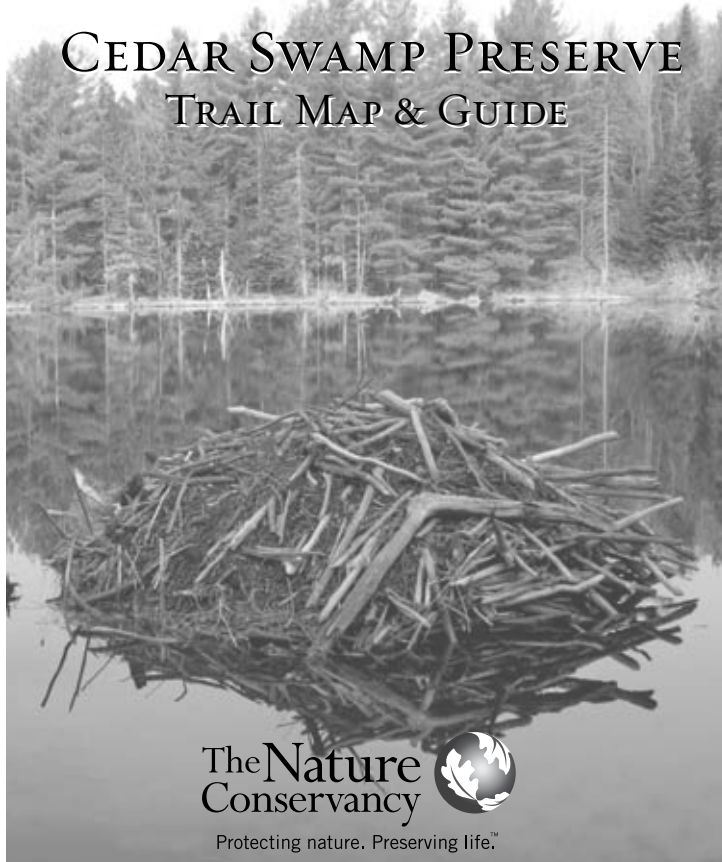


LOVERENS MILL CEDAR SWAMP PRESERVE TRAIL MAP & GUIDE



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Atlantic White Cedar Swamps

Atlantic white cedar (*Chamaecyparis thyoides*) ranges from southern Maine to Florida and the Gulf of Mexico, mainly in freshwater wetlands along the coast. With a combined total of less than 500 acres, Atlantic white cedar swamps are one of the rarest wetland types in New Hampshire. Only four of the State's unique Atlantic white cedar swamps are larger than 40 acres. Threats to the cedar habitat include development, timber harvesting, pollution, and groundwater changes. The cedar swamp at Loverens Mill is nearly 50 acres and is the second largest in the State. Because of the size of the cedar stand, maturity of its cedar trees (up to 130 years old), abundant regeneration, diversity of associated flora, ecological integrity of the surrounding landscape, and stable hydrology, the Loverens Mill site is the highest quality boreal cedar swamp in New Hampshire — and perhaps in all of New England.



Atlantic White Cedar
Chamaecyparis thyoides

The boreal nature of Loverens Mill Cedar Swamp is due to its relatively high elevation (1,083 feet) and a ring of

surrounding hills, which funnel cold air to the site. This cold environment supports northern boreal species — such as tamarack, black spruce, balsam fir, leatherleaf, labrador tea, bunchberry, goldthread, blue bead lily, creeping snowberry, and boreal lichen species — not typical in the southern part of the State.

A lichen study at the site revealed a number of species that are indicators of high air quality and lack of disturbance. This is largely due to the extensive intact woodland that surrounds and buffers the swamp. Another study examined the pollen in peat core samples and determined that cedar has been present in this location for over 4,000 years, indicating that the site has excellent long-term viability. Loverens Mill is an extremely important habitat, and the establishment of this preserve in January of 1999 fulfilled a long-standing goal of The Nature Conservancy of New Hampshire.



A boardwalk leads the way through the cedar swamp. ©Eric Aldrich/TNC

History of the Loverens Mill Site

The homestead and saw and grist mills were first built in 1798 by Samuel Dinsmore, a Revolutionary War veteran from County Antrim, Ireland. Through several ownerships, the mill became a large manufacturer of barrels and pails, and the grist mill was rebuilt. In 1864, Josiah Loveren, from a prominent family of builders in nearby Deering, married Nancy Peabody and bought the mill operation from her father. Under Josiah, the mills flourished and were greatly expanded to produce timbers, shingles, and siding, much of it used for houses in Antrim Village. A contemporary historian wrote, "This mill has great power, is kept in complete repair, and turns out lumber of all kinds in large quantities." The mill was an overshot type — the water was ponded behind the wheel and delivered to the top of the wheel, thus utilizing the power of gravity and the full vertical diameter of the wheel. Overshot mills were the most efficient of their time.



Goldthread
Coptis groenlandica

To this day, the site is named after the man who made the mills flourish. Josiah Loveren died in 1888, and his son John maintained the mills until the early 1900's, when they became idle until purchased by the Batchelder family. The Batchelders manufactured a variety of products, including cable reels, crib dowels, and small boxes that held the sound mechanism for "Mama" talking dolls! Sometime in the 1920's, the Batchelders closed the Loverens Mills and moved operations to Marlborough. Visible remnants of the homesteads and mill dam, foundation, and sluiceway remain near the banks of the North Branch of the Contoocook River.



Blue bead lily
Clintonia borealis

Thank You!

The Conservancy would like to acknowledge the generosity of those who supported the establishment of the preserve, trail system, and brochure. The following provided critical funding for land protection, trails and brochure:

Barakat, Inc.
Walter S. Caughey
Fields Pond Foundation
Eastern Mountain Sports
Gilbert Verney Foundation
Hoffman Family Foundation
Monadnock Community Foundation
The Norcross Wildlife Foundation, Inc.
Thomas & Barbara Putnam
Sweet Water Trust
The William P. Wharton Trust
Elsie van Buren



Painted trillium grow at Loverens Mill Cedar Swamp Preserve. ©Eric Aldrich/TNC

Enjoy Loverens Mill Responsibly

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

- Pedestrian use only.
- No motorized vehicles including ATV's and dirt bikes.
- No pets, please.
- No camping or campfires.
- Carry in/carry out trash (leave trail cleaner than found).
- No removal or destruction of plants, wildlife, minerals or cultural items.
- Remain on trail to minimize ecological impacts.
- Hunting only in the western portion of the preserve (see map).

DIRECTIONS

From Route 9 between Routes 123 North and 31 South, turn north onto Loveren Mill Road. Cross the bridge and park in the pull-out on the right. The preserve is marked with a sign at the entrance of a woods road just up and across from the parking area. Follow the woods road 0.25 miles to the preserve trailhead, which is marked by a trail sign and trail register.

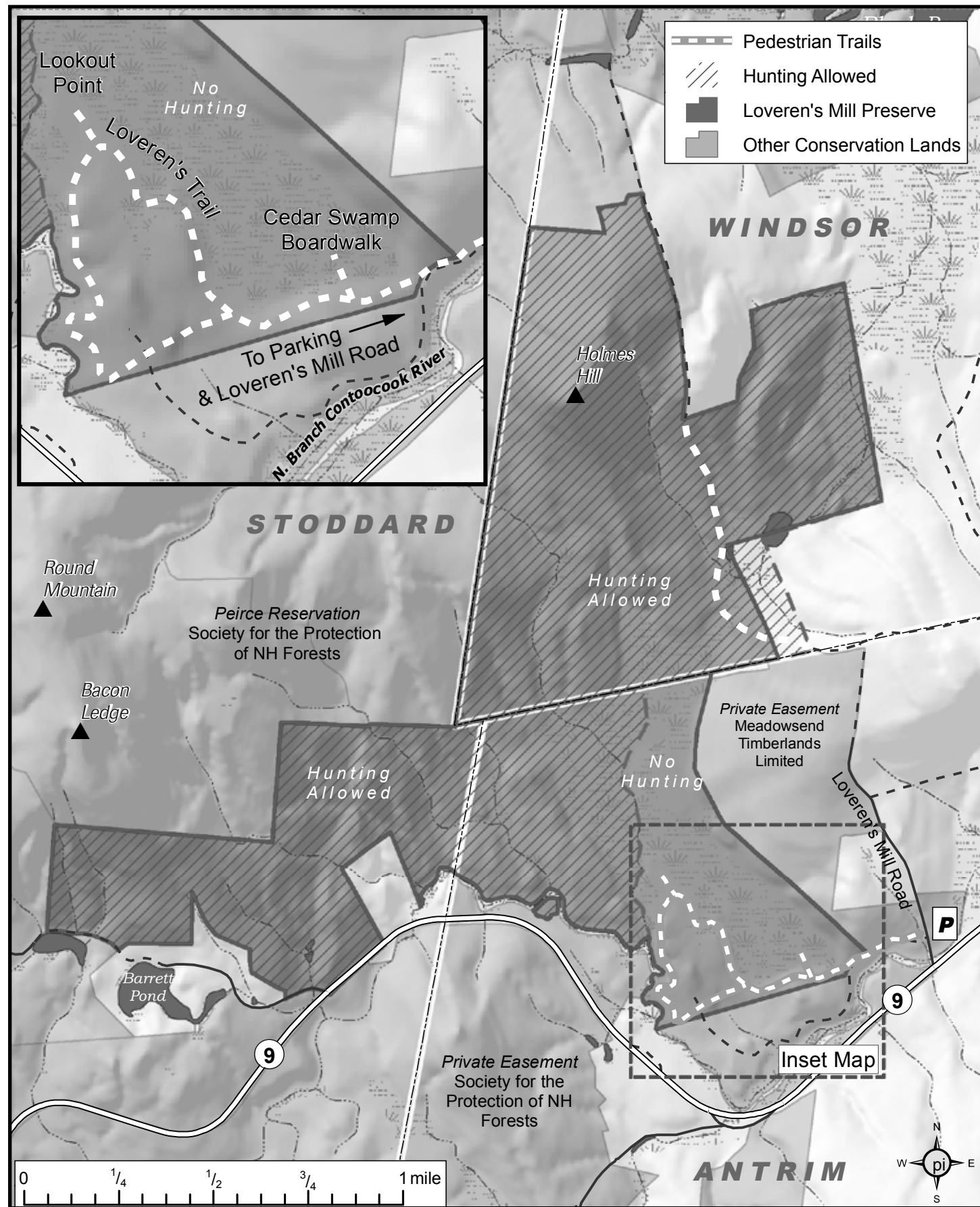
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The Nature Conservancy is an international, non-profit conservation organization. Our mission is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. Since establishing its first preserve here in 1961, The Nature Conservancy of New Hampshire has helped protect more than 270,000 acres of ecologically significant land and currently owns and manages 28 preserves across the state. For more information about our work, please contact us:

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TNC Preserves



Trail Notes

The Loverens Trail travels 3.0 miles through the southeastern portion of the preserve and provides access to the Atlantic white cedar swamp, views of the North Branch of the Contoocook River and its associated wetlands, and winter views of northern hills on the adjacent Peirce Reservation.

Along the woods road from Loveren Mill Road to the preserve are the remains of the old Loverens Mill. At 0.25 miles you will arrive at the preserve trailhead. Shortly after entering the Loverens Trail, you pass through a mixed forest of balsam fir, red spruce, white pine, and red oak. The fir and spruce, along with tamarack, bunchberry, goldthread, and blue bead lily, are typical of boreal habitats. At the wetland edge, a spring visit will reveal rosebud azalea in bloom.

The Cedar Swamp boardwalk is 0.1 miles from the trailhead and extends 200 feet into the swamp over a thick bed of sphagnum moss. This is a fragile habitat — **please do not step off the boardwalk!** Along the boardwalk you will find cedar, black spruce, and tamarack. Other wetland plants you may find include cinnamon fern, black huckleberry, highbush blueberry, maleberry, smooth winterberry, winterberry holly, sheep laurel, and red maple. In early summer, the moss mat is accented by yellow loosestrife, also known as swamp candles.

Resuming the Loverens Trail, you soon come to some huge boulders on the right. These glacial erratics were deposited at the retreat of the last ice age about 15,000 years ago. The glacial ice — some 1,600 feet thick in this area — easily moved large boulders across the landscape. Enjoy the fragrant balsam as you proceed 0.3 miles to a trail junction. By bearing left, you will come to the North Branch in another 0.2 miles. Look for ebony jewelwing

damselflies in the summer as they breed and lay eggs on grass stems in the water (females have a white spot on their wings). The North Branch was an important resource for the settlers of this area and a means of transporting timber to the mills. It now provides wildlife habitat for insects, birds, mink, muskrat, river otter, and beaver.

The trail now follows the North Branch and wetland edge for about 0.6 miles to an elevated point. Here, Lookout Point, a spur trail, extends 0.1 miles down to the water's edge. In winter, a vista of the surrounding highlands can be seen, with Nancy Mountain and Lightning Hill (both on the adjacent Peirce Reservation) prominent to the north. Back on Loverens Trail and continuing along the loop, it is 0.6 miles back to the beginning of the loop and another 0.4 miles to the trailhead. Watch for moose sign along this stretch. Other wildlife that inhabit the preserve include wild turkey, white-tail deer, coyote, fisher, bobcat, and black bear. Common birds include black-capped chickadee, hermit thrush, white-throated sparrow, veery, and Louisiana waterthrush.

Besides protecting rare habitat, the 1,268-acre Loverens Mill Cedar Swamp preserve is important because of its proximity to more than 21,000 acres of protected lands, including the Conservancy's 1,232.4-acre Otter Brook preserve to the west. Together, this landscape of protected habitats is critical for conserving biodiversity.



Black huckleberry
Gaylussacia baccata



Highbush blueberry
Vaccinium corymbosum



Mountain-holly
Nemopanthus mucronata



Winterberry holly
Ilex verticillata



Smooth winterberry
Ilex laevigata



Maleberry
Lyonia ligustrina



Balsam Fir
Abies balsamea



Red Spruce
Picea rubens



Tamarack
Larix laricina



Rosebud azalea
Rhododendron prionophyllum