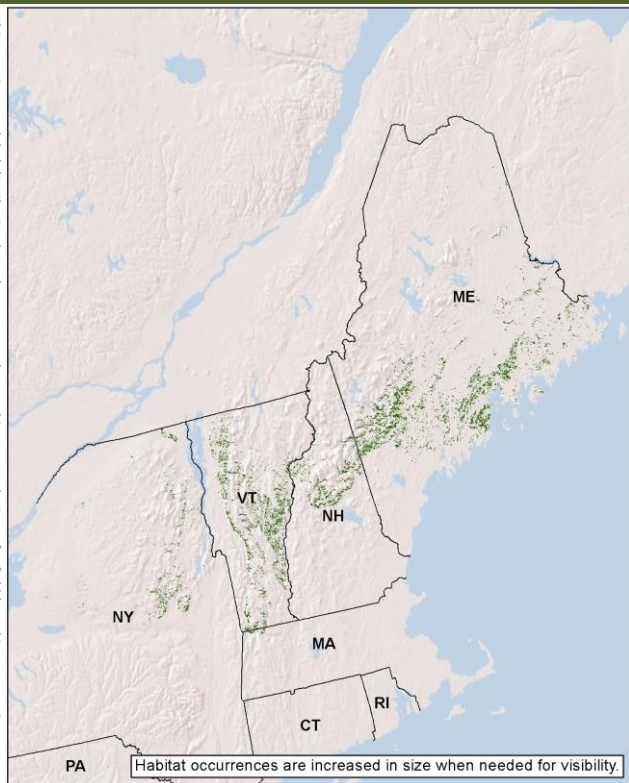




Macrogroup: Northern Hardwood & Conifer

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 closed canopy forest of low to moderate moisture in which a significant component of red oak is present along with the normal suite of northern hardwoods, primarily sugar maple, beech, and yellow birch. Red maple, hemlock, and white pine are common associates. It is most common across the southern part of the northern hardwood forest's range, where it is transitional to oak or oak-pine forests, but also develops in warm, sunny locations in northern hardwood forest stands farther north. Diversity is lower than in most northern hardwoods; the shrub layer tends to be sparse, as is the fern and forb herb layer. Downslope movement of acorns from dry oaky ridges above may help account for persistence of this habitat type. These forests can be very productive on the best sites.

Ecological Setting and Natural Processes:

This system is found at low to mid elevations, on convex landforms and slopes with strong insolation. Highest elevations are about 1500' in the north, 2500' in the south. It generally favors sites with acidic bedrock and well drained soils derived from glacial till. Fire promotes regeneration of the oak, and is probably more common in these stands than in northern hardwoods without oaks. Wildlife browsing (deer in particular) can severely inhibit it.

Similar Habitat Types:

Often embedded within or adjacent to Laurentian-Acadian Northern Hardwood Forests, which lack the red oak component. Laurentian-Acadian Pine-Hemlock-Hardwood Forest is a similar system, but with more conifers, lower land position, and more moderate climate. Appalachian (Hemlock-)Northern Hardwood Forest has a broader range of southern species, and may include white oak.

Crosswalk to State Wildlife Action Plans:

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

Total Habitat Acreage: 1,168,801

Percent Conserved: 19.2%

State	State Habitat %	State Acreage	GAP 1&2 (acres)	GAP 3 (acres)	Unsecured (acres)
ME	51%	601,523	17,069	45,495	538,959
VT	30%	349,340	6,275	42,459	300,606
NH	10%	114,399	21,009	40,696	52,694
NY	8%	96,970	38,790	9,808	48,372
MA	1%	6,569	622	2,249	3,698

Crosswalk to State Name Examples:

Red-Oak Sugar Maple Transition Forest (MA), Mesic Red Oak-Northern Hardwood Forest (VT)

Places to Visit this Habitat:

Clarksburg State Forest | MA
 Acadia National Park | ME
 White Mountain National Forest | NH
 Wilcox Lake | NY
 Green Mountain National Forest | VT

Associated Species: *Appendix lists scientific names*

BIRDS: similar to northern hardwood: black-and-white warbler, blackburnian warbler, black-throated blue warbler, black-throated green warbler, eastern wood pewee, hermit thrush, northern saw-whet owl, ovenbird, pine warbler, ruffed grouse, scarlet tanager, veery, wood thrush

MAMMALS: black bear, fisher, gray fox, northern flying squirrel, porcupine, smoky shrew, southern flying squirrel, white-footed mouse, woodland jumping mouse

PLANTS: broad beech fern (*Phegopteris hexagonoptera*), flowering dogwood (*Cornus florida*), american squawroot (*Conopholis americana*)

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

MAMMALS: eastern pipistrelle, eastern small-footed myotis, indiana myotis

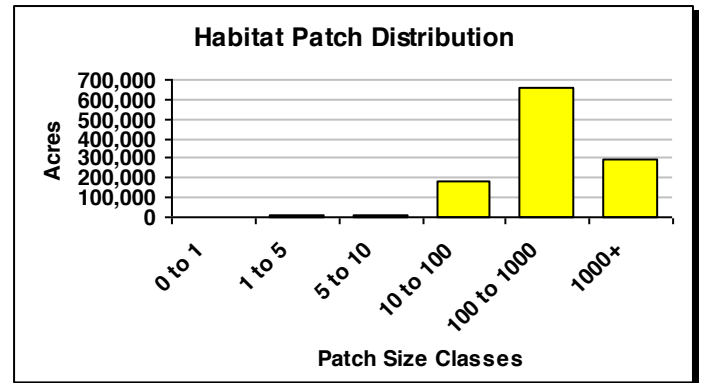
HERPTILES: blue-spotted salamander, brownsnake, eastern box turtle, jefferson salamander, spotted turtle, spring salamander

INSECTS: Carolina saddlebags, columbine duskywing, ocellated darner, swamp darner, tule bluet

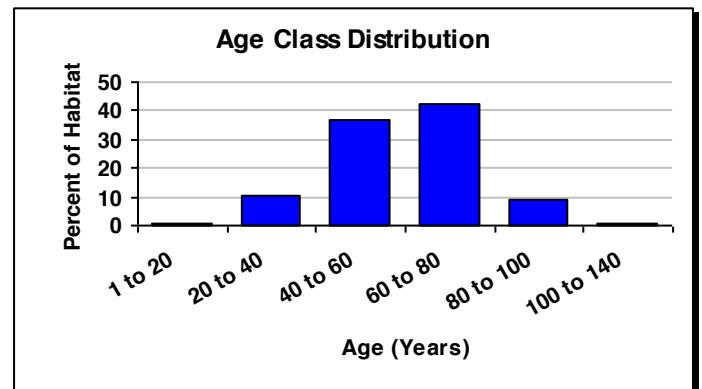
PLANTS: appalachian sandwort (*Minuartia glabra*), american ginseng (*Panax quinquefolius*), large whorled pogonia (*Isotria verticillata*), summer sedge (*Carex aestivalis*)



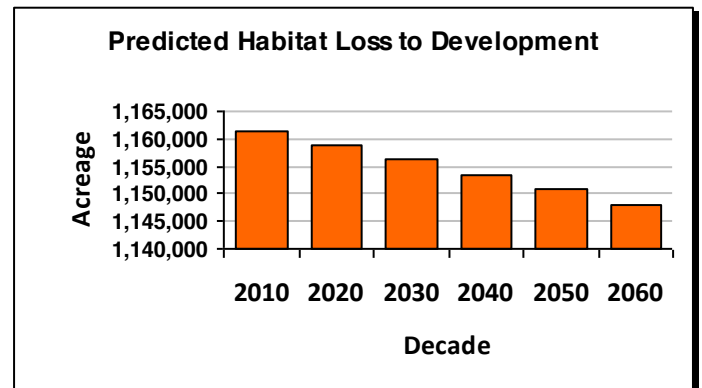
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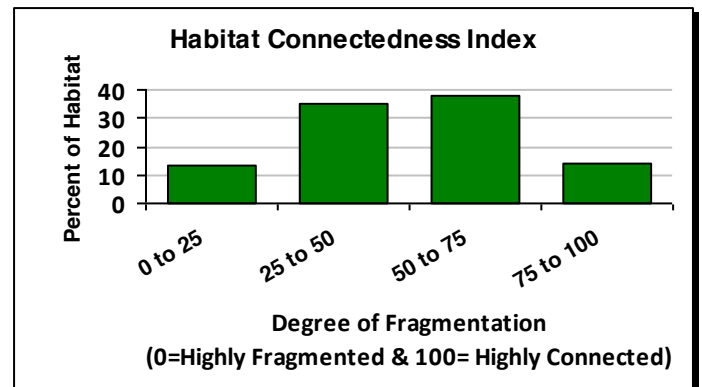
The average patch size for this habitat is 35 acres and the largest single patch is 5,050 acres. This chart shows the proportion of the habitat that is in each patch-size class.



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 (13,459 acres) if loss continues at the same rate as 1990-2000. The average rate of loss is 269 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.