

Conference Strand addressed: Conservation and Community Education

Master Naturalist:

A Multiple State Natural History Education and Community Service Program

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ABSTRACT

Master Naturalist Programs across the United States are providing new opportunities for adult volunteers to learn about their state's natural history, environment, and conservation issues. Master Naturalist programs also promote nature-based community service by citizen volunteers and provide continuing education opportunities. We describe four well-established programs—in Texas, Missouri, Florida and Minnesota—that provide successful models for providing adult environmental education and citizen volunteer opportunities. While these programs differ in the make-up of project teams, the relative amount of state versus chapter control over the programs, and whether or not volunteer service is required, all include common components of quality instructional materials and a state-wide support organization. A newly-established national coordinating organization, the Alliance of Natural Resource Outreach and Service Programs, is helping additional states develop new programs and providing a venue for sharing information among existing programs.

INTRODUCTION

Master Naturalist is a natural resource education and community service program that increases environmental literacy and conservation action. Master Naturalist programs address a growing need to connect people to nature (Main 2004). There is an

increasing trend of humans living in urban areas (UN 2001) and urban areas support fewer native species. This trend reduces opportunities for people to interact with, benefit from, and appreciate native species and natural areas (Turner 2004). The Master Naturalist program addresses people's need to connect with nature through learning and volunteer opportunities that promote conservation action.

Here, we explain the essential features and variations of this program by highlighting examples in Texas, Missouri, Florida, and Minnesota. We also describe a national effort to promote Master Naturalist programs in other states.

MASTER NATURALIST PROGRAMS: COMMON ELEMENTS

All Master Naturalist programs include educational opportunities for adults, community service, and a statewide network that facilitates the program. The initial training consists of a forty-hour course that incorporates lectures and active learning, including field trips to local natural areas. Advanced training classes on a variety of natural history and interpretation topics are available after a participant has completed the initial course.

Master Naturalists use their knowledge in nature-based, volunteer community service that is either encouraged or required. Volunteer service fits into four categories. 1) Citizen science involves collecting data for scientific research such as collecting water quality data or participating in a Christmas bird count. 2) Program support involves assisting a nature-based organization in activities such as building a boardwalk or organizing digital photographs. 3) Interpretation involves educational activities, such as designing a brochure or leading a nature walk. 4) Stewardship involves conservation-based land management projects, such as removing invasive species, planting native species or assisting with a land management plan.

Programs also include two main statewide partners, one with a natural resource focus and another with an education focus. The natural resource partner is often an agency that manages natural resources, such as the Texas Parks & Wildlife Department, the Missouri Department of Conservation, and the Minnesota Department of Natural Resources. The education partner is often a university-based cooperative extension service. In addition, numerous local partners assist in education and service opportunities.

Existing Master Naturalist programs use one of two models to conduct the initial training, the chapter-based and the instructor-based. In the chapter-based approach, individuals in a single geographical region organize a Master Naturalist chapter. Local chapters, with assistance from advisors (at least two statewide partner employees), conduct initial training sessions and provide volunteer service opportunities to their members. Chapters receive guidance from the state organization, including training guidelines, program marketing, curriculum resources, and advanced training opportunities. The instructor-based approach includes more direct state organization involvement in the initial training. Instructors from nature-based centers throughout the state attend a two-day training session that familiarizes them with the program. This “train-the-trainer” workshop introduces instructors to the required curriculum and a variety of teaching tools (PowerPoint presentations, videos, instructor manuals, and student workbooks), and connects them to the support services offered by the statewide program, such as marketing and components of a program website. After completing the training, instructors organize classes at their nature-based centers and the state organization coordinates class registration.

SAMPLE MASTER NATURALIST PROGRAMS

Texas

The Texas program, started statewide in 1998, uses the chapter-based training approach (Haggerty 1999). The Texas Master Naturalist mission is “to develop a corps of well-educated ‘Master Volunteers’ to provide education, outreach and service dedicated toward the beneficial management of natural areas and natural resources within their communities for the state of Texas.” Partners include the Texas Cooperative Extension, Texas Parks and Wildlife Department at the statewide level, and over 270 local partners. At the state level, the organization is directed by an advisory committee and a volunteer representatives’ committee that represents chapter interests. The program currently supports over 4,000 Master Naturalist volunteers in 35 local chapters across the state. Texas Master Naturalists are required to volunteer for 40 hours and participate in eight hours of advanced training annually; these volunteers have provided over 492,000 hours of service valued at more than \$8.5 million*. This service has resulted in 75,000 acres of enhanced wildlife and native plant habitats, and has reached more than 1 million youth, adults and private landowners. Of particular note among all of these efforts is the discovery of a new plant species by a program volunteer.

Missouri

The Missouri Master Naturalist™ program initiated courses in 2004 and has a chapter-based training structure. Its mission is “to engage Missourians in the stewardship of our state's natural resources through science-based education and community service.” Statewide partners include the Missouri Department of Conservation, and the University of Missouri Extension and School of Natural Resources. Statewide partner employees are responsible for conducting the initial training with volunteers support. At the end of

2006, the program supported 285 Master Naturalists in seven chapters. As in Texas, Missouri Master Naturalists are required to volunteer 40 hours and participate in eight hours of advanced training per year. They have contributed over 8,000 hours of service through 2006, valued at more than \$144,000*.

Florida

The Florida Master Naturalist Program™ (FMNP) initiated courses in 2001 and uses an instructor-based training approach (Main 2004). The mission is “to promote awareness, understanding, and respect of Florida's natural world among Florida's citizens and visitors.” The program, developed and overseen by the University of Florida Institute of Food and Agricultural Sciences, includes three 40 hour ecosystem-based initial courses: Freshwater Wetlands, Coastal Systems, and Upland Habitats. FMNP courses include complete educational curricula and are taught by a network of 150 trained instructors representing 90 organizations. The instructors have trained over 2,500 Master Naturalists. The courses attract professional audiences (e.g., teachers, park rangers, consultants) and they constitute 12-32% of FMNP graduates each year. Unlike Texas and Missouri, volunteer service is not required but averages >13,000 hours annually.

Minnesota

The Minnesota Master Naturalist program benefited from the input of Texas and Florida program organizers, and a needs assessment that included input from professional naturalists and environmental educators (Savanick and Blair 2005). The program initiated courses in 2005 and includes aspects of both the chapter and instructor-based program model. The mission is “to promote awareness, understanding, and respect of Minnesota's natural environment by developing a corps of well-informed citizens

dedicated to conservation education and service within their communities.” Statewide partners include the University of Minnesota Extension Service and the Minnesota Department of Natural Resources. The National Science Foundation has provided funding to support the development of the program over five years. The initial training is similar to Florida’s instructor-based approach with train-the-trainer courses and state-wide curriculum materials. Also like Florida, Minnesota has three biome focused 40 hour courses: the Deciduous Forest, Prairie, and Coniferous Forest. The program will develop chapters for Master Naturalists to join after they have completed the initial training. In its first year, 135 Master Naturalists and 44 instructors have completed courses. Minnesota Master Naturalists are required to complete eight hours of advanced training each year. Also Minnesota Master Naturalists are required to volunteer for 40 hours per year, and have contributed over 5,965 hours of service, valued at \$107,000*.

The Texas and Florida programs, currently the largest of all state Master Naturalist programs, have attracted national attention. More than 25 states (see www.nralliance.org for more specific information) have started or are developing Master Naturalist or similar programs. The Alliance of Natural Resource Outreach and Service Programs was recently established to help states develop programs and provide a venue for sharing information between states. The Alliance has been coordinating an annual conference since 2005.

Individuals or organizations interested in developing new state Master Naturalist programs have a growing pool of resources from which to draw. The Alliance website (www.nralliance.org) provides information on whether a program already exists, or if one is being developed in a specific state. Another way to learn about developing a program is to contact individuals associated with existing programs. Contact information for the

programs described above is available on state websites (Texas: <http://masternaturalist.tamu.edu>; Missouri: www.monaturalist.org; Florida: www.MasterNaturalist.org; Minnesota: www.MinnesotaMasterNaturalist.org). A valuable first step in developing a new program is putting together a strong partnership; potential partners include university departments and extension services, and state departments that manage natural resources. Other potential statewide or local partners include nature centers, museums, zoos, and botanical gardens.

CONCLUSION

Master Naturalist programs have been tremendously successful due to the strong interest people have in learning about the natural world and what they can do to conserve it. Clearly, the combination of education and service benefits both the natural and human communities. In addition, participants gain personally as well, as illustrated by the following quote from a Minnesota Master Naturalist: “This may sound really hokey, but taking this class changed my life. I feel like a different person. I feel more in line with who I am for having re-established my connection in a concrete way with the natural world. The natural world is key to my mental, emotional and spiritual health.”

*Independent Sector calculation of volunteer time is \$18.04 per hour for 2005.
http://www.independentsector.org/programs/research/volunteer_time.html

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