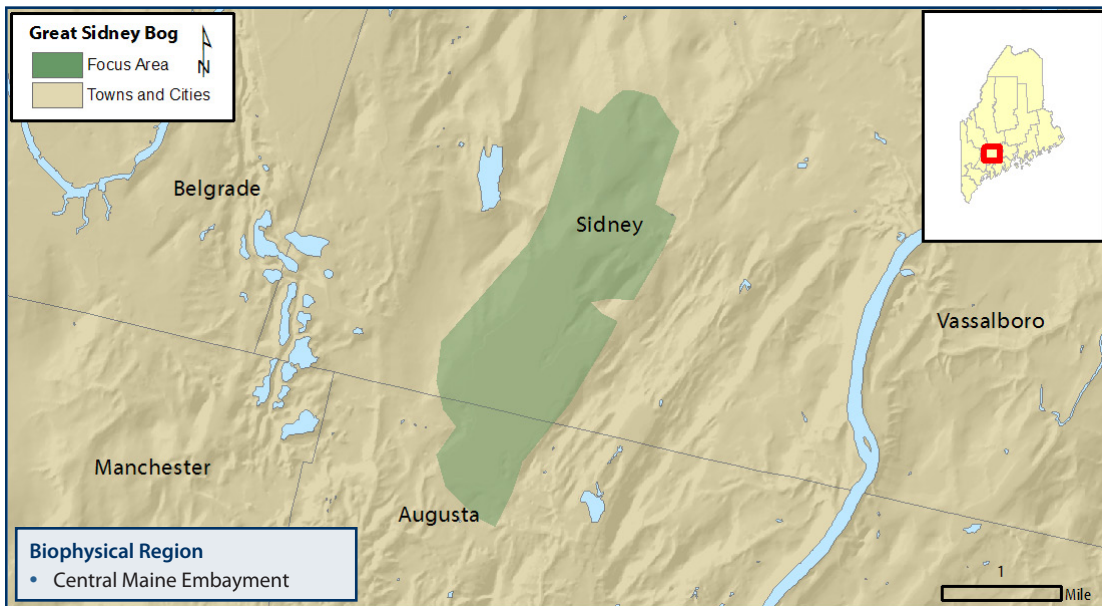
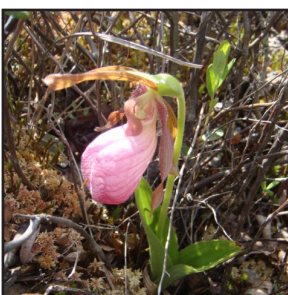


Great Sidney Bog



WHY IS THIS AREA SIGNIFICANT?

Because of its size, vegetation, and relatively undisturbed nature, the Great Sidney Bog is considered a very good example of a Raised Level Bog Ecosystem. Its ecological importance is augmented by its location in the southern third of the state, where raised bogs become much scarcer than they are further north. The easy access to this peatland in the Waterville – Augusta area enhances its value for education and research.

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.
- » Maintain intact forested buffers along water bodies and wetlands.
- » Work with landowners to encourage sustainable forest management and mining practices on remaining privately owned forest lands.
- » Work with willing landowners to permanently protect undeveloped areas and significant features.

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

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**Rare and Exemplary
Natural Communities**
Raised Level Bog Ecosystem

Significant Wildlife Habitats
Inland Wading Bird and Waterfowl
Deer Wintering Area



Great Sidney Bog, Maine Natural Areas Program

FOCUS AREA OVERVIEW

Great Sidney Bog is a 605-acre Raised Level Bog lying between the Belgrade Lakes chain and the Kennebec River. Much of the bog is clearly raised above the water table, relying on atmospheric deposition for its nutrients (ombrotrophic). As is typical in raised bogs, Sheep Laurel Dwarf Shrub Bog vegetation covers most of the highly raised acidic area, and the abundant rhodora and sheep laurel create an outstanding floral display. Spruce – Larch Wooded Bog, Red Maple Wooded Fen, and Bog Moss Lawn communities make up the remainder of the peatland. Small streams drain into the bog from the north and west, and exit the bog on the northeast and south sides. The open peatland has typical hummocks and hollows in the sheep laurel – rhodora – leatherleaf vegetation, but no other obvious patterning. No state-listed rare plants have been documented here, but the unusual orchid *Arethusa bulbosa* has been noted, as well as other typical bog orchids. The peatland is visited a few times yearly by local school field trips.

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.

CONSERVATION CONSIDERATIONS

- » Great Sidney Bog is largely surrounded by mid-successional woods, and bordered on the east by the Bog Road. In places, Bog Road is immediately adjacent to the peatland. Rt. 27, the south end of the Pond Road (Rt. 23), and Quaker Road border the bog on the west. Much of the roadside land is houselots.
- » The major threat, as yet unrealized, to the bog would be peat mining. The peatland contains sufficient peat resources that peat interests hold mining rights there, with one lot (as of 1990) owned by a peat company. Less pervasive, but more likely to occur, is degradation of the peatland from

incidental uses related to the increasing residential development in the area. Buffers can play a major role in protection here. ORV use of the peatland when the ground is not frozen could seriously degrade portions of the bog; this has been a problem in some other bogs in southern Maine.

- » An adequate buffer should be retained between developed lots or timber harvest areas and the wetland. The state minimum shoreland zoning standards restrict harvest and clearing within 250' of the wetland border. Because different species can have different buffering requirements, better protection will be afforded to the collective wetland plants and animals with larger buffers. Any timber harvesting within and adjacent to the wetland should be implemented with strict adherence to state or local Shoreland Zoning guidelines and Maine Forest Service Best Management Practices.
- » 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>.

Ecological Services of the Focus Area

- Retains floodwaters, sediments and nutrients
- Provides high value habitat for waterfowl and wading birds

Economic Contributions of the Focus Area

- Recharges groundwater
- Provides scenic views
- Provides opportunity for education and recreation

- » 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.
- » 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. Contact MDIFW for more information.
- » Appropriate conservation strategies include tree growth and open space treatments, conservation easements, and fee ownership.



Floral display, Great Sidney Bog, Maine Natural Areas Program

RARE SPECIES AND EXEMPLARY NATURAL COMMUNITIES OF THE FOCUS AREA

	Common Name	Scientific Name	State Status*	State Rarity Rank	Global Rarity Rank
Animals	none known				
Plants	none known				
Natural Communities	Raised Level Bog Ecosystem	Raised level bog ecosystem		S4	GNR

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.