

CUTLER COAST PUBLIC RESERVED LAND

Black Point Brook Loop - 5.5 miles round trip, advanced

Few hikers can tell the tale of Black Point Brook Loop. This isn't because of the trail's precipitous cliffs paired with tree-toppling winds. It's also not that hikers here have encountered America's largest rodent, which wanders in these woods. It's not even that visitors have been taken by the spectacular scenery and wandered into the surrounding wilderness, never to be found. Instead, many hikers are simply unaware of Black Point Brook Loop, making it perhaps Maine's greatest secret.

The benefits are many for those who venture beyond the trailhead. You may wander for hours without encountering another person, accompanied only by dramatic cliffs to the east and ever-changing ecology to the west. This trail is a showcase of Maine's most spectacular coastal communities for the budding ecologist to the experienced naturalist.

Getting There

From North: From the intersection of US Route 1 and ME Route 189 in Whiting, take ME Route 189 to ME Route 191. Turn right and travel 10 miles to the parking area and trailhead on the left of the road (marked by a blue/white sign).

From South: From the intersection of US Route 1 and ME Route 191 in East Machias, turn right on ME Route 191 and travel 16.9 miles to the parking area/trailhead on right of the road (marked by a blue/white sign).



① **Wetlands: The Fast and the Curious** -67.157653, 44.698487
Immediately after leaving the parking lot, the trail grades steeply downhill.

[A to map](#)

As you descend into the woods, step into the mind of a Maine ecologist. Ecologists describe places in terms of natural communities, or assemblages of interacting organisms and their common environment. They classify and identify natural communities to learn about the organization and vulnerabilities of the natural world including habitat rarity, human impacts to nature, and past and present effects of climate change. Rare natural communities often support rare plant and animal species, and to effectively conserve the rare species, it is often necessary to protect the natural community where it occurs.

One of the first steps to identifying a natural community type is to figure out if it is a wetland or an upland community. Here, look to the plants for a clue. A wetland is an area of seasonally or permanently saturated soil that harbors water-loving plants, called hydrophytes. Cinnamon fern, interrupted fern, and dwarf raspberry are conspicuous near the trailhead; all are hydrophytes. Here, northern white cedars tower



If fertile fronds are not present, cinnamon fern (L) and interrupted fern (R) can be differentiated by the shapes of their pinnae.

over a carpet of saturated sphagnum mosses. This is a [Northern White Cedar Swamp](#).



Bunchberry

Between the trailhead and the first junction, most of the northern white cedar is replaced by balsam fir; this is a good place to catch a glimpse of the world's fastest plant, bunchberry, which is easily identified in summer and fall by its clusters of four to six leaves beneath tight groups of red berries. When it's time to reproduce, bunchberry's flowers burst open in just 0.5 milliseconds, catapulting pollen far and wide in hopes of landing on and fertilizing another bunchberry. For comparison, blinking your eye takes 100 to 400 milliseconds; your blink is at least 200 times slower than the bunchberry. As it is being launched, the pollen experiences two- to three-thousand times the force of gravity.

② Maritime Spruce - Fir: The Forest that Never Gets Old

[A to map](#)

-67.149764, 44.694663

The forest has graded into a battered Maritime Spruce - Fir Forest.

The red spruce, white spruce, and balsam fir of this [Maritime Spruce - Fir Forest](#) don't survive to reach old age. Owing to its location on the immediate coast, this community is subject to brutal winds that blow down large trees. As you round the bend onto the coast, watch for wind thrown or snapped trees that couldn't withstand the weather.

The blowdowns give this upland forest its variety. Canopy openings provide light to the forest floor, enabling the growth of paper birch, mountain cranberry, and rough-stemmed goldenrod.

③ *At 1.4 miles, crashing waves become audible and the trail turns right to parallel towering sea cliffs, offering spectacular view of both the headlands and the ocean.*

④ Tall Grass Meadows: A Sea of Grass -67.148769, 44.682836

[A to map](#)

At 2.3 miles, the trail enters a vast meadow.

Round a bend and the sea of water is traded for a sea of grass. This [Tall Grass Meadow](#) is rippling with bluejoint grass and sprinkled with pink spikes of fireweed. Meadowsweet and alder ♀, which are more robust and shrubby, dot the landscape. Other diagnostic species for this community include flat-topped white aster and tall meadow rue.

Tall Grass Meadows are a more defiant component of an ecosystem than was once thought. For many years, ecologists believed that Tall Grass Meadows like this one needed periodic natural fires in order to avoid being overtaken, or succeeded, by larger shrubs and trees. It is more likely, however, that this meadow was a forest until it was burned by farmers in the 1800s to clear land for sheep or cattle farming; it has persisted as a Tall Grass Meadow ever since. This meadow owes its perseverance to the roots of bluejoint grass, which form nearly impenetrable mats preventing many other species from germinating here.



Meadowsweet (L) and fireweed (R)

Naturalist's Notes



Look for short, stout female catkins and long, skinny male catkins on an alder plant. The male catkins produce pollen while female catkins house the ovules, which become seeds after pollination occurs.



Goosetongue

⑤ **Open Headlands: A Wet Desert** -67.150719 44.680037

[A to map](#)

At about 2.5 miles, the trail ambles downhill to follow the rocky seashore. For lack of trees here, the blue trail blazes are painted directly on the rocks.

Look for thick, narrow, curling leaves of goosetongue peeking out of the crevices in the ribbon of exposed bedrock between the high tide line and the upland forest. Seaside goldenrod and bluejoint grass, the same grass found in the Tall Grass Meadow, can be found in patches where the forest edge abuts.

Open Headland communities, like this one, are constantly battered by storm tides and salt spray. But despite their constant exposure to water, many representative plants, like seaside goldenrod, goosetongue, and roseroot, have developed slightly thickened (succulent) leaves like those usually found on desert plants. Exposure to salty conditions creates a mineral imbalance between freshwater within the plants and the salt outside of the plants. Water moves in the direction of higher salinity; fresh water is drawn out of the plant. Succulent leaves store water and protect plants from drying out in these imbalanced conditions.

While these plants are hardy, they are not indestructible. To avoid damaging this community, please remain on the bare rock and avoid stepping on the plants.

At 2.6 miles, turn right and head inland on the Black Point Brook Cutoff.



Burl on a white spruce

⑥ **Funky Trunks and Holes in Boles**

[A to map](#)

Around mile 2.7, a large burl interrupts the otherwise straight trunk of a white spruce.

Though they look grotesque, burls are simply a tree's response to an injury, infestation, or bud malformation. Burls don't harm the tree unless they become cumbersome enough to cause girdling. Because a tree's living tissue (phloem) is just beneath the bark, a wound that circles the entire trunk will stop water and food from moving between the roots and the crown. This effectively strangles the tree. For this reason, a large sequoia in Yosemite National Park can survive for many years with a walking tunnel cut through it, whereas a shallow notch cut all the way around a tree is an effective way of killing it.

Naturalist's Notes



Percent cover of trees is commonly used to distinguish woodlands from forests, with woodlands generally having less than 65% canopy cover, and forests more than 65%, but there are also other factors (see the diagnostic key in *Natural Landscapes of Maine* for more information). To determine canopy cover, look straight up. How much sky do you see? If it's more than 35%, you may be standing in a woodland. There are 14 types of woodlands in Maine.

⑦ **Woodland: Not the Same as a Forest** -67.156463, 44.679104

[A to map](#)

At 2.9 miles, the trail climbs out of a second Maritime Spruce - Fir Forest and into a rocky woodland atop a low hill.

Though the terms "forest" and "woodland" may sound like they mean the same thing, they are different communities to a Maine ecologist. Woodlands, like this one, can be found in places where patches of exposed bedrock are surrounded by shallow, coarse, nutrient-poor soil that does not retain water. Low nutrient and moisture availability make these sites stressful for plants, limiting their growth. Forests, on the other hand, grow on thicker, richer soil that supports more robust vegetation, and results in a denser canopy of tree branches overhead.

In this woodland, dominant tree species include red spruce, tamarack, red maple, and young paper birch, while meadowsweet and lowbush blueberry are prevalent in the

shrub layer.

At 3.4 miles, turn right at the T to start the last leg of the loop. The trail grades in and out of woodlands, shrub wetlands, and spruce - fir forest paralleling Schooner Brook.



Beaver dam (not visible from trail)

⑧ **Community Changers: Rodents of Unusual Size**

[A to map](#)

-67.160954, 44.687882

At 3.9 miles, a rocky outcrop offers a view of a pond.

It cuts down trees to build its empire. It's the torment of landowners and the muse of naturalists. It's America's largest rodent, and it's the reason there's a pond here.

Beavers have a knack for changing the natural communities in a landscape to suit their needs. A beaver pond, like the one on the left, is established when beavers use sticks and mud to dam a stream for two reasons: food and safety.

Beavers prefer to eat the bark of hardwood trees, like red maple and alder, over soft-wood trees, like tamarack and black spruce. Eventually they will eat all the desirable bark near the safety of their pond, and will need to venture progressively farther away to collect sticks to fill their bellies. This is a dangerous prospect for a tasty beaver.

Beavers are slow travelers on land, making them easy meals for coyote, fisher, and bobcat. In the water, they are completely safe. Beavers constantly increase the size of their dam to widen their pond, shortening the distance they must travel over land to find food.



White notebook dipped into a stream that contains tannins

⑨ **Community Changers: Tannins**

[A to map](#)

In the next mile, the trail crosses several tea-colored streams.

Look closely at the water in the stream and you'll find it just as striking as the green sphagnum moss that surrounds it. Because it contains tannins, this water is the color of tea!

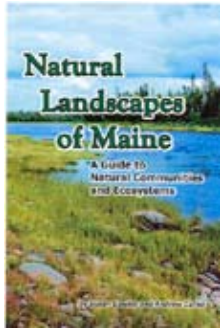
Many plants contain tannins, a group of chemicals that protect them from herbivores. When evergreen needles, sphagnum mosses, and other plants high in tannins decompose, they release these chemicals into the soil. Rain and ground water flowing through these substrates leach the tannins out and carry them into bodies of water, such as this stream.

Tannins create acidic conditions in soils, which in turn limit nutrient availability to plants. The effect of low nutrients from high-tannin soils is most obvious in bogs, where water-saturated soil also makes nutrient uptake difficult. Many plants that grow in bogs have developed special adaptations to survive the stressful conditions.

The tannins we see occurring naturally in the environment are the same chemical that tanneries traditionally used to tan leather. In Maine, the bark of [eastern hemlock](#) trees was a prime source for tannins until the tanning industry's gradual decline in the early 1900s.

At 4.7 miles, the loop is completed. Turn left to return to the parking lot.

Natural Landscapes of Maine



If you are interested in the definitive field guide to Maine's natural communities and ecosystems, pick up a copy of *Natural Landscapes of Maine* by Susan Gawler and Andrew Cutko. A two-page description is devoted to each of Maine's 104 natural communities, complete with color photographs and distribution maps. Introductory material includes a diagnostic key and a discussion of how this classification fits into a bigger picture for conservation.

Visit the [Maine Natural Areas Program website](#) for more details.

***Natural Heritage Hikes is a project of the [Maine Natural Areas Program](#) in partnership with the [Maine Trail Finder website](#).
For more Natural Heritage Hikes, please visit www.mainetrailfinder.com.***

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