



OXBOW ASSOCIATES, INC.

Wetlands Delineation and Permitting • Wildlife Studies • Herpetology • Vernal Pool Ecology

Jenks Conservation Land Meadow Management Recommendations Acton, MA



Prepared for:

**Town of Acton Natural Resources Department
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November 29, 2012

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Introduction

On behalf of the Town of Acton Natural Resources Department (NRC), Oxbow Associates, Inc. (OA) investigated the meadow habitat on the Jenks Conservation Land during fall 2012 in order to evaluate habitat conditions and make recommendations on how to manage the meadow on the property. This document, aimed at summarizing management goals and procedures, presents OA's recommendations for sustaining and enhancing the meadow habitat on Jenks Conservation Land. Below we provide a general overview of our recommendations followed by specific tasks for the various interested parties such as Acton NRC mowing crews, Land Stewardship Committee, and volunteer land managers.

Jenks Conservation Land Meadow Habitat Goals

- 1) Maximize diversity of native flora and fauna associated with early successional communities
- 2) Minimize or eradicate of invasive flora

Short-term Management Suggestions

- Mow current maximum extents of herbaceous and low shrub growth.
- Retain all apple trees and dogwood and alder patches that have been flagged for preservation.
- Follow-up to identify areas containing invasive plants to be mowed, cut, or pulled.
- Burn piles of pulled and cut invasive plants during winter.

Long-term Management Suggestions

Establish a mosaic of micro-habitats including open areas, native shrubby thickets, and solitary fruit trees. The mosaic will necessarily change throughout time in response to colonization by invasive plants, many seeds of which are spread by birds.

- Identify and allow dense patches of native vegetation to grow to maturity, such as raspberries/blackberries, dogwoods, alder, and sumac (i.e., do not mow or cut for multiple years). This will allow native fruit and stock to be available for seed dispersion and offer mast for wildlife as well as provide protective cover from predators.
- Selectively remove invasive plants within preserved patches and on meadow margins. This will help reduce invasive seed dispersion on the property and surrounding areas.
- Cut/Mow patches of dense vegetation as necessary if overgrown by invasive plants.
- Burn piles of pulled and cut invasive plants during winter.

Timing of Management Efforts

- Mow once annually between October 15th and March 15th. This should minimize negative impacts to fauna such as birds and reptiles. Optimal field conditions for access will most likely exist between October 15th and December 1st (i.e., prior to snow cover).
- Cut or pull invasive plants at any time. For greatest reduction of plants and seed stock, the optimal time for cutting is during the May-June flowering period, prior to fruiting. Most of the invasive plants on the Jenks Conservation Land, Oriental Bittersweet, Multiflora Rose, Honeysuckle, Autumn Olive, and Glossy and Common Buckthorns, tend to flower starting during May and June.

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Monitoring of Management

When those managing the Jenks Conservation Land lack plant identification skills, accompaniment or prior flagging by a person knowledgeable with plant identification (i.e., Land Stewards, Conservation Commissioners, or NRC staff) is recommended. This will ensure that invasive plant species are being managed against and that areas of native vegetation are periodically preserved. OA is happy to assist with plant identification via trainings, email, etc. Also, several valuable botanical references are listed within the enclosed Guidelines for Flagging of Cutting and Preservation Areas.

If resources exist in the future, generation a map or sketch that identifies both cutting and avoidance areas may be helpful for management crews to use in the field.

Enclosed herewith, we present specific guidelines for mowing and cutting crews and separate guidelines for those that may be flagging vegetation for mowing and cutting crews. We suggest that these sets of guidelines be readily available so that vegetation management efforts by others, such as volunteering individuals or groups, adhere to these guidelines.

Closing

The recommendations and guidelines contained within this document are OA's professional opinions for management of the Jenks Conservation Land meadow habitat. The ideas presented herein are not intended to preclude other management activities on the property and it is our belief that this general management plan can be expanded to include other management techniques and goals such as attracting specific species to the meadow on the property. Also, please note that the goals and techniques put forth here may need to shift or change over time in response to natural processes, alterations of the surrounding landscape, or other unforeseen factors.

Thank you for the opportunity to contribute to this valuable conservation project.

Sincerely,



Brett Trowbridge
Field Biologist

Enclosures:

Guidelines for Mowing and Cutting Crews
Guidelines for Flagging of Cutting and Preservation Areas

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Guidelines for Jenks Conservation Land Mowing and Cutting

- Mow all non-woody vegetation and low woody shrubs growing within the meadow area.
- Look for flagging color and label indicators on stands of trees and shrubs.
- In general, the flag colors designated below will apply, however, please pay attention to labels on the flags. Other colors may be used if yellow and orange are unavailable, but instructions will be written on the flags. Please do not disturb flags that are not labeled “Cut” or “Mow”.

Yellow flagging tape will be used to indicate individuals or stands of vegetation to be mowed or cut. These flags will be labeled “Cut” or “Mow”

YELLOW = MOW or CUT

Orange flagging tape will be used to indicate individual specimens or areas that should be avoided. These flags will be labeled “Avoid”

ORANGE = AVOID

- Cutting of larger shrubs and trees should be as close to the ground as possible. This will help minimize tripping injuries and equipment damage.

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Guidelines for Flagging of Cutting and Preservation Areas

- Target Oriental Bittersweet (*Celastrus orbiculata*), Multiflora Rose (*Rosa multiflora*), Honeysuckle (*Lonicera morrowii*), Autumn Olive (*Elaeagnus umbellata*), Glossy Buckthorn (*Frangula alnus*), and Common Buckthorn (*Rhamnus cathartica*) for mowing or cutting.
- Target large patches of native vegetation including raspberries/blackberries (*Rubus* spp.), dogwoods (*Swida* spp.), alder (*Alnus* spp.), and sumac (*Rhus* spp.) for preservation. Flag obstacles such as sink holes, rock outcrops, etc. for avoidance.
- Whenever possible, adhere to the following flag colors designated below.
- Be sure to label each flag with permanent marker, regardless of flag color.
- Yellow flagging tape should be used to indicate individuals or stands of vegetation to be mowed or cut. These flags should be labeled "Cut" or "Mow".
YELLOW = MOW or CUT
- Orange flagging tape will be used to indicate individual specimens or areas that should be avoided. These flags will be labeled "Avoid"
ORANGE = AVOID
- Please consider use of bio/photodegradable flagging tape (available at: <http://www.forestry-suppliers.com/> or <http://www.benmeadows.com/>)

Botanical References

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