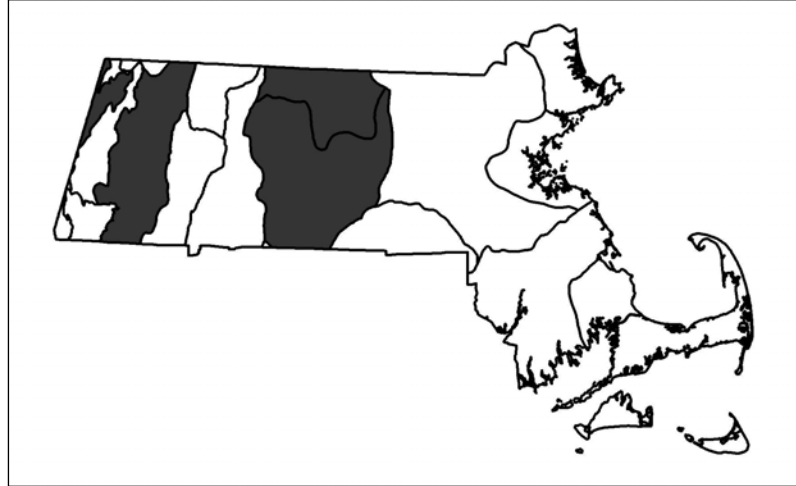


Community Name: RED SPRUCE SWAMP

Community ELCODE CP1A11A000

SRank: S3



Concept: Forested wetlands, primarily of western and north-central Massachusetts, dominated by Red Spruce.

Environmental Setting: Red Spruce Swamps are typically found at stream headwaters or in poorly drained basins in the central and western part of the state. They develop in cold, poorly drained areas, and are generally acidic and nutrient poor. Most sites occur on deep organic sediments (> 2 m).

Vegetation Description: Red Spruce (*Picea rubens*) is dominant in the overstory, with varying amounts of Balsam Fir (*Abies balsamea*), Eastern Hemlock (*Tsuga canadensis*), White Pine (*Pinus strobus*), Red Maple (*Acer rubrum*), Tamarack (*Larix laricina*), Yellow Birch (*Betula alleghaniensis*), and Black Spruce (*Picea mariana*). Unlike Spruce-Tamarack Forested Bogs, Red Spruce Swamps rather than Black Spruce dominant in the canopy; bog indicator species such as Labrador Tea (*Ledum groenlandicum*) and Bog Laurel (*Kalmia polifolia*) are uncommon or absent. The following shrub and herb species occur frequently in Red Spruce Swamps: Mountain Holly (*Ilex mucronata* (formerly *Nemopanthus mucronatus*)), Winterberry (*Ilex verticillata* and/or *I. laevigata*), Cinnamon Fern (*Osmundastrum cinnamomeum* (formerly *Osmunda cinnamomea*)), Goldthread (*Coptis trifolia* ssp. *groenlandica*), Creeping Snowberry (*Gaultheria hispidula*), Bluebead-lily (*Clintonia borealis*), Bunchberry (*Chamaepericlymenum* (formerly *Cornus*) *canadensis*), and Three-seeded Bog-sedge (*Carex trisperma*). The ground is often a carpet dominated by Sphagnum moss and the liverwort *Bazzania trilobata*. Species-rich variants of this community that occur in areas of mineral enrichment are classified as Rich Conifer Swamps.

Associations: No associations have been described in Massachusetts. Mixed spruce-hemlock swamps are common.

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

Rare Plants:

Rare animals:

Examples with Public Access: Several Red Spruce Swamps border Peru WMA (Peru). October Mountain State Forest; Tully Lake Property, Army Corps of Engineers, Royalston.

Threats: Climate change; altered hydrology.

Management Needs: Timber harvesting should be prohibited at some sites to allow old-growth characteristics to develop.

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

SYNONYMS:

USNVC/NatureServe: *Picea rubens* - *Abies balsamea* Saturated Forest Alliance -- *Picea rubens*-*Abies balsamea*/*Gaultheria hispidula*/*Sphagnum* spp. [CEGL006312]; and *Picea rubens*-*Abies balsamea*/*Sphagnum magellanicum* forest [CEGL006311];

ME Spruce-fir swamp community.

VT Red spruce-cinnamon fern swamp.

NH Coniferous basin swamp.

NY Spruce-fir swamp.

CT *Picea rubens*/*Nemopanthus mucronatus* community.

RI Not described.

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

Other Acidic conifer swamp community [Weatherbee 1996].

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