Mark your calendars...

- Feb 5, 10am—4pm. Water Education Festival at MOSH (Jacksonville). Free admission! Contact fboyd@sjrwmd.com for more information.
- Feb 8-24 —Coastal Master Naturalist Program (St. Johns Co.) See www.masternaturalist.org to register or for more information.
- More on back page!

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Exciting new project!

I’m thrilled to be able to share a new project with all of you. I’m working with publisher Frank Gromling (www.oceanpublishing.org) on a new book series about the National Marine Sanctuaries. The books are a partnership between Ocean Publishing, Jean-Michel Cousteau’s Ocean Futures Society and the National Marine Sanctuary Program, and each book profiles a particular region. My role is as compiler and editor—I’m taking text and images from Cousteau and the sanctuaries and merging them to produce a book that provides information about and lots of photographs depicting each of the sanctuaries. We’re also including information that we hope will be useful to people who would like to visit the sanctuaries. The first book, Explore the Southeast National Marine Sanctuaries with Jean-Michel Cousteau, is now available and the second book, profiling the West Coast Sanctuaries is due to come out this spring. For those of you in Flagler County, you can check out the book at the Ocean Publishing shop in Flagler Beach (across from the pier). It’s open most weekdays from 10 am—2 pm.

Maia McGuire, PhD
Marine Extension Agent

Evenings at Whitney lecture series

The University of Florida’s Whitney Laboratory for Marine Biosciences, located in the town of Marineland, presents a public lecture series called Evenings at Whitney. Lectures and parking are free and registration or reservations are not necessary. Lectures start at 7:00 p.m. in the Lohman Auditorium in the Center for Marine Studies. More information is available at www.whitney.ufl.edu or by calling (904) 461-4000.

Upcoming lectures:
February 10: Archie Carr: the man who saved sea turtles; Fritz Davis, Ph.D., Associate Professor of History, Florida State University
March 17: Looking at the Amazonian environment as an archaeological artifact; Augusto Oyuela-Caycedo, Ph.D., Assistant Professor of Anthropology, University of Florida
April 14: Restoring oyster reefs and creating living shorelines along the east coast of Florida; Linda Walters, Ph.D., Professor of Biology, University of Central Florida

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Right whales...and more!

As many readers know, Northern Right Whales visit the coastal waters of northeast Florida each winter and are often close enough to be seen from shore. Most of the visiting whales are females who have traveled to our waters to give birth to their calves. They are accompanied by other females, and some juvenile right whales. Several mother-calf pairs have already been spotted this year, so beachgoers are reminded to keep their eyes out and to report right whale sightings to the Marine Resources Council at 1-888-979-4253.

Adult right whales are about 50 feet long, while their calves are about 15 feet long at birth. Northern Right Whales are baleen feeders—they use large plates of baleen in their mouths to filter out small shrimp-like animals called copepods from the plankton. These whales spend the spring, summer and fall months in the northern Atlantic, feeding in waters off Cape Cod, Nova Scotia and the Bay of Fundy. They were given the name “right whale” because they were considered to be the right whale to hunt—they float when killed, have a high yield of blubber, and are slow-moving whales that are found relatively close to shore.

Northern Right Whales were hunted almost to extinction in the early part of the 20th century. By 1935, it was estimated that there were only about 100 of these whales left alive. Currently, the population of Northern Right Whales is estimated at about 400 animals. There are two other distinct populations of right whales. In the South Atlantic Ocean, there is a stable population of Southern Right Whales. There are only about 200 North Pacific Right Whales; that population is thought to be on the verge of extinction.

Northern Right Whales have a few distinguishing characteristics. When they come to the surface to breathe, their split blow-hole results in a V-shaped “blow” (the visible pattern of water droplets caused by the exhaled air). The whales are completely black on their upper body except for white spots on their heads. These white spots are called callosities, and the callosities are used to identify individual whales—rather like fingerprints are used to identify humans. The callosities are rough patches of skin, which become colonized by small, white crustaceans (relatives of crab and shrimp) called cyamids. It is these cyamids that give the callosities the white coloration. Right whales have no dorsal (back) fin. Typically, right whales will not raise much of their head or body above the water, so they are often difficult to see from shore.

For great information and images, check out the New England Aquarium’s right whale catalog at www.neaq.org/rwcatalog.
Right whales...and more! (cont.)

People are asked to report right whale sightings for two reasons. First, it helps researchers to gather more information about the whales, including the number of calves born each year. Second, information about right whale locations is broadcast to shipping traffic off our coast, so ships will be aware of the location of right whales in the area. One of the leading causes of mortality for right whales is boat and ship strikes. People, including surfers, kayakers and recreational boaters must stay more than 500 yards away from right whales. Locally, one airplane, called an “air-cam,” specially designed by National Geographic for filming wildlife, operates under a research permit which allows it to approach right whales for the purpose of photographing them in order to identify the individual whales. Other aircraft are not allowed to approach the whales.

In addition to Northern Right Whales, there are other whale and dolphin species that can be seen off our coast. The most common of these is the bottlenose dolphin. Often incorrectly referred to as a “porpoise,” the bottlenose dolphins are often seen around the right whales. Scientists are not sure why this is, but they suspect that the dolphins are simply curious about these large creatures. They may also be able to find food where the whales stir up the shallow water with their tails. Dolphins differ from porpoises by having a prominent beak, and by having conical teeth, not spade-shaped teeth.

The other large whale sometimes seen close to our coast is the humpback whale. Like right whales, this whale is also a baleen feeder, but differs from the right whale in several ways. It tends to be much more active than the right whales—often raising its flippers or tail out of the water, and even leaping out of the water. The humpback whale does have a dorsal fin, about 2/3 of the way along its back. It has a mottled black and white pattern on the underside of its body, including under the flippers and tail. The pattern on the underside of the tail is used to identify individual humpback whales.

Most of the other cetaceans (whales and dolphins) that live off our coast are rarely seen, unless they strand and wash up on a beach. However, there are many species of toothed cetaceans that live in our waters, including pygmy and dwarf sperm whales, pilot whales, some beaked whales and several dolphin species. Most of these live relatively far offshore, beyond the continental shelf.
**National Invasive Species Awareness Week**

National Invasive Species Awareness Week is February 28-March 4, 2011. During this week, there will be events from the national to the local level, all geared towards raising awareness about invasive species. Invasive species are plants and animals that are not native to a region (i.e. in the case of North America, were not here when the Europeans settled the continent) and that have a negative impact on native species, the environment, economics or human health. In Florida, we are well aware of problems caused by the Burmese python, the red lionfish, and plants like air potato and Brazilian pepper. During NISAW, there will be opportunities to learn about invasives, and to help with removal of invasive plants (e.g. air potato roundups). To find out about events around Florida, check the calendar at the Florida Invasive Species Partnership (FISP) website: [www.floridainvasives.org](http://www.floridainvasives.org). The First Coast Invasives Working Group covers Baker, Clay, Nassau, Duval, and St. Johns Counties. The quarterly meetings are open to all interested persons. To find out more information, check out the link at the FISP site (above) or contact Maia at mpmcg@ufl.edu.

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**Lionfish expand into Gulf of Mexico**

September 2010 brought mixed emotions to marine biologists in the northern Gulf of Mexico. The leaking oil well was permanently capped, bringing sighs of relief, but in the same month, divers found lionfish at several reef locations off Florida, Alabama and Texas. Lionfish are native to the Indo-Pacific, but have been introduced into the Atlantic Ocean. Since the 1990’s, and especially in the past decade, lionfish have greatly expanded their range throughout the western Atlantic. However, prior to 2009, lionfish had not been found in the Florida Keys or in the Gulf of Mexico. In January 2009, the first lionfish was reported in the Florida Keys, and since then the fish have become abundant throughout the Keys and in the Yucatan Peninsula region of the southern Gulf of Mexico. The reports from last September of lionfish in the northern Gulf of Mexico indicate that the fish has expanded its range to the northern Gulf of Mexico.

Many resource managers are advocating eating lionfish, and many locations are organizing “lionfish rodeos” to encourage divers to capture these fish (using spears or plastic nets). Lionfish must be handled carefully, as they have venomous spines on their dorsal (back), pelvic and anal (belly) fins. However, a research study currently underway in the US Virgin Islands suggests that lionfish flesh may carry a toxin called ciguatera. This toxin is more commonly associated with large barracuda or groupers which bioaccumulate the toxin. Ciguatoxin is produced by tiny algae associated with coral reefs. The algae are eaten by small fish, which in turn are eaten by larger fish. Ciguatera does not affect the fish, but causes neurological problems in humans who consume the fish. Cooking does not destroy ciguatoxin. There have been no reported cases of ciguatera poisoning resulting from human consumption of lionfish, but this issue is one that is being studied.

**Adult “Day Camp” scheduled**

Are you curious about the coastal environment of NE Florida? Have you ever wished that there was a “summer camp” for adults? If so, “Exploring our Environment—from the ocean to the river” may be the perfect opportunity for you! Join biologists from the University of Florida’s Sea Grant Extension Program and elsewhere as they provide hands-on learning experiences in this one-week program, April 4-8, 2011. The program combines field studies (outdoors), lectures and educational crafts (indoors) and is held at the GTMNERR building in the town of Marineland. Topics covered include beaches, sea turtles, estuaries, water quality monitoring, invasive species, coastal uplands and marine mammals. The ways in which humans interact with the coastal environment will be a recurring subject throughout the program. The program runs from 9 am to 4 pm each day and the cost for the week is $100. For more information, contact Maia or download a registration form from [http://stjohns.ifas.ufl.edu/sea/documents/EoEbrochure-Apr11.pdf](http://stjohns.ifas.ufl.edu/sea/documents/EoEbrochure-Apr11.pdf). Class is limited to 20 participants, and fills up fast, so register early!

**Florida Sea Grant faculty organizing workshops...**

Friday, February 11, 2011: Going “Coastal”: 21st Century Challenges to our fragile coast

The [Richard E. Nelson Symposium](http://www.law.ufl.edu/news/events/2011/nelson) will bring together an outstanding line-up of national experts. Presentations will focus on sea rise mitigation, oil spill litigation, drilling moratoria, the U.S. Supreme Court’s 2010 decision in *Stop the Beach Renourishment*, ocean acidification, and judicial takings. This program will be of special interest to attorneys specializing in land use, environmental, energy, and state and local government law. Those in attendance will have the opportunity to share ideas on these important topics with others who are active in the field. Florida CLE credits are available.


The Florida Sea Grant Boating and Waterway Planning Program will host a two-day workshop on Navigating in Rough Seas: Public Issues and Conflict Management. The workshop will be held at the University of Florida J. Wayne Reitz Union Room 285 (main campus, Gainesville) on Tuesday, March 29th and Wednesday, March 30th, 2011 from 9:00am to 4:30pm both days.

The workshop is designed to increase participants’ ability to design, conduct, and control public or targeted meetings. Participants will also learn to design and conduct collaborative processes for reaching consensus on public issues. This training is designed for coastal resource management, extension, and education professionals working for non-profit organizations, local government, or state government.

Registration is due by March 14, 2011. The registration fee for the workshop is $20.00 (checks only). Course materials and snacks will be provided. Space is limited to 30 participants, so please register early.

**To register or if you have questions about workshop content**, please contact Garin Davidson (gdavids@ufl.edu; 352-392-6233).
More “Mark your calendars”

- Feb 26—Invasive-Wise Community Workshop, 9 am—12 pm. South Ponte Vedra. Contact Emily at 904-823-2291 for more information.
- March 5—Air potato roundups (several locations). Check out the calendar at www.floridainvasives.org for more information.
- March 11-April 15—Coastal Master Naturalist Program (Volusia Co.) See www.masternaturalist.org to register or for more information.
- March 15—Living Shorelines Workshop, Yulee. 9:30 am—4 pm. $15 registration fee. Contact Emily Montgomery (Emily.Montgomery@dep.state.fl.us) for more information or to register.
- March 15-April 2—Freshwater Wetlands Master Naturalist Program (Duval Co.) See www.masternaturalist.org to register or for more information.
- March 21-April 18—Uplands Master Naturalist Program (Nassau Co.) See www.masternaturalist.org to register or for more information.
- March 29-30—Public Issues and Conflict Management, University of Florida. 9 am—4:30 pm. See page 1 for more information.
- April 4—8—Exploring our Environment: from the ocean to the river. Adult “day camp” program exploring coastal habitats and critters. Held in the town of Marineland. For more information, see http://stjohns.ifas.ufl.edu/sea/education.html
- April 16—Earth Day at Jacksonville Landing. 10am—4pm.
- April 16-17—Earth Day at Washington Oaks Gardens State Park. 10am-4 pm each day. Park admission fee applies.
- April 21-June 2—Uplands Master Naturalist Program (Clay Co.) See www.masternaturalist.org to register or for more information.

Please check the calendar at http://calendar.ifas.ufl.edu for other environmental education programs around the state.