

Florida Master Naturalist Program



UNIVERSITY OF
FLORIDA

EXTENSION

Institute of Food and Agricultural Sciences



*June Graduating Coastal Class,
Gumbo Limbo Nature Center*

Program Update	1
Instructor Information	2
Wild Eye	3
Interpretive Tracks	3
Class Information	4
Contacts	4

Engaging FMNP Graduates

Greetings! The first 6 months of 2003 have been very productive, with 20 Coastal Systems courses taught and 221 graduates! Wetlands courses had a strong showing too, with 12 classes and 86 graduates. This brings the total number of FMNP graduates to just over 800!

This brings me to the most important point of this column. We need to remember that our mission goes beyond providing information to FMNP participants - we need to prepare them to help us with our mission of educating Florida's citizens and visitors. To strengthen a strong conservation ethic that will ensure Florida continues to be a natural wonderland long into the future. For our enjoyment and the enjoyment of future generations, and perhaps even for our survival.

Instructors - impress upon your students that they are to be teachers. They are to use their enthusiasm, knowledge, and the knowledge they will continue to accrue to share the mysteries of nature with others.

FMNP Graduates - you have a role in our mission, and it is an important one. Get engaged in your communities. Talk to a child, your neighbor, your homeowners association. Write a column for the newspaper. Volunteer with a local nature center, park, refuge, or other facility where you can help others see what you see, feel what you feel, and care like you care.

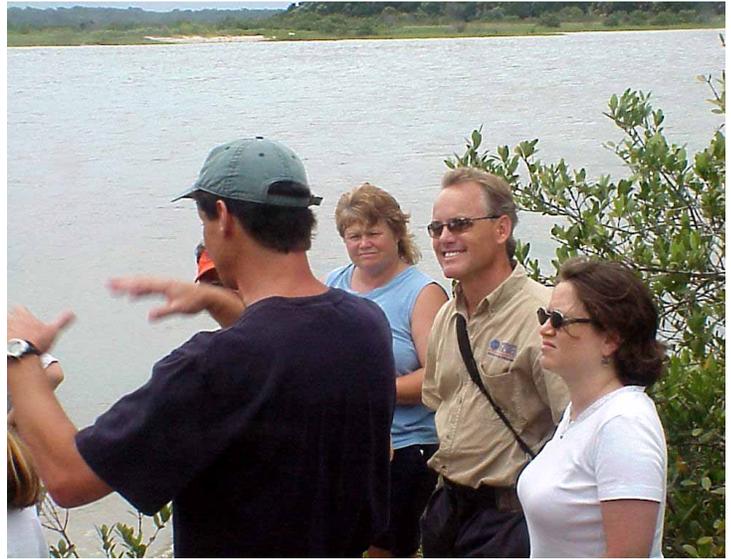
The FMNP Volunteer/Job Opportunities page - is a new feature on the FMNP web site and is intended to help FMNP graduates become actively engaged in their communities. Please check it out. Instructors, you need to send in your volunteer/job opportunity links; see the site for specific information. Pass the word on to other organizations that promote science-based environmental education and we'll post their links as well. Our goal is to make opportunities more accessible to FMNP graduates, so they can become active emissaries for environmental education and a stronger conservation ethic in Florida. Together we can make a difference!

Marty

Dr. Martin B. Main
FMNP Program Director
UF Associate Professor and Ecologist
Southwest Florida Research and Education Center
Immokalee, Florida



FMNP Director Marty Main loses his head in a solution hole



UF Whitney Lab Instructor Bill Buzzi leads salt marsh discussion

NEW FMNP Coastal Instructors attend St. Augustine Workshop, May 21-22, 2003

The FMNP Spring Instructor Training session added 28 new Coastal Instructors and 8 new organizations to our group (listed below). We now have 135 FMNP Instructors in 40 counties.

Collier County Public Schools - Leslie Breland

Highlands County Soil & Water - Jennifer Brunty

Learning Gate Comm. School, Hillsborough - Betty Wargo, Seaton Tarrant

Okaloosa UF/Extension - Sheila Dunning

Gumbo Limbo Nature Ctr. - Dom Cosica, Susan Elliott, Dori Faerman, Nancy Leeds, Debra Wilson

Sarasota Crowley Museum - Debbie Dixon

GTM NERR, St. Johns - Janet Zimmerman

Marine Discovery Center, Volusia - Gary Melsyn, Bruce Jaildagian, Barbara Plourde

Collier County Parks - Nan Gerhardt, Nancy Olson

FCES Riverwoods Field Lab - Loisa Kerwin

Env. Learning Ctr. Indian River - Heather Stapleton

Orange Co. Audubon Soc. - Deborah Green

FWCC, FMRI, Pinellas - Chris Anderson

Manatee Community College - Denise Bristol

UF Whitney Lab, St. Johns - William Buzzi

Walton County UF Extension - Kim McDonald

Featured Web Site: Frogs & Toads of Florida: <http://www.wec.ufl.edu/extension/frogs>

Tell us your favorite Naturalist Site!

Marine Posters available for purchase:

Cetaceans to invertebrates, ocean currents and topography. Some have worksheets.
<http://www.leaveonlybubbles.com>

Interested in becoming an FMNP Instructor?

FMNP Instructor Workshops are required for all new instructors and existing, certified instructors who want to teach a new module. There is no fee for attending Instructor Workshops, but prospective instructors must submit an instructor application (available on the FMNP web site) and receive approval to attend. Instructor workshops are 2 days long with an optional field trip on the second day. More information about Instructor benefits, qualifications, and responsibilities can be found on the Master Naturalist Website: www.MasterNaturalist.org under the "Information" link.

Wild Eye Watch on:

Bioluminescent Plankton, *Pyrocystis noctiluca*

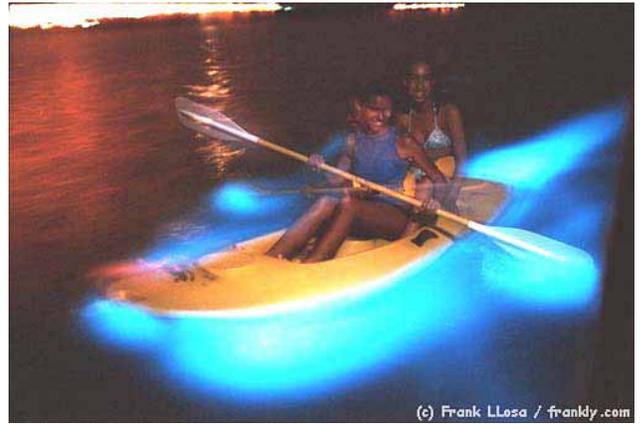
Identifiers: single-celled with paired, flagella

Status: abundant, common in Gulf of Mexico

Reproduction: by cell division

Adaptations: bioluminescent defense system created by chemical reaction

Fun Facts: latin name = night light fire cell
exhibit limited mobility



Kayak hull and paddles disturb bioluminescent plankton

Plankton species contribute approximately one-third to the earth's total primary production. Dinoflagellates are micro-phytoplankton which have characteristics of both plants and animals and move with the aid of small flagella. *Pyrocystis noctiluca* is a marine dinoflagellate, capable of bioluminescence. During the day chloroplasts are distributed throughout the entire cell, then they migrate to the cell's center at night and create an emission (transformation of enzyme) or flashes of light. Many flashes can be generated in a single cell. In the summer *P. noctiluca* can undergo mass propagation (blooms). Countless light flashes from blooms make the sea glow at night. When disturbed (paddles, motors, zooplankton etc.), the plankton flash, resulting in light that deters predation from zooplankton and attracts larger predators (fish) to eat the zooplankton.

Interpretive Tracks

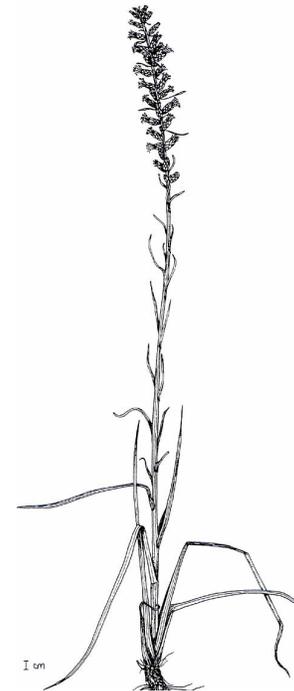
Feeling At 'Home' With Your Interpretive Programs

During our recent (May 2003) Coastal Systems Instructor training workshop, Steve Bass (Gumbo Limbo Nature Center) had an excellent tip about interpretation. As Steve informed us, this technique was one that was used by Roman senators in preparation for their orations before the assembly. The Roman Room technique is an ancient and effective way of remembering information where its structure is not important. For example, it serves as the basis of one of the powerful mnemonic systems used to learn foreign languages. To use the technique, imagine a room that you know, such as your sitting room, bedroom, office, or classroom. Within the room are objects. Associate images representing the information you want to remember with the objects in the room. To recall information, simply take a tour around the room in your mind, visualizing the known objects and their associated images.

This particular technique is one that can be useful when planning a nature walk or field trip. The essence of the technique is to consider the area your home, and each interpretive stop is a room within that home. You should be familiar with items in your room. There may be a specific component or item within each room that is particularly interesting, or that makes that room unique, that you may wish to feature. Perhaps it is the architecture of the room (such as a live oak overstory), a principal function of the room (such as water storage and recharge), the primary inhabitants of the room (such as invasive species), or the history of the room (such as restoration) that you choose to illustrate.

There are many options for the components you may wish to feature in each "room" (each interpretive stop) and, collectively, your "home." This strategy provides a simple technique that can be useful in visualizing your interpretive options and consider how you might string together different components to build on an interpretive theme or provide insight into the ecology of the area.

For more information on this technique, go to:
<http://www.mindtools.com/romanrom.html>



Blazing Star (*Liatris spicata*)

Flowering herb found in moist pinelands.

Purple florets bloom from the top of the spike downward.

Butterfly nectar plant: Monarch, Eastern Tiger Swallowtail, Cabbage White, Gray Hairstreak.

© Drawing by Ann Murray, Center for Aquatic & Invasive Plants, University of Florida, Gainesville

Current Course Offerings

Freshwater Wetlands Classes:

July 21-August 23, 2003 (Palm Beach County)

Coastal Systems Classes:

July 16-25, 2003 (Volusia County)

July 17-August 30, 2003 (Alachua County)

Go to www.MasterNaturalist.org
Click on "Course Offerings" for **locations** and **time**
schedules. After you have chosen your course, follow
the prompts to **register online**.

For program details: Click on "Information"



FMNP Graduate Testimonials

Tillandsia, Guzmania, Catopsis... were foreign words to me- now they flow from my mouth like names of old friends ...well, almost!!

After taking the FMNP Freshwater Wetlands Module, my eyes were opened to the fascinating world around me. In 2000, I was hired to manage the 150-acre South Florida United Methodist Camp, which borders the Caloosahatchee River. I knew that it was a special place before I took the wetlands course; but now realize that it is a fragile, vital site to be protected. Gone are the days when I could wander the forest in blissful ignorance and enjoy the "view." Now, I wander with guidebook and notepad in hand. Learning about the amazing biodiversity of SW Florida and the tragic manner in which it is disappearing challenged me to start a site inventory of flora and fauna that could be used to educate visitors. I began with an inventory of 15 acres of river bed/oak and palmetto forest. For my final project, I planned the inventory and mapping of 15 acres of cypress head, which is ongoing and challenging. We have a large variety of ferns and bromeliads, including Butterfly orchids, Strap and Whisk ferns.

At least the animals are easily identified! The Gopher Turtles thrill visitors with their casual indifference. 8 ½ foot "granddaddy" Indigo Snakes bring more excitement, as does the Scarlet Kingsnake. A female Bobcat is so comfortable on our trails that she parades her kittens around.

Most importantly my FMNP training has enabled me to share my enhanced awareness with others. Now, I have more answers to visitor questions and more joy to share. The more people come to understand and appreciate the world around them, the more they will want to protect it for future generations. More than anything else, I would want my legacy to be that I passed along such attitudes.
Martha E. Pierce, FMNP Wetlands Naturalist

FMNP Wetlands Module funding provided by:

- Florida Fish and Wildlife Conservation Commission, Advisory Council on Environmental Education (ACEE)
- Southwest Florida Council for Environment Education, Inc. (SWFCEE)

FMNP Coastal Module funding provided by:

- Florida Sea Grant, University of Florida, IFAS
- Florida Marine Research Institute,
- Florida Fish and Wildlife Conservation Commission
- Hubbs-Sea World Research Institute

FMNP Newsletter Staff

Editor: Dr. Martin Main
Managing Editor: Ginger Allen
Contributing Editors: Julie Carson, Annisa Karim
Web Coordinator: Buddy Walker



Florida Master Naturalist Program

Director: Dr. Martin Main, Associate Professor
Coordinator: Ginger Allen
Assistant: Annisa Karim

Southwest Florida Research & Education Center
2686 State Road 29 North
Immokalee, FL 34142-9515
Phone: 239-658-3400; Fax: 239-658-3469
E-Mail: info@masternaturalist.org
Web: www.MasterNaturalist.org
www.MasterNaturalist.ifas.ufl.edu