

## **Appendix H – Green Lakes State Park Grassland Management Plan**

## ***Green Lakes State Park Grassland Management Plan***

### **Background**

The current habitat in the western portion of Green Lakes State Park presents a unique opportunity within OPRHP to manage abandoned agricultural fields for the benefit of grassland birds. The size of the old fields that are currently suitable for grassland management is approximately 220 acres (see Figure 1). Many of the existing fields contain hedgerows creating the appearance of several smaller fields.

Other adjacent fields under park management, which are currently composed of a mix of grasses and early successional shrubs, could be managed or converted to grassland as well. If reclamation of these additional fields is pursued, the total project area could comprise nearly 400 acres representing the largest expanse of grassland habitat within the NYS park system.

### **Purpose**

Grassland-dependent birds have declined precipitously at both the regional and national level. Many grassland birds have been listed as Species of Greatest Conservation Need by the NYS Department of Environmental Conservation. Some have also been listed under the NYS Endangered Species Act as endangered, threatened or of special concern. The grassland habitat and the birds that depend on this habitat are a major contributing factor to meeting the criteria for portions of Green Lakes State Park to be designated as a NYS Bird Conservation Area.

The purpose of this plan is to restore and maintain grassland habitat for breeding and wintering grassland birds, while controlling or eliminating non-native plants and woody vegetation. The target species for these management activities are breeding or potentially breeding Grasshopper, Vesper and Savannah Sparrows, Bobolinks, Eastern Meadowlarks and Northern Harrier; and wintering Northern Harriers and Short-eared Owls.

### **Grassland Restoration and Maintenance**

The goal of the management activity is to restore and maintain grassland habitat that is large, contiguous and with the physical characteristics to maintain and increase populations of the target grassland species. Operationally, this should be accomplished as simply, efficiently and effectively as possible without unreasonable demands of time or money.

Since habitat requirements differ slightly even among grassland birds, management activities will aim for some diversity in composition and structure with the grassland.

Recommendations for restoration and management have been guided by our partnerships with the Sisters of St. Francis, the US Fish and Wildlife Service and Audubon NY. Their continued involvement in the planning and implementation of the grassland management plan should be encouraged.

### **Restoration Activities**

Restoration of grassland habitat begins with removal of woody vegetation. Brush hogging or mowing all of the fields in the target area to height of about 4-6", should be done as soon after August 15th as feasible (mid to late August). This will allow breeding birds to fledge while at the same time giving

grasses a competitive advantage over forbs and shrubs. Grasses will continue to re-grow through the fall. Waiting too long will risk spreading seeds of forbs; if the mowing can't be done by mid-September, wait until the following year.

To the extent that hedgerows can be removed, the benefits to grassland birds will be maximized. Unfragmented grassland is perceived as larger, more suitable habitat by some grassland birds. Hedgerows can also serve as corridors for predators of nesting birds, but can provide benefits as well, such as serving as windbreaks in the winter and the preservation of scenic vistas. Specific hedgerows delineate former Military Tracts, while others identify former property lines and farm lots. Hedgerow removal has been prioritized from a grassland bird conservation perspective (see Figure 1). Hedgerows should also be prioritized from a park user perspective considering priorities for retaining hedgerows for other purposes. Hedgerows that are a high priority for removal from a bird conservation perspective and a low priority for retaining for other purposes should be removed. Where other uses outweigh the benefits to birds, the hedgerows should remain.

Removal of shrubs from adjacent early successional shrublands would result in a larger, more contiguous grassland, further enhancing the value of this area to grassland dependent birds. Longer term management should consider restoring some of these areas to grassland e.g. the plot delineated by the yellow circle on Figure 1. Other areas to the west of the current grassland management area should be assessed for future consideration.

## **Maintenance Activities**

After the first year of mowing, subsequent management activities will focus on maintaining the grassland habitat. Given the extent of the grassland and the benefit to grassland birds by providing a diversity of habitats, it is recommended that mowing be conducted on a 3-year rotational basis. Specifically, in the first year of maintenance mowing, one-third of the target area would be mowed. Spot mowing would occur in the other two-thirds of the area, to the extent necessary to control woody vegetation and invasive plants. In the second year of maintenance another third of the target area would be mowed and spot mowing would continue as necessary. The procedure would be repeated for the third and final year of the rotation. In year 4 begin again as per year one.

Resources including time, money, staffing and equipment may necessitate modification to the maintenance regime. Other options that will also meet our goals for restoration and management may be considered e.g. mowing half the area on a 2-year rotation.

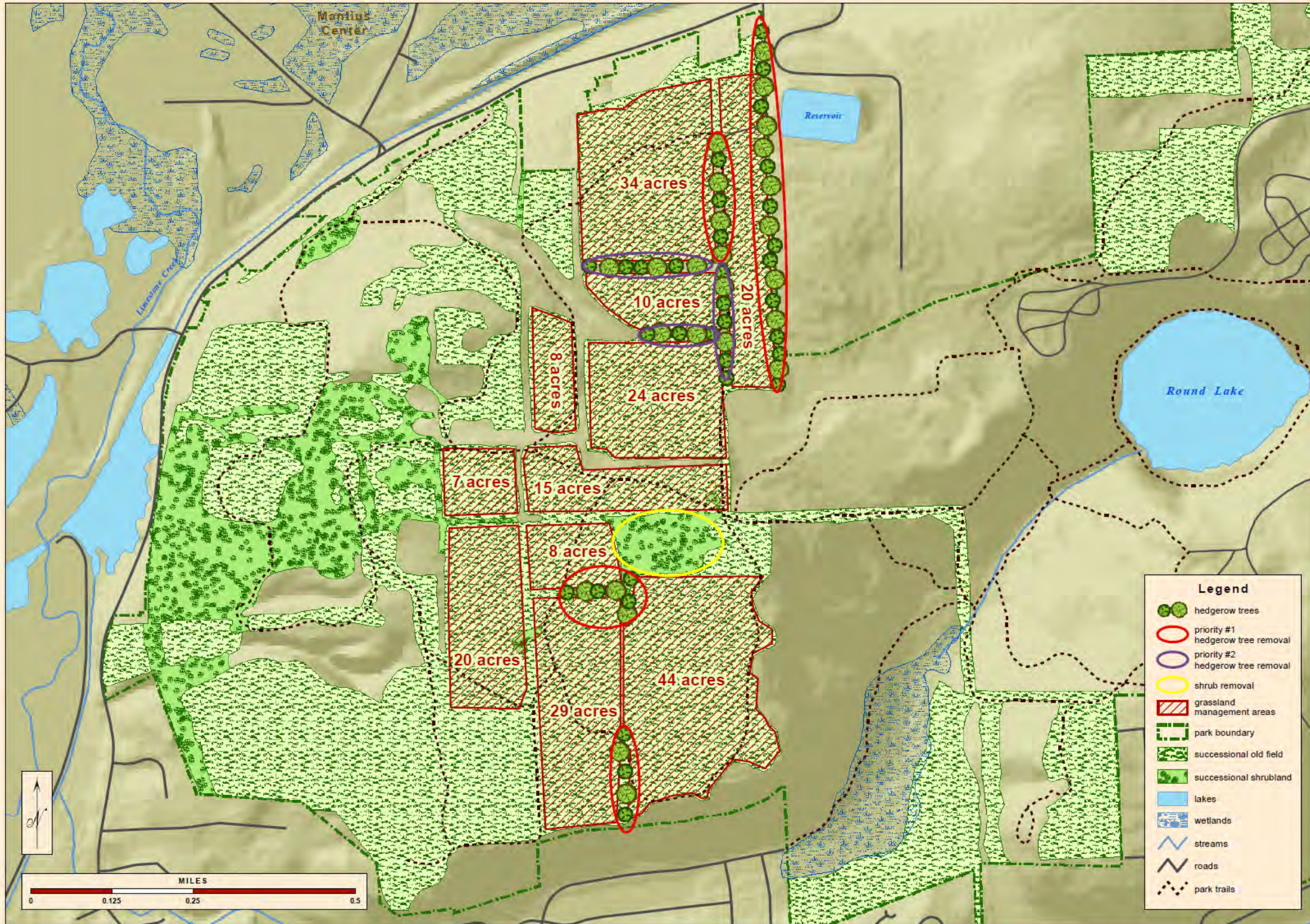
If the initial restoration and subsequent spot mowing is not sufficient to prevent the establishment of invasive species or shrubs, spot treatment with herbicides could be considered.

## **Monitoring**

Auditory surveys for birds should be done in spring and early summer every year. Surveys will be done by someone familiar with identification of grassland birds by both sight and sound e.g. Albany or regional Resource Management staff, or volunteers from Onondaga Audubon Society, Syracuse University or SUNY-ESF. For most species early morning is the optimal time for surveys. Monitoring should be repeated in late afternoon or early evening for some species such as Vesper Sparrow. Winter visual surveys for Northern Harrier and Short-eared Owls should also be conducted 2-3 times per winter. Late afternoon (Northern Harrier) extending into early evening (Short-eared Owl) may be the most efficient way to survey.

## **Trails**

Current trail mowing practices will continue. To the extent possible, re-routing of any trails should take visitors along the edge of fields rather than through the middle of fields to minimize disturbances to grassland birds. Use of motorized equipment or vehicles should be kept to a minimum during the breeding season (April 15 – August 15).



Legend	
	hedgerow trees
	priority #1 hedgerow tree removal
	priority #2 hedgerow tree removal
	shrub removal
	grassland management areas
	park boundary
	successional old field
	successional shrubland
	lakes
	wetlands
	streams
	roads
	park trails



Grassland Management Plan  
Figure 1

# Grassland Management Areas Green Lakes State Park

Map produced by NYSOPREP-GIS Unit, July 14, 2010.