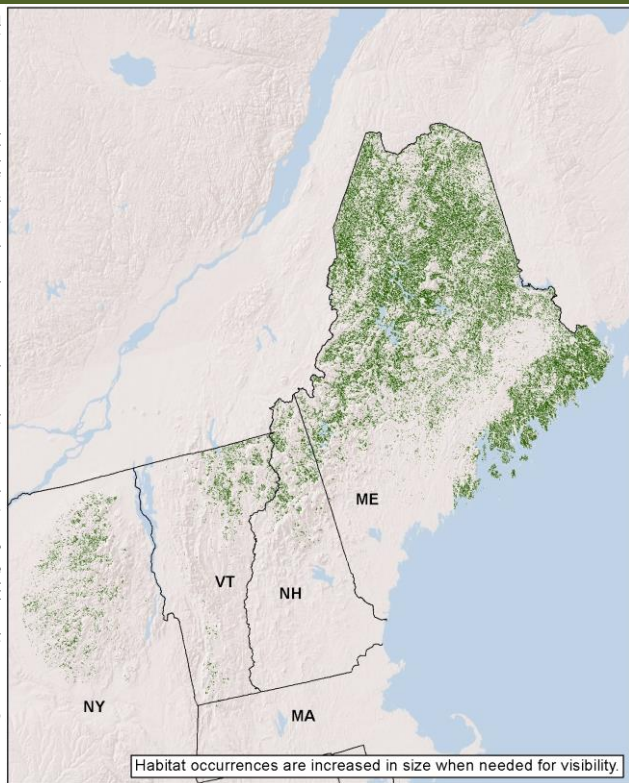


Acadian Low Elevation Spruce-Fir-Hardwood Forest



Macrogroup: Boreal Upland Forest

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 low elevation conifer forest dominated by red spruce and balsam fir, often forming the matrix forest in colder parts of the Acadian and northern Appalachian region. Black and white spruce are sometimes present, along with yellow birch, paper birch, beech, and red or sugar maple, and northern white cedar in moister, richer locations. The shrub layer is sparse, and consists primarily of seedlings of principal tree species. Bryophytes are dominant in a dense herb layer. This habitat includes both cold pockets and depressions in hardwood mountains and large areas of seasonally wet flats, but not saturated conifer swamps. In successional patches, paper birch, aspen, and larch are mixed in with the spruce and fir.

Ecological Setting and Natural Processes:

Found at elevations up to 2000' in the northern part of its range. Occurs on acidic, rocky, well- to moderately well-drained soils, with pockets of somewhat poorly drained areas in depressions and slope bottoms. Blowdowns and gap regeneration are the most frequent form of natural disturbance, with large-scale fires at longer return intervals important in drier areas.

Similar Habitat Types:

Upland from (and often adjacent to) the Sub-boreal Spruce Flats system, generally with more hardwoods and less black spruce. Various wetland habitat types are commonly embedded in low elevation spruce-fir landscapes. Montane Spruce-Fir Forests occur at higher elevation, in more rugged terrain.

Crosswalk to State Wildlife Action Plans:

Coniferous Forest (ME), Lowland Spruce Forest (NH), Spruce Fir-Forests and Flats (NY), Spruce-Fir-Northern Hardwood Forest - Lowland Spruce-Fir Forest (VT)

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

Total Habitat Acreage: 5,522,851

Percent Conserved: 27.2%

| State | State Habitat % | State Acreage | GAP 1&2 (acres) | GAP 3 (acres) | Unsecured (acres) |
|-------|-----------------|---------------|-----------------|---------------|-------------------|
| ME | 87% | 4,818,649 | 225,935 | 956,191 | 3,636,523 |
| NY | 6% | 306,622 | 172,371 | 45,501 | 88,751 |
| VT | 4% | 219,479 | 13,586 | 27,397 | 178,496 |
| NH | 3% | 177,546 | 18,525 | 44,769 | 114,253 |
| MA | 0% | 554 | 0 | 80 | 473 |

Crosswalk to State Name Examples:

Spruce - Fir - Broom-Moss Forest (ME), Lowland Spruce - Fir Forest (NH), Balsam Flats (NY), Lowland Spruce-Fir Forest (VT), Spruce-Fir-Northern Hardwoods Forest (MA)

Places to Visit this Habitat:

Acadia National Park | ME
 Baxter State Park | ME
 Upper St. John River (The Nature Conservancy) | ME
 White Mountain National Forest | NH
 Green Mountain National Forest | VT

Associated Species: *Appendix lists scientific names*

BIRDS: blackburnian warbler, ruby-crowned kinglet, spruce grouse, swainson's thrush, yellow-bellied flycatcher, yellow-rumped warbler, white-throated sparrow

MAMMALS: deer mouse, fisher, moose, porcupine, red fox, red squirrel, southern red-backed vole

PLANTS: alpine sweet-vetch (*Hedysarum alpinum*), Carolina grass-of-parnassus (*Parnassia glauca*), mountain cranberry (*Vaccinium vitis-idaea*), moose dung moss (*Splachnum ampullaceum*), giant rattlesnake-plantain (*Goodyera oblongifolia*), white adder's-mouth (*Malaxis monophyllos*)

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

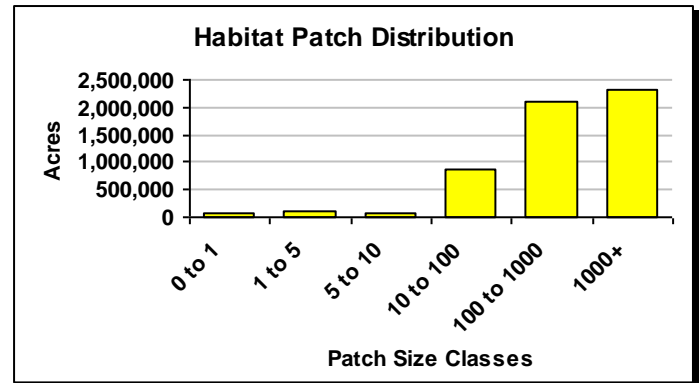
BIRDS: american three-toed woodpecker, bay-breasted warbler, black-backed woodpecker, boreal chickadee, cape may warbler, gray jay, olive-sided flycatcher, red crossbill

INSECTS: early hairstreak butterfly

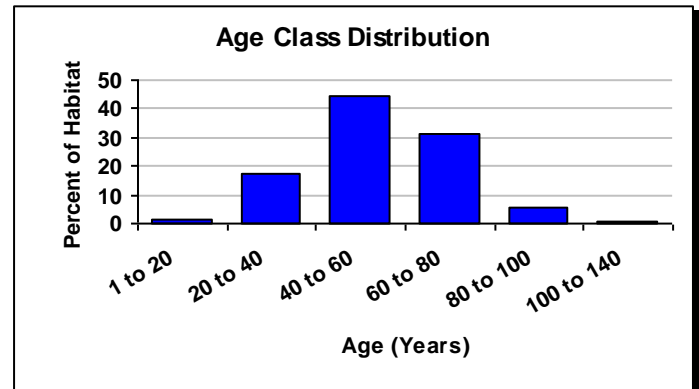
PLANTS: Dudley's rush (*Juncus dudleyi*), glaucous rattlesnake-root (*Prenanthes racemosa*), arnica (*Arnica lanceolata*), auricled twayblade (*Listera auriculata*), furbish lousewort (*Pedicularis furbishiae*), orono sedge (*Carex oronensis*), Wiegand's sedge (*Carex wiegandii*)



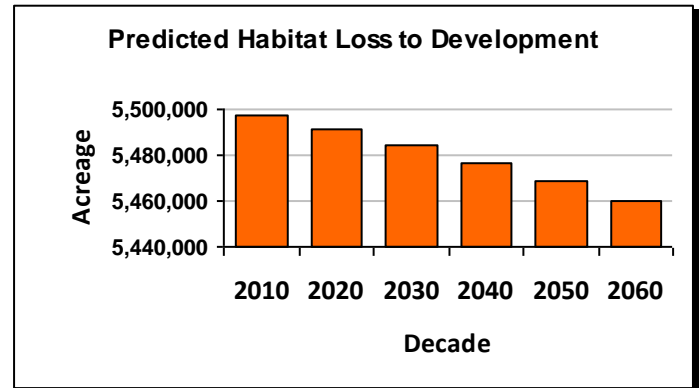
© Maine Natural Areas Program



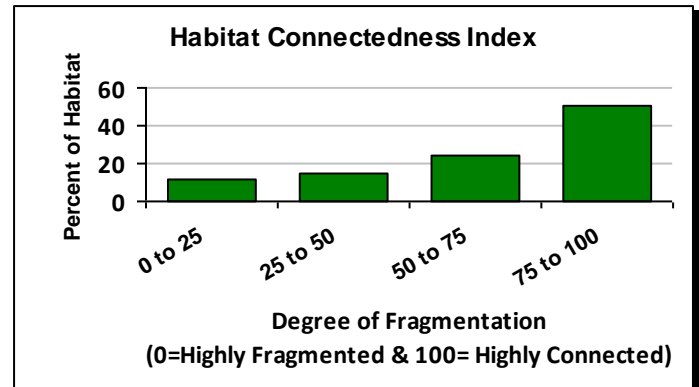
The average patch size for this habitat is 18 acres and the largest single patch is 22,000 acres. This chart shows the proportion of the habitat that is in each patch-size class.



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 (36,864 acres) if loss continues at the same rate as 1990-2000. The average rate of loss is 737 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.