Mark your calendars…

- May 18: Women in Science—presentation geared towards encouraging 8th-10th grade girls to pursue careers in science. Ponte Vedra Library, 3:30 pm.
- May 20-21: Environmental Education Fair, River to Sea Preserve (Flagler County) See http://www.scenica1.org/EnvironmentalEducationForum.aspx for more information
- More on back page!

Gearing up for a busy summer

Summer may be a time for vacation and relaxation for many people, but for those of us in Extension, it’s one of the busiest times of the year. Once FCATs are over, schools look for field trips and plan science nights. During summer months, I teach day camps and attend the National Marine Educators Association conference. This summer I will also be teaching some workshops, working with teachers from Mayport Elementary School in Jacksonville as they gear up to become a marine magnet school. I’m also wrapping up the second book in the “Explore the National Marine Sanctuaries with Jean-Michel Cousteau” series—this one focuses on the sanctuaries off the west coast of the US. It should be available this fall. So, if you try to reach me between July 18 and 22 and are told that I am backpacking and have no cell phone or internet access, maybe you’ll appreciate why that is 😊

If you have a few minutes, UF Extension would appreciate your input as we start to plan our priorities for the coming years. Please go to www.solutionsforyourlife.com and click on “We Need Your Advice” to fill out a survey. Thanks!

Great new resource books

I have recently learned about a couple of newly-published books that might be of interest to those of you with coastal interests.
For those interested in fish identification, “A Field Guide to Coastal Fishes from Maine to Texas” by Val Kells and Kent Carpenter was just released by Johns Hopkins Press. You can preview some of the content at http://fieldguidetofishes.com/. The book is quite comprehensive, and the illustrations are marvelous!
“Sandhills, Swamps & Sea Islands” by Heather McCarthy and Lynn Lisenby is described as an environmental guidebook to Northeast Florida. Published by the University of North Florida’s Environmental Center this book provides an overview of coastal habitats in the region, with lots of color photographs. You can view a sample chapter at www.wormreefs.com.
Invasive species

The Florida Invasive Species Partnership is promoting several educational programs and invasive plant removal efforts in our state. These activities are coordinated by regional cooperative invasive species management areas (CISMAs). There are two CISMAs in our region: the First Coast Invasives Working Group (FCIWG: Nassau, Duval, St Johns, Clay and Baker Counties) and the East Central Florida CISMA (Flagler, Volusia, Brevard and Putnam Counties). I am the co-chair of the FCIWG. Information about the Partnership and the CISMAs can be found at www.floridainvasives.org.

So what is an invasive species, anyway? Plants and animals are considered “invasive” if they are non-native to Florida (i.e. were not present when the Europeans settled here) and if they cause some sort of negative environmental, economic or health impact. There are many non-native species that are not considered invasive. In Florida, the Florida Exotic Pest Plant Council (FLEPPC), a non-profit group, produces a list of invasive plant species. This list is updated every other year. Invasive plants are listed as either “Category I” or “Category II” plants--category I plants are known to have caused ecological damage, while category II plants are known to have increased in abundance or frequency, but have not yet caused the level of damage seen by category I plants. The list can be viewed at www.fleppc.org.

It is important to know that of the 142 plants listed on the FLEPPC list, only 35 of these may not be sold in Florida (because they are designated as noxious weeds, or prohibited plants.) Homeowners are encouraged not to plant landscaping plants that are designated as invasive, in order to try and slow the spread of these plants into natural areas of the state. Many of the invasive plants produce berries or seeds that are eaten by wildlife, so they can easily be transported from someone’s home garden into conservation lands.

There is not an animal equivalent of FLEPPC, so it is more difficult to determine whether a non-native animal (including fish) should receive the label of “invasive.” However, some species, like the Burmese python and the lionfish, have biologists extremely concerned. Many of the animals that cause problems for Florida’s environment are species that were most likely introduced through the pet trade. It is very important that pet owners not release their pets into the wild. Most pets are not animals that are native to Florida. If they are released here, many will not survive. However, those that do survive can become a threat to native animals. For more information about this issue, see the links at http://stjohns.ifas.ufl.edu/sea/DontRelease.html.
Invasive species (cont.)

Non-native plants and animals generally do not have predators in Florida, whereas in their native ranges, predators exist that keep the populations in check. In order to try and control invasive plants, biologists often look for “biological controls”—typically insects that feed on or bore into these plants in their native range. Scientists then spend many years studying those biological controls to try and find one that will feed ONLY on the invasive plant. If their tests show that such a control organism exists, they will apply for permits to be allowed to release the organism in areas where the invasive plant is abundant. These biological controls are often used as part of an integrated pest management plan, which may also include the use of chemicals or mechanical labor to try and reduce the invasive plant population.

Biological controls are being used to try and control water hyacinth, Melaleuca trees and tropical soda apple. Insects are being studied for possible use against air potato and Brazilian pepper. Control of invasive plants and animals is expensive and difficult. Preventing the introduction of non-native plants and animals that could become invasive is highly desirable.

Transporting firewood from one area to another can result in the spread of invasive pests. Laurel wilt, the fungus that is killing red bay trees throughout the southeastern US. The fungus has also been found on avocado trees in Duval and Brevard Counties. In 2006, the fungus was fairly widespread through northeast Florida. While it was not in Flagler, Volusia or Brevard Counties at that time, it was in Indian River County (it has since been found in Flagler, Volusia and Brevard Counties). It is thought that transport of infected red bay wood (possibly from the Jacksonville area) introduced the fungus to Indian River County.

Infected trees’ leaves turn brown, but stay attached to the tree for many months. More information about laurel wilt can be found at the University of Florida’s IFAS Extension website: www.solutionsforyourlife.com or the Florida Department of Agriculture website: www.freshfromflorida.com (search for “laurel wilt”).

Florida residents are encouraged to learn what landscape plants are considered invasive, and to replace invasives that might be in their gardens. Additionally, residents can volunteer for invasive plant removal work days (many of these are listed on the calendar at www.floridainvasives.org). People can also report sightings of invasive plants and animals to a central database hosted by the University of Georgia’s Center for Invasive Species and Ecosystem Health. These reports help biologists to track the spread of invasives and to set priority areas for control efforts. The website is www.ivegot1.org. Landowners and managers should consider joining their local CISMA—these groups provide training and also have opportunities for partnering with other organizations or groups on invasive plant removal efforts.
More “Mark your calendars”

- June 9-20: Coastal Master Naturalist Class (Duval Co.) see www.masternaturalist.org for more information.
- June 20-23: 4-H Coastal Camp (contact the St Johns County 4-H program at 904-209-0430 or the Flagler County 4-H program at 386-437-7464 to see if space is available).
- July 12: Aquatic Species Educators’ Collecting Permit workshop; 10 am-noon. GTMNERR Environmental Education Center (Guana). Contact Maia for more information or to register.
- August 1-4: 4-H Coastal Camp (contact the St Johns County 4-H program at 904-209-0430 or the Flagler County 4-H program at 386-437-7464 to see if space is available).
- October 31-November 21: Coastal Master Naturalist Class (Nassau Co.) see www.masternaturalist.org for more information

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