



Dec. 8-9th, Fish and Wildlife Research Institute

St. Petersburg, FL

Background:

In support of the commitments of FWC's 2015 Resolution on forage fish conservation, the Florida Forage Fish Coalition recently partnered with the Fish and Wildlife Research Institute (FWRI) to conduct a data analysis workshop with Florida academic institutions. The goal of the workshop was to develop long term collaborations between FWRI and university professors conducting marine research to engage graduate students in the analysis of backlogged fishery survey and monitoring data collected by FWRI. Results from these analyses will help improve knowledge of the health and abundance of forage fish species and their dependent predators in FL state waters, while also providing practical training for the next generation of fisheries scientists.

Workshop Summary:

The workshop was well attended by scientists, professors, and postdocs from five academic institutions (see participant list below and photo inset). FWRI scientists Tim MacDonald (Director of Survey and Monitoring Programs) and Kevin Thompson (Coordinator of Gut Lab Database) started the workshop by giving presentations on FWRI's data collection efforts over the past twenty years as well as their current database capacity and future research priorities. Each participant then gave a short synopsis of their academic programs and common interests with FWRI priorities.



After a tour of the gut lab (see photo), the remainder of the workshop was conducted as a roundtable discussion that identified 8 forage related research topics (see below) that are 'wish list' priorities FWRI would like to pursue but lack the personnel resources. Interested academic partners were then invited to develop data mining project proposals suitable for early career scientists (graduate students and postdocs).



'Wish List' Project Topics:

1. FF Recruitment Delivery - identifying sources and sinks of FF via patterns & trends associated with habitat use
2. FF Community Structure – identifying regional spatio-temporal variation in species composition among FL's estuaries
3. Perturbance Impacts - chronic vs acute environmental drivers of abundance (e.g. red tides, droughts, Lake Okeechobee discharges, septic tanks etc.)
4. Inshore/Offshore Connectivity – investigating energy transfer from predator/prey trophodynamics
5. Seasonal Diet Shifts - diet database of predators crossed against Fishery independent Monitoring (FIM) catch data of forage species
6. FF Life History Analysis – otolith age & growth
7. Data Collection and Lab Training - estuary sampling and gut lab identification
8. Data accessibility for public – Web-based interface tool of GIS map showing diet data of predators.

Next Steps:

The group agreed on a proposal format of 1 - 2 pages for a project description with a budget, student candidate, and timeline included. FWRI is providing everyone access to the diet data prior to the submission deadline so they can explore what species are available to inspire proposal development. Fellowship proposals will be submitted to the Forage Fish Coalition by February 17th and reviewed by an advisory panel made up of FWRI, the FF Coalition. Awards will be determined based on scientific merit for publication, timeline feasibility, funding availability, and FWRI priorities.

Over the coming year, the Forage Fish Coalition will assist with administrative, logistical, and financial support for the program including disbursing funds, fostering development of collaborations through conference call updates, ensuring project deadlines are met, and assisting FWRI with coordinating the 2nd year follow up workshop.