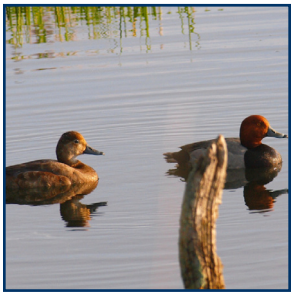
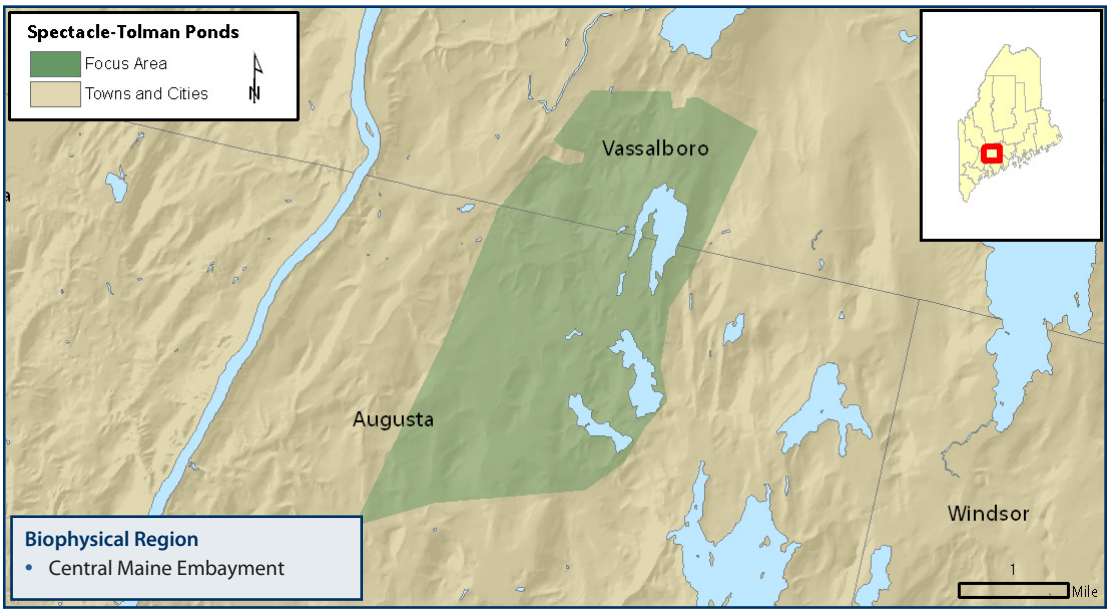
Beginning with HABITAT

Focus Areas of Statewide Ecological Significance

Spectacle and Tolman Ponds





WHY IS THIS AREA SIGNIFICANT?

The area around Spectacle, Dam and Tolman Ponds and their intervening uplands contain extensive wetland complexes, habitat for rare animals, and is a good example of forest types representative of the region. The three ponds can be thought of as one wetland complex with occasional gentle rises on the lands around them.

OPPORTUNITIES FOR CONSERVATION

» Monitor and remove invasive plant populations.
» Work with landowners to encourage sustainable forest management practices on remaining privately owned forest lands.
» Work with willing landowners to permanently protect undeveloped areas and significant features.
» Encourage best management practices for forestry, vegetation clearing, and soil disturbance activities near significant features.
» Maintain intact forested buffers along water bodies and wetlands.
» Educate recreational users about the ecological and economic benefits provided by the focus area.

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

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Rare Animals
Ribbon Snake

Rare and Exemplary Natural Communities
Pocket Swamp

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

Public Access Opportunities
- Alonzo H Garcelon WMA, MDIFW
- Spectacle Pond, MBPL

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FOCUS AREA OVERVIEW

Along the streams west of Tolman Pond and north of Dam Pond there are vast stretches of cat-tail marsh and mixed graminoid-shrub marsh. Acidic fen communities occur along flat pondshores, especially those near outlets and inlets, and some streamsides. The forest types present demonstrate this area's transitional position between the Appalachian oak forests to our south and the more boreal forests of northern Maine. The red oak – northern hardwood forests here are good examples of this characteristically central Maine type, as are the hemlock forests on the more steeply sloped lakeshores. The white oak – red oak forest north of Dam Pond is more typically southern, and forests with noticeable amounts of white oak are uncommon this far north. The oak – northern hardwood stand north of Spectacle Pond shows a gradation from enriched conditions on the lower slope (large sugar maple and some basswood) to stonier and drier conditions upslope. Much of the forest here has not been cut in more than 50 years, and some of the red oak are more than 20" in diameter and over 60' tall.

RARE AND EXEMPLARY NATURAL COMMUNITIES

Pocket Swamp: These forested wetlands may be deciduous or mixed and typically occur as small depressions within an upland landscape. Red maple almost always dominates the canopy and occurs with hemlock and/or black gum. Black gum is an uncommon tree in Maine and is a good indicator of this community. Shrubs may be locally dense and include high-bush blueberry and winterberry. The herb layer is variable in extent, and often features large clumps of ferns.

Timber harvesting lowers the natural community values of these small and often isolated wetlands. Because these tend to occur as small forest patches, their conservation depends in part on maintaining some surrounding forest cover as a buffer. They should be buffered from direct impacts, such as physical disturbance to the soil, and indirect impacts, such as water quality degradation. Only a few examples are known on public lands or private conservation lands.

Many occurrences of this community type function as vernal pools, which are important breeding habitats for a variety of amphibians including wood frogs, spotted salamanders, and blue-spotted salamanders. Rare turtles such as Blanding's and spotted turtles may feed on amphibian egg masses present in such pools. If peaty hummocks are common, four-toed

salamanders may breed in these wetlands. Occurrences of this community type in which spicebush is present may host the spicebush swallowtail butterfly, whose larvae feed only on spicebush and sassafras.

CHARACTERISTIC SPECIES

The wetlands of the focus area also provide habitat for the **ribbon snake** (*Thamnophis sauritus*), 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 their habitats. The wetland-upland ecology of this snake puts it at further risk due to inadequate regulations protecting riparian and upland habitat around smaller wetlands.

Dam Pond and streams to the west are mapped as **Inland Wading Bird and Waterfowl Habitat**. **Deer Wintering Areas** are mapped west of Dam and Tolman Ponds and around the eastern and southern edge of Spectacle Pond.

The ponds in this focus area provide an important fishery. One-hundred-thirty-nine-acre Spectacle Pond offers stocked brook trout and brown trout as well as largemouth bass, chain pickerel and white perch as principal fisheries. Largemouth bass and chain pickerel are principal fisheries in the 96-acre Dam Pond. Sixty-two-acre Toman Pond provides fishery resources as well.

CONSERVATION CONSIDERATIONS

» The combination of important wetland and upland ecological features indicates that conservation should focus on upland as well as wetland habitats. While the forest tracts here are not huge, they are representative of this region and in good condition relative to nearby areas.

» The public ownership here is a good start; however, additional protection efforts could be directed to the private lands that separate and surround the public land. Appropriate conservation strategies for privately owned lands include conservation easements and fee ownership.

» 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

Ecological Services of the Focus Area

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

Economic Contributions of the Focus Area

- Provides high value forest products that support the regional economy.
- Attracts tourism for wildlife observation, paddling, hunting, and angling.
- Serves as a valuable recreational resource for local residents.

Top: Cat-tail marsh, Maine Natural Areas Program
Bottom: Maine Natural Areas Program

for removal. Monitoring for invasive exotic plants, such as barberry in the forests and purple loosestrife in the open wetlands, would help identify problems as soon as they arise, when control might be possible. For more information on invasive plants visit: http://www.maine.gov/doc/nrimc/mnap/features/invasives.htm.

» For 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.

» 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.

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RARE SPECIES AND EXEMPLARY NATURAL COMMUNITIES OF THE FOCUS AREA

	Common Name	Scientific Name	State Status*	State Rarity Rank	Global Rarity Rank
Animals	Ribbon Snake	*Thamnophis sauritus*	SC	S3	G5
Natural Communities	Pocket Swamp	Hemlock - hardwood pocket swamp		S2	G5

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.