



## Marine Extension Newsletter – November 2009

Volume 1, Issue 4

### Success Stories

*Chuck Adams* -- Cultured Sunray Venus clams have been delivered to four participating sushi restaurants in the Gainesville area. The clams were grown in trial production runs in Cedar Key. The bagged and tagged clams were provided to the restaurants for testing as a raw sushi product. Initial tests with sample clams by the four sushi chefs were very favorable. Consumer acceptance information will be collected via an IRB-approved survey format. The survey will be conducted during the October-November period. The information gathered will complement similar information recently gathered from more traditional restaurant settings regarding consumer acceptance of cooked sunray venus clams. The information will provide background data for an upcoming Florida Sea Grant-funded study by scientists at Harbor Branch Oceanographic Institute and University of Florida to address the constraints to full-scale commercialization of sunray venus clams within the Florida molluscan shellfish aquaculture and seafood distribution industry.

*Bryan Fluech* -- On October 17, the Collier County Sea Grant Agent collaborated with the U.S. Fish and Wildlife Service and Port of the Islands Marina near Goodland, FL to organize and host the 3<sup>rd</sup> annual National Wildlife Refuge Week Kids Fishing Clinic. The goals of the clinic were to engage local underserved youth with a positive outdoor learning experience by teaching them fundamental and ethical fishing skills, and to describe the purpose of National Wildlife Refuges. Fifty-one migrant Hispanic and Haitian youth from Immokalee and East Naples plus chaperones and family members participated in the clinic.



Participants rotated through five skill stations that emphasized casting, knot tying, common tackle, fishing regulations, and ethical angling practices. Following the rotations, youth fished along the marina's seawall and caught mangrove snapper, striped mojarra and catfish. Two local ecotour businesses then provided students with complimentary manatee-viewing boat tours. Students wrapped up the day with a free lunch donated by local businesses. The agent acquired fishing poles and tackle boxes through a Fish Florida grant to give to participants, and the youth also received numerous nature-

based activity books and other handouts. The agent recruited volunteers from a local fishing club to work the stations, and provided the equipment and tackle to run the event.

*Maia McGuire* -- Many school-age children spend the majority of their time indoors. This observation recently started a national initiative, No Child Left Indoors, to expose youth to the natural environment. Youth from Flagler and St. Johns Counties had the opportunity to explore the coastal outdoors during two Coastal Camps in July and August, 2009. Thirty-four youth aged eight to thirteen learned about sun safety, water conservation, fish, plankton and manatees during the four-day programs. Students discovered that sunscreens with



an SPF of 30 or higher blocked UV light better than those with a SPF of 4 or 15, and were reminded to wear hats, sunglasses, shirts and sunscreen to protect them from sunburn. As a result of the camp, 89% of the youth were able to correctly identify that most water at home is used for lawns and gardens (compared to 18% on the pre-test). All of the youth felt that we need to try to reduce the amount of water that we use to make sure there is enough to go around (an increase from 71% on the pre-test.) On the last day of camp, participants created posters, audio podcasts or video public service announcements to teach people about ways to protect manatees. The podcasts and PSAs were uploaded on the manatee page of the county's Sea Grant Extension website (<http://stjohns.ifas.ufl.edu/sea/manatees.html>.) One participant's mother stated, "Thank you for doing such a wonderful camp. Allie has said so many neat and fun things about the camp. She is making me conserve water when I shower by turning off the water while I soap up."

*Doug Gregory* -- The Florida Keys Seafood Festival was awarded \$30,000 in advertising monies to help attract mainland visitors to the event. The festival is a partnership between the Monroe County Sea Grant Extension Program and the Florida Keys Commercial Fishermen's Association. The proceeds from the festival are used to maintain ongoing operations for the fishermen's association and to provide various scholarships to local schools.

*Steve Otwell* -- In Spring 2009, Florida Sea Grant provided evidence to secure formal regulatory recognition of a special irradiation procedure for reducing certain bacteria that have been associated with potential illnesses caused by eating raw oysters. Following legal protocol established through FDA, Victor Garrido and Florida Sea Grant Specialist Dr. Steve Otwell, from the UF/IFAS Food Science and Human Nutrition Department, worked with oyster processing firms in Florida and Louisiana to develop the nation's first commercial oyster irradiation plant, validated by both state and federal authorities, to apply a minimum exposure to gamma-base irradiation that reduces the bacteria while maintaining the raw sensory attributes preferred by consumers. The validation involved trials with actual products with

known bacterial loads and various packaging for product protection. This historical development provides one additional option for industry and consumers to reduce potential risks. Likewise, this development helps avert adverse regulatory measures that actually threatened closure of oyster operations during certain times of the year unless processors develop safer alternative processes. The result is a viable commercial industry and sustainable community values, plus safer consumer options. This work was recognized in Florida Trend Magazine (Sept 2009)

Florida Sea Grant partnered with Louisiana Sea Grant and National Sea Grant Office to provide a special conference addressing the “State of the Union of Our Nation’s Fisheries and Seafood Industry” in New Orleans during October 26-28. The event was held in concert with the annual Seafood Science and Technology Society Conference, and was led by Florida Sea Grant Specialist, Dr. Steve Otwell, working closely with the National Sea Grant Focus Team for Safe Sustainable Seafood Supply. The program involved invited leaders from all aspects of concern for domestic fisheries including fishery management, seafood inspection, trade associations, marketing programs, academic based research and extension services, and pertinent non-government organizations aligned with commerce and aquatic resources. The event documented the current situation and advanced recommendations in support of the industry and associated communities. Details are available and will progressively be posted at <http://sst.ifas.ufl.edu/current.shtml>

Florida Sea Grant continues to maintain the Nation’s leading program for training of all processors of seafood and aquaculture products destined for sale in the USA. Simply known as the ‘Seafood HACCP Alliance’ this program has won numerous awards for innovation in cooperative education involving all pertinent regulatory agencies, commercial sectors, and academic expertise in both research and extension services. Through the past decade this program has involved over 95% of the processing firms in the nation, processing operations and authorities in every nation exporting seafood to the USA, and every Sea Grant and respective Land Grant program across all states and territories. In 2009, working with Sea Grant expertise from Florida, New York, Delaware and Rhode Island the Alliance drafted proposals to secure funds to advance the Alliance’s educational efforts in anticipation of historical regulatory addendums from FDA in 2010. The anticipated regulatory changes will require adjustments in both commercial and regulatory practices that depend on orientation and education. The Alliance offers the most cost-effective, proven, valued and immediate response. Training programs to prepare a cadre of state agency instructors begins Oct 14-15 in Battle Creek, Michigan. This training program involves cooperation with the national Association of Food and Drug Officials (AFDO) and the new International Food Protection Training Institute (IFPTI) funded by the Kellogg Foundation. Additional sessions for both industry and international expertise are scheduled for early 2010. This work involves production and distribution of new educational materials and audio-visual support coordinated through the FL Sea Grant Program.

Florida Sea Grant and UF/IFAS worked in cooperation with the Cedar Key aquaculture clam industry to develop and demonstrate a new ‘sensory characterization’ program to help distinguish and advance the quality aspects of farm raised hard clams, *Mercenaria* spp. Led by seafood sensory profile expert Laura

Garrido, of the Food Science and Human Nutrition Department at the University of Florida IFAS, and regional UF/IFAS extension agent, Leslie Sturmer, this team developed a trained sensory panel with specific product attributes for appearance, flavors, textures, aftertastes and other unique sensory characteristics that could be used to describe the clam shells and edible meats either as raw or cooked products. Their work involved experience with hard clams samples from over 12 locations from Florida through Massachusetts. The final product is a formal, standardized science-based profile that can be used to describe the clams in a similar manner as used in establishing appellations for wines. The intent is not to rate clams from regions, but support the culinary appreciation. The results were demonstrated during a national clam festival in Savannah, Georgia sponsored by the East Coast Shellfish Growers Association in March 2009. The clam sensory profile remains available to support continuing technical innovations and promotion of the shellfish aquaculture industry.

*Mike Spranger* -- Mike Spranger, Florida Sea Grant Associate Director for Extension and Education and UF/IFAS Associate Dean for Extension, coordinated and taught at the second National Sea Grant Extension Academy, held the week of 5 October at the 4H Youth Camp Timpooshee. Twenty six extension agents from 18 states attend the session. They came from all corners of the United States (America Samoa, Alaska, Vermont, Puerto Rico....and everywhere in between). Three relatively new the people from the National Sea Grant Office (Gene Kim, Miguel Ligo and David Blysm) also attended to learn about extension fundamentals. Also serving as instructors were: Mike Liffman (National Sea Grant Office, Brian Miller (IL-IN Sea Grant Director), Jim Hurley (Associate Director for Extension and Research - WI), Bruce Delaney (UF Natural Resources Leadership Institute, and Dorothy Zimmerman (Florida Sea Grant). Chris Verlinde and Andrew Diller provided great field support, as did Brooke Saari, who led an excellent tour of the Coastal Dune Lakes. In informal verbal evaluation at the end of the academy indicated that all participants learned new skills and knowledge, which they will apply to their jobs. The extra benefit is that this group came together as a team through classroom, field and extramural activities. With this second academy, over 60 Sea Grant agents and specialists from around the country have been trained in the fundamentals of extension. This represents 20% of the total National Sea Grant Extension Network.

*Betty Staugler* -- Bay scallops disappeared from southwest Florida waters decades ago due to degraded water quality and declines in seagrass coverage. In the last couple of years, bay scallops have been observed in SW Florida waters. This may be an indication that water quality and seagrass conditions are improving. On September 12, 2009, a total of 114 volunteers participated in a scallop search in Lemon Bay and Gasparilla Sound. The goal was to document scallop populations using standardized methods.



The morning of the event, volunteers received survey

equipment and participated in an orientation on survey methods. They navigated to assigned locations where they deployed transects, snorkeled and counted live scallops. Volunteers recorded transect location, scallop counts, seagrass type and density, and other pertinent information on data sheets. They surveyed 111 transects during the event, which covered a 31 square nautical mile area. End of event surveys determined that participants increased their ability to correctly identify bay scallops by 27% and the three seagrass species common to the area by 39%. Participants ranked the onsite training 9 on a scale of 1-10 (10 the highest ranking). This year's scallop search was an important step towards establishing a baseline conditions in our local waters. The data provide important management information for scientists where no data existed. It also allows citizens to be a part of scientific process and enhanced their sense of stewardship for the local water resources. Rod Walinchus, Editor of *Waterline*, commented that *"The people who volunteered did so for different reasons, but most participated to give something back to the environmental community. And, it was a ton of fun."*

**Betty Staugler and Joy Hazell** – Betty and Joy were invited by the Florida Fish and Wildlife Conversation Commission (FWC) to present to the Statewide Blue Crab Advisory Board on Florida Sea Grant's efforts in regard to the blue crab gear closure. On October 28<sup>th</sup> Betty and Joy gave a presentation to the Board highlighting four volunteer clean ups held in the Charlotte Harbor area in cooperation with commercial fishermen; a



Train the Trainer program conducted in Punta Gorda and educational materials produced for statewide dissemination. The agents emphasized the strengthened relationship between Florida Sea Grant, commercial fishermen and local agency volunteers as well as the positive press that the clean ups received. FWC representatives were very complimentary about FSG's role in educating stakeholders about the state's rotational closures for blue crab gear.

**Leslie Sturmer** -- The annual Clam Industry Workshop, held on October 14 in Cedar Key, provided an opportunity for industry members to meet with research and extension faculty from the UF and Harbor Branch Oceanographic Institute at Florida Atlantic University. About 80 people in attendance were provided with updates on a variety of applied research projects. Project reports included sensory characteristics for hard clams from Massachusetts to Florida (Steve Otwell and Laura Garrido), results of field trials and laboratory challenges for hybrid clams



(John Scarpa, Leslie Sturmer, and Shirley Baker), a final report on ark clam culture potential and marketability (Sturmer), results of sunray venus nursery and grow out trials and consumer acceptance studies (Sturmer and Chuck Adams), and water quality and temperature variability monitoring (Sturmer). Written summaries of each presentation were also provided. After the presentations, participants had the opportunity to provide feedback and discussion. The afternoon ended with a social

hour during which results of the hybrid clam and sunray venus field trials were served. Hybrid clams were also served by the Cedar Key Aquaculture Association at the 40<sup>th</sup> Annual Seafood Festival held in Cedar Key on October 17-18. The public was informed of the genetic project to increase production performance of hard clams in Florida and were introduced to the “Sunshine Clam” and “Tropiclam.”

*Bob Swett, Tom Ankersen, Thomas Ruppert, Betty Staugler and Joy Hazell* -- With support from the Florida Department of Community Affairs, the University of Florida Conservation Clinic and the UF/IFAS Florida Sea Grant Boating and Waterway Management Program held a 1-day workshop in Southwest Florida to present and obtain feedback for a planning tool (proof-of-concept) designed to identify and value regionally significant maritime infrastructure in Florida as components in a recreational and commercial marine transportation system. The project, *Strategies to Secure Florida’s Maritime Infrastructure*, emphasized the need to maintain the diverse array of components that together create the infrastructure for boating activities in Florida. Twenty experts in various aspects of maritime infrastructure attended the October 19<sup>th</sup> workshop.

### **Upcoming Events**

*Joy Hazell and Bryan Fluech* – Joy and Bryan will conduct four focus groups in November, two in Naples and two in Ft. Myers to gather information about the fishing knowledge and behavior of Hispanic recreational anglers. The focus groups will be conducted in Spanish, in collaboration with Dr. Marylin Swisher who is a fluent Spanish speaker and has previous experience in designing and leading focus groups for Hispanic farm workers and anglers. By conducting the focus groups we plan to accomplish the following:

- 1) Determine the motivation(s) causing Hispanic individuals to engage in saltwater angling.
- 2) Determine the extent of Hispanic angler’s knowledge/compliance with state/federal saltwater fishing regulations and conservation methods such as catch and release practices, closed seasons, bag/size limits, monofilament recycling, and trash disposal.
- 3) Determine the best means of educating/reaching out to English and Non-English speaking Hispanic recreational anglers on sustainable fishing practices.
- 4) Determine what social/cultural barriers prevent English and non-English speaking Hispanic anglers from engaging in sustainable angling practices.

*Doug Gregory* -- The Monroe County Board of County Commissioners (BOCC), upon recommendation of the County Administrator will consider making the UF/IFAS Florida Sea Grant Extension Agent to be a County liaison to the BOCC-appointed Green Initiative Task Force and to direct the development of the County’s Climate Action Plan. This will be a cooperative effort between Extension, the County Attorney and the County Administrator’s offices. The County has a need to effectively focus its greening efforts and they believe the existing leadership provided by Extension to date warranted the transfer of the task force from the Building Department/Growth Management to Extension. The task force is comprised of community environmental leaders and representatives from all cities and utilities within Monroe County. The expected outcomes will include development of a Climate Action Plan that will save county

operations significant money and greatly reduce future green house gas emissions. Doug aims to have *“an operational plan that will effect a 20% reduction in costs and emissions within the next 10 years.”*

*Steve Otwell* -- Use of ‘Seafood Schools’ has proven to be one of the most effective and valued approaches to addressing commercial and regulatory practices in the USA. Through the past 15 years, Dr. Steve Otwell has maintained a variety of annual schools that cater to commercial and regulatory audiences from both regional and international interests. The schools have become so effective and popular that they do not require promotion, but they do require limits to control attendance. The schools address all aspects of seafood and aquaculture product quality and safety from production through processing, distribution and retail/foodservice operations. The attractive feature is the ‘hands-on’ approach that involves actual product demonstrations, labs, and field activities. The schools scheduled for 2009-2010 include:

- Food Irradiation, November 18 Lakeland, FL (Leader - Victor Garrido)
- Shrimp School, May 10-14, Gainesville, FL (University of Florida; Leader - Laura Garrido)
- Cooked Shrimp School, March 10-12, 2010, New Orleans, LA (Leader – Victor Garrido)
- Oyster School, February 2010, Apalachicola, FL (Leader – Victor Garrido)
- Analytical Seafood Sensory School for Seafood, April, Gainesville,, FL (Leader – Laura Garrido)
- Seafood Ingredients School, May, Gainesville, FL (Leader – Laura & Victor Garrido)

*Betty Staugler* -- Registrations are being accepted for participation in the Coastal Module of the Florida Master Naturalist Program which will be offered in Charlotte County beginning January 4, and running weekly through February 8, 2010. The Florida Master Naturalist Program (FMNP) is an adult education program to promote awareness, understanding and respect of Florida's natural world among Florida's citizens and visitors. Core modules cover freshwater wetlands, coastal systems and upland habitats. For more information and a listing of courses offered throughout the state visit <http://www.masternaturalist.ifas.ufl.edu/>.

*Bob Swett and Chuck Adams* -- On December 15<sup>th</sup>, the final report on the socioeconomic value that artificial reefs provide to six southwest Florida counties – Pinellas, Hillsborough, Manatee, Sarasota, Charlotte, and Lee – will be submitted to the Florida Fish and Wildlife Conservation Commission and to the artificial reef coordinators in each county for their review and comments.

*Bob Swett, Bill Lindberg and Garin Davidson* -- In December, faculty with the UF School of Forest Resources and Conservation and Florida Sea Grant will hold a 3-day intensive workshop on ArcGIS 9.3, a powerful tool for managing natural resources and guiding growth and development processes. The training will provide novices with practical, hands-on instruction in the use of a geographic information system (GIS). The registration fee is \$400. Students (for example, graduate students) may register for \$200. The Dean for Research Office will fund the \$400 registration for the first 10 research faculty who register for this course. Please contact Bob Swett if you are interested in registering for the workshop ([rszett@ufl.edu](mailto:rszett@ufl.edu); 352-392-6233).