

DFW Pre-Harvest Flora

Herm Covey WMA, Belchertown, Massachusetts

Date of survey: 8/7/2006

Surveyed by DFW Staff

Location of lot(s): East of East Street & West of the Swift River

General Description and Setting

Two stands of old-field white pine are scheduled for the second (removal) cut of a two-cut shelterwood regeneration harvest to establish diverse young forest habitat. The first (preparatory) cut was carried out in January-February, 2000, and resulted in a lush understory of advance tree regeneration (primarily white pine and red oak, along with red maple, aspen, birch, cherry, and hemlock), shrubs (primarily including raspberry, blueberry, and hazelnut), and herbs (primarily including asters, lady slipper, hay-scented fern, Canada mayflower, partridgeberry, and star flower). The two stands both occur along East Street (north and south of the Connecticut Valley District Headquarters) and were surveyed together.

Significant Flora and Habitats

No rare species, priority natural communities, or significant habitats were found. The two stands are both post-agricultural, second growth white pine growing on abandoned pastureland and an abandoned campground area.

Invasive Exotic Species

Six non-native, invasive species are present between the two stands, all at low densities, and include garlic-mustard, autumn olive, honeysuckle, multiflora rose, Japanese barberry, and black locust. These species may respond favorably to increased light and disturbance associated with the planned harvest. Note: Prior to the harvesting operation, mechanical control efforts were conducted to locate and pull invasive plant seedlings within the harvest areas. Follow-up treatment will likely be needed as invasive plant seed likely occurs within the soil seed bank.

WMA Pre-Harvest Flora

Herm Covey WMA Survey by Private Contractor, August 7, 2006

<i>Latin Name</i>	<i>Common Name</i>	(1 to 3) <i>Frequency</i>	(+, 1 to 5) <i>Cover</i>	<i>Stratum</i>
<i>Amelanchier sp.</i>	shadbush, serviceberry	1	+	C
<i>Betula alleghaniensis</i>	yellow birch	1	+	C
<i>Betula lenta</i>	sweet birch	1	+	C
<i>Betula papyrifera</i>	paper birch	1	+	C
<i>Betula populifolia</i>	grey birch	1	+	C
<i>Pinus strobus</i>	eastern white pine	3	5	C
<i>Prunus serotina</i>	black cherry	1	+	C
<i>Quercus alba</i>	white oak	2	2	C
<i>Quercus coccinea</i>	scarlet oak	2	2	C
<i>Quercus ilicifolia</i>	bear or scrub oak	1	+	C
<i>Quercus rubra</i>	northern red oak	2	2	C
<i>Quercus velutina</i>	black oak	2	2	C

	<i>Tsuga canadensis</i>	eastern hemlock	1	1	C
	<i>Acer rubrum</i>	red maple	2	2	U
i	<i>Alliaria petiolata</i>	garlic-mustard	1	+	U
	<i>Amelanchier sp.</i>	unknown shadbush	1	1	U
	<i>Apocynum androsaemifolium</i>	spreading dogbane	1	+	U
	<i>Aralia hispida</i>	bristly sarsaparilla	1	+	U
	<i>Aralia nudicaulis</i>	wild sarsaparilla	1	+	U
	<i>Aster divaricatus</i>	white wood aster	1	+	U
i	<i>Berberis thunbergii</i>	Japanese barberry	1	+	U
	<i>Betula alleghaniensis</i>	yellow birch	1	1	U
	<i>Betula lenta</i>	sweet birch	1	1	U
	<i>Betula populifolia</i>	gray birch	2	1	U
	<i>Castanea dentata</i>	American chestnut	1	+	U
	<i>Chimaphila maculata</i>	striped pipsissewa	2	+	U
	<i>Chimaphila umbellata</i>	pipsissewa	2	+	U
	<i>Comptonia peregrina</i>	sweet fern	1	1	U
	<i>Cornus alternifolia</i>	alternateleaf dogwood	1	+	U
	<i>Corylus americana</i>	American hazlenut	2	2	U
	<i>Corylus cornuta</i>	beaked hazelnut	2	2	U
	<i>Crataegus sp.</i>	unknown hawthorn	1	+	U
	CYPERACEAE	unknown sedge	1	+	U
	<i>Cypripedium acaule</i>	lady slipper	2	+	U
	<i>Dennstaedtia punctilobula</i>	hay-scented fern	2	3	U
	<i>Dianthus deltoides</i>	maiden pink	1	+	U
	<i>Dryopteris intermedia</i>	intermediate woodfern	1	+	U
i	<i>Elaeagnus umbellata</i>	autumn olive	1	+	U
	<i>Fraxinus americana</i>	white ash	1	1	U
	<i>Galium mollugo</i>	wild madder (bedstraw)	1	+	U
	<i>Gaultheria procumbens</i>	wintergreen	3	2	U
	<i>Glechoma hederacea</i>	Gill-over-the-ground	1	1	U
	<i>Goodyera pubescens</i>	downy rattlesnake plantain	2	2	U
	GRAMINOIDS	unknown grass	3	2	U
	<i>Hieracium scabrum</i>	rough hawkweed	1	+	U
	<i>Ilex verticillata</i>	common winterberry	1	+	U
	<i>Juniperus virginiana</i>	eastern redcedar	1	+	U
	<i>Lespedeza sp.</i>	unkown bush-clover	1	+	U
	<i>Linaria vulgaris</i>	butter-and-eggs	1	+	U
i	<i>Lonicera spp</i>	non-native honeysuckle	1	1	U
	<i>Lycopodium obscurum</i>	tree clubmoss	2	2	U
	<i>Lysimachia quadrifolia</i>	whorled loosestrife	2	2	U
	<i>Maianthemum canadense</i>	Canada mayflower	3	2	U
	<i>Medeola virginiana</i>	Indian cucumber	1	1	U
	<i>Mitchella repens</i>	partridgeberry	3	3	U
	<i>Monotropa uniflora</i>	Indian pipe	1	+	U
	<i>Picea abies</i>	Norway spruce	1	+	U
	<i>Pinus strobus</i>	eastern white pine	3	4	U
	<i>Polygonatum pubescens</i>	Solomon's seal	1	+	U
	<i>Polystichum acrostichoides</i>	Christmas fern	1	+	U
	<i>Populus grandidentata</i>	bigtooth aspen	2	2	U
	<i>Populus tremuloides</i>	quaking aspen	2	2	U

	<i>Potentilla simplex</i>	common cinquefoil	1	1	U
	<i>Prunus serotina</i>	black cherry	2	2	U
	<i>Quercus alba</i>	white oak	2	2	U
	<i>Quercus coccinea</i>	scarlet oak	1	1	U
	<i>Quercus rubra</i>	northern red oak	3	3	U
	<i>Quercus velutina</i>	black oak	2	2	U
	<i>Rhus hirta</i>	staghorn sumac	1	+	U
i	<i>Robinia pseudoacacia</i>	black locust	1	+	U
i	<i>Rosa sp.</i>	unknown rose – multiflora?	1	+	U
	<i>Rubus allegheniensis</i>	Allegheny blackberry	1	1	U
	<i>Rubus hispidus</i>	bristly dewberry	3	4	U
	<i>Rubus idaeus</i>	American red raspberry	2	2	U
	<i>Rubus occidentalis</i>	black raspberry	2	2	U
	<i>Salix sp.</i>	unkown willow	1	+	U
	<i>Solidago sp.</i>	unknown goldenrod	1	+	U
	<i>Sorbus aucuparia</i>	European mountain ash	1	+	U
	<i>Spiraea tomentosa</i>	steeplebush	1	1	U
	<i>Taraxacum officinale</i>	common dandelion	1	+	U
	<i>Toxicodendron radicans</i>	poison ivy	1	1	U
	<i>Trientalis borealis</i>	starflower	2	1	U
	<i>Tsuga canadensis</i>	eastern hemlock	2	2	U
	<i>Ulmus americana</i>	American elm	1	+	U
	<i>Vaccinium angustifolium</i>	lowbush blueberry	2	2	U
	<i>Vaccinium corymbosum</i>	highbush blueberry	2	2	U
	<i>Vaccinium pallidum</i>	early sweet, lowbush blueberry	1	1	U
	<i>Viburnum acerifolium</i>	mapleleaf viburnum	1	1	U
	<i>Viburnum nudum var. cassinoides</i>	withe-rod	1	+	U
	<i>Viola sp. #1</i>	unknown unstemmed violet	1	+	U
	<i>Vitis labrusca</i>	fox grape	1	+	U
Non-Vascular Plants:					
	<i>Fungi</i>	unknown fungi	2	+	U
	<i>Lichens</i>	unknown lichens	3	+	U
	<i>Polytricum sp.</i>		2	2	U
	<i>other mosses</i>		1	1	U

Frequency:

1 - Infrequent - represented in a small percentage of plots under traditional plot-sampling methods.

2 - Moderately well distributed - represented in many plots under traditional plot-sampling methods.

3 - Frequent - represented in most plots under traditional plot-sampling methods.

Cover:

[<1%] Few Stems, low cover = +

[1-5% cover] = 1

[6-25% cover] = 2

[26-50% cover] = 3

[51-75% cover] = 4

[76-100% cover] = 5

Stratum:

(C)anopy

(U)nderstory [sub-canopy, shrub layers, herbs and forbs].

i =invasive, exotic species