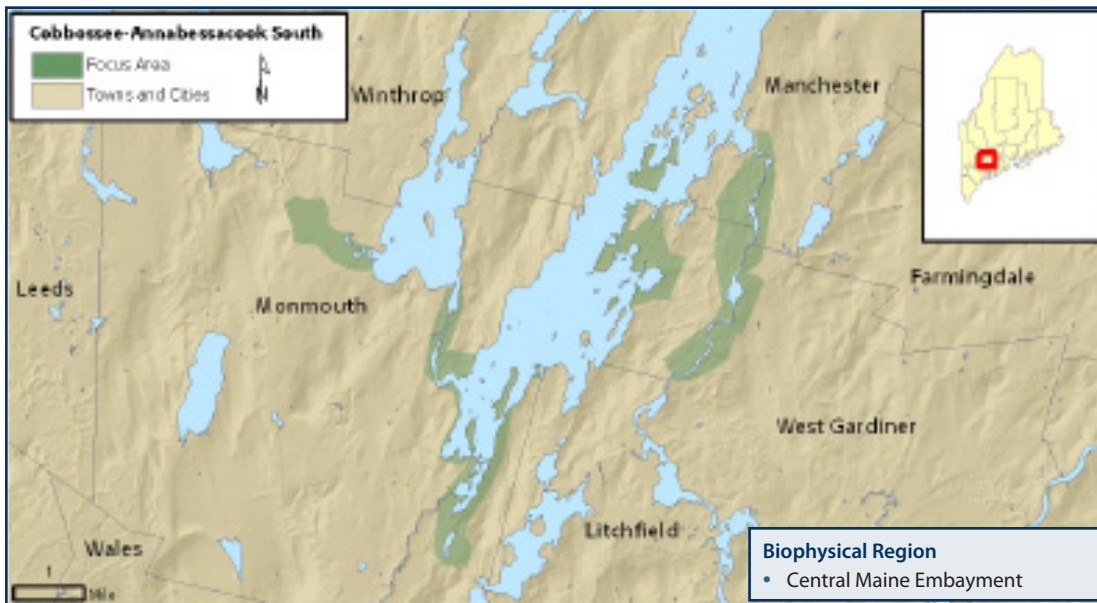
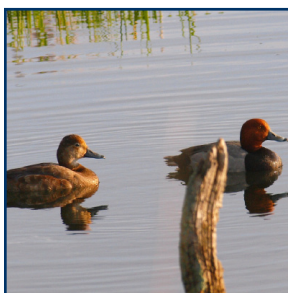
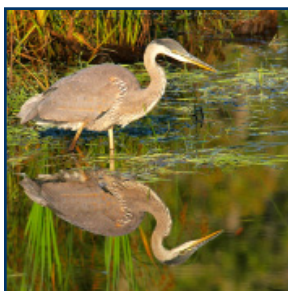
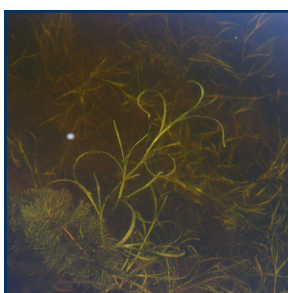
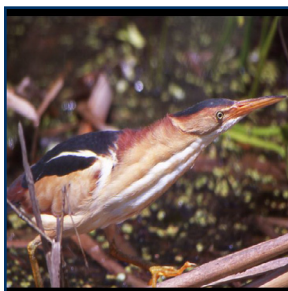


**Cobbesee - Annabessacook South**



**WHY IS THIS AREA SIGNIFICANT?**

The extensive areas of wetlands associated with the southern portions of Cobbesee Lake and Lake Annabessacook provide habitat for rare species and exceptional habitat for wading birds and waterfowl as well as wintering deer.

**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.
- » Monitor and remove invasive species.
- » Encourage landowners to maintain enhanced riparian buffers.
- » Encourage sustainable forest management practices on remaining privately owned forest lands in and around the focus area.
- » Work with willing landowners to secure permanent conservation status for unprotected significant features in the focus area

For more conservation opportunities, visit the Beginning with Habitat Online Toolbox: [www.beginningwithhabitat.org/toolbox/about\\_toolbox.html](http://www.beginningwithhabitat.org/toolbox/about_toolbox.html).

*Photo credits, top to bottom: Jeremiah Hayden, Maine Natural Areas Program, Paul Cyr, Jonathan Mays, Paul Cyr*

**Rare Animals**

- Least Bittern
- Ribbon Snake

**Rare Plants**

- Water Stargrass

**Rare and Exemplary**

**Natural Communities**

- None Documented

**Significant Wildlife Habitats**

- Inland Wading Bird and Waterfowl Habitat
- Deer Wintering Area

**Public Access Opportunities**

- » Jamies Pond Wildlife Management Area, MDIFW



*Cobbossee Lake, Maine Natural Areas Program*

## FOCUS AREA OVERVIEW

The Cobbossee-Annabessacook South Focus Area includes several areas of extensive wetlands associated with the southern portions of Cobbossee Lake (also known as Cobbosseecontee Lake) and Lake Annabessacook. Wilson Stream, as it flows into Lake Annabessacook, contains extensive habitat for wetland species as well as least bittern, a rare and regionally declining species, and a heron rookery. The wetland at the south end of Cobbossee Lake is a large complex consisting of deep areas of open water, fringed by dense cattail stands at lower reaches and by floodplain forest and sedge meadow at upper reaches. The open wetlands are not considered exemplary natural communities in themselves, but do support several rare animal species, including least bittern and ribbon snake as well as water stargrass, a rare plant. A large wetland to the east of Cobbossee Lake also supports least bittern. Cobbosseecontee Stream in West Gardiner supports least bittern as well and is an historic location for threadfoot, a rare plant, that has not been recently confirmed there.

Extensive areas along Cobbosseecontee Stream east of the lake, the wetlands north and east of Wentworth Cove, the Jock Stream – Mud pond area at the south end of the lake, and Jug Stream (between Annabessacook and Cobbossee Lakes) are mapped as Inland Wading Bird and Waterfowl Habitat. These

areas provide undisturbed nesting habitat and undisturbed, uncontaminated feeding areas and are essential for maintaining viable waterfowl and wading bird populations. Several Deer Wintering Areas are mapped as well, mostly on the east side of the lake. Deer congregate in wintering areas which provide reduced snow depths, ample food and protection from wind.

Principal fisheries in the 5,543-acre Cobbossee Lake and associated streams include stocked brook and brown trout, brown bullhead, largemouth bass, chain pickerel, smallmouth bass, white perch and yellow perch. Northern pike and rudd were illegally introduced into lake.

Principal fisheries in the 1,420-acre Lake Annabessacook and associated streams include largemouth bass, chain pickerel, smallmouth bass and white perch. Northern pike were illegally introduced into this lake as well.

Bald eagles have used Cobbossee Lake intermittently. Nesting was recorded near the inlet in East Monmouth in 1966. Although transient eagles continued to visit the area in fall and spring, no residency was noted for the next twenty years as population declines nearly extirpated bald eagles from

central Maine. Meanwhile, a large colony of great blue herons on Pinkham Island and a wide scattering of osprey nests among islands in the southern reaches of the lake suggested the area remained suitable for eagles' return. A non-breeding pair wandered the lake in 1997 – 1999 (briefly occupying an old osprey nest on Pine Island during 1998). In 2000, a new eagle nest was occupied on Goodwin Island in West Gardiner. Nesting was successful even though a summer camp is not far away on the island. Many other islands in Cobbossee appear to be suitable and relatively more secure niches. Time will tell whether Cobbossee becomes a steady and reliable nesting area for bald eagles.

### RARE AND EXEMPLARY NATURAL COMMUNITIES

None documented

### CHARACTERISTIC SPECIES

The state Endangered **least bittern** (*Ixobrychus exilis*) is a member of the heron family. The very secretive least bittern inhabits large marshes with dense vegetation. The numbers of these birds have declined due to loss of habitat.

The **ribbon snake** (*Thamnophis sauritus*), is a species of special concern in Maine. Ribbon snakes are semi-aquatic snakes with yellowish stripes running the length of their long, thin bodies. Habitat types frequented by ribbon snakes include bogs, shrub swamps, forested wetlands, wet meadows, streams, and pond/lake edges. They prefer the periphery of these areas where vegetation and supplies of amphibians are abundant. Most of Maine's ribbon snake population occurs in southern and south-central Maine. Due to the high rates of development in these areas, this species is also vulnerable to habitat loss, fragmentation, and degradation of its habitat. The wetland-upland ecology of this snake puts it at further risk due to inadequate regulations protecting riparian and upland habitat around smaller wetlands

**Water stargrass** (*Zosterella dubia*) is a perennial aquatic plant that usually grows in shallow water with its stem submersed. The leaves are grass-like and up to 15 cm long. The flowers are pale yellow, and the fruits are black. It can be recognized vegetatively by its alternate, narrow, parallel-sided leaves with many fine veins. The leaves lack a more prominent central vein. To conserve this species, maintain water quality in the lakes and ponds where it occurs.

### CONSERVATION CONSIDERATIONS

- » Cobbossee Lake is a highly developed lake, so the conservation goal should be to minimize encroachment on what is currently undeveloped.
- » Appropriate conservation strategies include tree growth and open space treatments, conservation easements and fee ownership.
- » For lands where timber harvest or development continues,

#### Ecological Services of the Focus Area

- Supports regional biodiversity by providing habitat for rare plants and animals
- Provides high quality habitat for waterfowl, wading birds, deer, and other wildlife

#### Economic Contributions of the Focus Area

- Provides scenic viewshed
- Recharges groundwater
- Attracts tourism for wildlife observation, paddling, hunting, and angling

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.

- » 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.
- » 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>.
- » 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.

**RARE SPECIES AND EXEMPLARY NATURAL COMMUNITIES OF THE FOCUS AREA**

	Common Name	Scientific Name	State Status*	State Rarity Rank	Global Rarity Rank
Animals	Least Bittern	<i>Ixobrychus exilis</i>	E	S2B	G5
	Ribbon Snake	<i>Thamnophis sauritus</i>	SC	S3	G5
Plants	Water Stargrass	<i>Zosterella dubia</i>	SC	S3	G5
	None Documented				
Natural Communities	None Documented				

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) or because some aspect of its biology makes it especially vulnerable to extirpation.
- 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.