

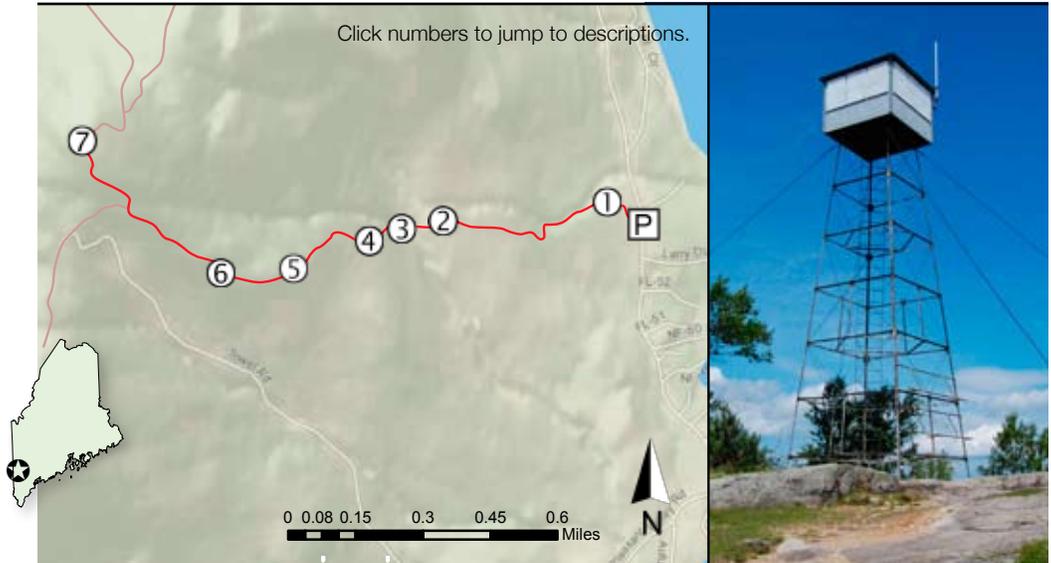
PLEASANT MOUNTAIN

Ledges Trail - 1.8 miles each way, moderate

Pleasant Mountain was born as part of the Sebago Pluton, a rising mass of magma that cooled before it reached the surface of the Earth. It's been shrinking ever since. To hike Pleasant Mountain is to be reminded that mountains aren't as static as we think. Water, wind, fire, vegetation, and even people have been sculpting Pleasant Mountain's slopes – and it shows. By the end of the hike, the phrase "to move mountains" will seem trivial in a landscape that is constantly evolving.

Getting There

From Bridgton, follow US Route 302 west for approximately 6 miles. Turn left onto Mountain Road and continue for 1 mile, passing Shawnee Peak Ski Area, to the Bald Peak Trailhead on the right side of the road. The Ledges Trailhead is in another 2 miles.



Naturalist's Notes

Atop warm, dry, well-drained soil, beech, white pine, sugar maple, and red oak tower over blue-bead lily, partridgeberry, bracken fern, and white ash seedlings. It's no surprise that an Oak-Northern Hardwood Forest is found here; this natural community occurs on well-drained, lower elevation slopes in the southern portions of Maine.



Sweetfern

① Plants that Share the Wealth

The trail enters an [Oak - Northern Hardwoods Forest](#), passes an information board on the right, and follows an old, cobbly fire road.

[A to map](#)

Beside the path, look for two ordinary-looking plants with a nearly supernatural ability.

Sweetfern was poorly named. Rather than being a true fern, this species is a woody shrub in the bayberry family. It gets its name from the fern-like shape of its leaves and their sweet smell when crushed. Hog peanut is a creeping vine-like plant in the pea family with leaves divided into three parts, looking a bit like a small poison ivy plant. Both of these plants have the convenient ability to make the soil around them more nutrient-rich through a process called nitrogen fixation.

Think about the fertilizer that you add to your garden. What's in it? More than likely, it contains nitrogen, one of the most important elements on earth for plant growth. Nitrogen is abundant in the air, but as a gas it is useless to plants. Enter nitrogen-fixing bacteria, which live on the roots of hog peanut, sweetfern, and many other plants in the pea and bayberry families. Through complex chemical reactions, the bacteria turn nitrogen gas into ammonia, a form of nitrogen that plants can absorb. When these plants die, they release their stored ammonia, fertilizing the soil around them. These plants are changing the environment in which they live!



Hog peanut (L), with smooth leaf edges, not to be mistaken for poison ivy (R)



The maximum extent of glacial ice during Pleistocene time (2 million years ago to 10,000 years ago)
Image courtesy of the U.S. Geological Survey



Coppiced maple



Beech with beech bark disease (top), healthy beech (bottom)

② Cutting the Top off a Mountain -70.806087, 44.024377

[to map](#)

At 0.4 miles, the trail passes a massive boulder on the right.

As recently as 17,000 years ago, most of Maine's landscape was thousands of feet beneath the Laurentide Ice Sheet, which covered even the top of Mt. Katahdin. Most people think of ice as a solid, but in large masses (glaciers) it is constantly, slowly shifting. As the sheet moved, it ground down everything that it touched, rounding the tops of mountains and widening valleys. It gathered giant rocks, like this one, and dragged them just a few yards or hundreds of miles, depositing them in seemingly random places. Hence, these boulders are called "glacial erratics."

③ ...And It's Still Shrinking -70.807992, 44.024229

[to map](#)

At 0.5 miles, the trail crosses a small stream.

Each rainy day, Pleasant Mountain gets a bit smaller. Water is a powerful agent of **erosion**; a single raindrop hitting bare earth at 20 miles per hour can fling soil particles three feet into the air. Mountain streams can rise rapidly during storms. After a heavy rain or during spring snowmelt, a stream like this one carries soil and rocks down Pleasant Mountain.

Look on either side of the stream for young maple trees growing in tight groups. Red maple is one of many hardwood trees that can regenerate from a cut stump. After a red maple is cut, it sends up a cluster of new shoots (coppicing). Over many years, the shoots grow into a tight cluster of trees that share a root system.

④ Bug & Fungus: The Destructive Duo -70.809512, 44.024142

[to map](#)

Shortly after the stream, the trail begins to switch back through a primarily beech forest.

Healthy **American beech** trees are usually recognizable by their smooth, pale gray bark. The bark keeps the tree from overheating by reflecting sunlight, discourages other organisms from growing on it, and most impressively, allows light to pass through so that the tree can photosynthesize.

How would you describe the bark of these trees? These beech aren't smooth at all, but are covered in disfiguring lesions. Despite its benefits, the beech's thin bark offers no defense against the beech scale, a tiny insect introduced from Europe in the late 1800s. And still worse, while burrowing into the bark to feed, the insect infects the tree with a destructive invasive fungus. The tree tries to isolate the fungus in ugly cankers, but fails. These openings in the bark make the beech tree more susceptible to infestation from insects, which attract woodpeckers. Too many holes and disruptions in the bark prevent the movement of life-supporting nutrients and the tree gradually weakens and dies. Beech trees are in decline over much of Maine, and their loss affects many species, like bears, that depend on beechnuts for survival.

⑤ A Woodland with a View -70.81264, 44.022805

[to map](#)

At 0.8 miles, a final switchback deposits hikers onto a rocky ledge covered in stunted red oak and white pine trees.

The rocky ledges in this **Oak - Ash Woodland** offer an excellent view of the south



Turk's cap lily (L), harebells (R)



Bracken fern



Pitch pine needles, bark, and cones



Pleasant Mountain Fire Tower, installed in 1920

end of Moose Pond, almost due south of the woodland. Slightly to the southwest, a smaller beaver pond peeks out from the rolling hills. Does the view make you want to build a house here? For many people, it does. In southern Maine, this natural community is often targeted for development because of its hilltop settings. However, the shallow soils will not support intensive residential use.

The soil also makes it challenging for trees to grow here. It is dry because of the warm, southern exposure of the slope, and very thin. Oaks flourish in warm sites but struggle in thin, dry soil, so these trees are stunted versions of the tall, stately oaks that many of us know. Look here for white ash, bracken fern, Turk's cap lily, harebells, and St. John's wort.

⑥ **Trees Geared up for Fire** -70.815904, 44.022636

[to map](#)

Between the last stop and the next trail junction, look for pitch pines.

Distinguished from red pine by deeply furrowed bark and needles in bundles of three, **pitch pine** is the most fire-adapted tree in New England.

Like humans wearing thick sweaters in winter, trees with thick bark are better insulated against extreme temperatures. Pitch pine wears the most impressive sweater of them all; its thick, layered bark can protect it from a forest fire. Shoots of this tree emerge directly from the charred trunk following a fire, allowing it to refoliate even if all of its needles have been burned off. But pitch pine pays a price for its fire resistance; its seeds will only germinate after a fire.

The presence of pitch pine here is good evidence that this site has burned.

At 1.6 miles, turn right at the trail junction to approach the summit.

⑦ **Fire, Lookout!**

[to map](#)

Continue to the summit.

With pitch pine in the vicinity, it's no surprise that there's a fire tower at the summit of Pleasant Mountain.

There were once nearly 150 of these structures on Maine's mountaintops, where watchmen staffed them for up to six months per year. In the early 1900s, widespread logging littered the forest floor with woody debris, which could flare up like kindling in the presence of a lightning bolt or a spark. Diligent watchmen could spot fires while they were small enough to be extinguished. Ecologists have since discovered that this practice of fire suppression is often more harmful to an ecosystem than periodic burns. Occasional small fires clear the forest floor of debris without spreading to the branches of live trees. If debris is allowed to accumulate, it fuels 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.

On a clear day, you can see incredible distances from the summit of Pleasant Moun-

tain. To the southwest, a [Sweetgale Fen](#) is linked to the western edge of Pleasant Pond by a thin ribbon of water. In the distance, the Presidential Range in New Hampshire stretches north to south.

Naturalist's Glossary

Erosion: The process by which soil and rock are transported and deposited in other locations.

***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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