

Massachusetts Division of Fisheries & Wildlife

Forest Cutting Plan Summary

DCR File Number	233-2449-6
Natural Heritage Atlas	No overlap with Priority or Estimated habitats for rare species
Public Drinking Water Supply	No
ACEC	No

Site Information:

Property: Peru WMA, Tracy Pond Section	Town(s): Peru
Acres: 19	Road: Middlefield Road
Forest Management Zone: Berkshire Highlands	Wildlife District: Western
Ecoregion: Berkshire-Vermont Upland	Watershed: Housatonic River
Stands Treated: Portions of WE2420, 2435	

Harvest Information:

Objective: To regenerate a 60-year old Norway spruce plantation and establish young forest habitat composed of native northern hardwood tree species and non-invasive Norway spruce. Clusters of mature spruce with occasional black cherry seed trees were retained throughout the harvest area to provide structural diversity, mast production, and den/cavity habitat.

Harvest Start Date: November 20, 2007	Harvest End Date: February 21, 2007
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Forest Products to be Harvested

Species	Board Foot Volume	Cords	Tons
Norway Spruce	229	0	538
White Pine	3	0	0
Total	232	0	538

Site Selection: This plantation was identified as a priority site for regeneration through a GIS analysis of DFW landcover data and a subsequent site visit. The GIS analysis identifies stands that are potentially at high risk of damage by windthrow, and stands that may have been degraded by high-grade cutting prior to acquisition by DFW.

Silviculture: This regeneration harvest is designed as an aggregate retention cut (ARC), and will retain at least 10 sq. ft./acre basal area of mature trees of native species and Norway spruce in small groups and single trees. In addition to the native spruce trees in adjacent stands, most existing native trees within the stand (white pine and northern hardwoods) will be retained as seed sources. Some old field white pine along the northern edge of the plantation will be harvested but white pine within the stand will be mostly retained. We expect some trees in the wetland portion of this stand to continue to blow down once the upland is harvested. This Norway spruce plantation has advance regeneration of 1-2' native red spruce and balsam fir regeneration from seed trees in adjacent stands. Advance regeneration will be protected by requiring the use of a forwarder, and by minimizing the number of forwarder trails.

ARCs are structurally diverse and typically produce two-aged stands with abundant early-seral habitat, while retaining important structural attributes associated with natural disturbance process. Within an ARC, 10-20% of existing forest cover is retained in clusters of live trees and snags. Retained groups will include both deciduous, mast-producing trees, and coniferous stems to provide thermal cover whenever possible. Existing den and cavity trees provide ideal nuclei for retained groups. Retained trees will generally not be cut during subsequent operations, but will be allowed to break up and decay naturally over time. Even

where small openings occur, some trees will go un-harvested, and will eventually become a source of large, woody debris as they decay upon reaching their maximum biological life span.

To a degree, retained groups within ARCs act as miniature reserves, from which resident flora and fauna can repopulate harvested sites. ARCs typically foster regeneration of both shade intolerant tree species (primarily on the south and west sides of retained groups), as well as shade tolerant species (primarily on the north and east sides of retained groups). Occurrence of both shade tolerant and shade intolerant tree species in one stand is a characteristic of original eastern forests.

Plan Preparer:

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 Division of Fisheries & Wildlife
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 MA Licensed Forester No. 366

Licensed Timber Harvester:

Cloutier Logging
 645 Main Road
 Dalton, MA 01223
 MA Licensed Harvester No. 06-947

Best Management Practices:

Stream Crossings: None
Filter Strips: One 50' filter strip along un-named intermittent stream (see harvest map).

Wetland Crossings: None
Harvesting in Wetlands: Two acres of Norway spruce plantation with $\geq 50\%$ basal area retention (see harvest map).

FS-1 protects a braided intermittent stream complex associated with a wetland along Middlefield Rd. No trees are marked within this filter strip.

HW-1 is a wetland within ST-1 with water table near the surface. More than 50% BA will be retained, and equipment will operate in the wetland as little as possible, and only during dry, frozen, or otherwise stable conditions. In much of the wetland, 100% of the overstory will be retained.

Cutting Standards:

Feature (see map)	Stand 1
Forest Type	Spruce/Fir
Acres	19
Landowner Objective	Long Term
Designation of Trees	Cut
Type of Cut	Other *
Source of Regeneration	Advanced & Natural Seed

* See Silviculture section, above.

Determination of Status:

This cutting plan was approved by DCR on 5/26/2006

Final inspection approval was obtained from the DCR Service forester in May, 2007.

Stand map

Brian Holt Hawthorne
Forester, Western Wildlife District
Division of Fisheries and Wildlife
MA Lic. 366

W-PR-4 Tracy Pond Norway Spruce Plantation Peru Wildlife Management Area

Forest Cutting Plan Map
4/3/2006

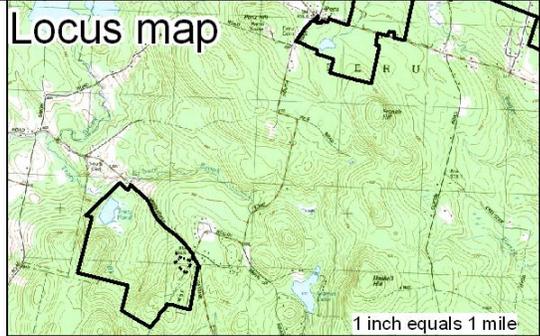


Map data from MassGIS and
Division of Fisheries and Wildlife.



Legend

- ⊗ Landings
- ▭ Property boundary
- ⋯ Intermittent streams
- ⋯ Forwarder trail
- Stream
- - - Existing road
- Wetland
- 50' Filter strip





MassWildlife photo by Brian Hawthorne

November 2006: Tracked delimeter processing Norway spruce trees that were felled with a chainsaw on the Tracy Pond section of the Peru WMA. Tops were placed in the forwarder road to reduce impact to the soil, and boles were cut-to length, sorted, and stacked for removal by a forwarder.



MassWildlife photo by Brian Hawthorne

January 2007: Partially completed regeneration harvest in a Norway spruce plantation, Tracy Pond Section, Peru WMA. Note aggregate and individual retention of overstory trees within the harvest area. Merchantable logs and pulpwood are felled and cut-to-length in this photo, but had not yet been removed from the site because the operator was waiting for more completely frozen ground conditions before using a forwarder to remove wood products.



MassWildlife photo by Brian Hawthorne

February 2007: Norway spruce logs on the roadside landing at the Peru WMA. After the ground finally froze in this unusually warm winter, logs were carried by a forwarder to the road-side landing and then loaded onto log trucks for transportation to sawmills.