Northern Appalachian-Acadian Conifer-Hardwood Acidic Swamp

Macrogoup: Northern Swamp

Description:
A conifer or mixed forested swamp of permanently saturated basins with seasonal standing water. Characteristic of the glaciated Northeast, this habitat may develop in peat moss or mineral soil. In peat, trees form a partial to full cover and stunted to well-developed black spruce and larch are dominant. Heath shrubs and sedges are common in the understory, although the dwarf-shrub layer is less well-developed than in open acidic peatlands. In mineral soil, red maple, red spruce, and balsam fir are the most typical trees; ash may be common in some locations. The herbaceous and shrub layers tend to be fairly species-poor; catberry, tall ferns (cinnamon, interrupted, sensitive), and wetland sedges are typical.

Ecological Setting and Natural Processes:
Occurs in permanently saturated basins and depressions that may have standing water seasonally. Peat moss or mineral soil is the primary substrate, but many examples are associated with streamways, and the more minerotrophic conditions (groundwater contact) yield nutrient levels somewhat higher than in a true bog.

Similar Habitat Types:
Similar to North-Central Appalachian Acidic Swamp, but with a flora characteristic of a cooler climate. Occurs in much of the same area as Laurentian-Acadian Alkaline Conifer-Hardwood Swamp, but experiences less groundwater nutrient enrichment and a generally less diverse flora. Small patch poor fens are often embedded within the larger swamp complex.

Crosswalk to State Name Examples:
Forested Inland Wetland - Red/Black Spruce Swamps (CT), Red Spruce Swamp (MA), Hemlock - Hardwood Pocket Swamp (ME), Black Spruce Swamp (NH), Spruce-Fir Swamp (NY), Red Maple - Mixed Shrub Palustrine Woodland (PA), Spruce-Fir-Tamarack Swamp (VT)

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

Total Habitat Acreage: 1,311,922
Percent Conserved: 38.0%

<table>
<thead>
<tr>
<th>State</th>
<th>Habitat %</th>
<th>State Acreage</th>
<th>GAP 1&amp;2 (acres)</th>
<th>GAP 3 (acres)</th>
<th>Unsecured (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME</td>
<td>49%</td>
<td>640,892</td>
<td>25,658</td>
<td>112,701</td>
<td>502,534</td>
</tr>
<tr>
<td>NY</td>
<td>42%</td>
<td>549,248</td>
<td>208,194</td>
<td>105,359</td>
<td>235,695</td>
</tr>
<tr>
<td>VT</td>
<td>4%</td>
<td>48,793</td>
<td>6,774</td>
<td>14,499</td>
<td>27,520</td>
</tr>
<tr>
<td>NH</td>
<td>3%</td>
<td>45,828</td>
<td>4,220</td>
<td>10,134</td>
<td>31,474</td>
</tr>
<tr>
<td>MA</td>
<td>2%</td>
<td>26,938</td>
<td>2,217</td>
<td>9,049</td>
<td>15,672</td>
</tr>
<tr>
<td>CT</td>
<td>0%</td>
<td>220</td>
<td>1</td>
<td>14</td>
<td>205</td>
</tr>
<tr>
<td>PA</td>
<td>0%</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Crosswalk to State Wildlife Action Plans:
Forested Inland Wetland - Red/Black Spruce Swamps (CT), Forested Swamps (MA), Forested Wetland (ME), Peatlands - Forested Peatlands (NH), Mixed Hardwood Swamp (NY), Wetlands - Forested Wetlands and Bogs (PA), Hardwood Swamps - Red Maple-Sphagnum Acidic Basin Swamp (VT)
Places to Visit this Habitat:
October Mountain State Forest | MA
Acadia National Park | ME
White Mountain National Forest | NH
Debar Mountain Wild Forest | NY
Green Mountain National Forest | VT

Associated Species:  
**BIRDS:** black-backed woodpecker, Blackburnian warbler, blackpoll warbler, gray jay, green heron, lincoln’s sparrow, nashville warbler, northern parula, northern waterthrush, swamp sparrow, wilson’s warbler, wood duck

**MAMMALS:** canada lynx, masked shrew, red-backed vole, silver-haired bat

**HERPTILES:** blue-spotted salamander, spotted salamander

**INSECTS:** hoary comma, spicebush swallowtail butterfly, water-willow stem borer

**PLANTS:** large water-starwort (Callitriche heterophylla), largeleaf avens (Geum macrophyllum), spicebush (Lindera benzoin), swamp lousewort (Pedicularis lanceolata), swamp saxifrage (Saxifraga pensylvanica), swamp white oak (Quercus bicolor)

Species of Concern (G1-G4):

**BIRDS:** olive-sided flycatcher, rusty blackbird, american three-toed woodpecker

**MAMMALS:** water shrew

**HERPTILES:** Blanding’s turtle, bog turtle, jefferson salamander, spring salamander, wood turtle

**INSECTS:** beaverpond clubtail, bird dropping moth, bog elfin, Clayton’s copper butterfly, pygmy snaketail, twilight moth

**PLANTS:** mosses (Calliergon obtusifolium, Calliergon richardsonii), creeping rush (Juncus subtilis), marsh valerian (Valeriana uliginosa), nova scotia false foxglove (Agalinis neoscotica), slender spikerush (Eleocharis nitida)

### Habitat Loss to Development

This chart shows the predicted loss of habitat over the next five decades (5,190 acres) if loss continues at the same rate as 1990-2000. The average rate of loss is 104 acres per year.

### Habitat Patch Distribution

The average patch size for this habitat is 3 acres and the largest single patch is 1,976 acres. This chart shows the proportion of the habitat that is in each patch-size class.

### Age Class Distribution

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.

### Habitat Connectedness Index

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.