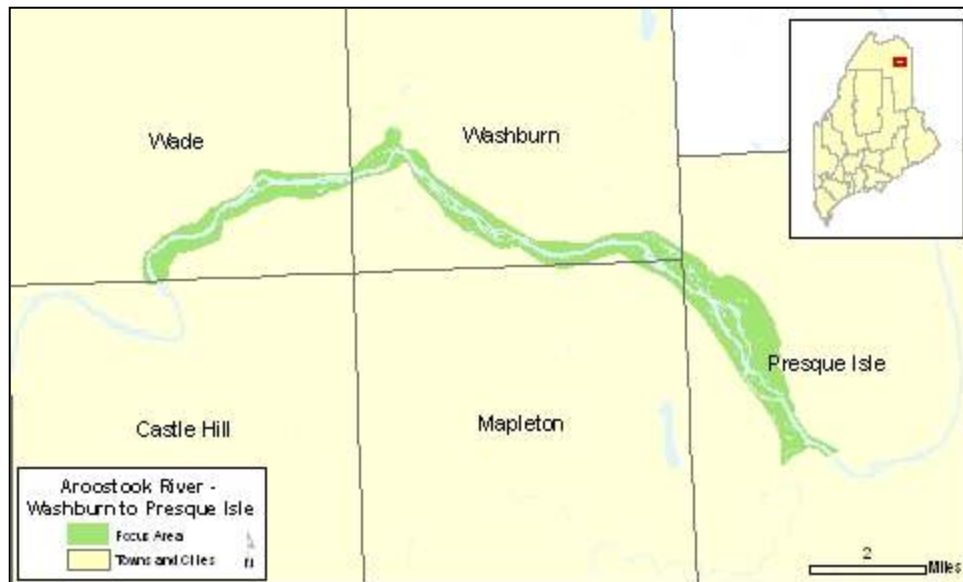


Aroostook River - Washburn to Presque Isle Area

Wade, Washburn & Presque Isle

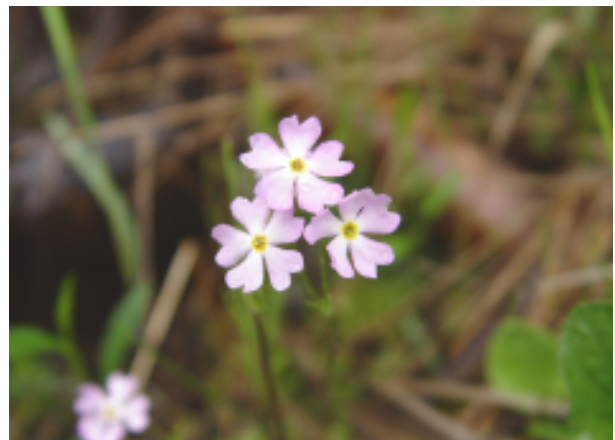


Description:

The Aroostook River—Washburn to Presque Isle Focus Area follows the Aroostook River from the Castle Hill/Wade town boundary through Wade to Washburn and ends in Presque Isle. The Focus Area includes the river, multiple islands scattered throughout its meandering channel, and adjacent floodplains. Local calcareous bedrock creates enriched conditions in this focus area that support an unusual array of rare natural communities and plants, and the backwaters, pools and water quality of the river support a diversity of rare aquatic features.

Natural Communities and Rare Plants

In the upstream sections of the focus area, populations of a wide variety of rare plant species are scattered along the calcareous river banks. Upstream, the Wade ledges site near the Wade-Washburn border is quite rich in rare plant species and hosts **alpine milk-vetch** (*Astragalus alpinus*), **dioecious sedge** (*Carex sterilis*), **few-flowered spikerush** (*Eleocharis quinqueflora*), **soft-leaved muhly** (*Muhlenbergia richardsonis*), **glaucous rattlesnake root** (*Prenanthes racemosa*), **bird's eye primrose** (*Primula mistassinica*), and **tall dropseed** (*Sporobolus asper*). The majority of the known locations of these plant species have been found on land that



Bird's eye primrose (Primula mistassinica), found along the Aroostook River shore (photograph by the Maine Natural Areas Program).

is so far not formally managed as public or private conservation land in Maine; therefore concentrations such as what is found along the Aroostook River represent a significant opportunity to protect or manage for several species that are otherwise not well represented through other conservation efforts. Furthermore, the Aroostook River shores mark the only known location in the state for tall dropseed, a grass that grows south into Alabama and west into Washington state.

The Washburn ledges hosts several rare species including **capillary sedge** (*Carex capillaris*), **Garber's sedge** (*Carex garberi*), **hyssop-leaved fleabane** (*Erigeron hyssopifolius*), **alpine sweet-broom** (*Hedysarum alpinum*), and **bird's eye primrose**.

The section of the Aroostook River within this focus area includes numerous islands that are seasonally flooded. On some of these there are bogans (narrow stretches of backwater) and sloughs (marshy pools) of varying hydroperiods that support aquatic plant communities which thrive in enriched conditions. Two of these locations have been documented as **circumneutral-alkaline water macrophyte suite** communities. One, at the mouth of Pettingill Brook, is the Pettingill Brook Bogan and the other, on Pond Island, is an assortment of ponds with unusual berms and evidence of beaver activity. The state endangered **Fries' pondweed** (*Potamogeton friesii*) has also been documented in this section of the river.

Wildlife

The majority of the Aroostook River- Washburn to Presque Isle Focus Area downstream of Washburn supports **inland waterfowl and wading bird habitat** and the bogans and sloughs provide excellent foraging habitat for waterfowl.

The focus area also hosts at least two rare animal species: **wood turtles** (*Glyptemys insculpta*) and **pygmy snaketail** (*Ophiogomphus howei*), a small globally rare dragonfly. Wood turtles, a primarily northeastern species listed as a species of special concern in Maine, are declining throughout their range. Maine, however, likely hosts some of the largest and most viable remaining populations in the U.S. The turtles require well-oxygenated streams and rivers for overwintering, and sandy, gravelly banks for nesting sites, two of the prominent features that are included in the Aroostook River Focus Area.

The pygmy snaketail has been documented in two locations within the focus area. This species spends most of its life in rivers and depends on clean, free-flowing rivers and streams with forested riparian areas and sand and gravel bottoms. This species is one of the least tolerant groups of dragonflies to changes in water quality. Increased sedimentation, nonpoint sources of pollution (e.g., runoff from roads and storm sewers, agricultural fertilizers, pesticides), dams and intensive



Pygmy snaketail (*Ophiogomphus howei*), a rare species of dragonfly that has been found along the Aroostook River.
(Photograph by Blair Nikula)

watershed development contribute to their decline. The pygmy snaketail has declined and disappeared from many rivers in the Northeast. Surveys have shown that Maine, with its relatively clean, free-flowing rivers in forested watersheds, has some of the best populations remaining in the Northeast. As such, Maine will play a major role in the future conservation of this species.

The surrounding upland areas beyond the immediate riparian sections have been somewhat altered from their natural conditions especially for agricultural fields and for residential/business development in the town of Washburn.

The combination of natural communities, rare plants and rare animals in such close proximity to one another, however, make this section of the Aroostook River an important area for focusing conservation attention.

Rare Features Table for the Aroostook River - Washburn to Presque Isle Focus Area:

Common Name	Scientific Name	Status	S-Rank	G-Rank
Natural Communities				
Circumneutral pond	Circumneutral-Alkaline Water Macrophyte Suite	N/A	GNR	S2
Rare Plants				
Wild ginger	<i>Asarum canadense</i>	T	G5	S1S2
Alpine milk-vetch	<i>Astragalus alpinus var. brunetianus</i>	SC	G5T3	S3
Capillary sedge	<i>Carex capillaris</i>	T	G5	S1S2
Garber's sedge	<i>Carex garberi</i>	SC	G5	S2
Dioecious sedge	<i>Carex sterilis</i>	T	G4	S2
Few-flowered spikerush	<i>Eleocharis quinqueflora</i>	E	G5	S2
Hyssop-leaved fleabane	<i>Erigeron hyssopifolius</i>	SC	G5	S2
Alpine sweet-broom	<i>Hedysarum alpinum var. americanum</i>	SC	G5T5?	S3
Soft-leaved muhly	<i>Muhlenbergia richardsonis</i>	T	G5	S3
Fries' pondweed	<i>Potamogeton friesii</i>	E	G4	S1
Glaucous rattlesnake root	<i>Prenanthes racemosa</i>	SC	G5	S3
Bird's eye primrose	<i>Primula mistassinica</i>	SC	G5	S3
Tall dropseed	<i>Sporobolus asper</i>	E	G5	S1
Rare Animals				
Pygmy snaketail	<i>Ophiogomphus howei</i>	G3	S2	SC
Wood turtle	<i>Glyptemys insculpta</i>	G4	S4	SC

Other Features Mapped by MDIFW:

Inland waterfowl and wading bird habitat

Protection Status:

No land within this focus area is known to be in conservation protection at this time.

Conservation Considerations :

- The integrity of wetlands and the processes and life forms they support, including rare plants and animals, are dependent on the maintenance of the current hydrology and water quality 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 that can degrade the high quality natural systems that occur here.
- Forested buffers along the Aroostook River serve to decrease erosion and nutrient runoff and help prevent the spread of exotic invasive plants. Unchecked erosion can cause formerly stable banks to slump and completely wash away under heavy runoff conditions. Maintaining or restoring a healthy buffer of native trees is vital to help protect the integrity of riparian ecosystems.
- Rivershore communities, because of the periodic natural hydrological disturbances to which they are subjected, are particularly susceptible to colonization by invasive plant species. Local groups with an interest in the protection of this focus area should be made aware of the potential threat of invasive plants in these communities and keep an eye out for them before they become well established.

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.

