

2010
FACT SHEET

NOAA FISHERIES
NATIONAL MARINE FISHERIES SERVICE
GALVESTON LABORATORY
<http://galveston.ssp.nmfs.gov>

- Affiliation:** U.S. Department of Commerce
NOAA National Marine Fisheries Service
Southeast Fisheries Science Center
- Location:** 4700 Avenue U, Galveston, TX 77551
Telephone (409) 766-3500, Fax (409) 766-3508
- Founded:** In 1929, a U. S. Fish & Wildlife Service Fisheries field station was established in Galveston on Offatts Bayou, directed by A.E. Hopkins, Ph.D.
- Original Mission:** Oyster Research
- Early Research:** In 1931, the Laboratory became one of four FWS field stations to Do shrimp research in the Gulf of Mexico directed out of New Orleans by F.W. Weymouth.
- Present Facility:** Established in 1950, at the old U.S. Army Ft. Crockett in Galveston, as a Bureau of Commercial Fisheries Laboratory. Historical designation. Renovated 2008.
- Present Mission:** Research on management of shrimp, sea turtles and coastal wetlands.
- Present Director:** Roger J. Zimmerman, Ph.D.
- Employees:** 75 (35 federal, 27 contract, 13 students/volunteers)
- Annual Budget:** \$7.6 million in 2009 (\$5.5 million NOAA funds)
- Facilities:** Over 70,000 square feet of offices and laboratories in 10 buildings with a 130,000-gallon seawater system. Research space is shared with National Ocean Service's (NOS) Flower Garden Banks National Marine Sanctuary (FGBNMS), Physical Oceanographic Real Time System (PORTS) and the Texas Marine Mammal Stranding Network (TMMSN).
- Programs:** Offshore Fishery Observers (shrimp, red snapper, bottom longline grouper, pelagic longline tuna and mackerel), Shrimp Stock Assessment, Oil Platform Removal Observers, Bycatch Characterization, Shrimp Biology, Shrimp Catch Statistics, Monitoring of Sea Turtle and Marine Mammal Strandings, Sea Turtle TED and Longline Research, Essential Fish Habitat Research, Coastal Wetland Restoration, Ecosystem Modeling.

Organization: NMFS/SEFSC Galveston Laboratory Division
Laboratory Director – Dr. Roger Zimmerman
Administrative Services – Mr. James Randolph

Research Branches:

Fishery Management Branch - Dr. James M. Nance
Fishery Ecology Branch - Dr. Thomas J. Minello
Protected Species Branch – Vacant
Estuarine Habitats & Coastal Fisheries Center
(Lafayette, LA) – Dr. John Foret

SERO, Habitat Conservation Division:

Gulf of Mexico Branch – Mr. Rusty Swafford

History of Accomplishments:

1950's

- Instituted a long-term record of U.S. shrimp fishery catch statistics (continuous since 1956).
- Developed a geographic Subarea System for Analyses of Fishery Data in the Gulf of Mexico.
- Conducted early research on red tides.

1960's

- Studied life cycles of brown shrimp and white shrimp.
- Reared brown shrimp and white shrimp in captivity from eggs.
- Developed hatchery methods for shrimp aquaculture.
- Conducted early research on shrimp growout in pond culture.
- Determined immigration patterns of postlarval shrimp in the Gulf of Mexico.
- Developed shrimp tagging methods for migration and population studies.
- Studied salinity and temperature effects on postlarval white shrimp and brown shrimp.
- Developed the Baxter/Berry bait shrimp index to correlate brown shrimp catch.

1970's

- Conducted oceanographic surveys of circulation and bathymetry in the Gulf of Mexico.
- Initiated the "Headstart" experiment for conservation of Kemp's ridley sea turtles.
- Developed methods for captive rearing of sea turtles.
- Undertook environmental surveys of the Gulf of Mexico shelf for the U.S. Dept of Energy.
- Determined offshore migration patterns for penaeid shrimps in the Gulf of Mexico.
- Contributed to development of the Shrimp Fishery Management Plan for the Gulf of Mexico.
- Conducted stock identification (genetic) studies of penaeid shrimp.
- Developed a long-term (streamer) tag for penaeid shrimp.
- Conducted Environmental Impact Studies of offshore petroleum storage in salt domes.

1980's

- Issued forecasts of annual yields of western Gulf brown shrimp and Florida pink shrimp.
- Quantified utilization of marsh, seagrass and mangrove habitats by shrimps, crabs and fishes.
- Quantified feeding and protective functions of estuarine wetlands for fishery species.
- Compared ecological value of created versus natural wetlands for estuarine species.
- Determined effects of freshwater inflow on use of Texas marshes by fishery species.
- Developed life-time tagging methods for hatchling and juvenile sea turtles.
- Released thousands of head-started Kemp's ridleys into the Gulf of Mexico.

- Evaluated Turtle Excluder Devices (TEDs) in shrimp trawls.
- Assessed changes in size distributions of shrimp by weight and value of annual landings.

1990's

- Characterized bycatch from shrimp trawls, gill nets, fish traps, and longlines.
- Evaluated Bycatch Reduction Devices (BRDs) in shrimp trawls.
- Developed an ecosystem-based shrimp fishery bycatch model.
- Tracked movements of sea turtles through satellite, radio and sonic telemetry.
- Studied natural designs of seagrass and marsh habitats beneficial to fisheries.
- Studied effects of marsh habitat loss and restoration on fisheries production.
- Established parameters for evaluation of essential fish habitat in the Gulf of Mexico.
- Confirmed nesting of 10 year-old Headstarted Kemp's ridleys on Padre Island.
- Participated in the regional Sea Turtle Stranding and Salvage Network.
- Correlated sea turtle strandings with shrimping intensity.

2000's

- Initiated research of Gulf and Caribbean coral reefs.
- Supported Community-based Habitat Restoration in Texas and Louisiana.
- Began development of ecosystem models for use in ecosystem-based fishery management.
- Quantified shrimp production derived from estuarine habitats
- Initiated cooperative work with Mexico on the Gulf of Mexico Large Marine Ecosystem
- Examined effects of habitat change and fishing pressure on populations of Queen Conch in the USVI

Research Partners and Cooperators:

Coastal Bend National Estuary Program
 Ecuador Instituto de la Pesca
 Everglades National Park
 Florida Department of Environmental Protection
 Galveston Bay National Estuary Program
 Galveston Bay Foundation
 Galveston Independent School District
 Gladys Porter Zoo
 Gulf & South Atlantic Fisheries Development Foundation, Inc.
 Gulf of Mexico Fishery Management Council
 Houston Zoo
 LGL Ecological Research Association
 Mexico's Departamento de la Pesca
 Mexico's Secretariat of Environment and Natural Resources (Secretaría de Medio Ambiente y Recursos Naturales, *SEMARNAT*)
 Moody Gardens Aquarium
 New England Aquarium
 Northern Gulf Institute
 Louisiana Department of Wildlife and Fisheries
 Louisiana State University
 Port of Houston Authority
 Savannah State University
 Scenic Galveston
 Texas A&M University
 Texas Marine Mammal Stranding Network
 Texas Parks and Wildlife Department
 Texas Sea Grant
 Texas Sea Turtle Stranding and Salvage Network

Texas Shrimpers Association
University of Houston
University of Louisiana at Lafayette
University of Puerto Rico
University of Texas
US Army Corps of Engineers at Galveston and New Orleans
US Coast Guard at Galveston
US Department of Interior/Minerals Management Service
US Environmental Protection Agency/Region IV and Gulf of Mexico Program
US Fish and Wildlife Service/Environmental Services at Clear Lake
US National Park Service at Padre Island National Seashore

rev. 01/25/10