

**Mark your calendars...**

- August 3-14;  
Freshwater wet-lands Master Naturalist class (Duval Co). See [www.masternaturalist.org](http://www.masternaturalist.org) to register and for more information
- August 8, 10—2;  
Marina Day (Camachee Cove, St Augustine)
- More on back page!

**Phasing out printed copies of aqua-notes**

Those of you who still receive the printed version of this newsletter by regular mail will be aware that the University of Florida is discontinuing its bulk mail permits for county extension offices. These permits have allowed us to mail quantities of printed materials (including newsletters) at reduced rates. With the cancellation of the bulk mail permits, we will only be able to mail limited numbers of "hard copies" of newsletters (at first class mail rates). Many of you have already notified me that you are willing and able to receive e-mail notification of the newsletter (which is posted on my website in .pdf format) and a few have requested that I continue to send hard copies by mail. For those of you who are receiving this newsletter in the mail and have not contacted me to make other arrangements, this will be your LAST copy of aqua-notes. If you have not done so already, please e-mail me or give me a call to let me know that you wish to continue receiving mailed copies of aqua-notes, or if you have an e-mail account that I can use to send you future issues. Thanks for helping us conserve funds and paper!



*M. P. McGuire*

Maia McGuire, PhD  
Marine Extension Agent

**Inside this issue:**

**New state Shoreline Fishing License takes effect Aug 1, 2009**

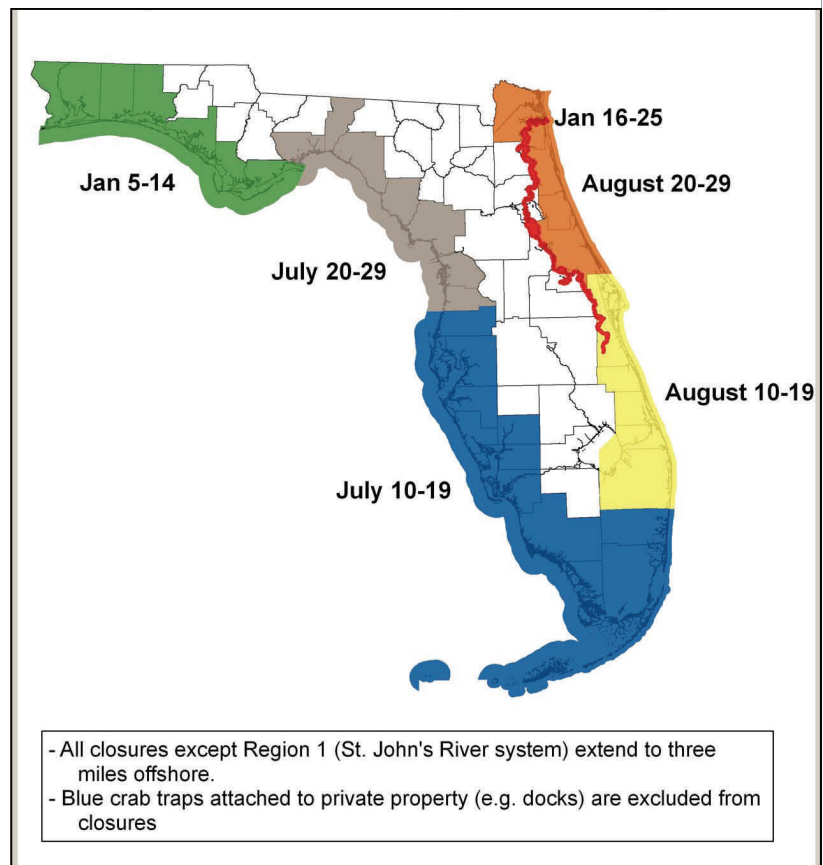
Previously, Florida residents who are saltwater anglers fishing from shore or from a dock or pier have not needed to possess saltwater fishing licenses. However, effective August 1 2009, the state will require most of these anglers to possess shoreline fishing licenses (\$9.00) which went on sale in mid-July. Anglers who have recreational saltwater fishing licenses do not need to purchase the shoreline fishing license. A new federal fishing license requirement will take effect on Jan 1, 2010. Florida residents who have the Florida shoreline fishing license (or recreational saltwater fishing license) will be exempt from the more expensive federal fishing license. As with the recreational saltwater fishing license, there are several groups of people who are exempt from having to purchase a shoreline fishing license. These exemptions include youth under 16, senior citizens, anglers fishing from a licensed pier and several other groups. Check the FWC website at <http://myfwc.com/Fishing/Index.htm> for more information.

## New closed seasons for blue crab traps

Recreational and commercial harvesters of blue crabs need to be aware that Florida has implemented closed seasons for the use of blue crab traps around the state. These closures affect any buoyed blue crab trap (traps tied to docks are not affected and can still be used during closed seasons). The purpose of the closures is to make it easier to remove derelict crab traps, which can become navigational hazards and can trap and kill large numbers of aquatic (and terrestrial) wildlife.

Coastal waters of northeast Florida (including the intracoastal waterway) from the Georgia border through Volusia County will be closed to blue crab traps from August 20-29 each year. A separate closed period will be in effect for the entire St Johns River from January 16-25 each year. Recreational and commercial crabbers should remove their traps from the water during these closed periods, or the traps may legally be hauled and discarded during an approved cleanup effort. During closed periods, any buoyed blue crab trap, derelict trap or trap debris that is in the water may be removed by participants in a permitted, organized crab trap cleanup effort. Crab trap cleanups can be conducted by any group, at any time of year, as long as the group has a written plan which has been approved by the Florida Fish and Wildlife Conservation Commission (FWC). If a cleanup is conducted outside the closed time period, only traps meeting certain criteria are allowed to be pulled from the water. During open season, any trap containing six intact sides can only be removed in an approved cleanup event if it meets the definition of "derelict" by lacking three of the following: buoy, line, current trap tag or ID, or current commercial saltwater products license. Trap debris (any piece of a trap or combination of pieces that does not make up a fishable trap) can be removed during any approved cleanup events.

To learn more about organizing derelict blue crab trap removal events, see the FWC website at [www.myfwc.com](http://www.myfwc.com). The Florida Sea Grant Extension Program is investigating the possibility of organizing a blue crab trap cleanup event in Flagler and St Johns County intracoastal waters in early 2010. Anyone who observes derelict crab traps in the area is asked to notify Maia McGuire at [mpmcmg@ufl.edu](mailto:mpmcmg@ufl.edu) or by calling 386-437-7464. Please provide GPS coordinates of the derelict traps if possible. These data will be used to help determine which areas should be targeted by a cleanup effort.



Map of blue crab closures in Florida. Dates will be the same each year.

## Ocean facts



The Earth has one big ocean with many features, including several ocean basins, but 95% of the ocean realm is unexplored. The ocean covers 71% of the earth's surface, and contains 97% of the earth's water, as salt water. The average salinity (salt content) of the ocean is 3.5%. The average depth of the ocean is 3,795 m (about 2.3 miles). The deepest point in the ocean is in the Mariana Trench in the Pacific Ocean. Here the ocean is 11,000 meters (6.8 miles) deep. To get an idea of how deep that is, if you could take Mt. Everest and place it at the bottom of the trench there would still be over a mile of ocean above it. The ocean contains the longest mountain range on earth—the mid-ocean ridge system. This range is over 65,000 km (40,000 miles) in length and winds around the globe from the Arctic Ocean through the Atlantic and Pacific Oceans to the west coast of North America. It is four times longer than the Andes, Rockies, and Himalayas combined. 90% of the mid-ocean ridge system is under the ocean. The highest mountain on earth is found in the ocean—Mauna Kea, in Hawaii, is 10,203 meters (6.3 miles) tall, but only 40% of this is above sea level.

The ocean and life in the ocean shape the features of the earth. Many of the sedimentary rocks found on earth formed in the ocean. Ocean currents and waves are responsible for transporting sand from one location to another. The Gulf Stream is a well known current of warm water in the Atlantic Ocean. At a speed of 97 km/day (60 miles/day), the Gulf Stream moves 100 times as much water as all the rivers on earth and flows at a rate 300 times faster than the Amazon, which is the world's largest river.

The ocean is a major influence on weather and climate. Absorption of solar radiation and loss of heat through evaporation by the ocean drive atmospheric circulation and contribute to hurricane formation. The ocean has had, and will continue to have, a significant influence on climate change by absorbing, storing, and moving heat, carbon and water. The ocean makes earth habitable. Most of the oxygen in the atmosphere originally came from photosynthetic organisms in the ocean. The ocean and humans are inextricably interconnected. In 2007, four out of five Americans lived in coastal states, generating 83% of the Nation's economic output, and contributing \$11.4 trillion to the national gross domestic product. Air pollution is responsible for 33% of the toxic contaminants that end up in oceans and coastal waters. All major watersheds on earth drain into the ocean. About 44% of the toxic contaminants in the ocean come from runoff via rivers and streams. Each year, three times as much rubbish is dumped into the world's oceans as the weight of fish caught.

The ocean supports a great diversity of life and ecosystems. Oceans contain 99% of the living space on the planet. Almost every known phylum of creatures is represented in the ocean. The swordfish and marlin are the fastest fish in the ocean reaching speeds up to 121 kph (75 mph) in quick bursts; the bluefin tuna may reach sustained speeds up to 90 kph (56 mph.) The blue whale is the largest animal on our planet ever (exceeding the size of the greatest known dinosaurs) and has a heart is the size of a Volkswagen.



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## More “Mark your calendars”

- Sept 11-Oct 16: Freshwater wetlands Master Naturalist Class, Volusia Co. To register, or for more information, see [www.masternaturalist.org](http://www.masternaturalist.org).
- Sept 16-Oct 28: Uplands Master Naturalist Class, Clay Co. To register, or for more information, see [www.masternaturalist.org](http://www.masternaturalist.org).
- Sept 19: International Coastal Cleanup. See [www.oceanconservancy.org](http://www.oceanconservancy.org) to sign up!
- Sept 19: Palm Coast waterway cleanup event.
- Dec 5: Right Whale Festival, Jacksonville Beach. See [www.rightwhalefestival.org](http://www.rightwhalefestival.org) for more information.

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



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