

## TUMBLEDOWN MOUNTAIN

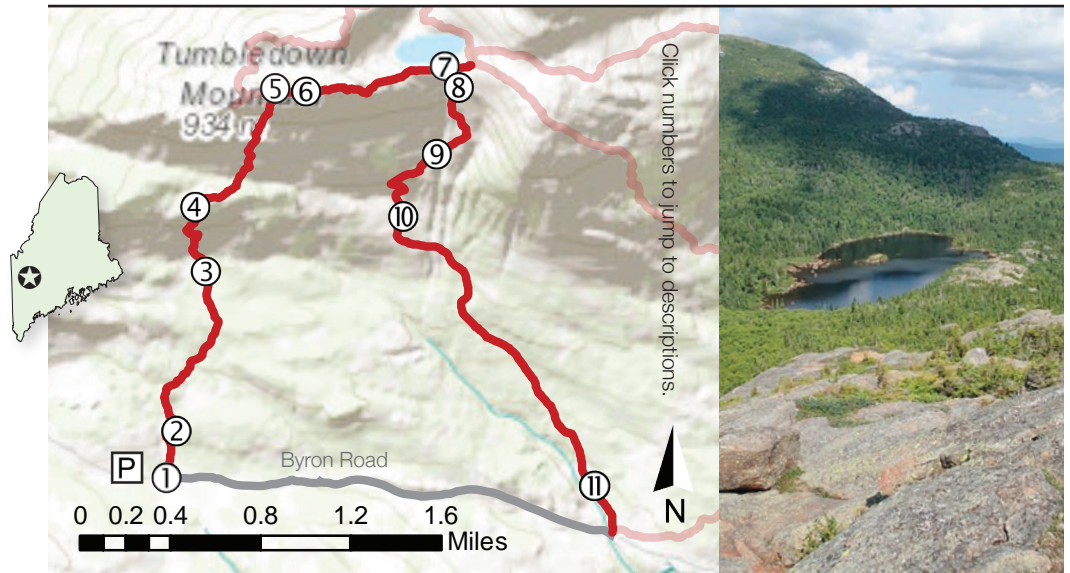
Loop Trail, Tumbledown Ridge Trail, Brook Trail, and Byron Road  
5.5-mile loop, strenuous

*The most visited mountain in Maine, Tumbledown needs no introduction. Its popularity stems from its appeal to nearly everyone; a challenging but relatively short 1.5-mile ascent up the Loop Trail brings hikers to a half-mile bald ridgeline with some of the best western mountain views in the state, and is followed by a gentle descent to picturesque Tumbledown Pond. Both the mountain and the pond are rich with natural history and legend, and Tumbledown's flanks and twin summits are home to a striking variety of natural communities and several animal species that are rare, endangered, or just plain fascinating.*


### Getting There

**From West:** Starting on ME Route 17 in Byron (22 miles south of Oquossuc or 13 miles north of Mexico), take Dingle Hill Road over Coos Canyon and the Swift River and drive approximately 4.5 miles until you see a pullout and signs for the trail on the left. (Dingle Hill Road changes name and becomes first Weld Road and then Weld to Byron Road.)

**From East:** From the intersection of ME Routes 156 and 142 in Weld, follow ME Route 142 north 2.3 miles and turn left onto Byron Road. Shortly after the turn, Byron Road is unpaved; continue to follow Byron Road approximately 5.6 miles (past the Brook Trailhead) to the Loop Trailhead pullout on the right. (Byron Road changes its name to Weld to Byron Road.)



① **Tumbledown's Furry Architect** -70.558015, 44.731481  
*The Loop Trail enters the forest across Byron Road from a beaver pond.*

 to map

Before you begin hiking along the brook, take a minute to notice that this stream flows into a small beaver wetland across the road from the trailhead. In spring, a chorus of frogs can be heard calling for mates in the dark waters. Moose are sometimes spotted strolling along this section of Byron Road.

Clumsy on land but quick in water, beavers need large pools of water to help them avoid predators. They build dams to submerge surrounding land in water, decreasing the distance that they must travel out of water to find their favorite winter food: the bark of broadleaved trees. High in protein and easily digestible, members of the willow family, including aspen trees, are coveted by beavers.

You can find [bigtooth aspen](#) in this young forest surrounding the trailhead, where it towers above smaller [sugar maples](#), birches, and [American beeches](#) growing along the small brook. The presence of bigtooth aspen in this forest indicates that this area was disturbed in the recent past, likely by a timber harvest. Aspens and some species of birch are trees that “specialize” in colonizing recently disturbed, open areas, whether the openings are due to fire, wind, or logging.



Bigtooth aspen leaf



Red squirrel

Image courtesy of Dave Small, photosbychance

### Naturalist's Notes

Some scientists hypothesize that trees produce seeds in bursts to control the populations of animals that feed on the seeds. For example, by restricting seed production for years at a time, red spruce keeps the red squirrel population in check by limiting its food source. When there's a bumper crop, these trees produce more seeds than the population of squirrels can eat, increasing the spruce's chance of successful reproduction.




Polypody fern



Jack-in-the-pulpit "flower"


### ② **Noisy Sentinel of the Woods** -70.558118, 44.733335

 to map

*At 0.1 miles, the trail enters a dense stand of young red spruce.*

By now, you've probably been greeted by the chatter of that familiar forest-dweller, the feisty red squirrel. This engaging, rust-colored tree squirrel makes its presence known with a surprisingly loud, high-pitched call. Red squirrels are solitary and territorial, and will aggressively chase intruders. You will probably come across several places where red squirrels have stripped the bracts off of spruce cones to get to the seeds inside ♀. **Conifer** seeds are the squirrels' main food source, but they are opportunistic feeders and will readily dig for underground fungi when it is available.

### ③ **Fairyland Forest** -70.556292, 44.736499


 to map

*The trail undulates over several stream crossings, then skirts the edge of a recent clearcut and enters a forest filled with large boulders at 0.4 miles.*

The marvelous boulders of this area are crowned with miniature forests of small, stunted fir and spruce trees and polypody fern. Brown, leathery rock tripe, a type of lichen, curls up from the sides of these rocks. **Yellow birches**, with glossy bark that peels in narrow strips, overshadow the largest (house-sized!) boulder. Larger, older yellow birches may be found on the steep section of trail ahead, perhaps overlooked by loggers in search of more accessible and valuable spruce.

As you begin to ascend, look for jack-in-the-pulpit, a charismatic plant commonly found on slightly rich, moist sites. Two three-parted leaves form a canopy over the reproductive parts: a green and purple striped leaf ("pulpit") sheltering and enclosing a tight, club-shaped group of tiny flowers ("Jack.") In the late summer and fall, Jack and his pulpit are replaced by a cluster of red berries.


### ④ **World's Fastest Animal** -70.556388, 44.743070

 to map

*At mile one, the trail climbs beyond the boulders to a series of open bedrock ledges that provide a clear view of the massive Tumbledown Cliffs.*

Because they offer protection from many terrestrial predators, the exposed, south-facing cliffs visible from these ledges are excellent nesting habitat for the endangered **peregrine falcon**. While diving after prey, peregrine falcons have the ability to dislocate the shoulder joints of their wings, folding themselves into a more aerodynamic shape. They combine this adaptation with long, narrow wings and a special projection in the nostrils that prevents excessive air to the lungs. Together, these features allow peregrine falcons to dive at incredible speeds of over 200 miles per hour, earning them the title of world's fastest animal.

### ⑤ **Sculptor of the Forest** -70.551341, 44.748117

 to map

*After a tight squeeze between boulders and a final steep climb up to the ridgeline, you find yourself in a small col filled with evergreen trees (1.5 miles).*

*The west peak of Tumbledown Ridge looms to the west. Keep right on the Ridge Trail.*

The spruce and fir in this gap between the peaks are stunted and gnarled, with many battered or dead branches and twigs. Some of the trees have dense "skirts" of foliage near the ground, but have little growth on top. Wind and ice cause much damage to



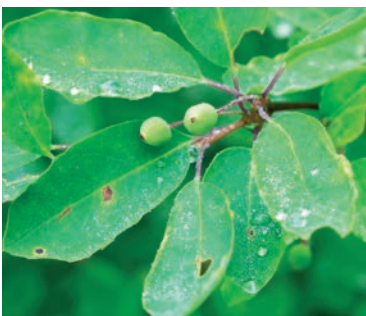
Red spruce branches



Mountain cranberry



Purple crowberry



Mountain holly

these exposed trees each winter, causing their unusual shapes. As winds blow frozen water droplets over the summit, ice accumulates on exposed twigs. When too much ice builds up, whole portions of the branch may be broken off as the ice falls (or is blown) off. But a snowpack can shield lower branches from this wintery harassment.

⑥ **Stress, Stress, Stress** -70.550829, 44.747984

[to map](#)

Enter a *Mid-elevation Bald* community 50 yards later.

On the highest, most exposed bedrock ledges of Tumbledown Ridge, stunted spruce trees give way to islands of short, stress-tolerant plants and lichens between expanses of bare rock. Three-toothed cinquefoil, blueberry, bilberry, and crowberry, all representatives of this Mid-elevation Bald community, grow close to the rock to avoid the brutal, snow-laden winds of a winter on Tumbledown Ridge. Mid-elevation Balds, like this one, occur on upper mountain slopes at moderate to high elevations (1800 feet and up).

Tread lightly here and stay on the rock surfaces to protect the fragile growth of these plants. If wind is blowing from the south, keep an ear tuned for a sound like a small jet engine! Air traveling through rock crevices creates a surprising cacophony here.

#### Flowers and Flowering Times of Common Tumbledown Ridge Plants



Sheep laurel (June-July)



Wild raisin (May-July)



Mountain ash (May-July)



Rhodora (May-June)



Lowbush blueberry (May-June)



Alpine bilberry (June-July)



Labrador tea (May-July)



Three-toothed cinquefoil (June-August)

⑦ **The Story of Tumbledown Pond** -70.541313, 44.749229

[to map](#)

At mile two, reach the edge of Tumbledown Pond.

Some folks mistakenly think that Tumbledown is an extinct volcano, with Tumbledown Pond in its retired crater. Contrary to this legend, Tumbledown Pond is a story of ice rather than fire.

Imagine that you are standing in this location 17,000 years ago. What would you see? Not much, because nearly the entire state of Maine, including the summit of Tum-



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



Brook trout



Heart-leaved birch, pink where outer bark has peeled away (left), yellow birch (right)



Spring salamander  
Image courtesy of the U.S. Geological Survey

bledown, was covered beneath a sheet of ice that was thousands of feet thick. Even though ice appears to be solid, it is constantly, slowly shifting when it takes the form of an ice sheet or a glacier. As this enormous ice sheet moved, it ground down pointy summits, widened valleys, and gouged out shallow depressions that would someday become lakes, like Tumbledown Pond.

Today, the cool, oxygen-rich water of Tumbledown Pond is home to brook trout, a Maine native and the state's most popular sport fish. But brook trout hasn't always been at home in Tumbledown Pond. Fishless since the retreat of the glaciers, this pond has only been stocked with fish since 1966.

Fishless ponds are rare in Maine, and may lack fish because they are too acidic or, more likely, as with highly perched Tumbledown Pond, they are too isolated from other water bodies to be reached by fish. Despite their lack of fish, fishless ponds are far from barren. Free from one of their main predators, an incredible diversity of amphibians and [invertebrates](#) flourish in fishless ponds.

*Turn right just after the pond outlet to follow the Brook Trail down the mountain.*

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⑧ **A Tree with a Heart** -70.540745, 44.748377

[A to map](#)

*Just beyond the outlet (2.1 miles), heart-leaved birch becomes abundant.*

Where the trail begins to descend, look for heart-leaved birch. White to rose-colored bark peels away from the trunk in large strips, and the bases of leaves are indented where the leaf joins the stem, making them heart-shaped. This is the first of four birch species, each occupying a different ecological niche, that the trail will pass during the descent. As you travel downhill, taller red spruce will begin to dominate the canopy, gradually joined by yellow birch, distinguishable from heart-leaved birch by glossy, golden bark that peels away in thin strips.

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⑨ **Small but Fearsome** -70.541725, 44.745403

[A to map](#)

*At 2.3 miles, the trail crosses a Tumbledown Brook where there are small waterfalls.*

By the time you reach the crossing, evergreen and broadleaved trees mingle together in a [Spruce – Northern Hardwoods Forest](#), a community often found where higher-elevation evergreen forests transition into lower-elevation broadleaved forests. Red spruce, yellow birch, and [red maple](#) tower above [striped maple](#) and small [balsam fir](#).

The cold water and rocky crevices of Tumbledown Brook provide good habitat for the northern spring salamander. Adult northern spring salamanders are relatively large (about 5.5 inches long) and, formerly named the purple salamander, they range in color from salmon pink to brown. Though they lay their eggs in water, adults are often found under rocks or logs in the damp soil nearby. Northern spring salamanders are fearsome predators in both these habitats, feeding on nearly any animal that can fit into their mouths. The diet of northern spring salamanders includes aquatic insects, centipedes, earthworms, snails, spiders, small frogs, other salamanders, and even their own young.

## Naturalist's Notes



The smooth, pale gray bark of many of the beeches in this forest is interrupted by the disfiguring lesions of beech bark disease, caused by a scale insect working together with an invasive fungus. Diseased beech trees become home to more insects, which invite foraging birds. Look on the diseased beech for large, rectangular holes that are the trademark of pileated woodpeckers.



Gray birch (left), paper birch (right)



White ash leaf



Adult emerald ash borer

Where the topography flattens at the base of several switchbacks, the forest has transitioned completely into a good example of a [Northern Hardwoods Forest](#). New England's most abundant natural community, the broadleaved trees of this forest include American beech ♀, sugar maple, yellow birch, and [paper birch](#).

### ⑩ Ecology of Four Birches -70.543958, 44.742792

[to map](#)

*The trail widens and joins an old road bed at 2.6 miles.*

The old road bed here is lined with the striking white trunks of paper birch and [gray birch](#), easily separated from the aspen trees that grow among them; unlike these birches, aspen bark is dark near the ground and lighter near the treetops. Features of paper birch include white bark that peels away in large sheets and more rounded leaves, while gray birch has triangular leaves that taper dramatically near the tip and bark that peels very little or not at all. A diagnostic feature of gray birch is dark, chevron-shaped patches where the branches emerge from the trunk.

Although they are closely related, the four birches found on the Brook Trail (heart-leaved birch, yellow birch, paper birch, and gray birch) have a different position ([niche](#)) in the Tumbledown ecosystem that prevents them from competing with one another for resources like light, water, or nutrients. Paper birch and gray birch are found in young forests that grow on sites that have been disturbed, like this one, where they grow quickly to maturity and typically die in less than 100 years. Heart-leaved birch is better adapted to life at higher elevations. Yellow birch is the longest-lived of these birches, sometimes living for more than 300 years! It usually lives in lower-elevation moist forests alongside maples and beech.

### ⑩ Burn It Where You Buy It -70.531251, 44.729403

[to map](#)

*The trail parallels Tumbledown Brook again near the Brook Trailhead (3.9 miles).*

In the area immediately adjacent to the brook, you'll find several large [white ash](#) trees, recognizable by their rough bark with diamond-shaped furrows and compound leaves with seven leaflets. For the past century, the strong, dense, straight-grained wood of this tree species has been coveted for making baseball bats, tool handles, furniture, and flooring, but now this majestic tree is threatened by an invasive insect: the emerald ash borer.

Indigenous to eastern Asia, the emerald ash borer accidentally arrived in Michigan at the turn of the 21st century. Since then, it has been boring its way in every direction, leaving dead ash trees in its wake. While the adult emerald ash borer causes little damage to trees, the [larvae](#) burrow deep into the trunk, disrupting the flow of nutrients within the tree.

By following the guidelines for not transporting firewood, you can help protect places like Tumbledown from the emerald ash borer.

*Turn right on Byron Road and walk 1.4 miles to return to the Loop Trailhead and your vehicle. 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.*

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## Naturalist's Glossary

**Conifer:** Needle-leaved tree.

**Ecological Niche:** The relative role filled by a species in an ecosystem (community of living organisms in their nonliving environment.)

**Invertebrate:** An animal lacking an internal backbone, for example, an insect.

**Larva:** The juvenile phase many insects undergo before metamorphosis into adults.

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*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](http://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