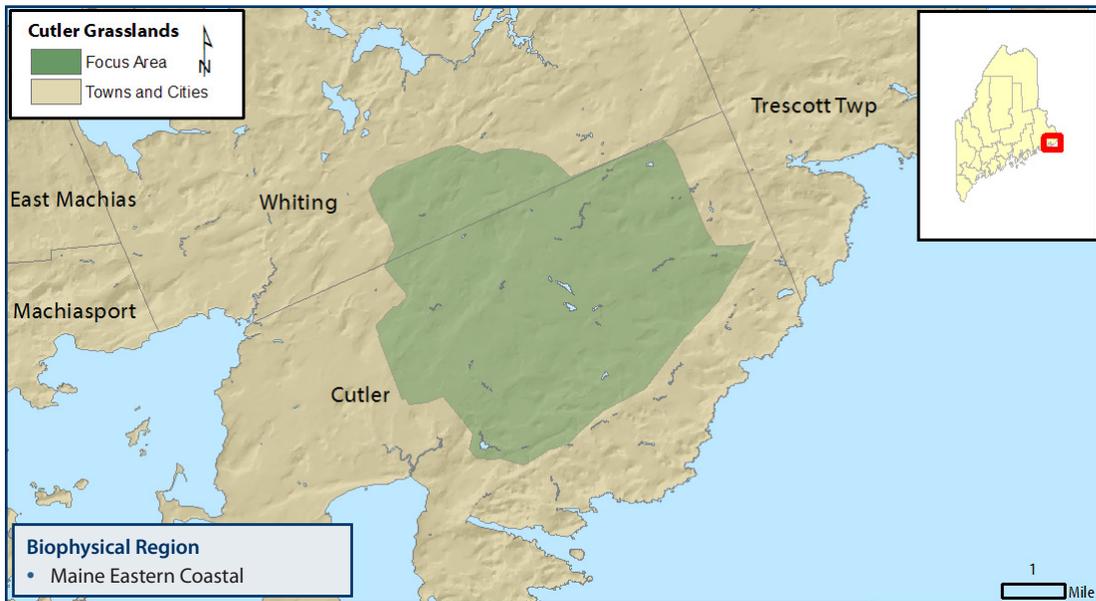


Cutler Grasslands



WHY IS THIS AREA SIGNIFICANT?

The Cutler Grasslands Focus Area encompasses several peatlands, small ponds, meandering stream drainages, and one of the largest known “bluejoint meadow” natural communities in Maine. The streams and wetlands provide over 2,000 acres of mapped habitat for inland waterfowl and wading birds as well as other wildlife species. These open habitats are embedded within forested stands of varying degrees of past disturbance, ranging from early successional aspen groves to a spruce stand over 100 years old.

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.
- » If recreational use is impacting natural features, work to enforce legal restrictions on motorized use in fragile areas.
- » Maintain or restore natural hydrology.
- » Maintain intact forested buffers along water bodies and wetlands.
- » Monitor and remove invasive plant populations.

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

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Rare Animals

Yellow Rail

Rare and Exemplary Natural Communities

Maritime Huckleberry Bog
Maritime Spruce - Fir Forest
Tall Grass Meadow

Significant Wildlife Habitats

Inland Wading Bird and Waterfowl Habitat

Public Access Opportunities

- » Bog Brook and Moose Cove Public Reserve Land, MBPL
- » Cutler Coast Public Reserve Land, MBPL



Bluejoint Meadow, Maine Natural Areas Program

FOCUS AREA OVERVIEW

Several exemplary examples of natural communities are associated with the peatlands, small ponds, and meandering stream drainages found in the Cutler Grasslands Focus Area. At over 1,000 acres, the bluejoint meadow along East Stream is a mosaic of upland and wetland types with a history of fire. Research by Krall (1994) suggests that these meadows were initially created by fire in the mid 19th century. The meadows have burned repeatedly in the 20th century and have been targeted for prescribed burns in past management plans by the state. Krall's study also suggests, however, that fire may not be necessary to keep the meadows open. Bluejoint grass (*Calamagrostis canadensis*) may inhibit tree regeneration by forming dense mats and preventing seed germination.

One of the largest bogs in the focus area is the ~120 acre huckleberry – crowberry bog along Bagley Brook. Black crowberry (*Empetrum nigrum*) and baked apple-berry (*Rubus chamaemorus*), both characteristic of this maritime bog type, occur frequently here. Other peatlands in this focus area lack these characteristic maritime species

In general, forested stands in this area are comparatively young and low in volume, reflecting combinations of past spruce-budworm, fire, heavy harvesting, and weather damage.

Bureau of Public Land stand type maps, for example, indicate no sawtimber stands within the public lands. A few mature stands remain, such as a 100+ year old spruce stand near Cocoa Mountain.

RARE AND EXEMPLARY NATURAL COMMUNITIES

Huckleberry-Crowberry Bog: This peatland type is characterized by low (usually < 60 cm) heath shrubs, such as sheep laurel and leatherleaf, as the dominant layer. Dwarf huckleberry is typically prominent. Black crowberry and/or deer-hair sedge are also present, though not necessarily abundant. In far Downeast examples, black crowberry may entirely replace dwarf huckleberry. Small islands of stunted black spruce may be scattered among the shrubs. Pitcher plants, sundews, bog goldenrod, and other typical bog herbs are mixed in with the shrubs; herb cover is usually <40%. Deer-hair sedge may be locally dominant. A dense layer of peat mosses underlies the plants. These are coastal or near coastal peatlands, either in raised bogs or in weakly minerotrophic areas transitional to true bogs. They are saturated during the growing season and typically highly acidic (pH < 5.0, occasionally slightly higher).

Bluejoint Meadow: These dense swards of tall grassy vegeta-

tion are dominated by bluejoint grass, with smaller amounts of shrubs (alder, meadowsweet, willow) mixed in. Depending on the disturbance history, the shrubs may be low and not easily visible among the grasses, or taller, in which case the vegetation appears as mixed shrub-graminoid. Other graminoids, such as tussock sedge and other sedges are occasional. Flat-topped white aster and spotted joe-pye weed are common tall forbs. Freshwater cordgrass is often present in small amounts. Bryophytes are very minor (0-10% cover), and lichens are absent. Two principal variants occur; those in alluvial soils of larger rivers and those of more peaty soils along small streams. In the absence of disturbance (flooding or fire, the latter often human-initiated), this community develops into dense shrublands dominated by alder. Maintaining both the natural disturbance regime and the hydrologic integrity of these systems is key to their conservation. Several high quality examples occur on public lands and private conservation lands. Northern leopard frogs inhabit large grassy meadows associated with rivers in mid-summer where they forage. Northern harriers, Lincoln's sparrows, and rare short-eared owls may also nest and forage in these meadows.

CHARACTERISTIC SPECIES

Numerous high to moderate value **Inland Waterfowl and Wadingbird Habitats** have been mapped throughout this focus area. Many of these occur along stream meanders and floodplains dominated by emergent vegetation including stretches of Lively Brook, East Stream, Bagley Brook, Bog Brook, Bother Brook and Spring Brook. Other Waterfowl and Wadingbird Habitats occur in large open peatland and open water wetlands such as Ackley Pond and Crotched Meadows. Inland Wading Bird and Waterfowl Habitats provide undisturbed nesting habitat and undisturbed, uncontaminated feeding areas and are essential for maintaining viable waterfowl and wading bird populations.

High value **brook trout** fisheries are also present in East Stream and Bagley Brook.

A **yellow rail** (*Coturnicops noveboracensis*) was documented along Bog Brook during breeding season in 1991, but it has not been confirmed since then. Yellow rail, a species of Special Concern in Maine, nests in emergent wetlands, marshes and wet meadows. Management of yellow rail should include restrictions on wetland draining and coastal development that eliminate breeding sites, and the restriction of stream alteration projects that lower the water table in wetland habitat.

CONSERVATION CONSIDERATIONS

» In general, threats to peatlands include mining, invasive species, timber harvest around the forested perimeters, ATV use and adjacent development that increases runoff or alters

Ecological Services of the Focus Area

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

Economic Contributions of the Focus Area

- Contributes to the recreational value of the area, including nearby coastal areas, by protecting water quality, fisheries, and wildlife habitat and offering open space.
- Attracts tourism to the region.
- Provides wildlife habitat for a number of game species that are seasonally important to Maine's rural economy, including local sporting camps.
- Provides opportunities for research and education.

hydrology.

- » All-terrain vehicles (ATV) use of the area has increased in recent years, and the Bureau of Public lands is working with local ATV users to direct trails in appropriate locations. In a broader fashion, the Bureau of Public Lands is revising its management plan for the Cutler Unit. Part of this evaluation will be a consideration of vehicular use (e.g., ATVs), prescribed fire, and other management concerns.
- » The ecological integrity of peatlands, including all the processes and life forms they support, are 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.
- » Peatland systems benefit from establishing and/or maintaining vegetative buffers around their perimeter wherever possible. A buffer of 250 feet or more will serve to limit impacts from adjacent development, help prevent erosion, limit colonization of invasive species, and prevent unnecessary impacts from off road vehicle use.
- » Improperly sized and installed crossing structures such as culverts can block fish and invertebrate passage through stream channels often resulting in aquatic habitat fragmentation and alteration of 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 Focus Area includes the Downeast Grassland Ecological Reserve. Research and education are actively encouraged on all state Ecological Reserves. The state has developed a long term ecological monitoring program for Reserves and seeks opportunities to promote research efforts that complement its monitoring program.

RARE SPECIES AND EXEMPLARY NATURAL COMMUNITIES OF THE FOCUS AREA

	Common Name	Scientific Name	State Status*	State Rarity Rank	Global Rarity Rank
Animals	Yellow Rail	<i>Coturnicops noveboracensis</i>	SC	SNA	G4
Natural Communities	Maritime Huckleberry Bog	Huckleberry - crowberry bog		S3	G3G5
	Maritime Spruce - Fir Forest	Maritime spruce - fir forest		S4	G4G5
	Tall Grass Meadow	Bluejoint meadow		S3	G4G5

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.