

Mark your calendars...

- November 17: 10 am—4 pm. Right Whale Festival, Jacksonville Beach. See www.rightwhalefestival.org for more information
- November 26-December 14: Upland Habitats Master Naturalist class, Nassau County. See www.masternaturalist.org for more information and to register.
- More on back page!

Beachcombing mystery—solved!

I love a good mystery. When someone posted a photo on the Facebook Sea Bean page of a pink plastic tag with a name printed on it that they had found near Daytona Beach, I had to find out where it came from! Thanks to a colleague at Maine Sea Grant, I was able to discover that it was a lobster pot tag from Stonington, ME. Unfortunately we have no way of knowing how long the tag spent in the ocean before finding its way to Florida, but it was fun following the clues! I also had the chance to introduce someone new to the wonderful world of sea beans (not sure what they are? Check out www.seabean.com!). It will be interesting to learn what kinds of sea beans he finds in coastal Maine!



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Florida Master Naturalist Program Teacher Scholarships

The Florida Master Naturalist Program (FMNP) Teacher Scholarship is available to certified Florida teachers who are currently employed by a public or private K-12 school. Scholarships cover the entire cost of one FMNP core module or special topics course. Scholarships will be awarded on a first-come first serve basis in each of the 8 geographic regions recognized by the program. Interested parties must submit a completed application form, a copy of their certification, and a letter of recommendation from the principal of the school where he/she is employed. Applications must be submitted online at www.masternaturalist.org. Applications for scholarships awarded in January will be accepted from May 15 – December 15. Applications for scholarships awarded in June will be accepted from December 16 – May 14. Awardees must register for the course of their choice within 6 months from the date the scholarship is awarded.



Bycatch reduction devices for blue crab traps

Diamondback terrapins are small turtles that live in mangrove and salt marsh habitats along the eastern and Gulf coasts of the United States. Five of the seven subspecies of these turtles live in different geographic regions of Florida. These terrapins are adapted to live in brackish waters. Like sea turtles, diamondback terrapins (DBTs) have salt glands in their eyes which are used to excrete excess salt. Female DBTs grow considerably larger than males.



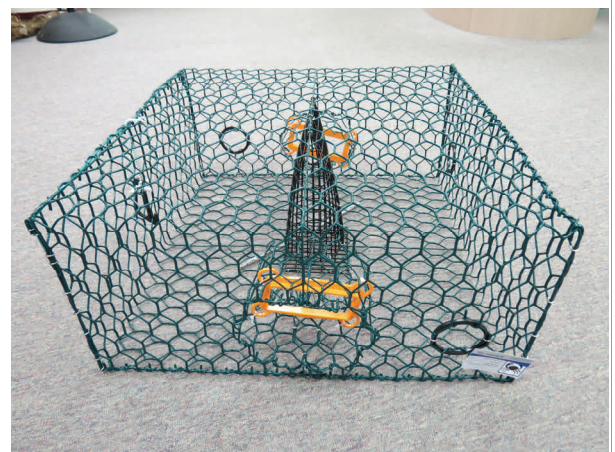
Diamondback terrapin

From the mid 1800's to the 1930's, diamondback terrapins were hunted for terrapin soup. Females, being larger, were preferred to male terrapins. The terrapin fishery collapsed when demand exceeded supply. Natural predators of terrapins include raccoons, fire ants, fish, birds and snakes.

Today, the biggest human threat to DBTs comes from accidental drowning in blue crab traps (both recreational and commercial). Depending on water temperature, DBTs can drown in as little as 45 minutes, however they may be able to survive for up to 5 hours without access to air. Crab traps that are set close to shore, or that become washed into shallow water are the most likely to entrap diamondback terrapins. Most DBTs seem to become trapped during spring months. Single derelict (or "ghost") traps have been reported to contain as many as 94 dead terrapins—these are often adult males or juveniles, as adult females are too large to fit into the trap openings.

Since the early 1990's researchers have been studying rectangular bycatch reduction devices (BRDs) to study their ability to prevent diamondback terrapins from entering blue crab traps. The studies have also examined the effect of the BRDs on the catch rates of blue crabs. Of six studies published between 2000 and 2011, all but one documented that terrapin bycatch reduction devices (4.5 cm in height) had no effect on the number of legal size blue crabs caught in the traps. One study reported that the 4.5 cm BRDs resulted in a 21% reduction in the number of legal blue crabs caught, but the same study found no impact on the catch of peeler crabs.

Blue crab traps seem to catch more terrapins in the spring months (April and May), and have higher bycatch rates when they are placed close to shore (within about 300 meters/1000 feet.) Because recreational blue crab traps are often placed relatively close to shore, the Florida Fish and Wildlife Conservation Commission is suggesting that recreational crabbers install BRDs in their traps. **FREE BRDs are available** (while supplies last) at the Flagler County Extension Office (150 Sawgrass Road, Bunnell, FL 32110).



Blue crab trap with terrapin bycatch reduction devices (yellow plastic rectangles) inserted in trap openings

Right whale updates

On November 17th, the Right Whale Festival in Jacksonville Beach (www.rightwhalefestival.org) will kick off the calving season for the critically endangered North Atlantic right whales. Researchers estimate that there are now about 450 of these whales in existence. Although the number of these 55-foot long mammals is slowly increasing, the main threats to their survival are human-related. Recent articles in Nature magazine and online at the Thank You Ocean Report highlight the high number of whales that are killed in US coastal waters by ship strikes. These high mortalities have led to efforts to change shipping routes and speeds in some locations.

In 2007, the United Nations International Maritime Organization shifted the shipping lanes in the approach to Boston Harbor. Scientists had noticed that the existing shipping lanes ran through an area where high densities of whales (humpback, fin, minke and North Atlantic right whales) gather to feed. By shifting the shipping lane slightly to the north, ships now avoid the areas with high whale abundance, without delaying their transit by more than 10-20 minutes. Acoustic buoys near the shipping lane help to record the presence of right whales so ships can be alerted to slow down if whales are nearby. More information about the buoy system can be found at www.listenforwhales.org. A shift has also been proposed for two of the three shipping lanes used to access San Francisco Bay. The IMO has approved the proposal, and will meet with the National Oceanic and Atmospheric Administration later this year to finalize the plan.

Off the northeast Florida and Georgia coasts, as well as off the New England area, NOAA and the US Coast Guard require ships greater than 300 gross tons to take measures to prevent right whale injuries. Once the ships enter the mandatory ship reporting system area, they must report to a shore-based station. Implemented in 1999, the two reporting areas operate during different times of the year. The northern area operates year-round, but the southern area is only active between November 15 and April 15, when right whales are in the region giving birth to their calves. Once ships report their location, course, speed and route, they are advised about the presence of right whales in the area. The ships are required to post a lookout to watch for whales.

Information about right whale locations in the southern calving grounds comes from aerial surveys and from volunteer right whale spotters. In the area from St Augustine to Daytona Beach, volunteers provide valuable data about the location and identity of right whales. There will be three information sessions for people who are interested in learning more about right whales and the volunteer network. See the "Mark your calendars" section of this newsletter for dates, times and locations.



We're now on Facebook—check out 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 :)



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Educational videos at www.youtube.com/user/IFASCDistrict



More “Mark your calendars”

- December 1: Florida 4-H Marine Ecology Event, Kissimmee, FL. See <http://florida4h.org/programsandevents/marineevent.shtml> for more information.
- December 5: Planning for Sea Level Rise in the Matanzas Basin—stakeholder meeting (Flagler Co residents). Meetings are 9 am–noon or 5:30–8:30 pm at the GTMNERR Marineland office. See <http://planningmatanzas.org/events> to register.
- December 6: Planning for Sea Level Rise in the Matanzas Basin—stakeholder meeting (St. Augustine area residents). Meetings are 9 am–noon at St Augustine Alligator Farm or 5:30–8:30 pm at Flagler College. See <http://planningmatanzas.org/events> to register.
- December 6, 1–2:30 pm: Right Whale Introductory Talk (for potential volunteers and interested members of the public). Flagler County Public Library.
- December 8, 10–11:30 am: Right Whale Introductory Talk (for potential volunteers and interested members of the public). Ormond Beach Public Library.
- December 8, 3–4:30 pm: Right Whale Introductory Talk (for potential volunteers and interested members of the public). St Augustine Beach Public Library.
- January 5, 2013, 2–4:30 pm: Right Whale Survey Training Class for all those wishing to volunteer. Center for Marine Studies, Whitney Lab, 9505 Ocean Shore Blvd., Marineland. Contact marinelandrightwhale@gmail.com for details.
- January 7–25, 2013: Coastal Systems Master Naturalist class, Nassau County. See www.masternaturalist.org for more information and to register.
- January 11–February 15: Upland Habitats Master Naturalist class, Volusia County. See www.masternaturalist.org for more information and to register.
- January 30: River Region East Science Fair (St Augustine). Judges needed—please contact Mark Lewis at lewism@stjohns.k12.fl.us.
- February 4–22: Freshwater Wetlands Master Naturalist class, Nassau County. See www.masternaturalist.org for more information and to register.

Please check the calendar at <http://ifas.ufl.edu/calendar-extension.shtml> for other environmental education programs around the state.

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