

CONNECT WITH NATURE!



nature.org/newhampshire



facebook.com/TNCNH



Nature NH



@tncnewhampshire

BE A CITIZEN SCIENTIST!

Help us collect valuable data at this preserve. Find out how by scanning the QR Code or by visiting http://naturenh.org/CitSci



ABOUT THE NATURE CONSERVANCY

The Nature Conservancy in New Hampshire has been safeguarding our state's most precious natural resources since 1961, conserving 290,000 acres of forests and fields and 680 miles of river and estuary shoreline. Our 29 preserves are open for hiking, fishing, skiing, hunting and wildlife viewing. We are committed to finding solutions to some of the most formidable challenges facing our natural world.

Like No Other Place In New Hampshire

Welcome to New Hampshire's last intact pitch pine-scrub oak woodland natural community, a globally rare forest type. Here you'll find a diversity of uncommon wildlife, including nearly two dozen threatened and endangered moths and butterflies, and several declining bird species like whip-poor-will, common nighthawk and Eastern towhee. Beneath your feet, the forest serves as a natural filter for one of the Granite State's largest "stratified-drift" aguifers, which ensures a constant and clean source of water for the area's families and businesses.

Natural History

Roughly 15,000 years ago, the last of the great continental glaciers melted away from the Northeast. In its wake, torrents of water carried debris embedded in the ice. While heavier rocks and boulders were deposited quickly in the uplands to form what is known as "glacial till," the finer sands and gravels washed to the lowlands and were often deposited in "proglacial"



lakes—large bodies of water that collected south of the melting glacier. For some time, Ossipee and Silver lakes were combined as a proglacial lake, extending across the present-day gentle plain lying between them. Today, this is where the Ossipee Pine Barrens are found.

Pitch pine barrens thrive in the dry, acidic and infertile soil conditions of these sandy plains. Evergreen needles enable pitch pines to save energy by not having to reproduce leaves each season. They are also uniquely adapted to withstand and flourish in the frequent fires that occur due to the drought conditions.

In addition to pitch pines, common plants found in the Ossipee Pine Barrens include scrub oak, black huckleberry, low-sweet blueberry, sweet fern and woodland sedge, as well as rare hairy hudsonia and slender-leaved goldenrod.

Protecting the Ossipee Pine Barrens

Early on, the Ossipee Pine Barrens were largely used for timber production. It was not until recent times that these lands began to be converted for housing, industry and other kinds of development—activities that continue to fragment the landscape each year.

Only 2,000 acres of pitch pine-scrub oak barrens are left in the Ossipee region, representing the last viable occurrence of this forest community in the state. Furthermore, the Ossipee Barrens lie above the Saco-Ossipee Aquifer, the largest stratified-drift aquifer in the state. Undeveloped portions of the barrens serve as recharge areas for this important



resource that provides clean drinking water for the towns of Freedom, Madison, Ossipee and Effingham.

Because of its importance for both people and nature, The Nature Conservancy has long identified the Ossipee Pine Barrens as a conservation priority. Since 1988, we have protected more than 2,700 acres of critical habitat here, including: large, excellent

examples of the rare pitch pine-scrub oak woodland; a quartermile of undeveloped shoreline on Ossipee Lake; much of Cook's Pond and a stream connecting it with Silver Lake, a popular destination for local paddlers. There are many opportunities for hiking, kayaking, cross-country skiing, hunting and snowmobiling.



A controlled burn in the Ossipee Pine Barrens. © TNC (Jan McClure)

The Fire Connection

Pitch pine-scrub oak woodlands depend on periodic fire to regenerate and thrive. Run your hand along the bark of a pitch pine and you'll know instantly what sets it apart from other trees: The thick bark protects the living tissue of the tree during a fire, while the seeds germinate best on soils exposed by fire. Unlike other pines, pitch pines are also able to sprout from both roots and trunks.

Historically, it is thought that the Ossipee Pine Barrens burned every 25 to 50 years—far more frequently than other forest types. However, over time the effort to suppress fires to protect homes and property had virtually eliminated fire from this ecosystem.

In 2005, after thorough research, The Nature Conservancy launched a comprehensive project to sustain the Ossipee Pine Barrens using a combination of mechanical vegetation management and controlled burning. This effort restores and

maintains the unique habitat found here and helps reduce the threat of wildfire to the surrounding towns. Carefully controlled burns eliminate dangerous accumulations of leaf litter and flammable vegetation that could burn out of



control if set ablaze by a lightning strike. After a fire, scrub oak and blueberry produce vigorous new growth which provides a highly nutritious food source for wildlife, including rare moths and butterflies—five species of which are found nowhere else in New Hampshire. Like the plants, these insects have evolved with fire; some survive the burn season by burrowing into the soil.

You Can Be a Citizen Scientist!

These lands serve not only as a unique place to hike and explore, but also as a living laboratory for student education and scientific study. Research adds tremendous value to our work and isn't limited to students and scientists. You can also participate in collecting valuable data to assist with our conservation and management efforts just by using your smartphone or camera!

While on your preserve hike, help us learn more about the plants and animals on the preserve by documenting what you see on our iNaturalist page. You can also visit one of our Picture Posts. Each post guides visitors to photograph a location in nine orientations. Photos are dated, geotagged, uploaded and shared online to assist in environmental monitoring. The process is easy, and instructions are located right on the Picture Post. For Picture Post locations, see the map in this guide. For more on all the ways you can engage with our preserves, scan the QR Code (left) or visit http://naturenh.org/CitSci.

ENJOY THE PRESERVE RESPONSIBLY

This area is open to the public for recreation and education. Please, for the protection of this area and its inhabitants:

- No camping or open fires allowed.
- Motorized vehicles (except snowmobiles along designated trails) and horses are prohibited.
- Keep pets leashed to avoid disturbance to birds, other wildlife and preserve visitors.
- Hunting is allowed on portions of the preserve. Tree stands and blinds are prohibited. Please obey all posted signs and contact NH Fish & Game for dates and regulations.
- No removal or destruction of plants, wildlife, minerals or cultural items.
- Carry in/carry out trash (and any you find).

DIRECTIONS TO THE OSSIPEE PINE BARRENS

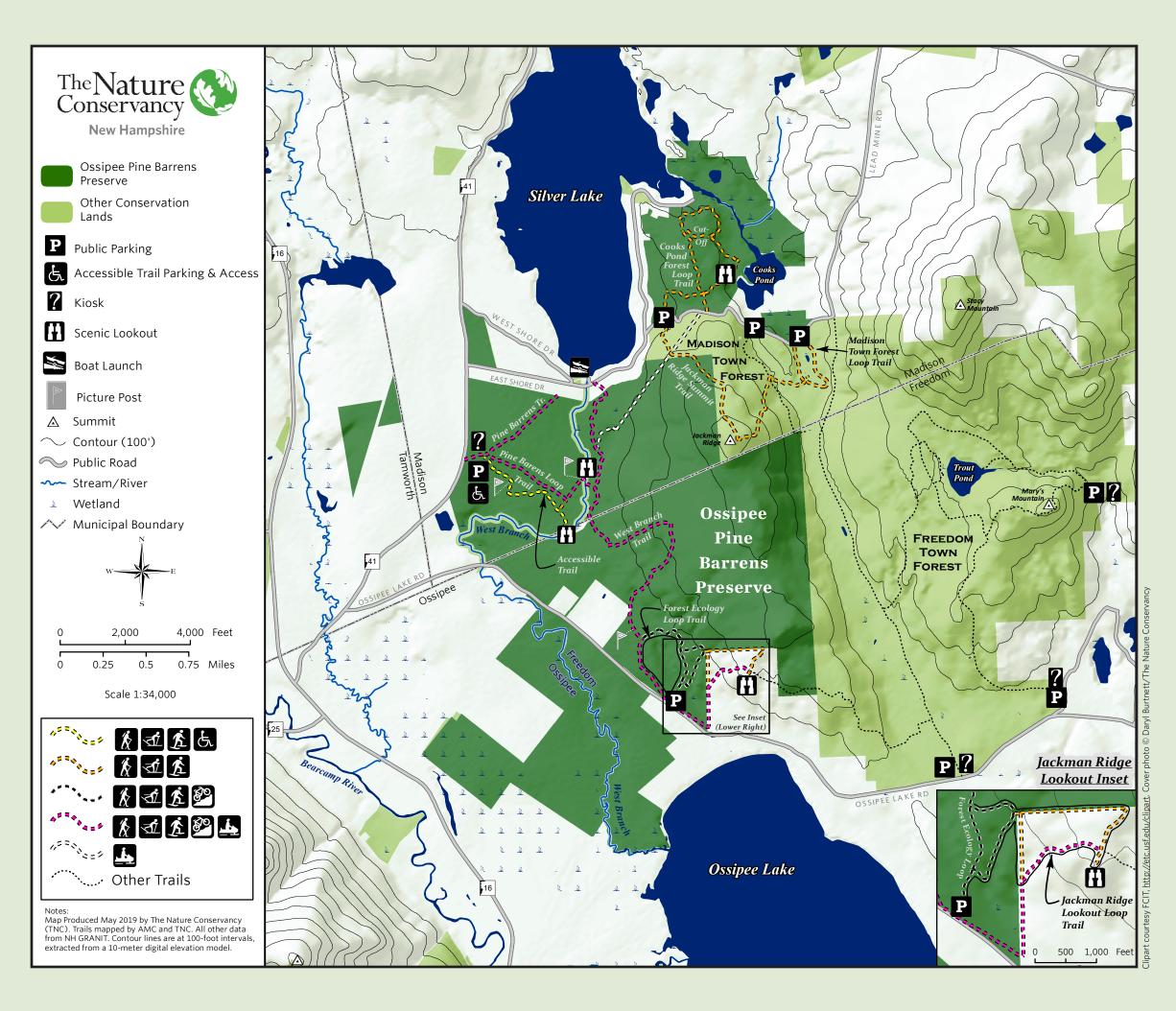
West Branch Trailhead—From the junction of Route 16 and Route 41 in Ossipee, follow Route 41 North for approximately 2 miles. The preserve entrance will be on the right (east) side of the road across from the entrance to Black Birch Lane.

Cooks Pond Trailhead—From Route 41 North, turn right onto East Shore Drive. Follow the road for 1.1 miles and turn right onto Lead Mine Road. Drive for approximately 0.4 mile to the pull-off and trailhead located on the right side of the road.

Jackman Ridge Trailhead—From Route 41 North, turn right onto Ossipee Lake Road. Drive approximately 2.1 miles, and the parking area and trailhead are located on the left side of the road.

The mission of The Nature Conservancy is to conserve the lands and waters on which all life depends. For more information on the Ossipee Pine Barrens, our work or our preserves, please contact us:

> The Nature Conservancy 22 Bridge Street, 4th Floor Concord, NH 03301 603.224.5853 nature.org/newhampshire



TRAILS OF THE OSSIPEE PINE BARRENS

Distances are **one way** from trailhead unless noted as loops.

Route 41—West Branch Trailhead

Accessible Trail—Approximately 1 mile (green/yellow blazes). Five feet wide and nearly flat with a surface of compacted crush gravel, this trail is ideal for people of all abilities, larger groups, strollers and wheelchairs. It offers an easy excursion through classic pitch pine-scrub oak barrens, crossing under a powerline just before reaching an observation platform overlooking the West Branch of the Ossipee River at the terminus of the trail.

Pine Barrens Trail—0.7 miles (red blazes). This trail, a Class VI Town Road, cuts across the West Branch Pine Barrens from the Route 41 kiosk to East Shore Drive near the south end of Silver Lake. Note: This is NOT a loop trail.

Lead Mine Road—Cooks Pond Trailhead

Cooks Pond Forest Loop Trail—2.4 miles (green and yellow blazes). This loop meanders through oak forest, pitch pine-scrub oak woodland and eskers, providing views of Cooks Pond and its associated wetlands.

Cooks Pond Forest Loop Cut-Off—(red blazes). This trail cuts about 0.5 mile off of the Cooks Pond Forest Loop.

Jackman Ridge Summit Trail—1 mile (red blazes). Follow this trail to the summit of Jackman Ridge and see filtered views to the north. Turn this into a loop hike by continuing east past the summit and down toward the Madison Town Forest Loop Trail before walking back along Lead Mine Road (adds 2 miles).

Madison Town Forest Loop Trail—0.75 mile (red blazes). This short walk traverses wetlands adjacent to areas recently (2014) treated with prescribed fire through a partnership between The Nature Conservancy and town of Madison. This trail also provides alternate access to the Jackman Ridge Summit Trail.

Ossipee Lake Road—Jackman Ridge Trailhead

Jackman Ridge Lookout Loop Trail—2.3 miles (green and yellow blazes). This moderately uphill trail leads to a viewpoint looking south of Ossipee Lake to the Ossipee Mountains and a sweeping view west of the Ossipee Pine Barrens Preserve.

Forest Ecology Loop Trail—1.2 miles (red blazes). This flat hike winds through pitch pine-scrub oak woodland recently (2013) treated with prescribed fire.

West Branch Trail—3.2 miles (orange blazes). A popular snowmobile trail, this path begins at Camp Calumet Conference Center. Following the West Branch of the Ossipee River, it traverses through pitch pine, white pine and hardwood forests. The trail ends at East Shore Drive across from the boat access at the south end of Silver Lake. Note: This is NOT a loop trail.