



Narragansett Bay National Estuarine Research Reserve

2010 Woodcutting Stewards Program

Overview

The Narragansett Bay National Estuarine Research Reserve (NBNERR) is responsible for land management (or stewardship) of the properties on Prudence Island owned by the RI Department of Environmental Management, State of Rhode Island. Typically, funding for land management activities is difficult to acquire and volunteer effort is often necessary to make the implementation of stewardship programs possible. Therefore, it is the intention of NBNERR to employ volunteer stewards whenever possible. In addition, the woodcutting stewards program is mutually beneficial to program participants as a mechanism for acquiring home fuel wood.

The NBNERR Stewardship program has adopted a series of guidance documents to direct stewardship activities on the Reserve (e.g. A Recommendation for the Management of Atlantic Coastal Pine Barren Habitats within the Narragansett Bay National Estuarine Research Reserve, The Narragansett Bay National Estuarine Research Reserve Stewardship Program: Invasive Species Management Plan). The goals and objectives outlined in these guidance documents has directed the activities of the woodcutting stewards program in recent years and will continue to do so into the future. Woodcutting program management areas are of sufficient geographic extent to require multiple years of effort by the limited number of woodcutting stewards to complete program targets. Previous program efforts have been responsible for creating open grassland, enhancing understory growth, promoting the regeneration of pitch pine, and the removal of non-native species. In time, the effort of this program and that of other stewardship activities may result in an appropriate mix of habitats throughout NBNERR managed properties.

Specifically, the NBNERR 2010 Woodcutting Stewards Program has been designed to contribute to the invasive species removal effort and habitat management. To achieve these objectives, woodcutting activities will be taking place in three separate locations on NBNERR properties.

Area 1 (South End Unit):

As an extension to previous woodcutting program activities and a component of the Reserve's pine barrens management strategy, a twenty-five acre stand of European larch has been contracted for removal to allow for the restoration of grassland and old field habitat as early successional components of the barrens mosaic. If conditions and resources permit, next steps in this restoration effort will include a prescribed burn in 2010 to reduce fuel loading, expose mineral soils, and promote regeneration of fire-dependent pitch pine within the larch removal site as well as an additional thirty-five acres of mixed vegetation types.

Cutback zones to improve field and woodland border habitat will be created along the edge which exists between the larch stand and the mixed hardwood stand bounding it on the east side. Selectively cutting trees within cutback zones will allow sunlight to penetrate the canopy and create a broader edge to enhance wildlife use. Trees of various age and species will be marked for removal to ensure the greatest degree of structural diversity in the remaining edge habitat. Woodcutters will be required to

collect and distribute ten pitch pine cones for each hardwood tree removed to ensure the pre-burn presence of pitch pine seed throughout the restoration area.

Area 2 (Pine Hill Grassland Restoration Area):

Grassland habitats will convert to shrubland and forest in the absence of management activities designed to interrupt this process. Recent grassland restoration efforts on Reserve managed lands included the mechanical clearing of 18 acres of a grassland / shrubland complex in the vicinity of Pine Hill. The clearing was conducted by Reserve staff and RIDEM Div. of Fish & Wildlife contracted labor and is part of a long-term plan to establish a greater than 80 acre grassland in this area. A next step in this restoration effort is the removal of many of the small trees (primarily black cherry) which are scattered throughout the restoration area. Shading by these trees, if not removed, would impede the recovery of warm season grasses.

With few exceptions, all trees occurring within the grassland restoration area are available for harvesting. Woodcutting stewards will be encouraged to take the larger black cherry trees as well as cut down smaller trees in the immediate vicinity of their cutting area to ensure that a majority of the trees on-site are removed. Larger oak trees will be marked by Reserve staff for retention as these trees provide an excellent source of food for wildlife and are relatively scarce in this area.

Area 3 (North End Unit):

In a continuing effort to promote a better understanding of the issue of invasive plants on NBNERR properties and prepare a degraded forest area for the re-establishment of native species, invasive Norway maple and Black locust will again be removed from a selected area on the North End unit. Norway maple has been recognized as a serious threat to native plant communities because of its ability to become locally dominant, creating dense shade which displaces native trees, shrubs and herbs. Black locust forms dense groves by root suckering, spreads aggressively in disturbed sites, and is capable of nitrogen fixation.

As during the 2008 and 2009 programs, the focus of invasive tree removal will be limited to an area adjacent to an existing road and firebreak near the entrance gate. The woodcutting stewards will also be required to cut bittersweet vines from trees that are not marked for removal but which are located adjacent to their work area. This activity will hopefully help retain some of the native trees, as many would soon die as the result of the bittersweet infestation in these areas if this issue is not addressed. The nature of Black locust reproduction will require additional follow-up control efforts for many years, specifically periodic mowing and the application of herbicide to the cut stumps of stump sprouts and clones.

Program Specifics

The 2010 Woodcutting Stewards Program is scheduled to take place on the following dates: **Jan. 21, 23, 28, 30, and Feb. 2, 4, 6.** In the event that weather conditions prevent woodcutting on one or more of these scheduled dates, the program will be extended to include Feb. 11 and 13 as necessary.

Woodcutting activity will be restricted to specific target areas on specific dates. Specific meeting locations for scheduled program dates will be posted in the kiosk located at the end of the Homestead ferry ramp. **Active woodcutting in alternate program areas will result in an immediate cessation of the program.**

Individuals who wish to participate are required to sign and comply with the conditions outlined in the 2010 Woodcutting Stewards Program Agreement.

Next Steps

In keeping with NBNERR's mission to promote education, the activities and outcomes of the woodcutting stewards will be communicated to the general public by posting appropriate signage and documentation on our website (www.nbnerr.org).

To ensure that the woodcutting stewards program is successful in achieving its objectives; NBNERR staff will establish permanent photopoints and sampling sites to document changes in the vegetation community over time. This type of monitoring effort, although of limited research value to outside agencies, is designed to answer specific questions and will help to direct future efforts of the NBNERR stewardship program.

With each successive year of an active woodcutting stewards program, the effort required to monitor the effectiveness of the program increases. **Participants of this program are urged to assist in monitoring efforts to ensure program success in the years ahead.** Direct enquiries regarding volunteer opportunities to Robin Weber (401-683-7369; robin@nbnerr.org).