Focus Areas of Statewide Ecological Significance

Carlton Pond North

WHY IS THIS AREA SIGNIFICANT?
The Carlton Pond North Focus Area is an extensive wetland complex featuring bogs, emergent marshes, and habitat for at least two rare species, the black tern and the bald eagle. The area is also noteworthy as a large unfragmented block of waterfowl habitat.

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.
» Encourage landowners to maintain enhanced riparian buffers.
» Encourage town planners to improve approaches to development that may impact focus area functions.
» Monitor and remove invasive plant populations.
» Work with landowners to encourage sustainable forest management practices on remaining privately owned forest lands in and around the focus area.

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

Rare Animals
Black Tern
Bald Eagle

Rare Plants
None Documented

Rare and Exemplary Natural Communities
Raised Level Bog Ecosystem

Significant Wildlife Habitats
Inland Wading Bird and Waterfowl Habitat
Deer Wintering Area

Public Access Opportunities
» Carlton Pond Wildlife Production Area, USFWS

Photo credits, top to bottom: Maine Department of Inland Fisheries and Wildlife, Ron Logan, Paul Cyr, Maine Natural Areas Program, Paul Cyr
FOCUS AREA OVERVIEW

The extensive wetland complex found in the Carlton Pond North Focus Area includes bogs and emergent marshes as well as Carlton Pond. The bog north of Carlton Pond (at least a portion of which is also known as Detroit Bog) is a mid-size peatland complex including both raised level bog and unpatterned stream drainage fen, and has been described as having one coalesced dome lacking concentric pattern and secondary pools to the east and individual domes of the same type to the west. Stretches of unpatterned geogenous and transitional peatlands are in the stream valleys. Peatland communities include leatherleaf boggy fen, sedge – leatherleaf fen lawn, sheep laurel dwarf shrub bog, spruce – larch wooded bog, mountain holly – alder woodland fen, red maple woodland fen, and low sedge – buckbean fen lawn.

Southward, Carlton Pond itself (which is locally referred to as a “bog”, but which is more of a fen in this impounded lake) features extensive waterfowl habitat. The black tern colony here is well established, having been consistently documented for the last 20 years. Carlton Pond provides very productive waterfowl habitat. A bald eagle nest site has been documented here as well.

Much of the area around Carlton Pond is owned by the US Fish and Wildlife Service and managed as the Carlton Pond Waterfowl Production Area.

RARE AND EXEMPLARY NATURAL COMMUNITIES

A raised level bog ecosystem consists of flat peatlands in basins with mostly closed drainage, receiving water from precipitation and runoff from the immediate surroundings. Most parts of level bogs are somewhat raised (though not domed), in which case vegetation is almost entirely ombrotrophic (dwarf shrub heath or forested bog). Other parts of the bog are not raised; in this case, vegetation is transitional (in nutrient status) between that of ombrotrophic bogs and minerotrophic fens. In all cases, Sphagnum dominates the ground surface and is the main peat constituent. The surface of the bog is flat and featureless. These bogs are often at least partly treed with black spruce and larch.

CHARACTERISTIC SPECIES

Black terns (Chlidonias niger) nest exclusively in large (over 40 acres) shallow freshwater emergent marshes associated with lakes, impoundments, or slow moving streams. They con-
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Black Tern, Maine Dept. of Inland Fisheries and Wildlife

struct their nests on floating mats of dead vegetation or small mudflats and, therefore, fluctuating water levels and nest and chick predation are significant threats to the species. Maintaining stable water levels in impoundments, using floating nest platforms and employing measures to deter predators may help sustain black tern populations.

**Bald eagles (Haliaeetus leucocephalus)** were nearly extirpated because of widespread use of environmental contaminants that caused eggshell thinning and impaired reproductive success. With bans on the use of these contaminants and habitat protection measures, bald eagles have made a tremendous recovery. In 2009 they were removed from the state Endangered Species list. They remain listed as Special Concern. Bald eagles and their nest sites are protected by the USFWS under the Bald and Golden Eagle Protection Act.

Carlton Pond provides an 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. A large **Deer Wintering Area** has also been identified to the east of the raised level bog ecosystem and to the south of Carlton Pond. Deer congregate in wintering areas which provide reduced snow depths, ample food and protection from wind.

Principal fisheries in the 430 acre Carlton Pond include brown bullhead, largemouth bass, chain pickerel and yellow perch.

**CONSERVATION CONSIDERATIONS**

» Willing-seller expansion of the national wildlife refuge (Carlton Pond Waterfowl Production Area), through conservation easements or fee acquisition, could help fill in some of the pieces in the somewhat patchy ownership. A priority would be conservation of the bog north of Carlton Pond.

» On lands where timber harvest or development continues, buffers should be maintained around all wetlands and ponds. While different species can have different buffering requirements, wider buffers provide better protection for riparian and wetland-dependent species. The state minimum shoreland zoning standards specify a minimum 75’ buffer in which very little harvest or clearing is allowed, with less stringent restrictions within 250’ of the wetland border. 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.

» This area includes Significant Wildlife Habitat. Land managers should follow best management practices with respect to forestry 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.

» Invasive plants and aquatic organisms have become an increasing problem in Maine and a threat to the state’s natural communities. Disturbances to soils and natural vegetation and introductions of non-native species to terrestrial and aquatic habitats can create opportunities for colonization. Landowners and local conservation groups should be made aware of the potential threat of invasive species, of methods to limit establishment, and/or of appropriate techniques for removal. For more information on invasive plants visit: [http://www.maine.gov/doc/nrimc/mnap/features/invasives.htm](http://www.maine.gov/doc/nrimc/mnap/features/invasives.htm).

» 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.

**Ecological Services of the Focus Area**

- Retains floodwater, sediments and nutrients
- Provides important habitat for waterfowl and wading birds
- Contributes to regional biodiversity.

**Economic Contributions of the Focus Area**

- Recharges groundwater
- Provides a scenic viewshed
- Provides opportunity for education and tourism
- Provides high value forest products that support the regional economy.
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## RARE SPECIES AND EXEMPLARY NATURAL COMMUNITIES OF THE FOCUS AREA

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<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>State Status*</th>
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