Notes from FLT

The Newsletter of the Francestown Land Trust, Inc. Fall 2008

SPECIAL FOCUS ISSUE
RAND BROOK FOREST

To celebrate the completion of the second expansion phase of the Rand Brook Forest (RBF), we are devoting this issue of the newsletter to the Rand Brook Forest and to the collaborative Headwaters 1 (HP-I) project which made it possible.

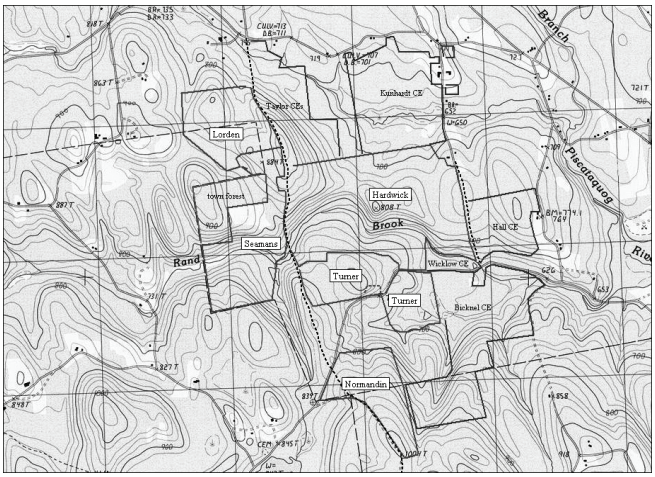
As a result of the successful HP-I effort by the Francestown Land Trust (FLT), the Piscataquog Land Conservancy (PLC) and the Monadnock Conservancy (MC), what started as FLT's first land acquisition in 1999 is now part of almost 1,000 acres of contiguous, conserved acreage that has earned the name of the Rand Brook Conservation Area.

At the core of the Area in Francestown is the 581 acre Rand Brook Forest which connects with:

- the 54 acre Driscoll Hill Town Forest
- 115 acres owned by the PLC with an easement held by the Town of Francestown.
- 220 +/- private acres protected by landowners with conservation easements

The Rand Brook and Driscoll Hill Forests, as well as the PLC property, are a valuable community resource, offering a variety of passive recreational activities to the public.

Less than a mile to the southwest in Greenfield is a 986+ acre block previously protected by the Town of Greenfield and landowners working with the MC. As part of the HP-I project 20 additional acres have been added to that area and an additional 50+ acres are in the works. And to the east, between Old County Road South and the Piscataquog River are



another 77 acres protected, as part of the Headwaters-I project, by landowners with the help of PLC and the Town of Francestown.

HP-I has enjoyed broad based support not only from the three lead partners but also from landowners, the Town of Francestown, hundreds of individual donors from throughout the region, the new federal Landowner's Incentive Program—managed by NH Fish and Game—the Society for the Protection of NH Forests and a number of charitable foundations including the Russell Foundation, the Verney Foundation, Fields and Ponds, the Cricket Foundation, the Wharton Trust, the Samuel P. Hunt Foundation and the Davis Conservation Foundation.

This newsletter is dedicated, with many thanks, to all of those, without whom, the Rand Brook Conservation Area could not have been created.

Tom Wessels Reveals Some of RBF's Hidden Past

By Elizabeth Hunter Lavallee

Editor's Note: Following the June Annual Meeting, Tom Wessels, noted ecologist, author and professor at Antioch University of New England, led a 2 hour hike in the southern portion of the Rand Brook Forest. Participants were so enthusiastic, we wanted to share with others some of the highlights of the walk.

"We can interpret detailed history in this area, going back in some instances over 500 years," Wessels told the audience, "just by looking at evidence in our forests and fields, such as the way stone walls are built and trees and stumps are scarred. Think of it as forest forensics."

From 1810 to 1840, northern New England was the wool capital of the world. Close to 80% if the land was cleared, primarily for raising Merino sheep. "Living in Francestown, without knowing anything else about your land, you could describe it as part of a former sheep farm and you'd have about a 75% chance of being right," he said. Virtually all the old stone walls in town would have been built during this period. With 4 million sheep grazing in the region, at its peak, the land soon became seriously eroded. As a result and for other reasons, most of the sheep farming moved west, and eventually dairy farming became more predominant. Although this boom time – called "Sheep Fever" – was 170 years ago, much evidence remains today in the lay of the land, stone walls, cellar holes, and trees and other growth in our fields and forests.

On the hike, Wessels expanded upon many of the points made during his slide presentation. The size of the stones in a wall can tell you a great deal about the history of the land use around it – smaller (fist-sized) stones indicate the walls bounded crop fields, while larger stones would bound hay field and pastures. Forest floors with noticeable holes and other unevenness (called "pillows and cradles") are woodlands that were never opened up agriculturally. By the same token, when ground is more smooth and even, it is evidence that at one point it was plowed.

We came upon an old cellar hole (later identified as the Henry Spaulding homestead) that Wessels estimated to be pre-1820s. "This was a classic, prosperous farm house," he said, pointing out the original house boundaries, threshold, and well.

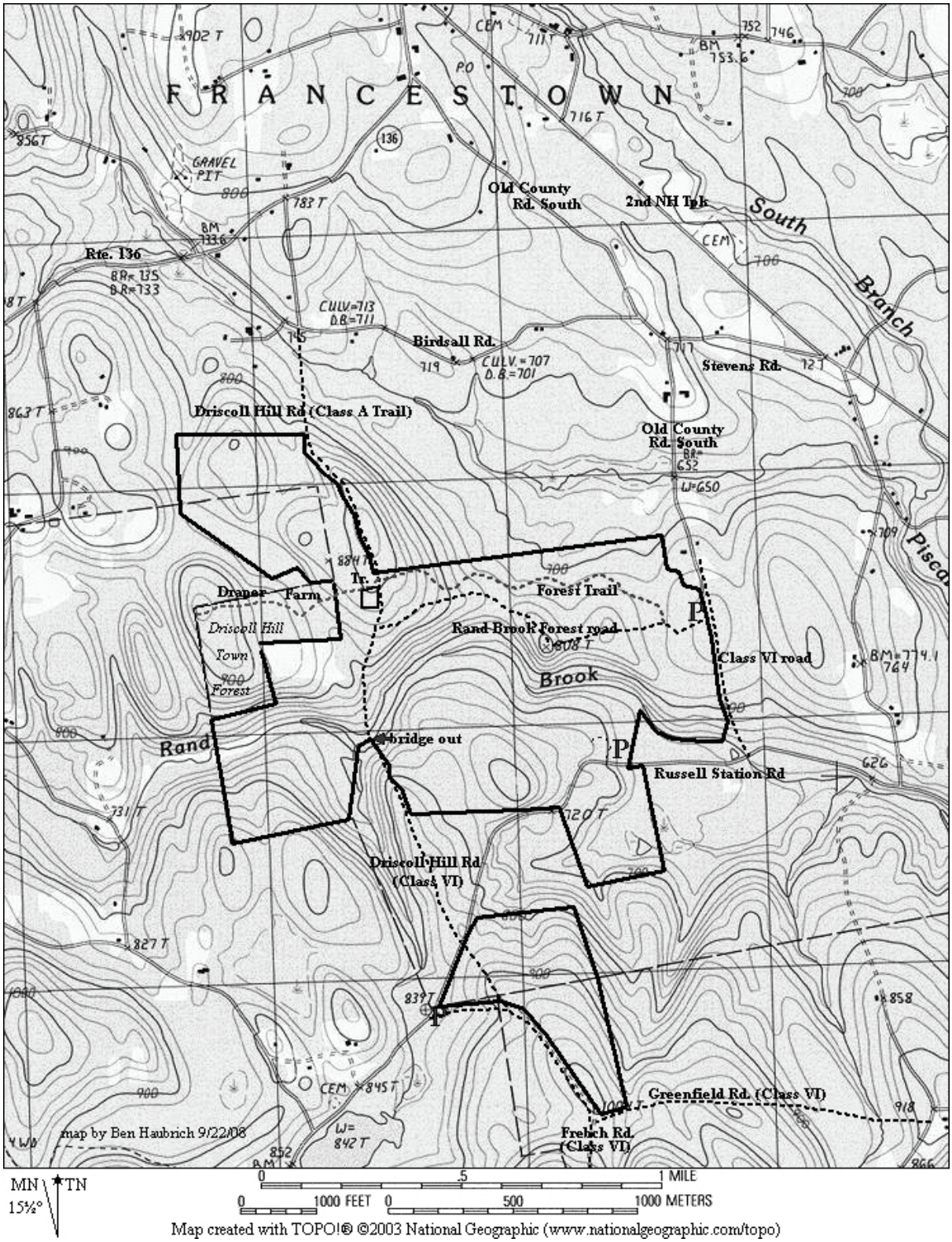
Wessels then brought our attention to a flat top cairn in the forest. Although this cairn was likely a rock depository from the adjacent once-cultivated land, some ancient cairns are believed to be of Native American construction. Wessels shared the speculation of scholars that such cairns have something to do with burial and religious beliefs and practices of the Abenaki Indians, who lived and traveled in the area well before the days of "Sheep Fever."

Wessels caught the group's attention when he claimed, "Trees actually communicate." He went on to explain that it is most likely a form of chemical communication that helps them collectively to survive. For instance, trees do something called "masting" where within a region they will all have limited seed production for a number of years, and then collectively have a banner year. We've all experienced this phenomenon with, for instance, oak trees and acorns, and conifers and pinecones. By masting, these trees can help to assure that the bugs and other predators who feed on them don't get all the seeds. Masting is not weather-related, and Wessels claimed that, contrary to popular opinion, a heavy acorn autumn provides no clues to the upcoming winter.

Wessels showed the group how to tell when a tree was damaged by counting the rings that heal the wound around the scar. He helped us to understand how the forest is a dynamic integrated system where tree stumps can continue to grow, gaining sustenance from the roots of surrounding trees. He showed us how some trees photosynthesize through their bark, and how to interpret the story behind the shape of a

(Continued on page 7)

Rand Brook Forest Welcomes You



Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

Rand Brook

The 6.4 mile long Rand Brook rises in Greenfield in the wetlands north of 136 which it crosses on its way into Francestown. After entering the southwest corner of Francestown it crosses Driscoll Hill Road and runs along Russell Station Road which it crosses twice before joining the South Branch of the Piscataquog River. The NH Department of Environmental Services designated Rand Brook as a "reference stream" against which the quality and health of other streams in central and southern New Hampshire should be measured.

Rand Brook Forest

In 1999 a small group of conservationists revived the dormant Francestown Land Conservation, now known as the Francestown Land Trust (FLT). Together they inspired area residents to raise the funds necessary to purchase the first 232 acres of the Rand Brook Forest. Since then five additional parcels totaling 351 acres have been purchased. 387 of the total 581 acres have the additional protection of conservation easements held by the Piscataquog Land Conservancy and the Society and the Society for Protection of New Hampshire Forests.

The Francestown Land Trust manages the RBF with the primary objectives of protecting critical water resources and of conserving the open space and habitat needed to support bio-diversity. FLT also encourages compatible educational and recreational uses by the public.

Exploring Rand Brook Forest: Trails

Trail opportunities in Rand Brook Forest (RBF) range from the narrow Forest Trail to old town roads laid out by some of Francestown's earliest settlers in the late 1700's. The best access to the Rand Brook Forest is via Old County Road South. A **parking area** and information kiosk are located at the end of the town maintained section of Old County Rd. South. The unmaintained (Class VI) portion of Old County Rd. South continues for about 1/3 mile down to Rand Brook and Russell Station Road.

Starting at a closed gate just past the kiosk is the ***Rand Brook Forest Road,*** the main access through the property. It heads westerly for about ½ mile before rising somewhat steeply to an 8-acre field. *RBF Road* generally follows the south (left) edge of the field and meets Driscoll Hill Rd, a Francestown Class A Trail, near an old cellar hole. The distance from the parking area to this intersection is ¾ of a mile.

Forest Trail roughly parallels *RBF Road* to the north. It leaves the *RBF Road* a couple of hundred feet in from the gate. After about a half mile through the woods and along some stone walls the trail enters the field and follows its north edge to Driscoll Hill Rd., not far from the top of Driscoll Hill. Forest Trail's total distance is about ¾ of a mile.

The ***Draper Farm Trail*** leaves Driscoll Hill Rd. almost opposite where Forest Trail joins it. It continues westerly to and through the Driscoll Hill Town Forest, passing by the cellar holes of the Draper homestead, and dead ends at the western boundary of the town forest. Its one-way distance is about ½ mile.

From the intersection with Forest Trail, ***Driscoll Hill Road*** goes north over the top of Driscoll Hill, drops down, steeply in one section, then levels out before crossing Brennan Brook and meeting town maintained Birdsall Rd.

To the south *Driscoll Hill Road* passes by *RBF Road*, and descends to Rand Brook, where there is no longer a bridge. In low water one might cross the brook by jumping from rock to rock. On the other side of the brook Driscoll Hill Rd. ascends steeply over damp, eroded terrain before leveling out just before meeting Russell Station Rd. The total distance of Driscoll Hill Rd. from Birdsall Rd. to Russell Station Rd. is about 1¾ mile.

After Driscoll Hill Rd. crosses Russell Station Rd. it continues south, through the RBF , to where it connects to French Rd. near the Francestown, Greenfield, Lyndeborough town line intersection. French Rd, which leaves Russell Station Rd in Greenfield, near the southwest corner of Francestown, continues into Lyndeborough and connects there with Class V Mountain Rd.

Directions and Etiquette

Take Route 136 west from the center of Francestown. Take first left on Old County Road South.. After the intersection with Birdsall, bear right to parking lot.

- *Dogs on a leash are welcome.*
- *The use of motorized wheeled vehicles on the Class VI roads and Class A trails that run through the RBF is regulated by the state and the town. Motorized, wheeled vehicles are not permitted in the RBF itself.*
- *Mountain bikes and horses must stay on maintained trails. Sno-mobiles are allowed only on Forest Rd*
- *Pedestrians, including skiers and snowshoers, are welcome to explore off trail.*

If you have questions or comments please contact us at info@francestownlandtrust.org.

Rand Brook Forest Habit Types

Riparian

The Rand Brook Forest protects over 1½ miles of frontage on both sides of Rand Brook. It is a year-round resource for bobcat (tracks seen on the left), otter, bear, deer, moose, coyote and numerous other birds and animals. Insects which emerge earlier in river valleys than in the uplands are an important food source for migrating birds while rich floodplain soils support nut producing trees and fruiting shrubs and vines. Shaded shorelines maintain the cool temperatures needed for healthy populations of brook trout, caddisfly and other indicator species while minimizing evaporation and water loss. Keeping activites that cause soil erosion at a distance of several hundred feet from the brook prevents siltation and turbidity.

Vernal Pools and Wetlands

Vernal pools are temporary, fish-free bodies of water that appear in the spring before drying out, usually, by the summer. These unassuming water bodies support an abundance of life and critical habitat. They are hatcheries for the peepers, salamanders and many other species, a food supply for snakes, turtles, birds and other carnivores, a source of drinking water for migrating reptiles and amphibians. As you walk into the RBF from Old County Road in the early spring, listen for the sound of wood frogs coming from one of the forest's several vernal pools.

Of the wetland areas in the RBF, the **black gum swamp** located to the west of Driscoll Hill Road north of the Draper Farm Trail is one of the most interesting. "According to the NH Natural Heritage bureau, black gum swamps are very rare in the state and vulnerable to extinction." (*Wildlines*, *Winter 2007)*. Black gum trees are the oldest known hardwood in the US. With one NH native documented at 679 years, black gums are also the oldest tree of any kind in our state. Because they share their root system with each other, the genetic age of black gums may be considerably greater—1,000+ years! This clonal root system along with brittle branches which break easily under the stress of ice, snow and wind may partly explain their longevity. The black gum is one of the trees whose leaves turn bright red early in the fall. Known as foliar fruit flagging, this early change is believed to alert migrating birds to the presence of high-energy foods. Birds known to feed on the clustered dark-blue fruit include the Robin, Hermit Thrust, Cardinal, Mocking Bird, Bluebird, Yellow-bellied Sapsucker, Scarlet Tanager and Cedar Waxwing. The berries are also an important food source for many mammals.

Rand Brook Forest Habit Types (*Continued*)

Fields, South Facing Slopes & Shrubland

Much of the RBF was logged before FLT purchased the land. Two of the heavily cut areas are being maintained as field and shrubland. Both types of habitat are disappearing in NH as the fields that were created in the 1800's mostly for the sheep industry have reverted to forest. The **field** along Driscoll Hill Road looks southward towards Rose Mountain. Crab apples that will eventually be a rich food source for wildlife have been planted along the north edge of the field. The **south facing slope** is important for wildlife because the sun makes it warmer. During the winter snow melts faster providing a source of fresh water and reducing the depth of the snow so it is easier for animals to get around and to reach food sources. These slopes are also some of the first snow-free areas in the spring.

The next stage of forest growth is described as **shrubland**, or early successional habitat. What is often described by first-time visitors as 'that ugly scrubby area' on the left as you walk into RBF from Old County Road is being intentionally maintained as shrubland. New growth is a food source or 'browse' for deer and moose. Shrubland is also favored by certain species such as the New England cottontail which may soon be classified as threatened or endangered. To them,' scrubby' is beautiful.

As you walk through these successional areas of forest, look for signs of woodcock, turkey, towhee, deer and moose.

Forest

Most of the RBF is composed of a transitional forest type with a predominance of hemlock, hardwood, and pine. A second type, "Appalachian Oak-Pine," is found along Rand Brook. Both types reflect dry, sandy soils. On the south side of Russell Station Road is a plantation stand of red pine. The forests will be managed to maintain habitat for species including bobcat, woodturtle, blandings turtle, eastern smooth green and black racer snakes, northern goshawk and woodcock.

Partial Bibliography: *Identifying and Protecting New Hampshire's Significant Wildlife Habitat*, Kanter, Suomala and Snyder. *Wildlines, Winter 2007*. NH Department of Environmental Services Website

Family Fun with FLT

Treasure Hunting, Geo Style

In July, the first geocache was hidden in the Rand Brook Forest by Benji and Jonas Bromberg and their friend Peter Thompson with help from FLT's land manager, Ben Haubrich.

Geocaching is a way for modern day pirates to capture the fun of a treasure hunt. These new treasure hunters use a variety of high-tech positioning tools, including a global positioning system (GPS), to find a particular destination. When they reach the equivalent of the 'X' on a pirate's map, the treasure hunters have to find the hidden treasure, or cache. The cache in the Rand Brook Forest is a waterproof, plastic box containing a logbook and, when it was first hidden, a collection of small round objects. The successful hunter signs the log book and takes the 'treasure' after replacing it with a new item. The cache is then returned to its hiding place. On returning home, a geo-cacher can go to a web-site and report on the experience.

Here's what the the **f**irst (person) **t**o **f**ind the cache—or 'FTF', as they are known—had to say:

I live 11 miles away from here, but was 110 miles away when I noticed this cache this morning. Two and a half hours later I found myself circling the area trying to find an access point, but I never seemed to get any closer and was getting ready to give up as I needed to get to work.

Now that I notice the topo map on the page, it turns out I started up Driscoll Hill Rd from the south and knowing what I know now I think I'm glad I didn't pursue that route. Instead I serendipitously found a nice trailhead at the end of Old County Rd S and followed Rand Brook Forest Rd in.

*I have only superlatives for this area! The forest was beautiful in the early morning and the old road made for highly enjoyable walking. To the cache and back was an easy 2.6 mile roundtrip and along the way I scared up countless frogs, grasshoppers, and butterflies; I even had a two-foot long water snake (*editor's note: this may not have been a water snake) *scare me as he stayed perfectly still on the road until I gave him a gentle prod and he let me know he wasn't amused.*

The cache area was a fascinating look at quite a remarkable remnant of the past...truly amazing when you really think about it. Thanks so much for showing me this outstanding forest, yet another place I'd never have known about if it wasn't for this amazing hobby!

The second visitors were from Francestown. The mother of two boys reports: *They had a ball! Totally a great experience and they can't wait to go again. It was their first cache ever.*

To get started, go to www.geocaching.com and use the 03043 zip code to find several caches in Francestown, including the newly established "Round Rand Cache".

What are you waiting for?

(Continued from page 2)

tree. We learned how to make our own weather sticks out of conifer branches, and how to identify a bar way (opening in stone walls) to earlier maple sugaring enterprises. At one point we were on an overgrown Class 6 road in Rand Forest. Wessels explained that the bounding stone walls that were set so far back from the road revealed that it had once been a major thoroughfare, probably used to herd sheep in the early 1800s. "You simply need to know how to read the signs," he explained.

To learn more about Wessels' insights, check out *Reading the Forested Landscape, a Natural History of New England*, *The Granite Landscape and The Myth of Progress: Toward a Sustainable Future.*

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TRAIL MAP INSIDE

Discovering Nature's Treasures

Every summer, noted educator Carol Lunan hits the trails in the Rand Brook Forest to share her love of nature with eager learners of all ages. Don't miss next year's adventures.

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