

DFW Pre-Harvest Flora  
Moose Hill WMA, Paxton Massachusetts  
Date of survey: 7/19/06  
Surveyed by Private Contractor  
Location of lot(s): West of Winter Street

#### General description and setting

The harvest area consists of three marked stands; a 17.4-acre stand dominated by old field white pine (ST-1); a 1-acre early successional patch, and 1-acre hedgerow that surrounds the agricultural fields (ST-2 and ST-3). The marked stands surround agricultural land currently used for row crops (corn) and are themselves second growth forest, of various ages, on former agricultural land.

The variation in seral stages on the property results in an interesting patchy mosaic of habitats, and rather high floristic diversity.

#### Significant Flora and Habitats

No rare or unusual species or significant habitat types were found.

#### Invasive Species

Invasive species are prominent components of the vegetation in the field edges, hedgerows and early seral stands (throughout Stands 1 & 2). Invasives are present, but uncommon in most of Stand 1, but are well established in the edge habitat where field and forest meet. No attempt was made to map individual invasive species locations in these stands. The following invasive species were observed.

Celastris orbiculata (oriental bittersweet)  
Berberis thunbergii (Japanese barberry)  
Rosa multiflora (multiflora rose)  
Lonicera morrowii (Morrow's honeysuckle)  
Ligustrum vulgare (privet)

Oriental bittersweet is the most abundant of the group, and achieves impressive densities, particularly in edge habitat. The other species are widespread, but usually at low-to-moderate densities or in smaller, discreet dominance patches.

*Note: Invasive plant "thickets" were cut as part of the field edge/hedgerow maintenance project. Most of this material was chipped and removed from the site. These linear strips of invasive plants will sprout and these low sprouts will be chemically treated at the first possible opportunity and monitored periodically for treatment success.*

# WMA Pre-harvest Floras

Moose Hill WMA

Survey by Private Contractor, July 2006

ST-1

| <i>Latin Name</i>                           | <i>Common Name</i>               | <i>Stratum</i> <sup>1</sup> | <i>Freq.</i> <sup>2</sup> | <i>Cover</i> <sup>3</sup> | <i>Growth Form</i>         |
|---|----------------------------------|-----------------------------|---------------------------|---------------------------|----------------------------|
| <i>Acer rubrum</i>                          | red maple                        | C                           | 2                         | 3                         | Tree                       |
| <i>Acer saccharum</i>                       | sugar maple                      | C                           | 1                         | 1                         | Tree, Shrub                |
| <i>Pinus rigida</i>                         | pitch pine                       | C                           | 1                         | 1                         | Tree                       |
| <i>Pinus strobus</i>                        | eastern white pine               | C                           | 2                         | 3                         | Tree                       |
| <i>Quercus rubra</i>                        | northern red oak                 | C                           | 2                         | 3                         | Tree                       |
| <i>Acer saccharum</i>                       | sugar maple                      | U                           | 1                         | 1                         | Tree, Shrub                |
| <i>Apocynum androsaemifolium</i>            | spreading dogbane                | U                           | 1                         | 1                         | Forb/herb                  |
| <i>Aralia nudicaulis</i>                    | wild sarsaparilla                | U                           | 3                         | 1                         | Subshrub, Shrub, Forb/herb |
| <i>Betula papyrifera</i>                    | paper birch                      | U                           | 1                         | 1                         | Tree                       |
| <i>Brachyelytrum septentrionale</i>         | northern shorthusk               | U                           | 1                         | 1                         | Graminoid                  |
| <i>Carex swanii</i>                         | Swan's sedge                     | U                           | 1                         | 1                         | Graminoid                  |
| <i>Castanea dentata</i>                     | American chestnut                | U                           | 1                         | 1                         | Tree                       |
| <i>Celastrus orbiculata</i>                 | Asian bittersweet                | U                           | 1                         | 1                         | Vine                       |
| <i>Circaea lutetiana ssp. canadensis</i>    | broadleaf enchanter's nightshade | U                           | 1                         | 1                         | Forb/herb                  |
| <i>Coptis trifolia ssp. groenlandica</i>    | goldthread                       | U                           | 1                         | 1                         |                            |
| <i>Cornus alternifolia</i>                  | alternateleaf dogwood            | U                           | 1                         | 1                         | Tree, Shrub                |
| <i>Corylus cornuta</i>                      | beaked hazelnut                  | U                           | 1                         | 1                         | Tree, Shrub                |
| <i>Dennstaedtia punctilobula</i>            | eastern hayscented fern          | U                           | 2                         | 3                         | Forb/herb                  |
| <i>Dryopteris intermedia</i>                | intermediate woodfern            | U                           | 2                         | 2                         | Forb/herb                  |
| <i>Gaultheria procumbens</i>                | eastern teaberry                 | U                           | 1                         | 1                         | Subshrub, Shrub            |
| <i>Ilex verticillata</i>                    | common winterberry               | U                           | 1                         | 1                         | Tree, Shrub                |
| <i>Kalmia latifolia</i>                     | mountain laurel                  | U                           | 2                         | 3                         | Tree, Shrub                |
| <i>Lycopodium hickeyi</i>                   | Pennsylvania clubmoss            | U                           | 1                         | 1                         | Subshrub, Forb/herb        |
| <i>Lycopodium obscurum</i>                  | rare clubmoss                    | U                           | 1                         | 1                         | Subshrub, Shrub            |
| <i>Maianthemum canadense</i>                | Canada mayflower                 | U                           | 3                         | 2                         | Forb/herb                  |
| <i>Maianthemum racemosum</i>                | feathery false lily of the vally | U                           | 2                         | 1                         | Forb/herb                  |
| <i>Mitchella repens</i>                     | partridgeberry                   | U                           | 2                         | 2                         | Subshrub, Shrub, Forb/herb |
| <i>Monotropa uniflora</i>                   | Indianpipe                       | U                           | 1                         | 1                         | Forb/herb                  |
| <i>Osmunda claytoniana</i>                  | interrupted fern                 | U                           | 1                         | 1                         | Forb/herb                  |
| <i>Pinus strobus</i>                        | eastern white pine               | U                           | 2                         | 1                         | Tree                       |
| <i>Prunus serotina</i>                      | black cherry                     | U                           | 1                         | 1                         | Tree, Shrub                |
| <i>Prunus virginiana</i>                    | chokecherry                      | U                           | 1                         | 1                         | Tree, Shrub                |
| <i>Pteridium aquilinum var. latiusculum</i> | western brackenfern              | U                           | 1                         | 1                         | Forb/herb                  |
| <i>Quercus alba</i>                         | white oak                        | U                           | 1                         | 1                         | Tree                       |
| <i>Quercus rubra</i>                        | northern red oak                 | U                           | 1                         | 1                         | Tree                       |
| <i>Quercus velutina</i>                     | black oak                        | U                           | 1                         | 1                         | Tree                       |
| <i>Rosa multiflora</i>                      | multiflora rose                  | U                           | 1                         | 1                         | Vine, Shrub                |
| <i>Rubus allegheniensis</i>                 | Allegheny blackberry             | U                           | 1                         | 1                         | Shrub                      |
| <i>Rubus flagellaris</i>                    | northern dewberry                | U                           | 2                         | 1                         | Shrub                      |
| <i>Thelypteris noveboracensis</i>           | New York fern                    | U                           | 1                         | 2                         | Forb/herb                  |
| <i>Toxicodendron radicans</i>               | eastern poison ivy               | U                           | 1                         | 1                         | Shrub, Subshrub, Vine      |
| <i>Trientalis borealis</i>                  | starflower                       | U                           | 2                         | 1                         | Forb/herb                  |
| <i>Uvularia sessilifolia</i>                | sessileleaf bellwort             | U                           | 1                         | 1                         | Forb/herb                  |
| <i>Vaccinium angustifolium</i>              | lowbush blueberry                | U                           | 2                         | 2                         | Subshrub, Shrub            |
| <i>Vaccinium corymbosum</i>                 | highbush blueberry               | U                           | 2                         | 1                         | Shrub                      |
| <i>Viburnum acerifolium</i>                 | mapleleaf viburnum               | U                           | 1                         | 1                         | Shrub                      |
| <i>Viburnum acerifolium</i>                 | mapleleaf viburnum               | U                           | 1                         | 1                         | Shrub                      |
| <i>Viburnum dentatum var. lucidum</i>       | southern arrowwood               | U                           | 1                         | 1                         | Tree, Shrub                |
| <i>Viburnum lentago</i>                     | nannyberry                       | U                           | 1                         | 1                         | Tree, Shrub                |

<sup>1</sup>C = Canopy (Overstory), U = Understory

<sup>2</sup>1 = Occasional, 2 = Common, 3 = Abundant

<sup>3</sup>1 = Sparse, 2 = Moderate, 3 = Dense

Moose Hill WMA

ST-2 & ST-3

| <i>Latin Name</i>                               | <i>Common Name</i>               | <i>Stratum</i> <sup>1</sup> | <i>Freq.</i> <sup>2</sup> | <i>Cover</i> <sup>3</sup> | <i>Growth Form</i>         |
|---|----------------------------------|-----------------------------|---------------------------|---------------------------|----------------------------|
| <i>Acer rubrum</i>                              | red maple                        | C                           |                           |                           | Tree                       |
| <i>Pinus strobus</i>                            | eastern white pine               | C                           |                           |                           | Tree                       |
| <i>Prunus serotina</i>                          | black cherry                     | C                           |                           |                           | Tree, Shrub                |
| <i>Quercus rubra</i>                            | northern red oak                 | C                           |                           |                           | Tree                       |
| <i>Acer rubrum</i>                              | red maple                        | U                           |                           |                           | Tree                       |
| <i>Acer saccharum</i>                           | sugar maple                      | U                           |                           |                           | Tree, Shrub                |
| <i>Aralia nudicaulis</i>                        | wild sarsaparilla                | U                           |                           |                           | Subshrub, Shrub, Forb/herb |
| <i>Asclepias syriaca</i>                        | common milkweed                  | U                           |                           |                           | Forb/herb                  |
| <i>Berberis thunbergii</i>                      | Japanese barberry                | U                           |                           |                           | Shrub                      |
| <i>Betula papyrifera</i>                        | paper birch                      | U                           |                           |                           | Tree                       |
| <i>Betula populifolia</i>                       | gray birch                       | U                           |                           |                           | Tree                       |
| <i>Carex debilis</i> var. <i>rudgei</i>         | white edge sedge                 | U                           |                           |                           | Graminoid                  |
| <i>Celastrus orbiculata</i>                     | Asian bittersweet                | U                           |                           |                           | Vine                       |
| <i>Circaea lutetiana</i> ssp. <i>canadensis</i> | broadleaf enchanter's nightshade | U                           |                           |                           | Forb/herb                  |
| <i>Cornus alternifolia</i>                      | alternateleaf dogwood            | U                           |                           |                           | Tree, Shrub                |
| <i>Danthonia compressa</i>                      | flattened oatgrass               | U                           |                           |                           | Graminoid                  |
| <i>Dennstaedtia punctilobula</i>                | eastern hayscented fern          | U                           |                           |                           | Forb/herb                  |
| <i>Fragaria virginiana</i>                      | Virginia strawberry              | U                           |                           |                           | Forb/herb                  |
| <i>Fraxinus americana</i>                       | white ash                        | U                           |                           |                           | Tree                       |
| <i>Galium mollugo</i>                           | false baby's breath              | U                           |                           |                           | Forb/herb                  |
| <i>Ilex verticillata</i>                        | common winterberry               | U                           |                           |                           | Tree, Shrub                |
| <i>Impatiens capensis</i>                       | jewelweed                        | U                           |                           |                           | Forb/herb                  |
| <i>Kalmia latifolia</i>                         | mountain laurel                  | U                           |                           |                           | Tree, Shrub                |
| <i>Lysimachia ciliata</i>                       | fringed loosestrife              | U                           |                           |                           | Forb/herb                  |
| <i>Maianthemum canadense</i>                    | Canada mayflower                 | U                           |                           |                           | Forb/herb                  |
| <i>Maianthemum racemosum</i>                    | feathery false lily of the vally | U                           |                           |                           | Forb/herb                  |
| <i>Malus pumila</i>                             | paradise apple                   | U                           |                           |                           | Tree                       |
| <i>Mitchella repens</i>                         | partridgeberry                   | U                           |                           |                           | Subshrub, Shrub, Forb/herb |
| <i>Parthenocissus quinquefolia</i>              | Virginia creeper                 | U                           |                           |                           | Vine                       |
| <i>Pinus rigida</i>                             | pitch pine                       | U                           |                           |                           | Tree                       |
| <i>Pinus strobus</i>                            | eastern white pine               | U                           |                           |                           | Tree                       |
| <i>Populus tremuloides</i>                      | quaking aspen                    | U                           |                           |                           | Tree                       |
| <i>Potentilla simplex</i>                       | common cinquefoil                | U                           |                           |                           | Forb/herb                  |
| <i>Prunus serotina</i>                          | black cherry                     | U                           |                           |                           | Tree, Shrub                |
| <i>Prunus virginiana</i>                        | chokecherry                      | U                           |                           |                           | Tree, Shrub                |
| <i>Pyrola elliptica</i>                         | waxflower shinleaf               | U                           |                           |                           | Subshrub, Shrub            |
| <i>Quercus alba</i>                             | white oak                        | U                           |                           |                           | Tree                       |
| <i>Quercus alba</i>                             | white oak                        | U                           |                           |                           | Tree                       |
| <i>Quercus rubra</i>                            | northern red oak                 | U                           |                           |                           | Tree                       |
| <i>Quercus velutina</i>                         | black oak                        | U                           |                           |                           | Tree                       |
| <i>Rhus hirta</i>                               | staghorn sumac                   | U                           |                           |                           | Tree, Shrub                |
| <i>Rubus allegheniensis</i>                     | Allegheny blackberry             | U                           |                           |                           | Shrub                      |
| <i>Rubus flagellaris</i>                        | northern dewberry                | U                           |                           |                           | Shrub                      |
| <i>Rubus occidentalis</i>                       | black raspberry                  | U                           |                           |                           | Shrub                      |
| <i>Solidago canadensis</i> var. <i>scabra</i>   | Canada goldenrod                 | U                           |                           |                           | Forb/herb                  |
| <i>Solidago rugosa</i>                          | wrinkleleaf goldenrod            | U                           |                           |                           | Forb/herb                  |
| <i>Spiraea alba</i> var. <i>latifolia</i>       | white meadowsweet                | U                           |                           |                           | Shrub                      |
| <i>Spiraea tomentosa</i>                        | steeplebush                      | U                           |                           |                           | Shrub                      |
| <i>Taraxacum officinale</i>                     | common dandelion                 | U                           |                           |                           | Forb/herb                  |
| <i>Toxicodendron radicans</i>                   | eastern poison ivy               | U                           |                           |                           | Shrub, Subshrub, Vine      |
| <i>Tsuga canadensis</i>                         | eastern hemlock                  | U                           |                           |                           | Tree                       |
| <i>Vaccinium angustifolium</i>                  | lowbush blueberry                | U                           |                           |                           | Subshrub, Shrub            |
| <i>Vaccinium corymbosum</i>                     | highbush blueberry               | U                           |                           |                           | Shrub                      |
| <i>Veronica officinalis</i>                     | common gypsyweed                 | U                           |                           |                           | Forb/herb                  |
| <i>Viburnum acerifolium</i>                     | mapleleaf viburnum               | U                           |                           |                           | Shrub                      |
| <i>Viburnum dentatum</i> var. <i>lucidum</i>    | southern arrowwood               | U                           |                           |                           | Tree, Shrub                |
| <i>Vitis labrusca</i>                           | fox grape                        | U                           |                           |                           | Vine                       |

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