Gulf States Marine Fisheries Commission

2404 Government Street Ocean Springs, Mississippi 39564 228-875-5912 Fax: 228-875-6604 www.gsmfc.org

Management Update - March 2005

The Gulf States Marine Fisheries Commission (GSMFC) was formed in 1949 through individual acts of the state legislatures of Texas, Louisiana, Mississippi, Alabama, and Florida and the consent of the U.S. Congress. The purpose of the GSMFC is to provide a forum and administrative mechanism to address interjurisdictional fisheries issues and programs. The GSMFC is, however, much more than the sum of its individual state members.

In the past 15 years, the GSMFC has proven its relevance to fisheries governance by significant increases in the scope and number of programs we manage. Our quasi-governmental status provides us an opportunity to serve our member states and federal agency partners in ways that reduce both overall program costs and bureaucratic, administrative burden. The unique position of the interstate marine fisheries commissions afford us the opportunity to work closely with state legislatures, state agencies, federal agencies, the U.S. Congress, and the myriad of constituency groups to achieve consensus on issues that are complicated and often contentious. We have a proven track record of success in fulfilling multi-state, state-federal program coordination needs, as evidenced by the program narratives included in this report.

Fisheries Information Network (FIN)

Introduction

The Fisheries Information Network (FIN) is a state-federal cooperative program to collect, manage, and disseminate statistical data and information on the marine commercial and recreational fisheries of the Southeast Region. The FIN consists of two components: Commercial Fisheries Information Network (ComFIN) and the Southeast Recreational Fisheries Information Network [RecFIN(SE)]. The program was established in the mid-1990s and began operational activities in 1997. Listed below is a description of these activities as well as some accomplishments.

Recreational Data Collection

Since 1997, the states of Louisiana, Mississippi, Alabama, and Florida and the GSMFC have provided coordination of the survey, the field intercept survey of shore, for-hire and private boat anglers to estimate angler catch using the existing MRFSS methodology, and entry of the data. These data are combined with the NMFS effort estimate telephone survey to produce expanded estimates of catch and effort by wave using the existing MRFSS methodology. In addition, the states have conducted increased sampling of the intercept portion for the MRFSS for charter boats in Louisiana, Mississippi, Alabama, and Florida as well as increasing charter boat sampling in Texas by TPW personnel. The states also have conducted weekly telephone calls to a 10% random sample of the Texas, Louisiana, Mississippi, Alabama, and Florida charter boat captains to obtain estimates of charter boat fishing effort, which has lead to more precise estimates of for-hire fishing effort. In 2004, the state collected over 56,000 interviews from recreational anglers and exceeded the quota for all modes by 35% Gulf-wide. For shore mode, all of the states conducted 1.3X sampling; for charter mode, they conducted 5.5X sampling; and for private/rental

mode, they conducted 1.4X sampling. That works out to over a third more available data for fisheries management.

Regarding head boat sampling, personnel from Louisiana and Texas have compiling logbook data from head boats since 1998. The samplers sample catches and collect catch reports from head boat personnel, as well as gather effort data on head boats which operate primarily in the Exclusive Economic Zone from ports along the coasts of Texas and Florida utilizing the existing NMFS head boat logbook methodology. Beginning in 2004, Alabama personnel conducted an at-sea sampling survey of 10 % of the trips made by Alabama head boats operators. The field personnel will sample head boat anglers while actively fishing in order to collect biological and disposition data on discards and, when fishing is completed, conduct an intercept survey of these fishermen using the Marine Recreational Fisheries Statistics Survey (MRFSS) protocols. These data will be used to produce expanded estimates of catch and discards by wave for head boats. During 2004, Alabama samplers rode on 30 vessels, which resulted in almost 800 interviews with head boat anglers. In 2005, Florida will also be conducting at-sea sampling for head boats operating in their state.

Commerical Data Collection

Beginning in 1999, Texas, Louisiana, Mississippi and Alabama have been in the process of developing, implementing and operating commercial trip ticket systems. Florida, Louisiana and Alabama have fully implemented programs while Texas will be implementing a program for a limited number of dealers (~60) in 2005. Mississippi has implemented trip-level reporting for oysters and finfish and is working towards including their other fisheries. One of the innovations from trip tickets in the electronic report system, developed by Louisiana. This system allows for the electronic submission of data and is a more efficient and less time consuming process for the dealers, which has lead to its success. Currently, there are 283 dealers from Louisiana to Florida utilizing this system. Those dealers represent about 25% of the commercial landings (excluding menhaden) reported to those states. The breakdown (by state) of dealers reporting electronically is as follows: Florida – 26%; Alabama –27%; and Louisiana – 22%. As the Texas dealers come on-line with trip tickets, the electronic system will be an option for them as well.

Biological Sampling

Starting in 2002, samplers from Florida, Alabama, Mississippi, Louisiana and Texas conducted interviews of recreational and commercial fishermen to collect biological data from their catches. The samplers identify the fish to the species level and collect length measurements, trip and gear characteristics, and hard parts (otoliths), and make comparisons of interview data to trip ticket data for quality assurance purposes. The FIN has identified 29 species that need additional biological data to accurately conduct stock assessments. Unfortunately, due to funding shortfalls, samplers are currently targeting red snapper, king mackerel, greater amberjack, gulf and southern flounder. In 2004, samplers collected almost 24,000 otoliths from almost 90 species. For the targeted species, samplers collected approximately 5,100 otoliths and 9,200 lengths for red snappers; 4,100 otoliths and 4,800 lengths for the flounders; 2,000 otoliths and 2,300 lengths for king mackerel; and 230 otoliths and 280 lengths for greater amberjack. These data will be used by stock assessment scientists to determine the status of the fisheries stocks and allow managers to make more informed management decisions.

FIN Data Management System

Although it is important to collect the necessary data, it is equally important to provide access to those data so they can be easily used in the management process. The FIN has developed and implemented a data management system, which has been on-line since July 2002. This system provides data to both confidential and non-confidential data users and contains a multitude of fishery-dependent data. The data

that are currently loaded in system include: (1) Trip ticket data from Florida (1984-2004), Alabama (2002-2004), Mississippi (2002-2003 for oyster and finfish only) and Louisiana (1999-2004); in addition, historical data from NMFS (19854-2004) is available for those areas not covered by trip ticket systems; (2) Recreational catch estimates (1981-2003); (3) Menhaden catch and effort data (1987-1990 and 1993-1999); and (4) Biological data (2002-2003). There are currently almost 17 million records in the system. To get access to the system, please visit our web site at http://www.gsmfc.org/data.html.

CONCLUSIONS

All of the activities listed above will be conducted in 2005 in addition to the initial development of marine recreational fishing license sampling frame. The states will provide the GSMFC with their recreational fishing license databases as a first step in developing a sampling frame for estimating recreational fishing effort. The states and GSMFC will develop a database that incorporates all the states' data elements and they can identify where gaps in the required fields exist and work to fill those gaps. In addition, GSMFC will analyze the percent complete rates for the required elements.

Interjurisdictional Fisheries (IJF) Program

The Fishery Management Plan (FMP) development and review program of the Gulf States Marine Fisheries Commission (GSMFC) continues to provide the Gulf States with quality information and recommendations for interstate management of fisheries. Additionally, this information is continually being used by the states in their respective programs. The GSMFC IJF Program staff continued to review previously developed FMPs and to monitor each state's progress in implementing management recommendations. This is accomplished through activities that are described as follows for individual fisheries under IJF FMP development, revision, and review:

Sheepshead Technical Task Force (TTF)

The Sheepshead TTF is nearing completion of the Sheepshead Profile and we anticipate providing the draft to the State-Federal Fisheries Management Committee (SFFMC) by the March 2005 GSMFC meeting. Once it begins review, the process should take until the winter or early spring of 2006 to complete.

Striped Bass TTF

The Striped Bass TTF continues to review the final draft of the FMP and plans to present it to the Technical Coordinating Committee (TCC) in March at the GSMFC meeting. Once it begins review, the process should take until the winter or early spring of 2006 to complete.

Otolith Work Group

The otolith manual, which was approved by the Commission last year was presented at the Third International Symposium on Fish Otolith Research and Application, held in July 2004. Two hundred CD copies and 20 hardcopies of *A Practical Handbook for Determining the Ages of Gulf of Mexico Fishes* were distributed to meeting participants and several more copies were requested after. The first edition of the manual is available on the Commission website in a PDF format or by request. There continues to be great interest at the ASMFC to incorporate the Gulf standards outlined in the manual with their own. The Otolith Workgroup has been reactivated to begin the revision of the manual to add new species and techniques. Participants at that meeting included a representative of the ASMFC and several biologists from the Georgia DNR who are interested in participating in the revision process.

Gulf Menhaden

The IJF Program has completed the data-entry of the NMFS's historic menhaden logs (Captain's Daily Fishing Reports) for the Gulf of Mexico. This effort was being conducted as time and money permitted using temporary personnel to computerize historic data housed in Beaufort, North Carolina. All the CDFRs from 1982 to current have been entered and will be searchable on the GSMFC website. The IJF Coordinator has directed supervision of the temporary personnel on this project. Close to 30 temporary employees were utilized from 2000 to 2004 on this project. Approximately 6,727 man-hours were achieved resulting in 87,081 individual forms spanning 10 years (1982-1991) to be key-entered into the database. In addition, 3 years (1979-1981) of less reliable forms were scanned and provided to NOAA as digital records along with 5 years of Atlantic menhaden CDFR forms (1979-1984).

Literature Database

In addition to the regular maintenance and scanning of reprints housed in the GSMFC office, the IJF staff utilized the availability of a temporary employee to scan the entire collection of GSMFC publications to PDF files. The 700 Fishery Impacts bibliographic database reprints has also been scanned and made available as PDFs. All publications in a PDF format will be available on the GSMFC website.

Currently 2,072 references and abstracts have been entered into the IJF ProCite database. The bibliographic collection represents all the citations used in the last several FMPs and include spotted seatrout, flounder, menhaden, blue crab, and numerous miscellaneous publications. The database is searchable from the GSMFC website and provides keywords and complete abstracts when available. All reprints are housed at the GSMFC office and copies are available upon request. The IJF ProCite database is currently being scanned and converted to electronic copies for storage on DVD.

Sportfish Restoration Administrative Program

The Gulf States Marine Fisheries Commission has provided interstate and state-federal coordination of marine artificial reef development and management activities for the past 18 years. While there is still debate regarding the function of artificial reefs, there can be no doubt as to the value of the state programs to the creation of marine fisheries habitat and opportunities for anglers and divers to enjoy our important marine resources. Of significance was the development of the *Coastal Artificial Reef Planning Guide*, designed to provide standard guidelines for artificial reef development. This document was adopted by all three interstate marine fisheries commissions in 1998, and as such is national in scope. More recently, the Gulf States Marine Fisheries Commission, in partnership with the Atlantic States Marine Fisheries Commission and input from representatives from the Pacific Coast and the Caribbean region, finalized and published the second edition of the *Guidelines for Marine Artificial Reef Materials*, designed to provide artificial reef developers and managers with the information they need to make wise and intelligent decisions about the type of materials they use to create artificial reefs. Together, these two documents provide artificial reef planning, development, and management guidance that is national in scope.

Aquatic Invasive Species Program

The issue of aquatic invasive species consistently appears as one of the top five most critical issues affecting the ecological integrity of our Nation's waters. In general, the mechanisms of invasiveness are not well understood or well documented; however, much progress has been made in recent years to manage known pathways for non-native species transport, including ballast water, the pet and aquarium trade, aquaculture operations, state and federal stocking programs, among others. In addition, there is a greater understanding of what makes a species invasive, allowing natural resource managers to devise

better methods of managing and controlling spread. The Gulf States Marine Fisheries Commission is integrally involved in this issue, providing administrative support to a regional coordinating body known as the Gulf and South Atlantic Regional Panel on Aquatic Invasive Species. In addition, the Gulf States Marine Fisheries Commission had designed and launched a web site for invasive species for the Gulf and South Atlantic regions, including a database of non-native species occurrences in the Gulf of Mexico. The website and database can be found at www.gsmfc.org and then click the Invasive Species button.

Atlantic Billfish Research Program

In 2004, the Gulf States Marine Fisheries Commission undertook administration of the Atlantic Billfish Research Program, which is providing \$1.8 million to researchers to conduct important research projects to better understand billfish populations and provide information to assist in the national and international management of billfish resources. As of January of 2005, the Gulf States Marine Fisheries Commission awarded 11 grants averaging about \$164,000.00 to address population, distribution, post-release survival, and stock identification issues, among others. These grants will run through December 2006, after which the resulting information will be available to managers.

Habitat Program

The Joint Habitat Program between the Gulf States Marine Fisheries Commission and Gulf of Mexico Fishery Management Council has been reviewing applications for liquefied natural gas (LNG) facilities. Use of an open loop system using seawater as the heat source for vaporizing the LNG back into gas has the potential to impact billions of fish eggs and larvae each year. The seven LNG facilities proposing to use open loop systems in the Gulf of Mexico will use approximately 100-200 million gallons of seawater a day. Once the seawater has passed through the system it will be approximately 20° F colder than when it entered the system. It will also contain sodium hypochlorite as an antibiofouling agent. It is expected that any fish eggs, fish larvae, or zooplankton passing through the system will be killed. An alternative technology to heat LNG exists that would not kill any eggs or larvae. This technology is a closed loop system that uses the burning of natural gas to heat the LNG back into a gas. The Commission and Council have both stated that an open loop system will have unacceptable impacts on marine fish populations, and that the Commission and Council support the use of closed loop systems for heating the LNG.

The Commission's Derelict Trap Task Force recently completed work on a grant from the NOAA Community-based Restoration Program for removing derelict crab traps from the coastal waters of Texas, Louisiana, Mississippi, and Alabama. Working with the state agencies, over 750 volunteers representing a multitude of organizations came together in early 2004 to remove 11,478 derelict traps from the coastal waters of Alabama, Mississippi, Louisiana, and Texas. The success of this project was based on innovative partnerships among governmental, environmental, educational, industrial, and recreational and commercial fishing groups. The 2004 efforts were a major step towards removing the thousands of derelict traps that litter the coastal waters of the Gulf of Mexico and continue to catch and kill crabs, fish, and other species. The Derelict Trap Task Force won a second place Gulf Guardian Award sponsored by the Gulf of Mexico Program for the project in the Government Category. Texas and Louisiana will again hold trap removals in 2005.

The Commission's Habitat Subcommittee was recently awarded a MARFIN grant to map bottom habitats throughout the Gulf of Mexico. The objective of this project is to create and distribute a digital spatial database of bottom habitats on the continental shelf and slope from the Texas/Mexico border to the southern tip of Florida. The database will be created from the recovery, interpretation, and integration of existing data for this region. This project will help focus protection of coral and hardbottom areas in the Gulf of Mexico and also allow for better EFH descriptions.

Southeast Area Monitoring and Assessment Program (SEAMAP)

The Southeast Area Monitoring and Assessment Program (SEAMAP) has been working on improving access to the SEAMAP database. The SEAMAP database contains fishery independent data from the Gulf of Mexico from 1982 to the present. One of the ways SEAMAP is looking to improve access is through an Internet based mapping site that displays catch rate, environmental, and location information for all SEAMAP shrimp/groundfish surveys. The site allows users to query the SEAMAP data and produce maps depicting their query results. Another product that SEAMAP will soon be distributing is a standardized database containing catch per unit effort information for each trawl record. This will free users from having to standardize the data themselves if they would like to compare trawl records from different areas in the Gulf of Mexico or between different time periods. The database will be standardized on a 40-foot trawl and 60-minute tow time. The standardized data will soon be available on the Commission's web site. Researchers will still be able to access the raw data if requested.

Web Site Info

The Gulf States Marine Fisheries Commission website, www.gsmfc.org, has been on-line since May 22, 1997. The site contains an overview of the Gulf States Marine Fisheries Commission, summary and detailed information on each of our programs, listings of publications produced by the Commission, some of which are downloadable, listings of upcoming meetings by program, federal and state links to boating and fishing regulations, links and information on toxic blooms, links to sites related to marine fisheries, a photo archive of past meetings and events, and a search area giving users the ability to search our web site, bibliography databases, portcode database, species cross reference database, and even finding the weight of a fish based on it's length.

There are two sub-sites within the Gulf States Marine Fisheries Commission web site – the Gulf Menhaden site (www.gsmfc.org/menhaden) and the Non-Native Aquatic Species in the Gulf of Mexico and South Atlantic Regions site (nis.gsmfc.org).

The Gulf Menhaden site is dedicated to providing the most complete source for scientific information on the Gulf menhaden population. The information included reflects the most current scientific data available on both the fish and the fishery. The Gulf States Marine Fisheries Commission has worked hand-in-hand with the National Marine Fisheries Service, the five Gulf States (Florida, Alabama, Mississippi, Louisiana, and Texas), and the menhaden industry for many years to monitor the Gulf menhaden stocks and is confident in the assessments provided.

The Non-Native Aquatic Species in the Gulf of Mexico and South Atlantic Regions site provides a Gulf-wide inventory of biological data on non-native species, including fishes and invertebrates. It also addresses microorganisms with disease potential within the Gulf of Mexico and near-coastal habitats. The longer-term goal of the website is to improve tracking of the effects of non-native species. The web site is designed to permit data and information to be shared between the GSMFC non-native species site, the USGS Aquatic Species database, and other sites with which agreements have been made.