

Beavers have dammed four large areas along the stream, creating pools of open water. Photo by Dea Brickner-Wood.

# Madbury and Durham Conservation Projects Help Protect Great Bay Water Quality

The Forest Society accepted three additions totaling 174 acres to its growing collection of reservations near New Hampshire's Great Bay estuary. Although modest in size, the three parcels provide critical linkages to other protected properties and expand existing Forest Society reservations.

"There are simply no large unprotected parcels around the bay. We must conserve one small project after another, stitching together a greenway piece by piece," said Forest Society President/Forester Jane Difley. "We're grateful to our colleagues at The Nature Conservancy and the Great Bay Partnership, who did the heavy lifting on these projects." These lands were transferred from The Nature Conservancy acting for the Great Bay Resource Protection Partnership, a group of agency and non-profit conservation organizations that includes the Forest Society. This partnership program has protected critical estuarine and upland habitat essential for wildlife and recreation for more than fifteen years. The Nature Conservancy purchased the land with National Oceanic and Atmospheric Administration (NOAA) funding, then transferred ownership to the Forest Society.

The common conservation purpose on each of these lands is the protection of water quality and quantity as it enters the Great Bay estuary. Through this process, diverse wildlife habitat is also protected, as are opportunities for the many people living near the estuary to remain connected to the land.

### Expanding a Greenway between the Oyster and Bellamy Rivers

Straddling the towns of Durham and Madbury, the 129-acre Hills property is the largest of the three new acquisitions. Laced with woods roads, this land offers educational and recreational opportunities as well as 29 acres of fertile agricultural soils that may be a vital asset in the future. Additionally, the property's forests and wetlands support a variety of wildlife,



Laced with woods roads, the Hills property offers educational and recreational opportunities. The property's forests and wetlands also support a variety of wildlife, including waterfowl, turkey, deer, fox and coyote. Photo by Joyce El Kouarti.

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The land is entirely within the Bunker Creek watershed, just 1,300 feet upstream from the Oyster River. It connects with three other parcels, all less than 30 acres in size, to create a 185-acre block of conserved land. This larger block is a key link in the as yet largely undeveloped arc of lands between the Oyster and Bellamy Rivers, anchored by the 473-acre Bellamy River Wildlife Management Area in Dover and Durham's 136-acre Wagon Hill Farm along the Oyster River.

One of the smaller parcels contiguous to the Hills property is the 25-acre Brewer parcel in Madbury. The land is bisected by a trail that continues through abutting properties to the northeast and the south.

The majority of the land is forested, with a wetland in the middle of the tract and many areas that appear to be vernal pools. This property also serves as a wildlife corridor between larger protected lands.

#### **Crommet Creek Connections**

Further south, the 22-acre Ryan property in Durham features forests, several large

wetland complexes, streams, and ledge. A tributary of Crommet Creek, which drains directly into Great Bay, runs along the property. Beavers have dammed four large areas along the stream, creating pools of open water. Lined by narrow open fields and wetlands, the stream drains these pools.

This property fills in a gap in the matrix of protected lands in the Crommet Creek area. By connecting multiple tracts to the north, including the Forest Society's Dame Forest, with a 123-acre conservation easement property to the south, it adds to a contiguous block of 1,678 protected acres.

These three parcels add to the nearly 10,000 acres of open space and estuarine waters already protected within the Great Bay National Estuarine Reserve. The Reserve is part of a national network of protected areas established for long-term research, education, and stewardship.

"If we had waited to conserve one big piece, we would have nothing," said Difley. "But our patience has been rewarded." Y

### WHY GREAT BAY MATTERS

Sitting at the confluence of approximately 930 square miles of major watersheds in Maine and New Hampshire, the Great Bay estuary is part of the Great Bay watershed, which encompasses 9 percent of New Hampshire's land area. Widely recognized as an estuarine ecosystem of local, regional, and national significance, New Hampshire's Great Bay has been a focus of New Hampshire's conservation planning and management since the 1940s.

Formed by the outflow of five rivers, the estuary draws a tidal flush of salt water from the Atlantic Ocean nearly five miles east of the estuary itself. Its inland location makes the estuary unique both in terms of ecosystem and wildlife, as well as exceptionally vulnerable to human pressures and threats to its natural features. The rivers flowing into Great Bay cause the mixing of fresh and salt water, creating a rich aquatic habitat that supports more than 150 rare species and 55 exemplary natural communities. Healthy salt and brackish marsh, intact eelgrass beds, and substantial mud flats can all be found along the Great Bay estuary. These habitats provide feeding, breeding, and nursery grounds for a variety of finfish, oysters, shellfish, waterfowl, wading birds, and shorebirds. The rivers feeding Great Bay have historically supported several diadramous fish species, such as salmon, which spend part of their life cycles in both fresh and saltwater.

The Great Bay area is the most important waterfowl breeding, migrating, and wintering area in the state. The estuary is a critical stopover point for more than 20 species of migratory waterfowl, such as Canada geese, and is a nesting site for at least six waterfowl species. In addition, at least 27 species of shorebirds and 13 species of wading birds use the Great Bay estuary for feeding, resting, and nesting.

Since 1994 the Great Bay Resource Protection Partnership has conserved 5,000 acres of critical habitat around Great Bay. Area cities, towns, and organizations have protected an additional 3,000 acres that the partnership has been able to use as a match to leverage federal funding. The leading sources of funds include the National Oceanic and Atmospheric Administration, and the North American Wetland Conservation Act. A key player in securing those funds is US Senator Judd Gregg, who knows the Great Bay area well.

Gregg was recently honored at a ceremony to celebrate the conservation of 5,000 acres surrounding Great Bay. Over the past 16 years, the senator has delivered more than \$171 million in federal funds to New Hampshire, including \$56 million dedicated to Great Bay, to help protect more than 337,000 acres statewide.

# Five Sisters Protect 115 Acres of Family Farm in Newmarket

By Duane Hyde and Joel Harrington

he Nature Conservancy and the Great Bay Resource Protection Partnership announced the conservation of 115 acres of an old family farm along Follet's Brook in Durham and Newmarket. This acquisition adds to adjacent conservation lands, creating a contiguous block of more than 300 acres of protected land.

On behalf of the Great Bay Partnership, The Nature Conservancy acquired the property from five sisters who together owned the family land know locally as Knight Farm.

"The land has meant so much to our family," said Adrienne Rubino, one of the sisters. "It's great to know it will remain intact and healthy for generations to come."

The property includes more than 3,250 feet of frontage on both sides of Follet's Brook and 45 acres of wetlands that provide exceptional breeding habitat for some species that are on the State of New Hampshire's endangered and threatened species list. The land also includes 50 acres of open fields that provide excellent nesting sites for birds.

In addition to its outstanding wildlife habitat features, the property also helps protect important water resources for the Town of Newmarket. A critical partner in the project, Newmarket provided direct funding support and helped secure a grant from the NH Department of Environmental Services (DES).

"Land conservation is one of the most effective ways to protect public drinking water," said Holly Green, who administers the DES Water Supply Land Protection grant program. "The Department of Environmental Services was happy to provide the Town of Newmarket with a grant to preserve both the quality and quantity of its drinking water."

"Newmarket residents, like most Granite Staters, are very supportive of conservation," said Ed Wojnowkski, Town Administrator for Newmarket. "It is such a great feeling of achievement when we can be involved in a The high quality wildlife habitat surrounding Follet's Brook makes the area a conservation priority. Photo by Phil Brown, NH Audubon.



project that conserves so many resources that are not only important for our community but also to the Great Bay region."

Additional funding assistance came from the Town of Durham Conservation Commission, the Lamprey River Advisory Committee, National Oceanic and Atmospheric Administration, the US Fish and Wildlife Service's North American Wetland Conservation Act, and private funds raised by The Nature Conservancy.

The Nature Conservancy conveyed a conservation easement on the entire parcel to the Town of Newmarket and plans to transfer the property to New Hampshire Audubon to manage for public pedestrian access, hunting, and fishing.

This is the Great Bay Partnership's second acquisition in the Follet's Brook conservation area, which features known breeding populations of Canada goose, mallard and wood duck, hooded merganser, and green back heron. The area also includes the state threatened small crested sedge and the state endangered knotty pondweed. The Great Bay Resource Protection Partnership is a group of organizations committed to protecting the important habitats within 24 towns around the bay. Since 1994 the Great Bay Partnership has operated as a cooperative effort to develop and implement habitat protection strategies and stewardship activities through the collaboration with local, regional, state, and national conservation partners. To learn more, visit www.greatbaypartnership.org.

The Nature Conservancy is a leading conservation organization working around the world to protect ecologically important lands and waters for nature and people. To date, the Conservancy and its more than one million members have been responsible for the protection of more than 18 million acres in the United States and have helped preserve more than 117 million acres in Latin America, the Caribbean, Asia, and the Pacific. Visit The Nature Conservancy on the Web at www. nature.org/newhampshire.  $\mathbb{Y}$