



aqua-notes

3125 Agricultural Center Drive
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Volume 2, Issue 4

November, 2002

Mark your calendars...

- November 5-6: Workshop: "Invasive Species in Florida's Saltwater Systems: Where We Are and Where We're Going" at Tampa Aquarium. For details, see link at www.flseagrants.org.
- November 8-9: Florida Aquaculture Association annual meeting, Tampa. Call 863-293-5710 for information.
- More on back page!

Another year's almost gone...

The saying "time flies when you're having fun" certainly applies to me these days. I can't believe another quarter has sped by and the year's almost over! I've been working with several local marinas to help them meet the Clean Marina criteria—before the next newsletter comes out we should have our first Clean Marinas in St. Johns and Nassau counties! The monofilament recycling program is going very well—from the data that the volunteers have reported, we've collected over 200 lbs of fishing line in less than a year!



Marina staff, boaters and emergency management personnel are encouraged to attend the presentation, "Fire in Your Marina" on November 13

M. P. McGuire

Maia McGuire
Marine Extension Agent

Fire in Your Marina

With over 870,000 vessels registered in the state of Florida, and an additional 400,000 boats that visit our state each year, the potential for a large-scale fire exists at any local marina. Marina staff, boaters, and emergency service personnel in northeast Florida are invited to attend "**Fire In Your Marina: Are You Planning To Have One Today?**" a seminar by Gene Spinazola, P.E., a marine crisis management consultant. The seminar, which is free, will be offered twice on Wednesday, November 13, 2002 and is sponsored by the Jacksonville Marine Association, the Florida Department of Environmental Protection and the University of Florida Sea Grant Extension Office. The first session will be at 1 pm at the Duval County Agricultural Center and the second session will begin at 6 pm at the St. Johns County Agricultural Center. For more information, contact Maia McGuire or April Alexander at the Sea Grant Extension Office (904-824-4564).

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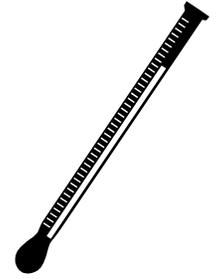
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Mercury—could it be making you sick?

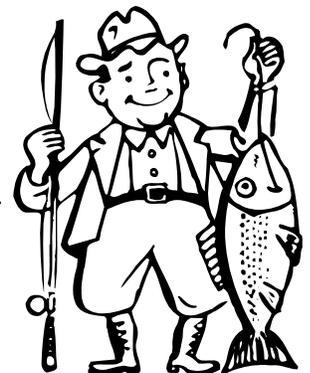
Mercury. Quicksilver. Most of us probably remember somebody breaking a mercury thermometer in science class and the panic that ensued as the teacher tried to stop everyone from playing with the liquid metal that formed little balls and raced around the floor. Some people may even be aware that the phrase “Mad as a hatter” originated when mercury was used in the manufacturing of felt hats. People working in the hat factories were prone to mercury poisoning, which can cause nerve and brain damage, sight and hearing loss and birth defects.



Today, it is rare to see a mercury thermometer, as the red alcohol-filled ones are now used in schools, and digital thermometers are becoming the norm in homes, doctors' offices and hospitals. Mercury is still used in many thermostats, bilge switches and in fluorescent light bulbs, but improvements in technology are resulting in a decrease in the amounts of mercury being used in these devices. Recycling programs for mercury are in place—check with your county solid waste department to find out where to take items containing mercury.

Mercury in the Environment

- An estimated 243 tons of mercury gets pumped into U.S. air each year from human activities. Once released into the environment, mercury can be recirculated through the air, soils and water for extremely long periods, possibly even hundreds of years. Total global atmospheric mercury has at least doubled during the industrialized age and may have increased five-fold since 1890. A 1992 national study by the U.S. EPA found mercury in fish at 92 percent of more than 314 water bodies tested across the nation.
- Humans can be exposed to methylmercury, one of mercury's most toxic forms, by drinking contaminated water, breathing contaminated air, or eating contaminated beef, milk, chicken, eggs, lamb, pork, leafy vegetables, potatoes, cereal grains and fruits--but by far the most important exposure route is through eating freshwater fish.
- When mercury is deposited into the water, microorganisms help convert it to methylmercury, a highly toxic form of mercury. Small organisms and plants take up the mercury as they feed. As animals higher up the food chain eat those plants and organisms, they, too, take in methylmercury. The process continues, with levels of mercury increasing, up the food chain. This process is known as bioaccumulation. Fish higher in the food chain, such as sharks and swordfish, have much higher mercury concentrations than fish lower on the food chain.
- In general, people who eat more than 3.5 ounces of fish each day may be eating enough methylmercury to cause health problems.
- For the most part, marine seafood consumed in the U.S. is safe. Elevated levels of mercury are principally found in shark, swordfish and some tunas.
- The population groups considered most at risk from methylmercury consumption are women of child-bearing age (between 15 and 44) and children below age 15. The FDA recommends that pregnant women, or women who may become pregnant limit their intake of shark and swordfish to one meal per month



What fish are safe to eat?

The Florida Fish and Wildlife Conservation Commission website (<http://floridafisheries.com>) contains health advisories for fresh and saltwater fish in Florida. In general, fresh and saltwater fish caught in Northeast Florida are safe for unrestricted consumption (they contain very low levels of mercury). However, largemouth bass, bowfin and gar caught in the St. Mary's River or shark caught in any marine or brackish water should not be eaten more than once a week (once a month for nursing or pregnant women and children). A meal is considered to be eight ounces of fish.

Monofilament recycling poster contest

Are you interested in helping the environment? Do you like to paint, draw or color? If so, you should enter the monofilament recycling poster contest. This contest is to promote awareness of the monofilament recycling program in NE Florida and winning artwork will be used to produce posters, t-shirts and calendars. Poster contest rules and entry forms can be downloaded from <http://stjohns.ifas.ufl.edu/sea/SEAGRANT.htm> or by calling 904-824-4564. The contest is open to all ages (4 age categories) and prizes will be awarded to the top three entries in each age group. The entry deadline is January 31, 2003. Entries can be mailed or hand-delivered to Maia McGuire at the St. Johns County Agricultural Center (mailing address 3125 Agricultural Center Drive, St. Augustine, FL 32092).



Please bookmark this site!

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

I have been working hard to update the Sea Grant portion of the St. Johns County Extension Office website. Check out the site (above) to find out what I'm up to. Take the angler's survey. Learn about marine careers and the Marine Explorer Program. Find out who has sponsored monofilament recycling stations and where the stations are located. Learn which marina is the latest to be designated as a Clean Marina. Find out about the Marine Ecology Judging Event workshops. Check back often as I will be updating the site regularly. I am working on getting my PowerPoint presentations and other educational materials online—"Water and Watersheds" is already available for download, along with the companion "Water Jeopardy" game! Check them out!





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More “Mark your calendars”

- November 12-14: Symposium on the Effects of Fishing Activities on Benthic Habitats, Tampa, FL. See walrus.wr.usgs.gov/bh2002/ for more information.
- November 13: Fire in Your Marina presentation by Gene Spinazola. See the link at <http://stjohns.ifas.ufl.edu/sea/SEAGRANT.htm> for details or call 904-824-4564.
- November 22-24: Invasive Species Educator Workshop, Florida Aquarium, Tampa. Stipend, hotel and field trip provided. Call 813-273-4015 for details.
- November 23: 4-H Marine Ecology Judging Event at Camp Ocala. Call Maia at 904-824-4564 for details.
- January 31, 2003: Deadline to enter monofilament recycling poster contest. See story inside for details.
- February 3-7, 2003: Elderhostel program: “Marineland: More than just a dolphin show”. See www.elderhostel.org for more information

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 in alternative format upon specific request. For more information about this document, contact Maia McGuire at the St. Johns county extension service at 904-824-4564