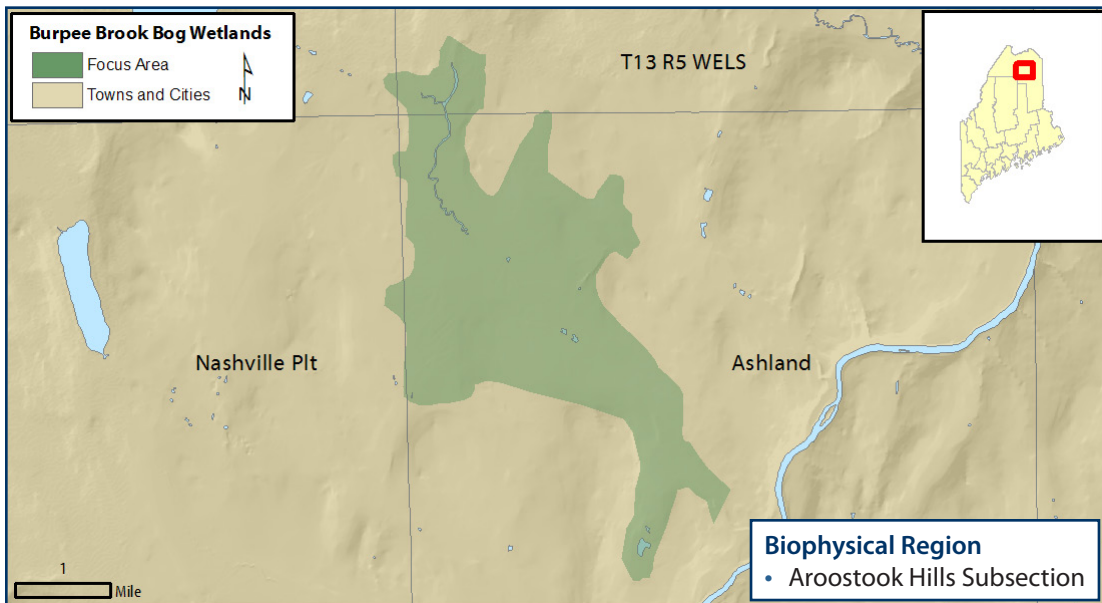


Burpee Brook Bog Wetlands



WHY IS THIS AREA SIGNIFICANT?

This Focus Area supports several species of rare plants and is part of one of the largest Deer Wintering Areas in Northern Maine. Additionally, the contiguous and concentrated nature of the forested and open wetlands in the vicinity of Burpee Brook Bog enhance the ecological value of the bog and make the area stand out as a Focus Area of ecological significance.

OPPORTUNITIES FOR CONSERVATION

- » Educate recreational users about the ecological and economic benefits provided by the Focus Area.
- » Encourage best management practices for forestry, vegetation clearing, and soil disturbance activities near significant features to maintain ecological functions and values, habitat connectivity for wildlife, hydrologic processes, and watershed protection.
- » Maintain intact forested buffers along water bodies and wetlands to protect water quality and provide valuable riparian habitat for wildlife.
- » Maintain natural hydrologic regime by avoiding drainage or impoundment of the wetlands, streams or adjacent water bodies.
- » Protect sensitive natural features through careful management planning on conserved lands.

For more conservation opportunities, visit the Beginning with Habitat Online Toolbox: www.beginningwithhabitat.org/toolbox/about_toolbox.html.

Photo credits, top to bottom: Maine Natural Areas Program - all photos, except for last, MDIFW.

Rare Animals

Wood Turtle
Pygmy Snaketail

Rare Plants

Northern Comandra
Showy Lady's-slipper
Swamp Birch

Rare and Exemplary Natural Communities

Dwarf Shrub Bog
Raised Level Bog Ecosystem

Significant Wildlife Habitats

Inland Waterfowl and Wading Bird Habitat
Deer Wintering Area



Burpee Brook Bog, Maine Natural Areas Program

FOCUS AREA OVERVIEW

The Burpee Brook Bog Wetlands Focus Area includes a large multi-unit peatland and several areas of forested wetlands along associated drainages. The large multi-unit peatland is mapped as a Raised Level Bog Ecosystem with multiple occurrences of Sheep Laurel Dwarf Shrub Bog. The forested wetlands of the associated drainages are mapped as Significant Wildlife Habitat with large areas of Deer Wintering Area and smaller areas of Inland Waterfowl and Wading Bird Habitat. Burpee Brook supports a wild brook trout population.

RARE AND EXEMPLARY NATURAL COMMUNITIES

One of the largest features of Burpee Brook Bog is a 700 acre **Raised Level Bog Ecosystem**, comprised of Spruce – Larch Wooded Bog and inclusions of six slightly raised Sheep Laurel Dwarf Shrub Bogs all of which occur in a broad basin bisected by Burpee Brook. The **dwarf shrub bogs** are characterized by varying amounts of the stunted black spruce along with a variety of low shrubs including sheep laurel, leatherleaf, and Labrador tea. Sedge species including tussock cotton-grass and few-seeded sedge are frequent. Sphagnum moss forms a lush carpet throughout the bogs and the overall peatland.

CHARACTERISTIC SPECIES

The bogs support several rare plants. The segment of Burpee Brook that flows through the peatland is a low gradient, slow moving stream. Tall shrubs including speckled alder and rhodora, line either side of the stream. The rare shrub, **swamp birch** (*Betula pumila*), occurs in this area along the brook. Swamp birch tends to grow in minerotrophic (weakly acidic to circumneutral) peatlands, and is a rare species in Maine due to the relatively small amount of this type of habitat. The soft-wood swamp shows no evidence of recent disturbance and was most likely last harvested in the early 1900s.

The rare plant species **northern comandra** (*Geocaulon lividum*) occurs in the fringing spruce – larch swamp on the southwest edge of the peatland complex. This species occurs in open to lightly forested northern peatlands and in sub-alpine heaths.

In addition to the peatland ecosystem, there are several areas of Significant Wildlife Habitat mapped in the forested wetland areas that lie to the east and south of the bog. These areas include over 2000 acres of heavily used **Deer Wintering Areas**. These forested riparian areas likely are also important to reptiles and amphibians that use them for habitat and for traveling corridors. Open wetlands along Burpee Brook and Blake

Brook also support significant acreages of **Inland Waterfowl and Wading Bird Habitat**.

CONSERVATION CONSIDERATIONS

- » The integrity of wetlands and the processes and life forms they support including rare plants and animals are dependent on the maintenance of the current hydrology and water quality of the site. Intensive timber harvesting, vegetation clearing, soil disturbance, new roads, and development on buffering uplands can result in greater runoff, sedimentation, and other non-point sources of pollution that can degrade the high quality natural systems that occur here.
- » Preserving the natural communities and other sensitive features within the Focus Area will be best achieved by working to conserve the integrity of the larger natural systems in which these features occur. Conserving the larger systems will help ensure that both common and rare natural features will persist on the landscape in this part of the state.
- » In general, threats to peatlands include peat mining, cranberry harvesting, timber harvest around the forest perimeters, and development.
- » Peatland systems benefit from establishing and/or maintaining vegetative buffers around their perimeter wherever possible. A buffer of 250 feet or more will serve to limit impacts



Swamp Birch, Maine Natural Areas Program

Ecological Services of the Focus Area

- Provides high quality habitat for waterfowl, wading birds, deer, moose, and other wildlife
- Retains sediments and nutrients
- Supports regional biodiversity by providing habitat for rare plants, animals, and natural communities
- Retains floodwaters

Economic Contributions of the Focus Area

- Attracts tourism for wildlife observation, paddling, hunting, and angling
- Recharges groundwater
- Serves as a valuable recreational resource for local residents
- Provides a scenic viewshed

from adjacent development, help prevent erosion, limit colonization of invasive species, and prevent unnecessary impacts from off road vehicle use.

- » Towns should strive to protect Inland Waterfowl and Wading Bird Habitat (IWWH) areas identified by MDIFW in low density, rural settings by identifying IWWH areas in comprehensive plans and zoning accordingly.
- » Improperly sized culverts and other stream crossing structures can impede movement of fish and aquatic invertebrates effectively fragmenting local aquatic ecosystems and ultimately leading to local extirpation of some species. Future management should maintain or restore the sites natural hydrology.
- » With expected changes in climate over the next century, plant and wildlife species will shift their ranges. Maintaining landscape connections between undeveloped habitats will provide an important safety net for biodiversity as species adjust their ranges to future climate conditions.

RARE SPECIES AND EXEMPLARY NATURAL COMMUNITIES OF THE FOCUS AREA

	Common Name	Scientific Name	State Status*	State Rar-ity Rank	Global Rarity Rank
Animals	Wood Turtle	<i>Glyptemys insculpta</i>	SC	S2	G4
	Pygmy Snaketail	<i>Ophiogomphus howei</i>	SC	S2S3	G3
Plants	Northern Comandra	<i>Geocaulon lividum</i>	SC	S3	G5
	Showy Lady's-slipper	<i>Cypripedium reginae</i>	T	S3	G4
	Swamp Birch	<i>Betula pumila</i>	SC	S2S3	G5
Natural Communities	Dwarf Shrub Bog	<i>Sheep laurel dwarf shrub bog</i>		S4	G5
	Raised Level Bog Ecosystem	<i>Raised level bog ecosystem</i>		S4	GNR

State Status*

- E** Endangered: Rare and in danger of being lost from the state in the foreseeable future, or federally listed as Endangered.
- T** Threatened: Rare and, with further decline, could become endangered; or federally listed as Threatened.
- SC** Special Concern: Rare in Maine, based on available information, but not sufficiently rare to be Threatened or Endangered.

*State status rankings are not assigned to natural communities.

State Rarity Rank

- S1** Critically imperiled in Maine because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres).
- S2** Imperiled in Maine because of rarity (6–20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- S3** Rare in Maine (on the order of 20–100 occurrences).
- S4** Apparently secure in Maine.
- S5** Demonstrably secure in Maine.

Global Rarity Rank

- G1** Critically imperiled globally because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation.
- G2** Globally imperiled because of rarity (6–20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- G3** Globally rare (on the order of 20–100 occurrences).
- G4** Apparently secure globally.
- G5** Demonstrably secure globally.