

Early Successional Habitat Development/Management - 647

Massachusetts Grassland Job Sheet

Client:	Farm #:	Tract #:
Planned By:	Date:	
Acres to be Managed (Patch Size):	Target Species: Grassland species	

DEFINITION

Manage plant succession to develop and maintain early successional habitat to benefit desired wildlife and/or natural communities.

BACKGROUND/PURPOSE

Early successional habitats are transitional and require different levels of disturbance to be maintained. If they are not disturbed in some fashion (e.g., mowing, burning, etc.), they will transform into another habitat type over time through the process referred to as succession. Early successional habitats are of concern because many of the species that depend on this habitat type are declining in the Northeast due to loss of habitat.



GRASSLAND

Grassland is a broad term that applies to many open habitat types but in general, these areas are dominated by grasses and have no trees or shrubs. Unless disturbed by mowing, burning, grazing, etc., grassland will revert to old field (dominated by forbs) over time. In Massachusetts, grassland habitat is important for a variety of wildlife such as grassland nesting songbirds, wood turtles, rabbits, deer and many others. Their use by wildlife will depend on their size, configuration, and vegetation height, density and composition. Grassland nesting birds are the focus of many management plans because their numbers have experienced significant population declines.



SITE SELECTION

Locations to target for management include:

- open landscapes (i.e., sites located near other grassland or scrubland habitats);
- large, blocky shaped grassland parcels.

Most of the declining grassland nesting birds species are *area sensitive* which means they select breeding grassland sites that are of a particular size. Birds such as bobolinks can utilize smaller grasslands (~ 10 acres) but other species such as upland sandpiper require grassland areas of 100 acres or more. Field shape is also important. Grassland nesting birds prefer to nest away from field edges because of the increased threat of predators. Large, blocky fields have less *edge* than do long, narrow fields.

MANAGEMENT SPECIFICATIONS

- Manage the field to maintain or establish grass so that it comprises 50 – 75 % of the cover, with forbs comprising the remainder. Lime and/or fertilizer may be needed to improve the growing conditions for grasses.
- Mowing or brush hogging must be done outside of the primary nesting season (i.e., April 15 through August 1st). Where Wood turtles or Eastern Box turtles are known to occur, mowing shall be delayed until after September 15th. If forbs are present, consider mowing after the growing season (i.e., November-December) to allow the plants to flower and provide pollen and nectar to pollinators.
- The mower height should be set at a minimum of 5 inches for cool season grass stands and 7 inches for warm season grass stands. If turtles are known to occur in the area, the mower height should be set no lower than 7 inches for all grassland types.
- Practice rotational mowing where feasible by mowing ½ of the field one year and the remaining ½ the following year. The intent is to have grassland in various stages of growth and vegetative diversity which can provide for increased wildlife diversity.

MAINTENANCE

Grasslands must be disturbed at regular intervals to prevent succession. Additionally, the wildlife benefits of grassland stands decline over time as plant thatch accumulates and grass composition decreases. Any land use or use of fertilizers, herbicides and other chemicals shall not compromise the intended purpose of this practice which is improved early successional habitat.

Resources for More Information -

Grassland Birds – USDA NRCS WHMI and the WHC Fish and Wildlife Habitat Management Leaflet #8, 1999.

<http://www.whmi.nrcs.usda.gov/technical/leaflet.htm>

Managing Grasslands, Shrublands and Young Forests for Wildlife – Northeast Upland Habitat Technical Committee, 2006: Chapter 3.

Maintaining and Restoring Grasslands

http://www.wildlife.state.nh.us/Wildlife/Northeast_Hab_Mgt_Guide.htm

Grassland Conservation Program of Massachusetts Audubon

http://www.massaudubon.org/Birds_&_Beyond/grassland/index.php

