

## Northern Forest & Boreal Forest

By Steve Young



*(Photo by Tom Slayton. Steve Young, holder of a Harvard PhD in botany, is the founder and long-time president, recently retired, of the Center for Northern Studies in Wolcott. He is also a founding trustee of the NRLT.*

*For a recent biography of Steve by Tom Slayton, go to [VTDigger.org](http://VTDigger.org) and click on *Life in Vermont, Archive, Profiles, and "In This State: Steve Young Thinks Globally, Botanizes Locally."* Slayton notes, "Steve's academic interests led him to travel all over the northern regions and become a seminal thinker and writer about northern studies, which has become an important research field in no small part due to his efforts."*

*The following article is an extract from a longer essay by Steve that can be found on the blog page of NRLT's website, [www.northernriverslandtrust.org](http://www.northernriverslandtrust.org)*

The two terms Northern forest and Boreal forest would seem to mean the same thing—but they don't! The boreal forest is the wooded country of the far north, stretching from Newfoundland and Labrador to Alaska. It has an Old World counterpart in the vast taiga of northern Europe and Siberia, although the tree species are not the same. We often hear of the boreal coniferous forest, and this is true to a degree; the dominant trees are white and black spruce and, mostly east of Hudson Bay, balsam fir. But there are also expanses of birch woodland, aspen, and cottonwood, as well as enormous peatlands, largely devoid of trees, that are often called muskeg in Canada.

In the Northern Rivers area, boreal forest is at its southern limit, and it occurs mainly along ridgelines above 2,000 feet or so, like the Lowell Mountains and Woodbury Mountain, and in cold hollows and valley floors such as Bear Swamp, in Wolcott. You can walk into these areas and, within

a few hundred feet, be hard pressed to distinguish the ecosystem from that of southern Labrador—especially since the return of the moose!

In the sense that the term is usually used, the northern forest is found mainly in northern New England, New York State, and in adjacent Canada. (This latter is demonstrated by the fact that the Province of Quebec makes several times more maple syrup than all the New England states together.) The idea of the Great Northern Forest has gained a good deal of traction in environmental circles, as the northern states have begun to work together to protect what is the defining ecosystem of the region.

We often talk of the northern hardwood forest. This is no more an accurate description than boreal coniferous forest. Many of the characteristic trees, and woodland types, of the northern forest are coniferous. Great stands of white pines dominate the drier uplands and are interspersed with beech and maple. Ancient hemlocks shade the moist valley floors, and white cedar wetlands occur wherever the substrate is not too acid. Still, the most characteristic trees are deciduous, flowering hardwoods: sugar maple, red maple, beech, cherry, birch, and, mostly south of our area, red oak.

### NRLT's new trustees

In June of this year, two local residents, Mike Coffey and John Miller, joined the NRLT board.

Mike Coffey and his wife Susan have been residents of Walden since 2005 and both work seasonally preparing personal income tax returns. Mike is semi-retired and previously worked in the microelectronics industry as an engineering manager. He and his wife enjoy travel, gardening, kayaking and canoeing. Mike is also a justice of the peace in Walden.

John Miller and his wife, Karen, live in Stannard on her folks' family farm. Their children, Sarah, Kristen and Matthew, are the sixth generation to have grown up on the farm. For the last 34 years John has been employed by the Vermont Agency of Natural Resources, Department of Environmental Conservation. He currently serves as a Permit Specialist at the Agency's Barre and St. Johnsbury Regional Offices.

### The Land Trust Alliance

The Land Trust Alliance (LTA) is the umbrella organization for some 1,500 land conservation agencies in the US. Its members include nation- and state-wide bodies such as The Nature Conservancy and Vermont Land Trust, as well as subregional and single-town land trusts such as the Northern Rivers and Greensboro Land Trusts. In 2007 the LTA established an Accreditation Commission to certify individual land trusts after reviewing their compliance with accepted standards and practices. Being formed only in 2007, the NRLT is too new to have applied for accreditation, but it expects to do so in the near future.

The LTA is starting a conservation defense program under which land trusts will purchase insurance to defend against potential lawsuits threatening the terms of their conservation easements. The arrangement is expected to reduce the stewardship endowments needed for this purpose, freeing resources for new projects. NRLT has registered for this program, and plans to bring its seven easements into it in January 2013.



# The Northern Rivers Land Trust Newsletter

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## Nature Conservancy and NRLT close on Keeler Pond easement

NRLT acquired its sixth conservation easement in October 2012 by closing with The Nature Conservancy (TNC) on a property of 22 acres encompassing Keeler Pond in Wolcott. The 4-acre pond drains into Keeler Brook, which then drains successively into Tucker Brook, Alder Brook, Hardwick Lake and finally the Lamoille River.

TNC acquired the parcel as "trade land," meaning that the former owners donated it to TNC to resell and utilize the proceeds elsewhere after conserving the property with a land trust. In October TNC sold the parcel to David and Pamela Ely of Carlisle, Massachusetts, and together with the easement gave NRLT the \$5,000 stewardship fee that land trusts need to monitor and defend easements in perpetuity.



*NRLT secretary Bob Hawk views Keeler Pond*

## Lammi property near Nichols Pond becomes NRLT's 7th easement



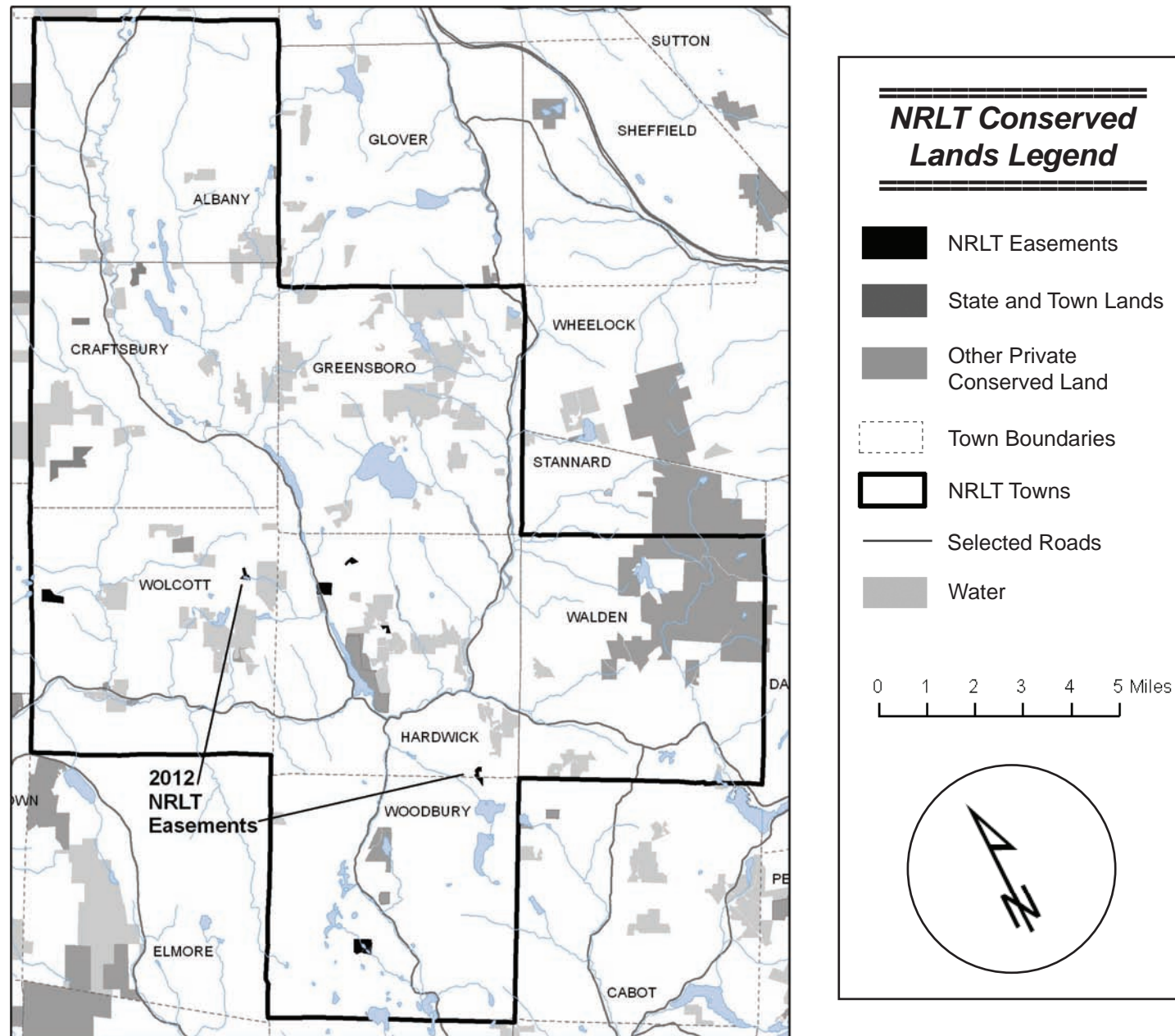
*Lisa Lammi shows her Class II wetland to NRLT site team*

In October Lisa Lammi donated an easement on her 36-acre property straddling the Hardwick and Woodbury town lines on Dutton and Nichols Pond Roads. Of several conserved parcels in the two towns, the Lammi property is the closest to Nichols Ledge and Nichols Pond, two spots of extraordinary natural beauty in our area. (See ortho photo on next page.)

The Lammi stewardship fee is being financed by a \$5,000 grant from the Green Mountain Fund (GMF), a donor-advised fund of the Vermont Community Foundation based in Middlebury. The GMF, established in 1993, supports charitable activities in much of NRLT'S region. The GMF grant will enable the NRLT to monitor the Lammi easement annually and defend it in perpetuity.



# Conserved Lands in the Northern Rivers Land Trust Region



## NRLT's Hardwick Lake study

Hardwick Lake, managed by the Hardwick Electric Company, was completed in 1920 by damming the Lamoille River. Currently drained in winter to maintain flow in the river and limit ice backup, the lake no longer serves its original purpose of supporting electric power generation. Its retention has recently been an issue since it raises the river's temperature downstream.

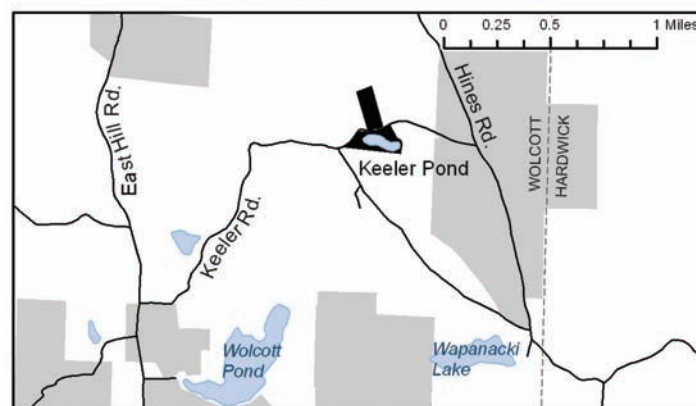
At NRLT's annual meeting in June 2012, Elizabeth "Wiz" Dow, a professor at Louisiana State University, author of *Hardwick on the Map* and part-time Hardwick resident, spoke about the lake's history.

As part of its educational mission, in collaboration with Prof. Farley Brown and students of Sterling College, NRLT is studying Hardwick Lake as a community resource. Topics include the history of the lake and dam, use of the abutting land, issues raised about the lake's retention or removal, and its current ecological status, recreational use, and value to the community.

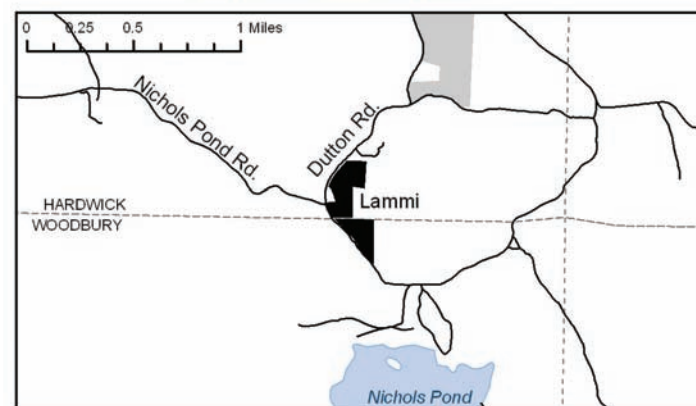
This summer and fall the Sterling team inventoried the lake's fish, wildlife and plant communities. This winter, assisted by an NRLT intern, Travis Van Alstyn, it will interview public officials and local citizens. Travis, a former student at Sterling College, is currently a graduate student at Castleton State College.

The study will be completed in 2013, with discussion of the findings at NRLT's annual meeting in June.

### Keeler Pond Easement



### Lammi Easement



## About NRLT

NRLT is a partnership of people working together to ensure that, as Vermont changes, rural land in our region is not lost to development. We help farm families conserve agricultural land for future generations, preserving not only our heritage but also our economic future.

We protect forestland that supports a healthy wood products industry and sustains habitat critical for black bear, songbirds, deer, and other wildlife. We help to permanently protect irreplaceable fields, woods, and shoreline essential for recreation and scenic enjoyment. All this is done while recognizing the need for town planning that allocates portions of the landscape to residential and commercial uses.

### Conserving your land

Using legal tools called "conservation easements" or "grants of development rights," NRLT helps landowners to voluntarily limit development while keeping the land open for forestry, farming, and recreation. Conserved property remains in private ownership with the peace of mind that it is protected forever. The landowner decides whether to allow public access.

### Tax deduction

Easement donations qualify as charitable contributions for federal and state income and estate taxes, but do not normally lower property taxes.

### Financing NRLT

We work with landowners who love their land and want to see it conserved. Some conservation groups, such as the Vermont Land Trust (VLT), raise funds to buy development rights. NRLT lacks the necessary resources for purchase, so all seven of its easements have been generously donated by the landowners.

We share projects with the VLT, which receives funding from The Vermont Housing and Conservation Board, the Freeman Foundation, and private donors. But to cover our costs we rely on funds raised from residents and friends of the towns we serve. In 2011, 80 individuals and three family foundations donated a total of \$8,923. In addition we received \$7,500 in grants for our new easements.

We talk regularly with potential conservators, and incur expenses for appraisals, surveys, purchase of easements, and monitoring. You can help by sending a check to NRLT, Box 112, Hardwick, VT 05843.

*Visit our website to see the latest news and more details about our projects.*

### NRLT Board of Trustees

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