

### **Welcome to Lubberland Creek Preserve**

Nickname of Great Bay's northern shore as early as 1669, "lubberland" is thought to have been a term used by sailors to describe the "land-loving" farmers along the shoreline.

Today, much of the landscape has changed from farms to forest, and the Lubberland Creek Preserve is a remarkable natural area where visitors can see a mosaic of estuarine, grassland, forest, and freshwater wetland habitats, as well as relics of its agricultural past. The Nature Conservancy acquired the first of many tracts comprising this preserve in 1999, and protection efforts here continue to this day.

Some of the lands for this nearly 400-acre preserve were acquired by the Conservancy on behalf of the Great Bay Resource Protection Partnership (GBRPP). Launched in 1994, the GBRPP is an innovative science-based effort between many agencies and organizations to protect critical habitats in the Great Bay watershed. As of January 2016, the GBRPP has protected more than 10,000 acres in the Great Bay watershed, including over 2,000 acres contiguous with this Preserve. For more on the GBRPP, visit www.greatbaypartnership.org.

# The Early History

David Davis and John Smith were among this area's early settlers in the late 1600's and early 1700's and built

several garrisons (fortified military posts) throughout the area to offer early colonists protection from Native American attacks. Many battles were fought and lives lost on the shores of Great Bay throughout the 1600's and early 1700's. The Davis-Smith garrison, which was built somewhere on the present-day preserve, is remembered by a nearby stone marker on Bay Road.

Agriculture, including cutting hay from the salt marsh and raising sheep on the uplands, became a major activity in the area. Robert Channell purchased this land around 1817 and passed it down through generations of the Channell family. Successful endeavors on the land through the 1800's included dairy farming and granite quarrying. Remnants of the quarry are still visible on Jeff's Hill (named after William Jefferson Channell). Stone from the property was used to build some of the mills at Newmarket Manufacturing Company, along with other landmark buildings in downtown Newmarket. Between Jeff's Hill and Great Bay lay open pastures and fields where cows, oxen and horses grazed. Stone walls and the foundations of the Channell family's house and barn are reminders of this once busy landscape. The land stayed with the Channell family until 1999 when they sold it to The Nature Conservancy for permanent protection.

In the early 1970's, oil tycoon Aristotle Onassis proposed building the world's largest oil refinery on Great Bay in Durham. Onassis and his agents actually acquired options to purchase one-third of the land in Durham, including parcels north and east of here. Despite an all-out effort by Onassis, the refinery proposal failed in March 1974 when grassroots organizers helped persuade Durham voters and the state legislature to oppose the idea. Had it been built, this area would have changed forever and become an industrial landscape.

# **Great Bay: Recognizing an Ecological Gem**

The refinery fight fortified appreciation for Great Bay and its resources across New Hampshire. On a national and international scale, scientists were evaluating the estuary for its conservation significance. The Great Bay Estuary was heralded as a coastal gem and unique in its recessed nature, 9 miles from the ocean. It was found to support over 150 rare species, 55 exemplary natural communities, and was internationally recognized as providing critical breeding, migration, and wintering habitat for over 20 species of North American waterfowl. In the late 1980's, the North American Waterfowl Management Plan—ratified by the US, Canada, and Mexico—identified Great Bay as one of several focus areas for waterfowl conservation, and the North American Wetlands Conservation Act (NAWCA) was established by Congress to provide funding to conserve wetlands in these focus areas. Additionally, Great Bay was designated as one of several National Estuarine Research Reserves, opening the door for federal funding through NOAA for land protection and research.

### **Exploring The Sweet Trail**

The idea for a "trail to the bay" became possible following 10 years of successful land protection in the Great Bay watershed. By 2007, the efforts of the GBRPP had conserved over 2,200 acres in the area on and around the Lubberland Creek Preserve. Beginning on Longmarsh Road in Durham, the Sweet Trail is a linear trail that passes through 4.2 miles of conserved land (half on the Lubberland Creek Preserve) and showcases the success of the partnership and the beauty and ecological importance of the wild and natural places that remain within the Great Bay watershed. The trail corridor was very carefully chosen to protect sensitive areas and minimize new disturbances. With much to offer in all seasons, the trail--named for Cyrus and Barbara Sweet, long-time supporters of land and marine conservation work in the Great Bay Estuary-is popularly used by families, school-groups, and outdoor enthusiasts from the community and region. Check out the Sweet Trail Map & Guide at bit.ly/SweetTrail for more.



Winter hike at Lubberland Creek Preserve. © Eric Aldrich

# **Ecological Values of the Preserve**

Extending from Great Bay's tidal shoreline to the rocky outcrop of Jeff's Hill and its nearby beaver ponds, the preserve has a diverse mix of upland, wetland, freshwater and estuarine environments. Among the highlights:

- Extensive oak-hickory and hemlock-beech-oak-pine forests providing habitat for songbirds, porcupine, fisher, deer, and other wildlife;
- Important shoreline and intertidal habitats including the second largest expanse of salt marsh in the Great Bay Estuary at the mouth of Lubberland Creek;
- Active beaver ponds and their associated mosaic of wetland habitats along the freshwater portion of the Lubberland Creek corridor;
- High quality vernal pools supporting various insects,
  reptiles and amphibians including the rare Blanding's turtle;
- Abundant waterfowl habitat associated with tidal wetlands, beaver flowages, and streams supporting wood duck, black duck, ring-neck duck, mallard, common and hooded mergansers, and others;
- Two great blue heron rookeries with nests occasionally occupied by osprey or great-horned owl.

### **ENJOY THE PRESERVE RESPONSIBLY**

Please, for the protection of this area and its inhabitants:

- Foot travel only (no horses or bikes). Please stay on marked trails.
- No camping or open fires allowed.
- Motorized use is prohibited.
- No pets permitted (exception: <u>leashed</u> dogs are allowed on the Sweet Trail only).
- Hunting is allowed on portions of the preserve.
  Please obey all posted signs and contact NH Fish & Game Dept. 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 LUBBERLAND CREEK PRESERVE**

From Route 108 in Durham, turn east onto Durham Point Road and drive 6.3 miles. The preserve parking lot is on the right. From Route 108 in Newmarket, turn east onto Bay Road and drive 1.4 miles. The preserve parking lot is on the left.



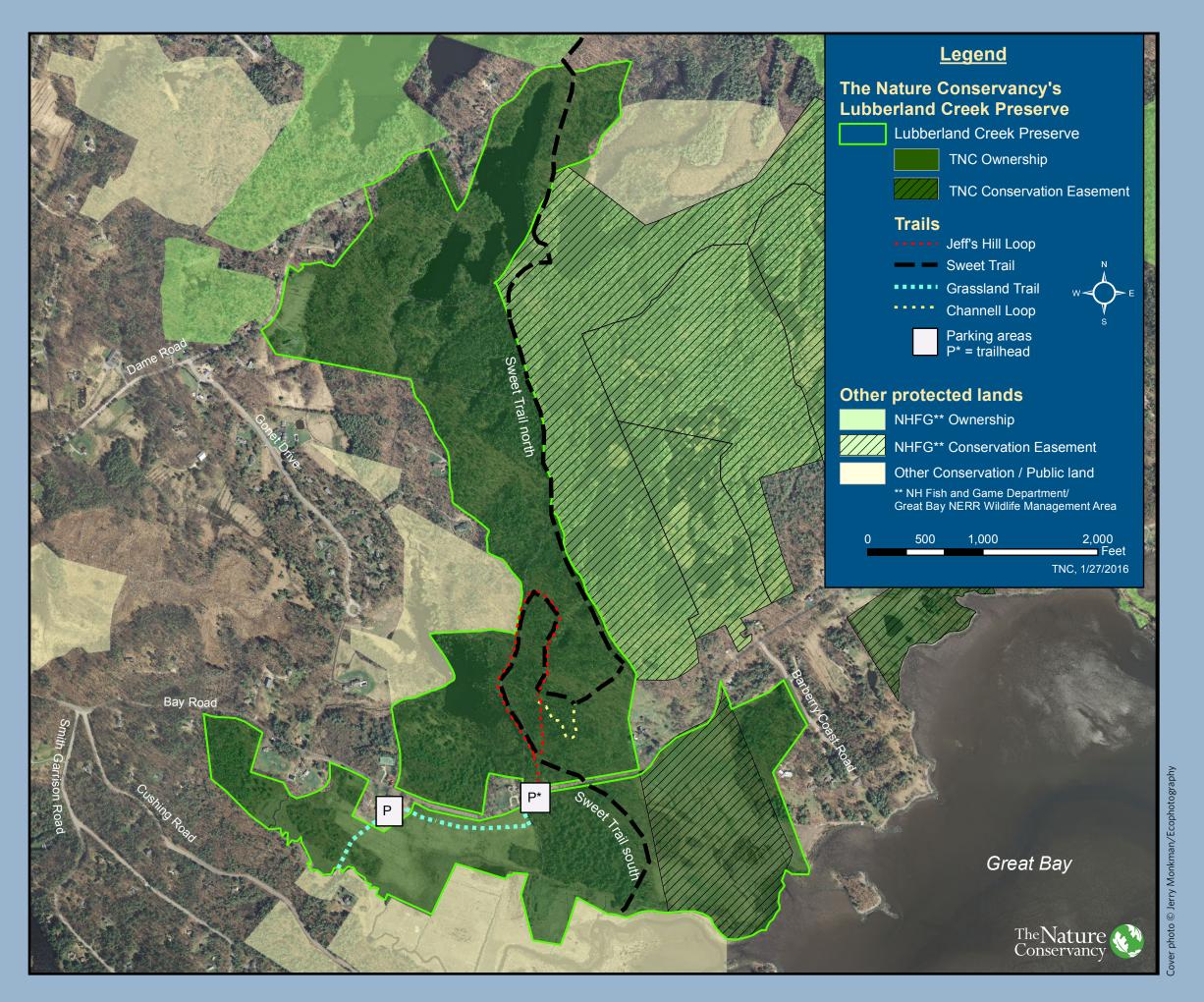
The mission of The Nature Conservancy is to conserve the lands and waters on which all life depends. For more information on Lubberland Creek, Great Bay, or our work or our preserves, please contact us:

> The Nature Conservancy 112 Bay Road Newmarket, NH 03857 603.659.2678



#### **WITH GRATITUDE**

Thank you to Appledore Real Estate for its generous support in the creation of this map & guide.



#### TRAILS OF LUBBERLAND CREEK PRESERVE

Jeff's Hill Loop - 0.6 miles. The Jeff's Hill Loop is a scenic hike that loops up and over Jeff's Hill. The trail travels through upland hemlock, pine and oak forests, with great views across beaver ponds. Watch for signs of beaver activity where the trail approaches the wetland edges. A small heron rookery is also present in this beaver pond; watch and listen for the herons in their nests in the spring. Near the summit of the hill is an interesting cluster of vernal pools. As you round out the loop, note the different forests you encounter on the north and south facing slopes. The warmer, south-facing slope is a forest more typical to southern New England with white and black oaks and hickories, while the northern side is much shadier, with more hemlocks and other trees common throughout NH.

**Channell Spur** - 0.2 miles. At the summit of Jeff's Hill is a small loop to a bench dedicated to the Channell family, who owned the property from 1817 until selling it to The Nature Conservancy.

Sweet Trail (north)\* - 1.7 miles. From the trailhead on Bay Road, the Sweet Trail follows the Jeff's Hill loop to the top of Jeff's Hill. From here, it continues north following an old carriage road past beaver ponds and large glacial erratics (boulders transported and deposited by glaciers) to Dame Road. Beyond Dame Road, the Sweet Trail continues off the preserve another 2 miles. THIS IS NOT A LOOP TRAIL.

Sweet Trail (south)\* - 0.4 miles. From the trailhead on Bay Road, the Sweet Trail south is a short, scenic, and easy walk through oak-hickory woods to the shore of the Great Bay estuary. The trail passes by the cut-stone foundation that once supported the Channell family house. You can see an osprey nesting platform across a neighboring field near the Bay's edge (but please don't approach). At the trail's end, relax at the granite benches to enjoy the expansive view of salt marsh, tidal flats, and coastal islands. At low tide, Great Bay is almost entirely exposed mud flats, and numerous wading birds can be observed feeding on the flats. At high tide, waterfowl tend to congregate near the island. Bring your binoculars and see how many species of birds you can find. THIS IS NOT A LOOP TRAIL.

**Grassland Trail** - 0.2 miles. Cut across Bay Road to the large field. A trail is mowed through the field to an observation point with spotting scope on a hill overlooking the field and 55-acre salt marsh at the mouth of Lubberland Creek. You may continue south from the lookout point to the old farm crossing (visible as a crumbling collection of small rocks no longer functioning as a viable bridge across the tidal stream) of Lubberland Creek at the edge of the preserve. **THIS IS NOT A LOOP TRAIL.** 

\*The Sweet Trail is not a loop trail. For the complete trail description, please consult the **Sweet Trail Map & Guide**. Download your copy at: <a href="http://naturenh.org/SweetTrail">http://naturenh.org/SweetTrail</a>.