

COOPERATIVE EXTENSION SERVICE

Mississippi State University. United States Department of Agriculture. Counties Cooperating



FILE COPY DO NOT REMOVE Sea Grant NEWSLETTER

MISSISSIPPI TO HOST ANNUAL SEA GRANT ASSOCIATION MEETING

The Annual Sea Grant Association Program Planning Committee met in Biloxi recently to initiate plans for the annual meeting to be held in Biloxi from October 27 - 30.

The committee was composed of chairmen of the six councils and the executive committee. The six councils are: marine education, marine advisory services, communication, marine resource developments, coastal research and ocean policy.

The committee met to select a theme, plan a general program and make other arrangements for the annual meeting. Details will be announced later.

ADVISORY SERVICE TIDE TABLES USED IN UNUSUAL WAY

The tide tables published annually by the Mississippi Sea Grant Advisory Service are used not only by fishermen. They are also used to save automobiles from

flooding! Mr. George Ryan, sales manager for Pontiac-Toyota dealer in Pascagoula, reports they use the tide tables in determining when it's necessary to move their new cars from their parking lot to higher ground. "If a heavy rain coincides with a high tide, it's necessary for us to move our automobiles to prevent flooding. We've used the tide tables for this purpose several times and it has worked perfectly. They are especially beneficial at night in determining if it's necessary to go down and move cars from low areas."

The Sea Grant Advisory Service is conducted by the Cooperative Extension Service for the Sea Grant Consortium composed of the Gulf Coast Research Laboratory, Mississippi State University, University of Mississippi and the University of Southern Mississippi. Send correspondence to Sea Grant, c/o Leon Paulette, Box 4557, Biloxi, Mississippi 39531.

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"Without the tide tables we would have had cars damaged from flooding or we would have moved cars when it wasn't necessary. We haven't had an insurance claim since we started using the tide tables. I'm a firm believer in the tide tables," George Ryan reported.

A GUIDE TO MISSISSIPPI
MARINE RESOURCES

A comprehensive guide to the marine resources of Mississippi is being developed under a grant from the Mississippi-

Alabama Sea Grant Consortium by Dr. Bobby N. Irby, Chairman of Science Education, Department of Education at the University of Southern Mississippi.

The need for this guide has long been recognized by marine science teachers and laymen who are aware of the importance of marine resources to the state of Mississippi. The need for a comprehensive volume of information pertaining directly to marine resources has been magnified by the significant contributions estuarine areas can make to ease food energy shortages.

This guide, containing chapters on the history of the Barrier Islands, oceanography, geology, ecology, botany, zoology, economics and pollution, will be useful to the layman, educator, scientist, naturalist, and businessman. In addition, information also will be presented concerning the harbors, ports, and marinas on the Mississippi Coast; seafood processing plants; boat building operations; and local, state and federal agencies involved in programs directly related to marine resources.

Mrs. Della McCaughan, noted marine biology teacher at Biloxi High School, has supervised the collection and preparation of the comprehensive and useful material contained in this guide.

COAST SPORT
FISHING STUDIED

A study of sport fishing in Biloxi Bay and adjacent Mississippi Sound was conducted in 1973-74 to document the magnitude of

sport fishing activities and provide data necessary for sound sports fisheries management. Thomas McIlwain of the Gulf Coast Research Lab was principle investigator. Economic data was also collected and analyzed by the Bureau of Business Research, University of Southern Mississippi.

The study revealed that 15,008 fishermen used 6,253 boats, spent 32,264 fishing hours in catching twenty-three species of fish weighing 76,568 pounds. Eighty-five percent of the fishermen were from Harrison and Jackson counties. The remaining fifteen percent were from other Mississippi counties and from other states.

Two publications resulting from the collection of these data are now in preparation.

RESULTS OF FISHING REEFS
SURVEY ANNOUNCED

A survey of fishing pressure at twelve sites selected because of natural features or artificial reefs was conducted under Sea Grant sponsorship from April to December of 1974. The sites ranged from just off-shore to the islands and from east of Pascagoula to west of Ship Island. Six of the sites selected were artificial and six were natural reefs.

The data collected indicate that the presence of artificial fishing reefs usually increases fishing pressure in that area. However, the results also indicate that a particular reef may or may not generate any additional fishing pressure. The amount of fishing pressure which may be expected is dependent upon the size of the development, its accessibility, the extent to which its location is known and publicized and upon its fish producing capability. Further results of this study on evaluating the economic feasibility of artificial reef development will be published in the near future. Donnie Daniels of the University of Southern Mississippi was principle investigator for this project.

CHARTER BOAT INFORMATIONAL DIRECTORIES
DEVELOPED

The Advisory Services in Alabama and Mississippi recently developed guides with pertinent information for interested parties to have in deciding on a deep-sea fishing trip. Information on clothing, food, ice, tackle, length of trip, location, time required, capacity; scheduling and cost are included. These were developed in cooperation with the charter boat associations in the two states.

FLOUNDERS AND FLOUNDERING
BROCHURE PUBLISHED

The Mississippi Advisory staff has developed a brochure on "Flounders and Floundering." This was developed in response to requests from motel owners for a publication that would answer visitors' questions about flounders. The brochure replaces a Sea Grant publication "Floundering for Family Fun."

WILL YOU DO US
A FAVOR?

If you find the Sea Grant Newsletter is not appropriate to you in your business, profession or personal interest and you wish to be removed from our mailing list, please clip this notice including the address label and return it to Sea Grant, Box 4557, Biloxi, MS 39531. No action is necessary to continue receiving the newsletter.

CIGUATERA FISH POISON
RESEARCH AIDED BY GIFT
OF FIELD STATION

Field Station by Century Steel Corporation of Chicago. Dr. Norman J. Doorenbos, chairman and professor of pharmacognosy, has been named Director of the Field Station. Dr. Doorenbos is principle investigator for this Sea Grant research project.

Ciguatera Fish Poison Research being conducted by the University of Mississippi Department of Pharmacognosy will benefit tremendously by the gift of the Bitter End

The "hottest spot" for ciguatera in the Caribbean Sea is off the shores of Virgin Gorda. The Field Station located on Virgin Gorda and will contain housing accomodations, a laboratory, two fish holding pens and a motor boat constructed to meet the special needs of scientists engaged in Field Research.

Large barracuda and other potentially toxic carnivores will be collected by research personnel, national fishermen and divers. Fish found to be toxic will be ground, freeze dried, and shipped to the Department of Pharmacognosy for chemical and biological study.

ALABAMA ADVISORY
SERVICE ACTIVITIES

area. This past winter has been extremely difficult for shrimpers due to the sharp rise in fuel and other production costs. Working with the Small Business Administration through area workshops, we were able to get some relief. Approximately \$315,000 in emergency loans were received by fourteen boat owners.

Since establishing an office in Mobile last July, the Alabama Advisory Services has played an active role in the coastal

The Gulf off Alabama is rapidly becoming a real sports fishing haven. To assist in planning a deep-sea fishing trip, we published the "Alabama Charter Boat Directory" and distributed it throughout the state. This directory lists some forty charter boats giving detailed information about the boat, the captain's name, address and charter rates. Additional copies are available from: Dr. Billy Powell, Marine Advisory Specialist, 800 Downtowner Blvd., Suite 104, Mobile, AL 36609.

We are currently finalizing plans for an Alabama Seafood Festival to be held in Bayou La Batre on June 20-22. This three-day event will give the public a chance to get a firsthand look at the seafood industry and enjoy local culture and some real good seafood. The festive activities include arts and crafts exhibits, an antique auction, seafood tasting bee, fish expo and open house, fish fry and shrimp boil and the crowning of "Miss Seafood."

**ADVISORY SERVICE ASSISTS
WITH EDUCATIONAL EXHIBIT
AT TRAVEL SHOW**

Jackson. The exhibit consisted of an attractive display of salt water fish specimens, tackle and information on fresh and salt water fishing along the Coast. Charter boat captains, Benny Rohr of National Marine Fisheries, sports enthusiast and writer Jim Martin, Dr. David Veal and Leon Paulette of Sea Grant Advisory Service manned the exhibit.

The Advisory Service assisted in planning, promoting and manning a sports fishing educational exhibit during Mississippi's first Travel show in



Shown manning the Sea Grant sports fishing booth are: Leon Paulette, Sea Grant Advisory Service; Jim Martin, sports writer; Benny Rohr, NMFS; and charter boat captains Glenn Young and P. E. Raymond. Other captains assisting were: Marshall Patronas, Joe Fountain, Jr., Norman and Jane Truax, and Ben Cruthirds, fishing camp operator.

**SEA GRANT RESEARCH
STUDIES LYMPHOCYSTIS
VIRUS OF FISHES**

lymphocystis virus of fishes. The research is being conducted by Dr. R. D. Ellender of the Department of Microbiology.

The virology research laboratory at the University of Southern Mississippi in Hattiesburg is currently involved in a Sea Grant research project concerning

This virus will transform susceptible cells into abnormal, generally enlarged cells and is considered to be a type of "Fish Cancer." To date, five cell lines have been established for the purpose of supporting growth of the lymphocystis virus. Four are susceptible--Silver perch swim bladder (SPSB), Silver perch spleen (SPS), White trout fin (WTF), and Speckled trout fin (STF). WTF is susceptible to two types of lymphocystis virus--Croaker and Silver perch. All five lines are being characterized.

The effects produced by the virus are much the same in all susceptible cell lines. Normal cell shape which is long and spindly is lost and cells become rounded. An increase in cell size, from 10,000 to 25,000 fold, may be noted, depending on the cell line employed. Infected cells are soon surrounded by secondary infections. This is succeeded by tumor formation.

Objectives of this research are:

- A. Employ existing methodology for maintenance of marine species in recirculated seawater systems.
- B. Develop cell cultures or lines from economically important Gulf fish for eventual use in viral isolation and characterization.
- C. Utilize such lines for isolation and characterization of new viruses of teleosts and determine their importance in fish diseases.
- D. Screen select human waterborne pathogens in primary or established fish lines.

1100 ATTEND
YOUTH CLINIC

The Advisory Service assisted in conducting twelve Ecology and Conservation Clinics in Harrison and Stone counties.

Fishing skills, boating safety, and water quality were discussed and demonstrated during the clinics.

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