



White Mountain National Forest

Boulder Loop



Boulder Loop

3-mile loop – Moderate Difficulty
Approximately 2 ½ hours

The **Boulder Loop Trail** is located off the Kancamagus Highway near the Covered Bridge Campground. The 3 mile long trail passes through broad-leafed and evergreen forests to reach its highest point at the Ledges, 1,000 ft. above the Passaconaway Valley.

Along the trail are 18 Stops that are numbered and keyed to this guide. Yellow blazes mark the trail route.

Sturdy footwear should be worn on this trail. Hiking boots are recommended. Please stay on the trail and use caution at all times, particularly near the Ledges.

Over 50,000 years ago, the Wisconsin Ice Sheet gathered in Canada and grew southward. Eventually it covered every mountain and valley in New Hampshire. On melting, the ice picked up frozen soil and broken pieces of rock. This glacial "material" acted like a giant piece of sandpaper being dragged across the land surface. The last of the ice melted away some 10,000 years ago.

As you walk this trail you will see the effects and results of glaciers. The scoured and scratched granite was probably covered by soil before the grinding ice dragged the surface material away and exposed the ancient bedrock.

STOP # 1 - The things that look like grayish-green dead leaves growing on the rocks are lichens. Lichens are pioneers. They are the first plants to cover bare earth and rock. A lichen is a combination of two plants, algae, and fungus. The fungus absorbs and stores water, which the algae combines with sunlight to make food for both plants. The fungus produces an acid that eats into the rock on which it grows. This acid helps to crumble the rock into fine particles. This is one of the first steps of soil formation.

STOP # 2 - So far, the trail has passed through a broad-leaf or deciduous forest. Starting at this point, evergreens or conifers, such as the nearby spruce become mixed with the broad-leafed trees.

STOP # 3 - Before you is evidence of the damage done by a typical New England "Nor'easter." The high winds of these coastal storms have uprooted several trees in the vicinity including the pine tree crossing the trail. The majority of these trees have fallen in the same direction pushed by the wind.

STOP # 4 - New growth of red spruce is taking place here. Red spruce is able to grow as a seedling in the shade of the surrounding bigger trees. When trees fall and a clearing such as this one is opened, the seedlings grow toward the sunlight.

STOP # 5 - From this point you can see the Swift River and the Kancamagus Highway weaving through the Passaconaway Valley below.

STOP # 6 - Expansion within the granite masses causes fractures known as "sheet joints" (cracks parallel to the rock surface). The parallel cracks before you are illustrative of this jointing. The glaciers quarried out fractured pieces of rock, exposing smooth surfaces of bedrock.

STOP #7 - This slope is exposed to the sun's rays during midday. It is, therefore, hotter and drier than slopes that receive less direct sunlight. The large conifers are absent here, mainly because they grow better in a moister environment.

STOP #8 - This old hemlock was at one time a healthy specimen as you can see by the size. One can only guess what brought about its death. It could have been a prolonged period of drought or perhaps lightning, disease, or wind.

STOP #9 - The cool moist slopes in this vicinity provide good growing conditions for hemlock and paper birch. Can you find them?

STOP #10 - Red oak tolerates a hotter exposure and drier, stonier soil than most other trees in this region. On this rock outcropping, red oak has little competition from other species.

STOP #11 - This is the entrance to the Ledges. **CAUTION:** The sheerness that makes these ledges spectacular also makes them dangerous. **YOU CAN ENJOY THE VIEWS AS MUCH FROM A SAFE SPOT AS YOU CAN FROM THE CLIFF EDGES.** Use good judgment and be careful. As you walk out to the ledges, joint fracturing of the bedrock underfoot causes the hollow sound you hear.

STOP #12 - This is similar to stop 7 except this is a south/southeast slope as compared to a west/northwest slope at 7. At one time this area was bare rock. As time passed, lichens and mosses grew, and enough soil built up to support plant life.

STOP #13 - You are in the White Mountain National Forest, one of the 155 National Forests in the United States. The Forest Service, U.S. Department of Agriculture, administers these public lands. The Forest Service mission is to manage the land for many uses including, water, timber, forage, wildlife habitat, and recreation. Before you and to the left, is an example of the types of vegetative management done on the White Mountain National Forest. The particular method here is called "regeneration" or "harvest cut." To your right and along the trail for about 800 feet is a selective thinning. To your left is a small "clear cut." As you would weed and harvest your garden at home, we are doing the same thing with this stand of trees. This produces stronger and larger trees to be used in the future.

STOP #14 - Although hemlock trees are capable of surviving for long periods in the shade of other trees. When an opening is created, they take advantage of the added sunlight and grow into good-sized trees.

STOP #15 - The decayed granite you see is referred to as "rotten rock." It is used to cover many of the roads, footpaths, and campsite pads in the White Mountain National Forest. It takes approximately 1,000 years for Mother Nature to wear down solid rock to make an inch of soil.

STOP #16 - All life depends on water for survival. This small stream is a tributary to the Swift River that feeds into the Saco River in Conway. The Saco River meanders to Saco, Maine, where it enters the Atlantic Ocean. Streams like this meet many needs before entering the ocean. A few of these uses include: fishing, swimming, drinking water, and irrigation of crops. What other uses can you think of?

STOP #17 - This area shook when boulders crashed down from the cliffs above. Trees and underbrush have healed the scars and obscured the path taken by these boulders when they fell.

STOP #18 - The stumps you see here are remains of timber sales from the early 1940s. The new growth shows why timber is truly a renewable resource. Timber harvesting helps provide a variety of habitats such as those needed for songbirds, large and small mammals such as deer, bear, and moose.

This completes the guided portion of the Boulder Loop Trail.

FOR MORE INFORMATION:

**Saco Ranger District
33 Kancamagus Highway
Conway, NH 03818
603-447-5448
TTY: 603-447-1989**

The White Mountain National Forest is participating in the national recreation fee demonstration program. This program was created by Congress in 1996 (PL 104-134) to test ways for users to help finance the activities they enjoy.

The White Mountain National Forest designed a program that charges for parking in designated areas. Areas requiring a parking pass are signed as fee areas. Many of the locations requiring a pass have an on-site purchase option available. If you haven't purchased a pass ahead of time, check the bulletin board and follow the instructions on how to purchase and display a pass for that location.

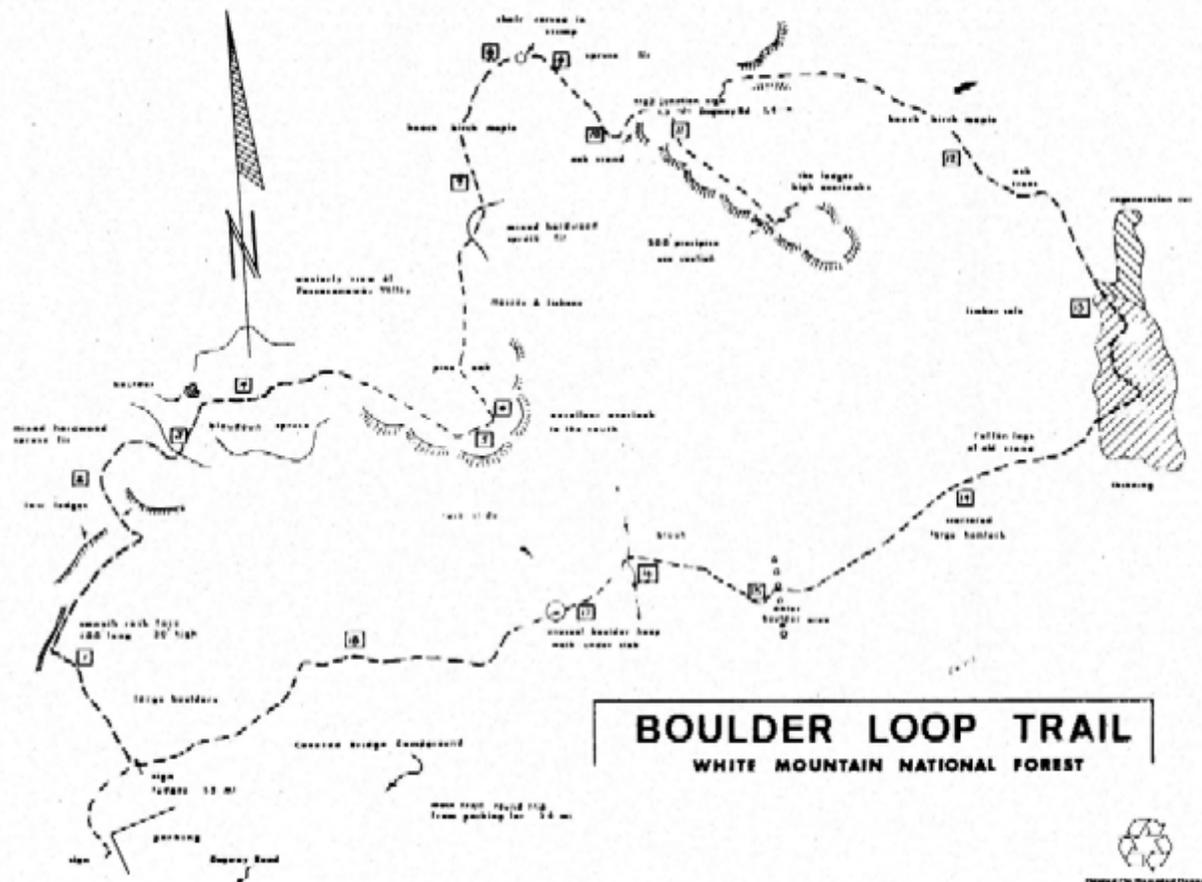
Money raised by this parking pass is used to maintain and enhance recreation opportunities across the White Mountain National Forest.

**Visit our website at:
www.fs.fed.us/r9/white**

RECREATION PARKING PASS

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