

**BOTANICAL SURVEY
STORRS CENTER PROJECT AREA**

ENVIRONMENTAL PLANNING SERVICES, INC.
OCTOBER, 2004

SURVEY METHODS AND LIMITATIONS

A botanical survey of the parcel east of Route 195 and south of Dog Lane, in Storrs, Connecticut was conducted by Environmental Planning Services biologist James Cowen on October 26, 2004. Field conditions were sunny and in the 60s degrees F. Since the vegetation was going dormant, assessment relied largely on persistent and woody vegetation.

VEGETATION

Three plant communities occur on the parcel: old field, mixed hardwood-coniferous forest, and wooded swamp. A detailed description of each vegetation type follows.

Old Field

In the eastern portion of the site is a patch of old field vegetation associated with an internal road. There are also many planted woody ornamental shrubs and conifers present.

In the early years after abandonment/disturbance, open land is characteristically vegetated with an extensive herb layer of grasses and forbes. On this site the herb layer consists predominantly of various grasses (*Poaceae spp.*), Rough-stemmed Goldenrod (*Solidago rugosa*), and Grass-leaved Goldenrod (*Euthamia graminifolia*). The open shrub layer is composed mostly of brambles (*Rubus spp.*) and several invasive non-native species: Multiflora Rose* (*Rosa multiflora*), Autumn Olive* (*Elaeagnus umbellata*), and Asiatic Bittersweet* (*Celastrus orbiculatus*). The latter forms dense thickets. The scattered tree and sapling layer includes Gray Birch (*Betula populifolia*) and Black Cherry (*Prunus serotina*).

Mixed Hardwood-Coniferous Forest

The majority of the site is forested. This is the most plentiful and characteristic type of vegetation in Connecticut. Our forests are included in the Central Hardwoods-Hemlock zone in a classification of New England forests. Since most of Connecticut has been cleared in the past, forests are called second growth and usually consist of relatively young trees with a diameter at breast height (dbh) of less than one foot.

The tree and sapling layers consist predominantly of: oak (*Quercus spp.*), White Pine (*Pinus strobus*), Red Pine (*Pinus resinosa*), Sugar Maple (*Acer saccharinum*), Black Birch (*Betula lenta*), hickory (*Carya spp.*), American Beech (*Fagus grandifolia*), Red Maple (*Acer rubrum*), and White Ash (*Fraxinus americana*). White Pine is scattered

throughout the forest and forms a dense stand on the east central knoll. The relatively open shrub layer consists largely of locally dense thickets of Japanese Barberry* (*Berberis thunbergii*), Highbush Blueberry (*Vaccinium corymbosum*), Spicebush (*Lindera benzoin*), Winged Burning Bush* (*Euonymus alatus*), Arrowwood (*Viburnum dentatum*), privet* (*Ligustrum sp.*) and Multiflora Rose* (*Rosa multiflora*). The sporadic vine layer includes Poison Ivy (*Toxicodendron radicans*), and Asiatic Bittersweet* (*Celastrus orbiculatus*). The open herb layer is mostly patches of Hay-scented Fern (*Dennstaedtia punctiloba*), sedges (*Carex spp.*), New York Fern (*Thelypteris noveboracensis*), Tree Clubmoss (*Lycopodium obscurum*), Cinnamon Fern (*Osmunda cinnamomea*), and Bristly Dewberry (*Rubus hispidus*).

Wooded Swamp

Wooded swamps are the most abundant wetland type in Connecticut and have a vegetational community which is characterized by a forest canopy at least 20 feet (6 m) tall. The wetlands on this site are all wooded and consist of two easterly-flowing stream systems and a vernal pool.

The tree layer consists mostly of Red Maple (*Acer rubrum*) with American Elm (*Ulmus americana*), Yellow Birch (*Betula allegheniensis*), Green Ash (*Fraxinus pensylvanica*), and American Beech. The moderately dense shrub layer is largely Spicebush (*Lindera benzoin*), Highbush Blueberry (*Vaccinium corymbosum*), Winterberry (*Ilex verticillata*), Sweet Pepperbush (*Clethra alnifolia*), Nannyberry (*Viburnum lentago*), Multiflora Rose*, and Japanese Barberry*. The herb layer consists predominantly of Skunk Cabbage (*Symplocarpus foetidus*), Cinnamon Fern (*Osmunda cinnamomea*), Sensitive Fern (*Onoclea sensibilis*), Bristly Dewberry, and sedges. The minimal vine layer consists of Fox Grape (*Vitis labrusca*) and Poison Ivy. Common Reed** (*Phragmites australis*) grows along the disturbed edge adjacent to the Post Office.

The vernal pool has a tree layer of Red Maple with a shrub layer of mostly Sweet Pepperbush along the edges and Spicebush, Winterberry, and Japanese Barberry*. The open herb layer includes Cinnamon Fern and Tussock Sedge (*Carex stricta*).

Specimen Trees

A large White Pine, 2' dbh, occurs approximately 20' upslope from the wetland edge between wetland flags WL 77 & 78.

A mature Japanese Chestnut tree (*Castanea crenata*.) with numerous burs beneath is located east of the internal road.

*=invasive non-native species. Invasive non-native species are derived from CT Invasive Plant List (produced by the Connecticut Invasive Plants Council) Connecticut Public Act No. 03-136

** Common Reed on the site was confirmed to be an introduced invasive genotype using the observed "morphological differences between native and introduced genotypes" as described at the Cornell University website

(<http://www.invasiveplants.net/phragmites/morphology.asp>)