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Martin B. Main

University of Florida IFAS, Immokalee, Florida

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The Florida Master Naturalist Program: Creating, Implementing, and Evaluating a Successful Statewide Conservation Education Program

Martin B. Main, FMNP Program Leader
Southwest Florida Research & Education Center, University of Florida IFAS, Immokalee, Florida

Abstract: The Florida Master Naturalist Program is an educational program with a well-developed curriculum that encourages but does not require volunteer service. Its history, development, administration, curriculum, and target audiences are described. It presently consists of three modules: Freshwater Wetlands, Coastal Systems, and Upland Habitats. Considerations regarding program training, how instructors are recruited and selected, and how program impacts are evaluated are summarized.

Key Words: conservation education, environmental sciences, Florida, Master Naturalist program, natural resources

Background

The Florida Master Naturalist Program (FMNP) is an environment and conservation education training program developed by Dr. Martin Main through the University of Florida IFAS. The FMNP is an extension education opportunity that targets adult audiences, but unlike other extension programs, the FMNP does not rely solely on University of Florida personnel to implement the program. The FMNP is a partnership program administered by registered FMNP Instructors that represent education professionals from many different organizations.

The impetus for developing the FMNP initially came from the 1998 Florida Eco-Heritage and national Watchable Wildlife Conferences held in Fort Myers, Florida. A recurrent point of discussion among ecotour operators, nature centers, and other organizations that provide environmental education was the lack of sufficiently trained persons to satisfy the demand for environmental education programs. Consequently, many organizations utilize volunteers and employees that receive cursory training, if any, to serve as interpretive naturalists. The lack of knowledgeable personnel limits both the quality and types of programs offered. Concern also was voiced that the rapid growth of the ecotourism industry in Florida may lead to a preponderance of poorly trained and poorly informed individuals serving the ecotourism industry. The initial objective of the FMNP, therefore, was to develop a training program that would prepare knowledgeable volunteers and employees to assist in educational programs. It became quickly apparent, however, that the FMNP would benefit many other audiences as well.

We conducted a survey of almost 200 professional environmental educators that included state and federal environmental agencies, private non-governmental organizations, educators, and commercial ecotour operators to ascertain interest in the FMNP. Survey results revealed strong support for development of the FMNP, and stakeholder meeting provided additional insight regarding content.

An Educational Program or a Volunteer Management Program

Many traditional “extension” programs, such as the Master Gardener program, require volunteer service from participants. Often, curricula are not well-defined in these programs and consist of a series of lectures on various topics by local experts. Educational programs of this type are difficult to evaluate and are not replicable among locations or over time. It is debatable whether programs of this type add anything different than provided by any local seminar series, except a title and a requirement to provide volunteer service.

Whereas the Master Gardener program provides a unique opportunity for volunteer service in horticulture, the same cannot be said for volunteer service in natural resource education or service. “Friends of” groups are established for wildlife refuges, parks, nature centers, and many other organizations that
provide education or other environmental services. Volunteer service in Master Naturalist programs, therefore, is not a unique opportunity and in some cases may actually compete with neighbor organizations that depend on volunteers.

The FMNP is an educational program with a well-developed curriculum that encourages but does not require volunteer service. As such, the FMNP prepares individuals to be better volunteers and also services professional audiences such as teachers, park rangers, ecotour guides, and others that may benefit from FMNP training but are either unable or unwilling to contribute time outside of their normal job duties. Consequently, the FMNP serves the needs of both lay and professional audiences and measures programmatic impacts from both.

**FMNP Curriculum**

The FMNP includes 3 core, stand-alone modules – Freshwater Wetlands, Coastal Systems, and Upland Habitats. FMNP module categories were defined based on Florida’s major environmental categories. I often hear “my state is too diverse to develop a statewide curriculum,” but consider that Florida’s environment ranges from temperate to essentially tropical, is surrounded by oceans and related habitats, and ranges from wetland to desert. Florida has more species of native, non-native, and endangered plants and animals than nearly any other state, including all the conservation issues. If we can develop a statewide educational program in Florida, you can do it in your state too.

Each FMNP module provides 40 educational contact hours and includes classroom, field trip, and practical learning experience for participants. The format and the FMNP instructional materials, which include 4 videos, 12 presentations, 3 field trips, speaking and final project requirements, and student and instructor workbooks for each course, was developed with assistance and comments provided during developmental workshops and from an advisory committee. Persons that successfully complete FMNP courses are registered in the University of Florida FMNP database as Wetlands, Coastal, or Uplands Naturalists as they finish each course. Participants that complete all 3 courses are registered as Florida Master Naturalists. FMNP graduates receive certificates, patches, and pins denoting their achievements.

**Target Audiences**

The FMNP is intended for adult audiences of all educational levels. There is something in the FMNP for everyone, from the expert to the novice. Having said this, there are 3 general types of target audiences anticipated. These include interested persons, persons that wish to contribute to environmental education programs as volunteers or employees, and professional audiences such as rangers, biologists, teachers, ecotour operators, and others looking to expand upon their base of knowledge for professional reasons. Lay persons, many of which contribute volunteer service, represent the largest percentage of Master Naturalist students and include the greatest range of background knowledge and experience. However, the percentage of persons that represent professional audiences has been as high as 30% per year.

**Registration and Scheduling FMNP Training**

Information on class offerings and registration is available online through the FMNP web site ([www.MasterNaturalist.org](http://www.MasterNaturalist.org)), which is being coordinated through the University of Florida IFAS Office of Conferences and Institutes (OCI). Registration fees are used to pay for the reproduction of course materials, administrative costs, and support the tuition-sharing program. Allowances for refunds and accommodation for special needs of students per the American’s with Disabilities Act have been incorporated into registration information, which may be viewed online through the FMNP web site.

**Teaching the Florida Master Naturalist Program**

FMNP Instructors are educational professionals that must apply, be accepted, and complete an FMNP Instructor Training Workshop prior to offering FMNP training. Information for prospective FMNP Instructors is available online through the FMNP web site. There is no cost for becoming an FMNP...
Instructor. Registration support and all instructional materials are provided without cost, and 30% of the tuition fee is provided to the Instructor organization to offset costs associated with providing FMNP training or provide other benefits, such as supplementing reference libraries, providing special opportunities and scholarships, and providing for additional training opportunities for Instructors.

FMNP Instructors are expected to participate as leader or assistant instructor in at least 1 FMNP course per year to remain on the FMNP database of registered FMNP Instructors. FMNP training relies heavily on the use of FMNP curriculum materials, which are designed to lead lectures and provide a level of statewide knowledge and consistency in training previously unavailable. Instructors personalize materials to their area with personal knowledge during lectures and field trips.

Successful completion of FMNP modules requires meeting student attendance requirements, participating in practical speaking experience, and completion of a group Final Project that addresses some form of environmental education. Instructors verify the names of successful graduates.

Measuring Success and Program Growth
There are many ways to measure success of a program. By documenting and maintaining a record of students that successfully complete the FMNP, we document success in terms of course participation. Pre- and post-testing in each course provides metrics on short-term knowledge gain. Course evaluation forms provide measures of participant satisfaction and demographic information. Annual surveys of Master Naturalist graduates provides measures of impacts, including volunteer contributions, impacts on jobs and other benefits to professional audiences, changes in behavior and attitudes, and success stories that result from FMNP training.

The 3 FMNP core modules were not developed simultaneously. The Freshwater Wetlands module was released in 2001, Coastal Systems in 2003, and Upland Habitats in 2005. The program grew continuously during this time, both among students and instructors. During 2001-2005, the FMNP issued 2,167 FMNP graduate certificates (Wetlands = 955, Coastal = 936, Upland = 276), representing 86,680 contact hours of education (Figure 1). During 2005, the statewide FMNP Instructor network included 151 trained FMNP Instructors representing 64 organizations in 44 counties throughout Florida.

Program growth continues in curricula as well. Now that modules addressing the major environmental systems have been completed, we are in the process of developing special topics workshops to build on previous knowledge and advance learning and skills into specific areas. An educational curriculum can be expanded indefinitely.

Educational Programs - Promoting a Stronger Conservation Ethic beyond the MNP Graduate
Perhaps the most compelling reason for promoting programs with an educational emphasis and curricula that teach people about their environmental surroundings, how they work, and what needs to be considered to conserve healthy ecosystems and the plants and wildlife that depend on them, is that these individuals are then prepared and empowered to share this knowledge with others. Only educational programs can achieve this goal, and the more detailed in scope the program, the better prepared will be the individuals to share information and promote a stronger conservation ethic among others, regardless of the venue.
Figure 1. Number of FMNP courses and graduates during 2001-2005.

4 hurricanes in 2003.