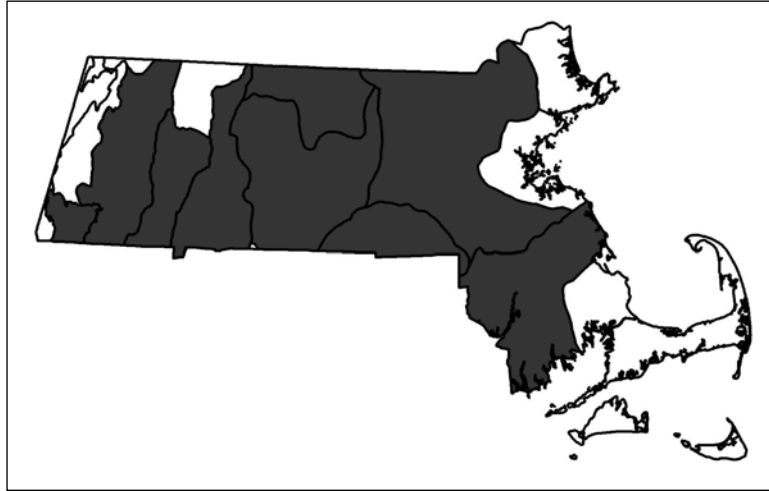


Community Name: HEMLOCK SWAMP

Community ELCODE CP1A12A000

SRank: S4



Concept: Acidic forested swamps where Eastern Hemlock is dominant or co-dominant in the canopy.

Environmental Setting: Hemlock Swamps occur in poorly drained basins throughout the state. The soil is characterized by organic peat or muck, and is saturated throughout the year.

Vegetation Description: Many swamps have Hemlock (*Tsuga canadensis*) as a component of the canopy but Hemlock Swamps are differentiated by having Hemlock as the major canopy species. In some cases, Hemlock forms dense stands; more commonly, Hemlock is associated with a mixture of White Pine (*Pinus strobus*), Red Maple (*Acer rubrum*), and Yellow Birch (*Betula alleghaniensis*). The Hemlock - dominated canopy allows little light into the subcanopy and shrub species are sparse, but shrubs can form dense thickets in canopy gaps. Typical shrubs include Winterberry (*Ilex verticillata*) and Mountain Laurel (*Kalmia latifolia*). Ferns are common, especially Cinnamon Fern (*Osmundastrum cinnamomeum* (formerly *Osmunda cinnamomea*)), along with Goldthread (*Coptis trifolia* ssp. *groenlandica*), Partridgeberry (*Mitchella repens*), and Wild Sarsaparilla (*Aralia nudicaulis*). The ground layer is hummocky and covered with Sphagnum moss and the liverwort *Bazzania trilobata*; the moss *Thuidium delicatulum* is often present.

Associations: No associations have been described in Massachusetts.

Habitat values for Associated Fauna: Hemlock Swamps can function as vernal pool habitat if water remains standing for 2-3 months and they lack fish; these areas provide amphibian breeding habitat.

Rare Plants:

Rare animals:

Examples with Public Access: Wolf Swamp Wildlife Management Area (Brookfield); Bear Swamp [DEM Representative Natural Areas, Beartown SF, Great Barrington]; 1000 Acre Swamp (Athol/Phillipston); Knightville Dam property (Huntington/Chester)

Threats: Insect pests (e.g., Hemlock Woolly Adelgid); altered hydrology.

Management Needs: More information is needed to assess the management needs for Hemlock swamps.

Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife

SYNONYMS:

USNVC/NatureServe Tsuga canadensis Saturated Forest Alliance -- Tsuga canadensis Betula alleghaniensis / Ilex verticillata /Sphagnum spp. forest [CEGL006226].

MAold Not described., included within Northern New England basin swamp [CP2B2B0000].

ME Not described.

VT Hemlock -Sphagnum acidic basin swamp; Sorenson et al. (2010)

NH Hardwood-conifer seepage swamp-Tsuga canadensis/Taxus canadensis association.

NY Hemlock -hardwood swamp; Rich Hemlock -hardwood peat swamp.

CT Tsuga canadensis seasonally flooded forest.

RI Hemlock -hardwood swamp.

Golet Larson 1974 Evergreen wooded swamp [WS-2].

Other

AUTHOR J. Kearsley; revised by G. Motzkin 2/15/2011 **DATE** 7/21/1999