

Tennessee Naturalist Program Under Development

By Margie Hunter

There are a lot of us grownups who've spent our adult years pursuing careers in sundry occupations, and one day we find ourselves wishing we'd majored in biology or botany or ecology or geology and spent our lives outside studying this earth and its marvelously varied forms of life. Well take heart fellow nature lovers, there's a Tennessee Naturalist program under development that is just for us. Tennessee joins 32 other states in creating a state-specific natural history course designed to educate adult citizens who will use this knowledge volunteering in various capacities.



Nationally, the program, often called Master Naturalist, got its start in 1992 in Ft. Collins, Colo., as the only municipal version. Modeled on the Master Gardener program, the naturalist programs feature an overview curriculum touching all the major components of an area's natural biological systems. Intensive classes are spread over several weeks or months. To earn certification in the program, participants are expected to volunteer in a wide variety of service activities, from citizen science-type, data-driven projects often in conjunction with state agencies to informal environmental education and interpretation programs oriented to school and other public groups.

Naturalist programs produce two highly desirable outcomes. First, citizens gain valuable insight to the natural history of their state. This knowledge not only allows them to better understand and appreciate living organisms, natural systems, and their functions, but it also increases understanding of current environmental and conservation issues, which can influence personal, social, and political decision making. Second, a pool of informed volunteers can make vast contributions to over-worked and under-staffed government agencies, nature centers, and parks on national, state, and local levels.

These two outcomes inspired a local planning committee to research other states' naturalist programs and draft a course structure and curriculum for our state called simply Tennessee Naturalist. For three years this committee developed the program scheme and pursued funding from the National Science Foundation, submitting two full grant applications in 2008 and 2009. Both were declined. In the absence of sufficient funds to fully develop a statewide Tennessee Naturalist program for launch, the committee is beginning, on a chapter-by-chapter basis, to develop locally directed courses. The first such course, a pilot of the nascent Tennessee Naturalist program and its curriculum outline, is currently underway at Owl's Hill Nature Sanctuary in Brentwood.

The Tennessee Naturalist committee is working closely with Owl's Hill directors Margaret Cameron and Nancy Garden in class scheduling, soliciting instructors, procuring course materials, and developing volunteer opportunities. Executive Director Cameron praises the program. "Nancy and I have found working with the Tennessee Naturalist group to be great fun. The people on the committee putting the program together are committed to having an excellent learning experience for adults. Instructors have been generous in passing on their knowledge and passion for their subject. Our first class of 16 participants is enthusiastic and eager to learn. It is always exciting to be with a group of people who share a love of the outdoors and want to explore and learn about the natural world around them." A thorough review of this first course, including participant feedback, will provide improvements and adjustments to strengthen the program.

In its current form, Tennessee Naturalist program features 10 four-hour classes, each representing two hours of classroom instruction and two hours in the field. Class topics explore:

- Geology, Geography, Climate and Ecology; Naturalist Skills
- Rivers, Wetlands, and Watersheds; Aquatic Invertebrates, Fish
- Forests and Woody Plant Identification
- Herbaceous Vascular and Non-vascular Plants; Fungi
- Insects and Arthropods
- Birds
- Mammals
- Reptiles and Amphibians
- Nocturnal Nature and Astronomy
- Environmental Stewardship and Volunteer Preparation.

During each class, instructors are encouraged to weave in ecological concepts, native vs. nonnative species, and the use of keys and other identification techniques. Instructors are asked to suggest a recommended guide or other material to be provided to participants and a supplemental reading list. While the entire state is discussed in the over-view, a greater focus on the geographic grand division in which the course takes place is expected.

Participants pay a fee to take the course, and this money is used to purchase field guides and class materials for each person as well as address any additional expenses. Remaining funds may be split between the host site and the Tennessee Naturalist program. Before receiving a Tennessee Naturalist certificate, participants must volunteer 40 hours in approved service activities such as bird and butterfly counts, environmental monitoring, or conducting interpretive programs. Owl's Hill chapter participant Kristy Baker is already earning her hours. "I am truly enjoying this program! It is wonderful to be with a group of people who have a passion regarding the natural world around us. The enthusiasm can be quite contagious," she says.

Volunteer activities are more than just an opportunity to reinforce and increase knowledge. Tennessee Naturalist volunteers will play an important role in supporting environmental and conservation work and sharing the natural wonders of this state with others through education and interpretation.

One of the more exciting elements of a functioning statewide Tennessee Naturalist program is the ability to bolster the capacity and reach of environmental education programs for the general public, especially children.

Despite little to no funds, the planning committee pushes forward thanks to the volunteer efforts of folks dedicated to the promise of the Tennessee Naturalist program. Tennessee State Parks, Tennessee Wildlife Resources Agency, Center for Environmental Education at Middle Tennessee State University, Tennessee Parks and Greenways Foundation, Nashville's Metro Parks Nature Centers, and Owl's Hill are key players in the development of Tennessee Naturalist.

The Tennessee Naturalist is affiliated with the Alliance of Natural Resource Outreach and Service Programs, the national organization for state environmental programs, and committee member Dr. David Hill, attended their annual conference to learn successful methods and tips employed in other states. Tennessee Department of Environment and Conservation's graphic designer LeAnne Johnson developed a Tennessee Naturalist logo. Committee members are serving as instructors for some classes at Owl's Hill. With little publicity, the Tennessee Naturalist committee has already received numerous contacts expressing interest in starting chapters across the state.

Before the program can move forward, however, some changes are needed. The committee is investigating a more formal organizing structure to accommodate financial matters. To maximize program availability and effectiveness statewide, a Tennessee Naturalist coordinator is essential, and the committee is exploring a variety of options to create this position. Tennessee State Parks has offered space (cubicle) and in-kind resources (phone, computer, copier) to enable a coordinator to assist new and existing chapters and pursue grants.

State officials understand the value of such a program. TWRA Executive Director Ed Carter sees several benefits. "The program presents a formal way for people to become involved, and the volunteer time commitment demonstrates genuine interest." He envisions certified Tennessee Naturalists "sharing their experiences and excitement with family and friends, extending the benefits into the community."

Mike Carlton, assistant commissioner for Tennessee State Parks is equally enthusiastic. "TDEC is very much in need of having available a well-trained pool of volunteers to work with our limited resources. Tennessee Naturalist offers much promise for heightening the awareness, knowledge, and skill of many concerned citizens of all ages for conserving our environment."

A subject as comprehensive as the natural history of Tennessee encompasses numerous scientific disciplines. Tennessee Naturalist seeks to establish a foundation, a base level of exposure that will encourage and support further individual study. Realistically, a 40-hour course can only provide an introductory overview. Recognizing inherent limitations, the program's planning committee is sketching an outline for a second instructional tier with several single, in-depth courses featuring more narrowly focused curricula for the future. Tennessee Naturalist II subjects might focus on specific biological systems or ecological functions and could be tied to specific volunteer needs and particular skills.

For example, TDEC's Natural Heritage Inventory Program monitors rare plants across the state. Certain protocols are used to check each site and gather data. In order to assist with this process, volunteers would not only need to learn to identify certain plants and the monitoring protocols, but would also learn about the plants' habitats and life histories, gain an understanding of population dynamics and species interactions, and could assist with rare plant searches, habitat modeling, and data mapping. Such a TN II course would involve 30 hours of instruction and require an equal number of volunteer hours.

To ensure a strong and successful Tennessee Naturalist program, the efforts of many people and organizations statewide will be needed. Anyone interested in contributing time, resources, or grant funding opportunities or starting a Tennessee Naturalist chapter may e-mail Dr. David Hill at David.R.Hill@tn.gov or call him at 615-253-2455.

(Margie Hunter of Nashville is the author of the book *Gardening with the Native Plants of Tennessee: The Spirit of Place*, and serves on the Tennessee Native Plant Society and Tennessee Exotic Pest Plant Council boards as well as the Tennessee Naturalist planning committee.)