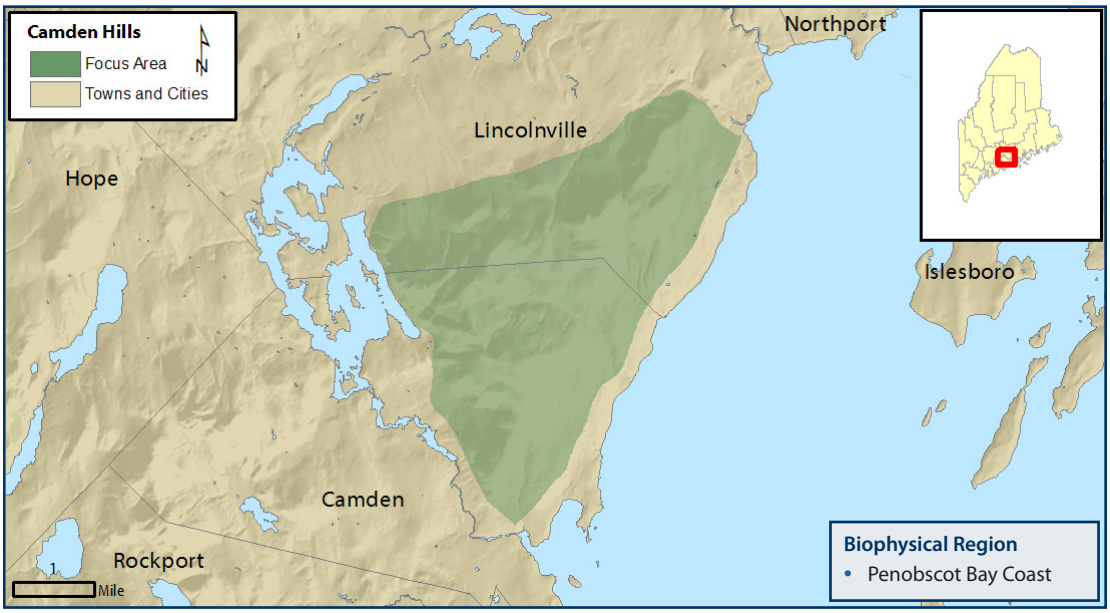
Beginning with HABITAT

Focus Areas of Statewide Ecological Significance

Camden Hills



WHY IS THIS AREA SIGNIFICANT?

The summits, ledges, and forests of the Camden Hills form an ecologically rich area with high recreational and scenic values. Camden Hills State Park supports several natural communities of statewide significance. The focus area has large blocks of roadless forest and an old growth oak-northern hardwood forest stand, which are unusual in midcoast Maine.

OPPORTUNITIES FOR CONSERVATION

» Work with willing landowners to permanently protect remaining undeveloped areas.
» Encourage town planners to improve approaches to development that may impact focus area functions.
» Protect sensitive natural features through careful management planning on conserved lands.
» 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
Peregrine Falcon

Rare and Exemplary Natural Communities
Birch–Oak Rocky Woodland
Oak–Ash Woodland
Oak–Northern Hardwoods Forest
Low-elevation Bald

Significant Wildlife Habitats
Deer Wintering Area

Public Access Opportunity

» Camden Hills State Park, MBPL

Kate Doiron

FOCUS AREA OVERVIEW

The summits, ledges, and forests of the Camden Hills form an ecologically rich area with high recreational and scenic values. Camden Hills State Park forms the core of a nearly 6,000-acre block of largely undeveloped land just north of the village of Camden. The state park supports several natural communities of statewide significance, including an acidic rocky summit, spruce woodland, oak-pine woodland, and oak-beech forest. The town-owned Millerite Ledges and Maiden Cliff lie immediately west of Camden Hills State Park and east of Lake Megunticook.

Perhaps the most striking features of the Camden Hills are the open summit ledges of Mt. Battie, Mt. Megunticook, and the Millerite Ledges. These peaks support open balds (acidic rocky summit communities) with scattered, stunted red oak trees and shrubs of mountain ash and chokeberry. Other characteristic plant species of these open summits include three-leaved cinquefoil, bristly sarsaparilla, pink corydalis, hairgrass, and bear-berry.

Several sites within and adjacent to the park support plant communities indicative of basic or alkaline soil conditions. These conditions result from the unique bedrock composition of the area. Ultramafic bedrock—igneous rock containing magnesium silicates—is scattered among the dominant,

Ecological Services of the Focus Area

- Protects headwater streams that flow into Coleman and Norton Ponds and Megunticook Lake
- Provides productive habitat for numerous wildlife species
- Harbors valuable deer wintering habitat

Economic Contributions of the Focus Area

- The state park and surrounding undeveloped lands are a major tourism draw.
- Recreational trails offer year-round opportunities and support local businesses.
- Large unfragmented forests provide a viable source of renewable energy and timber.
- Scenic quality of undeveloped ridge lines increase local property values.

typically more acidic, sedimentary bedrock of the area. One such plant community occurs at the northwestern end of the Millerite Ledges, as the trail drops down toward Maiden Cliff. Rock outcrops amid the oak forest in this location support wild columbine, sweet cicely, spring beauty, hepatica, early saxifrage, herb robert, rusty woodsy, and flat-leaved sedge. While none of these plants are rare in Maine, many are quite uncommon in the midcoast area.

Below Maiden Cliff, the steep, talus slope hosts other rich-woods species, such as spikenard, poison ivy, round-leaved dogwood, and jack-in-the-pulpit. A few plant species typical of dry woods and talus also occur there, including small-flowered bitter-cress and Drummond's rock-cress.

In the northern part of the focus area, Derry Mountain supports a small but outstanding oak-pine woodland dominated by red oak. Roadless woodlands of this size are increasingly uncommon in midcoast Maine.

RARE AND EXEMPLARY NATURAL COMMUNITIES

Birch - Oak Rocky Woodland: These community types are partial canopy deciduous woodlands or patches of woodland among talus areas. Overall canopy closure may be <25% when the open areas are included. Paper birch, red oak, and/or yellow birch are dominant. Sugar maple, if present, is not abundant. Marginal wood-fern, rock polypody, and poison ivy are characteristic of the herb layer, which is best developed in open patches. Vegetation is generally very patchy, developing in pockets among the rocks.

Talus woodlands receive little human use because of their inaccessibility and low timber value; however, areas at the base of talus slopes that receive water and nutrients from above sometimes have enough large trees to make logging economical. Conservation of these sites should include the range of talus forest cover, from the base of the slope on up, with a buffer of adjacent forest cover.

South facing occurrences of this type in the southern part of the state may have provided historical habitat for the timber rattlesnake, which is believed to have been extirpated from Maine.

Low-elevation Bald: Patches of blueberry, lichens, low herbs, and bare rock form a mosaic on the summits of low elevation bald natural communities. Vegetation may be sparse, but usually forms 10-50% cover overall, often comprised of only a few species. Three-toothed cinquefoil may be locally abundant. A few coastal sites feature broom-crowberry, an uncommon species. Bryoid cover may be low or high and usually is dominated by lichens rather than bryophytes. This is the typical habitat of the rare smooth sandwort.

Top: Low-elevation bald natural community. *Don Cameron*
Above: Inland wading bird and waterfowl habitat. *Rich Bard*

This type is well represented on public lands and private conservation lands. However, because this community type is usually associated with nice views, many sites have moderate to heavy hiker or ATV use. Because the vegetation is rather sparse, it is easy for visitors to wander off the trail, and off-trail traffic can seriously degrade the vegetation and has done so at several sites.

Oak - Ash Woodland: These partial canopy deciduous woodlands are dominated by red oak and ironwood (the latter often as subcanopy). Basswood is an indicator species. Sugar maple may be codominant at some sites. The herb layer features species typical of somewhat enriched sites, such as Venus' looking-glass, herb Robert, round-lobed hepatica, plantain-leaved pussytoes, and wild-licorice, among an often dense cover of graminoids. Marginal wood-fern is characteristic of the herb layer. Vegetation may be patchy, developing in pockets among the rocks, or more continuous along upper slopes and ridges.

CHARACTERISTIC SPECIES

Peregrine falcons *(Falco peregrinus),* a state Endangered

species, have been documented in the focus area, however a nest site has not yet been found. Increased use of pesticides after World War II caused drastic declines in peregrine populations. Although once broadly distributed in North America, they were extirpated throughout much of their historic range including the eastern United States. Maine has joined other states in a large-scale peregrine falcon reintroduction program. Young, captive-reared peregrines were slowly released at former nest sites in a process called "hacking." Reintroduced peregrines have been successful in Maine as well as in New Hampshire, Vermont, and New York. With recovery of the species nationwide, the peregrine falcon was taken off the federal endangered species list in 1999, but its breeding population remains listed as endangered on the Maine list, as its numbers here are still low.

Spring Brook and Great Brook contain wild anadromous **brook trout** *(Salvelinus fontinalis)* populations, an important recreational resource.

CONSERVATION CONSIDERATIONS

» Roadless blocks of this size and condition are increasingly uncommon in coastal Maine. With Camden Hills State Park as a core, this focus area provides an excellent opportunity to protect landscape-scale ecological functions and values. Particular attention should be given to protecting large parcels adjacent to already protected lands.

» The Coastal Mountains have experienced rapid growth in recent years, and many of the upland areas are under increasing threat. Growth and sprawl in rural areas contribute to habitat fragmentation, water quality degradation, and the spread of invasive plant species.

» In the focus area, nearly all known sites with exemplary natural communities lie within existing conservation lands.

» Many of the higher-elevation oak forests in this region—particularly stands facing the east and southeast—were heavily damaged by the January 1998 ice storm. Some landowners undertook heavy salvage cuts to offset possible economic loss. Woodlot owners considering such options should be encouraged to develop a long-term forest management plan with the guidance of a licensed forester.

» Forests more than a century old are becoming scarce in Maine. Retention of old forest stands and characteristics, such as coarse woody debris and standing snags, may augment habitat diversity and value.

» Two rare plants seen historically in the focus area, purple clematis and American chestnut, have not been found here in over 30 years. They probably still grow in the area, but specific locations must be verified before further conservation activity is warranted.

» On two occasions in the last decade, peregrine falcons have been seen around Maiden Cliff during breeding season, but no nests were observed. The area could be monitored during breeding season for possible future nesting activity.

» Camden Hills State Park is the most visited state park in Maine. The trail network in the state park and on surrounding town and private lands receives moderate to heavy use. Some management in the form of signs and/or interpretive materials may be helpful to limit damage to sensitive habitats such as open summits.

» 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.

» With expected changes in climate over the next century, plant and wildlife species will shift their ranges. Maintaining landscape connections between undeveloped habitats will provide an important safety net for biodiversity as species adjust their ranges to future climate conditions.

RARE SPECIES AND EXEMPLARY NATURAL COMMUNITIES OF THE FOCUS AREA

	Common Name	Scientific Name	State Status*	State Rarity Rank	Global Rarity Rank
Animals	Peregrine Falcon	Falco peregrinus	E	S1S2N,S2B	G4
Natural Communities	Birch–Oak Rocky Woodland	Birch–Oak Talus Woodland		S3	G3G5
	Oak–Ash Woodland	Ironwood–Oak–Ash Woodland		S3	G3G5
	Oak–Northern Hardwoods Forest	Red oak–Northern hardwoods–White pine Forest		S4	n/a
	Low-elevation Bald	Three-toothed cinquefoil–Blueberry Low Summit Bald		S3	n/a

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.