# Focus Areas of Statewide Ecological Significance

# **Kennebec Highlands**













#### WHY IS THIS AREA SIGNIFICANT?

The numerous remote ponds, streams, rolling uplands and hills nestled within a 5,000-acre block of undeveloped land in the Kennebec Highlands provide valuable wildlife habitat and recreational opportunities. This focus area is part of a much larger (12,000 acre) undeveloped area, increasing its significance within this densely populated part of Maine.

#### **OPPORTUNITIES FOR CONSERVATION**

- » Encourage town planners to improve approaches to development that may impact focus area functions.
- » Minimize recreational impacts on sensitive areas through careful siting of trails, combined with education and monitoring for overuse.
- » Encourage best management practices for forestry, vegetation clearing, and soil disturbance activities near significant features.
- » Encourage landowners to maintain intact forested buffers along water bodies and wetlands.
- » Maintain natural hydrology by avoiding drainage or impoundment of wetlands, streams or other water bodies.
- » Support the restoration of stream connectivity by surveying, prioritizing, and repairing or replacing impassible culverts and dams.

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

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# Rare Animals None documented

Rare Plants
None documented

# Rare and Exemplary Natural Communities

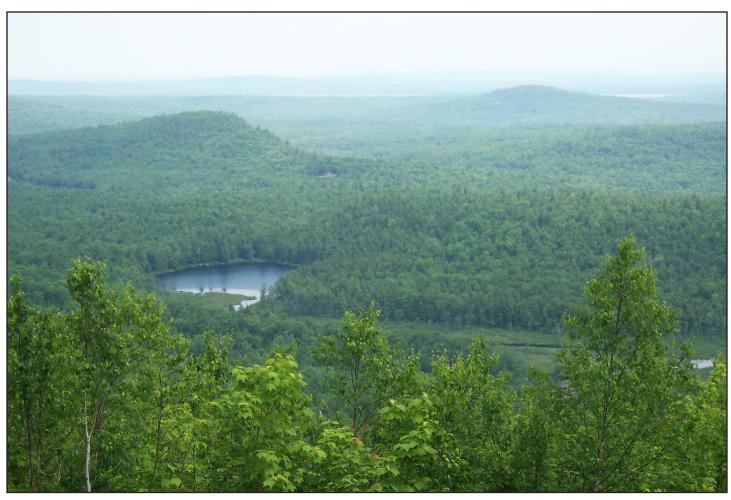
**Unpatterned Fen Ecosystem** 

#### **Significant Wildlife Habitats**

Inland Waterfowl and Wading Bird Habitat Deer Wintering Area

## **Public Access Opportunities**

Kennebec Highlands



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#### **FOCUS AREA OVERVIEW**

The Kennebec Highlands is a 5000-acre block of undeveloped land that features remote ponds, streams, rolling uplands, and several hills. Vienna Mountain, one of the largest hills, features a large open ridge under blueberry cultivation. The remainder of the uplands are forested with early to mid-successional growth. Most of the uplands have a relatively recent history of timber harvest or other human intervention such that undisturbed natural upland settings are scarce.

Ponds in the Kennebec Highlands include McIntire Pond, Kidder Pond, and Boody Pond in the western half of the area, and the Round Pond – Beaver Pond complex in the eastern portion. The Kennebec Highlands Focus Area borders on Watson Pond, which has camps along its east side but is otherwise undeveloped. Whittier Pond also lies along the eastern border of the project area, overlooked by French's Mountain, a locally popular hiking spot. Long Pond, a major lake in the Belgrade Lakes chain, lies to the east.

The wetlands surrounding Beaver and Round Ponds form a good example of an unpatterned fen ecosystem. Unpatterned fens are peatlands that form where drainage is impeded such that peat can accumulate, but where water still flows into and

out of the system. These fens are well distributed throughout the state; however, the Round Pond-Beaver Ponds fen provides a good example of the smaller-size expression of this type of peatland. The peatland ecosystem is comprised of at least four vegetation types, which occur in different portions of the wetland and provide habitat diversity. The vegetation types are: mixed tall sedge fen, sweetgale mixed shrub fen, leatherleaf boggy fen, and mixed graminoid-shrub marsh. In addition, the wetland is of interest because it represents the northern range limit of poison sumac (Toxicodendron vernix), a plant of southern affinities that is uncommon in Maine. There is also open-water aquatic vegetation in Beaver Pond and its inlet, including water-lily - macrophyte aquatic bed vegetation and pickerelweed - macrophyte aquatic bed vegetation. These are all common vegetation types statewide, but form a high-quality mosaic here.

Many of the ponds and wetlands in the focus area provide important **Inland Waterfowl and Wading Bird Habitat**. These areas provide undisturbed nesting habitat and undisturbed, uncontaminated feeding areas and are essential for maintaining viable waterfowl and wading bird populations. Many ponds and streams also contain diverse fish species and



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provide a popular fishery. **Wild brook trout**, for example, are present in Stoney Brook, Roaring Brook, Beaver Brook, Kimball Brook, Upper Mill Stream and some unnamed tributaries.

The blueberry fields (while providing lovely views) are intensively managed, and all of the forest here are mid-successional or recently harvested, some areas cut rather hard. Small bands of mature forest remain around most of the ponds and some of the wetlands, but these forests are not extensive enough to be considered exemplary. They do, however, provide important buffer functions.

Several **Deer Wintering Areas** have also been identified in the Kennebec Highlands Focus Area. Deer congregate in wintering areas which provide reduced snow depths, ample food and protection from wind.

A large portion of the Kennebec Highlands Focus Area has been conserved by the Belgrade Regional Conservation Alliance, Kennebec Land Trust and Maine Bureau of Public Lands.

#### RARE AND EXEMPLARY NATURAL COMMUNITIES

**Unpatterned Fen Ecosystem:** Fens are peatlands in which groundwater or water from adjacent uplands moves through the area. As a result, plants are exposed to more nutrients, and the vegetation is typically different and more diverse than that of bogs. Peat is moderately- to well-decomposed and of variable thickness. The vegetation consists predominantly of sedges, grasses, reeds, and *Sphagnum* mosses. Bog communities, dominated by heath shrubs, may be present; though

## **Ecological Services of the Focus Area**

- Provides high quality habitat for waterfowl, wading birds, deer, moose, and other wildlife.
- Provides an important component of regional biodiversity.
- Protects water quality.

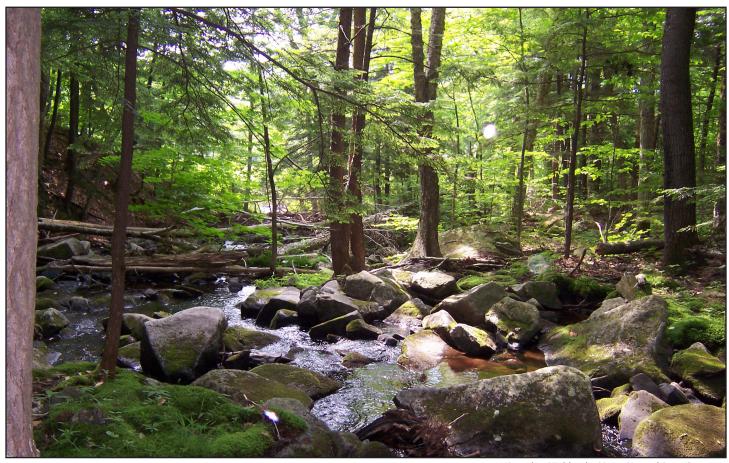
# **Economic Contributions of the Focus Area**

- Attracts tourism for hiking, biking, skiing, snowshoeing, wildlife observation, and hunting.
- Provides wildlife habitat for a number of game species that are seasonally important to Maine's rural economy.
- Serves as a valuable recreational resource for local residents.

fen and bog vegetation may co-occur, in a fen ecosystem the former is more extensive.

# **CONSERVATION CONSIDERATIONS**

» Buffers should be maintained around all wetlands and ponds. While different species can have different buffering requirements, wider buffers provide better protection for



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riparian and wetland-dependent species. Better protection will be afforded to the wetlands and ponds if as little alteration as possible occurs within 250' of the wetland/upland border. Any timber harvesting within and adjacent to wetlands or adjacent to ponds should be implemented with strict adherence to Shoreland Zoning guidelines and Maine Forest Service Best Management Practices.

- » 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.
- » Conservation planning for upland features should include setting some areas aside from timber harvests to allow for the development of some unmanaged forests.
- » Existing roads and trails should be reviewed with particular recreation and access needs in mind, and trails closed if they run counter to protection needs. One of the prime values of Kennebec Highlands is the comparative lack of permanent roads (although the new logging road through the center of the property approaches a permanent road in size), and

fragmenting features should be minimized where possible.

- » This area includes Significant Wildlife Habitat for wintering deer and wading birds and waterfowl. Land managers should follow best management practices with respect to forestry and building activities in and around wetlands, shoreland areas, and Significant Wildlife Habitat. Vegetation removal, soil disturbance and construction activities may require a permit under the Natural Resources Protection Act. Contact MDIFW for more information.
- » 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	None Documented				
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Plants	None Documented				
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#### State Status\*

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

### State Rarity Rank

- Critically imperiled in Maine because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres).
- 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

- 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.

<sup>\*</sup>State status rankings are not assigned to natural communities.