



Florida Fish and Wildlife Conservation Commission (2006-07)

Federal Aid in Sportfish Restoration (Wallop-Breaux; Dingell-Johnson) Uses



SURVEY AND MANAGEMENT

Marine Recreation Fisheries Statistics

Researchers monitor marine fish, crab, and shrimp populations in selected bay systems throughout the state. Areas of research include Apalachicola Bay, Cedar Key, Tampa Bay, Charlotte Harbor, Indian River Lagoon, southeast Florida, and the Florida Keys. FWC uses data collected in this program in other research projects, such as sport fish genetics and sport fish health monitoring. Resource managers use the data collected in all of these projects in making management decisions.



Freshwater Fisheries Monitoring and Management

Florida has 3,000,000 acres of lakes and 12,000 miles of rivers and streams that contain some of the best freshwater sport fisheries resources in the country. To ensure protection, conservation and wise use of these resources, FWC staff use Sportfish Restoration grants to collect data on freshwater sport fish populations on major resource areas such as Lake Okeechobee or Lake Kissimmee, in its small lakes fish management area system located in rural and urban areas, and on many other of Florida's 7500+ lakes, rivers or streams. Through use of freshwater fish management techniques employed by FWC scientists funded by Sportfish Restoration grants, fish communities or their habitats are enhanced so that sport fish populations benefit to provide quality fishing opportunities for a diverse group of freshwater anglers. Information derived from these activities also is used to evaluate environmental changes or to develop management plans for protection or restoration of sport fish populations. Data from these programs also is made available to other Florida state agencies, local and regional governments, anglers and other stakeholder groups to assist in protecting, restoring, or enhancing Florida's freshwater sport fisheries for future generations.

RESEARCH

Nearshore and Estuarine Gamefish

Scientists gather information on the behavior, ecology, and life history of Florida's nearshore and estuarine (an estuary is a partially enclosed water-body or bay where fresh water and salt-water mix) fish species. Current research focuses on tarpon, bonefish, snook, spotted seatrout, red drum, Florida pompano, and dolphin. More data are needed to assess the population status of each of these recreationally important species. This information is vital for developing management plans at the state and federal levels.



Reef Fish

FWRI staff collect information on the age, growth, and reproduction of reef fish species in southeast Florida and the Florida Keys. Current research concentrates on gray snapper, mutton snapper, yellowtail snapper, and lane snapper. Research on important species of groupers is also planned. This project provides fishery managers with necessary information on the life history and population dynamics of reef fish species.



Sport Fish Genetics

Genetic research focuses on two major areas: genetically identifying wild fish populations and genetic monitoring of hatchery fish at the Fish and Wildlife Research Institute's (FWRI's) **Stock Enhancement Research Facility**. Genetic information about wild populations lets managers know if a species should be managed as a single population or if parts of the population should be managed separately. Genetic tags allow staff to distinguish released hatchery-raised fish and their offspring from fish in the natural population. This technique is used to evaluate the success of the stocking program.



Habitat Suitability Modeling (Where Fish Live)

Researchers are developing computer models that



predict the distribution of recreationally important fish species. The models include fish-catch data and information about temperature, salinity, water depth, and bottom type. These models are designed to help fishery managers forecast fish populations and to provide information about habitat important to fish populations that might need special protection or management.

Sport Fish Health Monitoring

FWC gathers information about fish kills and outbreaks of diseases in marine fish in Florida. Information is obtained through a volunteer network and citizen reports to the Marine Fish Kill Hotline: 1-800-636-0511. Staff also monitor fish health at FWRI's Stock Enhancement Research Facility, thus ensuring that hatchery-raised fish are healthy when they are released into the natural environment.



Marine Resource Geographic Information System

The Marine Resource Geographic Information System (MRGIS) is a computer system that allows FWRI staff to create mapped versions of marine-related data. Staff use the MRGIS to respond to requests for data about Florida's recreational marine fisheries. Boater's Guides, brochures created using MRGIS data, offer information about marine resources and boating-access sites in many coastal areas of Florida. These guides are available free of charge to anglers, boaters, and resource managers at a variety of locations. Contact FWRI's education office to determine availability.



HATCHERY CONSTRUCTION AND MANAGEMENT

Florida Bass Conservation Center

The Florida Bass Conservation Center (FBCC) modernized the state's primary freshwater fish production hatchery by completely renovating the original facility that was built in Sumter County in 1965. This state-of-the-art freshwater fish hatchery and research facility, completed in 2007, is dedicated to conservation of the



unique Florida largemouth bass, other freshwater sport fishes. It will also act as a focal point to facilitate effective statewide management of Florida's vast aquatic resources and strive to become a nationally recognized bass research center.

EDUCATION

Marine Resource Education

FWC conducts educational programs including fishing clinics for kids and women and field events emphasizing marine resource conservation. We also provide conservation-related materials to citizens to inform them about the environment.



Freshwater Aquatic Education

Aquatic education programs provide resources for elementary and secondary students to gain understanding of freshwater aquatic ecosystems, fisheries science, angler ethics, and angling skills aimed at promoting responsible lifetime participation in sport fishing and resource stewardship. Two approaches are taken: direct training, primarily through the Joe Budd Aquatic Education Center (Gadsden County, Florida), and indirectly through workshops to train educators and volunteers to teach sportfishing and aquatic education utilizing materials such as Training Guidelines for Fishing Clinic Instructors and Aquatic Resources Education Curriculum. Training also is provided for instructors who will implement Hooked on Fishing-Not on Drugs and Florida4-H Sportfishing Programs.

OUTREACH

Angler and Boater Outreach

In this project, FWC informs anglers and boaters of the roles they play in supporting the Sport Fish Restoration Program. Educational products describing Sport Fish Restoration-funded projects are produced and distributed free of charge.



HABITAT ENHANCEMENT

Artificial Reefs

Florida Fish and Wildlife Conservation Commission (FWC) staffs coordinate and track the progress of artificial reef projects conducted by coastal governments and qualified non-profit groups. Staff members monitor reef construction and perform scuba dives to gather data about how and what types of marine life use the artificial habitats. Staff members examine the materials used to build and the stability of the reef. A list of artificial reef locations can be found on the FWC Web site: <http://www.myfwc.com/marine/>.



BOATING ACCESS

Boating Access Improvements

The Federal Aid in Sport Fish Restoration Act requires each state to set aside at least 15% of its annual Federal Aid apportionment for boating access to fund facilities constructed, acquired, developed, or renovated for the purpose of providing additional, improved, or safer access to public waters for boating recreation and fishing. In addition, Sport Fish Restoration - Boating Access is funding the Boating Access Facilities Inventory and Economic Assessment that will provide the State with a comprehensive statewide inventory and a planning tool for boating access in the State of Florida through 2020 and serve as a national model.

