# Greater Mattawamkeag Lake

Island Falls & T4 R3 WELS



### **Description**:

The Greater Mattawamkeag Lake Focus Area encompasses a broad swath of uplands and wetlands surrounding Upper Mattawamkeag and Mattawamkeag Lakes, extending from Sly Brook in the southwest to Pleasant Lake in the northeast. The combination of open wetlands, small ponds, rivers, and undeveloped shorelines with hills and low peaks provides this area with a unique combination of natural features including rich plant and animal species diversity.



Silver Maple Floodplain Forest along the West Branch Mattawamkeag River (photograph by the Maine Natural Areas Program).

### **Natural Communities and Rare Plants**

With the exception of scattered camps around the west ends of the lakes, the land around Mattawamkeag Lake and Pleasant Lake at the edge of the focus area is within a large undeveloped block. The southern end of Mattawamkeag Lake, where it drains into the West Branch of the Mattawamkeag River, is conservation land owned by the State of Maine. An island in the middle of Mattawamkeag Lake, also public land, supports one of the largest and best examples of **Hemlock Forest** documented in the state.

Multiple important habitat types have been mapped in the southwest side of the focus area, along the wetlands and lowland conifer forests that border Sly Brook. Here, a large (~1800 acre) wetland complex between Sly Brook and Mattawamkeag Lake supports a diversity of natural communities including an excellent example of a **Sheep Laurel Dwarf Shrub Bog**, and smaller patches of Bog Moss Lawn and Leatherleaf Boggy Fen.

Though there is a history of logging within the Greater Mattawamkeag Lake Focus Area, some of the forested areas have been left unmanaged for longer periods and have developed habitat and natural community characteristics that make them exceptional. Patches of **Hemlock Forest** with trees up to 200 years old and large snags provide cover and habitat for songbirds and other wildlife within the lowlands of the focus area. **Beech-Birch-Maple Forest** on the slopes south of Pleasant Lake contain large legacy trees – giants passed over during the last forest harvest – that may have stood when Teddy Roosevelt hunted around Mattawamkeag Lake with Maine guide Bill Sewall in the 1870's.

A rare natural community type in Maine, **Silver Maple Floodplain Forest**, occupies the silty flats along the West Branch of the Mattawamkeag River. Silver Maple Floodplain Forests occur on the plains of low-gradient rivers where seasonal floods regularly deposit fine sand and silt. The resulting high nutrient levels often support a rich display of spring ephemerals, along with a dense herbaceous layer dominated by sensitive fern (*Onoclea sensibilis*) and ostrich fern (*Matteuccia struthiopteris*). The isolated pools, oxbows, and river channels associated with floodplain forests provide excellent habitat for multiple wildlife species such as turtles, amphibians, and waterfowl.

### Wildlife

One of the highlights of this focus area is the mussel habitat along the Mattawamkeag River. **Yellow lampmussels** (*Lampsilis cariosa*), a threatened species in Maine, have been found in several locations along the West Branch of the Mattawamkeag River and within Mattawamkeag Lake. These mussels are found only in high quality streams and rivers. The undisturbed nature of the area and relatively undeveloped shorelines have created excellent conditions for this freshwater mussel species. Future surveys along the West Branch or within Pleasant Lake may locate additional populations.



Brook floater (Alasmidonta varicosa) (Photograph by Ethan Nedeau).

Another threatened mussel species, the **brook floater** (*Alasmidonta varicosa*), was found on the West Branch and the East Branch of the Mattawamkeag River on the east side of Pleasant Lake, adding to the overall mussel diversity of this focus area. The brook floater is found among rocks, gravel, and sand in creeks and small rivers. In Maine, this species is generally found among rooted aquatic vegetation in nutrient-poor streams. The brook floater has experienced significant

declines throughout its range, and many populations have been extirpated. Even where it is found, populations often consist of just a small number of aging individuals. For these reasons it is listed as a species of special concern in the state. Maine may hold some of the best remaining populations of this species anywhere in its range.

The large wetland complex between Sly Brook and Mattawamkeag Lake contains open water, streamside wetlands, and emergent vegetation which all create significant habitat for **inland waterfowl and wading birds**. Spruce and cedar stands between the streams and open wetlands provide cover for deer and are mapped as important **deer wintering areas**.

**Bald eagles** (*Haliaeetus leucocephalus*) have nested in the tall trees near the southern perimeter of Mattawamkeag Lake since 1985. At least one alternate nest site has been identified, and the nests were occupied into the early 1990s, when they were last monitored. The nearest known eagle nests are about 10 northeast near Meduxnekeag Lake. Bald eagles nest along sea coasts, inland lakes and major rivers. Breeding habitat includes large trees, primarily old white pines, in close proximity (less than one mile) to water where food is abundant and human disturbance is minimal. Bald eagles, once abundant in Maine, were nearly extirpated throughout their range because of widespread use of environmental contaminants. Due to a wide variety of efforts, including designation of Essential Habitat to protect bald eagle nest sites through provisions of the Maine Endangered Species Act, bald eagles have now made a dramatic recovery. Because of Essential Habitat designation, all projects or activities funded and carried out by municipalities and state agencies within <sup>1</sup>/<sub>4</sub> mile of eagle nests are reviewed by MDIFW. Problems for eagles still persist, however. Habitat loss, human disturbance at nest sites, environmental contamination, diminished water quality, and human-caused deaths and injuries are still primary conservation problems. Management will continue to ensure that declines of the past are not repeated, and that habitat and a clean environment persist to promote population growth and expansion.

Common Name	Scientific Name	Status	S-Rank	G-Rank			
Natural Communities							
Northern Hardwoods Forest	Beech - Birch - Maple Forest	N/A	S4	G3G5			
Hemlock Forest	Hemlock Forest	N/A	S4	G4G5			
Hemlock Forest	Hemlock Forest	N/A	S4	G4G5			
Dwarf Shrub Bog	Sheep Laurel Dwarf Shrub Bog	N/A	S4	G5			
Silver Maple Floodplain Forest	Silver Maple Floodplain Forest	N/A	S3	GNR			
Rare Plants							
None documented							
Rare Animals							

Rare Features Table for the Greater Mattawamkeag Lake Focus Area:

Brook floater	Alasmidonta varicose	Т	S3	G3
Yellow lampmussel	Lampsilis cariosa	Т	S2S3	G3G4

## **Other Features Mapped by MDIFW:**

Bald eagle essential habitat Inland waterfowl and wading bird habitat Deer wintering area

## **Protection Status:**

The Maine Department of Conservation and Bureau of Parks and Lands own and manage approximately 3600 acres around the south end of Mattawamkeag Lake.

## **Conservation Considerations:**

- The integrity of wetlands and the processes and life forms they support are dependent on the maintenance of the current hydrology 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. These effects could have devastating impacts on freshwater mussel populations such as the rare brook floater or yellow lampmussel. Future management activity should avoid additional impacts to the area's hydrology.
- An adequate buffer should be retained between timber harvest areas and wetlands. The state minimum shoreland zoning standards restrict harvest and clearing within 250' of wetland borders. Because different species can have different buffering requirements, better protection will be afforded to the collective wetland plants and animals when larger buffers are used. Any timber harvesting within and adjacent to wetlands should be implemented with strict adherence to state or local Shoreland Zoning guidelines and Maine Forest Service Best Management Practices.
- The ecological integrity of peatlands, including all the processes and life forms they support, is dependent on the maintenance of the current hydrology and water quality of these systems. 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. In general, threats to peatlands include peat mining, cranberry harvesting, timber harvest around the forest perimeters, and development.
- Eagles are extremely sensitive to disturbance during their nesting season. Any activities near their nests or within their nesting territory during this period may cause nest failure or may even cause adults to abandon the nest. In general it is recommended that a 330-foot radius be left undisturbed around an eagle nest during any kind of land-clearing or timber harvest activity. Habitat protection within a <sup>1</sup>/<sub>4</sub> mile radius of a nesting site is another significant measure that can help support nesting eagles. Consult with a MDIFW biologist prior to planning any activity that may disturb the forest around an eagle nest.

#### Visit our web site for more information on rare, threatened and endangered species! http://www.mainenaturalareas.org

#### STATE RARITY RANKS

- S1 Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
- **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.
- Note: State Ranks are determined by the Maine Natural Areas Program.

#### **GLOBAL RARITY RANKS**

- G1 Critically imperiled globally because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
- **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.
- Note: Global Ranks are determined by The Nature Conservancy.

#### STATE LEGAL STATUS FOR PLANTS

**Note**: State legal status is according to 5 M.R.S.A. § 13076-13079, which mandates the Department of Conservation to produce and biennially update the official list of Maine's endangered and threatened plants. The list is derived by a technical advisory committee of botanists who use data in the Natural Areas Program's database to recommend status changes to the Department of Conservation.

- **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 considered Threatened or Endangered.