From November, 1977 to February, 1978, 784 benthic samples were collected from 28 sites from Apalachicola Bay, Florida to Lake Borgne, Louisiana. These samples were taken to evaluate the effects of past maintenance dredging operations on bottom communities of the Gulf Intracoastal Waterway. Objectives were to characterize the benthic fauna at 28 sites along the waterway, estimate biological productivity and food web relationships at each site and rate the disposal sites with regard to environmental impact of dredge disposal.

ANNO

06/11/1987

.....
ACC 852
TYPE
YEAR 1961
AUTH TAYLOR, R.;
TITL PHAEOPHYTA OF THE EASTERN GULF OF MEXICO.

BIBL PH.D. DISSERTATION. DUKE UNIVERSITY, DURHAM, NC. 300 PP.

KEYW BENTHIC FLORA

ABST A three year survey beginining in 1958 was undertaken to study the Phaeophyta of the eastern Gulf of Mexico and Beaufort, North Carolina. The study included species determination and counts of Phaeophyta.

ANNO

06/11/1987

.....

ACC 1065

TYPE

YEAR 1953

AUTH TAYLOR, W.R.;

TITL SKETCH OF THE CHARACTER OF THE MARINE ALGAL VEGETATION OF THE SHORES OF THE
GULF OF MEXICO.

BIBL FISH. BULL. 89:177-192.

KEYW ALGAE
FLORA

BIOLOGY
MARINE

BOTANY

ABST

ANNO

06/11/1987

.....
ACC 2252
TYPE P
YEAR 1968
AUTH TAYLOR, J.L.; SALOMAN, C.H.;
TITL SOME EFFECTS OF HYDRAULIC DREDGING AND COASTAL DEVELOPMENT IN BOCA CIEGA BAY, FLORIDA.

BIBL FISH. BULL. 67(2):213-241.

KEYW SEAGRASS	FISHERY	INFAUNA
MEIOFAUNA	TEMPERATURE	SALINITY
DO	CHLOROPHYLL	NUTRIENT

ABST Some effects of hydraulic dredging and coastal development on Boca Ciega Bay were discussed. It was estimated that the losses due to the filling of the Bay by hydraulic dredging has reduced Boca Ciega Bay by about 20% since 1950. In terms of annual production, the minimum estimates of loss were 25,841 metric tons of seagrass, 73 metric tons of fishery products and 1,091 metric tons of infauna, exclusive of meiofauna. Secondary losses due to sedimentation, turbidity, and domestic sewage was suggested to add additional inestimable losses.

ANNO

06/11/1987

.....
ACC 2332
TYPE P
YEAR 1974
AUTH TAYLOR, J.L.;
TITL THE CHARLOTTE HARBOR ESTUARINE SYSTEM.

BIBL FLA. SCIENTIST 37(4):205-216.

KEYW CHARLOTTE	POLLUTION	FISH
TEMPERATURE	SALINITY	DO
TURBIDITY	NUTRIENT	CHEMISTRY
MOLLUSC	DREDGING	POLLUTION

ABST The Charlotte Harbor estuary was described. It is about 35 by 30 miles at the extremes with more than 200 miles of shoreline and comparatively little contamination. Vegetation includes salt marsh, mangrove and other peninsular Florida Gulf coast communities which are highly productive. Dredging and development had an inverse effect on more than 11,000 acres near Port Charlotte, Punta Gorda, Cape Coral and Fort Myers. Additional acres were closed to shell fishing because of pollution. Further manmade changes have threatened the value of the estuary as a fishing ground and hatchery for commercially valuable marine fishes.

ANNO

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ACC 4142
 TYPE P
 YEAR 1983
 AUTH TAYLOR, R.G.;MCMICHAEL, R.H.;
 TITL THE WIRE FISH-TRAP FISHERIES IN MONROE AND COLLIER COUNTIES, FLORIDA. 1983.

BIBL FL. MAR. RES. PUBL. NO. 39. 19 P.

KEYW BIOMASS	COMMERCIAL FISHERY	DEMERSAL FISH
FISH TRAP	FISH	FISHING EFFORT
FISHING GEAR	GROUPE	REEFFISH
BIOLOGY		

ABST The commercial fish-trap fishery in Monroe and Collier Counties was investigated from November 1979 through September 1980. Fishing grounds, techniques, trap design, and catch composition are described. A total of 1,694 trap hauls containing 10,226 fishes of 111 species were monitored in the Monroe County fishery. Target fishes in Monroe County made up 69.2% of the total weight and 50.7% of the total number monitored. Three of the ten most numerically abundant species were target species. Serranids composed 71.0% of the target weight and 29.4% of the target number monitored in Monroe County. Average yield in Monroe County was 4.9 kg/haul; 3.4 kg were target species. Two hundred seventy trap hauls monitored in the Collier County fishery contained 3,111 fishes of 28 species. Target fishes in the Collier County fishery made up 70.1% of the total weight and 27.9% of the total number monitored. *Epinephelus morio*, the most abundant target species in the Collier County fishery, made up 91.0% of the target weight and 73.0% of the target number monitored. Average yield in Collier County was 4.4 kg/haul; 3.1 kg were target fishes. Trap loss was estimated at 63% per year; however, the fishing life and catch rate of lost traps remain unclear. There was no significant difference between the mean fork lengths of five species of serranids taken from traps constructed of two different mesh sizes. Four percent of all fishes observed were dead or injured. The most commonly injured fishes were chaetodonids and pomacanthids.

ANNO

06/11/1987

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ACC 143
TYPE
YEAR 1980
AUTH TECHCON, INC.;
TITL ENVIRONMENTAL MONITORING PROGRAM FOR THE MOBILE OIL EXPLORATION AND PRODUCI
NG SOUTHEAST, INC. TEST WELL IN MOBILE BAY, ALABAMA.

BIBL MOBILE OIL EXPLORATION AND PRODUCING SOUTHEAST, INC., NEW ORLEANS, LA. 7 VO
LS.

KEYW BENTHIC COMMUNITY	BIOLOGY	CHEMISTRY
GEOLOGY	HYDROGRAPHY	PHYSICAL PROCESS
SEDIMENTOLOGY	WATER QUALITY	OFFSHORE DRILLING
DRILLING		

ABST Mobile Oil Exploration and Producing Southeast, Inc. acquired four oil and gas leases in Mobile Bay, Alabama in 1969. Applications for drilling permits were filed in 1970 but the State of Alabama did not provide water quality certification and clear the way for drilling until 1978. The Mobile Bay Environmental Monitoring Program performed for Mobil Oil Southeast Exploration and Producing, Inc. by TechCon, Inc. has furnished both a clear demonstration of the clean operation of the test well and an excellent baseline for important characteristics of the Mobile Bay estuary. Based upon the results of these studies, it is evident that natural environmental variability induced by seasonal changes and periodic climatological extremes exceeds by far any effects which the drilling operation might have had on this estuary. Much better predictions can now be made of the impacts of additional test drilling and production in Mobile Bay. And finally, examination of this database identifies those aspects of the ecosystem which will provide meaningful information at a realistic cost during monitoring of future development of oil resources in the Bay.

ANNO

06/11/1987

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ACC 808

TYPE

YEAR 1977

AUTH TEMPLE, R.F.;HARRINGTON. D.L.;MARTIN, J.A.;

TITL MONTHLY TEMPERATURE AND SALINITY MEASUREMENTS OF CONTINENTAL SHELF WATERS OF
THE NORTHWESTERN GULF OF MEXICO, 1963-1965.

BIBL NOAA TECH. REPORT NMFS SSRF-707.

KEYW SALINITY

TEMPERATURE

HYDROGRAPHY

PHYSICAL OCEANOGRAPH

ABST Monthly temperature and salinity data were collected at 8 transects totaling 40 stations west of the Mississippi River to the Texas Mexico border from January 1963 to December 1965. In addition, 10 stations on 2 transects were occupied bimonthly in 1963 east of the Mississippi River.

ANNO

06/11/1987

.....
ACC 865
TYPE
YEAR 1985
AUTH TEMPLE, R.F.; MARTIN, J.A.;
TITL SURFACE CIRCULATION IN THE NORTHWESTERN GULF OF MEXICO AS DEDUCED FROM DRIFT BOTTLES.

BIBL NOAA TECH. REPORT IN PRESS.

KEYW DRIFT BOTTLE CURRENTS WIND DIRECTION
CIRCULATION

ABST Over 7900 drift bottles have been released in the northwest Gulf of Mexico out to the 100 fathom line in an effort to describe the surface circulation patterns of this area. A total of 523 bottles have been returned within 15 days and 430 returned between 16 30 days after release. Additional bottles have been returned after 30 days.

ANNO

06/11/1987

.....
ACC 67
TYPE
YEAR 1979
AUTH TEREKO CORPORATION;
TITL LITERATURE REVIEW OF MISSISSIPPI SOUND AND ADJACENT AREA.

BIBL U.S. ARMY CORPS OF ENGINEERS, MOBILE DISTRICT, MOBILE, AL.

KEYW BIOLOGY GEOLOGY HYDROLOGY
 OCEANOGRAPHY PHYSICAL PROCESS BIBLIOGRAPHY

ABST The present report summarizes published and pertinent unpublished information relative to environmental and biological characteristics of the nearshore sea bottom of the northeastern Gulf of Mexico. The study area extends from the East Pearl River, Mississippi to a point 14 miles east of Pensacola, Florida and from the shoreline to a depth of 22 fathoms. Preparation of the present report has entailed an extensive search of the available literature, including articles published in technical journals, a variety of reports to and by government agencies, and university dissertations (as listed in Dissertation Abstracts). All significant sources have been examined and abstracted for the pertinent information. Where major data gaps existed in the published literature, unpublished information was sought by telephone or by visitation. From the published and unpublished information the narrative section of this report and the supportive maps have been prepared. The annotated references and an index have also been included.

ANNO

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ACC 1037
TYPE
YEAR 1980
AUTH Tereco Corporation;
TITL LITERATURE SEARCH AND SELECTION OF A SITE OFF MOBILE, ALABAMA FOR DISPOSAL
OF DRILLING MUD AND CUTTINGS.

BIBL Tereco Corporation, College Station, TX. 127 pp.

KEYW	BIBLIOGRAPHY	BIOLOGY	GAS
	GEOLOGY	METEOROLOGY	OCEANOGRAPHY
	OIL	OPERATIONS	DRILLING MUD
	DRILL CUTTING		

ABST This report presents the background, methodology and justification for the selection of a site off Mobile, Alabama, for the disposal of drilling mud and cuttings. The drilling mud and cuttings will come from 14 proposed wells to be drilled over the next seven years in Mobile Bay by Mobil Oil Exploration and Producing Southeast, Inc. The quantity of drilling mud and cuttings produced by each well is estimated to be 4,900 cubic yards; therefore, the total amount of waste for disposal is estimated to be 68,600 cubic yards. It is planned that the material will be disposed by hopper barges on a per well rate of approximately 700-900 cubic yards every six weeks.

ANNO

06/11/1987

.....
ACC 4162
TYPE P
YEAR 1985
AUTH TETRA TECH, INC.
TITL FATE AND EFFECTS OF OIL DISPERSANTS AND CHEMICALLY DISPERSED OIL IN THE MAR
INE ENVIRONMENT.

BIBL PREPARED FOR THE MINERALS MANAGEMENT SERVICE (CONTRACT #14-12-0001-30157),
SAN DIEGO, CA. 114 PP.

KEYW HYDROCARBON	OIL SPILL	OIL
OIL RESIDUE	BIOLOGICAL	PHYSICAL
CHEMICAL	BIOASSAY	

ABST The fate and effects of oil dispersants and dispersed oil are reviewed in t
his report. Field tests indicate that total petroleum hydrocarbon concentr
ations in the upper few meters of the water column (typically 1-60 ppm imme
diately after dispersant application, with concentrations decreasing rapidl
y with depth) decrease by at least an order of magnitude within several hou
rs. Therefore, chemical dispersal of nearshore oil slicks may effectively
prevent stranding of concentrated oil on the shore. Dispersants have been
effective at removing oil stranded on beaches, but further research is need
ed to clarify the specific circumstances that lead to penetration of dispes
ed oil into sediment. Sublethal effects of modern oil dispersants on marin
e organisms have been demonstrated at dispersant concentrations of less tha
n 100 ppm. Acute lethal concentration (LC50) values ranged from about 10 t
o 50,000 ppm. With initial average concentrations in the field expected to
be about 0.5-2 ppm in the upper 3 m of the water column, relatively short-
term and localized effects from dispersants alone are expected under actual
field conditions. In field experiments, use of dispersants on nearshore o
il slicks has usually decreased initial effects on subtidal and intertidal
communities. Limited case history data indicate, in general, that adverse
effects caused by dispersant or dispersed oil have been observed only in ca
ses where dispersant has been applied directly to oiled shorelines. In mos
t cases, the relatively short-term effects of chemical dispesal of oil slic
ks may be acceptable to mitigate long-term effects of untreated oil on the

ANNO

06/11/1987

.....
ACC 2333
TYPE P
YEAR 1978
AUTH TEXAS INSTRUMENTS, INC.;
TITL BENTHIC MACROINVERTEBRATES, IN: PRELIMINARY BIOLOGICAL REPORT FOR THE PROPOSED DESOTO SITE DEVELOPMENT.

BIBL REPT. PREPARED FOR FLORIDA POWER AND LIGHT CO. 586 PP.

KEYW CHARLOTTE	BASELINE STUDY	SEASONAL
ABUNDANCE	DISTRIBUTION	BENTHIC
INVERTEBRATE	SUBSTRATE	TEMPERATURE
SALINITY	DO	TURBIDITY
CHEMISTRY		

ABST A baseline biological study was conducted to develop a comprehensive data base reflecting historical trends and present ecological conditions in the study area. The field sampling program was designed to inventory flora and fauna of the study area and describe spatial and seasonal patterns in their abundances and distribution. Terrestrial as well as aquatic environments were sampled. The waters of the study area were divided into 3 regions: 1) the Peace River (typical flowing freshwater environment); 2) the Peace River estuary; and 3) Charlotte Harbor. The most obvious influence on distribution; composition and abundance of benthic macroinvertebrates in the Peace River stations was riverflow. Density of organisms was reduced during the periods of increased flow, when much of the infauna was dislodged from the substrate. The Peace River estuarine stations demonstrated a readily apparent transitional nature of the benthos. The Charlotte Harbor benthic communities were extremely diverse and complex. No one factor maintained an overall controlling influence on the community dynamics of benthic macroinvertebrates in this area. It did appear, however, that major controlling factors in Charlotte Harbor were salinity and substrate type, while in the Peace River, flow rate was the most influential factor.

ANNO

06/11/1987

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ACC 2148

TYPE P

YEAR 1981

AUTH THISTLE, D.; LEWIS, F.G., III;

TITL LITERATURE SEARCH ON THE SOFT-BOTTOM BENTHOS OF THE OPEN WATERS OF THE GULF OF MEXICO. IN: PROC. OF A SYMP. ON ENVIRON. RESEARCH NEEDS IN THE GULF OF MEXICO, KEY BISCAYNE, FLORIDA, 30 SEPT.-5 OCT. 1979. D.K. ATWOOD (CONVENER).

BIBL NOAA/ERL, ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LAB., MIAMI, FLA. VOL. I
IB. P. 31-52.

KEYW BENTHIC
COMMUNITY

CONTINENTAL SHELF
FAUNA

POLLUTANT

ABST This summary paper presents a review of soft-bottom benthic faunal studies from intertidal, continental shelf, and deep sea habitats of the Gulf of Mexico. Studies on the effects of pollutants on benthic communities are also included. The sparsity of information on the continental shelf and deep sea benthos is noted. The authors recommend intensive studies on the continental shelf benthos and a whole suite of studies on individual organisms and community responses to pollutants.

ANNO

06/11/1987

.....
ACC 699
TYPE
YEAR 1978
AUTH THOMPSON, P.A.; LEMING, T.D.;
TITL SEASONAL DESCRIPTION OF WINDS AND SURFACE AND BOTTOM SALINITIES AND TEMPERATURES IN THE NORTHERN GULF OF MEXICO, OCTOBER 1972 TO JANUARY 1976.

BIBL NOAA TECH. REPT. NMFS SSRT-719. 44 PP.

KEYW HYDROGRAPHY	METEOROLOGY	WIND
SALINITY	TEMPERATURE	SEASONALITY

ABST Seasonal surface and bottom salinities and temperatures in the northern Gulf of Mexico are described. The area surveyed, from October 1972 to January 1976, was between Mobile Bay, Alabama (long. 88 00' w), and Atchafalaya Bay, Louisiana (long. 91 30' w), from 5 to 50 fathoms (9 to 91 m).

ANNO

06/11/1987

.....
ACC 2193
TYPE P
YEAR 1980
AUTH THOMPSON, M.J.;GILLILAND, L.D.;
TITL TOPOGRAPHIC MAPPING OF SHELF EDGE PROMINENCES OFF SOUTHEASTERN FLORIDA.

BIBL SOUTHEASTERN GEOL. 21(2):155-164.

KEYW TOPOGRAPHIC	SIDE SCAN SONAR	BIOLOGICAL
SUBSTRATE	DISTRIBUTION	HOLE
CORAL	REEF	

ABST The Sebastian Pinnale system, a zone of topographic prominences along the eastern continental shelf edge of Florida was mapped with side scan sonar and fathometer tracings. The major features of the zone were formed from combined geophysical and biological forces. Substrate distribution patterns are a result of deposition and erosion by the Florida Current. Periods of lower sea level caused differential erosion and dissolution of underlying limestone, forming holes and crater like depressions throughout the area. Major relief was found to be due to mounds of oolitic limestone and relict coral reefs.

ANNO

06/11/1987

.....
ACC 2202
TYPE P
YEAR 1974
AUTH THOMAS, J.R. ;
TITL BENTHIC SPECIES DIVERSITY AND ENVIRONMENTAL STABILITY IN THE NORTHERN INDIAN RIVER, FLORIDA.

BIBL MASTER'S THESIS. FLORIDA INSTITUTE OF TECHNOLOGY.

KEYW	DEPTH	REDOX	SEDIMENT
	TEMPERATURE	DO	SALINITY
	BENTHIC	DIVERSITY	

ABST Benthic samples were taken with a ponar grab along a transect in the northern Indian River, Florida, during the summer of 1973 to examine benthic species diversity. Species richness and evenness varied inversely with water depth. Species richness was also significantly related to the redox potential of the sediments. Oxygen availability, as determined from the redox potential, was believed to be more important than environmental stability in regulating species diversity. A biological indicator was proposed to assess sediment instability due to dredging activities in the estuary.

ANNO

06/11/1987

.....
ACC 2484
TYPE P
YEAR 1961
AUTH THOMAS, L.P.;
TITL DISTRIBUTION AND SALINITY TOLERANCE OF THE AMPHIURID BRITTLESTAR, OPHIOPHRA
GNUS FILOGRANEUS (LYMAN, 1875).

BIBL BULL. MAR. SCI. 11(1):158-160.

KEYW MONROE	DISTRIBUTION	ECHINODERM
SEAGRASS	SALINITY	ECHINODERMATA

ABST This short note gives the distribution of the amphiuroid, *Ophiophragmus filograneus*, in Florida and discusses the ecology of the species. *O. filograneus* was collected from Whitewater Bay, Florida, at a salinity of 7.7 o/oo, a record low for echinoderms. The estuarine domain of echinoderms is reviewed.

ANNO

06/11/1987

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ACC 2485

TYPE P

YEAR 1964

AUTH THOMAS, L.P.;

TITL AMPHIODIA ATRA (STIMPSON) AND OPHIONEMA INTRICATA LUTKEN, ADDITIONS TO THE
SHALLOW WATER AMPHIURID BRITTLE STAR FAUNA OF FLORIDA (ECHINODERMATA: OPHIU
ROIDEA).

BIBL BULL. MAR. SCI. GULF & CARIBB. 14(1):158-167.

KEYW MONROE

ECHINODERMATA

ABST *Ophionema intricata* Lutken and *Amphiodia atra* (Stimpson) were reported for the first time from Florida waters. Descriptions and illustrations were presented, and *Anaphiodia gyraspis* H.L. Clark and *A. limbata* (Grube) were synonymized with *A. atra*. A discussion of the genus *Amphiodia* was included.

ANNO

06/11/1987

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ACC 2531

TYPE P

YEAR 1961

AUTH THOMAS, L.P.;MOORE, D.R.;WORK, R.C.;

TITL EFFECTS OF HURRICANE DONNA ON THE TURTLE GRASS BEDS OF BISCAYNE BAY, FLORIDA.
A.

BIBL BULL. MAR. SCI. GULF & CARIBB. 11(2):191-197.

KEYW DADE
SEAGRASS

GROWTH
HURRICANE

STORM

ABST The dry weight of *Thalassia testudinum* washed ashore Biscayne Bay during Hurricane Donna of 1960 was estimated. Destructive agents other than wind were discussed. Although a great deal of *Thalassia* was washed ashore, damage to the *Thalassia* beds was considered light and a rapid growth rate contributed to an early recovery from storm damage.

ANNO

06/11/1987

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ACC 4191
TYPE P
YEAR 1980
AUTH THOMPSON, J.H., JR.; BRIGHT, T.J.;
TITL EFFECTS OF AN OFFSHORE DRILLING FLUID ON SELECTED CORALS.

BIBL PROC. SYMP./RES. ENVIRON. FATE EF. DRILL. FLUIDS CUTTINGS 2:1044-1078.

KEYW OFFSHORE DRILLING DRILLING FLUID CORAL
AGARCIA

ABST

ANNO

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ACC 2038
TYPE P
YEAR 1978
AUTH THORHAUG, A.;SHROEDER, P.B.;
TITL SYNERGISTIC EFFECTS OF SUBSTANCES EMITTED FROM POWER PLANTS ON SUBTROPICAL
AND TROPICAL POPULATIONS OF THE SEAGRASS THALASSIA TESTUDINUM: TEMPERATURE,
SALINITY, AND HEAVY METALS.

BIBL PRESENTED AT WASTE HEAT MGT. & UTILIZATION SECOND CONF., MIAMI BEACH, FLA.
P. XI-B-72-90.

KEYW SEAGRASS HEAVY METAL TEMPERATURE
SALINITY

ABST The effects of temperature and salinity on metal uptake in Thalassia testudinum were examined in an effort to determine synergistic relationships found in sites impacted by energy related industry. Metals used were zinc, cobalt, cesium, manganese, silver, and iron. Specimens were collected from the field but all work was done in the laboratory. Sublethal and lethal synergistic effects were found for several combinations of factors.

ANNO

06/11/1987

.....
ACC 2486

TYPE P

YEAR 1965

AUTH THORHAUG, A.L.;

TITL ASPECTS OF THE DEVELOPMENTAL MORPHOLOGY AND BIOLOGY OF THE GENUS PENICILLUS
, A GREEN MARINE ALGA.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI. MIAMI, FL.

KEYW MONROE

REPRODUCTION

DEPTH

ALGAE

DISTRIBUTION

MORPHOLOGY

CURRENTS

SEASONAL

GROWTH

SEDIMENT

ABST Penicillus in the Biscayne Bay and Florida Keys region was studied for distributions, relative densities, seasonal variations, and favorable environments. Plants were most abundant in the summer and on sandy or mud bottoms.

Space competition was important in determining growth of Penicillus, as were depth, current velocity, and predation. Growth occurred through asexual reproduction by vegetative propagation. Morphology and growth were also studied in the lab revealing a growth rate of .7 cm/week and a mean height of 5.7 cm.

ANNO

06/11/1987

.....
ACC 2532
TYPE P
YEAR 1977
AUTH THORHAUG, A.; ROESSLER, M.A.;
TITL SEAGRASS COMMUNITY DYNAMICS IN A SUBTROPICAL ESTUARINE LAGOON.

BIBL AQUACULTURE 12:253-277.

KEYW DADE	SEAGRASS	DISTRIBUTION
ALGAE	SPONGE	CORAL
TEMPERATURE	DO	TURBIDITY
CURRENTS	NUTRIENT	ECHINODERM

ABST Temporal and spatial distribution of major plant and animal species in Biscayne Bay were investigated. The major plant species, and the standing crop and production of the plant material were determined. The major animal species were not equally distributed; in the nearshore turtle grass community, species of Pagurus, Heopanope, Hippolyte, Cerithium, Bulla, Prunum and Modulus were dominant. In mid-bay where patchy turtle grass plus green algae occurred, Thor and Chondrilla were dominant. Near the fringing islands where tidal flow caused more oceanic conditions, the community was dominated by sponges, urchins and corals.

ANNO

06/11/1987

ACC 4143

TYPE P

YEAR 1982

AUTH THUE, E.B.; RUTHERFORD, E.S.; BUKER, D.G.;

TITL AGE, GROWTH, AND MORTALITY OF THE COMMON SNOOK, CENTROPOMUS UNDECIMALIS (BLOCH), IN EVERGLADES NATIONAL PARK, FLORIDA.

BIBL SOUTH FLORIDA RESEARCH CENTER REP. T-683. 32 P.

KEYW BIOLOGY
LIFE HISTORY
RECRUITMENT

FISH
SNOOK
COASTAL

RECREATIONAL FISHERY
REPRODUCTION

ABST A study was made of age, growth and mortality of 325 snook, *Centropomus undecimalis* (Bloch), collected from sportfishermen in Everglades National Park from May 1976 through December 1979. Fish sampled ranged in length from 284 to 940 mm F.L. (mean = 643 +/- 11 mm) and in weight from 0.7-11.6 kg (mean = 3.03 +/- .17 kg). Females ranged in length from 464-940 mm (mean = 680 +/- 25 mm) and in weight from 1.0-11.6 kg (mean = 3.64 +/- .49 kg). Males ranged in length from 284-889 mm (mean = 632 +/- 14 mm) and in weight from 0.7-7.2 kg (mean = 2.84 +/- .18 kg). Mean lengths of fish were largest in spring and smallest in winter. There were no differences in mean length among areas of capture. Snook were aged by scale annuli. Annulus formation occurred in spring (March-May). Ages of fish were mainly four- and five-year olds. Recruitment to the fishery began at age two and was completed by age six. The oldest fish sampled was eight-years old. The overall sex ratio favored males 3/1, but the ratio decreased steadily with age. The mean age of females was significantly greater than the mean age of males. There were no differences in mean age of fish among areas of capture. Mean calculated growth of all snook was 375 mm F.L. in the first year and 57-90 mm F.L. thereafter. Females were significantly larger than males in calculated mean lengths at ages one through four. Calculated fish lengths at age differed among areas of capture. Fish taken from the Whitewater Bay-Coot Bay area were larger at ages one through four than fish of

ANNO

06/11/1987

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ACC 1025

TYPE

YEAR 1973

AUTH THURMAN, C.L.;

TITL ASPECTS OF ANOXIC METABOLISM IN THE FIDDLER CRAB UCA MINAX AND THE DISTRIBUTION OF FIDDLE CRABS OF THE GENUS UCA ALONG THE NORTHERN COAST OF THE GULF OF MEXICO.

BIBL MASTER'S THESIS. UNIVERSITY OF WEST FLORIDA, PENSACOLA, FL. 75 PP.

KEYW BENTHIC FAUNA
TEMPERATURE

CRAB
DISSOLVED OXYGEN

DISTRIBUTION
STRESS

ABST Fiddler crabs of the genus *Uca* have been identified and distributions described from 20 stations along the coast of the Gulf of Mexico from Tampico, Mexico to the Florida Keys. Laboratory experiments have been conducted to describe the anoxic metabolism of *Uca minax*. Laboratory animals held under various environmental conditions were monitored for levels of protein, lactic acid, glycogen, and LDH (lactate dehydrogenase). LD 50 experiments were conducted at various temperatures to describe the fiddler's ability to withstand anoxia.

ANNO

06/11/1987

.....
ACC 2316
TYPE P
YEAR 1974
AUTH TIFFANY, W.J.;
TITL BRUSHY BAYOU AND LIDO KEY STUDY FOR CITY OF SARASOTA.

BIBL NEW COLLEGE OF THE UNIV. SO. FLA., ENVIR. STUD. PROG. REPT.

KEYW SARASOTA	MOLLUSC	SPONGE
POLYCHAETE	ECHINODERM	SALINITY
DO	MANAGEMENT	

ABST Macrobenthic data from Brushy Bayou and South Lido Key, Sarasota, Florida were compiled. The species collected of molluscs, sponges, polychaetes, echinoderms, oligochaetes, and bryozoa are listed and enumerated. Recommendations are made for the future management of the area.

ANNO

06/11/1987

.....
ACC 2317
TYPE P
YEAR 1974
AUTH TIFFANY, W.J.;
TITL CHECKLIST OF BENTHIC INVERTEBRATE COMMUNITIES IN SARASOTA BAY WITH SPECIAL
REFERENCE TO WATER QUALITY INDICATOR SPECIES.

BIBL CONTRIB. NO. 2, FLOWER GARDENS OCEAN RES. CTR., MAR. BIOMED. INSTIT., GALVE
STION, TX. 123 P.

KEYW SARASOTA	INVERTEBRATE	BENTHIC
SEDIMENT	COMMUNITY	TEMPERATURE
SALINITY	DO	TURBIDITY
WATER QUALITY		

ABST This study presents a checklist of benthic marine invertebrates in Sarasota and Roberts Bays and characterizes their habitats by sediment types and community structure. Five species of marine benthic invertebrates were established as bioindicators for various unhealthy water quality parameters, and six species were correlated to healthy water conditions. Sarasota Bay proved more stable and healthier than Roberts Bay.

ANNO

06/11/1987

.....
ACC 2318
TYPE P
YEAR 1978
AUTH TIFFANY, W.J.; HEYL, M.G.;
TITL INVERTEBRATE MASS MORTALITY INDUCED BY A GYMNODINIUM BREVE RED TIDE IN GULF
OF MEXICO WATER AT SARASOTA, FLORIDA.

BIBL J. ENVIR. SCI. HEALTH A13(9):635-662.

KEYW SARASOTA INVERTEBRATE MORTALITY
 RED TIDE DO

ABST An outbreak of red tide (*Gymnodinium breve*) during September 1978, resulted in a mass mortality of certain invertebrates at Turtle Beach, Florida. The invertebrate kill was suggested to be due to the effects of the toxic dinoflagellate rather than other factors such as low DO.

ANNO

06/11/1987

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ACC 2349

TYPE P

YEAR 1978

AUTH TIFFANY, W.J.;

TITL MASS MORTALITY OF LUIDIA SENEGALENSIS (LAMARK, 1816) ON CAPTIVA ISLAND, FLORIDA WITH A NOTE ON ITS OCCURRENCE IN FLORIDA GULF COASTAL WATERS.

BIBL FLA. SCIENTIST 41(1):63-64.

KEYW LEE

MORTALITY

INVERTEBRATE

ECHINODERMATA

ABST A mass mortality of *Luidia senegalensis* occurred on February 18, 1977 on Captiva Island, Florida. The occurrence of the nine armed sea star in Florida Gulf coastal waters was discussed. The cause of the mass mortality was not determined.

ANNO

06/11/1987

.....
ACC 4258
TYPE P
YEAR 1980
AUTH TILLERY, J.B. ;
TITL ENVIRONMENTAL ASSESSMENT OF BUCCANEER GAS AND OIL FIELD IN THE NORTHWESTERN
GULF OF MEXICO, 1975-1980. VOLUME 6: TRACE METALS.

BIBL NOAA/NMFS, GALVELSTON, TX (USA). NOV. 1980.

KEYW TRACE METAL SEDIMENT SUSPENDED
OIL AND GAS POLLUTION HEAVY METAL

ABST Concentrations of Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Hg, Fe, Mn, Ni, Pb, S
b, Se, Sr, Tl and Zn were determined in surficial sediments, subsurface sed
iments, suspended particulate matter, seawater, produced brine, crude oil a
nd various tissues of biological organisms collected seasonally near two pe
troleum production platforms. Concentrations of Ba, Cd, Cr, Co, Cu, Mn, Pb
, Sr, Hg and Zn in surficial sediments have been related to the platforms o
r activities on them. Trace metal concentrations in suspended particulate
matter are higher than in bottom sediments. Seawater trace metal concentra
tions are within the range reported for shelf waters. Produced brine disch
arge have concentrations of Ba, Cd, Cr, Fe, Hg, Mn, Sr, Tl and Zn that are
higher than seawater and vary with time. No evidence of excessive bioaccum
ulation of trace metals in marine organisms from the area around the produc
tion platforms was established. Seasonal variations of trace metals were o
bserved in various marine organisms.

ANNO

06/11/1987

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ACC 4275
TYPE P
YEAR 1980
AUTH TILLERY, J.B.; THOMAS, R.E.;
TITL HEAVY METAL CONTAMINATION FROM PETROLEUM PRODUCTION PLATFORMS IN THE CENTRAL GULF OF MEXICO.

BIBL RES. ENVIRON. FATE AND EFFECTS OF DRILLING FLUIDS AND CUTTINGS CONF., LAKE BUENA VISTA, FL. 562-587.

KEYW HEAVY METAL TRACE METAL SEDIMENT
 PETROLEUM POLLUTION

ABST Southwest Research Institute conducted a multidisciplinary study of the long-term fate and effects of petroleum production platforms in the central Gulf of Mexico (Louisiana OCS). This report covers the trace metal investigations of that study. The objectives of the trace metal investigations of this program were (1) to determine the concentration of selected trace metals (Ba, Cd, Cr, Cu, Fe, Ni, Pb, Zn, V) in sediments and biotic samples, (2) to determine if these metal concentrations can be related to petroleum production activities (past and present), (3) to determine if bioaccumulation of trace metals has occurred and can be detected in species that inhabit the area around petroleum production platforms, and (4) to determine which marine species could be used as indicators of metal pollution.

ANNO

06/11/1987

.....
ACC 1033
TYPE
YEAR 1964
AUTH TOLBERT, W.H.;SALSMAN, G.G.;
TITL SURFACE CIRCULATION OF THE EASTERN GULF OF MEXICO AS DETERMINED BY DRIFT BOTTL
TLE STUDIES.

BIBL J. GEOPHY. RES. 69(2):223-230.

KEYW DRIFT CURRENTS DRIFT MEASUREMENT DRIFT PATTERN
 PHYSICAL OCEANOGRAPH SURFACE CURRENTS WIND DRIFT CURRENT

ABST During the 28-month interval from September 1960 through December 1962, drift bottles were released periodically from a stationary platform located 20 .4 km offshore from Panama City, Florida. Of the 951 bottles released, 276 or 29 per cent, were recovered. Approximately 67 per cent of the returns have been found along a 350-km section of coastline extending from Cape St. George west to the Florida-Alabama line; 20 per cent of the returns were from the Florida east coast and keys, and 12 percent were found along the coasts of Alabama, Mississippi, Louisiana, and Texas. Comparison of the drift-bottle data with local wind information indicates that the primary mechanism of surface water transport in the vicinity of the release point is wind-induced currents, which either transport the bottles to local beaches or to regions where permanent or semipermanent currents can displace them to western or southern shores. The results of this study are also compared with other drift-bottle studies conducted in the Gulf of Mexico.

ANNO

06/11/1987

.....
ACC 4144
TYPE P
YEAR 1978
AUTH TOPP, R.W.; INGLE, R.M.;
TITL ANNOTATED LIST OF POST-1950 LITERATURE PERTAINING TO DISTRIBUTION OF GULF O
F MEXICO FISHES.

BIBL FLA. DEPT. NAT. RES., MAR. RES. LAB. SPEC. SCI. REP. 33. 17 P.

KEYW FISH	DISTRIBUTION	BIOLOGY
RECREATIONAL FISHERY	COMMERCIAL FISHERY	ICHTHYOPLANKTON
DEMERSAL FISH	PELAGIC FISH	

ABST This list presents 204 references to published and unpublished reports containing ichthyofaunal lists from Gulf of Mexico localities. References dealing with specific taxa are not included. Each annotation designates the shelf subregion where collections were made, the number of species collected, and the gear used. An index to collection areas is included.

ANNO

06/11/1987

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ACC 559
TYPE
YEAR 1952
AUTH TRASK, P.D.
TITL STRENGTH OF SEDIMENTS IN THE GULF OF MEXICO.

BIBL IN: PROCEEDINGS 2ND CONFERENCE ON COASTAL ENGINEERING. P. 145-157.

KEYW CONTINENTAL SHELF ENGINEERING GEOLOGY
 SEDIMENTATION SEDIMENT

ABST

ANNO

06/11/1987

.....
ACC 363

TYPE

YEAR 1977

AUTH TREFRY, J.H.;FREDERICKS, A.D.;FAY, S.R.;BYINGTON, M.L.;

TITL HEAVY METAL ANALYSIS OF BOTTOM SEDIMENT.

BIBL BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. FIRST QUARTERLY REPORT FOR BLM-
MAFLA OCS STUDY.

KEYW MAFLA

CARBONATE

CHEMISTRY

HEAVY METAL

SEDIMENT TEXTURE

ABST

ANNO

06/11/1987

.....
ACC 917
TYPE
YEAR 1974
AUTH TREFRY, J.H.;
TITL THE DISTRIBUTION OF POTENTIALLY TOXIC HEAVY METALS IN THE SEDIMENTS OF SAN ANTONIO BAY AND THE NORTHWEST GULF OF MEXICO.

BIBL MASTER'S THESIS. TEXAS A&M UNIVERSITY, COLLEGE STATION, TX. 105 PP.

KEYW CADMIUM	CARBONATE	CARBON
COPPER	IRON	LEAD
MANGANESE	NICKEL	SALINITY
ZINC	SEDIMENT	HEAVY METAL

ABST A total of 123 sediment samples were collected from 48 sites in San Antonio Bay and the Mississippi River delta between June, 1972 and July, 1973 and analyzed for the heavy metals Fe, Mn, Pb, Zn, Cd, Cu and calcium carbonate and organic carbon. Samples were collected during cruise 73-A-9 of the R/V Alaminos and cruise 73-L-2 of the R/V Longhorn. Data include scatter plots of various heavy metals.

ANNO

06/11/1987

.....
ACC 2150

TYPE P

YEAR 1981

AUTH TREFRY, J.H.;

TITL A REVIEW OF EXISTING KNOWLEDGE ON TRACE METALS IN THE GULF OF MEXICO. IN:
PROC. OF A SYMP. ON ENVIRON. RESEARCH NEEDS IN THE GULF OF MEXICO, KEY BISC
AYNE, FLORIDA, 30 SEPT.-5 OCT. 1979. D.K. ATWOOD (CONVENER).

BIBL NOAA/ERL, ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LAB., MIAMI, FLA. VOL.
IIB. P. 225-259.

KEYW TRACE METAL

SEDIMENT

CARBONATE

ABST This summary paper reviews the state of knowledge on the trace metals in the Gulf of Mexico. Sediment metal studies for the Gulf of Mexico show that carbonate rich Florida shelf to be almost devoid of sedimentary metals in great contrast to the Mississippi Delta and outer shelf areas to the west of the Delta. The author notes that these differences are strictly a function of source material, in that >90% of the massive sediment load of the Mississippi River is deposited in an area <1% of the Gulf. The scarcity of available data is noted, and future research needs are outlined.

ANNO

06/11/1987

.....
ACC 2151
TYPE P
YEAR 1979
AUTH TREFRY, J.H.; FELDHAUSEN, P.H.;
TITL TRACE METAL GEOCHEMISTRY OF FLORIDA GULF COAST SEDIMENTS.

BIBL FLA. SCI. 42(SUPPL. 1):21.

KEYW TRACE METAL	GEOCHEMISTRY	DISTRIBUTION
HEAVY METAL	SEDIMENT	ORGANIC CARBON

ABST Over 400 sediment samples from the West Florida continental shelf were analyzed for total and leachable Ba, Cd, Cr, Cu, Fe, Ni, Pb, V, and Zn to determine the distribution and abundance of heavy metals in shelf sediments. Total metal concentrations showed an increasing trend offshore and to the west, which was correlated with increased abundance of sediment clays and organic carbon. Distribution trends are presented for each metal and the proportion of metal leached, and correlated with sediment type. Five trace metal regions and several modes of metal accumulation are identified.

ANNO

06/11/1987

.....
ACC 2152
TYPE P
YEAR 1981
AUTH TREFRY, J.H.;TROCINE, R.;METZ, S.;
TITL TRACE METAL ANALYSIS OF BOTTOM SEDIMENT.

BIBL FINAL REPT. FOR BLM, SOUTHWEST FLORIDA OUTER CONTINENTAL SHELF STUDY. 26 P

KEYW TRACE METAL	SEDIMENT	CARBONATE
GRAIN SIZE	BARIUM	CADMIUM
COPPER	IRON	NICKEL
CHROMIUM	VANADIUM	LEAD
ZINC		

ABST Sediment samples from 15 sites on the southwest Florida continental shelf were analyzed for Ba, Cd, Cr, Cu, Fe, Ni, Pb, V, and Zn to provide baseline data on sediment trace metal contents of areas proposed as oil drilling sites. All samples were analyzed after leaching with nitric acid. Trace metals concentrations throughout the area were low and uniform, due to the high carbonate fraction (>90% at 13 or 15 sites) of the sediment, which is characteristic of the area. The potential biological availability of sediment metals is assessed.

ANNO

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ACC 4145

TYPE P

YEAR 1983

AUTH TRENT, L.; WILLIAMS, R.O.; TAYLOR, R.G.; SALOMAN, C.H.; MANOOCH, C.S. III;
 TITL SIZE, SEX RATIO, AND RECRUITMENT IN VARIOUS FISHERIES OF KING MACKEREL, SCOMBEROMORUS CAVALLA, IN THE SOUTHEASTERN UNITED STATES.

BIBL FISH. BULL. 81(4):709-721

KEYW	BIOLOGY	COMMERCIAL FISHERY	FISH
	KING MACKEREL	RECRUITMENT	SEASONALITY
	RECREATIONAL FISHERY	REPRODUCTION	DISTRIBUTION
	LENGTH	SPAWNING	

ABST Data from over 54,000 king mackerel, *Scomberomorus cavalla*, were analyzed to evaluate spatial & temporal variations in size and sex composition in seven areas of the southeastern United States. Data were obtained from recreational hook-and-line and gill net fisheries of south Florida. Of the three types of gear, recreational hook and line appeared to be the least selective and gill net the most selective for particular sizes of king mackerel. Size composition in each area varied considerably among months; patterns of size change were discernible in some areas. Sizes of king mackerel varied significantly among areas and years. Catches from south and northwest Florida contained high proportions of small fish <700 mm FL; those from Texas and North Carolina contained mostly medium-sized fish (700-900 mm FL). Mean lengths of king mackerel were larger in 1978 than in 1977 in all areas except northwest Florida. In northwest Florida, modal fork lengths were 749 mm in 1968-69, 649 mm in 1977, and 549 mm in 1978. The majority of the smallest fish (400-600 mm FL) were recruited to the fisheries in Florida, but the range and areas of abundance of king mackerel smaller than this are known. For purposes of evaluating effects of minimum size regulations, the king population was divided into groups (the Florida winter, immature, spawning, and Louisiana groups). Females dominated catches in all size groups and in all areas and years, except for south Florida in 1978. Annual, or ranges of annual, estimates of percentage female by area were as follows: Texas, 60.8-62.2%; Louisiana, 91.9-92.2%; northwest Florida, 57.1-75.1%; South Florida, 40.2-75.4%

ANNO

06/11/1987

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ACC 2350

TYPE 0

YEAR 1978

AUTH TSUI, P.T.P.; BREEDLOVE, B.W.;

TITL USE OF THE MULTIPLE-PLATE SAMPLER IN BIOLOGICAL MONITORING OF THE AQUATIC ENVIRONMENT.

BIBL FLA. SCIENTIST 41(2):110-116.

KEYW LEE

BIOLOGICAL

INVERTEBRATE

ABST Field studies revealed that the diversity of macroinvertebrates collected by the multiple-plate sampler is time dependent. Pilot studies to determine optimum exposure period were recommended. Comparisons of samples of macroinvertebrates collected by the multiple-plate sampler and the petite ponar grab from both lentic and lotic environments resulted in significant differences.

ANNO

06/11/1987

.....
ACC 2153
TYPE P
YEAR 1977
AUTH TURGEON, D.D.; LYONS, W.G.;
TITL A TROPICAL MARINE MOLLUSCAN ASSEMBLAGE IN THE NORTHEASTERN GULF OF MEXICO

BIBL BULL. AN. MALACOL. UNION INC. 88-89. (ABSTRACT).

KEYW MOLLUSC	REEF	FOULING
SEDIMENT	COMMUNITY	ASSEMBLAGE

ABST Two hundred and fifty-one molluscan species, including 179 gastropods, 63 bivalves, 8 polyplacophorans, and 1 scaphopod, are reported from the Florida Middle Ground, a reef in the northeastern Gulf of Mexico. Specimens occurred as epizooics on corals, among fouling organisms, and in biogenic sediments in three samples from the reef. Of the gastropod species, 64% belong to 9 families of typically small taxa (micromolluscs). Most bivalves are reef-inhabiting epizooics or borers along with some sponge dwellers and small species adapted for living among coarse sediments. This molluscan assemblage has distinct tropical affinities with nearly all species also occurring commonly in shallow water communities in the Florida Keys, Bahamas, and Caribbean.

ANNO

06/11/1987

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ACC 2487
TYPE P
YEAR 1976
AUTH TURMEL, R.J.; SWANSON, R.G.;
TITL THE DEVELOPMENT OF RODRIGUEZ BANK, A HOLOCENE MUDBANK IN THE FLORIDA REEF T
RACT.

BIBL J. SEDIMENT. PETROL. 46(3):497-518.

KEYW MONROE	SEDIMENT	WAVE
ALGAE	REEF	HYDROGRAPHY
FLORA	GEOLOGY	GEOLOGIC HISTORY

ABST Rodriguez Bank off Key Largo, Florida consists of unconsolidated calcareous sediments deposited during a period of sea level rise with minimal wave action. Unlike modern coral-algal reefs, the bank has no rigid organic framework, but has accumulated as direct and indirect results of plants. Algae contribute most of the sediment. Four ecologic zones are described and their importance in the reef building is assessed. Although the biotic assemblages and hydrography have changed since its initial development, the bank has become a stable topographic feature.

ANNO

06/11/1987

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ACC 49
TYPE
YEAR 1982
AUTH TURNER, R.E.; ALLEN, R.L.;
TITL BOTTOM WATER OXYGEN CONCENTRATION IN THE MISSISSIPPI RIVER DELTA BIGHT.

BIBL CONTRIB. MAR. SCI. 25:161-172.

KEYW COASTAL ZONE CONTINENTAL SHELF DISSOLVED OXYGEN
HYDROGRAPHY HYPOXIA OCEANOGRAPHY
PHYSICAL PROCESS

ABST Bottom water oxygen concentrations in the Mississippi River Delta Bight are commonly below saturation values. Hypoxic conditions (less than 3 mg/l) most often occur in shallow depths, west of the delta during summer. The hypoxic layer may be only a few meters thick and located on the bottom. An unusual midwater oxygen-depleted zone was observed south of Mobile Bay. The oxygen-minimum layer from deep water in the Gulf of Mexico may connect with low oxygen zones at the shelf break. In situ decomposition of material sinking from the surface layers is the most likely major oxygen consuming process. Lack of vertical mixing due to stratification probably contributes to the hypoxic summer conditions when oxygen concentration values are lowest.

ANNO

06/11/1987

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ACC 50
TYPE
YEAR 1982
AUTH TURNER, R.E.; ALLEN, R.L.;
TITL PLANKTON RESPIRATION RATES IN THE BOTTOM WATERS OF THE MISSISSIPPI RIVER DELTA BIGHT.

BIBL CONTRIB. MAR. SCI. 25:173-179.

KEYW BENTHIC COMMUNITY BIOLOGY CONTINENTAL SHELF
PLANKTON RESPIRATION RATE SEDIMENT
DISSOLVED OXYGEN SUSPENDED CHLOROPHYLL
PHYTOPLANKTON

ABST Community plankton respiration (CPR) rates in the bottom waters of the Mississippi River Delta Bight ranged from 0.12 to 8 mg oxygen m⁻³ h⁻¹ in July and November, 1976. Mean values were similar on both cruises, and between east and west halves of the delta in July. The observed rates are high enough to influence significantly and possibly dominate factors influencing oxygen concentrations. The regional low oxygen concentrations that commonly occur are probably influenced as well by benthic respiration and by stratification. The role of suspended sediments in deriving variations in average CPR rates appears to be of minor importance since equal rates occurred in areas with and without a nepheloid layer. In July CPR was correlated with variations in chlorophyll a concentrations, thus indicating that phytoplankton sinking is probably a major factor determining regional variations in CPR.

ANNO

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ACC 144

TYPE

YEAR 1983

AUTH TURNER, R.E.; BRODY, M.S.;

TITL HABITAT SUITABILITY INDEX MODELS: NORTHERN GULF OF MEXICO BROWN SHRIMP AND
WHITE SHRIMP.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C. FWS/OBS-82/10.54. 24 PP.

KEYW	BIOLOGY	COASTAL WATER	CONTINENTAL SHELF
	HABITAT	LIFE HISTORY	MATHEMATICAL MODEL
	SHRIMP FISHERY	BROWN SHRIMP	MANAGEMENT

ABST The habitat use information and habitat suitability index (HSI) models in this report on northern Gulf of Mexico brown shrimp and white shrimp are intended for use in impact assessment and habitat management. The models were developed from a review and synthesis of existing information and are scaled to produce an index of habitat suitability between 0 (unsuitable habitat) and 1 (optimally suitable habitat). Assumptions used to transform habitat use information into the HSI model and guidelines for model applications, including methods for measuring model variables, are described. These models are hypotheses of species-habitat relationships, not a statement of proven cause and effect relationships. The models have not been field-tested, but have been applied to four hypothetical data sets which are presented and discussed. For this reason, the U.S. Fish and Wildlife Service encourages model users to convey comments and suggestions that may help increase the utility and effectiveness of this habitat-based approach to fish and wildlife management.

ANNO

06/11/1987

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ACC 4237

TYPE P

YEAR 1979

AUTH TURNER, J.T.;COLARD, S.B.;WRIGHT, J.C.;MITCHELL, D.V.;STEELE, P.;

TITL SUMMER DISTRIBUTION OF PONTELLID COPEPODS IN THE NEUSTON OF THE EASTERN GULF OF MEXICO CONTINENTAL SHELF.

BIBL BULL. MAR. SCI. 29(3):287-297.

KEYW DISTRIBUTION
SALINITY

NEUSTON
ZOOPLANKTON

ABUNDANCE
CRUSTACEAN

ABST Twelve species of pontellid copepods (*Calanopia americana*, *Labiocera acutifrons*, *L. aestiva*, *L. neri*, *L. scotti*, *Pontella atlantica*, *P. meadi*, *P. mimocerami*, *P. securifer*, *Pontellina plumata*, *Potellopsis brevis* and *P. perspicax*) were collected in summer of 1976 in 158 neuston samples from the eastern continental shelf of the Gulf of Mexico. Preadults, most of which were *Pontella meadi* copepodids, were more abundant than adults, accounting for 77-88% of the total number of pontellids collected. This, together with spermatophore attachment to 70-85% of the *P. meadi* females collected indicates that summer is a period of active breeding for this species. There were no clear trends of abundance at the surface vs. time of day for either adults or juveniles. Off Mobile Bay, Panama City and Cedar Key (Florida USA), the pontellid assemblages were dominated by species generally considered to be coastal, but off Tampa Bay, 5 pontellid species previously thought to exhibit oceanic distributions were collected in low salinity (34.42-35.54 per mill.) surface waters over the continental shelf. Among these was *P. atlantica* for which there are no prior reliable reports from the Gulf of Mexico. The presence of oceanic species in continental shelf waters suggests that broader zooplankton sampling is needed to define zooplankton-water mass relationships in the eastern Gulf of Mexico.

ANNO

06/11/1987

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ACC 2488
TYPE P
YEAR 1972
AUTH TURNEY, W.J.; PERKINS, B.F.;
TITL MOLLUSCAN DISTRIBUTION IN FLORIDA BAY. SEDIMENTA III, THE COMPARATIVE SEDIMENTOLOGY LABORATORY.

BIBL UNIVERSITY OF MIAMI. DIVISION OF MARINE GEOLOGY AND GEOPHYSICS.

KEYW MONROE	SALINITY	WIND
MOLLUSC	CRAB	SPONGE
ALGAE	CURRENTS	ECHINODERM
CIRCULATION	SEAGRASS	

ABST Within Florida Bay 4 subenvironments were designated according to the physical characteristics of salinity and variability of salinity, water circulation, and wind. The fauna of Florida Bay was found to be dominantly molluscan, principally gastropods and bivalves which were represented by about 100 genera and 140 recognized species. A few "index species" and several "consistently common species" defined 4 molluscan suites whose distributions seemed to be controlled by the environmental influences characterizing the 4 subenvironments. Molluscan debris was determined to comprise 58 to 95% of the sediment particles greater than 1/8 mm. It was suggested that the disintegration process is almost entirely organic and affected by crabs, boring sponges, perforating algae, holothurians, worms, and *Thalassia testudinum* roots. Thin-shelled bivalves were observed to break down more rapidly than thick shelled bivalves and gastropods.

ANNO

06/11/1987

.....
ACC 2489
TYPE P
YEAR 1981
AUTH TYSON, R.;
TITL SEDIMENTS OF A FLORIDA BAY BASIN.

BIBL MASTER'S THESIS. UNIVERSITY OF SOUTHERN FLORIDA.

KEYW MONROE	SEDIMENT	MINERALOGY
MOLLUSC	GRAIN SIZE	SEAGRASS
DEPTH	FORAMINIFERA	

ABST Forty four surface sediment samples from a basin in southeastern Florida Bay exhibited variations in texture, mineralogy, and molluscan assemblages. Sediment grain size analysis separated the samples into three major groups. Aragonite averaged approximately 51% in the silt and clay sized fractions. Bivalves were shown to prefer small grain sized sediments. A direct correlation between bivalve and *Thalassia* distribution was associated with the trapping of fine grained sediments by seagrass beds. Epifauna gastropods exhibited uniform distribution. Correlations among sand, depth, rock fragments, foraminifera, *Cerithium*, *Halimeda*, and calcite content are identified for sand environments; correlations among other variables are also cited for or silt subenvironments.

ANNO

06/11/1987

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ACC 2369

TYPE P

YEAR 1979

AUTH U.S. ARMY ENGINEER DISTRICT, JACKSONVILLE, FLORIDA;

TITL DRAFT ENVIRONMENTAL IMPACT ASSESSMENT, ON: PERMIT APPLICATION FOR DELTONA C
ORP.'S RESIDENTIAL DEVELOPMENT IN WETLANDS NEAR MARCO ISLAND, FLORIDA.

BIBL

KEYW COLLIER

COASTAL

DEVELOPMENT

ABST The permit application described was a redesign by the Deltona Corporation in order to obtain alternate lots for property owners impacted by the denial of a previous application in 1976. Implementation of the proposal would result in the loss of a total of 4,029 acres of wetlands comprised of 1,392 acres of highly productive tidal mangroves and 2,637 acres of other mangroves and freshwater marshes. It was estimated that this would reduce local estuarine productivity by about 20%. A prime wading bird habitat would be lost, resulting in a possible decline in their nesting success in a large rookery nearby. The existing freshwater input into portions of the coastal waters may be reduced up to 30%. Alternatives to the proposed plan were suggested to confine the development to upland locations within the immediate vicinity and design changes to reduce the size of the wetlands' development.

ANNO

ACC 2288

TYPE P

YEAR 1978

AUTH U.S. ARMY CORPS OF ENGINEERS, JACKSONVILLE DISTRICT;

TITL ECOLOGICAL COMPARISON OF BEACHES, OFFSHORE BORROW SITES, AND ADJACENT BOTTO
M AT ANNA MARIA ISLAND AND TREASURE ISLAND, FLORIDA.

BIBL

IN: PHASE I. U.S. ARMY CORPS OF ENGINEERS.

KEYW	SEDIMENT	GRAIN SIZE	BENTHIC
	DIVERSITY	INVERTEBRATE	TEMPERATURE
	SALINITY	DEPTH	STRESS

ABST A comparison was made between the sediment of Anna Maria Island beach, the proposed borrow area, and Treasure Island borrow pit. Texture (grain size) and statistical factors that include mean grain size, sorting, skewness, and kurtosis were compared. A statistical comparison of benthic species richness and species diversity between Treasure Island borrow areas and historical regional data was also conducted. In addition a statistical comparison of benthic species richness and species diversity between Anna Maria Island proposed borrow sites and historical regional data was made. Data on existing biological communities at Anna Maria and contour maps of the 4 separate borrow sites at Treasure Island were provided. Four years after dredging, the benthos of the borrow pits at Treasure Island were determined to be in some stage of slow recovery, but faunal density was well below previous data. It was suggested that these dredged holes support a progressively more normal benthic fauna as they fill to the level of surrounding bottom and become covered with sediments that are predominantly sand and shell. Benthos of sites (borrow) of Anna Marie proved to be more diverse than those recorded from stations in any other area at Treasure Island. Both islands were found to support typical Gulf beach invertebrates and were high energy zones. Recommendations on procedures for the proposed beach nourishment were made.

ANNO

06/11/1987

.....
ACC 876

TYPE

YEAR N/A.

AUTH U.S. ARMY CORPS OF ENGINEERS, COASTAL ENGINEERING RESEARCH CENTER;

TITL SEDIMENT ANALYSIS STATISTICS FILE.

BIBL U.S. ARMY CORPS OF ENGINEERS, COASTAL ENGINEERING RESEARCH CENTER, FORT BEL VOIR, VI.

KEYW SEDIMENT TEXTURE SEDIMENT GRAIN SIZE
 SUSPENDED

ABST Data is taken by field surveys by C.E.R.C. field parties, district survey parties, or under contract by commercial firms. The sand samples analyzed are grab samples taken from beaches or bottom surfaces, suspended samples taken from water, or core samples obtained from offshore or onshore locations.

Size analysis are made by mechanical (hydraulic) measurement of fall velocity. Applications programs applied to raw data are: plot sediment size analysis graph; edit, verify, reformat, list geological sample information; reduce raw data in form of a digitalized decay vs. time curve to a sediment size frequency distribution and computes statistical moments of the distribution.

ANNO

06/11/1987

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ACC 635

TYPE

YEAR 1984

AUTH U.S. ARMY CORPS OF ENGINEERS;

TITL DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT: EXPLORATION AND PRODUCTION OF
HYDROCARBON RESOURCES IN COASTAL ALABAMA AND MISSISSIPPI.

BIBL U.S. ARMY CORPS OF ENGINEERS, MOBILE DISTRICT, MOBILE, AL. 615 PP.

KEYW BIOLOGY

COASTAL ZONE

DRILLING

EXPLORATION

GEOLOGY

HYDROCARBON

HYDROLOGY

SOCIOECONOMIC

RESOURCE

ABST The U.S. Army Corps of Engineers have produced a draft Environmental Impact Statement in preparation for the leasing of tracts and the activities related to hydrocarbon production and exploration along the coast of Alabama & Mississippi. A brief background of the area affected and the anticipated activities that may impact the environment is presented along with proposed mitigation measures.

ANNO

06/11/1987

.....
ACC 350

TYPE

YEAR 1973

AUTH U.S. ARMY CORPS OF ENGINEERS;

TITL REPORT ON GULF COAST DEEP WATER PORT FACILITIES, TEXAS, LOUISIANA, MISSISSI
PPI, ALABAMA, AND FLORIDA.

BIBL U.S. ARMY CORPS OF ENGINEERS, LOWER MISSISSIPPI VALLEY DIVISION, 136 PP.

KEYW BENTHOS
METEOROLOGY

CHEMISTRY
OCEANOGRAPHY

GEOLOGY
PORT

ABST

ANNO

06/11/1987

.....
ACC 4146

TYPE P

YEAR 1982

AUTH U.S. DEPT. OF COMMERCE; NAT. OCEANIC & ATMOSPHERIC ADM., ET AL.;

TITL THREE REPORTS CONCERNING THE TORTUGAS SANCTUARY STUDIES, 1981-1982

BIBL NOAA TECH. MEM. NMFS-SEFC-104. 179 P.

KEYW PINK SHRIMP
BIOLOGY
INVERTEBRATE
ECOLOGY

COMMERCIAL FISHERY
LANDINGS (POUNDS)
EPIFAUNA

CRUSTACEAN
LIFE HISTORY
BENTHIC

ABST The tortugas shrimp sanctuary was initiated to protect important pink shrimp nursery areas of the Tortugas shrimp grounds from overfishing. This report sought to historically profile the Tortugas shrimp fishers; examine the regulatory history of the sanctuary area; determine size ranges of shrimp inside and outside the sanctuary area; and determine the effectiveness of the established sanctuary line. Distribution of shrimp size varied with location and season in the Tortugas sanctuary. Small shrimp dominated the population inside and outside the sanctuary boundaries. Catch per unit effort was variable and highest values were reported from inside the sanctuary. Reproductive activity was greatest during September and October. Commercial landings for the area were relatively stable for the 21-year period. Fishing effort averaged 16.5 days/yr with little fluctuation over a 20-period. During 1981, catch, size distribution, and relative abundance were distinct from all other years except 1960.

ANNO

06/11/1987

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ACC 2370
TYPE P
YEAR 1982
AUTH U.S. DEPT. OF COMMERCE;
TITL GOLDEN GATE/FAKA UNION PROJECT: PROGRESS REPT.

BIBL SUBMITTED TO U.S. ARMY CORPS OF ENGINEERS. 22 P.

KEYW COLLIER	FISHES	CRUSTACEAN
SEDIMENT	TEMPERATURE	SALINITY
DO	DEPTH	CURRENTS

ABST A sampling program was designed to assess the effects of excessive freshwater discharge into Faka Union Bay on the spawning and growth of estuarine fishes and macrobenthos. Surface and bottom trawls were taken monthly from 16 stations each in Faka Union Bay, Chokoloskee Bay, and Goodland Bay to collect fishes and crustaceans. Twenty-one total sites were sampled monthly with roller trawl in Pumpkin Bay, Faka Union Bay, and Fakahatchee Bay for epibenthic fauna. At the time of this progress report, the first two monthly samples had been collected and data was being analyzed.

ANNO

06/11/1987

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ACC 233
TYPE
YEAR 1982
AUTH U.S. ENVIRONMENTAL PROTECTION AGENCY;
TITL DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE PENSACOLA, FL, MOBILE, AL, AND
GULFPORT, MS DREDGED MATERIAL DISPOSAL SITE DESIGNATION.

BIBL ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D.C. 184 PP.

KEYW DREDGE SPOIL	DREDGING	ECOLOGY
MANAGEMENT	TURBIDITY	SUSPENDED
SEDIMENT	BENTHOS	

ABST The purpose of the action is to provide an environmentally acceptable ocean location for the disposal of dredged materials, which complies with the environmental impact criteria of the Ocean Dumping Regulations (40CFR220-229). Adverse environmental effects of the proposed action may include: (1) mounding, (2) smothering of some members of the benthos, and (3) increases in suspended sediment concentration. Adverse impacts within the site are unavoidable, but the disposal operation will be regulated to prevent unacceptable environmental degradation outside the site boundaries. The existing sites fulfill all criteria for site selection and are preferred over the alternative sites and areas based on evaluation of EPA's 11 site-specific criteria, and historical use. However, because potential impacts to the benthic community may be lessened at a larger Pensacola site it is recommended that this site be selected instead of the existing site. The Pensacola nearshore alternative site is a geographic extension of the existing site and covers an area previously used for disposal of dredged material.

ANNO

06/11/1987

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ACC 2371

TYPE P

YEAR 1975

AUTH U.S. ENVIRONMENTAL PROTECTION AGENCY;

TITL FIELD STUDIES: PARKSHORE AND CLAM BAY SYSTEMS, NAPLES, FLORIDA.

BIBL U.S. EPA, REGION IV, SURVEILLANCE AND ANALYSIS DIV., ATHENS, GA.

KEYW COLLIER

DISSOLVED OXYGEN

NUTRIENT

ABST No dissolved oxygen violations were experienced in either the Parkshore or Clam Bay systems in Naples, Florida during the November 11-17, 1975 period.

Nutrient concentrations in both estuarine systems represented reasonably pollution free levels. Hydrographic studies revealed that the Clam Bay system does not experience the norms of local tidal ranges. Maximum tidal ranges were 2.5 ft in Parkshore and 1.0 ft in Clam Bay. The Clam Bay system does not dewater to the local low water level. Sediment chemical composition revealed little difference between the Parkshore and Seagate Systems. Concentrations were in the range of those found in similar canal systems investigated by the EPA.

ANNO

06/11/1987

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ACC 2372

TYPE P

YEAR 1975

AUTH U.S. ENVIRONMENTAL PROTECTION AGENCY;

TITL AN EVALUATION OF PHYSICAL, CHEMICAL AND BIOLOGICAL ASPECTS OF CANALS AND ASSOCIATED WATERWAYS AT MARCO ISLAND, FLORIDA.

BIBL U.S. EPA, REGION IV, SURVEILLANCE AND ANALYSIS DIV., ATHENS, GA.

KEYW COLLIER

CARBON

ICHTHYOPLANKTON

DO

PHYSICAL

INVERTEBRATE

TEMPERATURE

CHEMISTRY

CHEMICAL

PHYTOPLANKTON

SALINITY

BIOLOGICAL

ABST Studies at Marco Island described the following detrimental factors of canal systems: poor circulation, dissolved oxygen depletion, and water quality standard violations. Ammonia nitrogen (NH₃) concentrations were elevated indicating anaerobic conditions. The center troughs of canal systems acted as a trap, collecting excessive silt and organics. This build up affected the bottom dwelling biota and water quality. Canals in general were importing carbon in amounts dependent upon each canal's proximity to the major carbon source (mangroves). Macroinvertebrates exhibited a longitudinal decline in numbers and species from the mouth to the landward end of the canal.

ANNO

06/11/1987

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ACC 2373
TYPE P
YEAR 1977
AUTH U.S. ENVIRONMENTAL PROTECTION AGENCY;
TITL FIELD STUDIES: PARKSHORE AND CLAM BAY SYSTEMS, NAPLES, FLORIDA.

BIBL U.S. EPA, REGION IV, SURVEILLANCE AND ANALYSIS DIV., ATHENS, GA.

KEYW COLLIER	HYDROGRAPHIC	BENTHIC
COMMUNITY	SEDIMENT	PHYTOPLANKTON
CHLOROPHYLL	INVERTEBRATE	TEMPERATURE
SALINITY	DO	CHEMISTRY

ABST An evaluation of hydrographic effects of the connection opened between Clam and Doctors Bays and the effects of over water structures at Parkshore Development on benthic communities in Doctors Bay was presented. No significant differences between sampling stations and habitat (shallow vs. deep) for numbers of taxa were found. The finer sediment was determined to be the principal factor affecting community differences at the deep and shallow water stations. Phytoplankton chlorophyll 'a' (mg/cubic meter) concentrations were higher in 1975 than in 1977 but were not significantly different. Chlorophyll 'a' concentrations in Doctors Bay, Clam Bay, and in the canal systems were all lower than the average concentration of 17 mg/sq. meter in Gulf inshore waters.

ANNO

06/11/1987

.....
ACC 793

TYPE

YEAR 1975

AUTH U.S. ENVIRONMENTAL PROTECTION AGENCY;

TITL ENVIRONMENTAL AND RECOVERY STUDIES OF ESCAMBIA BAY AND THE PENSACOLA BAY SYSTEM, FLORIDA: BENTHIC MACROINVERTEBRATES.

BIBL ENVIRONMENTAL PROTECTION AGENCY, ATLANTA, GA.

KEYW BENTHIC COMMUNITY
ECOLOGY
INVERTEBRATE

BENTHIC FAUNA
SPECIES COMPOSITION
SEDIMENT

BIOLOGY
DISTRIBUTION

ABST The objective of this study was to determine if distinct communities existed in Escambia Bay and the distribution of these communities. Three major benthic habitats were defined based on sediment patterns in the Bay. These include a broad central mud plain, a sand transition zone close to shore and the sandy shelf along the Bay margin. Comparisons were made between assemblages of organisms in Escambia Bay and other Bays in the Pensacola Bay System as well as other bays in the Gulf of Mexico.

ANNO

06/11/1987

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ACC 383
TYPE
YEAR 1977
AUTH U.S. FISH AND WILDLIFE SERVICE;
TITL COASTAL MARSH PRODUCTIVITY, A BIBLIOGRAPHY.

BIBL U.S. FISH AND WILDLIFE SERVICE, OFFICE OF BIOLOGICAL SERVICES, WASHINGTON,
D.C. 300 PP.
KEYW BIBLIOGRAPHY BIOLOGY ECOLOGY
 MARSH PRODUCTIVITY COASTAL

ABST

ANNO

06/11/1987

.....
ACC 2533
TYPE P
YEAR 1958
AUTH UNIVERSITY OF MIAMI MARINE LABORATORY;
TITL INVESTIGATION OF POSSIBLE EFFECTS ON THE MARINE ENVIRONMENT OF DREDGING AND
FILLING THE RAGGED KEYS.

BIBL REPT. TO FLA. ST. BD. CONSERV.

KEYW DADE	FISH	INVERTEBRATE
ALGAE	CURRENTS	SUBSTRATE
SALINITY	TEMPERATURE	SEAGRASS
DRILLING MUD		

ABST Checklists of fishes, marine invertebrates, algae and marine flora were given for the Ragged Keys vicinity. The Ragged Keys and the marine environment immediately adjacent to them were found to support a rich and varied group of plants and animals. Currents were believed to have, by their sorting of the substrate, created many ecological niches not usually found inside the outer reef. The reported possible effects of dredging and filling include: the destruction of channels now extensively utilized by boats; a shift of currents to the north and south around the fill, causing scouring and redistribution of bottom material beyond the immediate dredge and fill zone; conditions of greater extremes in salinity and temperatures than now prevail in one region of Biscayne Bay; and an overall destruction of the marine environment.

ANNO

06/11/1987

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ACC 4283

TYPE P

YEAR 1984

AUTH UNKNOWN;

TITL RIGS-TO-REEFS. ONE ASPECT OF A SOUND OCS PROGRAM. ADAPTED FROM REMARKS BY
INTER. SECY W.P. CLARK BEFORE RECREATIONAL, ENVIRONMENTAL ENHANCEMENT & FIS
HING IN THE SEAS TASK FORCE (M).

BIBL THE OIL DAILY 8187:4 (84/07/16).

KEYW CONTINENTAL SHELF
ARTIFICIAL REEF

DRILLING

OFFSHORE DRILLING

ABST

ANNO

06/11/1987

.....
ACC 4284
TYPE P
YEAR 1984
AUTH UNKNOWN;
TITL ECO-SENSITIVE AREAS DEFERRED FOR '85 SALES IN GULF OF MEXICO.

BIBL PLATT'S OILGRAM NEWS SERVICE 62(76):3.

KEYW OIL	ECOSYSTEM	NURSERY AREA
LIVE BOTTOM	REEF	SEAGRASS
WETLAND		

ABST

ANNO

06/11/1987

.....
ACC 4285

TYPE P

YEAR 1983

AUTH UNKNOWN;

TITL DRILLING LIMITS ASKED FOR THE FLOWER GARDEN BANKS, THE MOST NORTHERLY LIVIN
G CORAL REEFS IN THE GULF OF MEXICO (M).

BIBL THE OIL DAILY 7950:2.

KEYW DRILLING

CORAL

REEF

OFFSHORE DRILLING

ABST

ANNO

06/11/1987

.....

ACC 4286
TYPE P
YEAR 1982
AUTH UNKNOWN;
TITL FLORIDA OPPOSES INTERIOR'S AREA-WIDE LEASING.

BIBL OIL GAS J. 80(44):45.

KEYW OIL CONTINENTAL SHELF OIL SPILL

ABST

ANNO

06/11/1987

.....

ACC 4287
TYPE P
YEAR 1982
AUTH UNKNOWN;
TITL INDUSTRY BACKS AREA-WIDE SALE OF OCS BLOCKS.

BIBL OIL GAS J. 80(42):54-55.

KEYW DRILLING OIL AND GAS

ABST

ANNO

06/11/1987

.....
ACC 4288

TYPE P

YEAR 1982

AUTH UNKNOWN;

TITL BLM PICKS GULF OF MEXICO AREAS FOR ENVIRONMENTAL STUDY.

BIBL THE OIL DAILY 7627:6.

KEYW CONTINENTAL SHELF OIL AND GAS

ABST

ANNO

06/11/1987

.....
ACC 4295

TYPE P

YEAR 1979

AUTH UNKNOWN;

TITL CORAL REEFS IN POTENTIAL CONFLICT WITH OIL AND GAS DEVELOPMENT (FLOWER GARDEN BANK, GULF OF MEXICO).

BIBL SCIENCE 204(4395):812.

KEYW CORAL
POLLUTION

REEF
PETROLEUM

OIL AND GAS
CONTINENTAL SHELF

ABST

ANNO

06/11/1987

.....
ACC 620
TYPE
YEAR 1960
AUTH VAN ANDEL, T.H.; POOLE, D.M.;
TITL SOURCES OF RECENT SEDIMENTS IN THE NORTHERN GULF OF MEXICO.

BIBL J. SEDIMENT. PETROL. 30:91-122.

KEYW GEOLOGY HEAVY MINERAL SEDIMENT
 GEOLOGIC HISTORY

ABST

ANNO

06/11/1987

.....
ACC 2253
TYPE P
YEAR 1975
AUTH VAN BREEDVELD, J.F. ;
TITL TRANSPLANTING OF SEAGRASSES WITH EMPHASIS ON THE IMPORTANCE OF SUBSTRATE.

BIBL FLA. DEPT. NAT. RESOURCES, MAR. RESEARCH LAB. FLA. MAR. RES. PUBL. NO. 17.
26 P.

KEYW SEAGRASS SUBSTRATE SEDIMENT

ABST Past seagrass transplant experiments emphasized the use of anchoring devices rather than the suitability of substrate. *Thalassia testudinum* was determined to need a reduced (anaerobic) environment, while *Halodule wrightii* required an oxidized (aerobic) substrate. *Syringodium filiforme* was found to be able to thrive in either a reduced or oxidized sediment. Transplanting should be done in a clump of 4 to 7 shoots with a few intact rhizome apices; the original substrate should be transferred with the plants. Plantings should be done close together thus offering the roots and rhizomes a favorable environment from the beginning, and allowing them gradually to stabilize the surrounding area. Additionally, at least three rows should be planted in plot formation for increased protection and transplant success.

ANNO

06/11/1987

.....
ACC 766
TYPE
YEAR 1978
AUTH VAN DEVENDER, T.M.;
TITL THE SHRIMP FISHERY. PAGES 216-273 IN FISHERIES ASSESSMENT AND MONITORING,
MISSISSIPPI COMPLETION REPORT, P.L. 88-309. PROJECT 2-215-R.

BIBL GULF COAST RESEARCH LABORATORY, OCEAN SPRINGS, MS.

KEYW BIOLOGY COMMERCIAL FISHERY SEAFOOD
 SHELLFISH SHRIMP SHRIMP FISHERY

ABST

ANNO

06/11/1987

.....
ACC 958
TYPE
YEAR 1984
AUTH VAN SICLEN, D.C.;
TITL EARLY OPENING OF INITIALLY-CLOSED GULF OF MEXICO AND CENTRAL NORTH ATLANTIC OCEAN.

BIBL TRANS., GULF COAST ASSOC. GEOL. SOC. 36:265-275.

KEYW GEOLOGY GEOLOGIC HISTORY PLATE TECTONIC

ABST Regional structures beneath the northern Gulf of Mexico coastal plain clearly reveal the fit of the American continents following Late Paleozoic Appalachian-Ouachita orogeny. Most diagnostic is a wrench fault zone within the former Gondwana megacontinent, recognizable from the Florida panhandle to western Mississippi, along which future South America moved northwest against the southern edge of eastern North America to form the Ouachita foldbelt, while future Africa was already subducting that continent along the Appalachian belt. Extending westward from this in southwestern Alabama is the Wiggins arch, underlain by "granite" and phyllite of Late Pennsylvania into Early Permian age, apparently part of a volcanic arc. Along its north side and that to its counterparts farther west are shallow-marine strata of similar age. These appear to occupy a remnant ocean on North American oceanic crust, which was uncoupled by the close approach of future South America and subducted very briefly beneath North America, while the sediments on its leading edge were peeled off and thrust onto the continent. The inferred volcanic arc and remnant ocean, and the Late Triassic Interior rift system that separates them from the Ouachita foldbelt, terminate abruptly in East Texas against a wrench fault that transferred this rifting south-southwest to the Rio Grande embayment area.

ANNO

06/11/1987

.....
ACC 4147
TYPE P
YEAR 1982
AUTH VAN VLEET, E.S.;
TITL OIL CONTAMINATION OF THE GULF OF MEXICO.

BIBL PRESENTED AT GULF OF MEXICO -- TRENDS FOR THE 80'S. TULANE UNIVERSITY, NEW ORLEANS, LA.

KEYW OIL RESIDUE	TAR	LOOP CURRENT
POLLUTION	CHEMISTRY	PETROLEUM
CIRCULATION	HYDROCARBON	

ABST A two-year study of floating oil residues in the eastern Gulf of Mexico indicates that the Gulf is one of the world's most polluted bodies of water with respect to floating tar. Chemical analysis indicated that the major single source of tar in the eastern Gulf was through discharge of wall washings from crude oil tankers. Less than 5 to 10% of the tar could possibly have come from the massive IXTOC-1 oil well blowout in the Bay of Campeche in 1979. Although the quantity of tar in the Gulf of Mexico is substantial, few instances of direct biological impact have been reported. The floating tar appears to be fairly innocuous in the open Gulf but may be having a socioeconomic impact on southeast Florida beaches. Due to current circulation patterns in the eastern Gulf, most of the tar that washes ashore on beaches will accumulate between Key West and Fort Pierce, where it could have a serious impact on tourist industry of southeast Florida. The primary ecological danger of oil pollution results from major oil spills occurring in nearshore coastal waters and estuaries. The projected increase in offshore oil exploration and development over the next decade is likely to result in increased tanker operations, increased nearshore spillage, and increased ecological damage around the Gulf of Mexico.

ANNO

06/11/1987

.....

ACC 2254

TYPE P

YEAR 1983

AUTH VAN VLEET, E.S.;REINHARDT, S.B.;

TITL INPUTS AND FATES OF PETROLEUM HYDROCARBONS IN A SUBTROPICAL MARINE ESTUARY.

BIBL ENVIRON. INT. 9(1):19-26.

KEYW PETROLEUM

BENTHIC

HYDROCARBON

TEMPERATURE

SEDIMENT

ABST Petroleum hydrocarbons were measured in municipal wastewater, urban stormwater drains, sediments and benthic organisms in and around Tampa Bay. Lower concentrations of hydrocarbons were found in effluents from tertiary and secondary treatment plants in this area than the concentrations reported for treatment plants in temperate regions. Warmer temperatures in this subtropical system may result in increased metabolic rates of microorganisms and more rapid degradation or metabolism of the petroleum hydrocarbons.

ANNO

06/11/1987

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ACC 4148

TYPE P

YEAR 1981

AUTH VAN VLEET, E.S.; SACKETT, W.M.; WEBER, F.F. JR., AND REINHARDT, S.B.;

TITL SPATIAL AND TEMPORAL VARIATION OF PELAGIC TAR IN THE EASTERN GULF OF MEXICO

BIBL IN M. BJORAY, ED. ADVANCES IN ORGANIC GEOCHEMISTRY. JOHN WILEY AND SONS, LONDON, ENGLAND. P. 362-368.

KEYW TAR

PETROLEUM

CHEMISTRY

OIL RESIDUE

POLLUTION

LOOP CURRENT

CIRCULATION

HYDROCARBON

ABST Pelagic tar concentration have been measured for samples collected monthly in the eastern Gulf of Mexico over a one year period. Each month, seven stations were occupied and duplicate neuston tows (to 0.5 m depth) and oblique tows (to 100 m depth) were collected at each station. Gravimetric analysis was carried out on the total extract, as well as on the aliphatic and aromatic fractions. The concentrations of pelagic tar ranged from 0 to 26.5 mg m⁻² (expressed as the toluene extractable lipid) with an average of 1.60 mg m⁻² in the neuston tows collected off the West Florida Shelf and 0.05 mg m⁻² in neuston tows collected on the West Florida Shelf. The concentration of pelagic tar closely correlated with proximity to the Gulf Loop current. The occurrence of tar was often associated with floating Sargassum. Essentially all of the tar was found in the top 50 cm of the water column with very little occurring in the subsurface waters. The highest pelagic tar concentrations were observed during the spring and summer of 1980. Both the absolute concentrations and spatial distributions of tar decreased during the following fall and winter.

ANNO

06/11/1987

.....
ACC 4149

TYPE P

YEAR 1984

AUTH VAN VLEET, E.S.; SACKETT, W.M.; REINHARDT, S.B.; MANGINI, M.E.;

TITL DISTRIBUTION, SOURCES, AND FATES OF FLOATING OIL RESIDUES IN THE EASTERN GULF OF MEXICO.

BIBL MAR. POLL. BULL. 15(3):106-110

KEYW TAR

PETROLEUM

CIRCULATION

POLLUTION

OIL RESIDUE

HYDROCARBON

CHEMISTRY

LOOP CURRENT

ABST Pelagic tar was monitored over a two-year period in the Eastern Gulf of Mexico. A total of 416 surface and subsurface samples were collected during monthly cruises. Concentrations of pelagic tar found in the Eastern Gulf of Mexico were substantially higher than values reported for other areas around the world. Tar is primarily associated with the Gulf Loop Current, whereas continental shelf areas are relatively uncontaminated. Grounding of significant amounts of tar occurs primarily along the south-east coast of Florida, between Key West and Fort Pierce. Approximately 10-50% of the tar in the eastern Gulf is transported in from the Caribbean Sea via the Yucatan Straits. The remainder originates within the Gulf. Approximately half of the pelagic tar samples collected during the study appeared to have originated from tanker operations.

ANNO

06/11/1987

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ACC 4500

TYPE P

YEAR 1981

AUTH VAN VLEET, E.S.; SACKETT, W.M.; WEBER, F.F. JR., AND REINHARDT, S.B.;

TITL SPATIAL AND TEMPORAL VARIATION OF PELAGIC TAR IN THE EASTERN GULF OF MEXICO
, P. 362-368.

BIBL IN M. BJORAY, ED. ADVANCES IN ORGANIC GEOCHEMISTRY. JOHN WILEY AND SONS, LONDON, ENGLAND.

KEYW TAR

PETROLEUM

CHEMISTRY

OIL RESIDUE

POLLUTION

LOOP CURRENT

CIRCULATION

HYDROCARBON

ABST Pelagic tar concentration have been measured for samples collected monthly in the eastern Gulf of Mexico over a one year period. Each month, seven stations were occupied and duplicate neuston tows (to 0.5 m depth) and oblique tows (to 100 m depth) were collected at each station. Gravimetric analysis was carried out on the total extract, as well as on the aliphatic and aromatic fractions. The concentrations of pelagic tar ranged from 0 to 26.5 mg m⁻² (expressed as the toluene extractable lipid) with an average of 1.60 mg m⁻² in the neuston tows collected off the West Florida Shelf and 0.05 mg m⁻² in neuston tows collected on the West Florida Shelf. The concentration of pelagic tar closely correlated with proximity to the Gulf Loop current. The occurrence of tar was often associated with floating Sargassum. Essentially all of the tar was found in the top 50 cm of the water column with very little occurring in the subsurface waters. The highest pelagic tar concentrations were observed during the spring and summer of 1980. Both the absolute concentrations and spatial distributions of tar decreased during the following fall and winter.

ANNO

06/11/1987

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ACC 4501

TYPE P

YEAR 1981

AUTH VAN VLEET, E.S.; SACKETT, W.M.; WEBER, F.F. JR., AND REINHARDT, S.B.;

TITL SPATIAL AND TEMPORAL VARIATION OF PELAGIC TAR IN THE EASTERN GULF OF MEXICO
, P. 362-368.

BIBL IN M. BJORAY, ED. ADVANCES IN ORGANIC GEOCHEMISTRY. JOHN WILEY AND SONS, LONDON, ENGLAND.

KEYW TAR

PETROLEUM

CHEMISTRY

OIL RESIDUE

POLLUTION

LOOP CURRENT

CIRCULATION

HYDROCARBON

ABST Pelagic tar concentration have been measured for samples collected monthly in the eastern Gulf of Mexico over a one year period. Each month, seven stations were occupied and duplicate neuston tows (to 0.5 m depth) and oblique tows (to 100 m depth) were collected at each station. Gravimetric analysis was carried out on the total extract, as well as on the aliphatic and aromatic fractions. The concentrations of pelagic tar ranged from 0 to 26.5 mg m⁻² (expressed as the toluene extractable lipid) with an average of 1.60 mg m⁻² in the neuston tows collected off the West Florida Shelf and 0.05 mg m⁻² in neuston tows collected on the West Florida Shelf. The concentration of pelagic tar closely correlated with proximity to the Gulf Loop current. The occurrence of tar was often associated with floating Sargassum. Essentially all of the tar was found in the top 50 cm of the water column with very little occurring in the subsurface waters. The highest pelagic tar concentrations were observed during the spring and summer of 1980. Both the absolute concentrations and spatial distributions of tar decreased during the following fall and winter.

ANNO

06/11/1987

.....
ACC 2231

TYPE P

YEAR 1959

AUTH VAUSE, J.E.;

TITL UNDERWATER GEOLOGY AND ANALYSIS OF RECENT SEDIMENTS OFF THE NORTHWEST FLORIDA COAST.

BIBL J. SEDIMENT. PET. 29(4)555-563.

KEYW SEDIMENT

GRAIN SIZE

WAVE

ABST Diver-collected sediment samples were used in transect surveys of the sedimentary environment of the shallow continental shelf off the west coast of Florida. Sediment grain size was found to increase and sorting decrease in a seaward direction. Surface ripple marks were generally parallel to the shoreline and were apparently wave formed. Sea urchins of the genus Clypeaster were observed erasing ripple marks.

ANNO

06/11/1987

.....
ACC 2194

TYPE P

YEAR 1983

AUTH VIRNSTEIN, R.W.;CAPONE, M.A.;CAIRNS, K.D.;MIKKELSEN, P.S.;

TITL A SHARP CHANGE IN MACROFAUNAL DENSITY AND DYNAMICS AT THE CONTINENTAL SHELF
SLOPE BREAK.

BIBL PRESENTED AT BENTHIC ECOL. MEET., FLA. INSTIT. OF TECH., MELBOURNE.

KEYW CONTINENTAL SHELF
BENTHIC FAUNA

CONTINENTAL SLOPE
MACROFAUNA

DIVERSITY
DEFAUNATION

ABST An order of magnitude decrease in benthic macrofauna density was found near the topographic shelf slope break from samples along a transect off the southeast Florida coast. Recolonization rates in defaunated sediments also decreased markedly along the transect. On the inner shelf (33 m depth), density and diversity returned to original values within a few weeks, whereas on the slope (310 m), recolonization required more than a year.

ANNO

06/11/1987

.....
ACC 2203

TYPE P

YEAR 1983

AUTH VIRNSTEIN, R.W.;MIKKELSON, P.S.;CAIRNS, K.D.;CAPONE, M.A.;

TITL SEAGRASS BEDS VERSUS SAND BOTTOMS: THE TROPIC IMPORTANCE OF THEIR ASSOCIATED BETHNIC INVERTEBRATES.

BIBL FLORIDA SCI. 46(3/4):363-381.

KEYW SEAGRASS
SEDIMENT

INVERTEBRATE
BENTHIC FAUNA

EPIFAUNA

ABST Seagrass beds in the Indian River Lagoon, Florida had 3 times the density of acrobenthic invertebrates found in nearby unvegetated sediments. This difference was attributed to the presence of epifauna in the seagrass. Heavy predation by decapods on the epifauna gives it more trophic significance than the infauna. A series of caging experiments were used to reveal the trophic processes of the different habitats.

ANNO

06/11/1987

.....
ACC 2557
TYPE P
YEAR 1980
AUTH VIRNSTEIN, R.W.;MIKKELSEN, P.S.;CAIRNS, K.D.;CAPONS, M.A.;
TITL SEAGRASS BEDS VERSUS SAND BOTTOMS: THE TROPHIC IMPORTANCE OF THEIR ASSOCIATED BENTHIC INVERTEBRATES.

BIBL FLA. SCI.

KEYW SEAGRASS INVERTEBRATE EPIFAUNA
 SEDIMENT BENTHIC FAUNA

ABST Density of macrobenthic invertebrates was 3 times greater in seagrass beds in Indian River Lagoon, Florida than in nearby unvegetated sediments. Seagrass beds had 13 times more abundant epifauna than sand areas, presumably due to epifauna dependence on seagrass for food, habitat, nursery area, and protection from predators. To determine the importance of associated macrobenthos to the local food web and the effect of small decapod predators, four 3 mm mesh cages were erected each within a larger 12 mm mesh cage, 2 in seagrass and 2 in sand. After 2 months, decapod density increased within the inner cages, while macrobenthos abundance decreased. Problems associated with predator exclusion or enclosure experiments are cited and the trophic pathways of seagrass meadows and sand bottom communities are discussed.

ANNO

06/11/1987

ACC 424

TYPE

YEAR 1978

AUTH VITTOR, B.A.;

TITL REVIEW OF LITERATURE PERTAINING TO THE EFFECTS OF DREDGING WITHIN THE MISSISSIPPI SOUND AND ADJACENT AREAS STUDY AREA.

BIBL U.S. ARMY CORPS OF ENGINEERS, MOBILE DISTRICT, MOBILE, AL. 62 PP.

KEYW BACTERIA
DREDGING
TRACE METAL

BENTHIC COMMUNITY
NUTRIENT
TURBIDITY

DISSOLVED OXYGEN
PESTICIDE

ABST urbidity;

ANNO

06/11/1987

.....

ACC 647

TYPE

YEAR 1981

AUTH VITTOR, B.A.;

TITL BENTHIC COMMUNITY CHARACTERIZATION OF MISSISSIPPI SOUND. IN J.R. KELLY, ED.
SYMPOSIUM ON MISSISSIPPI SOUND.

BIBL MISSISSIPPI-ALABAMA SEA GRANT CONSORTIUM, OCEAN SPRINGS, MS. MASGP-81-007.

KEYW BENTHIC COMMUNITY
COASTAL RESOURCE

BENTHIC FAUNA

BIOLOGY

ABST

ANNO

06/11/1987

.....
ACC 815
TYPE
YEAR N/AT
AUTH VITTOR, B.A.;
TITL DRILLING SITE MONITORING IN MOBILE BAY, ALABAMA.

BIBL N/A

KEYW BENTHIC FAUNA	CARBON	DISSOLVED OXYGEN
HYDROCARBON	LIGHT ATTENUATION	METAL
MINERALOGY	SALINITY	SEDIMENT
WATER TEMPERATURE	MEIOFAUNA	MACROFAUNA
TURBIDITY		

ABST Biomonitoring is currently being conducted in lower Mobile Bay to provide a framework of marine life existing in the area prior to the drilling of an oil and gas test well. The study involves 6 stations monitored quarterly beginning in July, 1978 for macrofauna, meiofauna, sediment mineralogy, sediment total organic carbon, sediment oil and grease and sediment trace metals. Hydrography performed includes temperature, salinity, dissolved oxygen and turbidity.

ANNO

06/11/1987

.....
ACC 2154
TYPE U
YEAR 1977
AUTH VITTOR, B.A.;
TITL BENTHIC FAUNA OF MAFLA STUDY TRANSECTS V AND VI (1975-76).

BIBL UNPUBLISHED REPORT. U.S. DEPARTMENT OF INTERIOR. BLM, WASHINGTON, D.C.
28 P.

KEYW BENTHIC	POLYCHAETE	SEASON
BIOMASS	WEIGHT	DIVERSITY
GEOGRAPHIC	TEMPERATURE	SALINITY
DO	SEDIMENT	MAFLA

ABST This report presents the results of the polychaete study for transect V (West Florida Shelf) and transect VI (Mississippi-Alabama Shelf) of the Bureau of Land Management sponsored program in the Mississippi, Alabama, Florida (MAFLA) outer continental shelf. The author summarizes his findings as follows: 1) The number of species and individuals differed, with respect to both season and location. September values were generally lowest for both parameters, while stations with fine sediments supported fewest species and individuals. 2) Polychaete wet weight biomass estimates also varied with season and location (sediment type). Seasonal and sediment effects were the same as for numbers of species and individuals. 3) Species diversity and evenness were highest during June. The decrease in H' and $H_{\text{---}}$ in September coincided with decreases in species and individual abundance. 4) Dominant species are distributed according to sediment type and geographical location. Family groupings show the same patterns. 5) Species diversity decreases as mean sediment particle size decreases, regardless of season or geographical location.

ANNO

06/11/1987

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ACC 2155

TYPE P

YEAR 1978

AUTH VITTOR, B.A.;

TITL ABUNDANCE, DIVERSITY AND DISTRIBUTION OF BENTHIC POLYCHAETOUS ANNELIDS IN THE EASTERN GULF OF MEXICO.

BIBL MAFLA REPT. SUBMITTED TO DAMES AND MOORE, INC. BLM CONTRACT AA550-CT7-34. P . 699-747.

KEYW POLYCHAETE	CONTINENTAL SHELF	BIOMASS
DIVERSITY	SEDIMENT	SEASON
LATITUDE	SALINITY	ASSEMBLAGE
SUBSTRATE	ZOOGEOGRAPHY	

ABST Approximately 195,400 individual polychaetes from the Eastern Gulf of Mexico continental shelf were identified and counted, representing 60 families and 1,056 taxa. Wet weight biomass, individual abundance, and diversity varied with respect to the sediment type, season, latitude, and salinity. Average biomass values ranged from 39.04 to 306.53 mg/0.06 square meter at deep stations, and from 392.02 to 2226.06 mg/0.06 square meter at depths less than 100 m. Southern stations and generally higher standing crops. Polychaete abundance showed similar patterns as expected. Species richness and diversity, however, were higher north of Cape San Blas, Florida, and in shallow water habitats. Coarse sediments supported more polychaete individuals and species than either medium or fine sediments, although differences were small between coarse and medium benthos. Polychaete assemblages appeared to be arranged with respect to the same environmental parameters. Disjunct distributions of some groups were related to salinity and substrate preferences. Polychaete taxonomy and zoogeography were also discussed.

ANNO

06/11/1987

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ACC 4250

TYPE P

YEAR 1983

AUTH VLEET, E.S. VAN; SACKETT, W.M.; WEBER, F.F., JR.; REINHARDT, S.B.;

TITL INPUT OF PELAGIC TAR INTO THE NORTHWEST ATLANTIC FROM THE GULF LOOP CURRENT
: CHEMICAL CHARACTERIZATION AND ITS RELATIONSHIP TO WEATHERED IXTOC-I OIL.
CONFERENCE ON POLLUTION IN THE NORTH ATLANTIC OCEAN HALIFAX, N.S. (CANADA)
19-23 OCT. 1981.

BIBL CONF. ON POLL. IN THE NORTH ATLANTIC OCEAN. PP. 12-22.

KEYW TAR

NEUSTON

LOOP CURRENT

CIRCULATION

POLLUTION

ABST Pelagic tar concentrations have been measured for samples collected monthly in the eastern Gulf of Mexico over a one year period. Analyses of the pelagic tar included gravimetric isotopic ($\delta^{13}C$) and molecular (gas chromatographic) characterization of the total, aliphatic and aromatic fractions. The concentrations of pelagic tar ranged from 0 to 26.5 mg multiplied by m^{-2} of toluene extractable material, with an average of 1.60 mg multiplied by m^{-2} in the offshore neuston tows and 0.05 mg multiplied by m^{-2} in neuston tows taken on the west Florida continental shelf. Based upon an average annual Loop Current discharge of $28 \times 10^6 m^3$ multiplied by 3^{-2} through the Florida Straits, it

ANNO

06/11/1987

.....
ACC 318

TYPE

YEAR 1973

AUTH VOSS, G.;OPRESKO, L.;THOMAS, R.;

TITL THE POTENTIALLY COMMERCIAL SPECIES OF OCTOPUS AND SQUID OF FLORIDA, THE GUL
F OF MEXICO AND CARIBBEAN SEA.

BIBL SEA GRANT FIELD GUIDE SERIES, MIAMI UNIVERSITY, MIAMI, FL. NOAA-74010901. 4
0 PP.

KEYW BIOLOGY

COASTAL WATER

FISHERY

LIFE HISTORY

MOLLUSC

ABST

ANNO

06/11/1987

.....
ACC 2156
TYPE P
YEAR 1954
AUTH VOSS, G.L.;
TITL CEPHALOPODA OF THE GULF OF MEXICO.

IN: GULF OF MEXICO, ITS ORIGIN, WATERS, AND MARINE LIFE.

BIBL FISH. BULL. U.S. 55(89):475-478.

KEYW LIFE HISTORY

REPRODUCTION

MOLLUSC

ABST A short summary of distribution and taxonomic work on cephalopods of the Gulf of Mexico is given. The life histories, feeding behavior, abundances and reproduction of cephalopods are discussed. A list of species sighted to date in the Gulf of Mexico is given.

ANNO

06/11/1987

.....
ACC 2157
TYPE P
YEAR 1956
AUTH VOSS, G.L.;
TITL A REVIEW OF THE CEPHALOPODS OF THE GULF OF MEXICO.

BIBL BULL. MAR. SCI. GULF & CARIBB. 6(2):85-178.

KEYW DISTRIBUTION	MOLLUSC	TAXONOMY
LIFE HISTORY	FEEDING HABIT	ABUNDANCE
REPRODUCTION		

ABST An extensive effort was made to collect and identify specimens of Cephalopods collected during trawls from 1950 to 1956 in the Gulf of Mexico. Identification, classification, and distribution of cephalopods is discussed. Illustrations and a synopsis of species are given.

ANNO

06/11/1987

.....
ACC 2490
TYPE P
YEAR 1953
AUTH VOSS, G.;
TITL OBSERVATIONS OF OCTOPUS HUMMELINCKI.

BIBL NAUTILUS 66(3):73.

KEYW MONROE

MOLLUSC

ABST A single specimen of *Octopus hummelincki* discovered beneath a slab of coral at Long Reef in the Florida Keys was observed on 26 July 1952. The sculpture, coloration, movements, and habitat of the octopus are described.

ANNO

06/11/1987

.....
ACC 2534
TYPE P
YEAR 1955
AUTH VOSS, G.L.;VOSS, N.A.;
TITL AN ECOLOGICAL SURVEY OF SOLDIER KEY, BISCAYNE BAY, FLORIDA.

BIBL BULL. MAR. SCI. GULF & CARIBB. 5(3):23-229.

KEYW DADE	INVERTEBRATE	ALGAE
TEMPERATURE	SALINITY	DO
NUTRIENT		

ABST The intertidal and shallow water invertebrate and algae life of Soldier Key a small island off the southeast coast of Florida, was described and certain zones of the shallow water were classified according to the most numerous inhabitants. These included, proceeding from the shore seaward, the Echinometra zone, the Porites-coralline zone, the Thalassia zone and the alcyonaria zone. These zones were believed to be characteristic of the other islands of the Florida Keys. The plants and invertebrates common to these zones were listed and some of their relationships discussed. All of the known animals and plants of the intertidal and shallow water of Soldier Key were listed along with their respective zonations.

ANNO

06/11/1987

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ACC 2535
TYPE P
YEAR 1965
AUTH VOSS, G.L.; VOSS, N.A.;
TITL AN ECOLOGICAL SURVEY OF SOLDIER KEY, BISCAYNE BAY, FLORIDA.

BIBL BULL. MAR. SCI. 5(3):203-229.

KEYW DADE	INVERTEBRATE	ALGAE
TEMPERATURE	SALINITY	DO
NUTRIENT		

ABST The intertidal invertebrates and algae of Soldier Key were investigated and several zones described according to the most numerous inhabitants. Proceeding from the shore seaward, these zones are the Echinometra zone, the Porites-coraline zone, the Thalassia zone, and the alcyonaria zone. Plants and animals common to the zones are listed and some of their relationships described.

ANNO

06/11/1987

.....
ACC 1039
TYPE
YEAR 1979
AUTH VUKOVICH, F.M.;CRISSMAN, B.W.;BUSHNELL, M.;KING, W.J.;
TITL SOME ASPECTS OF THE OCEANOGRAPHY OF THE GULF OF MEXICO USING SATELLITE AND
IN SITU DATA.

BIBL J. GEOPHY. RES. 84:7749-7768.

KEYW LOOP CURRENT	DATA	GYRE
INFRARED IMAGERY	METEOROLOGY	PHYSICAL OCEANOGRAPH
RADIOMETER	REMOTE SENSING.	SATELLITE
CIRCULATION		

ABST Satellite infrared data and in situ data were combined to study synoptic-scale and mesoscale fronts in the Gulf of Mexico in the period 1973-1977. Deep northward penetrations of the Loop Current were noted in the winter, and a major warm gyre developed in the winter, 1974. Other major warm gyres were seen to develop in the early spring (1974 and 1977). In all cases, a very large meander developed off the southern part of the west Florida shelf prior to the development of the major warm gyre. Smaller meanders were seen to move along the Loop Current boundary at an average speed of 28 km/day and with an average wavelength of 210 km.

ANNO

06/11/1987

.....
ACC 4150
TYPE P
YEAR 1985
AUTH VUKOVICH, F.M.; MAUL, G.A.;
TITL CYCLONIC EDDIES IN THE EASTERN GULF OF MEXICO.

BIBL OCEANOGR. 15(1):105-117

KEYW PHYSICAL	OCEANOGRAPHY	EDDY FORMATION
CIRCULATION	REMOTE SENSING	LOOP CURRENT
HYDROGRAPHY	CURRENTS	

ABST Cold-domed cyclonic edies juxtaposed to the cyclonic shear side of the Gulf Loop current are observed in simultaneously obtained hydrographic, current meter mooring, and satellite infrared data. The cyclones are initially observed in the satellite data as cold perturbations on the northern extreme of the current and gr either into a cold tongue or a quasi-stable meander off the Dry Tortugas, Florida. Areal shipboard surveys show closed isopleths of temperature and salinity, and surface geostrophic current speeds relative to 1000 db are in excess of 100 cm s minus 1. The diameter of the cold domes varied from 80 to 120 km. Separation of large anticyclonic rings is always observed to be preceded by cyclonic edies in the transition zone between Campeche Bank and the West Florida Shelf, but only on the eastern side. Not every cyclonic eddy off Dry Tortugas is associated with the Separation of an anticyclonic ring; some are eroded away by the Florida Current, but they have never been observed in 10 years of satellite data to advect eastward through the Straits of Florida.

ANNO

06/11/1987

.....
ACC 4242
TYPE P
YEAR 1986
AUTH VUKOVICH, F.M.;
TITL ASPECTS OF THE BEHAVIOR OF COLD PERTURBATIONS IN THE EASTERN GULF OF MEXICO
: A CASE STUDY.

BIBL J. PHYS. OCEANOGR. 16(1):175-188.

KEYW LOOP CURRENT CURRENTS PHYSICAL OCEANOGRAPH

ABST Between 2 March and 13 May 1983, while using in situ and satellite data, three cold perturbations were observed off the West Florida Shelf. These perturbations moved southward along the boundary of the Loop Current at speeds of about 4 to 10 km day super (-1). Geostrophic current and current meter data indicated a cyclonic circulation associated with the cold perturbations. The geostrophic current indicated northward flow on the west side of the warm filaments that formed on the shoreward side of the cold perturbation, and weak southward flow on the east side. However, the current meter data only gave indications of northward flow in the filaments. The current meter array may not have been able to discriminate the entire flow pattern in the filaments.

ANNO

06/11/1987

.....
ACC 2491
TYPE P
YEAR 1969
AUTH WAINWRIGHT, S.A.; DILLON, J.R.;
TITL ON THE ORIENTATION OF SEAFANS (GENUS GORGONIA).

BIBL BIOL. BULL. 136:130-139.

KEYW MONROE CORAL GORGONIAN
 WAVE CURRENTS

ABST Measurements were made of the orientation (to points of the compass) of the plane of 189 seafans from 5 patches of coral reefs in the upper Florida Keys. Small fans were observed to be randomly oriented, whereas large fans showed a high degree of preferred orientation within each patch. Microscopic examination of the axial skeleton of some large fans revealed progressive changes in orientation that had taken place during growth. A passive mechanism of orientation was suggested. Due to the high velocity and short period of surf and surge and the observed motions of fans on the reef, surf and surge are judged to be the most important components of water movements controlling fan orientation.

ANNO

06/11/1987

.....
ACC 4313
TYPE P
YEAR 1982
AUTH WALKER, N.D.;ROBERTS, H.H.;ROUSE, L.J., JR.;HUH, O.K.;
TITL THERMAL HISTORY OF REEF-ASSOCIATED ENVIRONMENTS DURING A RECORD COLD-AIR OUBREAK EVENT.

BIBL CORAL REEFS 1(2):83-87.

KEYW CORAL	MORTALITY	REEF
TEMPERATURE	METEOROLOGICAL	WIND
BIOLOGICAL	STRESS	

ABST Several polar continental air masses intruding into the south Florida/northern Bahama Bank region during Jan. 1981 caused record low air temperatures and rapid chilling of extensive shallow-water carbonate systems. Numerous "coral kills" along the Florida reef tract and massive fish mortalities in Florida Bay were attributable to unusually cold waters generated at this time. Thermal evolution of Florida Bay/Florida reef tract and northern Bahama Bank waters from 8 to 21 January was assessed from thermal infrared data acquired by the NOAA-6 environmental satellite, in situ water temperatures, local meteorological data, and a computerized heat flux model. Offshore movement of bay water is driven primarily by strong northerly winds, density gradients, and tidal pumping. Absence of reef development opposite major tidal passes along the Florida reef tract and aperiodic coral kills along bank margins can be attributed to this process, which has probably had a limiting influence on Holocene reef development in these areas.

ANNO

06/11/1987

.....
ACC 4321
TYPE P
YEAR 1981
AUTH WALKER, N.D.;
TITL JANUARY WATER TEMPERATURES KILL FLORIDA FAUNA.

BIBL COASTAL OCEANOGR. AND CLIMATOL. NEWS. 3(3):30.

KEYW TEMPERATURE WIND SPEED FISH
MORTALITY DEFAUNATION

ABST Seven cold fronts reached southern Florida during Jan. 1981, depressing air and water temperatures below normal for most of the month. Intense frontal systems moved in to the area Jan. 10 and 16, causing air temperature minima over Florida Bay of 2.2 and 5.3 C, respectively, and wind speeds in excess of 15 m/sec at Key West. In response to their forcing mechanisms, Florida Bay water reached low temperatures of 9.0 C on Jan. 13 and 10.7 C on Jan. 18 and 19. The water temperatures rose briefly to 20 C during the interlude between frontal systems. A NOAA-6 satellite IR image shows the effects of the Jan. 16 frontal passage on shallow bank and bay environments.

ANNO

06/11/1987

.....
ACC 659

TYPE

YEAR 1979

AUTH WALLACE, R.H.;KRAEMER, T.F.;TAYLOR, R.E.;WESSELMA, J.B.;

TITL ASSESSMENT OF GEOPRESSURED-GEOTHERMAL RESOURCES IN THE NORTHERN GULF OF MEXICO. PAGES 132-163 IN L.J.P. MUFFLER, ED. ASSESSMENT OF GEOTHERMAL RESOURCES OF THE UNITED STATES - 1978.

BIBL U.S. GEOLOGICAL SURVEY, CIRCULAR 790. 163 PP.

KEYW COASTAL WATER
RESOURCE

GEOLOGY
SOCIOECONOMIC

GEOTHERMAL

ABST This report estimates the geopressured-geothermal energy contained in pore waters of sedimentary rocks to a depth of 22,500 ft (6.86 km) in the northern Gulf of Mexico basin, both onshore and offshore. The total thermal energy in waters of both sandstone and shale is estimated to be $107,000 \times 10^{18}$ J, of which $11,000 \times 10^{18}$ J is in sandstone and thus represents the amount from which initial production will be drawn. Assuming saturation of the water with methane, the total methane dissolved in water within sandstone and shale is $59,000 \times 10^{12}$ standard cubic feet. Of this, 5700×10^{12} standard cubic feet, equivalent to 6000×10^{18} J of thermal energy, is contained in water within sandstone. Application of the recoverability analysis presented by Papadopoulos and others (1975) in USGS Circular 726 suggests that recoverable thermal energy ranges from 270×10^{18} J under plan 3 (controlled development with limited pressure reduction and subsidence) to 2800×10^{18} J under plan 2 (depletion of reservoir pressure). The energy equivalent of recoverable methane ranges from 158×10^{18} J under plan 3 to 1640×10^{18} J under plan 2. The electricity producible from this thermal energy at a conversion efficiency of 8 percent ranges from 23,000 MWe for 30 yr under plan 3 to 240,000 MWe for 30 yr under plan 2. As in Circular 726, the dissolved methane is not considered to be used locally, and, accordingly, no electrical energy is calculated.

ANNO

06/11/1987

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ACC 2492
TYPE P
YEAR 1978
AUTH WALTON, A.S., JR.;
TITL ORIENTATION TO WAVE SURGE BY SPINY LOBSTERS.

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL.

KEYW MONROE SPINY LOBSTER WAVE
 BEHAVIOR

ABST *Panulirus argus* captured in the Florida Keys were tested for their ability to orientate according to wave surge level and direction. In the presence of surge, the paths were straighter and clustered about a single direction. As the surge level increased, however, straightness and clustering differences from control levels increased. Velocity, more than displacement was important in orientation. Walking speed remained constant under differing surge conditions. The possibility of menorrhoeotaxis is discussed.

ANNO

06/11/1987

.....
ACC 2039
TYPE P
YEAR 1975
AUTH WANLESS, H.R.;
TITL SEDIMENTARY DYNAMICS AND SIGNIFICANCE OF SEAGRASS BEDS.

BIBL FLA. SCI. 38(SUPPL. 1):20.

KEYW SEAGRASS SEDIMENT COMMUNITY
 TURBIDITY SEDIMENT TRANSPORT

ABST The influence of gassbeds on sediment movement and resultant faunal communities is discussed. Roots and rhizomes impede sediment movement and these stabilized areas provide good settings for molluscan community development. Grassbed losses increase sediment instability, higher turbidity, and reduced benthic communities. Seagrass molluscan communities are different from others and perhaps the progression of the beds can be compared in ancient sedimentary environments, thereby leading to reconstruction of paleoenvironments.

ANNO

06/11/1987

.....
ACC 2158
TYPE P
YEAR 1977
AUTH WANLESS, H.R.;DAVIS, J.;
TITL CARBONATE SEDIMENT CONSTITUENTS OF MAFLA SHELF. TECHNICAL REPORT.

BIBL SUBMITTED TO BUREAU OF LAND MANAGEMENT, WASHINGTON, DC. (MAFLA-OCS PROGRAM
. 45 P.
KEYW SEDIMENT CONTINENTAL SHELF CARBONATE
MAFLA

ABST Surface sediments from the continental shelf of the eastern Gulf of Mexico were analyzed for carbonate and biogeneous constituent composition. Results generally agree with those of previous studies. A number of quantitative differences are discussed.

ANNO

06/11/1987

.....
ACC 2159
TYPE P
YEAR 1977
AUTH WANLESS, H.R.;PARK, J.;BOHLKE, B.
TITL MOLLUSCAN LITHOTOPE ASSEMBLAGES OF MAFLA SHELF. TECHNICAL REPORT.

BIBL SUBMITTED TO BUREAU OF LAND MANAGEMENT, WASHINGTON, D.C. (MAFLA-OCS PROGRAM
. 63 P.

KEYW MOLLUSC BENTHIC COMMUNITY
 SUBSTRATE ASSEMBLAGE

ABST The molluscan lithotope (shell depth assemblage) was examined for the MAFLA lease area to acquire information about the benthic community character and dynamics, and the dominant substrate processes. Pending analysis will address some of the following: compare species distribution with other textural parameters; define assemblages and assemblage sequences; compare lithotope and biotope; correlate species-weathering assemblages with substrate attributes; and map critical species-weathering assemblages.

ANNO

06/11/1987

.....
ACC 2536
TYPE P
YEAR 1981
AUTH WANLESS, H.R. ;
TITL FINING UPWARDS SEDIMENTARY SEQUENCES GENERATED IN SEAGRASS BEDS.

BIBL J. SED. PETROL. 51(2):445-454.

KEYW DADE CARBONATE SEAGRASS
 TRANSPORT SEDIMENT

ABST Fining-upwards sedimentary sequences in shallow water carbonate environments of southeast Florida are generated by seagrass beds of *Thalassia testudinum*. A variable size lenticular fining-upwards sequence is produced from seaward-migrating storm blowouts in seagrass beds. The four vertical zones of a complete fining-upwards sequence are summarized. As seagrasses restabilize the upper portion of the blowout, bedload transport is decreased and settled storm suspensions are preserved. The grass stabilized zone is characterized by the molluscs, *Chione cancellata* and *Codakia orbicularis*. The characteristic mollusc assemblage and the preserved textural sediment sequences are unique among fining-upwards sequences.

ANNO

06/11/1987

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ACC 878
TYPE
YEAR 1974
AUTH WARD, E.G.;
TITL OCEAN DATA GATHERING PROGRAM, AN OVERVIEW.

BIBL SHELL DEVELOPMENT COMPANY.

KEYW BAROMETRIC PRESSURE HURRICANE WAVE AMPLITUDE
WIND DIRECTION WIND SPEED

ABST The ocean data gathering program resulted in the collection of oceanographic and meteorological data at six offshore sites in the Gulf of Mexico from 1968-1971. The primary goal of the program was to obtain data on extreme conditions generated by severe hurricanes in the Gulf of Mexico. Parameters continuously recorded are wave amplitude, wind speed and direction, and barometric pressure.

ANNO

06/11/1987

.....
ACC 2493

TYPE P

YEAR 1978

AUTH WARNER, R.E.;COMBS, C.L.;GREGORY, D.R., JR.;

TITL BIOLOGICAL STUDIES OF THE SPINY LOBSTER PANULIRUS ARGUS (DECAPODA: PALINURI
DAE) IN SOUTH FLORIDA.

BIBL PROC. GULF CARIBB. FISH. INSTIT. 29:166-183.

KEYW MONROE

BIOLOGY

COMMERCIAL FISHERY

SPINY LOBSTER

GROWTH

SEASONAL

POPULATION

ABST Seasonal movements, reproductive biology, growth rates, population structure, distribution and relative abundance of local adult and subadult lobster populations, especially as these parameters relate to the commercial industry, were evaluated. The south Florida commercial fishery was determined to be stressed heavily in both the Gulf and Atlantic. A reevaluation of the current management program for the lobster resource in south Florida was recommended so as to ensure the perpetuation of the fishery.

ANNO

06/11/1987

.....
ACC 2255
TYPE P
YEAR 1983
AUTH WATTS, S.A.;
TITL SEASONAL CHANGES IN ACTIVITY OF LUIDIA CLATHRATA (ECHINODERMATA: ASTEROIDEA
).

BIBL FLA. SCI. 46(SUPPL. 1):22.

KEYW SEASONALITY ECHINODERM TEMPERATURE
 SALINITY NUTRIENT

ABST Seasonal variations in activity of Luidia clathrata in Tampa Bay, Florida were measured by changes in righting time and prey handling time. Activity was found to be directly related to both temperature and salinity. Activity was maximum in the summer and minimum in the winter. Laboratory activity experiments indicated that L. clathrata does not acclimate to temperature. Low activity in late summer and winter may cause a decline in feeding and subsequent nutrient storage, thereby decreasing the reproduction potential of the seastars the following spring.

ANNO

06/11/1987

.....
ACC 2374
TYPE P
YEAR 1977
AUTH WEINSTEIN, M.P.;COURTNEY, C.M.;KINCH, J.C.;
TITL THE MARCO ISLAND ESTUARY: A SUMMARY OF PHYSICOCHEMICAL AND BIOLOGICAL
PARAMETERS.

BIBL FLA. SCIENTIST 40(2):97-124.

KEYW COLLIER	CHEMICAL	BIOLOGICAL
INVERTEBRATE	FISH	SUBSTRATE
INFAUNAL COMMUNITY	TEMPERATURE	SALINITY
DO	TURBIDITY	NUTRIENT
CHLOROPHYLL	PINK SHRIMP	

ABST Physicochemical and biological parameters of the Marco Island estuary were summarized in this report. Maximum diversity for epibenthic invertebrates and fishes was associated with predominantly coarser substrates. Several species of invertebrates and fishes exhibited distinct seasonality, becoming scarce during the cooler months. Considerable differences in the infaunal communities were found to occur between artificial waterways and natural mangrove tidal creeks and open bays. Less pronounced differences were apparent in the canal fish community which most closely resembles that of the un-vegetated open bay area.

ANNO

06/11/1987

.....

ACC 2537
TYPE P
YEAR 1948
AUTH WEISS, C.M.;
TITL THE SEASONAL OCCURRENCE OF SEDENTARY MARINE ORGANISMS IN BISCAYNE BAY, FLOR
IDA.

BIBL ECOLOGY 29(2):153-172.

KEYW DADE	SEASONAL	ABUNDANCE
FOULING	TEMPERATURE	SALINITY

ABST The sedimentary organisms recorded from Biscayne Bay exhibited pronounced seasonal fluctuations in abundance. Several of the organisms demonstrated year to year variation in numbers. The fouling complex in this area was shown to be dominated by barnacles in the early succession and by the colonial spreading forms, tunicates and encrusting bryozoans in the later stages. The ecological factors which contributed to the character and abundance of fouling at three sites were described.

ANNO

06/11/1987

.....
ACC 1032
TYPE
YEAR 1971
AUTH WETZEL, R.L.;
TITL ANALYSIS OF COHABITATION BY GAMBUSIA AFFINIS AND POECILIA LATIPINNA IN A SA
LTMARSH CANAL IN FLORIDA.

BIBL MASTER'S THESIS. UNIVERSITY OF WESTERN FLORIDA, PENSACOLA, FL. 80 PP.

KEYW AIR TEMPERATURE PELAGIC FISH WATER LEVEL
 WATER TEMPERATURE MARSH COASTAL

ABST The cohabitation of *Gambusia affinis* and *Poecilia latipinna* was described from populations at 3 stations in a salt marsh canal near Pensacola, Florida. 2395 fish of 6 species were examined between June, 1970 and July, 1971, but most data generated were on the 2 principal species.

ANNO

06/11/1987

.....
ACC 836
TYPE
YEAR 1977
AUTH WHITE, C.J.;BOUDREAUX, C.;
TITL DEVELOPMENT ON AN AREAL MANAGEMENT CONCEPT FOR GULF PENAEID SHRIMP.

BIBL LOUISIANA WILDLIFE AND FISHERIES COMMISSION, TECH. BULL. 22.

KEYW BENTHIC FAUNA	CURRENTS	LIGHT EXTINCTION
SALINITY	SEA STATE	WATER TEMPERATURE
WIND DIRECTION	WIND SPEED	ZOOPLANKTON

ABST This report presents information on occurrence, growth and movements of penaeid shrimp in Louisiana estuarine waters. Sampling was accomplished with a plankton net and otter trawl. Water parameters were also monitored at each station. Sample collection began in July, 1972 and lasted three years.

ANNO

06/11/1987

.....
ACC 2232

TYPE P

YEAR 1980

AUTH WHITE, D.C. ET AL.;

TITL EFFECTS OF BIOTURBATION AND PREDATION BY MELLITA QUINQUIESPERFORATA ON SEDI
MENTARY MICROBIAL COMMUNITY STRUCTURE, IN: ESTUARINE PERSPECTIVES.

BIBL ACADEMIC PRESS, INC., NEW YORK, NY. P. 163-171.

KEYW SEDIMENT
FORAMINIFERA
DO

NUTRIENT
TEMPERATURE
LIGHT

BIOMASS
SALINITY
ECHIODERM

ABST Sediment processing by sand dollars (*Mellita quinquesperforata*) modified the benthic microbial community without significantly altering gross nutrient balances. Cellular and membrane biomass remained unchanged as did prokaryotic biomass and total metabolic activity. Processed sands showed enrichment and prokaryotic fatty acids and reduction of microeukaryotic fatty acids. Lipid neutral carbohydrate exhibited the same trends. A significant decrease in foraminifera abundance suggested that sand dollars selectively prey on some microeukaryotes, but have little effect on the biomass or metabolic activity of benthic prokaryotes.

ANNO

06/11/1987

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ACC 850
TYPE
YEAR 1975
AUTH WHITE, C.J.;
TITL EFFECTS OF 1973 RIVER FLOOD WATERS ON BROWN SHRIMP IN LOUISIANA ESTUARIES.

BIBL LOUISIANA WILDLIFE AND FISHERIES COMMISSION, TECH. BULL. 16. 24 PP.

KEYW BENTHIC FAUNA SALINITY WATER TEMPERATURE
 ZOOPLANKTON RIVER DISCHARGE

ABST Brown shrimp data depicting larval occurrence, juvenile density and growth are presented for 1970 to 1973 during the period of January through June. Comparisons are made of brown shrimp populations occurring during periods of normal hydrological conditions and during flood conditions. The effects of a major flood upon survival, growth and production are discussed.

ANNO

06/11/1987

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ACC 895
TYPE
YEAR 1974
AUTH WHITING, N.H.; MOSHIRI, G.A.;
TITL CERTAIN ORGANISM - SUBSTRATE RELATIONSHIPS AFFECTING THE DISTRIBUTION OF UC
A MINAX.

BIBL HYDROBIOLOGIA 44:481-493.

KEYW DECAPODA	AIR TEMPERATURE	BENTHIC FAUNA
SEDIMENT	CARBON	DISSOLVED OXYGEN
SEDIMENT TEXTURE	TEMPERATURE	

ABST Substrate, temperature and oxygen relationships were studied as they effect populations of *Uca minax*, a decapod crustacean. These data were collected between December, 1968 and December, 1972.

ANNO

06/11/1987

.....
ACC 2494
TYPE P
YEAR 1967
AUTH WICKHAM, D.A.;
TITL OBSERVATIONS ON THE ACTIVITY PATTERNS IN JUVENILES OF THE PINK SHRIMP, PENA
EUS DUORARUM.

BIBL BULL. MAR. SCI. 17(4):769-786.

KEYW MONROE	PINK SHRIMP	LIGHT
CURRENT	BEHAVIOR	TEMPERATURE
SALINITY	DO	TIDE

ABST Laboratory observations of diel patterns in locomotor and burrowing activity of juvenile *Penaeus duorarum* collected from Buttonwood Canal, Flamingo, Florida were made under constant light intensity, water current, and water level. Activity patterns appeared to be regulated by tidal and lunar periodicities. Experimental variation of light and water levels also affected behavior patterns of juvenile pink shrimp. Activity patterns of *P. duorarum* in the field were concluded to be determined by an interaction of ambient environmental stimuli and rhythmic patterns of abiotic factors.

ANNO

06/11/1987

.....

ACC 2538

TYPE P

YEAR 1966

AUTH WICKHAM, D.H.;

TITL OBSERVATIONS OF THE PATTERNS OF PERSISTENT ACTIVITY IN JUVENILE PINK SHRIMP
, PENAEUS DUORARUM BURKENROAD.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI. MIAMI, FL. 52 P.

KEYW DADE

PRESSURE

PINK SHRIMP

LIGHT

BEHAVIOR

CURRENT

ABST The behavior of pink shrimp, *Penaeus duorarum* was examined to determine factors controlling activity levels, and periods. Most activity occurred during 2 nocturnal periods which seemed to be regulated by tidal rhythms. Rhythms were maintained under varying conditions but it could not be determined whether hydrostatic pressure, light intensity, or current is the entraining factor. Adaptive significance and the importance of considering several environmental factors in the control of a behavior pattern are discussed.

ANNO

06/11/1987

.....
ACC 2256
TYPE P
YEAR 1980
AUTH WICKS, S.R.;
TITL EVIDENCE OF NITROGEN FIXING BACTERIA ON SEAGRASSES.

BIBL CARIBB. J. SCI. 15(3-4):149-152.

KEYW SEAGRASS NUTRIENT

ABST Six species of free living, nitrogen-fixing bacteria were found to be abundant on the leaves and rhizomes of 3 seagrass species in Tampa Bay, Florida. *Azobacter agilis* was found on turtle grass (*Thalassia testudinum*), manatee grass (*Syringodium filiforme*), and shoal grass (*Diplanthera (Halodule) wrightii*). *Rhodospirillum rubrum* was isolated from shoal and turtle grass. *Thiobacillus traufweinii* and 3 anaerobic species were isolated from the rhizomes from all 3 seagrass species. The presence of nitrogen-fixing bacteria on seagrasses indicate that they may contribute to the fixed nitrogen budget of the seagrass community.

ANNO

06/11/1987

.....
ACC 632
TYPE
YEAR 1983
AUTH WIESE, J.D.;SLITOR, D.L.;MCCORD, C.A. ;
TITL GULF OF MEXICO SUMMARY REPORT: OUTER CONTINENTAL SHELF OIL AND GAS ACTIVITI
ES IN THE GULF OF MEXICO AND THEIR ONSHORE IMPACTS.

BIBL MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGIONAL OFFICE, METAIRIE,
LA. 106 PP.

KEYW	EXPLORATION	INDUSTRY	OIL
	CONTINENTAL SHELF	RESOURCE	SOCIOECONOMIC

ABST Principal sediment sources in the northern Gulf of Mexico are the Mississippi and Rio Grande basins, which supply subarkosic sands with highly unstable heavy mineral suites derived from mixed sedimentary, volcanic, plutonic, and metamorphic rocks. Components belonging to the last three groups predominate in the heavy mineral assemblages. Much of the detritus has been transported over very long distances. Tectonically, the source areas include both cratons and orogens. The distributive provinces are homogeneous, and sands, silts, and clays spread over the entire width of the shelf. The drainage basins of the rivers of western Louisiana, Texas, and the area east of the Mississippi represent less abundant sediment sources. With the exception of the metamorphic and sedimentary suite of the Colorado River, sediments are orthoquartzitic with stable heavy mineral suites, and are derived from the Cretaceous and Tertiary margins of the Gulf Coast basin. Sands from these sources are distributed mainly in the nearshore zone, whereas the clays are carried by Gulf residual currents and deposited on the Middle and outer shelf together with fine-grained Mississippi and Rio Grande material. The distribution patterns of the two major textural groups, sand and silt-clay, are virtually independent, and in many instances the sand, silt, and clay modes of the same locality have different sources. The sequence of nearshore environments produced by the Holocene transgression has resulted in the deposition of a complex pattern of sediments from a variety of sources.

ANNO

06/11/1987

.....
ACC 743
TYPE
YEAR 1960
AUTH WIESER, W.;
TITL BENTHIC STUDIES IN BUZZARDS BAY, II, THE MEIOFAUNA.

BIBL LIMNOL. OCEANOLOG. 56:121-137.

KEYW BENTHIC COMMUNITY BIOLOGY COASTAL WATER
 COMMUNITY STRUCTURE ECOLOGY MEIOFAUNA
 TAXONOMY

ABST During the summer of 1957 a study of the small metazoans (meiofauna), based on a series of Phleger core samples, was undertaken at three stations in Buzzards Bay, Massachusetts. The number of animals ranged from 1.69×10^5 to $1.86 \times 10^6/m^2$, the dry weights varied from approximately 100 to 600 mg $/m^2$. The nematodes and kinorhynchs, which comprised between 89 and 99% of the total meiofauna, were studied in detail. The sandy localities (stations P and J) were characterized by a number of nematodes restricted to this habitat, particularly by three representatives of the genus *Odontophora* and by all representatives of the genus *Leptonemella*. The locality rich in fine deposits (station R) was characterized by the relative abundance of several nematodes, particularly of *Tershelligia longicaudata*, and the three kinorhynch species. It was possible to recognize an *Odontophora*-*Leptonemella* community in the sandy habitats, and a *Tershelligia longicaudata*-*Trachydemus mainensis* (kinorhynch) community in the silty habitat, the former being equivalent to the *Ampelisca* community, the latter to the *Nucula proxima*-*Nephtys incisa* community described for the macrofauna in the same area. However, these "communities" can also be considered as two ecological groups of species, the former dependent on the presence of sand, the latter on that of fine deposits, which actually live side by side, forming an intricate meshwork of faunal combinations. Each combination is determined by the relative amounts of sand and fine deposits present.

ANNO

06/11/1987

.....
ACC 269
TYPE
YEAR 1972
AUTH WILHELM, O.; EWING, M.;
TITL GEOLOGY AND HISTORY OF THE GULF OF MEXICO.

BIBL GEOL. SOC. AM., BULL. 83:575-600.

KEYW GEOLOGIC HISTORY GEOLOGY SEISMIC
 STRATIGRAPHY

ABST The principal aim of this study has been directed toward a comprehensive interpretation of the historical development of the Gulf of Mexico. The initial stage was analysis and correlation of seismic profiler records obtained over a considerable period, followed by an endeavor to correlate the results with the surface geology of the land areas surrounding the Gulf. Indication of simatic oceanic crust beneath the abyssal Gulf has led to the assumption that it had been a permanent ocean basin. A concept developed in this study proposes that the simatic crust was formed in late Paleozoic time. Subsequent environmental conditions remained epicontinental-including the environment of Jurassic salt deposition. Proceeding from this viewpoint, the origin of the Gulf of Mexico is proposed to be related to the extensive regional subsidence of more than 10,000 ft during Cretaceous time, and its isolation came about by the continuous contemporaneous carbonate growth of the Florida and Yucatan platforms. Minimum rates of sediment deposition, compared to the rate of platform growth, led to consistent deepening which accordingly, must be underlain by a thin Cretaceous section. Hypothetically, the Straits of Florida and the Yucatan Channel originated from erosion at the front of the Laramide tectogene when carbonate growth was halted, following the inundation by seaways. The Gulf of Mexico had been reduced to its present size by the invasion from the north and southwest of the huge Cenozoic mass of deposits-referred to as the Gulf Coast geosyncline. The last major volume of clastic sediments was deposited on the Mississippi cone as early as

ANNO

06/11/1987

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ACC 4151
TYPE P
YEAR 1974
AUTH WILKENS, E.P.H.;
TITL KINDS AND DIVERSITY OF FISH LARVAE COLLECTED IN BONGO NETS OFF WESTERN FLORIDA.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI. MIAMI, FL. 64 P.

KEYW BIOLOGY FISH ICHTHYOPLANKTON
 LIFE HISTORY RECRUITMENT ZOOPLANKTON

ABST Ichthyoplankton sampling efficiency was evaluated using four bongo net samplers toward offshore southwest Florida. The effects of towing speed, opening size, mesh size, and time of day on estimates of species diversity and composition of larval fishes in representative samples were determined. Few taxa were added by increasing towing speed, possibly due to specimen damage which precluded identification beyond family level. Numbers of individuals did not increase with increasing towing speed. More species were collected during night tows at Station I, a deeper water station, than at Station II. Replicate tows of the 0.505 mm mesh net yielded significantly more species in common than did 0.333 mm mesh net. Whether 20 cm opening nets caught numbers of taxa similar to 60 cm nets could not be determined.

ed in 10 years of satellite data to advect eastward through the Straits of Florida.

ANNO

06/11/1987

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ACC 4152
TYPE P
YEAR 1977
AUTH WILLIAMS, J.;GREY, W.F.;MURPHY, E.B.;CRANE, J.J.;
TITL DRIFT BOTTLE ANALYSES OF EASTERN GULF OF MEXICO SURFACE CIRCULATION.

BIBL MEMOIRS OF THE HOURGLASS CRUISES. VOL. IV, PART III. MARINE RESEARCH LABORATORY, FLORIDA DEPARTMENT OF NATURAL RESOURCES, ST. PETERSBURG, FL. 134 P.

KEYW PHYSICAL OCEANOGRAPHY CIRCULATION
 DRIFT BOTTLE CURRENTS HOURGLASS

ABST A total of 4,460 drift bottles was released in continental shelf waters between Tampa Bay and Ft. Myers, Florida, during Project Hourglass, a 28 month (1965 to 1967) systematic sampling program. The number of recoveries was 1,415 or 31.73% of those released. Coastlines where bottles were recovered were divided into five geographic areas for analyses. Winter releases resulted in the greatest number of returns from the Florida east coast and Keys, and few or none from other areas. Spring and summer releases resulted in high percentages of returns from the lower west Florida coast (Area 1), primarily between Tampa and Ft. Myers. The greatest number of returns from the western Gulf of Mexico (Area IV) was from summer and fall releases. A combination of Gulf of Mexico Loop Current data from other cruises during this period, temperature and salinity measurements taken on the Hourglass cruises, and wind analysis aided our interpretation of possible mechanisms associated with drift trajectories. A sequential pattern of Loop Current development (intrusion, spreading, eddy formation, decay) has been well documented by hydrographic and satellite data.

ANNO

06/11/1987

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ACC 542
TYPE
YEAR 1975
AUTH WILLIAMS, G.N.; HANN, R.; JAMES, W.D.;
TITL PREDICTION THE FATE OF OIL IN THE MARINE ENVIRONMENT.

BIBL PROCEEDINGS OF THE 1975 CONFERENCE ON THE PREVENTION AND CONTROL OF OIL POLLUTION, MARCH 25, SAN FRANCISCO, CA.
KEYW GEOLOGY MODEL OIL SLICK
OIL SPILL OIL CONTINENTAL SHELD
PHYSICAL PROCESS CHEMISTRY

ABST

ANNO

06/11/1987

.....
ACC 4309

TYPE P

YEAR 1977

AUTH WILLIAMS, D.C.; STANG, P.R.; HYDE, B.;

TITL STATE INFORMATION NEEDS RELATED TO ONSHORE AND NEARSHORE EFFECTS OF OCS PETROLEUM DEVELOPMENT.

BIBL PREPARED BY BUREAU OF LAND MANAGEMENT AND MINERALS PROGRAM DEVELOPMENT AND ANALYSIS. 191 P.

KEYW CONTINENTAL SHELF PETROLEUM

ABST The United States currently has underway a program to develop tracts on the Outer Continental Shelf (OCS) for their petroleum resources that can have significant impact on and near the shore. The potentially affected States bordering the Atlantic and Pacific Oceans and the Gulf of Mexico have expressed serious concerns about the availability and adequacy of the information they need to make planning and management decisions about onshore activities and impacts related to OCS petroleum development. This report discusses state policies, major concerns, organization, planning approaches and relation to other state planning efforts.

ANNO

06/11/1987

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ACC 710

TYPE

YEAR 1973

AUTH WILLING, T.E.;DARNELL, R.M.;IBRAHIM, M.A.;BERNER, L.;

TITL CALORIC VALUES OF MARINE ANIMALS FROM THE GULF OF MEXICO.

BIBL CONTRIB. MAR. SCI. 17:1-7.

KEYW INVERTEBRATE
FISH

BENTHOS
GEOLOGY

CALORIC CONTENT
PLANKTON

ABST

ANNO

06/11/1987

.....
ACC 1038
TYPE
YEAR 1972
AUTH WILSON, C.R.;
TITL A VITAMIN B12 STUDY IN PORTIONS OF ESCAMBIA AND BLACKWATER BAYS, FLORIDA.

BIBL MASTER'S THESIS. UNIVERSITY OF WEST FLORIDA, PENSACOLA, FL. 70 PP.

KEYW LIGHT ATTENUATION	MICROFAUNA	PH
SALINITY	VITAMIN	WATER TEMPERATURE
BACTERIA	TURBIDITY	

ABST Vitamin B12 was measured by the lactobacillus and ochromonas assays from 5 stations in Mulatto Bayou and Catfish Basin, Florida between August and October, 1978. Other measurements included depth, temperature, pH, salinity, turbidity, and bacterial counts.

ANNO

06/11/1987

.....
ACC 2539

TYPE P

YEAR 1975

AUTH WIMAN, S.K.; MCKENDREE, W.G.;

TITL DISTRIBUTION OF HALIMEDA PLANTS AND SEDIMENTS ON AND AROUND A PATCH REEF NEAR OLD RHODES KEY, FLORIDA.

BIBL J. SED. PETROL. 45(2):415-421.

KEYW DADE

SUBSTRATE

SEDIMENT

CURRENTS

REEF

ABST Examination of sedimentation of Old Rhodes Key revealed the role played by species of Halimeda in calcium carbonate sedimentation. Seven species of Halimeda were found at the reef. Sedimentation is dependent on morphological characteristics, life cycles, and reproduction rates. Halimeda also influences sedimentation by acting as a substrate for other sediment-contributing organisms, by binding sediments in the substrate and by reducing current velocities.

ANNO

06/11/1987

.....
ACC 100
TYPE
YEAR 1976
AUTH WISEMAN, W.J.;WRIGHT, L.D.;ROUSE, L.J.;COLEMAN, J.M.;
TITL PERIODIC PHENOMENA AT THE MOUTH OF THE MISSISSIPPI RIVER.

BIBL CONTRIB. MAR. SCI. 20:11-32.

KEYW HYDROGRAPHY PHYSICAL PROCESS TEMPERATURE ANOMALY
 TEMPERATURE REMOTE SENSING WAVE

ABST Time series of temperature fluctuations, as well as aerial and satellite imagery, indicate the presence of periodic phenomena within the effluent from South Pass, Mississippi River Delta. Time scales on the order of 1 min and 15 min recur in both remotely sensed and in situ data, a fact which suggests that the same phenomenon is being measured. Vertical coherence estimates indicate this to be internal wave motion. Estimates of gross Richardson numbers are near critical; instabilities in the wave field are a possible mechanism for entrainment, but cannot account for all the required entrainment.

ANNO

06/11/1987

.....
ACC 101

TYPE

YEAR 1976

AUTH WISEMAN, W.J.;BANE, J.M.;MURRAY, S.P.;TUBMAN, M.W.;

TITL SMALL SCALE TEMPERATURE AND SALINITY STRUCTURE OVER THE INNER SHELF WEST OF
THE MISSISSIPPI RIVER DELTA.

BIBL MEM. SOC. R. SCI. LIEGE 6(10):277-285.

KEYW CIRCULATION

WATER MASS

HYDROGRAPHY

TEMPERATURE

PHYSICAL PROCESS

SALINITY

ABST More than 400 STD profiles collected during a single year immediately west of the Mississippi River Delta were used to determine the fate of the effluent plume from Southwest Pass. The dominant surface drift pattern within the plume is anticyclonic (westward and toward the coast). Vertically, the plume mixes intermittently with ambient coastal water, and a series of steps in the temperature and salinity profiles is produced.

ANNO

06/11/1987

.....

ACC 106

TYPE

YEAR 1978

AUTH WISEMAN, W.J.;ROUSE, L.J.;HUH, O.K.;

TITL MIXED LAYER MODELS FOR COASTAL WATERS. PAGES 2619-2632 IN PROCEEDINGS OF THE 16TH COASTAL ENGINEERING CONFERENCE, ASCE, AUGUST 28-SEPTEMBER 1, 1978, HAMBURG, WEST GERMANY.

BIBL AMERICAN SOCIETY OF CIVIL ENGINEERS.

KEYW HYDROGRAPHY

MATHEMATICAL MODEL

PHYSICAL PROCESS

RIVER DISCHARGE

ABST The applicability of oceanic mixed-layer models to the case of wind mixing in a coastal region dominated by river runoff is explored. Two-dimensional effects and the propagation of internal-inertial waves out of the mixed layer are seen to be extremely important. Modification of the boundary conditions changes the appearance of the solutions as well. Further field work will be necessary to determine if additional terms, ignored in the oceanic models, might become important in the coastal region.

ANNO

06/11/1987

.....
ACC 2549

TYPE P

YEAR 1968

AUTH WITHAM, R.; INGLE, R.M.; JOYCE, E.A., JR.;

TITL PHYSIOLOGICAL AND ECOLOGICAL STUDIES OF PANULIRUS ARGUS FROM THE ST. LUCIE ESTUARY.

BIBL FLA. BD. CONSERV. MAR. LAB., TECH. SER. NO. 53. 31 P.

KEYW SPINY LOBSTER
TEMPERATURE

ARTIFICIAL HABITAT
STRESS

SALINITY
MORTALITY

ABST Postlarval spiny lobsters (*Panulirus argus*) were captured with artificial habitats in St. Lucie Estuary over a 2 year period. A monthly influx of postlarval lobsters was found except in the summer of 1966 when salinity declined drastically. In salinity tolerance tests, high mortalities were found at salinities less than 19 o/oo. No phyllosome larvae were found in plankton samples of the Indian River area. Growth measurements indicated that the size of individuals raised under the same conditions cannot be directly correlated with age.

ANNO

06/11/1987

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ACC 2184
TYPE P
YEAR 1976
AUTH WOELKERLING, W.J.;
TITL SOUTH FLORIDA BENTHIC MARINE ALGAE. SEDIMENTA V.

BIBL THE COMPARATIVE SEDIMENTOLOGY LABORATORY, DIV. OF MAR. GEOL. & GEOPHYS. UNI
V. OF MIAMI.

KEYW BENTHIC ALGAE COMMUNITY
HABITAT

ABST Illustrated keys to the genera of green, brown, and red algae and to the genera and species of blue-green algae commonly found in marine benthic communities of Florida were presented. A glossary of morphological terms used in the keys, the literature pertaining to Florida marine algae, brief comments on marine algae habitats and communities and instructions for the collection, preservation, and examination of algae material were included.

ANNO

06/11/1987

.....
ACC 545

TYPE

YEAR 1983

AUTH WOOD, B.K.; TREFRY, J.H.;

TITL THE DISTRIBUTION AND PROVENANCE OF TRACE ELEMENTS IN EASTERN GULF OF MEXICO
SEDIMENTS.

BIBL TRANS., GULF COAST ASSOC. GEOL. SOC., 33:455-456.

KEYW CONTINENTAL SHELF
SEDIMENT

DISTRIBUTION
STATISTICAL ANALYSIS

GEOLOGY
TRACE ELEMENT

ABST

ANNO

06/11/1987

.....
ACC 2160
TYPE P
YEAR 1983
AUTH WOODWARD-CLYDE CONSULTANTS & CONTINENTAL SHELF ASSOCIATES, INC.;
TITL SOUTHWEST FLORIDA SHELF ECOSYSTEMS STUDY-YEAR 1. FINAL REPORT AND
2 APPENDICES.

BIBL PREPARED FOR U.S. DEPARTMENT OF INTERIOR, MINERALS MANAGEMENT SERVICE,
METAIRE, LA. CONTRACT 14-12-0001-29142.

KEYW CONTINENTAL SHELF	SEDIMENT	SUBSTRATE
TRACE METAL	LIVE BOTTOM	TEMPERATURE
SALINITY	DO	LIGHT
NUTRIENT	CHLOROPHYLL	

ABST Results of an extensive study of the southwest Florida continental shelf are given. The study was conducted because of potential oil and gas deposits beneath the outer shelf. Chapters describe these major areas of study: geophysical investigations, underwater camera observations, water quality, sediment and substrate characteristics, trace metals, soft and live bottom biota, and potential impacts of gas and oil operations. Two appendices include supporting data (A) and methodology (B). The study will encompass 3 years.

ANNO

06/11/1987

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ACC 2161

TYPE P

YEAR 1983

AUTH WOODWARD-CLYDE CONSULTANTS & CONTINENTAL SHELF ASSOCIATES, INC.;

TITL SOUTHWEST FLORIDA SHELF ECOSYSTEMS STUDY--YEAR 1. EXECUTIVE SUMMARY.

BIBL PREPARED FOR U.S. DEPARTMENT OF INTERIOR, MINERALS MANAGEMENT SERVICE,
METAIRE, LA. CONTRACT 14-12-0001-29142.

KEYW CONTINENTAL SHELF

SEDIMENT

SUBSTRATE

TRACE METAL

LIVE BOTTOM

ABST A summary is given of year 1 data from the study of the southwest Florida continental shelf. The study was done because of potential oil and gas deposits beneath the outer shelf. Brief chapters describe these areas of study ; geophysical investigations, underwater camera observations, water quality , sediment and substrate characteristics, trace metals, soft and live bottom biota, and potential impacts of oil and gas operations.

ANNO

06/11/1987

.....
ACC 2319
TYPE P
YEAR 1960
AUTH WOODBURN, K.D. ;
TITL SARASOTA COUNTY MARINE SURVEY.

BIBL FLA. ST. BD. CONSER. MAR. LAB. FSBCLM NO. 60-15, CS NO. 60-1.

KEYW SARASOTA	PINK SHRIMP	BLUE CRAB
SEAGRASS	DEPTH	SALINITY

ABST An evaluation of marine productivity and seafood potential was made to guide the Sarasota County commission in conserving present resources and adding aquaculture to the existing economy was described. Thirty two fish species were collected. Small pink shrimp and blue crabs were found at all grass stations. Seagrasses were found to be abundant in the county water. Oyster predators including crown conchs, Florida horse conchs, and banded tulips were present throughout the study area. Black Bay and Buttonwood Harbor were recommended as potentially good north hard shell clam growing spots because of suitable salinities, sufficient water depth, favorable sandy mud bottoms, and limited urbanization.

ANNO

06/11/1987

.....
ACC 2334
TYPE P
YEAR 1962
AUTH WOODBURN, K.D.;
TITL CLAMS AND OYSTERS IN CHARLOTTE COUNTY AND VICINITY.

BIBL FLA. BD. CONSERV. MAR. LAB., PUBL. NO. 62-12. 29 P.

KEYW CHARLOTTE	DISTRIBUTION	ABUNDANCE
MOLLUSC	TEMPERATURE	SALINITY
TIDE	DEPTH	SUBSTRATE

ABST A survey of commercial bivalves was conducted in Charlotte County, Florida during June 1962. Three species of commercial significance inhabit the area: *Crassostrea virginica*, *Rangia cuneata*, *Mercenaria campechiensis*. Forty-two hydrographic stations were sampled for temperature, salinity, tidal phase, depth, and bottom type. The distribution, size, and abundance of each of the 3 species is summarized for 18 bodies of water and generally related to the physical parameters measured.

ANNO

06/11/1987

.....
ACC 4153
TYPE P
YEAR 1979
AUTH WOODWARD-CLYDE CONSULTANTS;
TITL EASTERN GULF OF MEXICO MARINE HABITAT STUDY.

BIBL A REPORT FOR THE U.S. DEPARTMENT OF INTERIOR, BUREAU OF LAND MANAGEMENT, WASHINGTON D.C. CONTRACT NO. AA551-CT8-22. 2 VOL.

KEYW CONTINENTAL SHELF	BASELINE STUDY	PHOTODOCUMENTATION
EPIBIOTA	LIVE BOTTOM	GEOLOGY
GEOPHYSICAL	BIOLOGY	BENTHIC

ABST Marine benthic habitats on the continental shelf off west Florida were delineated prior to Oil and Gas Lease Sale 65 using underwater video and geophysical methods. A total of 49 lease blocks were surveyed including 3 in the Pensacola Area, 17 in the Destin Dome Area, 5 in the Tarpon Springs Area, 4 in the Elbow Area, 8 in the St. Petersburg Area, and 12 in the Charlotte Harbor Area. Soft bottom (thick sand or silt) was the most widespread seafloor type, butrse bottom (soft bottom with a surface rubble layer), hard bottom (low relief, often scattered and/or partially buried outcrops), and high-relief pinnacles were locally abundant in some blocks. The biota associated with hard bottom and pinnacles typically included (depending on location) sea feathers and fans, hard corals, sponges, encrusting coral line algae, starfishes, sea urchins, and a variety of bottom fishes. The most luxuriant and diverse epibiota was noted in association with large areas of scattered low-relief carbonate outcrops in Charlotte Harbor Area Blocks 143, 144, 145, and 188. Locations recommended for further study included: extensive hard bottom areas in Tarpon Springs Area Blocks 233, 234, 277, 278, and 279; small outcrops in portions of Elbow Area Block 567; areas of scattered low relief, limestone outcrops in St. Petersburg Area Blocks 661, 662, 705 and 706; and extensive areas of low-relief outcrops in Charlotte Harbor Area Blocks 143, 144, 145, and 188.

ANNO

06/11/1987

.....
ACC 4154

TYPE P

YEAR 1983

AUTH WOODWARD-CLYDE CONSULTANTS & SKIDAWAY INSTITUTE OF OCEANOGRAPHY;

TITL SOUTHWEST FLORIDA SHELF ECOSYSTEM--YEAR 2 MODIFICATION.

BIBL A REPORT FOR THE U.S. DEPARTMENT OF INTERIOR, MINERALS MANAGEMENT SERVICE G
ULF OF MEXICO OFFICE, METAIRIE, LA. CONTRACT NO 14-12-0001-29144.

KEYW CIRCULATION	CONTINENTAL SHELF	EDDY INTRUSION
IRRADIANCE	REMOTE SENSING	BIOLOGY
LOOP CURRENT	PHYSICAL	OCEANOGRAPHY
PHYTOPLANKTON	PRIMARY PRODUCTIVITY	

ABST Three independent evaluation methods (field sampling, optical measurements, and remote sensing) confirmed the presence of an upwelling event on the southwest Florida shelf. Upwelling consists of a warm water extension, or filament, of the loop current with a pocket of cooler upwelled water occurring between the filament and the Loop Current. Surface extent of an upwelling may be more than 200 km and subsurface extent at least 100 km. Generally, the frontal edge and cold core propagated southeastward for a distance of 95 km; concurrently, the Loop Current moved offshore. Primary productivity affected by Loop current moved offshore. Primary productivity affected by Loop Current intrusions was six times higher than unaffected waters. These observations were due to higher nutrient concentrations associated with deeper Loop Current waters upwelled during shelfward movement of the current edge. Productivity values were higher during the summer cruise as opposed to the spring cruise data values. Remote ocean color scanner imagery agreed with shipboard measurements of surface chlorophyll gradients and verified the oligotrophic nature of the upper 10 m. Loop current frontal eddies occurring off the southwest Florida shelf similar to Gulf Stream frontal eddies observed off the southeastern U.S. Shelf in terms of length scales and speeds.

ANNO

06/11/1987

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ACC 4155
TYPE P
YEAR 1983
AUTH WOODWARD-CLYDE CONSULTANTS & CONTINENTAL SHELF ASSOCIATES, INC.;
TITL SOUTHWEST FLORIDA SHELF ECOSYSTEMS STUDY MARINE HABITAT ATLAS.

BIBL A REPORT FOR THE U.S. DEPARTMENT OF INTERIOR, MINERALS MANAGEMENT SERVICE G
ULF OF MEXICO OFFICE, METAIRIE, LA. CONTRACT NOS. 14-12-0001-29142 AND ETAL
KEYW BASELINE STUDY CONTINENTAL SHELF LIVE BOTTOM
PHOTODOCUMENTATION GEOLOGY GEOPHYSICAL
EPIBIOTA BIOLOGY BENTHIC

ABST Substrates and biological communities on the southwest Florida shelf were i
nvestigated using side-scan sonar, subbottom profiler, and video/still came
ra system towed along five east-west transects and one north-south transect
in water depths ranging from 20 to 200 m. This information was used to pro
duce two regional maps of marine habitats, prepared at a scale of 1:500,000
, and 43 maps at a scale of 1:48,000. The relationships among water depth,
substrate types, and biological assemblages along each transect as well as
location relative to OCS lease blocks are included. Five substrate categori
es defined and mapped were: (1) Rock Outcrops/Hard Bottom; (2) Thin Sand Ov
er Hard Substrate; (3) Sand Bottom/Soft Bottom; (4) Coralline Algal Nodule
Layer Over Sand; and (5) Algal Pavement with Agaricia Accumulations, Nine b
iological assemblages were recognized and mapped including: 1) Inner and Mi
ddle Shelf Sand Bottom Assemblage; (2) Inner Shelf Live Bottom Assemblages;
(3) Inner and Middle Shelf Live Bottom Assemblage II; (4) Middle Shelf Alg
al Nodule Assemblage; (5) Agaricia Coral Plate Assemblage; (6) Outer Shelf
Sand Bottom Assemblage; (7) Outer Shelf Crinoid Assemblage; (8) Outer Shelf
Prominences Live Bottom Assemblage; and (9) Outer Shelf Low-Relief Live BO
ttom Assemblage.

ANNO

06/11/1987

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ACC 4156
TYPE P
YEAR 1985
AUTH WOODWARD-CLYDE CONSULTANTS & CONTINENTAL SHELF ASSOCIATES, INC.;
TITL SOUTHWEST FLORIDA SHELF ECOSYSTEMS STUDY--YEAR 2.

BIBL A REPORT FOR THE U.S. DEPARTMENT OF THE INTERIOR, MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGION, METAIRIE, LA. CONTRACT NO. 14-12-0001-29144.

KEYW BIOLOGY	BENTHIC	BASELINE STUDY
CONTINENTAL SHELF	DEMERSAL FISH	EPIBIOTA
FISH	GEOLOGY	GEOPHYSICAL
INFAUNA	MULTIVARIATE ANALYSI	HYDROGRAPHY

ABST

ANNO

06/11/1987

.....
ACC 79

TYPE

YEAR 1970

AUTH WRIGHT, L.D.; SWAYE, F.W.; COLEMAN, J.M.;

TITL EFFECTS OF HURRICANE CAMILLE ON THE LANDSCAPE OF THE BRETON-CHANDELEUR ISLAND CHAIN AND THE EASTERN PORTION OF THE LOWER MISSISSIPPI DELTA.

BIBL CENTER FOR WETLAND RESOURCES, LOUISIANA STATE UNIVERSITY, BATON ROUGE, LA.
BULL. NO. 4:13-34.

KEYW HURRICANE

PHYSICAL PROCESS

SEDIMENT TRANSPORT

ABST Air and ground reconnaissance immediately following the passage of Hurricane Camille disclosed significant modifications to the natural landscape of the Breton-Chandeleur Island arc and to the eastern portion of the lower Mississippi Delta. Considerable dissection and redeposition was evident along beach and barrier formations, and total obliteration dominated numerous sections. Trends of redistributed beach material strongly reflected the final direction of hurricane-induced mass transport of water. In the lower delta, damage was mainly to marsh vegetation and was attributable to high water and surge currents directed almost entirely from north to south.

ANNO

06/11/1987

.....
ACC 4216
TYPE P
YEAR 1978
AUTH WYANT, T.;
TITL CALIBRATION OF A SIMPLE OILSPILL TRAJECTORY MODEL USING THE ARGO MERCHANT S
PILL.

BIBL OPEN-FILE REPT. 78-334. 13 P.

KEYW OIL SPILL BIOLOGICAL POLLUTANT
MODEL

ABST An oil spill risk analysis was conducted to determine the relative environmental hazards of developing oil in different regions of the Eastern Gulf of Mexico Outer Continental Shelf lease area. The study analyzed the probability of spill occurrence, likely paths of the spills, and locations in space and time of such objects as recreational and biological resources likely to be vulnerable. These results combined to yield estimates of the overall oilspill risk associated with development of the proposed lease area. This risk is compared to the existing oilspill risk from existing leases in the area. The analysis implicitly includes estimates of weathering rates and slick dispersion and an indication of the possible mitigating effects of cleanups.

ANNO

06/11/1987

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ACC 4217

TYPE P

YEAR 1978

AUTH WYANT, T.; SLACK, J.R.;

TITL AN OILSPILL RISK ANALYSIS FOR THE EASTERN GULF OF MEXICO (PROPOSED SALE 65)
OUTER CONTINENTAL SHELF LEASE AREA.

BIBL OPEN-FILE REPT. 78-132. 72 P.

KEYW OIL SPILL
MODEL

BIOLOGICAL

POLLUTANT

ABST An oil spill risk analysis was conducted to determine the relative environmental hazards of developing oil in different regions of the Eastern Gulf of Mexico Outer Continental Shelf lease area. The study analyzed the probability of spill occurrence, likely paths of the spills, and locations in space and time of such objects as recreational and biological resources likely to be vulnerable. These results combined to yield estimates of the overall oilspill risk associated with development of the proposed lease area. This risk is compared to the existing oilspill risk from existing lease in the area. The analysis implicitly includes estimates of weathering rates and slick dispersion and an indication of the possible mitigating effects of cleanups.

ANNO

06/11/1987

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ACC 4294

TYPE P

YEAR 1978

AUTH WYANT, T.;SLACK, J.R.;

TITL AN OIL SPILL RISK ANALYSIS FOR THE EASTERN GULF OF MEXICO (PROPOSED SALE 65
). OUTER CONTINENTAL SHELF LEASE AREA.

BIBL U.S. GEOL. SURV. (WASHINGTON, D.C.) 78(132):72 P.

KEYW OIL SPILL PETROLEUM POLLUTION
CONTINENTAL SHELF

ABST

ANNO

06/11/1987

.....
ACC 2495
TYPE P
YEAR 1978
AUTH WYNNE, D.M.;
TITL LOW TEMPERATURE EFFECTS ON BEHAVIOR IN SPINY LOBSTERS, PANULIRUS
ARGUS (CRUSTACEA PALINURIDAE).

BIBL MASTER'S THESIS. FLORIDA STATE UNIVERSITY. TALLAHASSEE, FL.

KEYW MONROE TEMPERATURE BEHAVIOR
 SPINY LOBSTER SALINITY

ABST With the use of different cooling rates the locomotory and feeding behavior
s of Panulirus argus from the Florida Keys were studied. Warm-acclimated l
obsters subjected to cooling showed critical minimum temperatures of 12 deg
rees and 14 degrees C. Cold-acclimated lobsters which were cooled showed a
minimum temperature of 10 degrees C. It is suggested that P. argus cannot
withstand thermally variable waters below 12 degrees C and is probably una
ble to traverse deep water straits with temperatures below 10 degrees C.

ANNO

06/11/1987

.....
ACC 2204
TYPE P
YEAR 1982
AUTH YARBO, L.A.; CARLSON, P.R.; ZIMMERMAN, C.F.; MONTGOMERY, J.R.;
TITL SEDIMENT-WATER EXCHANGE OF NUTRIENTS IN THE INDIAN RIVER LAGOON IN FLORIDA.

BIBL FLORIDA SCI. 45 (SUPPL 1):37

KEYW NUTRIENT	SEDIMENT	GRASSBED
SEAGRASS	AMMONIA	SILICATE

ABST Fluxes of nutrients across the sediment-water interface was measured in situ (in clear domes) in grassbeds and sandy areas. Ammonia concentrations and filterable reactive phosphorus (FRP) remained the same or decreased during daylight when chamber oxygen was increasing, and increased at night as chamber oxygen decreased. Fluxes of ammonia, FRP and silicates were generally greater from silty seagrass sediments than nearby sandy areas. Primary producers at the sediment-water interface appear to affect flux of nutrients into the water column during the day.

ANNO

06/11/1987

.....
ACC 4299
TYPE P
YEAR 1985
AUTH YINGST, J.Y.;RHOADS, D.C.;
TITL STRUCTURE OF SOFT-BOTTOM BENTHIC COMMUNITIES IN THE VICINITY OF THE TEXAS F
LOWER GARDEN BANKS, GULF OF MEXICO.

BIBL EST. COAST. SHELF SCI. 20:569-592.

KEYW BENTHIC	COMMUNITY	BIOLOGICAL
SEDIMENT	CONTINENTAL SHELF	ATP
INFAUNAL		

ABST Biological and sedimentological samples were obtained in June 1980 from box cores taken in 100-200 meters of water on sandy-mud sediments near the East and West Flower Garden Bank (FGH) reefs, on the Texas-Louisiana Continental Shelf. The objective was to obtain needed and unknown baseline information about sedimentary parameters and organisms of the FGB environment to allow inferences to be made about the potential effects of physical disturbances of the seafloor on the indigenous benthos. Both microbial ATP and bacterial biomass are lower than reported for the Georgia Bight Shelf, Brazil-Amazon River Shelf, Cap Blanc, West African Shelf, western coast of Norway, and Long Island Sound. Bacterial counts are comparable to the Amazon River Shelf and lower than those recorded for the East China Sea. Moderate to low standing stocks of benthos further suggest that this area of the Gulf of Mexico is a relatively oligotrophic system for infaunal benthic consumers. [Copyright (c) 1985 Academic Press Inc. (London) Limited.]

ANNO

06/11/1987

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ACC 2162
TYPE P
YEAR 1974
AUTH YOCKEY, R.H.;
TITL AN ECOLOGICAL SURVEY OF SPONGES FROM THE EASTERN GULF OF MEXICO.

BIBL MASTER'S THESIS. UNIVERSITY OF FLORIDA. GAINESVILLE, FL. 59 P.

KEYW SPONGE	COMMUNITY	DEPTH
SUBSTRATE	DISTRIBUTION	

ABST Collection of sponges from Cedar Key and Crystal River areas to Key West from April-June 1973 revealed several interesting observations on sponge communities. One hundred sixty two specimens from 25 of the 57 stations were classified into 125 species. Only 7.2% were recovered from more than one site, while 9.6% were recovered at more than one station. Mean depth range was 19.8 m, while sampling occurred to 180 m. Depth has a significant effect upon species composition and substrate is the primary factor influencing sponge distribution.

ANNO

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ACC 2377
 TYPE P
 YEAR 1979
 AUTH YOKEL, B.J.;
 TITL APPENDIX E--BIOLOGY.

BIBL IN: THE NAPLES BAY STUDY, COLLIER COUNTY CONSERVANCY REPORT.

KEYW COLLIER	PHYSICAL	CHEMICAL
BIOLOGICAL	COMMUNITY	DIVERSITY
SEASONAL	FISH	TEMPERATURE
SALINITY	DO	SEDIMENT

ABST An examination of the physical and chemical conditions in Naples Bay and its associated waterways was made to determine their effect on water quality and biological conditions in this system. Remedies for poor water quality and impoverished biological conditions in existing developed areas were sought. Four measures of community structure were used to measure and compare the areas. These indices included: 1) the total catch or density of benthic animals; 2) the Shannon-Weaver diversity index; 3) recurrent groups of animals from various habitats in the bay; and 4) the total number of species. 96,693 animals belonging to 383 taxa in 15 phyla or classes were collected. Seasonal influence was observed on the total number of animals. Peaks in the total catch were observed in July and November. The high catches in July represent a population that was tolerant of low and fluctuating salinities produced by the summer rain and freshwater input. The November catches were highest for the year and came after the wet season where salinity and DO stresses were minimal. A total of 374 samples containing 71,110 small fish belonging to 61 species were studied. The bay anchovy and the yellow fin menhaden were dominant and accounted for 88% of the total fish catch. The plankton study was of 374 samples containing 76,978 fish in 71 species. In Naples Bay, the seasonal abundance pattern for these larval fish was typical of the plankton community that exhibits peaks in spring and fall. The 5 major habitats or areas of study were discussed separately.

ANNO

06/11/1987

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ACC 1077

TYPE

YEAR 1966

AUTH YOKEL, B.J.;

TITL A CONTRIBUTION TO THE BIOLOGY AND DISTRIBUTION OF THE RED DRUM, SCIAENOPS O
CELLATA.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI, CORAL GABLES, FL. 160 PP.

KEYW BIOLOGY
FISHERY

ECOLOGY
LIFE HISTORY

FISH
SPECIES COMPOSITION

ABST

ANNO

06/11/1987

.....
ACC 2375

TYPE P

YEAR 1975

AUTH YOKEL, B.J.;

TITL ROOKERY BAY LAND USE STUDIES AND ENVIRONMENTAL PLANNING STRATEGIES FOR THE
DEVELOPMENT OF A MANGROVE SHORELINE. STUDY NO. 5, ESTUARINE BIOLOGY.

BIBL CONSERV. FOUND. OFF. WATER RES. TECH. PB-250-121:112 P.

KEYW COLLIER
CRUSTACEAN
SALINITY

BENTHIC
MOLLUSC
DO

FISH
TEMPERATURE
CURRENTS

ABST A quantitative assessment and description of the kinds and numbers of benthic animals that inhabited benthic environments in the Rookery Bay Sanctuary was presented. The relative abundance and distribution of the fish, crustaceans, and molluscs in the major benthic environments were described for use in assessing ecological change in these areas.

ANNO

06/11/1987

.....
ACC 2376

TYPE P

YEAR 1975

AUTH YOKEL, B.J.;

TITL A COMPARISON OF ANIMAL ABUNDANCE AND DISTRIBUTION IN SIMILAR HABITATS IN RO
OKERY BAY, MARCO ISLAND AND FAKAHATCHEE ON THE SOUTHWEST COAST OF FLORIDA.

BIBL PRELIMINARY REPORT TO THE DELTONA CORP. (NOT FOR GENERAL DISTRIBUTION).

KEYW COLLIER

MOLLUSC

TEMPERATURE

CRUSTACEAN

PHYSICAL

SALINITY

FISH

GEOGRAPHIC

DO

ABST The 3 study areas located in Rookery Bay Sanctuary, near Marco Island and in Fakahatchee Bay produced 1,006,640 individual animals of which 55% came from the Marco Island area. When only the major classes of animals in the catch were considered (i.e., crustaceans, fish, and molluscs) the totals count for Fakahatchee and Marco were quite comparable but both exceeded Rookery Bay by a considerable margin. It was thus hypothesized from a consideration of gross catches and physical and geographic factors that Fakahatchee Bay and Marco have more in common than any combination involving Rookery Bay. Total catches by habitat types for crustaceans, fish and molluscs and certain of the more abundant species demonstrated clearly the overwhelming importance of the vegetated bottom as a habitat for animals. Fifty-four percent of the total catch of animals were collected in the vegetated habitats. The mud habitat was next with 28% and the sand-silt habitat was third with 18%. By habitat, the vegetated areas had the most "indicator species", mud next, and sand-shell third. From the data it was concluded that using selected groups of species that have shown consistent catch rates between the study areas would allow detection and estimation of environmental change.

ANNO

06/11/1987

.....
ACC 2496
TYPE P
YEAR 1976
AUTH ZIEMAN, J.C.;
TITL THE ECOLOGICAL EFFECTS OF PHYSICAL DAMAGE FROM MOTORBOATS.

BIBL AQUAT. BOT. 2:127-139.

KEYW MONROE SEDIMENT SEAGRASS

ABST A report on the ecological effects of motorboat damage revealed that beds of turtle grass, *Thalassia testudinum*, although highly productive do not recover rapidly following physical disturbance of the rhizome system. In shallow waters, the most common flora of rhizome disturbance was determined to be from the propellers of motorboats. In *Thalassia* beds which were otherwise thriving, tracks resulting from propellers were observed to persist from two to five years. The proportion of fine sediment components was reduced in the sediments from the boat tracks, and the pH and Eh were also reduced in comparison to the surrounding grassbed. Damage of this type was found to most often occur in shallow passes between islands and keys. These areas were also reported to be the slowest to recover due to the rapid tidal currents.

ANNO

06/11/1987

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ACC 2540
TYPE P
YEAR 1975
AUTH ZIEMAN, J.;
TITL SEASONAL VARIATION OF TURTLE GRASS, THALASSIA TESTUDINUM KONIG WITH REFEREN
CE TO TEMPERATURE AND SALINITY EFFECTS.

BIBL AQUAT. BOT. 1:107-123.

KEYW DADE	SEASONAL	TEMPERATURE
SALINITY	SEAGRASS	

ABST Seasonal variations in the growth of turtle grass, *Thalassia testudinum*, were demonstrated in Biscayne Bay, Florida, and related to temperature and salinity conditions. Measurements of productivity, standing crop, leaf length, blade density and other biotic parameters were maximum during summer months. Temperature and salinity optima for *Thalassia* were determined to be 30 degrees C and 30 o/oo, respectively. Minimum growth values occurred during periods of seasonally low temperatures or high temperatures in combination with lowered salinity. The slow response of *Thalassia testudinum* to environmental stress was attributed to stored starch reserves in the extensive rhizome system.

ANNO

06/11/1987

.....
ACC 2541
TYPE P
YEAR 1968
AUTH ZIEMAN, J.C.;
TITL A STUDY OF THE GROWTH AND DECOMPOSITION OF THE SEAGRASS, THALASSIA TESTUDINUM.

BIBL MASTER'S THESIS. UNIVERSITY OF MIAMI. MIAMI, FL.

KEYW DADE SEAGRASS GROWTH

ABST A technique for studying the comparative blade dynamics of a *Thalassia testudinum* community was described. The patterns of the new blades were similar in both communities. A marked decline in the new blades produced was noted in May and this was believed to be linked with the output of flowers or fruit. The net change in numbers of the blades and average growth rates for the communities were presented, and a technique was described that measured the amount of leaf material produced. The growth pattern of blades on a branch was demonstrated and the respective growth rates of the individual blades on the branch were given. The length of time required for a branch to put out a new blade was 14-16 days. The increase of blade width with increasing distance from the rhizome meristem was observed. A correlation between the average growth rate of the community and the average blade width of the community was demonstrated. Most of the blade growth was basal, but elongation continues some distance from the blade meristem. A description of the decomposition of blades of *Thalassia* was reported in addition to their decay rates. It was demonstrated that predrying has an accelerating effect on the decay rates. *Thalassia testudinum* was calculated to have a faster decay rate than *Spartina* thus being available to detritus feeders at a faster rate.

ANNO

06/11/1987

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ACC 2553
TYPE P
YEAR 1980
AUTH ZIMMERMAN, C.F.;
TITL SEDIMENT SIZE ANALYSIS OF SEDIMENTS COLLECTED FROM HALODULE WRIGHTII SEAGRA
SS BEDS.

BIBL HARBOR BRANCH FOUND., INC., TECH. REPT. NO. 32. 29 P.

KEYW SEDIMENT SEAGRASS GRAIN SIZE

ABST Six sediment cores were collected at various depths from a Halodule wrightii
grassbed in the Indian River, Florida and analyzed for grain size. The upper
15 cm of the sediment was relatively uniform with 95-98% sand. Below 15
cm sediments were more heterogeneous, with layers of sand and clay/sand.

ANNO

06/11/1987

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ACC 2497
TYPE P
YEAR 1972
AUTH ZISCHKE, J.A.;
TITL AN ECOLOGICAL GUIDE TO THE SHALLOW WATER MARINE COMMUNITIES OF PIGEON KEY,
FLORIDA.

BIBL ST. OLAF COLLEGE, NORTHFIELD, MINNESOTA.

KEYW MONROE	ECOLOGY	GEOGRAPHY
GEOLOGY	REEF	ALGAE
FORAMINIFERA	SPONGE	MOLLUSC
ECHINODERM	PHYSICAL	CHEMICAL
SEAGRASS		

ABST A concise description of the ecology of the Pigeon Key, Florida area was presented. The geography and geology of the Pigeon Key area were described.

The Key Largo limestone derived from these Pleistocene reefs was found to vary in composition and may include: large masses of coral skeleton (including species of the genera Montastrea, Diplora, Acropora, and Siderastrea), Halimeda (a calcareous algae), coralline algae, foraminiferans, bryozoans, sponge spicules, worm tubes, molluscan and coral debris, echinoderm spines, and fecal pellets, all of which are cemented together with calcite. Physical and chemical conditions including atmospheric conditions and surface water conditions were described. A detailed description of the life in the inshore intertidal regions of the Florida Keys was presented in terms of physical structure and plants and animals. The two distinct communities dominating the shallow water subtidal area of the reef flat, Alcyonaria sponge community and seagrass community were described as were variations in these communities. Other shallow water communities including mangrove communities and coral reef communities were also discussed. Recommendations for the preservation of the Florida Keys in their present state were made.

ANNO

06/11/1987

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ACC 4157
TYPE P
YEAR 1982
AUTH ZUBOY, J.R.; SNELL, J.E.;
TITL ASSESSMENT OF THE FLORIDA STONE CRAB FISHERY, 1980-81 SEASON.

BIBL NOAA TECH. NMFS-SEFC-79. 21 P.

KEYW COMMERCIAL FISHERY	CRAB	CRUSTACEAN
STONE CRAB	LANDINGS (POUNDS)	FISHING EFFORT
BIOLOGY	BENTHIC	COASTAL
INVERTEBRATE		

ABST Under the auspices of the Magnuson Fishery Conservation and Management Act of 1976, the National Marine Fisheries Service is responsible for providing scientific support for fishery management to the Regional Fishery Management Councils. Accordingly, this is the second annual report on the status of the Florida Stone crab (*Menippe mercenaria*) fishery which is being managed under the Fishery Management Plan for Stone Crabs by the Gulf of Mexico Fishery Management Council. The report updates the fishery statistics and reevaluates the previous estimate of MSY. The current best estimate of MSY is 1.88 million pounds of claws.

ANNO

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. The includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. Administration.

