

**Mark your calendars...**

- February 3—Water Education Festival, MOSH, Jacksonville. Contact Felicia Boyd at wavduval@sjrwmd.com for information.
- Feb 15—First Coast Regional Envirothon. McGirts Creek Park (Jax). For more information, contact Diane at 904-266-0088 ext 191.
- March 1— April 5—Coastal Master Naturalist Class (Volusia Co)—see [www.masternaturalist.org](http://www.masternaturalist.org) for more information or to register.
- More on back page!

**Where does the time go?**

This starts my seventh year of aqua-notes newsletters and causes me to reflect back on the past several years. Thanks to all of you who have helped with programs past and present, including monofilament recycling, various festivals and events. 2007 promises to be another busy year (although hopefully not for hurricanes!)—my calendar is already booked through the summer! As always there are many more events than time... I hope you all enjoy this month's newsletter—let me know if you have questions or topics you would like to see addressed in future issues! Have a great spring.

*M. P. McGuire*

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Willets feeding near the Matanzas Inlet in early January

**FWC seeks public views on future of saltwater fishing**

The Florida Fish and Wildlife Conservation Commission (FWC) has scheduled a series of public workshops to hear what people think about the future of saltwater fishing in Florida. The FWC has been working with a group of stakeholders to develop a draft vision document regarding the future management and protection of Florida's marine fisheries resources. The Commission now is asking the public to comment on this document, which includes a vision statement and five focus areas relating to marine habitat enhancement and protection, ecosystem management, research coordination, interagency coordination, and funding and staffing needs. The document is available online at [MyFWC.com/marine/workgroups/futureoffishinginfl.html](http://MyFWC.com/marine/workgroups/futureoffishinginfl.html).

Everyone is encouraged to participate at the workshops, which will take place from 6-8 p.m. The NE Florida workshop will be held on Thursday, Feb. 15 at the Jacksonville Public Library, 303 N. Laura Street. Contact Lee Schlesinger at (850) 487-0554 for information regarding the upcoming workshops

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## Portuguese man-o-war communities



Portuguese man-o-war washed up on the beach

The Portuguese man-o-war belongs to a group of organisms called hydrozoans. Most hydrozoans are small and planktonic, although many form colonies. Portuguese man-o-war are colonies of many, many individual animals, each of which has a specific role in the colony. Some individuals are responsible for reproduction, others for feeding or defense. All of the individuals are attached to a gas-filled float which looks like a pale purple/blue plastic bag.

The man-o-war is an oceanic species, but is often blown ashore on NE Florida beaches by strong NE winds. The man-o-war is not the only floating hydrozoan that can wash up on our beaches, but you'll have to look closely to see the others! Blue buttons is the common name for a small, circular hydrozoan which is usually only about 1 cm in diameter. If freshly washed ashore, it will have the same blue/purple color as the man-o-war, as it also is made up of a colony of individual animals. Blue buttons are flat (instead of an inflated sac, they have a thin, clear membrane that is like a small circular piece of plastic wrap), and the tentacles are very short.

The tentacles do not inflict a sting on people. The by-the-wind-sailor also has a membrane structure, but it is oval, with an upright triangular "sail." When alive, it has small non-harmful animals on the underside of the oval disk, similar to those of the blue buttons.

Other members of the man-o-war community include a small, silver and blue fish (the man-o-war fish) which can swim among the man-o-war's tentacles without being stung. This fish probably lures other fish into the waiting tentacles, where they are captured by the man-o-war. In return, the man-o-war fish may be able to feed on pieces of these fish as they are being digested by the man-o-war. A sea slug, or nudibranch, is also part of the man-o-war community—this purple slug feeds on the man-o-war tentacles and incorporates the nematocysts (stinging cells) into its body parts, thus acquiring a defense mechanism from its food source! The sea slug uses the surface tension of the ocean water's surface to allow it to slide along (underwater).

The final members of the man-o-war community are a group of snails that have a unique adaptation which allows them to float in the open ocean. The purple sea snails (genus *Janthina*) can create a bubble float to which they remain attached. Purple sea snails have very beautiful, and quite fragile shells. Like the sea slug, they also feed on the man-o-war, blue buttons and by-the-wind sailor. For great photos of all of the critters in this article, check out <http://www.imagequest3d.com/catalogue/surfacedrifters/index1.htm>.

## First Coast Birding & Nature Festival

The First Coast Birding and Nature Festival is not until April, but field trips are already filling up. To check out the great tours, seminars and activities that are offered as part of this annual event based at the St Augustine Amphitheatre, check out [www.getaway4nature.com](http://www.getaway4nature.com). The Festival runs from April 12-15, 2007 and features many well-known nature photographers, boat trips, birding tours, kayak excursions and kids' activities. You might want to enter the photography contest (deadline Friday, March 30). Mark your calendars for this great weekend event!



# Jellyfish!

Thanks to the (mostly) warm weather that December and January brought to NE Florida, more people than usual were at the beach in those months. Many noticed the large, brown, rubbery cannonball jellyfish that were washed up on the beaches. This is not unusual for winter months, but usually there aren't that many people around to take note of them! Cannonball jellyfish, also called "jellyballs," are very common in waters off NE Florida. The cannonball gets to be about 8" in diameter and is a very "solid" jellyfish compared to most. It is very high in collagen.

Jellyfish belong to the phylum Cnidaria, along with corals and sea anemones. All members of this phylum contain stinging cells called cnidae or nematocysts. Nematocysts contain a small harpoon-like barb attached to a coiled thread. When the nematocyst is triggered to fire (mechanically or chemically), it shoots out the barb, which also contains a small amount of protein-based toxin. The toxins produced by some cnidarians produce a painful reaction in humans, however most cnidarian toxins do not affect people.

The cannonball jellyfish falls into the latter group. The "jellyfish" best known for inflicting painful stings is the Portuguese man-o-war, which is not a true jellyfish, but belongs to the class hydrozoa (see previous page). The tentacles of the man-o-war can be very long, and may become broken off from the main colony. For this reason, if there are Portuguese man-o-war in the water, it is a good idea for people to stay out of the water. If the float of the man-o-war is in one area, the broken pieces of tentacle may still be washing around in the surf many hundreds of feet away. The tentacles can sting even if not connected to the float, and can continue to sting even if the man-o-war has washed ashore and appears to have dried up. Mechanical action (touching the tentacles) can cause the nematocysts to fire.

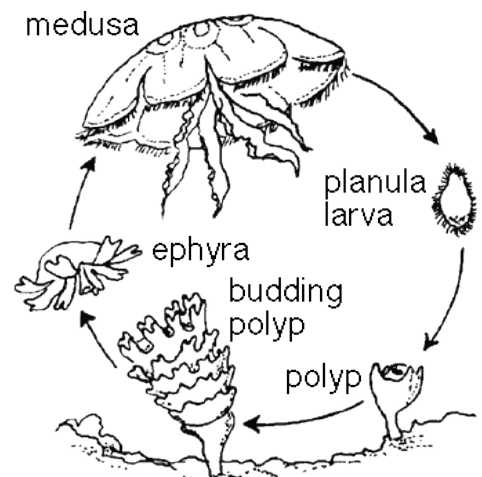
If you are stung by a jellyfish, the tentacles may stick to your skin. Try not to rub the tentacles as this will cause more nematocysts to fire into your skin. If possible, use tweezers or a flat blade to gently pull or scrape off the tentacles. Research from Australia suggests that, as for stingray barb injuries, hot water applied to jellyfish stings may provide the best pain relief as it appears to destroy the toxin. Mild vinegar or meat tenderizer are often also recommended. Do not rinse the tentacles with fresh water to get them off, as this will cause more nematocysts to discharge.

In some parts of Florida (primarily Martin County) in the spring, there are reports of "sea bathers' eruption," often erroneously called "sea lice." SBE is caused by tiny larval thimble jellyfish which are present in large quantities in the ocean water around May of each year. These baby jellyfish (planulae) also have stinging cells, and the planulae are small enough to get into the fibers of bathing suits. People swimming in water containing thimble jellyfish planulae report being stung in areas where their bathing suit elastic touches their bodies, as well as around their neck (for people with long hair). Even after the bathing suit has been washed and dried, it may still contain planulae with their nematocysts, which can be triggered the next time the bathing suit is worn.



Cannonball jellyfish washed up on the beach

## Jellyfish Life Cycle





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### More “Mark your calendars”

- March 19-23—“Exploring our Environment—from the ocean to the River.” Adult “day camp” program at GTMNERR office at Marineland. Cost \$100. To register, contact Maia at 904-209-0430 or [mpmcg@ufl.edu](mailto:mpmcg@ufl.edu). Class is almost full!
- April 3-28—Freshwater Wetlands Master Naturalist Class (Clay Co)—see [www.masternaturalist.org](http://www.masternaturalist.org) for more information or to register.
- April 12-15—First Coast Birding & Nature Festival, St. Augustine. See [www.getaway4nature.com](http://www.getaway4nature.com) for information and to register for field trips and seminars.
- April 21—Jacksonville Earth Day celebration 10 am—4 pm at Jacksonville Landing. <http://www.jea.com/earthday/>
- April 21-22—Washington Oaks State Park Earth Day celebration
- April 27-29—Florida Marine Science Educators Association conference, Naples. See [www.fmsea.org](http://www.fmsea.org) for details.

Please check the calendars at <http://calendar.ifas.ufl.edu> and [www.enviroedjax.org](http://www.enviroedjax.org) for other environmental education programs around the state.

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