# Will this Land Be Forever Unpaved?

In the fastest growing part of New Hampshire, a tri-town community is rallying to try to save land that protects their drinking water, a place to play outdoors, and their link to the birth of our nation.

By Brenda Charpentier





*Above:* The extensive trail system on the Powder Major's Farm and Forest land offers ready-made recreation opportunities. The trails take you along the Oyster River and past the site of the former Dishwater Mill. These and title page photo by Jerry Monkman/EcoPhotography.

**If you walk** the meandering trails of the nearly 300 acres of land that are part of the Powder Major's Farm and Forest conservation project, your feet will land on dirt, pine needles, mud, leaves, grass and wildflowers (mind the buttercups!) and maybe even the Oyster River's rocky bottom—if you're prone to wading on a hot summer day.

Just like the Powder Major's, your feet will not strike pavement. Close to 250 years have passed since Major John Demeritt walked his farm's fields and woodlands near the convergence of Madbury, Lee and Durham, and that much at least has not changed. But how pensively he must have walked, hoping no Loyalist spies had told the British about all that gunpowder stored at his farm. Did the gurgle of the Oyster River mingle with uneasy thoughts—*What if the Redcoats come to my house today?* What a relief it must have been when the day finally came to load those barrels of powder—stolen by Demeritt and fellow local patriots in a moonlight raid on the British fort in Portsmouth Harbor—onto an oxcart and slowly rumble it off southward to help his compatriots fight the Battle of Bunker Hill in the summer of 1775.

That road would have been dirt, of course. Today the Seacoast region is the fastest growing in the state; we think of dirt roads as either quaint, scenic novelties or car eaters, and pavement is pervasively covering former farms, forests and wetlands.

But not here. Most of the Powder Major's former farm and forestland today is owned and well managed by the Goss family and a big chunk that juts into their property is owned by the town

of Madbury. It's all part of the Powder Major conservation project, and it all remains unpaved. That simple fact has everything to do with how this land today functions as a community resource and—if successfully conserved—could increasingly serve as such in the future.

#### How 'bout a drink?

It is precisely its unpaved state that makes the Powder Major property an unassuming deliverer of clean drinking water for UNH and Durham, according to Tom Lee, PhD, an associate professor of forest ecology at UNH.

Lee is also the chair of the water testing committee of the Oyster River Watershed Association (ORWA). He leads a committed band of volunteers who for the past 15 years—every month from April to October—have dipped their buckets into the Oyster and tested the water on its way to faucets downstream. Their faithful research has produced conclusive data: This is some great water.

"Overall the Oyster River is in excellent shape," Lee said in a recent interview.

Wait a minute! This is not the gloom and doom news you're used to hearing about in conservation circles. No river on fire or stained red here. Refreshing, isn't it? Instead, here we have a pearl that's ours to keep untarnished as development pressures mount. The key, Lee said, is keeping still-intact land along the Oyster River, especially big blocks of land like the Powder Major's Farm property, forever unpaved.



Above: Oyster River Watershed Association members Dick Weyrick and Tom Lee stand in front of the pumphouse on the UNH campus in Durham, where a pipe draws water from the Oyster River and sends it to a nearby treatment plant. From there, it travels to faucets on the UNH campus and the rest of Durham.

**Right:** Volunteer water testers drop a bucket into the Oyster River to gather a sample for testing. The Oyster River Watershed Association has carried out water quality testing at sites along the Oyster and its tributaries for the past 15 years.



Photo courtesy Oyster River Watershed Assoc.



*In 1996, members of the First N.H. Militia from Newmarket helped Madbury dedicate a silver maple to the heroics of Maj. John Demeritt.* 

## Who was the Powder Major?

Maj. John Demeritt owned this farm and woodlands in the late 1700s. He was known locally as "The Powder Major" after taking part in a daring raid of the British Fort William and Mary (now Fort Constitution) at New Castle in 1774. Demeritt stored some of the gunpowder barrels stolen in the raid in a cellar tunnel under his Madbury farmhouse. Six months later, the story goes, he brought the gunpowder in the nick of time to American troops nearly out of ammunition in the Battle of Bunker Hill.

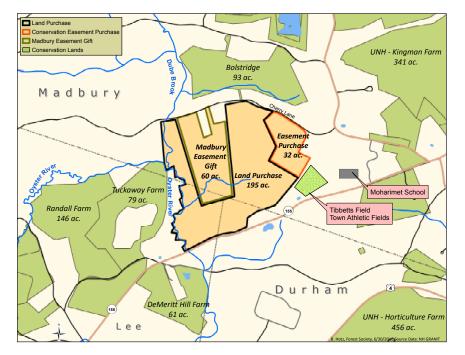
Here is a partial account of the raid as written in the 1996 Madbury Town Report:

"In 1774 the British Parliament passed an act prohibiting the further importation of gunpowder and military stores into the colonies. We have the following first-hand account of Eleazar Bennett of Durham as to the events that followed:

'I was working for Major Sullivan, he says, when Micah Davis came up and told me Major Sullivan wanted me to go to Portsmouth, and to get all the men I could to go with him. The men who went, as far as I can remember, were Major John Sullivan, Captain Winborn Adams, Ebenezer Thompson, John Demeritt, Alpheus and Jonathan Chesley, John Spencer, Micah Davis, Isaac and Benjamin Small of Durham; Ebenezer Sullivan, Captain Langdon and Thomas Pickering of Portsmouth; John Griffin, James Underwood and Alexander Scammel. We took a gondola belonging to Benjamin Mathes, who was too old to go, and went down the river to Portsmouth.

It was a clear, cold moonlight night. We sailed down to the Fort at the mouth of Piscataqua Harbor. The water was so shallow that we could not bring the boat to within a rod of shore. We waded through the water in perfect silence, mounted the Fort, surprised the Garrison, and bound the captain. In the Fort we found one hundred casks of powder and one hundred small arms, which we brought down to the boat. In wading through the water it froze upon us.'

The powder thus obtained from the raid was stored in Durham and at the Demeritt Farm in Madbury."



"The story from our perspective is that the portion of river that flows into and out of the Powder Major property is in good shape, and the only way to keep it that way is to keep it well buffered. You have to have natural vegetation along the banks for a couple of hundred feet back and a minimal amount of impervious surfacesroads, parking lots, buildings, any kind of material that prevents water from percolating into the ground," Lee said.

So you can imagine what would happen if the Powder Major's forests and fields-so relatively flat and buildable, so close to schools and N.H. Rt. 155, so desirably close to the seacoastbecame a housing subdivision of 60-70 homes, paved driveways and roads and green fertilized lawns. Rainwater would run off the impervious surfaces collecting pollutants along the way and dump quickly into the Oyster River. This deluge-then-drought scenario would replace the present one of clean rainwater sinking into the soft earth slowly and replenishing the ground water.

"Once about 10 percent of a watershed is covered with impervious surfaces, water quality goes down. The Oyster River Watershed is at about 7 percent impervious surfaces, so land protection is so important right now. Now is the time to do it," Lee said.

If protecting water quality was the only reason to conserve the Powder Major property, most of us would agree that that would be enough. But the reality is that conservation dollars are limited, and buildable land near the seacoast is more expensive than most other areas of New Hampshire. The Forest Society and the conservation communities in all three towns are coming together to try to raise \$2.25 million to buy the land and an easement from the Goss family, members of which are committed to a conservation outcome for the land and are selling it for below its market value, precisely because the project isn't just about water quality. It's an excellent example of "strategic conservation"—or choosing a property to focus fundraising energy on that will yield the highest possible reward in terms of both ecological benefits and community benefits.

### **Project Basics**

The Forest Society is working with the towns of Madbury, Lee and Durham to:

- Purchase 195 acres in Madbury, Lee and Durham to create a new, Forest Society reservation open to the public for low-impact recreation.
- Purchase a conservation easement on an abutting 32 acres of agricultural land (hayfields) also owned by the Goss family, which is facilitating the project by selling their land for a price below market value.
- Accept a donated conservation easement on 60 acres of abutting land owned by the Town of Madbury.

Combined, the above actions will result in the conservation of nearly 300 acres of land in the fastest growing region in the state.

That the Powder Major's Farm project hits that mark comes through clearly when you ask members of the local conservation community the question: How do you think the Powder Major property will be a community resource if it's successfully conserved? You will get different answers from different people, with much overlap and much enthusiasm.

#### **Recreation Destination: Let's Connect**

The Goss family has expanded and maintained miles of trails on the property and have generously opened them to the community. Conserving the land would make access to those trails permanent, but what people really love about them is that they connect to an adventure-inviting, large network of trails on other properties, some conserved, some open but not yet conserved.

"This is a key piece in terms of tying those important properties together," said John Nachilly, a member of the Durham Conservation Commission who previously served on Madbury's commission for 25 years.

The recreation vision is to eventually create a greenbelt through Durham, Lee and Madbury of conserved properties serving as a long trail corridor.

Supporting and being a catalyst for a greenbelt is one of the reasons the Goss family approached the Forest Society with their conservation goals, Chuck Goss said.

"We hope this project will have a domino effect in the area with many more conservation decisions being made," he said. "We have been involved in town committees like conservation, historical and ORWA and have been stewards of this property for generations. We have desired to protect it for future generations as green space."

With the Powder Major's size and biodiversity, it holds great promise as not only a recreation destination but also a research site for UNH's diverse life sciences programs, said John Carroll of Durham, a UNH professor of environmental conservation.



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Above, clockwise from top left: Wild edibles expert Russ Cohen leads a foraging walk through the property; the snowmobile bridge across the Oyster River; Delsin and Indiana Wormstead sample some sheep sorrel during a wild edibles hike on the Powder Major property; in May, a group of birders heard or saw 40 bird species during a three-hour excursion; a map of wildlife habitat shows that the land in the Powder Major project is classified by N.H. Fish and Game's Wildlife Action Plan as highest quality in the state or bioregion.

"As time goes on, we need more and more properties that are geographically close to the university. Students can get to this property easily by bicycle," he said.

Research into water quality, wildlife habitat, botany, forestrythe list is extensive when it comes to potential for UNH students, he added.

On the other end of the educational spectrum, Moharimet Elementary School is within walking distance of the Powder Major property. It draws students from Durham, Madbury and Lee in the Oyster River School District, which has an active environmental sustainability program. For years, the Goss family has welcomed Moharimet students to their maple groves to collect maple sap for boiling in the school's own maple sugar house. No busing would be needed for more field trips to the Powder Major land for both fun and environmental learning.

#### **Animal Attraction**

There are 15 distinct wetland natural communities on the Powder Major's Farm property, which bespeaks its value as a diverse wildlife habitat. Both rare and common species of plants and animals take full advantage of the nearly mile-long river frontage, beaver flowages, marshes, swamps and a mix of upland forest types.

Its very shape—a big, deep block of land not fragmented by roads-adds to its value for wildlife, said Anne Tappan, a member of the Lee Conservation Commission whose professional background is in wildlife biology.

"Size matters. Bigger is better for wildlife," she said. "In the Seacoast Region large parcels are increasingly uncommon."

The N.H. Fish and Game's Wildlife Action Plan map of this area (above) tells the story well, she said.

The Powder Major trails can be accessed from Tibbetts Field, used by all three communities.

"The entire Powder Major property ... is all habitat either ranked highest in New Hampshire or highest in the biological region and supporting habitat, and that tells you that there's a lot going on here," she said.

But it's not just the wildlife on the Powder Major property that may benefit. The Oyster River is one of seven rivers that flow into the Great Bay, a tidal nursery for fish and other Seacoast wildlife. Keeping the Oyster River clean by protecting the land around it will help to protect that tidal nursery.

"Great Bay is greatly troubled as far as water quality, and as the rivers go, Great Bay is going to go in that direction, too," said Dick Weyrick, a member of the Oyster River Watershed Association and a retired UNH forestry professor.

#### **Keeper of Stories and Quality of Life**

These three Seacoast towns working together for the good of the region—it's been done before, in the Revolutionary War, pointed out Eric Fiegenbaum, the chair of the Madbury Conservation Commission and the town's administrative assistant.

"In Madbury, there is no better historical connection than the ("Powder Major") Demeritt one for us to protect," Fiegenbaum said.

If the Powder Major's Farm is not conserved and ultimately gets developed, the tangible link to Revolution heroics would weaken. "It's land that connects Madbury to those activities that were going on during the Revolutionary War," Feigenbaum said.

Fiegenbaum gets the prize for the most succinct and pointed summary of the crux of this conservation project: "It's either this or Powder Major Drive."

There is another "community resource" connection that predates even the Revolution. Before European settlement, this property was used communally for farming by the Abenaki people. The name Moharimet—possibly an alternate spelling of Mahomet, a 17thcentury Abenaki chief—is associated with the spot, and the nearby Moharimet Elementary School is an acknowledgement of that link to land that once sustained an earlier, vibrant culture.

A future as a conserved Forest Society reservation would bring this place full circle. If the conservation project is successful, the Powder Major's Farm and Forest will continue its long tradition as a treasured community resource, forever unpaved. Y

## **Fundraising Campaign Update**

The Forest Society is seeking to raise \$2.25 million by Oct. 31 to cover the land and easement purchases and the stewardship and transaction costs for the Powder Major's Farm and Forest project. As of mid-July when *Forest Notes* was being printed, the fundraising campaign had passed the half-way milestone at \$1.3 million.

Thank you to these generous organizations, towns and agencies for supporting this project:

- N.H. Land and Community Heritage Investment Program (LCHIP) — \$380,000
- Natural Resources Conservation Service's Agricultural Land Easement program — \$175,000
- Town of Madbury \$75,000 (plus conservation easement value of \$175,000)
- Town of Lee \$155,000
- N.H. DES Aquatic Resource Mitigation Program \$148,000
- Bafflin Foundation \$50,000
- Conservation License Plate (Moose Plate) through the N.H. State Conservation Committee Grant Program — \$20,000
- Davis Conservation Foundation \$20,000
- Piscatagua Region Estuaries Program \$2,330
- Great Bay Resource Protection Partnership \$6,500
- Individual donations from private contributors \$165,000

Note: The Town of Durham has pledged \$120,000, pending final approval of a town-held conservation easement on land within Durham.

## How You Can Help

Individual donations will be needed to bridge the gap between the amounts raised through grants and town conservation funds and the total needed to complete the project.

If you would like to contribute, please send a gift—any amount will greatly help—by using the envelope enclosed in this issue of Forest Notes or go online to give at

www.forestsociety.org/powder\_major.