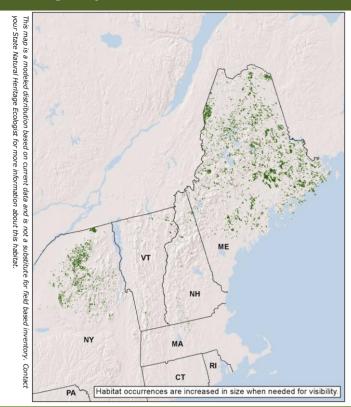
# **Boreal-Laurentian-Acadian Acidic Basin Fen**



# **Macrogroup: Northern Peatland**



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

Total Habitat Acreage: 401,390

Percent Conserved: 34.0%

	State	State	GAP 1&2	GAP 3	Unsecured
State	Habitat %	Acreage	(acres)	(acres)	(acres)
ME	78%	313,420	23,052	57,326	233,042
NY	18%	73,477	29,463	18,215	25,799
NH	2%	7,333	2,247	1,539	3,546
VT	2%	6,443	1,583	2,616	2,243
MA	0%	717	57	206	454

### **Crosswalk to State Name Examples:**

Acidic Graminoid Fen (MA), Leatherleaf Boggy Fen (ME), Bog Rosemary - Sedge Fen (NH), Inland Poor Fen (NY), Poor Fen (VT)



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## **Description:**

A sedge, grass, and dwarf-shrub dominated peatland of the northern part of the glaciated Northeast. Almost intermediate between a marsh and a bog, these fens develop in relatively shallow basins with nutrient-poor and acidic conditions, and may form a floating peat-based mat over water. The substrate is (generally deep) peat moss, and vegetation typically includes patches of graminoid herbs: coast sedge, American woollyfruit sedge, tussock sedge, Billings' sedge, tawny cotton-grass. Dwarf-shrubs such as leatherleaf often dominate; stunted black spruce and larch may be present. Northernmost examples may show a distinctive pattern of ribbed fens, narrow low ridges with wetter pools or depressions between the ridges.

## **Ecological Setting and Natural Processes:**

These occur in a variety of physical settings, from small isolated basins ("kettleholes") in glacial deposits to large wetland complexes that may be associated with lakes or streams. They often have well-developed microtopography, and despite the system name, bedrock or groundwater influence can create locally more calcareous conditions.

## Similar Habitat Types:

Commonly grades into North-Central Appalachian Acidic Swamp. More widespread than the cooler climate Boreal-Laurentian Bog, and differs from that system in that peat surface is not often raised beyond the influence of surface or groundwater.

#### **Crosswalk to State Wildlife Action Plans:**

Marshes and Wet Meadows - Acidic Graminoid Fen (MA), Peatlands (ME), Peatlands - Open Peatlands (NH), Open Acidic Peatlands (NY), Open Peatlands - Poor Fen (VT)

#### Places to Visit this Habitat:

Sunkhaze Meadows National Wildlife Refuge | ME Upper St. John River (The Nature Conservancy) | ME Lake Umbagog National Wildlife Refuge | NH Debar Mountain Wild Forest | NY Independence River State Forest | NY

#### Associated Species: Appendix lists scientific names

BIRDS: alder flycatcher, wilson's snipe, lincoln's sparrow, northern waterthrush, palm warbler, spruce grouse, tennessee warbler, white-throated sparrow, wilson's warbler

MAMMALS: masked shrew, meadow jumping mouse, southern bog lemming, southern red-backed vole

HERPTILES: four-toed salamander, pickerel frog, red-bellied snake, spotted salamander, ribbon snake

INSECTS: bog elfin, lake emerald, pitcher plant borer moth, ringed boghaunter

PLANTS: bog aster (Oclemena nemoralis), bog bedstraw (Galium labradoricum), boreal bog sedge (Carex magellanica), bog willow (Salix pedicellaris), dwarf water-lily (Nymphaea leibergii), ink-berry (Ilex glabra), bog bedstraw (Galium labradoricum), mud sedge (Carex limosa), prickly bog sedge (Carex atlantica), swamp birch (Betula pumila)

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

BIRDS: rusty blackbird, yellow rail

MAMMALS: southern bog lemming

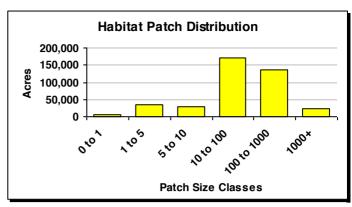
HERPTILES: blanding's turtle

INSECTS: broadtailed shadowdragon, Canada whiteface, Clayton's copper butterfly, crowberry blue, incurvate emerald, Quebec emerald

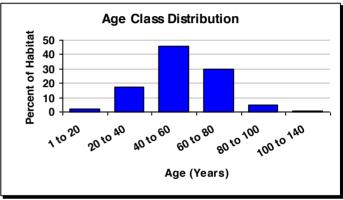
PLANTS: long's bulrush (Scirpus longii), Sphagnum andersonianum, swamp-pink (Arethusa bulbosa)



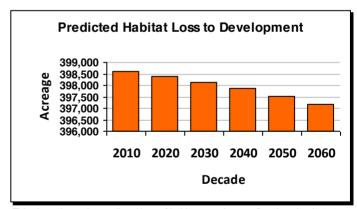
© Eric Sorenson (Vermont Fish & Wildlife)



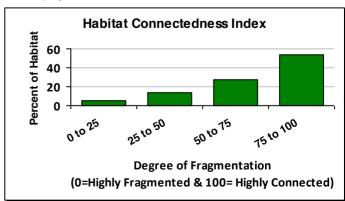
The average patch size for this habitat is 10 acres and the largest single patch is 3,118 acres. This chart shows the proportion of the habitat that is in each patch-size class.



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 (1,451 acres) if loss continues at the same rate as 1990-2000. The average rate of loss is 29 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.