

BIG MOOSE MOUNTAIN

Big Moose Trail - 2.1 miles each way, moderate

It's impossible to describe Big Moose Mountain without superlatives. With one of the loftiest summits in the Moosehead Lake region, Big Moose's ridgeline offers expansive views of New England's largest lake and the surrounding mountains including Maine's highest peak, Mt. Katahdin. But that's not all; a hike up Big Moose Mountain is a walk in the footsteps of Big Moose's fire watchmen on their journey to the nation's first fire tower.

Getting There

Follow ME Route 15 into downtown Greenville. Turn left at the downtown intersection to continue to follow ME Routes 15/6 (Pritham Avenue). Stay on ME Routes 15/6 for approximately 5 miles, and then turn left onto North Road and into the Little Moose Public Reserved Lands. Follow North Road for approximately two miles. The parking lot for Big Moose Mountain will be on the right.





Red trillium



Starflower



Bluebead lily

① **Bug, Snake, or Squirrel?** -69.687210, 45.475622 The trail enters a Northern Hardwoods Forest community.

★ to map

Centuries ago, people began classifying plants and animals by organizing them into groups based on their shared characteristics. Only recently have we started applying this science of classification to habitats, or what ecologists call natural communities. Natural communities are assemblages of organisms that share a common environment, and that recur across the landscape. Some natural communities, like this Northern Hardwoods Forest, are common and widespread in Maine, while other natural communities like Freshwater Tidal Marsh or Subalpine Meadows are rare.

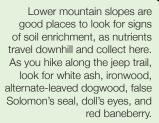
In this example of a Northern Hardwoods Forest community, sugar maple, American beech, and yellow birch grow together above hobblebush, striped maple, starflower, red trillium, and bluebead lily. These species, which are well adapted to live on the well-drained soil of relatively low hill slopes, are the easy to spot plants associated with this community. Other plants, along with mammals, birds, reptiles, insects, and fungi are members of this community too, but they are more elusive.

In spring and early summer, listen here for the ascending, buzzing call of the northern parula, the distinct "Old Sam Peabody Peabody" song of the white-throated sparrow, and the short, interrupted warbles of the red-eyed vireo. The upturned root system of a fallen maple tree near the trailhead is an excellent example



Winter wren Image ©Ron Logan, all rights reserved

Naturalist's Notes







Red baneberry (left), doll's eyes (right)



Paper birch (left), yellow birch (right)

of winter wren nesting habitat; this small, brown bird perches with its short tail erect and sings a wavering trill of high pitched notes for up to eight seconds in what sounds like a single breath. Red squirrels are also prevalent in this forest, their long, chattering, territorial calls sounding more like an insect or a rattlesnake than a mammal.

② A Haunted Walk through Maine's History

∧ to map

-69.689884, 45.476291

At 0.1 miles, turn left where the first section of trail meets a wider path ? .

While on this old jeep track, imagine yourself time traveling back more than a century to an age when widespread logging in Maine left swaths of barren land piled high with brush and tree limbs. In a dry season, those landscapes could quickly flare up when ignited by a lightning bolt or a spark. Watchmen in fire towers set high on the mountain tops could spot the smoke from a fire while it was still small enough to extinguish. The summit of Big Moose Mountain, then called Big Squaw Mountain, was the site of the nation's first fire tower, constructed in 1905.

Now imagine you're a fire watchman making the trip to your seasonal camp located near the mountain summit. In the early days, a watchman would carry as much as a month's worth of supplies on foot from the trail head up to his cabin. In the '50s, this path between the base of the mountain and the watchman's cabin was widened to allow access by jeep. Jeep trips were reduced significantly after 1959, however, when an accident killed fire watchman John Hutchinson on this very mountain.

3 A Trail of Two Birches -69.700683, 45.475326

∧ to map

At 0.7 miles, yellow and paper birch become more dominant in the canopy.

Birches have tiny, light seeds that can travel long distances in the wind. But relying on small seeds comes with a price; they don't contain much stored food for a young plant. To be successful, birch seeds must land on bare soil where the new plant's root doesn't need to poke through layers of leaf litter to reach the nutrients in the soil. But where do birch seeds find bare soil? Under natural conditions, they find it where the land has recently burned or been eroded. On human disturbed landscapes, they find it where there has been recent timber harvest or excavation. Yellow birches are more tolerant of shade than paper birches, so they are more likely to colonize a forest where the leaf litter burned but the canopy survived. Ironically, birch bark is extremely combustible and makes for excellent kindling.

As full size trees, yellow birches also have glossy, silver yellow bark that peels off in thin strips, unlike the brighter white bark of paper birch, which comes off in larger sheets. Another way to tell the difference between yellow birch and paper birch is to scratch a thin twig with your fingernail and smell it. If you smell wintergreen, you've got a yellow birch. The chemical that gives off the wintergreen fragrance is methyl salicylate, the same compound found in naturally-flavored root beer.

A 6-Month Camping Trip -69.711494, 45.477338

∧ to map

At 1.3 miles, an abandoned watchman's camp stands to the right of the trail.

Imagine living alone in this cabin for six months, from mid-spring to mid-fall.

stant presence. When not manning the fire tower, watchmen would cook, sleep, and carry out their lives in a nearby camp, like this one built in the 1930s. Early watchmen would leave camp rarely for supplies, while later watchmen were able to travel more frequently, thanks to the widening of the access path to accommodate jeeps.

From 1905 to 1976, the fire watchmen of Big Moose Mountain maintained a con-

Today, the yard of this two-room cabin is overrun with hay-scented fern \S and long beech fern; paper birch and red spruce encroach on its warping frame. Inside, remnants of the watchman's everyday life still remain beneath the markings left by hundreds of visitors. Beneath a patina of moss, a large rock in the front yard beside the trail bears the warning "no smoking from here up."

Continuing the climb, you are now tracing the route of the watchman to the fire tower. When the slope flattens at the junction to the first overlook, you've reached the site of an earlier camp. In the early 1900s, a log cabin with a porch was perched in an open meadow here.

⑤ **A Forest of Eternal Youth** -69.714795, 45.478343 At 1.5 miles, the first of two spur trails leads to a scenic overlook.

♠ to map

Compare this natural community to the Northern Hardwoods Forest lower on the mountain. Instead of a tall canopy of beech, birch, and maple, there's now a low canopy of tangled balsam fir, with trunks rarely reaching more than 10" in diameter. Fallen trees crisscross the forest and the trail, creating bright clearings for the germination of new fir, heart-leaved birch, and mountain ash, as well as mountain wood fern, bluebead lily, and northern wood-sorrel. Subalpine Fir Forests, like this one, are often found on the thin, rocky soil of ridgelines or steep upper slopes above 3,000 feet. A short growing season combined with periodic disturbances by high winds ensures that the trees remain relatively small. Firs that grow too tall are quickly blown down, resulting in a perpetually young-looking forest.

Keep right at the second trail junction to continue toward the summit.

© Landing Strips for Pollinators -69.712957, 45.482386 At 1.9 miles, the trail makes a final ascent and emerges on a narrow, sunny ridge where the forest has thinned significantly.

♠ to map

In the spring and summer, flowers abound on the final approach to the former site of the lookout tower. The white blooms of bunchberry, Labrador tea, and mountain ash face the sky while the yellow flowers of bluebead lily nod toward the ground. Look along this ridge and on the rest of the mountain summit for northern wood-sorrel and painted trillium; they share a unique strategy for attracting pollinators.

Insect-pollinated flowers trade nectar for help with reproduction. They offer this sweet, energy-rich liquid to butterflies, bees, and other pollinators through special glands, usually found deep within the flower. While accessing the nectar, the pollinators inadvertently dust themselves in pollen by bumping into the flower's pollencovered stamens. In their search for nectar, a pollinator often visits many flowers of the same species, effectively transferring pollen from one flower to another.

Naturalist's Notes



Competition between plants for space here in the light is ruthless. Hay-scented fern often wins by releasing chemical toxins into the soil that inhibit the germination of other plants, including trees that might shade it out. This adaptation is called allelopathy.





Balsam fir bark



Painted trillium

The pink or crimson stripes on the petals of northern wood-sorrel and painted trillium are not only attractive to the human eye but serve as arrows, directing pollinators toward the nectar—and the reproductive parts—in the center of the flower.

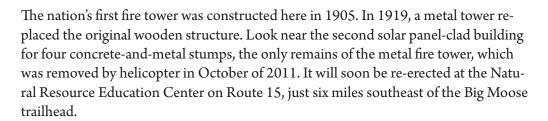
Fire... Lookout! -69.711515, 45.484098

♠ to map

At 2.1 miles, arrive at the summit \P .

Naturalist's Notes

Don't confuse the swirling, rising song of the Swainson's Thrush for the more complex, burrier song of the rare Bicknell's Thrush. Bicknell's Thrush breeds exclusively in structurally complex forests at elevations above 2500 feet, like this one.





Since the construction of these fire towers, ecologists have discovered that the practice of fire suppression is often more harmful to an ecosystem than periodic burns. Occasional small fires will clear the forest floor of debris without spreading to the branches of live trees. If debris is allowed to accumulate, it can fuel a larger, more harmful fire (crown fire), especially damaging in arid climates like those of the southwestern U.S. Some of Maine's natural communities, like Pitch Pine - Heath Barrens, depend on fire for persistence. Without fire, pitch pine will give way to white pine and oak, altering the habitat. Though Maine's fire towers are no longer in operation, about 70 remain standing in the state. For a complete directory of fire towers in Maine, visit the Forest Fire Lookout Association's website.

A short walk along the ridge will take visitors to a helicopter pad. From here, look northeast across Moosehead Lake, New England's largest, for Maine's highest peak, Mt. Katahdin. The jagged silhouette of Borestone Mountain, also a Natural Heritage Hike, is visible to the southeast.

Retrace your steps to return to the parking lot. To explore and share more of Maine's extraordinary natural features, be sure to check out the other Natural Heritage Hikes covering dozens of trails from the coast to the western mountains.

Naturalist's Glossary

Erosion: The process by which wind and water transport soil and rock to other locations.

Canopy: The highest layer of branches in the forest.

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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Map sources: Esri, DeLorme, HERE, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community