

COASTAL AND MARINE LABORATORY

# **Tidings Newsletter Winter 2020**



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## **Director's Report**

### Florida State University Wades into the Apalachicola Bay System



Florida State University has a long history of working in the Apalachicola Bay System and on oysters, starting in the 1950s with R. Winston Menzel, continuing through the 1990s with Skip Livingston, and the mid 2000s with postdocs Laura Petes and Steve Gosnell at the FSU Coastal & Marine Laboratory.

In 2019. the lab received nearly \$8 million in funding from the Triumph Gulf Coast Fund Inc., and another \$1.5 million from FSU's Office of Research to address questions related to the rapid decline of oysters occurring over the past 10 years and to develop plans for future management and restoration of oyster reefs throughout the region. It is a monumental task and one in which FSUCML has sought and developed strong partnerships with scientists from the Florida Fish & Wildlife Conservation

Commission, the Apalachicola National Estuarine Research Reserve, and the University of

Florida, among others, to seek solutions. In addition, we now have a <u>Science Advisory Board</u> to help guide the research that will get us there.

We also will rely on the expertise of people whose families have worked in these waters for generations. To that end, we have developed a <u>Community Advisory Board</u> to help develop a management and restoration plan for the bay.

Make no mistake, this is a game changer for the lab. As a result of the project, we are bringing in three new faculty members who will contribute to research in the bay, we are building a research hatchery to develop the larvae, spat, and seed we will need for both laboratory and field experiments, and are bringing in a host of new faces to work in the field, in the hatchery, and on outreach to the community.

#### Learn more about the Apalachicola Bay System Initiative by clicking here.

Questions? email <u>fsucml-absi@fsu.edu</u>

## **Research Highlights**

### The Faculty



**Dr. Sandra Brooke & Dr. Jeroen Ingels**, with colleagues from NOAA and FAMU ventured on an exciting expedition in early October 2019 in the eastern Gulf of Mexico to explore the deep sea corals, sponges, and meiofauna of the area (>1,000 meters deep). <u>Read More</u>



**Dr. Dean Grubbs &** Dr. Gavin Naylor (University of Florida) successfully tagged a deep-sea sixgill shark off Cape Eleuthera from a submersible using a manipulator arm. This is less traumatic for the fish than tagging at the surface and a wild quest that allows them to gain critical insights into this its behavior. **Read More & Watch the Documentary** 



**Dr. Sophie McCoy** received the *Norma J. Lang Early Career Fellowship* from the **Phycological Society of America** to explore the ecological differences between algal species that appear identical while differing genetically. Dr. McCoy is a community ecologist working primarily intertidally examining links between biology, environmental conditions and water chemistry. <u>Read More</u>



**Dr. Christopher Koenig & Dr. Felicia Coleman** have worked on goliath grouper for decades. They recently published, together with Coleman's former grad student, **Dr. Chris Malinowski**, a paper discussing the pressures acting on goliath grouper recovery and the drawbacks of reopening the fishery. Not the least of the problems is the extraordinarily high levels of mercury in their muscle tissue. <u>Read More</u>

### The Graduate Students

... are swimming in recognition! Check them out on the web.

**Josh Manning, Ph.D. candidate**, received two prestigious awards: the 2019 Guy Harvey Scholarship and the American Museum of Natural History Lerner-Gray Memorial Fund Award for Marine Research. His research in Bonaire will reveal the effects of spatiallyconstrained parrotfish herbivory on community assembly on coral reefs.

Bryan Keller, Ph.D. candidate, is packing off to Washington, DC, to become one of the 2020 John Knauss Marine Policy Fellow. Bryan will head to Washington D.C. soon where he will be matched with a legislative or executive governmental "host." Bryan hopes to be in a fisheries office working on management issues.

Alex Hooks, Ph.D. student, received the FSUCML Coastal & Marine Conservation Research Award, so she could conduct research at the lab on the voracious oyster predator, the Florida crown conch (Melongena corona). Her data on their reproduction will prove invaluable to oyster restoration and to industries that depend on healthy oyster populations.

The FSUCML Board of Trustees Awards went to the following students: in Biological Science - Alex Hooks, Kevin Olsen, Cheston Peterson, and Jackson Powell; and in Earth Ocean and Atmospheric Science - Bryan Keller.

## **FSU's Great Give in Action!**

**Shorebird Nesting Restoration Project** 

Funding from YOU as part of FSU's 2019 Great Give campaign allowed us to partner with the Florida Fish & Wildlife Conservation Commission and the U.S. Fish and Wildlife Service Coastal Program to restore 0.25 acres of shorebird nesting habitat on the west side of the boat basin. The project is designed to target state-threatened least terns (*Sternula antillarum*) and black skimmers (Rynchops niger) for nesting while maintaining foraging habitat for non-breeding water birds. Hutchinson Design and Construction has been contracted to remove existing vegetation and surface materials, place toe and sill logs, and install a mix of 75% crushed oyster shell and 25% sand as nesting material.







#### Read more about the project & upcoming citizen science opportunities.

**NOTE:** the next Great Give is March 26-27. The FSUCML will be seeking scholarship funds for graduate student research.

## Outreach

#### **Florida Seafood Festival 2019**

The FSUCML booth at the Florida Seafood Festival attracted kids of all ages to ask questions about sharks, grouper, & the work unfolding as part of the Apalachicola Bay System Initiative (see Director's report). We had a blast talking to the locals, the winter visitors, and meeting new people. Nestled in the midst of the Arts and Crafts section and next to our friends from Florida Sea Grant made it all the more fun. We can't wait for next year!





#### BUILD THAT BOAT! Whatever Floats Your Boat Regatta April 18, 2020

Get your boats ready! It's time once again for you to challenge your friends, your family, and your colleagues to build boats out of stuff that any normal person would toss and enter the <u>Whatever</u> Floats Your Boat Regatta at the Florida State

University Coastal & Marine Laboratory. Boats can be as artistic or as whacky as you care to make them. Just build 'em and they will float . . . more or less. Sail, row or skull through the 10-15 ft deep Apalachee Bay race course. For more information or to enter, click <u>here</u>.

#### **Volunteer Docent Program**

Our docent program has grown immensely over the past year and has become one of FSUCML's most unique and fun volunteer opportunities. Our docents are volunteer staff members that serve as public



ambassadors for FSUCML and help conduct tours and special programs for visiting guests. To learn more about being an FSUCML docent, or to sign-up, click <u>here</u>. You may also contact Durene Gilbert at degilbert@fsu.edu or call (850) 697-4095.

### **New Faces**

We have many new faces at the lab, some filling old positions while others arrived as part of the Apalachicola Bay System Initiative (ABSI). While those coming in as part of ABSI will have that noted in their job description below, we consider ourselves one big crazy family.

Lance Crum, Small Boat Technician, has lived in Crawfordville his



whole life. Not new to working for FSU, he spent the last five years on FSU's main campus in parking and transportation. Lance is working with Matt Edwards, head of Marine Operations, to ensure that all our vessels are in top shape for our users. He also is available to captain small vessels for people who need help in the field or have limited boating experience. An avid fisherman, Lance does have a favorite species, and that is Red Snapper ... beautiful to look at and delicious to eat!



**Matt Edwards, Head of Marine Operations**, has been messing around with boats at the lab for a while, so we can't really call him new. But when the boat captain position opened, he applied, beat out the competition, and became captain of the *R/V APALACHEE*, while remaining responsible for the small boats and the lab's Boating Safety Officer. He just added a whopper of a boat to his list. Originally from Southport, NC, Matt moved to the Panhandle seven years ago and, as an avid fisherman, fell in love with the area. Hope that's enough to keep him around for a long while.



Mary Lewis, Administrative Assistant, wears many hats, including assistant to the Director and working with the Business Manager to help with hiring, procurement, and scheduling. Mary received a Journalism degree (BSc) from the University of Florida. Besides her writing skills, she brings a wealth of expertise from her experiences in law firms, public service centers, and the Governor's office. As luck would have it, her absolute favorite species is the oyster!



Maddie Mahood, ABSI Outreach & Education Assistant, helps develop outreach and education experiences associated with ABSI. Her previous position in Atlanta was as the Marketing Manager for a women-run performing arts theatre. She received degrees from Penn State University in Theatre (BA) and Community, Environment, & Development (BSc). She is interested in marine conservation and policy. Her favorite species is the Mako Shark.



**Chris Matechik, ABSI Marine Field Technician,** is responsible for leading the field enterprise for ABSI. His experience in this area is broad, given his background in stream & fish habitat restoration in the western US, and his work with the Apalachicola National Estuarine Research Reserve. Chris is a familiar face at the lab, having worked here both before and after receiving his biology degrees: one from FSU (BSc) and the other from Auburn University (MSc). This is his third stint at FSUCML.



**Cullen Morris, Marine Research Technician,** is the lead marine tech and volunteer coordinator for the entire lab. His job includes reviewing and overseeing all research which provides invaluable support to faculty and grad students, and matching citizen scientists with projects that fit their interests and the researchers' needs. Cullen received degrees from FSU in Environmental Science (BSc), Oceanography (MSc), & Environmental Law (JD). His interests lie in the conservation of nature and fish ecology.

**Joe Rocco, ABSI Hatchery Manager,** runs the new Experimental Oyster Hatchery soon to have its first batch or resident oysters. He will rear oysters from eggs to adulthood, while training interns in the art & science of oyster



culture. He has tremendous background in this area, having worked for Sea World of Florida, Disney's Epcot, Maritech, and the Florida Oceanographic Coastal Center doing everything from design and construction to ensuring the survival of his wards.



**Gina Wells, ABSI Program Manager,** has worked at FSU for a number of years, primarily with FSU Sponsored Research & the Research Foundation so she knows her way around bookkeeping. She manages the budgets associated with the ABSI project and helps keep it all straight, a big job given all the construction, hiring, and research now underway. She also is a resident of the area and serves as a wonderful ambassador to the Franklin County community.



## The Florida State University Coastal & Marine Laboratory



www.marinelab.fsu.edu

