

**Mark your calendars...**

- Nov 7-23: Coastal Master Naturalist class (St Johns/Flagler Co). See [www.masternaturalist.org](http://www.masternaturalist.org) to register or for more information.
- Nov 18—deadline to apply for Aylesworth Scholarships (undergraduate or graduate marine science majors). See <http://bit.ly/oMXgyX>
- More on back page!

**Right whale trainings scheduled**

Most readers already know that North Atlantic Right Whales come to the coast off southern Georgia and northeastern Florida each winter to birth their calves. Volunteer spotters help track these whales every winter, collecting important data about the population of these highly endangered whales. Anyone interested in learning more about spotting right whales should plan to attend one of the introductory talks:

December 3, 10-11:30 am, Ormond Beach Public Library  
December 3, 3-4:30 pm, Anastasia Island Branch, St Johns County Public Library

December 5, 1-2:30 pm, Flagler County Public Library  
There will be a survey training class on Monday, January 2, 2012 from 2-4:30 pm at the Whitney Lab's Center for Marine Studies in the town of Marineland. Everyone who wishes to volunteer as a right whale surveyor (new or returning) should plan to attend this session.

Questions? Contact Joy Hampp at [summerwind99@gmail.com](mailto:summerwind99@gmail.com).



Maia McGuire, PhD  
Marine Extension Agent

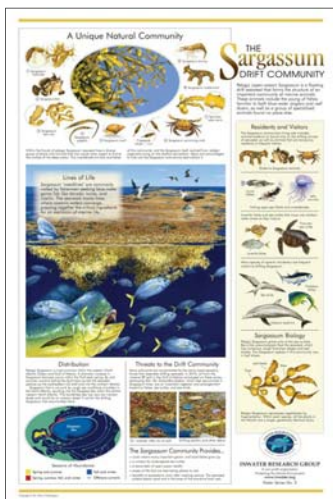
**Inside this issue:**

|              |   |
|--------------|---|
| Aquaculture  | 2 |
| Beachcombing | 3 |

**Free posters for educators**

Dawn Witherington (co-author of *Florida's Living Beaches*) has created two fabulous posters—one focusing on Sargassum and the other on wrack (the debris line left behind after a high tide or storm surge). These posters are available free to educators—preview the posters and find ordering information at

<http://www.inwater.org/POSTER-1.html>.



## Aquaculture

According to the Florida Department of Agriculture and Consumer Services, aquaculture (the culture of aquatic organisms) is the most diverse agribusiness in the state. Over 900 aquaculturists in the state produce almost \$71 million in aquaculture products (2007 figures). Because of its climate, Florida is home to many aquaculture industries, from traditional “fish farms” raising food fish to those raising tropical fish or invertebrates destined for home aquaria, clams or oysters, and aquatic plants. Recently, there has been interest in raising baitfish, or shrimp.

What is involved in getting started in aquaculture? From facilities to permitting, there are many questions that a potential aquaculturist faces. The Florida Division of Aquaculture falls under the Florida Department of Agriculture and Consumer Services. The Division of Aquaculture plays a key role in regulating aquaculture facilities and shellfish processing plants, is responsible for opening and closing shellfish harvest waters to protect human health, maintains a restoration program for oyster reefs and issues leases of submerged state lands for aquaculture.

There are very few aquaculture permit holders in northeast Florida. While there is interest in aquaculture as an industry, most interested people are not sure what type of aquaculture they should pursue, or what regulations govern aquaculture operations in the state. On August 25, 2011, Florida Sea Grant and UF/IFAS Extension held an *Introduction to Aquaculture* workshop at the Whitney Laboratory for Marine Bioscience in the town of Marineland. Twenty-six people came to the day-long workshop where they learned about various types of aquaculture opportunities in Florida. These included food fish, bait fish, clams and marine ornamentals. There were presentations about aquaculture’s perils and pitfalls as well as state permitting requirements and best management practices. Participants learned what resources are available through UF’s vet school, IFAS Extension and Florida Sea Grant.



Of the thirteen attendees who responded to an online evaluation, five attendees stated that they definitely plan to pursue aquaculture in the near future, and three others are thinking about starting up aquaculture operations. The workshop convinced four people to learn more about different types of aquaculture, and made five people excited about aquaculture opportunities in the state. At the same time, four people were discouraged from getting into aquaculture because of information presented at the workshop. The overall goal of the workshop was to provide participants with a realistic overview of the aquaculture industry in Florida, potential aquaculture products, and financial, zoning and permitting requirements for aquaculture operations. From the participant feedback, it seems that goal was met.

## Beachcombing

The 16th annual International Sea Bean Symposium was held on October 21-22, 2011 in Cocoa Beach, FL. The “no-name” storm in the first week of October washed lots of Sargassum seaweed ashore, providing excellent “wrack” lines on Florida’s east coast beaches for beachcombers to explore.

While many beachgoers avoid the mounds of golden-brown (when fresh) to black (when dry) seaweed, avid beachcombers know that the wrack line is the place to look for such treasures as sea beans, mermaids’ purses, rams’ horn shells, pumice (volcanic rock that floats!), and much, much more.

Even trash that is found in the wrack can have a story to tell. Dr. Curt Ebbesmeyer has made a career out of using marine debris to track ocean circulation. “Dr. Beachcomb” (aka Deacon Ritterbush) combines her loves of beachcombing and anthropology to uncover the history of pottery shards and sea glass. Both gave presentations at the symposium this year.

At the Symposium, I learned that the brownish-purple jellies that washed ashore this past spring in large quantities are called mauve stingers. I also learned that sea coconuts can be polished! The Symposium is always held on the third weekend in October—mark your calendars for 2012! Check [www.seabean.com](http://www.seabean.com) for more information.



Pumice—in shades of black, red, green and white



Above: Sea beans: bloodwood, sea coconuts, blister pod, prickly and star-nut palms, coco-plum, sea heart, manchineel, tropical almonds, sandbox tree pod.

Below: polished sea coconuts (photo by Ed Perry)



Turtle bone, fishing lure, mermaid's purse and some plastic toys found in the wrack.



NE Florida Sea Grant Extension Program  
150 Sawgrass Road  
Bunnell, FL 32110

Phone: 386-437-7464

Fax: 386-586-2102

E-mail: [mpmcg@ufl.edu](mailto:mpmcg@ufl.edu)

<http://stjohns.ifas.ufl.edu/sea/seagrant.htm>

We're now on Facebook—check out [facebook.com/NEFLSeaGrant](https://www.facebook.com/NEFLSeaGrant) and “like” it to keep informed about coastal topics in the region. Don't have a Facebook account? That's OK—you can view the page without one :)

### More “Mark your calendars”

- November 19: Right Whale Festival; 10 am—4 pm; Seawalk Pavilion, Jacksonville Beach. For more information, see [http://www.public.sea2shore.org/right\\_whale\\_festival/](http://www.public.sea2shore.org/right_whale_festival/)
- November 19: MarshFest; 10 am—3 pm; Dutton Island Preserves, Atlantic Beach. Call 904-707-3584 for more information
- November 30-December 1: Northeast Florida Boating and Waterways workshop. See <http://stjohns.ifas.ufl.edu/sea/boatingWaterwaysWorkshop.htm> for more information.
- January 13-February 17, 2012: Upland Habitats Master Naturalist class (Volusia Co). See [www.masternaturalist.org](http://www.masternaturalist.org) to register or for more information.
- February 1: River Region East science fair (St Augustine). Judges needed! Please contact Mark Lewis at [lewism@stjohns.k12.fl.us](mailto:lewism@stjohns.k12.fl.us).
- February 14-21: Environmental Interpretation Special Topic course (offered through Florida Master Naturalist Program)—St Johns Co. See [www.masternaturalist.org](http://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.

Aqua Notes is provided as one of the many services relating to educational programs offered by the University of Florida/IFAS cooperative extension service. This publication is available on the Web at <http://stjohns.ifas.ufl.edu>. The use of websites or product names in this publication is not a guarantee, warranty or endorsement of the sites/products named and does not signify that they are approved to the exclusion of others. For more information about this document, contact Maia McGuire at the Flagler County Extension Service at 386-437-7464.

*The Foundation for The Gator Nation*

An Equal Opportunity Institution