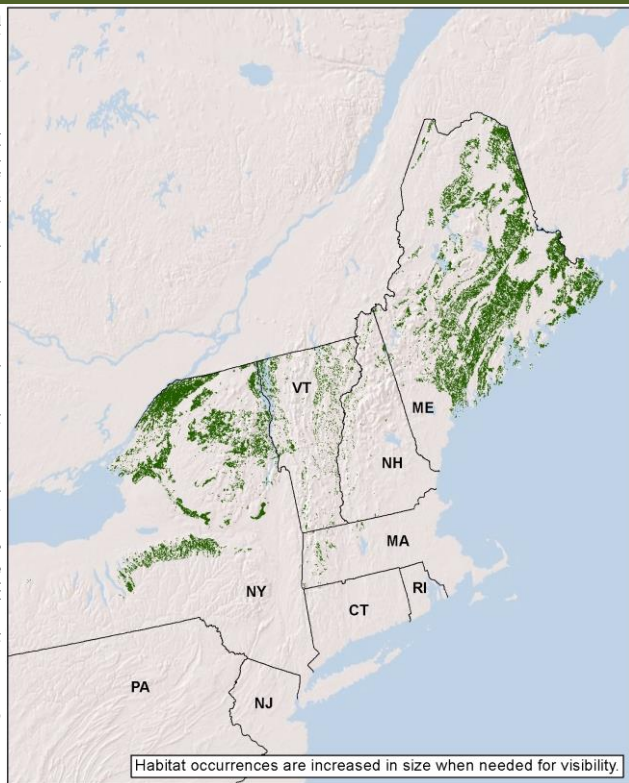


Laurentian-Acadian Alkaline Conifer-Hardwood Swamp



Macrogroup: Northern Swamp

This map is a modeled distribution based on current data and is not a substitute for field based inventory. Contact your State Natural Heritage Ecologist for more information about this habitat.



© Elizabeth Thompson (Vermont Land Trust)

Description:

A forested swamp of alkaline wetlands associated with limestone or other calcareous substrate in the northern part of the glaciated northeast. Northern white cedar is often present and may dominate the canopy or be mixed with other conifers or with deciduous trees, most commonly red maple or black ash. Some examples can be almost entirely deciduous and dominated by black ash. Red-osier dogwood is a common shrub. The herb layer tends to be more diverse than in acidic swamps, due to higher pH and nutrient level. Small open fenny areas may occur within the wetland. The moss layer is often extensive and diverse. Seepage may influence parts of the wetland, but the hydrology is dominated by the basin setting.

Ecological Setting and Natural Processes:

These forested wetlands are uncommon in the glaciated northeast except in areas with extensive limestone or similar substrate. The substrate is typically mineral soil, but there may be some peat, and there is often direct contact with alkaline groundwater.

Similar Habitat Types:

Similar to North-Central Interior and Appalachian Rich Swamp, but with a flora characteristic of a cooler climate. Northern Appalachian-Acadian Conifer-Hardwood Acidic Swamp occupy the same part of the region, but are found in less enriched settings. Small patch Laurentian-Acadian Alkaline Fens are often embedded within the larger swamp complex.

Crosswalk to State Wildlife Action Plans:

Forested Inland Wetland - Northern White Cedar Swamps (CT), Forested Wetland (ME), Northern White Cedar Swamp (NY), Hardwood Swamps - Red Maple-Black Ash Seepage Swamp (VT)

State Distribution: CT, MA, ME, NH, NY, VT

Total Habitat Acreage: 921,478

Percent Conserved: 19.5%

State	State Habitat %	State Acreage	GAP 1&2 (acres)	GAP 3 (acres)	Unsecured (acres)
ME	56%	520,121	14,203	60,307	445,611
NY	38%	345,750	49,536	44,764	251,450
VT	5%	43,899	1,177	4,786	37,935
NH	1%	7,363	2,054	1,013	4,295
MA	0%	4,261	643	1,267	2,350
CT	0%	86	0	0	86

Crosswalk to State Name Examples:

Forested Inland Wetland - Northern White Cedar Swamps (CT), Black Ash Red-Maple-Tamarack Calcareous Seepage Swamp (MA), Northern White Cedar Swamp (ME), Northern White Cedar - Balsam Fir Swamp (NH), Northern White Cedar Swamp (NY), Red Maple-Northern White Cedar Swamp (VT)

Places to Visit this Habitat:

Moosehorn National Wildlife Refuge | ME
 Sunkhaze Meadows National Wildlife Refuge | ME
 Lake Umbagog National Wildlife Refuge | NH
 High Peaks Wilderness Area | NY
 Saranac Lakes | NY

Associated Species: *Appendix lists scientific names*

BIRDS: black-backed woodpecker, canada warbler, golden-crowned kinglet, gray jay, northern waterthrush, palm warbler, red-shouldered hawk, american three-toed woodpecker, veery, white-throated sparrow, wood duck, yellow-bellied flycatcher

MAMMALS: masked shrew, mink, red-backed vole, short-tailed shrew

PLANTS: bog aster (*Oclemena nemoralis*), fairy slipper (*Calypso bulbosa*), green adder's-mouth (*Malaxis unifolia*), hoary willow (*Salix candida*), lapland buttercup (*Ranunculus lapponicus*), loesel's twayblade (*Liparis loeselii*), nodding trillium (*Trillium flexipes*), pink wintergreen (*Pyrola asarifolia*), swamp thistle (*Cirsium muticum*), yellow screwstem (*Bartonia virginica*), yellow water-crowfoot (*Ranunculus flabellaris*)

Species of Concern (G1-G4): *Appendix lists scientific names*

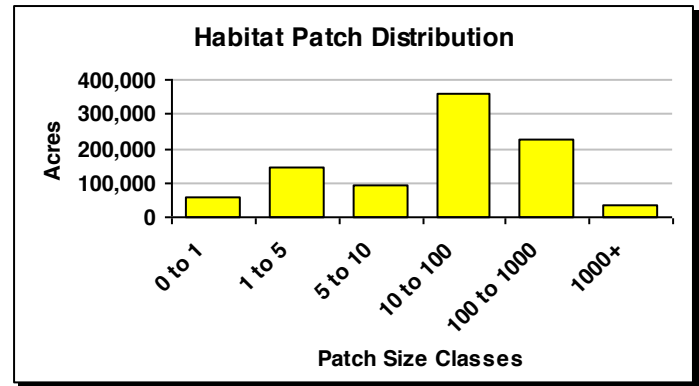
BIRDS: olive-sided flycatcher, yellow rail

INSECTS: Clayton's copper butterfly

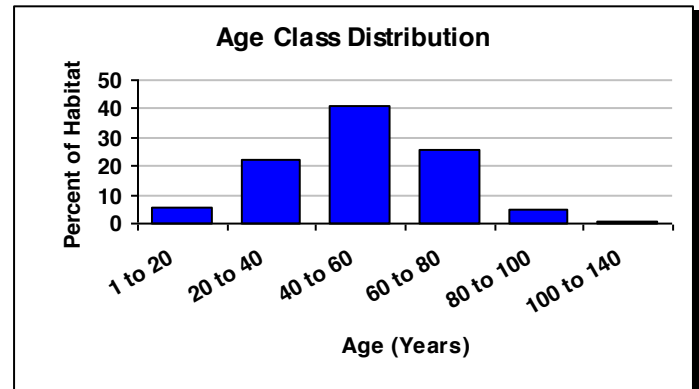
PLANTS: fen mosses (*Calliergon* spp, *Meesia triquetra*, *Paludella squarrosa*, *Scorpidium scorpioides*, *Tomentypnum falcifolium*), bog jacob's-ladder (*Polemonium vanbruntiae*), eastern prairie white-fringed orchid (*Platanthera leucophaea*), lake-cress (*Armoracia lacustris*), marsh valerian (*Valeriana uliginosa*), northern yellow lady's-slipper (*Cypripedium parviflorum*), prickly hornwort (*Ceratophyllum echinatum*), rugulose grape-fern (*Botrychium rugulosum*), sartwell's sedge (*Carex sartwellii*), small skullcap (*Scutellaria parvula* var. *parvula*), three-lobed violet (*Viola triloba*), white adder's-mouth (*Malaxis monophyllos*)



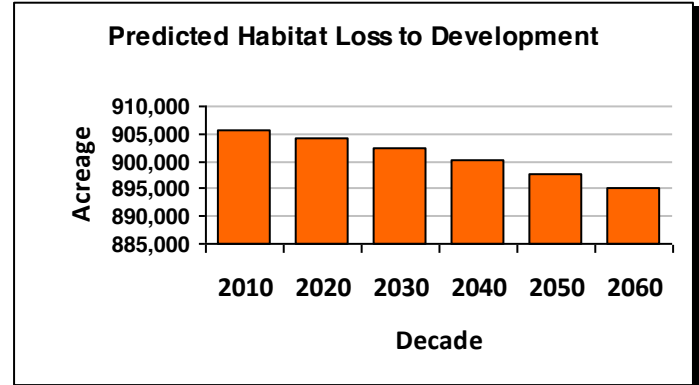
© Charles Ferree (The Nature Conservancy)



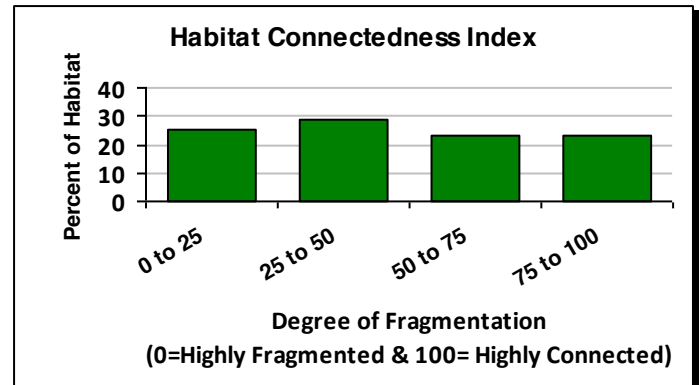
The average patch size for this habitat is 3 acres and the largest single patch is 2,091 acres. This chart shows the proportion of the habitat that is in each patch-size class.



This chart shows the average age of trees associated with this habitat based on forest inventory data. For non-forested systems or small habitats the average age is influenced by the surroundings.



This chart shows the predicted loss of habitat over the next five decades (10,426 acres) if loss continues at the same rate as 1990-2000. The average rate of loss is 209 acres per year.



This metric measures how connected or fragmented the land directly surrounding (18 square miles) the habitat is, this the chart shows the proportion of the habitat in each connectedness class.