

Science, Service, Stewardship



Southeast Fisheries Science Center

Marine Turtle Research Program

November 2011

**NOAA
FISHERIES
SERVICE**

Mandates

- **Endangered Species Act**
- **Magnuson-Stevens Conservation Management Act**
- **Oceans and Human Health Act**

Current Listing Status – Atlantic, Gulf of Mexico, Caribbean

- Loggerhead – Threatened (NW Atlantic DPS)
- Green – Threatened, Endangered (FL)
- Leatherback – Endangered
- Hawksbill – Endangered
- Kemp's ridley – Endangered
- Olive ridley – Threatened

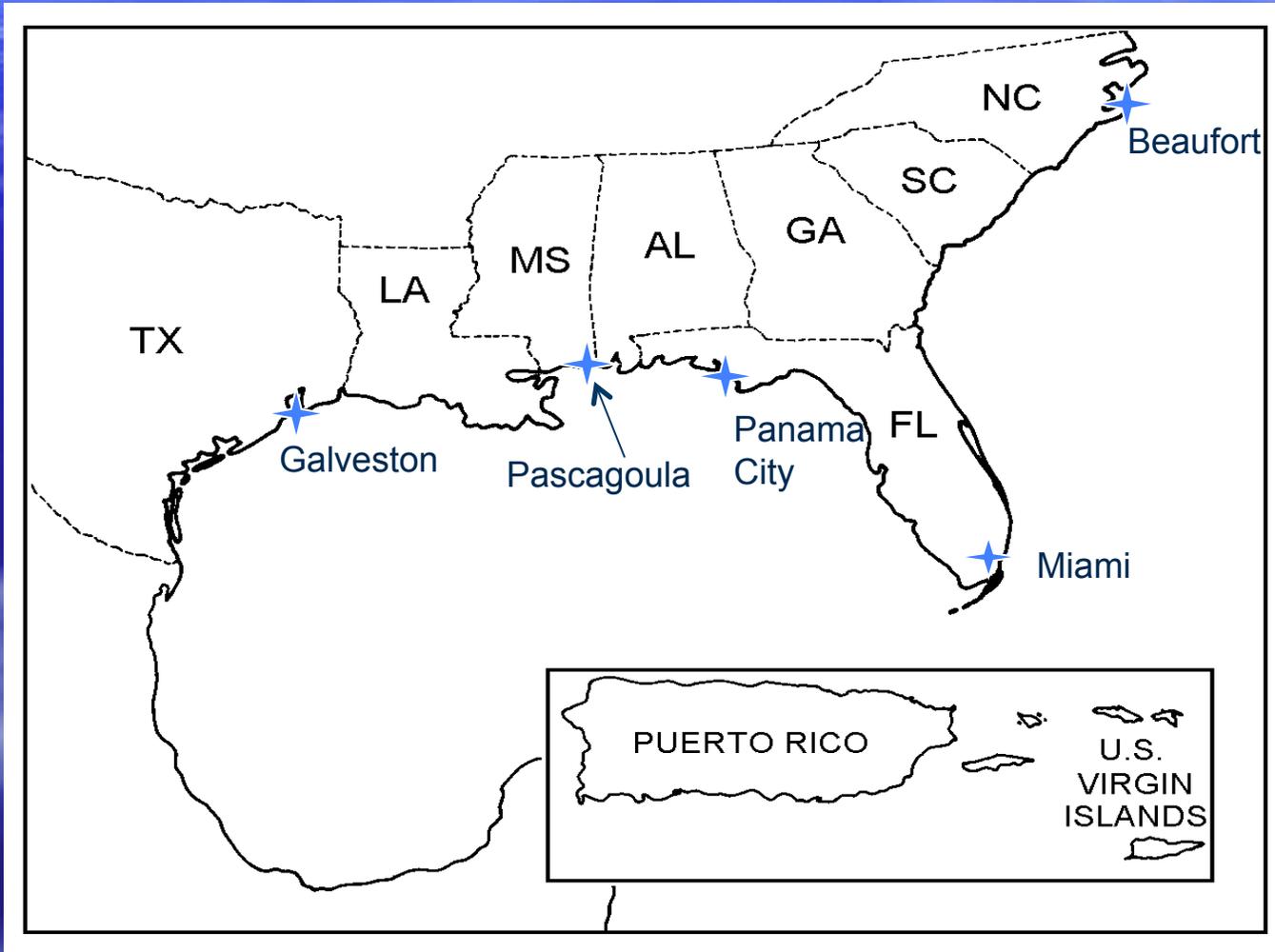
Research at the Southeast Fisheries Science Center

- **Stock ID**
 - Researching stock structure (age and genetics)
- **Abundance**
 - Conducting in-water studies to evaluate population trends and habitat requirements
- **Life History**
 - Investigating demographics (e.g., age-specific growth and stage-specific survival rates, time in stage and age-to-maturity estimates)

Research at the Southeast Fisheries Science Center

- **Anthropogenic Impacts**
 - Assessing sea turtle mortality, strandings, and health
- **Assessments (Quality and Frequency)**
 - Stock assessment reports (e.g., TEWG)
- **Bycatch Reduction**

SEFSC Laboratories



Staff for Directed Research, STSSN, Observer Program Support, Permitting, and Captive Rearing (FTEs + contractors)

- **Miami:** Lisa Belskis, Sheryan Epperly, Paul Richards, Chris Sasso, Lesley Stokes, Wendy Teas + Kate Mansfield (FIU/ CIMAS)
- **Beaufort:** Larisa Avens, Joanne Braun-McNeill + April Goodman, Lisa Goshe
- **Galveston:** Cain Bustinza, Ben Higgins, Lyndsey Howell + ≥ 2 contractors
- **Pascagoula:** Melissa Cook + Amy Schmitt



Staff* for Gear Research

- John Mitchell
- Charles Bergmann, II
- Kendall Falana
- Jack Forrester
- Dan Foster
- Jeff Gearhart
- Dominy Hataway
- Nick Hopkins
- Dale Stevens
- James Barbour
- Drew Hopper
- Lionel LaForce
- Blake Price (contractor)
- + 5 contractors



* Named staff's time ranges from 10% to 90% on sea turtle gear research

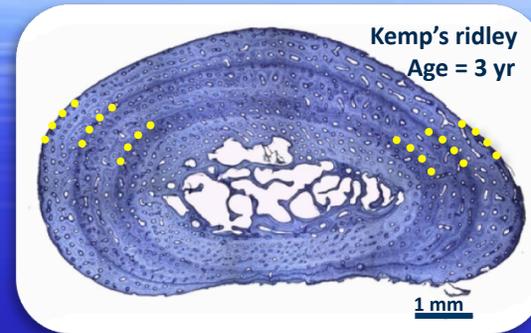
Miami Laboratory

- Sea Turtle Program Coordination
- Permits, including CITES clearance for Center
- Turtle Expert Working Groups, Recovery Teams, Biological Review Teams
- STSSN Coordination & Database
- Cooperative Marine Turtle Tagging Database
- Observer Program Support: training, equipment, Sea Turtle Life History Database
- Bycatch analysis; Natl. Bycatch Report support
- Bycatch reduction research
- Population modeling
- Satellite telemetry projects
- Coordinate genetics
- Rancho Nuevo (Mexico) turtle camp support
- Mexus-Gulf
- International Sea Turtle Society support
- Public outreach
- SEFSC website
- Virginia Key Nesting Beach Survey
- Pelagic Longline Observer Program



Beaufort Laboratory

- National Sea Turtle Aging Laboratory
 - Cold stun necropsy effort
- Demographic, life history, vital rate studies
- Index of abundance study
- Health assessment
- Contaminant analyses
- Satellite telemetry
- Stable isotope analysis
- Epibionts
- Sea turtle sightings (iSTOR)
- Aerial surveys



Galveston Laboratory

- Captive-rearing facility provides animals for experimental research and gear testing
- Public outreach tours of the sea turtle facility
- Strandings surveys of upper Texas coast
- Sea turtle nesting response
- Rehabilitation
- Reef Fish, Shrimp Fishery, and Rig Removal Observer Programs



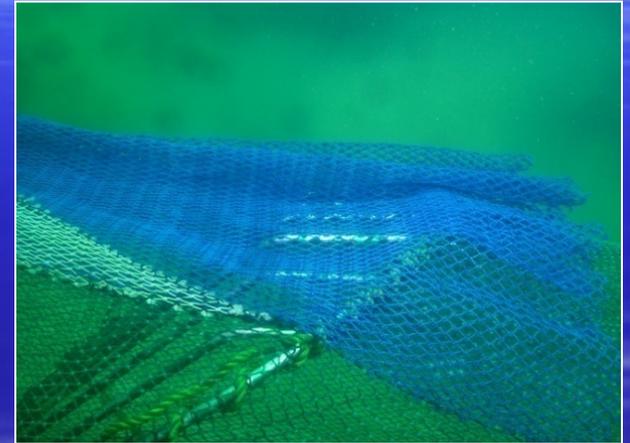
Panama City Laboratory

- Field base for experimental gear research including annual TED certification trials
- Field base for a variety of projects using captive-reared turtles in the outdoor pens
- Strandings response
- Shark Bottom Longline and Shark Gillnet Observer Programs



Pascagoula Laboratory

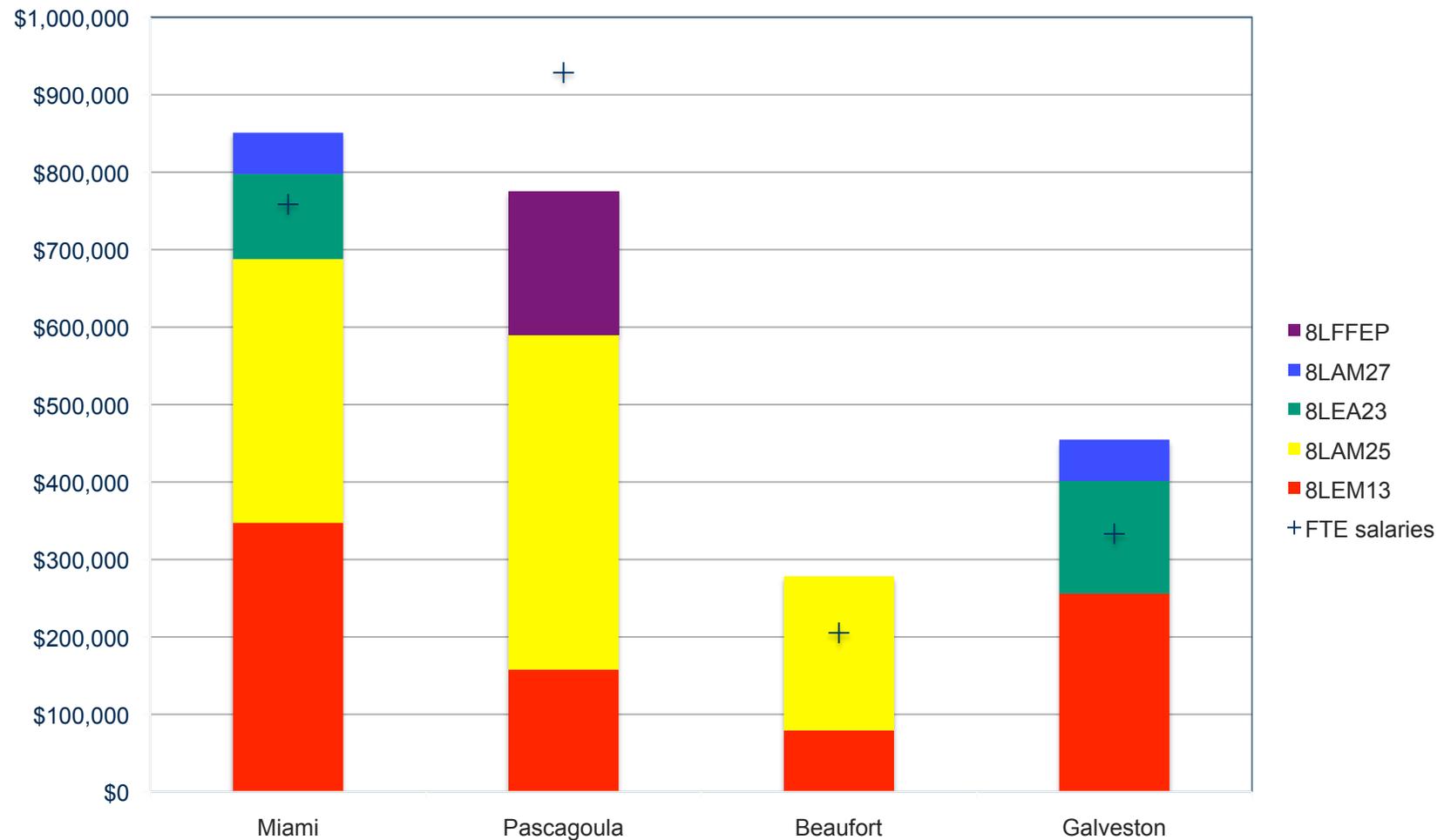
- Design and evaluate fishing gear modifications to reduce sea turtle bycatch and mortality
- Testing of candidate TED designs
- Evaluate careful release fishing gear removal tools for approval; conduct workshops
- MSRA/ESA domestic and international training (TEDs and longline)
- Enforcement assistance and training (GMT)
- Mexus-Gulf collaborative research
- Sea Turtle Stranding and Salvage Network MS State Coordinator
- Tagging of incidental capture turtles



Atlantic Strategy and Bycatch Analysis

- Participate in NMFS Atlantic Sea Turtle Strategy Steering Committee (Miami) and Committee's Gear Working Group (Pascagoula), aimed at reducing bycatch
- SEFSC provides bycatch analyses for the pelagic longline, reef fish, shark bottom longline, and shark gillnet fisheries as mandated by Biological Opinions
- Examining effectiveness of management actions to mitigate sea turtle bycatch
- Exploring mechanistic and traditional demographic modeling approaches to evaluate effects of bycatch

FY2011 Budget (permanent funds only)



For more details, see the SEFSC Sea Turtle
Program Strategic Plan and the national Stock
Assessment Improvement Plan



<http://www.sefsc.noaa.gov/species/turtles/>