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Native Plant Studies Independent Project Proposal

Fire in the Bay: A Community Outreach Presentation for the Pondberry Bay Rare Plant Preserve

Background

The North Carolina Plant Conservation Program (PCP), housed in the Department of Agriculture, is the agency charged with protecting and preserving our state's most imperiled native plants. To help fulfill this mission, PCP has established a system of 20 preserves, comprising 13,000 acres, where it seeks to protect target species in their natural habitats. Preserves are located in each region of the state: mountains, piedmont, and coastal plain.

Included in the coastal plain group is Pondberry Bay Preserve where, along with my husband, I serve as a volunteer site steward. The preserve contains several significant plant communities and rare plants including a state and federally listed endangered species: *Lindera melissifolia*, commonly known as Pondberry.

Pondberry occurs as part of a Cypress Savannah Community in one of a number of Carolina Bays located on the preserve. The Pondberry habitat has been degraded by the intrusion of loblolly pine and other effects from the property's long use for timber production. Removing the loblolly is an important management goal for the *Lindera* population.

Comprising more than 2000 acres, the Pondberry Bay Preserve also includes several Streamhead Pocosin communities featuring stands of Atlantic white cedar, *Chamaecyparis thyoides*. Several types of longleaf pine communities dominate the remainder of the preserve. The Plant Conservation Program works to manage and preserve all of the natural communities on the tract, benefiting both the plants and the animal species associated with them.

The management plan for Pondberry Bay includes prescribed burns for most of the preserve every three years. Mustering the resources including the manpower and equipment necessary to conduct a prescribed burn regimen of hundreds of acres each year such as the one needed at Pondberry is an enormous task. A number of other preserves also require prescribed fire, and while burns are important, other types of management work are also needed throughout the preserve system. Achieving management goals is yet another challenge faced by the PCP in managing a preserve system spread across the state with limited staff.

Preserve Stewards and other volunteers can assist staff with management work including burns. Stewards also help monitor preserves and report poaching or other unauthorized activity to PCP staff. Efforts to identify potential volunteers residing near some preserves have been unsuccessful. Pondberry Bay's Site Stewards reside in Raleigh, which is approximately 60 miles from the preserve. The preserve is vulnerable to unauthorized and destructive uses such as trash dumping and off-road vehicle use.

The Plant Conservation staff responded favorably to my proposal for a project designed to promote understanding of ecosystem restoration, including prescribed fire, at Pondberry Bay. An outreach effort in the local community could enhance public understanding of the work being done there and potentially aid recruitment of volunteers who reside near the preserve. Successful management at Pondberry Bay will not only ensure a future for the targeted rare plants, but also the continuation of several significant plant communities found historically in North Carolina's coastal plain and the survival of the animals associated with them.

Project Description

I propose to create a slide presentation highlighting the plant communities found at Pondberry Bay and providing an overview of the work being done by the NC Plant Conservation Program to restore and conserve those communities. The goal for the presentation is to increase area residents' awareness of their unique natural heritage and the importance of its conservation.

The presentation will cover the species targeted for restoration at Pondberry and the processes, such as required burns, that are required to ensure the survival of these rare plant communities. A significant aspect of the presentation will be the roles that volunteers can play in assisting NC PCP staff in achieving the management goals at Pondberry Bay.

An additional emphasis for the presentation will be to introduce audiences unfamiliar with conservation and ecological restoration to the work being done at Pondberry Bay and to enhance their understanding of the need to protect imperiled species.

I have identified two initial target audiences for the presentation in the community surrounding Pondberry Bay: the Tarheel ChalleNGe Academy and the Lakewood High School Science Club and will continue to seek prospective audiences.

Tarheel ChalleNGe, located in the nearby town of Salemburg is a National Guard sponsored program for at risk youth (age 16 to 18 years). Participants in the program perform a minimum of 40 hours of service to the community and/or conservation project activities.

Lakewood High School is located a few miles from Pondberry Bay. Among the school's extracurricular activities is the Science Club whose goal "is to promote interest, understanding, and knowledge of the scientific world around them. To promote conservation and recycling to improve and save our environment."

Additional audiences can be identified after the presentation is complete, and the format might serve as a template for the development of volunteer recruitment presentations for other PCP preserves.