

DIRECTIONS

Franconia Notch Parkway (a part of I-93) runs through Franconia Notch in the White Mtns. A paved bike path parallels the parkway. The parking lots for the portion of the bike path described here are both on the southbound (west) side of the parkway. For this guide, follow the bike path north to south between Lafayette Campground and The Basin.



NH DIVISION OF PARKS & RECREATION

The mission of the NH Division of Parks and Recreation (www.nhparks.state.nh.us) is to protect and preserve recreation, historic, scenic and natural areas of the state, to continually provide such additional park areas and facilities, to make these accessible to the public for recreational, educational, scientific and other uses consistent with their protection and preservation, and to encourage and support tourism and related economic activities within the state.

FRANCONIA NOTCH STATE PARK

Franconia Notch State Park is located in the heart of the popular White Mountain region. The notch is a dramatic mountain pass traversed by a unique parkway that extends for 8 miles between the high peaks of the Kinsman and Franconia mountain ranges, from the scenic Flume Gorge in the south end to Echo Lake at the north end. It contains the headwaters of the Pemigewasset River, the massive Cannon Cliffs (the largest cliff in northeastern U.S.), a great diversity of forests and alpine tundra, and several other spectacular natural features.

PARK USE GUIDELINES

This park is open to the public for recreation and education. Please, for the protection of the area and its inhabitants, and for everyone's enjoyment, follow these rules:

- BIKE PATH IS FOR MULTIPLE-USE. PLEASE SHARE WITH CARE.
- NO MOTORIZED WHEELED VEHICLES ON BIKE PATH OR TRAILS.
- NO PETS ALLOWED.
- CARRY OUT ALL TRASH.
- NO CAMPING OR OPEN FIRES ALLOWED EXCEPT IN THE CAMPGROUND.
- PRACTICE LOW-IMPACT RECREATION. PLEASE DON'T PICK PLANTS OR FLOWERS.

Note: As the bike path is heavily used, extra care must be taken when using this guide. Some bikers are riding fast. Please be alert and considerate of other users.

OLD FOREST IN FRANCONIA NOTCH

Old forests that have not been logged are rare throughout North America. They are characterized by large, old trees, lots of dead and downed wood, and rich biological legacies not found in heavily managed forests. There are patches of such uncut old forest in and around Franconia Notch. Although the history of cutting throughout the notch is not precisely known, we do know that there are remnants of old forest in areas like the *northern hardwood spruce - fir forest* along the bike path, which in many places is a good example of what a mature northern hardwood forest looks like. Some of the trees here exceed 250 years of age.

This forest has been impacted by several hurricanes and frequent winter storms. With such fierce weather, the notch is a harsh environment to grow in, and the architecture of the older trees reflects it. Hardwood species such as yellow birch, beech, and sugar maple typically have a dense scraggle of contorted branches at the top of thick, straight trunks that are anchored by large root structures. The irregular canopy of this forest is a result of many years of limbs being snapped and broken off by strong winds, heavy ice, and deep snow. Softwoods like red spruce readily shed ice and snow, and older specimens can frequently be seen emerging above the hardwood canopy.

Of course, old forests consist of much more than just old trees. In fact, the old trees are fairly widely scattered and mixed in with younger trees and saplings of various ages growing in the openings created when older trees died. Dead trees remain as standing snags and blowdowns, and this decaying wood provides both future organic soil for more plants and trees, and important habitat for a wide diversity of animals, microorganisms, flowering plants, and fungi. In addition, many lichen and moss species cover surfaces in these forests.

This brochure was created by the New Hampshire Natural Heritage Bureau as part of a series designed to educate the public about the state's special plants and natural communities. More site guides and profiles are available on the Visiting New Hampshire's Biodiversity program page at:

www.nhnaturalheritage.org



NEW HAMPSHIRE NATURAL HERITAGE BUREAU

NH Division of Forests & Lands - DRED
172 Pembroke Road - PO Box 1856
Concord, NH 03301-1856
Tel: (603) 271-2215

The DFL is an equal opportunity employer and educator.



NH NATURAL HERITAGE BUREAU

VISITING NEW HAMPSHIRE'S BIODIVERSITY

OLD FOREST IN FRANCONIA NOTCH STATE PARK



a property managed by

**New Hampshire Department of
Resources & Economic Development**
Division of Parks & Recreation



This brochure was paid for with funds from
the NH Conservation License Plate
www.mooseplate.com



TRAIL DESCRIPTION:

Along this stretch of the bike path you will pass through patches of old forest. The paved path travels over easy to moderate terrain with some hills. The surface is smooth, but it can be slick when wet, and the weather in the notch can change quickly at any time of the year.

Starting at the parking lot near **Lafayette Campground**, take the bike path south into the woods. When not obscured by leaves, Mt. Lincoln and Franconia Ridge are visible above the parkway to the left. On your right is the **Pemigewasset River**, which is really just a small cobbly brook this close to its origin. On either side of the path (1), notice a mix of young and old trees such as sugar maple, yellow birch, beech, and red spruce. Part of this forest has apparently been cut in the past, and a severe hurricane in 1938 blew down many trees, leaving large gaps for younger trees to fill. Scattered throughout, however, are much older trees that survived the hurricane. This mix of young and old trees closely mimics the ecology of our original natural northeastern forest, where wind and fire have historically acted as natural disturbance agents. Several particularly large yellow birch trees can be seen beside the path about 50-100 feet from the start. One of these trees has a diameter of 33 inches at chest height (quite big for a tree in an eastern mountain forest). In addition to their characteristic gnarly upper branches where decades of severe weather have taken a toll, some of the older trees have scars spiraling up the trunk in the bark. These lines are healed cracks, originally caused by lightning, frost-wedging, or trees twisting during high winds; the cracks often occur in the direction of prevailing winds.

As you cross **Walker Brook** (often dry in late summer) on a wooden bridge with iron rails (2), you'll see large rotting logs to either side, along with other woody debris like downed branches. Large and small woody debris in various stages of decomposition are indicative of older forests and the natural process of forest decay and regeneration. Just beyond the bridge to the left (3), observe several large trees and a dead standing snag. Then, at a turn to the right (4), note the presence of a large amount of hobblebush (*Viburnum alnifolium*) in the understory. This shrub, with its suede-like buds and veiny leaves, is often browsed by moose and is very common in this type of forest.

Next, you pass through a dense patch of spruce and fir trees (5) where there is deep shade year-round and it is relatively cool. The moist ground beneath these conifers is littered with their acidic needles, where few species of understory plants can thrive, save for a green carpet of mosses and clover-like northern wood sorrel (*Oxalis montana*). A nice example of a high-energy cobble/sand bar, constantly modified by the rushing water, can be seen in the river just off to the right (6). The forest soon opens up again as it transitions from thick

spruce - fir back to mixed northern hardwoods (7). You will see more large, old trees scattered throughout, some with moss growing on their more shaded north sides. Understory plant diversity increases here, with woodferns (*Dryopteris* spp.), hobblebush, and tree saplings being most prominent. You can also see many fallen logs, trunks, and branches in various stages of decomposition. Near the second picnic table pullout (8) there is a huge snag, with thick shelf fungus and interesting flaky bark patterns. An overgrown path with grasses and wild strawberries (*Fragaria virginiana*) in it comes in from the left (9). The forest floor soon becomes quite bouldery off to the left, on a slightly steeper slope with wood ferns and birch trees. Off to the right there is a fairly large wet depression known as a forest seep (10), where groundwater emerges near the surface. Plant species found here include peat moss (*Sphagnum*), foamflower (*Tiarella cordifolia*), and northeastern mannagrass (*Glyceria melicaria*). Such seeps are frequent throughout this forest.

Where the path crosses **Dry Brook** on the second wooden bridge (11), you can see another nice cobble bar below. A few tenacious plants and moss species are able to take hold in the loose, gravelly soil of this seasonally dry drainage. A few hundred feet beyond, conifers begin to reappear.

Beyond a few more curves in the trail, you'll see an even-aged stand of deciduous trees on the left (12), and a big leaning yellow birch just to the right. Many ephemeral drainages wind throughout this forest, causing small rolls and undulations in the otherwise flat ground. Soon, look for a yellow birch tree on the left with its roots above ground and lots of hobblebush nearby (13). This "barber chair" tree likely grew up around a fallen trunk that has long-since rotted away. Another grassy woods road soon comes in on the left (14), this time with wild raspberries. Shortly after this, a dense patch of sugar maple saplings can be seen off to the left, and several thick-trunked spruce trees tower over a hundred feet above the path (15).

A third wooden bridge crosses a smaller, unnamed brook (16). You are quite close to the parkway here, but in between and right next to the path you will pass by another small forest seep (17). Soon the path swings close to the river again. Down the steep embankment you can see a cobble bar in the middle of the river, along with fallen tree trunks (18). Large spruce, fir, and hemlock trees frame the path along the final set of turns before it emerges from the woods at the paved parking lot for The Basin. Well worth a visit, **The Basin** (19) is a picturesque pothole in the river where a waterfall cascades over a small ledge. Afterwards, either return the way you came, explore farther on the bike path, or take the Pemi Trail (no bikes allowed) back along the west side of the **Pemigewasset River**.

map and photo by Ben Kimball, 2004

