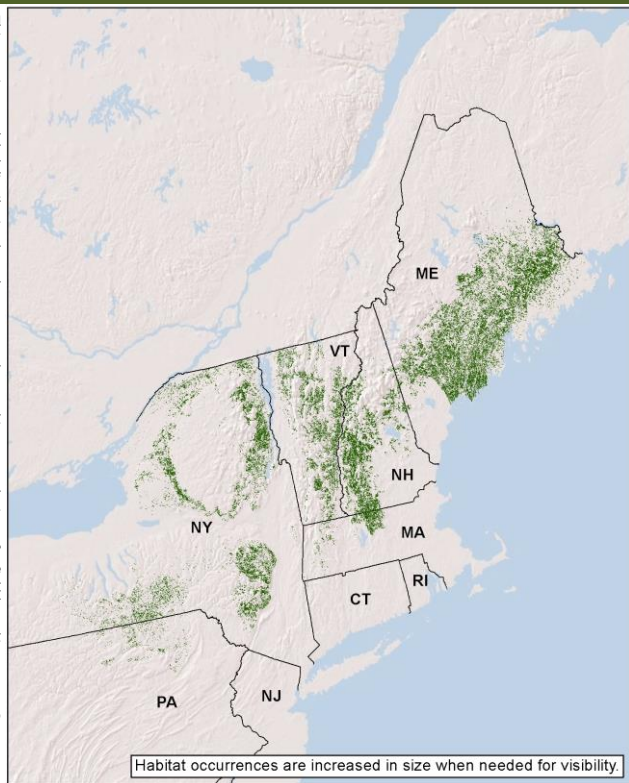




## Macrogroup: Northern Hardwood & Conifer

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.



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### Description:

A coniferous or mixed forest widespread in the glaciated northeast. White pine, hemlock, and red oak are typical canopy dominants. Red maple is common, and other hardwoods like sugar maple, beech, and birch also occur. Red spruce and balsam fir are uncommon associates, and oaks besides red oak are essentially absent from these forests. This forest system may be considered transitional between northern hardwood forests at higher elevations and to the north, and the warmer Appalachian hemlock-hardwoods and oak-pine forests at lower elevations and to the south. It ranges from the northeastern U.S. to adjacent Canada, and westward to the Great Lakes and upper Midwest. These forests are early and mid-successional in many areas, and often reflect an agricultural history.

### Ecological Setting and Natural Processes:

These dry to mesic forests usually occur on low-nutrient loamy-to-sandy soils on a wide range of landforms at lower elevations, mostly below about 2000'. As with most other forest types in the region, single tree blowdowns and gap replacement are the most common disturbance/regeneration event. Fire is infrequent.

### Similar Habitat Types:

Hardwoods dominate in Northern Hardwood Forests, which are often adjacent to this system in cooler settings. Pine is less important than hemlock in the Appalachian (Hemlock-)Northern Hardwood Forest, which also has a wider variety of oaks and other hardwoods. Red pines are characteristic and often dominant in the drier Laurentian-Acadian Northern Pine(-Oak) system.

### Crosswalk to State Wildlife Action Plans:

Coniferous Forest (ME), Hemlock Hardwood Pine Forests (NH), Mixed Northern Hardwoods (NY), Deciduous/Mixed Forest (upland) (PA), Northern Hardwood Forest - Hemlock Forest (VT)

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

**Total Habitat Acreage:** 6,105,581

**Percent Conserved:** 15.0%

State	State Habitat %	State Acreage	GAP 1&2 (acres)	GAP 3 (acres)	Unsecured (acres)
ME	44%	2,683,518	35,067	237,066	2,411,385
NY	25%	1,543,290	166,321	197,226	1,179,743
NH	14%	846,541	30,795	149,807	665,939
VT	13%	771,594	4,499	38,207	728,889
MA	3%	158,279	6,922	46,208	105,149
PA	2%	102,354	536	2,242	99,576
CT	0%	4	0	0	4

### Crosswalk to State Name Examples:

Hemlock Forest (ME), Hemlock - White Pine Forest (NH), Pine-Northern Hardwood Forest (NY), Deciduous/Mixed Forest (Upland) (PA), Hemlock-Northern Hardwood Forest (VT), Northern Hardwoods-Hemlock-White Pine forest (MA)

## Places to Visit this Habitat:

Warwick State Forest | MA  
 Sunhaze Meadows National Wildlife Refuge | ME  
 White Mountain National Forest | NH  
 Wilcox Lake | NY  
 Green Mountain National Forest | VT

## Associated Species: *Appendix lists scientific names*

**BIRDS:** black-and-white warbler, blackburnian warbler, black-throated blue warbler, eastern wood-pewee, hermit thrush, northern saw-whet owl, northern waterthrush, ovenbird, pine warbler, ruffed grouse, scarlet tanager, veery, wood thrush, yellow-bellied sapsucker

**MAMMALS:** deer mouse, red squirrel, southern red-backed vole

**HERPTILES:** northern redbelly snake

**PLANTS:** barren strawberry (*Waldsteinia fragarioides*), mountain laurel (*Kalmia latifolia*), giant pinedrops (*Pterospora andromedea*), green adder's-mouth (*Malaxis unifolia*), loesel's twayblade (*Liparis loeselii*), sand violet (*Viola adunca*), scarlet oak (*Quercus coccinea*), slender mountain-ricegrass (*Piptatherum pungens*), spotted wintergreen (*Chimaphila maculata*), spreading-pod rockcress (*Boechera grahamii*)

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

**BIRDS:** olive-sided flycatcher, eastern whip-poor-will, northern goshawk

**MAMMALS:** american pygmy shrew, eastern small-footed myotis, indiana myotis, new england cottontail

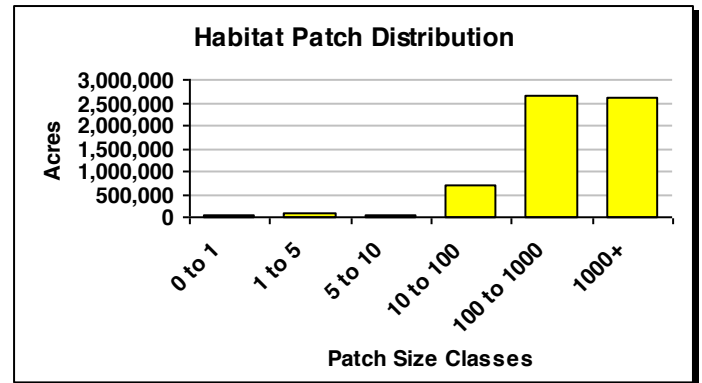
**HERPTILES:** Blanding's turtle, bog turtle, timber rattlesnake, wood turtle

**INSECTS:** early hairstreak, red-winged swallow

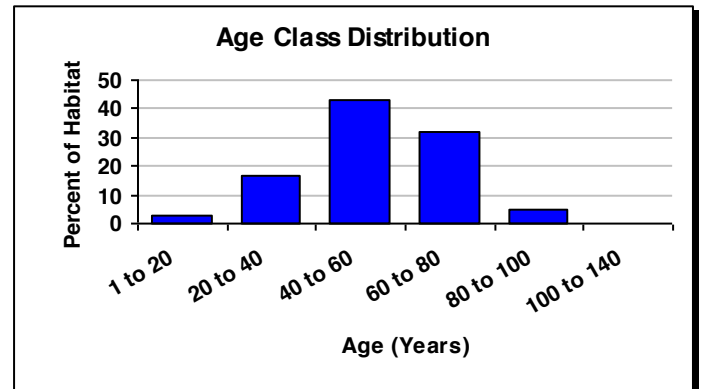
**PLANTS:** american chestnut (*Castanea dentata*), variable sedge (*Carex polymorpha*)



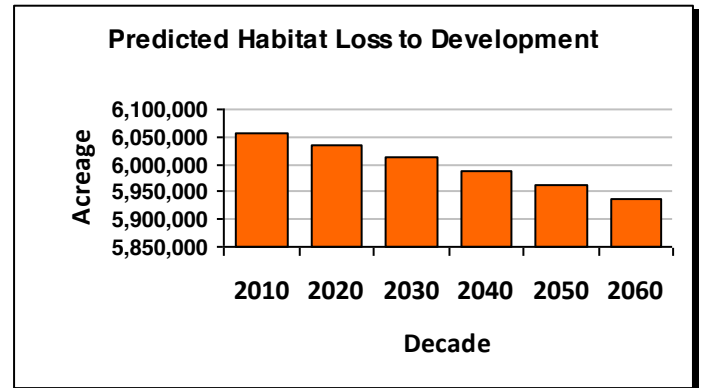
© Maine Natural Areas Program



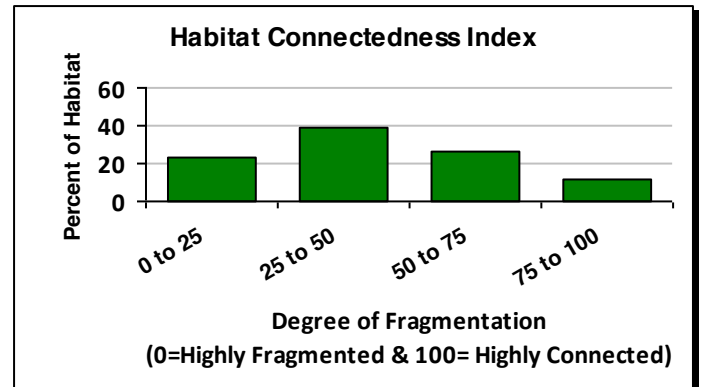
The average patch size for this habitat is 30 acres and the largest single patch is 28,879 acres. This chart shows the proportion of the habitat that is in each patch-size class.



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 (120,555 acres) if loss continues at the same rate as 1990-2000. The average rate of loss is 2,411 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.