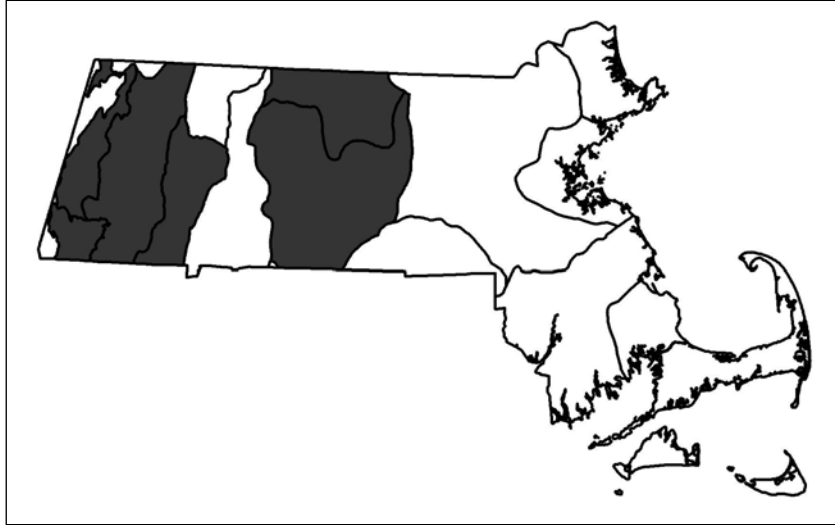


**Community Name:** RICH CONIFER SWAMP

**Community ELCODE** CP1A130000

**SRank:** S3



**Concept:** Species-rich conifer swamps with Hemlock, Balsam Fir, or Red Spruce as important canopy species, along with variable amounts of hardwoods and white pine. Understory species indicate mineral-enriched conditions.

**Environmental Setting:** Conifer swamps influenced by mineral-enriched water.

**Vegetation Description:** Variable type dominated by Hemlock (*Tsuga canadensis*), Balsam Fir (*Abies balsamea*), or Red Spruce (*Picea rubens*) mixed with Red Maple (*Acer rubrum*), Yellow Birch (*Betula alleghaniensis*), American Elm (*Ulmus americana*), and Black Ash (*Fraxinus nigra*). The understory is characterized by numerous species characteristic of mineral enriched conditions. The shrub layer may have dense patches and may include Spicebush (*Lindera benzoin*), Witch Hazel (*Hamamelis virginiana*), and Hornbeam (*Carpinus caroliniana*). Jack-in-the-pulpit (*Arisaema triphyllum*), Foamflower (*Tiarella cordifolia* var. *cordifolia*), Mitrewort (*Mitella nuda*), Wild Oats (*Uvularia sessilifolia*), Oak-fern (*Gymnocarpium dryopteris*), Slender Mannagrass (*Glyceria melicaria*), Delicate Sedge (*Carex leptalea* ssp. *leptalea*), (*Micranthes* (formerly *Saxifraga*) *pennsylvanica*), Northern Horse-balm (*Collinsonia canadensis*), Golden Ragwort (*Packera aurea* (formerly *Senecio aureus*)), Golden Saxifrage (*Chrysosplenium americanum*), Rough-leaved goldenrod (*Solidago patula*), Swamp-goldenrod (*S. uliginosa* (formerly *S. purshii*)), Purple avens (*Geum rivale*), and other rich indicators contribute to the variable and diverse herbaceous layer..

**Associations in MA:** No associations described. Balsam Fir is dominant at higher elevations.

**Habitat values for Associated Fauna:** Rich Conifer 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:** Hinsdale Flats WMA, Hinsdale; Cold Spring Rd., Sandisfield.

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

**Management Needs:**

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

**SYNONYMS:**

<b>USNVC/NatureServe</b>	Fraxinus nigra - Acer rubrum Saturated Forest Alliance -- Fraxinus nigra-Acer rubrum/Nemopanthus mucronatus-Vaccinium corymbosum forest [CEGL006220]. And Tsuga canadensis - Acer rubrum Saturated Forest Alliance (Eastern Hemlock - Red Maple Saturated Forest Alliance) - Betula alleghaniensis - Acer rubrum - (Tsuga canadensis, Abies balsamea) / Osmunda cinnamomea Forest [CEGL006380]– (Hardwood - Conifer Seepage Forest
<b>MAold</b>	was part of Spruce-Fir Swamp and Hemlock-Hardwood Swamp
<b>ME</b>	
<b>VT</b>	Hemlock -Balsam Fir-Black Ash seepage swamp; Sorenson et al. (2010)
<b>NH</b>	similar to: Northern hardwood-black ash-conifer swamp: Sperduto & Nichols 2004 and Sperduto & Kimball 2011
<b>NY</b>	related to hemlock-Hardwood and Spruce-fir Swamps
<b>CT</b>	within Eastern Hemlock seasonally flooded forests; Metzler & Barrett 2006
<b>RI</b>	related to Hemlock-Hardwood Swamp; Enser & Lundgren 2006
<b>AUTHOR</b>	G. Motzkin, P. Swain revised 8/2/11
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