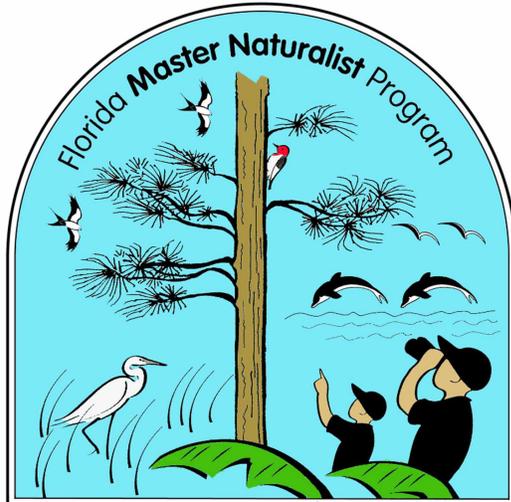


# Florida Master Naturalist Program



UNIVERSITY OF  
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EXTENSION

Institute of Food and Agricultural Sciences

*putting*  
**FLORIDA  
FIRST**

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## Master Naturalist Program Exceeding Expectations

Congratulations to all FMNP Instructors and participating organizations - your efforts are having a substantial impact. Currently, there are 74 FMNP Instructors representing 47 educational organizations, including 10 University of Florida Cooperative Extension offices. Thirteen Freshwater Wetlands courses were taught in 2001, with 158 persons certified as Wetlands Naturalists across south Florida. These students showed an average of 14.5% knowledge gain. Analysis of class participant evaluation forms showed 75% "excellent" and 20% "above average" ratings for FMNP Instructors. The overall rating for the classes was 60% "excellent" and 29% "above average." Remarkably, 96% of the 2001 graduates plan on attending a future FMNP ecosystem module when offered.

Extension agents in Palm Beach and Pinellas counties have used the FMNP to train volunteers of other natural resources programs, such as Master Gardener and Florida Yards and Neighborhoods. Palm Beach County also incorporated the FMNP Final Project requirement into Master Gardener training. Audubon Corkscrew Swamp Sanctuary, The Conservancy of Southwest Florida, and Collier Parks and Recreation used the FMNP to increase expertise of their employees and volunteers.

Congratulations are also in order for the FMNP graduates. Final Projects provided by FMNP students have provided direct benefit to environmental education in Florida. Examples include the North Sebastian Conservation Area 2002 Interpretive Plan, a "Science For Seniors Course" that focuses on created wetlands at Okeethee Park, and a slide presentation with handouts that describes wetland plants and folklore for Wakodahatchee Wetlands tours. Final Projects being used as educational supplements by K-12 schools in south Florida include the Delray Oaks Natural Area Strand Swamp education booklet for elementary students and an educational wetland quiz for middle-school students.

Our efforts continue going strong. To date, 25 Freshwater Wetlands 2002 courses have been scheduled in central and south Florida, with 203 registered participants. We look forward to hearing the creative ways FMNP Instructors and graduates will be utilizing their experiences and we will be collecting that information with surveys during the next year.

Keep up the great work!

*Marty*

Dr. Martin B. Main, FMNP Program Director

## Advanced FMNP Instructor Training Opportunity

**Topic:** Native Bromeliad/Orchid Identification and Conservation Concerns

**Date:** September 21, 2002

**Location:** Sarasota's Selby Gardens

**Time:** 10-4

**Cost:** Free to registered FMNP Instructors

**Registration:** e-mail ([info@masternaturalist.org](mailto:info@masternaturalist.org))

or call Ginger Allen (941-658-3409)

*Space is limited. Register by July 1, 2002*

Brought to you in conjunction with the Florida Council of Bromeliad Societies (<http://fcbs.org>) and the University of Florida, IFAS, Department of Entomology and Nematology (<http://savebromeliads.ifas.ufl.edu>).

The workshop will provide an overview of the Bromeliaceae and Orchidaceae plant families, with an emphasis on identification and natural history of Florida's native bromeliads and orchids. Following discussion of each family, participants will have the opportunity to observe specimens in the Selby Gardens collections.

10:00-11:30 Presentation on Florida's Native Bromeliads (Harry Luther)

11:30-12:30 Lunch break (on your own)

12:30-2:00 Presentation on Florida's Native Orchids (John Beckner)

2:00-2:15 Break (Weevil threat to native bromeliads)

2:15-4:00 Observe orchids and bromeliads in gardens with instructors

Marie Selby Botanical Gardens

811 South Palm Avenue

Sarasota, FL 34236

phone: 941-366-5731

map: See <http://www.selby.org/geninfo/directions.htm> for directions.

**Interested in sponsoring an advanced FMNP Instructor training?**

**Contact Ginger Allen by e-mail at [info@masternaturalist.org](mailto:info@masternaturalist.org).**

*Quill-Leaf*



*Photos by Ginger Allen,  
University of Florida*

*Wild Pine*



*Spanish Moss*



*Grass Pink*



### Interested in becoming an FMNP Instructor?

Read "Thinking of becoming a FMNP Instructor?" by clicking the "Instructor Information" link at [www.masternaturalist.org](http://www.masternaturalist.org). To attend an Instructor Workshop, fill out and submit the on-line Instructor Application. You will be notified with further information.

## Wild Eye Watch on:

### Giant Airplant (*Tillandsia utriculata*)

By Dr. Barbra Larson, UF, IFAS

**Characteristics:** grows to 2 meters tall; gray-green leaves, wide at base and overlapping to form a tank-like rosette; 1 flower spike with many branches

**Distribution:** Florida, Caribbean, Mexico, Central and South America

**Habitat:** epiphytic in hammocks, cypress swamps, pinelands

**Time of flowering:** spring to fall

**Fun Facts:** reaches maturity in 5-8 years; only species of bromeliad in Florida to reproduce only by seed; holds up to 1.3 liters of water in its tank.



©Photo by Barbra Larson

Florida has 16 species of native bromeliads (airplants). Tank bromeliads, like the giant airplant, impound water in their leaf axils, provide habitat to specialist aquatic invertebrates (15 known species in Florida), and a water source and shelter for both vertebrates and invertebrates. Florida's tank bromeliads are among 10 species of airplants that are state-listed as endangered or threatened.

Giant airplant (*Tillandsia utriculata*) and cardinal airplant (*Tillandsia fasciculata*) have been given endangered status as a result of attack by an exotic insect pest, the Mexican bromeliad weevil (*Metamasius callizona*). The weevil is damaging populations of 5 bromeliad species and may threaten 6 more once it reaches their isolated habitats. It is now found in 16 counties and poses a threat to Big Cypress and the Fakahatchee Strand, home to Florida's richest diversity of epiphytes. For more information on Florida's bromeliads and the weevil threat, see <http://savebromeliads.ifas.ufl.edu> or <http://bromeliadbiota.ifas.ufl.edu>.

## Interpretive Tracks

FMNP Instructor Dolly Cummings of the Camp Bayou Outdoor learning center, Ruskin, Florida uses "Resource Roundup" as an interpretive way for students to learn ecosystem relationships and get to know each other, and to use as an educational activity with children groups. The Resource Roundup teaches plant survival strategies, competition, invasive exotic plants, and the importance of energy resources for healthy environments.

Students gather in a circle awaiting Dolly's Instructions. Dolly, who is now "Mother Nature," tells them they are willow shrubs surrounding the banks of a pristine wetland marsh in Florida. Mother Nature explains how she is going to throw out life capsules (dry macaroni) containing water, nutrients, and sunshine, for them to thrive and grow. Mother Nature scatters a generous supply of life capsules on the floor around the shrub roots (students' feet). She tells them to pick up all the life capsules they can. This is survival, so politeness DOESN'T count!

Mother Nature explains they have used up those nutrients (collects the macaroni) and now require more, since they have grown and have to compete for space, sunlight, water and energy. Mother nature scatters life capsules again selectively--not all areas in an ecosystem receive exactly the same resources (can discuss topography, human impacts, etc.) Some "shrubs" will be deficient in resources. Shrubs (students) who have 2 or less life capsules are eliminated from the marsh bank. These native shrubs have died, and in their place there has seeded a new plant, a non-native invasive, such as Brazilian pepper (bring back eliminated students, new role). Life capsules are thrown out by Mother Nature, but since Brazilian pepper is aggressive and prolific, they get an extra 5 seconds before the natives to grab as much water and nutrients as they can. Continuing, more native shrubs die as new invasives (more pepper shrubs) encroach until the exotic invasive dominates the landscape!



### Elderberry (*Sambucus canadensis*)

Found along wetland edges and roadsides. Berry drupes provide food for wildlife and are used to make wine and jellies.

Cattle and humans can become sick if poisonous leaves, twigs, roots, and unripe fruits are eaten.

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

## Current Course Offerings

April 3-May 11, 2002 (Alachua County)  
April 10-May 8, 2002 (Seminole County)  
April 22-May 5, 2002 (Hendry County)  
April 29-May 20, 2002 (Pinellas County)  
May 4-29, 2002 (Glades County)  
May 5-25, 2002 (Lee County)  
May 6-17, 2002 (Collier County)  
May 9-June 6, 2002 (Highlands County)  
May 18-June 9, 2002 (Brevard County)  
May 28-June 7, 2002 (Polk County)  
June 18-July 30, 2002 (Alachua County)

Class locations, schedules, and registration information is available from the main FMNP Web site:

[www.masternaturalist.org](http://www.masternaturalist.org)

### Click on "Course Offerings" for:

Locations and time schedules. After you have chosen your course, follow the prompts to register online.

### Click on "Information" for:

*Thinking of becoming a Florida Master Naturalist?  
FMNP-Freshwater Wetlands Course Description*



Instructor workshops for the Coastal Systems Module will be offered in fall 2002.

## FMNP Newsletter Staff

Editor: Dr. Martin Main  
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## You Want Me To Do What?

*Story by Joy Ann Coll, FMNP Graduate, ELC, Vero Beach*

Panic surged through her as she sat in the first meeting of the Master Naturalist class. He wants me to walk through a swamp? She wondered if this class was really for her. On their first field trip, she steeled her nerves and waded into a knee-deep marsh. Panic struck when she felt something around her ankle. While her fellow students wore looks of confidence, she wondered: can I do this? Later, when she entered an unspoiled cypress dome, she felt awe struck. She waded into the water-filled world and stood in silence among cypress and tupelo trees, leather ferns, mosquito fish, sparkling black water and decorative epiphytes. Silence fell over the dome as students and swamp became one. Her stressful life disappeared. Calm encompassed her.

Six weeks later, she had blossomed into a self-confident, knowledgeable graduate. Today, she and her fellow graduates serve as interpretive guides on wagon rides and canoeing, kayaking, hiking and riverboat tours. One graduate began combination kayaking-hiking excursions. Two graduates developed an environmental curriculum to educate 140 families of home-schooled children. Another team is compiling four sophisticated trail maps for the Florida Department of Environmental Protection. Several graduates have continued their education through interpretive guide and volunteer training classes. Future plans will support county and state efforts to open new conservation areas to the public.

Now, the once uneasy student gazes at the red, glowing sunset and wishes she were back in that cypress dome ... standing silent ... experiencing life from an intimate distance. Many thanks to the University of Florida and the Environmental Learning Center for sharing life-altering experiences with the FMNP graduates of Indian River County.

## FMNP Wetlands Module funding provided by:

Florida Fish and Wildlife Conservation Commission,  
Advisory Council on Environmental Education (ACEE)

Southwest Florida Council on Environment Education, Inc.  
(SWFCEE)

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