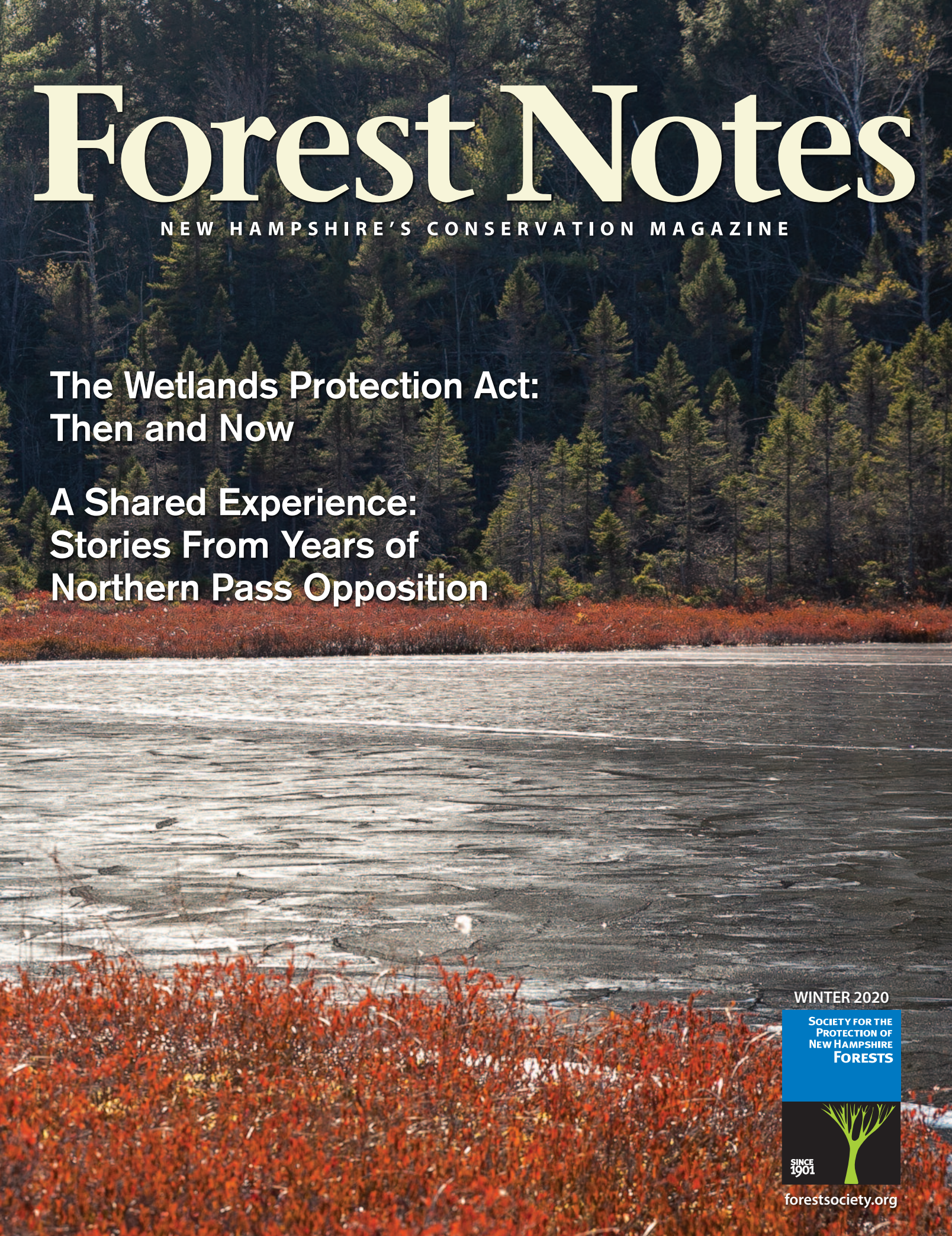
Forest Notes

NEW HAMPSHIRE'S CONSERVATION MAGAZINE



The Wetlands Protection Act: Then and Now

A Shared Experience: Stories From Years of Northern Pass Opposition

WINTER 2020

Society for the Protection of New Hampshire Forests

SINCE 1901

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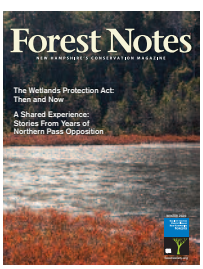
SOCIETY FOR THE PROTECTION OF NEW HAMPSHIRE FORESTS
SINCE 1901

JERRY MONKMAN (SULLIVAN FARM, NASHUA)

FEATURES

DEPARTMENTS



On our cover:
Ice forms on the Forest Society's Sharon Bog during a cold snap in November.
Photo by Ryan Smith.

(CLOCKWISE FROM LEFT) RYAN SMITH, EMILY LORD, DAVE ANDERSON

Living Up To Our Mission

Forest Notes' editor Ryan Smith tells me that this is our 300th issue of New Hampshire's conservation magazine, which the Forest Society began publishing in 1937, following Philip Ayres retirement as the Forest Society's first forester in 1935. During Lawrance Rathbun's subsequent 35-year tenure as forester, the pages of *Forest Notes* informed members and forestland owners and advocated strongly for policies that favor keeping forests as forests.

When Paul Bofinger was named president/forester in 1973, he continued that advocacy. In the winter 1973 issue he opined about the relative wisdom of proposals for a nuclear power plant in Seabrook and an oil refinery on the shores of Great Bay in Durham, invoking the words "myopia," "incompetence," and "illegality" in one sentence.

In 1996, then newly installed President/Forester Jane Difley wrote of "changing people's relationship to land, spreading a land ethic throughout the state, and translating that ethic into action."

It is with a deep respect for the history and past accomplishments of those who came before that I find myself privileged to be the new president of the Forest Society. I believe firmly that our mission to perpetuate forests and manage them

Society for the Protection of New Hampshire Forests
A nonprofit membership organization founded in 1901 to protect the state's most important landscapes and promote wise use of its renewable natural resources. Basic annual membership fee is $40 and includes a subscription to *Forest Notes*.

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54 Portsmouth Street, Concord, N.H. 03301 | Phone: 603-224-9945 | Fax: 603-228-0423
info@forestsociety.org | forestsociety.org

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wisely is more relevant than ever, and I relish the chance to work with our trustees, our staff, and our generous members to show the world how and why forests matter. It is also true that the world is changing around us and we must evolve to meet new challenges. Climate change demands that we, as a forestry organization and New Hampshire's third-largest private landowner, help lead the way in showing how sustainable forest management can provide strategies and solutions.

In an increasingly urbanized New Hampshire, our forest reservations represent our greatest opportunity to ensure that not only our mission, but the Forest Society itself, remains relevant. More than a quarter of a million people visit one of our 189 forest reservations annually. Engaging those visitors and soliciting their participation in the fulfillment of our mission must be a priority.

How do we do those things? Our staff and trustees are discussing new ideas every day. I invite your input.

Jack Savage is the president of the Society for the Protection of New Hampshire Forests. He can be reached by email at jsavage@forestsociety.org.

WEB EXCLUSIVES

Net Flick
forestsociety.org/protectingforests
Watch *Protecting Forests: The Fabric of New Hampshire*

Keeping Forests as Forests
forestsociety.org/sustainableforestry
A Visual Guide to Sustainable Timber Harvests

Bend Not Break
forestsociety.org/wintertrees
How Trees in New England Cope With Wind, Snow, and Ice Storms

Anne and Hunterr Payeur keep an eye on their dog, Oswald, while they scale High Watch Preserve's fire tower in Effingham and Freedom.

Tag #forestsociety on Instagram for a chance to be featured in a future issue of *Forest Notes*.

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(OPPOSITE PAGE) RYAN SMITH; (THIS PAGE, CLOCKWISE FROM TOP LEFT) CHRIS CONROY, FOREST SOCIETY FILES, DAVE ANDERSON, ANNE PAYEAUR

2019 Forest Society Volunteer Work, By the Numbers

By Andy Crowley

In just 29 weeks last year, from the end of April to mid-November, the Forest Society's volunteer trail crew and land stewards contributed an impressive 1,408 hours to conservation and recreational trail projects.

In that time, volunteers amassed 494 hours of trash removal and property cleanup on our forest reservations, including a massive outreach day during the Mount Major Leave No Trace Hotspot Week in June, where 33 volunteers participated.

As work progressed in the summer, our trail crew spent 732 hours on trail and infrastructure projects. During our annual Monadnock Trails Week, 39 volunteers, who contributed a total of 378 hours, repaired more than 2 miles of trail and installed dozens of log waterbars and enormous stone steps on the White Arrow and Dublin trails. Even though we had to cancel two days due to excessive heat, Forest Society staff and volunteers achieved a lot in a short time.

In addition, volunteers spent 182 hours this summer improving infrastructure on our forest reservations. If you visited the Powder Major's Forest this fall on a 5 Hikes trip, you likely noticed the two brand-new 20-foot bridges that were built onsite. Volunteers also added and replaced 273 feet of bog bridging at Cooper Cedar Woods. As I look back on 2019, I'm amazed by the immense amount of work our volunteers accomplished, down to the very last nail.

Andy Crowley is the land steward program coordinator for the Forest Society.

Trail crew volunteer Beth Sullivan of Billerica, Mass., works on a bog bridge at Powder Major's Forest.

Forest Society Awarded LTA Reaccreditation

From left, Forest Society President Jack Savage and Easement Stewardship Manager Naomi Houle receive the Land Trust Alliance's reaccreditation award from Molly Doran, chair of the Land Trust Alliance Reaccreditation Commission. Newly accredited land trusts and land trusts who completed the reaccreditation process in 2018 received their awards at the National Land Conservation Conference held in Raleigh, NC, this fall.

3 Forest Society Projects Receive Funding

Senior Director of Land Conservation Tom Howe (far right) and Public Policy Manager Matt Leahy (second from left) represented the Forest Society in receiving three grant awards from the Land & Community Heritage Investment Program (LCHIP) at a ceremony on December 4 at the Statehouse. In this photo, Governor Chris Sununu (third from left), LCHIP Executive Director Dijit Taylor (third from right), and LCHIP Board Chair Amanda Merrill (center) presented Howe and Leahy with a $300K grant award for the Forest Society's Ammonoosuc River Project, protecting 1.8 miles of river frontage in Bethlehem. Local partner Art Greene, chair of the Ammonoosuc Chapter of Trout Unlimited (second from right), and State Representative Linda Massimilla (far left) joined the event. The Forest Society also received grant awards for Tuckaway Farm in Lee and Morrill Dairy Farm in Boscawen.

Winter 2020 Events //

For more events, including dates for the New Hampshire Maple Experience at The Rocks and the NH Farm and Forest Expo, visit forestsociety.org/events.

Winter Wildlife Events

To register for February 19 programs, email signup@forestsociety.org or call Tina Ripley at 603-224-9945. Preregistration required.

To register for February 23 programs, contact The Fells at 603-763-4789 x3 or email info@thefells.org. Preregistration required.

FEBRUARY 19 | 12:30–3:30 P.M.

Wildlife Tracking Snowshoe Hike With Susan Morse

The Rocks, Bethlehem, NH

Join renowned New England wildlife tracker and educator Susan Morse for a rare, guided snowshoe hike at The Rocks. Morse will share track identification skills and the habits and habitats of active winter mammals.

Cost: $25. Limited to 20 people.

FEBRUARY 19 | 6–8 P.M.

Wild Felines of New England With Susan Morse

Bethlehem Public Library

In this special presentation, learn about bobcats, lynx, and mountain lions.

Forest Society members: Free; nonmembers: $5. Sponsored by The Bretzfelder Park Committee, Ammonoosuc Chapter of the Audubon Society of NH, and the Forest Society.

FEBRUARY 23 | 9 A.M.–12 P.M. (RAIN DATE: MARCH 1)

Wildlife Tracking Snowshoe Hike With Susan Morse

Hay Forest Reservation, Newbury

Join renowned New England wildlife tracker and educator Susan Morse for a rare, guided snowshoe hike at the Forest Society's Hay Forest Reservation. Morse will share track identification skills and the habits and habitats of active winter mammals.

Cost: $25. Limited to 20 people.

FEBRUARY 23 | 6:30–8:30 P.M.

Wild Cousins of Our Best Friends With Susan Morse

Whipple Town Hall Community Center, New London

Join us for a slide-illustrated lecture detailing the hidden lives of New England's foxes and coyotes.

Forest Society members: Free; nonmembers: $5. Sponsored by The Fells Historic Estate and Gardens and the Forest Society.

FEBRUARY 26 | 6 P.M.

Porcupine Facts and Myths

Bretzfelder Park, Bethlehem

Learn about all things porcupine, including fun facts about their quills and why they have a knack for eating wood structures. You will learn about the species of porcupines that inhabit the world, including the ones here in North America.

Cost: Free. Preregistration is not required.

Restore, Protect, Connect: The 2020 Cottrell-Baldwin Lecture Series

Henry I. Baldwin Environmental Center at Fox Forest | Hillsborough

Free evening programs. Preregistration is not required.

MARCH 17 | 7 P.M.

Trout Stream Restoration

Speaker: John Magee, fish habitat biologist, NH Fish and Game Department

Join us to learn about research in New Hampshire and beyond on fish habitat, instream wood, and what we may expect in the coming decades as our forests age. This research includes the interconnections of streams and riparian areas as integral parts of stream ecosystems.

MARCH 24 | 7 P.M.

Restoration of the New England Cottontail Rabbit

Speaker: Heidi Holman, wildlife diversity biologist, NH Fish and Game Department

Until recently, the New England cottontail was a candidate for federal listing under the Endangered Species Act. For years, shrubby thickets and young forests, primary habitat for the cottontail, has declined due to changes in human land use. Since 2008, hundreds of partners have been working together across the historical cottontail range on a recovery effort to reverse the decline and bring back the region's native rabbit. After 10 years of hard work to restore habitat, this presentation will address progress we are making towards meeting the goal of a viable population by 2030.

MARCH 31 | 7 P.M.

Edible Wild Plants of the Granite State

Speaker: Russ Cohen, expert forager and author of Wild Plants I Have Known...and Eaten

The Granite State is home to more than 100 species of edible wild plants, some of which are more nutritious and/or flavorful than their cultivated counterparts. Connect with more than 40 of the tastiest species the region has to offer, ranging from plants everyone knows, such as daisies and dandelions, to plants you may never have even heard of. Join us for a slideshow that covers identification tips, and preparation methods, along with general guidelines for safe and environmentally responsible foraging. Russ may have some foraged plants for people to sip or nibble on, too.

APRIL 7 | 7 P.M.

Water Connections: What Fresh Water Means to Us, What We Mean to Water

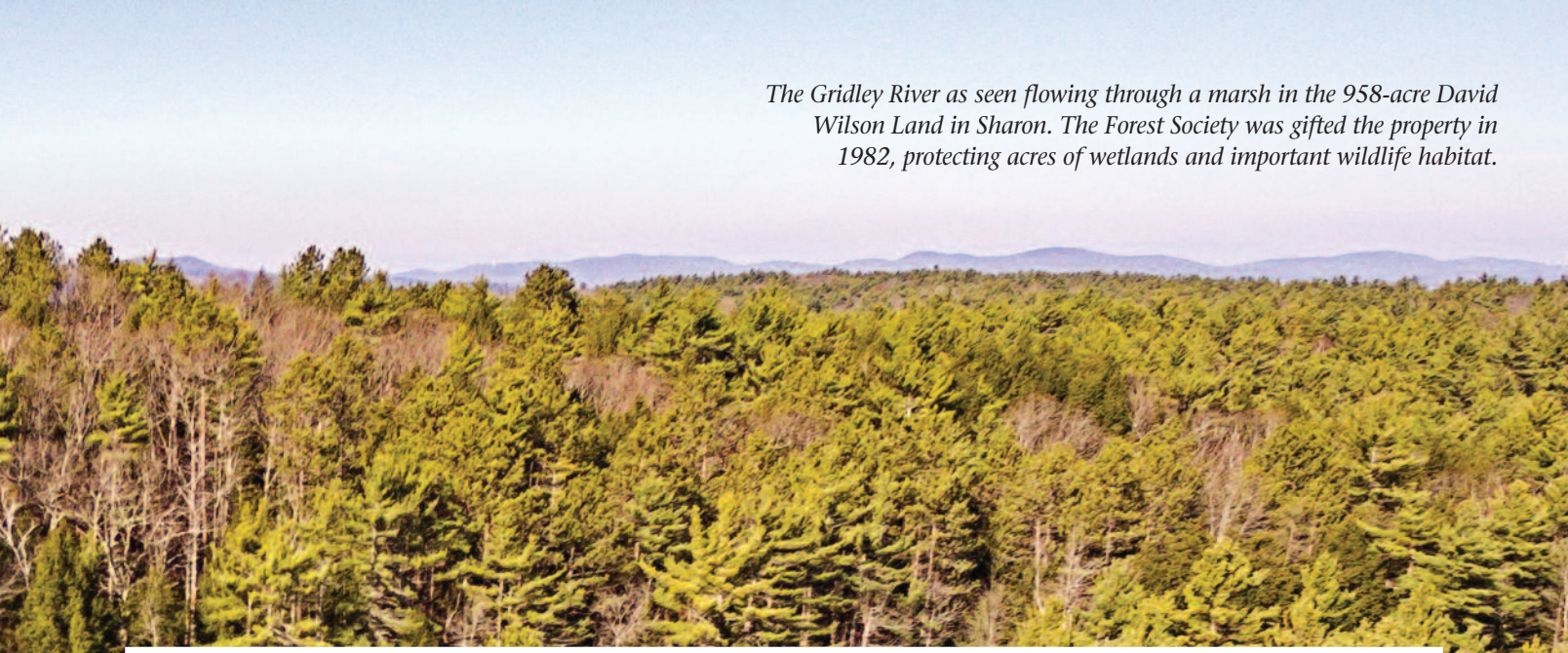
Speaker: Jim Rousmaniere, journalist and historian

Rousmaniere's book, *Water Connections*, focuses on a stream in New Hampshire and how it and other bodies of water have been affected by changes in technology, economic values, new forms of pollution, new ideas about nature, and the occasionally unintended consequences of human action. The book includes stories about how conservationists, artists, reservoir managers, government officials, hydropower interests, anglers, scientists, and ordinary citizens shape the use and protection of freshwater.

(OPPOSITE PAGE, FROM TOP) ANDY CROWLEY, DJ GUSSON II, PERRY SMITH

A Look Back at 40 Years of Wetland Protection

By Malcolm "Tink" Taylor



The Gridley River as seen flowing through a marsh in the 958-acre David Wilson Land in Sharon. The Forest Society was gifted the property in 1982, protecting acres of wetlands and important wildlife habitat.

It has been forty years since New Hampshire adopted a comprehensive approach to protecting its valuable wetlands. During the mid-1960s, marshes, swamps, bogs, and fens were seen as dismal, dank, mosquito-breeding holes in need of being "improved" by dredging or covering them over. At best, they were dumpsites for municipal waste, automobile hulks, tires, and animal carcasses, and municipalities went to all costs to get wetlands back on the tax rolls through commercial and residential development.

At the time, the rate of freshwater wetland destruction was reflected in the increasing number of applications received by the state's Water Resources Board (WRB), the overseeing agency which regulated water impoundment projects, namely dams, and lake and pond level seasonal maintenance. As developers sought to cash in on the increasing demand for waterfront development, especially in the Lakes Region, local groups became more concerned about the fate of New Hampshire's inland wetlands. Soon the realization that neither the towns nor the state possessed the regulatory tools necessary to assess the potential impacts of proposed wetland projects, or to act upon them, became apparent, for across the nation there were similar warning signs.

But the cause thought to have most prompted the state and local officials—ultimately the legislature—to reassess its existing wetlands protection protocol, occurred in 1966 when an out-of-state developer was discovered to be filling in marshland along Squam Lake's Sturtevant Bay to create vacation house lots—six hundred of them. New Hampshire laws of the day spoke only to placing fill into or removing same from state tidal or fresh waters, commonly referred to as "fill and dredge." Such bottomland had long been considered to be public domain, but the inland freshwaters of less than ten acres were not included. There were few legally defensible protections for wetlands that could withstand a court test, so only when filling or dredging occurred below mean high tide or below the seasonal highwater level in freshwater lakes and ponds did the law apply. Ironically, to fill or remove from such submerged lands required the approval of the Governor and Executive Council, for after all, this was state property being intruded upon.

Water Resources Board Chairman George McGee and his chief engineer, along with the town's police chief, Ira Weeks, were dispatched to the scene at Sturtevant Bay. Being marketed as Asquam Lake Beach and Ski Club, the developer pledged full cooperation with access to the site. The first calculation to be measured was whether fill had been placed, not into a wetland, but below the mean highwater lake level of 561 feet above sea level. Upon further inspection, the engineer found that marsh grasses, reeds, sedges, bulrushes, cattails,

RYAN SMITH

In the early 1970s, a developer sought to create The Asquam Lake Beach and Ski Club by filling in a marsh in Squam Lake's Sturtevant Bay (above). With no state law in place that protected interior wetlands at the time, local government and residents got to work creating what would eventually become the Wetlands Protection Act of 1979.

and other wildlife habitat, were all being buried by sand trucked to, in the developer's words, "improve" the wetland area to build on. By now, other residents around the lake had been alerted to what was underway in Sturtevant. The word was out and the pulling and tugging between the developer, the WRB, abutters, and other lake residents began.

Four other Squam Lake watershed towns, Sandwich, Moultonborough, Ashland, and Holderness, joined Center Harbor in the fight to save Sturtevant, becoming parties to what would become litigation against the developer. With the threat of such legal action, the developer agreed to a public hearing in Moultonboro, which was followed weeks later by a decision in Belknap County Superior Court to issue a consent decree (with no mention of wetland protection), the short version of which required developers to adopt much more stringent septic disposal standards and carve off larger lot sizes, in essence making the project no longer economical considering what had already been invested.

Out of this case, it became apparent that New Hampshire lacked the legal toolset it needed to prevent such future occurrences. Enter House Bill 690 into the 1974 session that this writer and legislator sponsored, while at the time working for the Forest Society to establish and provide support to New Hampshire's budding town and city conservation commission movement. Key within this wetlands protection legislative package was a provision requiring the notification and involvement of local municipalities throughout the permitting process by these locally appointed governmental commissions. To intervene meant you had to have adopted the state law establishing a conservation commission wherein monitoring of wetlands within their borders had actually been inferred within an existing enabling statute, RSA 36-A. Further, this just-introduced legislation sought to establish a state wetlands board with authority to regulate alterations to wetlands as they were now being generally redefined in HB 690. Town and city conservation commissions were to be brought into the regulatory process not as the regulators, as initially envisioned, but under what lawyers called "powers of review." This meant if the bill were to become law, these commissions could impose a temporary hold upon an application to fill, dredge, or otherwise alter a wetland in order to prompt closer scrutiny of potential damage.

THE NEXT STEPS FOR N.H. WETLANDS LAWS

By Matt Leahy

Policy makers continue to propose and enact further revisions to the laws protecting New Hampshire's wetlands areas. In the last two legislative sessions (2018 and 2019), the Legislature took two significant actions:

1) In 2018, the Legislature approved House Bill 1104 which shortened the time the Department of Environmental Services (DES) has to process applications for wetlands permits. In certain cases, the time limit was shortened from 105 days to 75 days and in others from 75 days to 50 days. The environmental community raised concerns that these new time frames would place an administrative burden on DES to process all the applications and thereby undermine protections of the wetland resources.

2) Recognizing these concerns, the Legislature included a provision in the state budget for fiscal years 2020 and 2021, which increased the required fees for certain Wetlands, Shoreland Protection, and Alteration of Terrain permits. The additional revenue will help to fund two new staff members for the Wetlands Bureau who will assist in administering the wetlands laws.

Online:

For more information on House Bill 1104, visit https://bit.ly/32EVb3n.

A stream winds through a wetland on the outskirts of Tower Hill Pond in Candia and Hooksett. In 2019, Manchester Water Works and the Forest Society worked together to permanently conserve 1,942 acres surrounding the pond, the drinking water source for the City of Manchester and other towns.

On the sage advice of then Forest Society Education Director Les Clark and President/Forester Paul Bofinger, I was urged to issue a heads-up to those who might be most impacted by enactment of this legislation. I did this by asking Phil Hazeltine, executive of the Associated General Contractors of New Hampshire, for time to speak at their annual meeting where, in fact, I ended up as their keynote presenter. Soon thereafter, the Forest Society sponsored a weekend briefing session at Camp Kabian in Alton Bay for contractors, building trade professionals, and conservation commission members. Based upon this outreach, weeks later, during public hearings on my Wetlands Protection Act, held alternately before both legislative chambers, no one from the contractors or trades appeared to oppose. On the House and Senate floor there was almost unanimous approval of the bill for it seems this was becoming a time of national recognition of the ecological imperative in favor of wetlands.

The wetlands protection bill passed both chambers and was then sent to former Governor Meldrim Thomson, who promptly vetoed it insisting it was "a clear violation of private property rights to do with one's land as one pleased." There weren't enough votes for a two-thirds override, so the bill was sidelined until the next biennial legislative session.

In 1979, as a second try at recovering the cause of saving wetlands, I introduced House Bill 278, which passed the House, followed by companion Senate Bill 251, with senators Ray Conley of Sandwich and Mary Louise Hancock of Concord as co-sponsors. Governor Hugh Gallen, having defeated Thomson for occupancy of the corner office, signed the wetlands protection bill into law, but this time with more substance added to the original draft, including provisions for mapping a town's wetlands, a more detailed definition of "prime wetlands," and a newly constituted state Wetlands Board.

With this enactment the Forest Society set about to bring in, after hiring her away from Connecticut Governor Ella Grasso's wetland protection bureau, Cynthia Ivey as "wetlands advocate" to the newly created N.H. Association of Conservation Commissions, where she promptly prepared a wetlands handbook to guide them in their deliberations. A program of assistance to conservation commissions, not just in New Hampshire but throughout the Northeast, funded by the Ford Foundation, came next.

Fast forward to today and the N.H. Wetlands Bureau is within the Department of Environmental Services, replacing the Water Resources and its successor, the Special Board. It operates under a $1.4 million annual budget that funds more than 37 staff, many specialized in their disciplines, and 4 field offices. The bureau processes some 2,000-plus wetland applications a month, with referrals back to local conservation commissions for closer scrutiny of projects and recommendations constituting today's wetlands protection effort in New Hampshire.

But the battle is never fully won. For in the legislative session just adjourned, HB 326, restoring local powers to designate critical "prime wetlands" weakened in 2011, was vetoed by Governor Sununu for similar reasons given in 1974 by Governor Thomson, and the House was unable to garner the needed majority to override such veto. So now it's on to the 2020 session.

Malcom "Tink" Taylor worked for the Forest Society from 1968–1980 where he founded and ran the N.H. Association of Conservation Commissions. Taylor holds an MS degree in Natural Resource Policy from Michigan State University.

Learn More:
To stay current with state conservation decision-making news, sign up for the Forest Advocate e-newsletter at forestsociety.org/forest-advocate.

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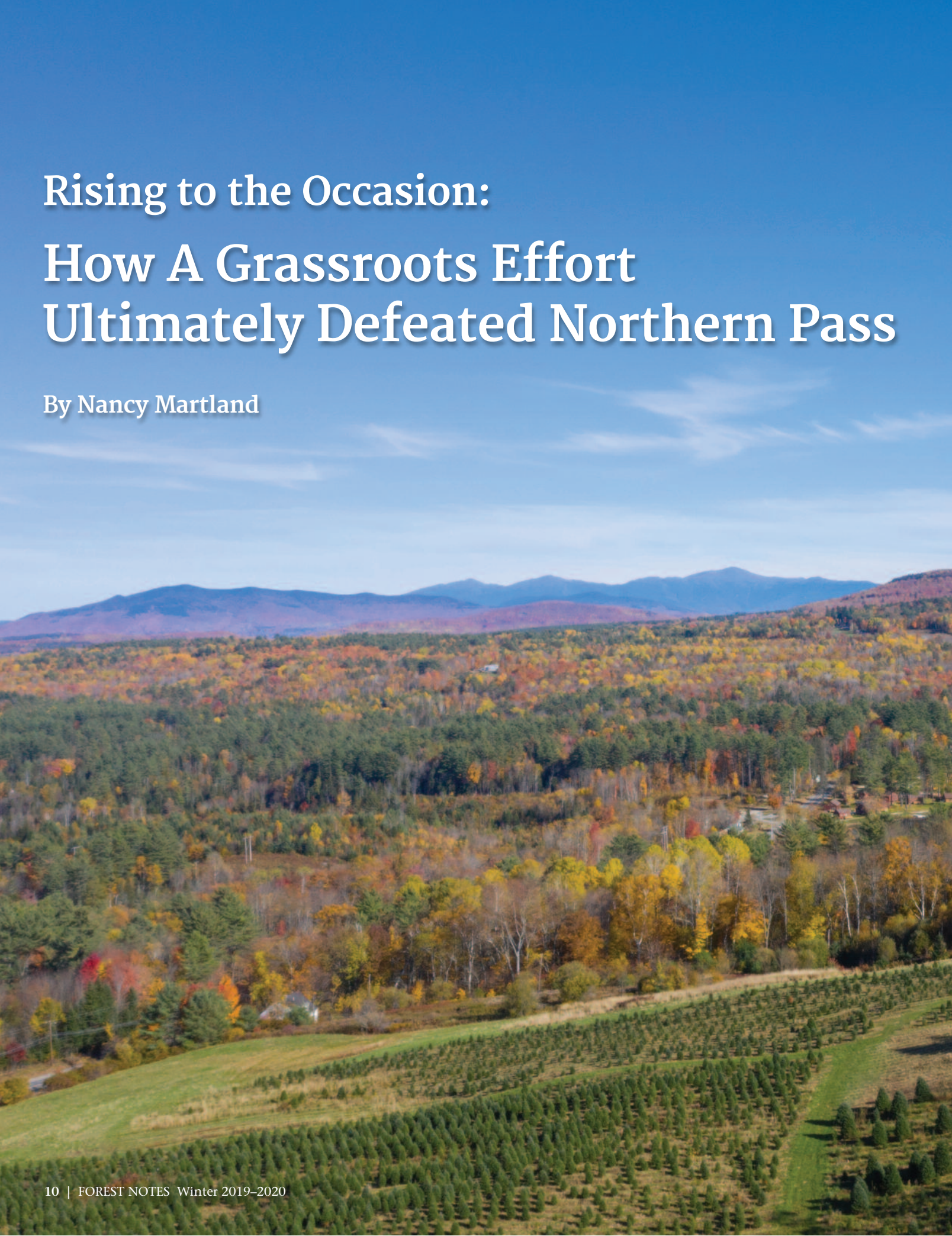
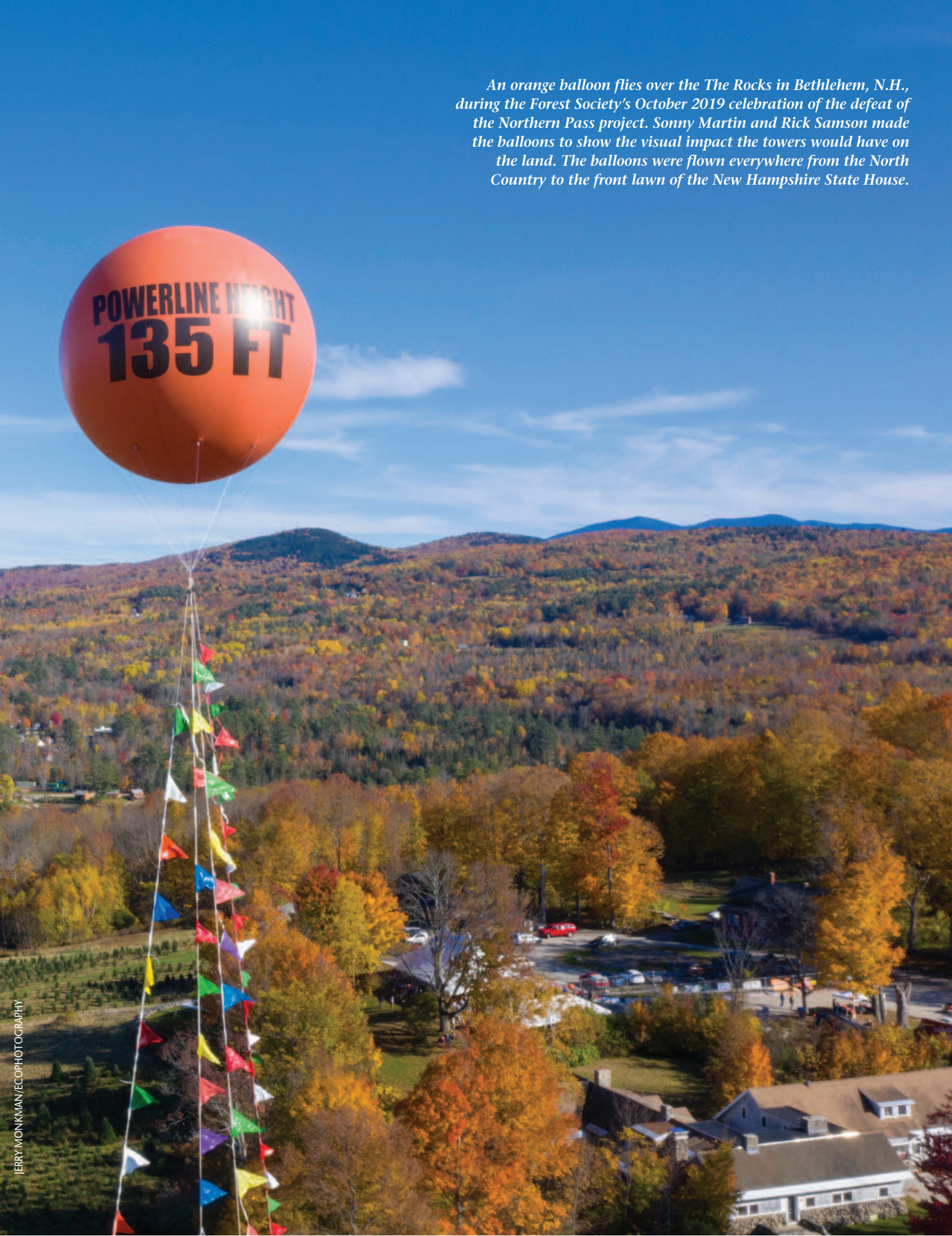
Rising to the Occasion:

How A Grassroots Effort Ultimately Defeated Northern Pass

By Nancy Martland





An orange balloon flies over the The Rocks in Bethlehem, N.H., during the Forest Society's October 2019 celebration of the defeat of the Northern Pass project. Sonny Martin and Rick Samson made the balloons to show the visual impact the towers would have on the land. The balloons were flown everywhere from the North Country to the front lawn of the New Hampshire State House.

JERRY MONKMAN/ECOPHOTOGRAPHY

Volunteers made hundreds of orange bows that were tied on mailboxes in Easton and Sugar Hill to visually display a unified opposition to Northern Pass.

One fall day in 2010, I had just taken the mail out of the mailbox at the end of my driveway and was thumbing through the bills and catalogues when my neighbor appeared, bursting with news. Gazing at the field across the road, she told me "they" were going to put up a new powerline just down at the bottom, against the spectacular backdrop of Cannon Mountain and the Kinsman Range.

I refused to believe her. Then I called other neighbors and invited them over to discuss the developing problem we all faced. The same thing was happening up and down the proposed Northern Pass line that fall: first disbelief, then action. All kinds of action.

For the nine years that the project loomed over us, people did everything they could think of to make their opposition public and crystal clear. There were so many acts of opposition, large and small, that wove a varied tapestry conveying the unmistakable message of resistance and tenacity.

Over time, individuals joined small groups and small groups joined large groups who befriended each other and worked together against the project. Tight networks formed that crossed every line: politics, age, geography, native or from away, full- or part-time, financial situation, level of education; you name it, it simply didn't matter.

The threads of the woven tapestry often were spun from small, simple, persistent acts of opposition. A group of townspeople in Easton conceived the idea of placing orange bows on every mailbox in town. The idea soon spread to neighboring Sugar Hill. Opponents met together (many for the first time) and spent hours and hours creating the bows, recruiting their friends and neighbors to display them, and then distributing them around town to be tied up. In Sugar Hill, we tried to affix bows to 80 percent of the mailboxes in town. Once a few orange bows went up, nobody wanted to be left behind. Within a very short time you would have been hard pressed to find a mailbox that was not sporting an orange bow in either town. The bows took on a life of their own, appearing on sign posts, telephone poles, and other convenient spots.

The bows were so eye-catching that local businesses asked us to supply informative materials that they could give to curious tourists who wanted to know more. Out of that suggestion, we produced an orange rack card with graphics and project details, and by word-of-mouth and these hand-outs, our cause eventually stretched beyond state boundaries.

One enterprising group decided to have postcards printed and addressed to former Governor John Lynch, with a blank space for a message and the sender's name. Others later invested in an address stamp and worked together pre-stamping postcards donated by a local photographer. A number of businesses agreed to place a basket of these cards and a collection box on a counter or desk so their customers could fill out the card and leave it there

Continued on page 14

In Their Words

In October 2019, Northern Pass opponents gathered at The Rocks in Bethlehem, N.H., to celebrate and tell stories about their personal grassroot efforts to speak up and be heard during the course of the nine-year fight to protect New Hampshire's landscapes. Here are just a few anecdotes from the event.

"I'm so very proud and excited to be here. It really is a testament to the people of New Hampshire. Their strength and fortitude. The commitment to preserve our landscapes. It was a battle of David versus Goliath, and we won … I'm just proud to have been part of this whole process. I'm proud of all the friends I made. It was truly a bipartisan effort throughout the years."

— Jeanie Forrester, Meredith

"I'm so glad that the system worked for the first time in my life. That people came together from Pittsburg on down and told their story. It was all about stories … It was the stories of the people that helped to win this fight."

— Gretchen Draper, New Hampton

"It's very satisfying. I guess that's the right word. I don't think we're celebrating so much today as we are feeling satisfied that the good guys won out. That the people who deserved to win this fight did."

— Tom Mullin, Campton

"It became clear and said with great feeling many times that 'we're not for sale.'"

— Max Stamp, Bristol

"We feel very successful and happy. It's the first time I've ever won at anything."

— Barry Draper, New Hampton

"It's a great day to celebrate. I'm going to go home and ride my bike under the powerlines that for the last nine years I've been worried about Northern Pass coming through and destroying the surrounding landscape. I'm going to be able to breathe again just knowing that the North Country and the White Mountains are safe from this. I cherish the beautiful community of people who came together from all sides of the aisle to defeat this project."

— Liz Wyman, Lancaster

(OPPOSITE PAGE) SUSAN SCHIBANOFF (X2); (THIS PAGE) JERRY MONKMAN/ECOPHOTOGRAPHY (X6)

to be picked up and shipped. The result was a flood of mail to the Governor's office. I heard that he received more pieces of mail on Northern Pass than on any other issue, and I'm not surprised.

A local construction business got creative by attaching a giant banner on a semi-trailer that was parked on their land. The banner showed the land with and without towers, highlighting the visual impact the line would have in the area. The trailer stayed there, on a state thoroughfare, for several years, leaving the indelible impression of active opposition.

Artists came out in droves to support our mission in any way possible. An accomplished graphic designer created the beautiful "Stop the Towers" design, which was printed on lawn signs, T-shirts, buttons, bumper stickers, and several large banners. The lawn signs were displayed everywhere and the buttons were ubiquitous. One lady of my acquaintance was never seen without her Stop the Towers button. I think she even wore it on her pajamas, though who could say for sure. On several holiday weekends and during fall foliage season, when Franconia Notch traffic was especially heavy, a group of local ladies stood for hours on the Echo Lake overpass holding a Stop the Towers banner and waving at the cars driving on Route 93 to raise awareness and to drum up support.

In Columbia, N.H., a visual artist created a sculpture for her Master of Fine Arts thesis work (see below) that conveyed her relationship with the northern New Hampshire landscape and the Northern Pass project, which was threatening to destroy the region's idyllic viewsheds. Her husband joined the cause by banding together with others to build the "Live Free and Fry" website.

While professional filmmakers produced such films as *Northern Trespass* and *The Power of Place*, more than one group of middle schoolers created and submitted anti-Northern Pass films to the North Country Middle School Film Festival. The Pittsburg School won "Best Performance" for its short film, *Stop Northern Pass*, in the 2012 festival.

Now, with the battle won, I look back at those seemingly small acts of opposition and I see them as part of an organic fabric that was stronger than steel. In nearly every town slated to "host" Northern Pass, individuals stood up in ways that suited them, came in contact with others of the same mind, and built a massive opposition that simply would not fade, would not bend, and would not stop. It was way more than what Eversource and Hydro-Québec ever bargained for, and in the end, it was their undoing.

As the opposition grew and developed, one overriding common element emerged. The threat of hulking high-voltage pylons ranged across our landscape was bigger than anybody's concern for their backyard. It turns out that what drove people was their love and regard for land in New Hampshire. Maybe we all took it for granted before it was threatened. Perhaps if you had asked us about our attachment to the land on the day before the project was announced, we would not have been able to articulate it. But as the fight wore on, and we undertook one action after another, and united with others around our state, we realized how much we treasured the land we live on and how the land is the essence of New Hampshire.

Not only did we learn how to fight and how to win, we came to a better and deeper understanding of what is worth fighting for.

Nancy Martland is a Forest Society board member who lives in Sugar Hill, N.H.

EXPRESSING HERSELF

Artist Michele Johnsen lives in Columbia, N.H., where her love of North Country landscapes inspires her work. In 2017, she received her M.F.A. at the New Hampshire Institute of Art. Her thesis work explored the deep connection she has to the land and the threat Northern Pass posed to the region. Johnsen conveyed this sentiment in a sculpture she made for her thesis (pictured at right).

"The work was a result of my exploration of landscape as a genre and my personal relationship to landscape as a visual art language. I was immersed in the making of landscape iterations and found that I could not separate my relationship to the northern New Hampshire landscape and the looming Northern Pass proposal that was threatening to destroy the land, trees, and idyllic views of the region. With this in mind, I decided to tackle the issue as I worked on the exhibition that was ultimately going to be my thesis work. There were many early attempts that did not make it into the show and included some of the items you see here such as the sign, the official report with landscape and electrical wires, and the stack of newspaper clippings that were published during the fight. The tree stumps with dripping black paint, did however make it into the final piece and it signified all the ways that man's intrusion into nature manifest themselves."

Marcy Weeks Takes Home Volunteer of the Year Award

By Kelly Whalen Cioe

Every year, the Forest Society presents the organization's Trish Churchill Volunteer of the Year Award at its Annual Meeting held in the fall. Among the organization's most prestigious recognitions, this annual award honors those exemplary people who have volunteered their time, resources, and energy to help the Forest Society achieve its mission.

At this year's 118th Annual Meeting at Gunstock Mountain Resort in Gilford, N.H., the Forest Society was honored to present the award to Marcy Weeks of Moultonborough. Weeks has taken the lead on the planning and execution of every annual meeting since the organization's centennial celebration in 2001, which was a four-day event that took two years of planning. She also has assisted with and advised on arrangements for a number of events every year.

Weeks is a nationally known event planner who coordinates corporate events across the country and in Europe. As owner of Event Builders, she has worked with clients such as Boston Scientific, IBM, Fidelity, and many more. Her volunteering to take on the Forest Society's events, both big and small, has been invaluable to the organization in delivering professional, engaging, and fun events.

"While the Forest Society benefits from hundreds of volunteers over the course of the year, one usually stands out for their efforts and dedication," says Jane Difley, former Forest Society president/forester. "This year we are especially pleased to present this award to Marcy, whose ability to materialize just when we need her the most is extraordinary. Her good cheer, friendship, and stellar qualifications are a true asset to the Forest Society."

(OPPOSITE PAGE) MICHELLE JOHNSEN; (THIS PAGE) FOREST SOCIETY FILES

Marcy is the third generation from her family to play a key role in the Forest Society's mission. In 1988, Marcy's grandparents, John and Esther Weeks, donated the Weeks Forest in Gilford to the organization in memory of her father, who played there as a child and later built his home from timber he harvested on the property. She is also the daughter of former Forest Society trustee Sheila Weeks. "We are proud of our long-term association with the Weeks family and are especially pleased and grateful to Marcy for choosing the Forest Society to dedicate her volunteerism efforts to," adds Difley.

Kelly Whalen Cioe is the communications director for the Forest Society.

Volunteer Opportunities:

Are you interested in volunteering for the Forest Society? If so, we're looking for Sugar Maple Regeneration Citizen Science Program volunteers. For more details, read "Minding the Sugar Babies" on the next page. To sign up, email Carrie Deegan at cdeegan@forestsociety.org or call 603-224-9945.

Minding the Sugar Babies

Studying Sugar Maple Regeneration on Forest Society Lands

By Carrie Deegan

Dr. Natalie Cleavitt thinks New Hampshire's sugar maples may be having trouble growing up. Cleavitt is an ecologist with Cornell University who works primarily at Hubbard Brook Experimental Forest in Woodstock, N.H., where long-term research by the vegetation team (Tom Siccama, Tim Fahey, and John Battles) first documented a decline in growth rates of mature sugar maple, followed by elevated mortality in these trees. The decline was linked to consequences of soil acidification from acid rain, which both leaches calcium, an important plant nutrient, from the soil and mobilizes aluminum, a toxic element. In the early 2000s, Hubbard Brook ecologists began looking at sugar maple seedlings in the same forest, comparing them to seedlings in a watershed in which calcium had been carefully returned to the soil to match pre-industrialization levels. What they found was that sugar maple seedling survivorship in the untreated reference watershed was three times lower than in the treated watershed, and everything from seedling leaf area to chlorophyll concentrations to mycorrhizal fungal associations were significantly lower in the untreated area. In simpler terms, the tree that draws tourists to our state with its incandescent foliage, slathers our waffles in delectably sweet syrup, and provides beautiful raw material for fine furniture and flooring, may be having trouble reproducing.

Volunteer citizen scientist Kim Sharp (right) measures a sugar maple sapling on a study plot at the Sudrabin Forest in Orange, N.H., while Cornell University student Alex Ding looks on.

Sugar maples don't produce seedlings every year. Masting tree species, such as maple, exhibit seed production that is highly variable by design. A sugar maple might not produce seeds one year and then follow that up with a synchronized bumper crop (many seeds) the following year. This reproductive strategy ensures that the number of seeds produced exceeds the capacity of seed-eating animals scavenging for them. Even in a good sugar maple mast year, which may happen only every 3–10 years, seedling survival is not high. Research at Hubbard Brook has shown that only about 30 percent of germinated "sugar babies" typically survive their first year, and Cleavitt and her team have witnessed worse than that. Following some mast years, entire seed cohorts have perished in their first season.

The causes of seedling failure are complex and multi-faceted, including soil acidification as well as increased insect and fungal invasions, climate warming, and competition from the American beech, another common northern hardwood tree. While soil acidification caused by acid rain may be slowly improving thanks to decades of air pollution control measures, the recovery of soil calcium will only occur on a geologic time scale from rock weathering. Factors such as insect pests and those caused by climate warming are likely to get worse in the near future. "Snowpack is extremely important for sugar maple health," Cleavitt says. Without the insulation provided by snow, cold temperatures easily kill the fine roots responsible for uptake of minerals and water. Elevated spring temperatures can also be an issue without snowpack, as Cleavitt observed in 2012 when a spell of 80-degree-plus days before trees had leafed out killed 100 percent of the previous year's mast crop. "The heat on the unshaded ground fried all the seeds before they could get their radicles, baby roots, into the soil," Cleavitt explains. As climate models predict more frequent freeze-thaw events, reduced snowpack, and longer "vernal windows" between snowmelt and the emergence of vegetative growth, sugar maple seedlings face increased vulnerability. "Even when a seedling survives a snow-free winter," Cleavitt notes, "it's at

a disadvantage because it has to invest a lot of carbon to regrow those fine roots in the spring. That's carbon it won't be putting into other growth."

In 2018, New Hampshire's sugar maples had a good mast year. Cleavitt was interested in expanding her research to see whether the sugar maple regeneration failure she'd documented at Hubbard Brook was happening on a wider geographic scale. "The timing was right," she says. "I'd waited almost a decade for this seed cohort and didn't want to let it slip by." Through a connection fostered by the Hubbard Brook Research Foundation (HBRF), she partnered with the Forest Society knowing that the organization has forested conservation land in all corners of the state as well as an army of engaged volunteers who steward those lands. Out of this partnership, the Sugar Maple Regeneration Citizen Science Project was born. In spring 2019, the Forest Society and Hubbard Brook trained 14 volunteer citizen scientists who worked alongside Cleavitt and HBRF educator Sarah Thorne. The volunteers established and collected data at forty-eight plots on four forest reservations that span the latitudinal gradient of northern hardwood forest in the state: from south to north, Monadnock Reservation (Jaffrey), Yatsevitch Forest (Cornish), Sudrabin Forest (Orange), and Kauffmann Forest (Stark). Two summer research interns from Cornell University were also a key component of the project, thanks to an Engaged Cornell Research Grant. Research teams spent the summer measuring and tagging trees in 0.5 hectare circular plots, taking soil samples, and of course, marking and recording the condition of nearly 1,200 sugar babies. The individual seedlings will be tracked over many years to see how they fare, and additional seedling cohorts will be added as subsequent mast years occur. In future years, Cleavitt hopes to add additional study sites, as well as to involve high school students and teachers in studying primary productivity and seed production on some of the plots.

CARRIE DEEGAN (X2)

Mature sugar maples are plentiful at Yatsevitch Forest in Cornish, N.H. To view a slideshow of the Sugar Maple Regeneration Citizen Science Project in action, visit forestsociety.org/sugar-maple-regeneration-citizen-science-project.

Volunteers appreciated the project's "embedded researcher" model of fieldwork, which meant that Hubbard Brook researchers as well as Cornell undergraduates were working alongside citizen scientists at all times, providing guidance and being available to answer technical questions as well as expound on big-picture inquires. "I loved looking at the woods in a more disciplined way, rather than just strolling through and enjoying it as I usually do," said volunteer Dave Heuss. Blaine Kopp, another citizen scientist, agreed that a deeper understanding of the science resulted from having regular access to researchers. "So much was unexpected about the research," Kopp says. "I was constantly prompted to ask more questions; and it was great to have people there who could answer them." The researchers, for their part, were impressed with both the Cornell students and the volunteers' dedication and attention to detail. "We wanted to help people engage in real science," Thorne says. "I was amazed at the caliber of the volunteers and their diverse backgrounds. It's just a great, highly qualified group." Everyone is striving for high data quality, as the ultimate goal for this research is publication in peer-reviewed scientific journals.

The inaugural year of the project also included making community connections with those managing northern hardwood forests in New Hampshire. Two stakeholder field visits were held in Cornish and Bethlehem, to which local landowners, foresters, and sugarmakers were invited to learn about the research and share ideas about the future of sugar maples in New Hampshire.

Sugarmakers at the Yatsevitch Forest in Cornish admitted that they are typically thinking about *mature* sugar maples, or those that might be ready to tap in five to ten years, not the seedling layer. They didn't know about Hubbard Brook's seedling failure studies, but also weren't surprised when Cleavitt talked about insect pests and reduced snowpack as contributing factors. Jim Taylor, who produced maple syrup from trees on the Yatsevitch Forest from 1992–2018, noted that the north-facing sugarbush at that location works to their advantage in terms of snowpack. "This is a cold woods," he explained. "Weather comes up and over Mount Ascutney and just dumps snow on us. It melts slow here, and it's slow to come to life in the spring." This means sugarmakers here typically get 3–4 more runs of sap than other places might; but they were also happy to learn that in the long term it may

Continued on the next page.

"Sugar Maples," from page 17.

be better for regeneration of the sugarbush.

The data collected in the Sugar Maple Regeneration Citizen Science Project's first year are nowhere near complete enough to make predictions about whether the study will corroborate findings at Hubbard Brook in other areas of the state, but they do offer some tantalizing tidbits to mull over. Seedling leaf damage from insect and fungal pests increased from south to north in 2019, with the northernmost site, Kauffmann Forest in Stark, recording the worst leaf damage. Will these northernmost seedlings have a lower survival rate over the winter? Will differences in seed production explain some differences in seedling densities seen between sites? These are just a few of the questions that researchers and citizen scientists will be considering, eagerly waiting to discover what transpires on the Forest Society study plots in 2020 as they watch the sugar babies grow.

Carrie Deegan is community engagement and volunteers director for the Forest Society.

Did You Know?

The Sugar Maple Regeneration Citizen Science Project is a partnership between the Forest Society, Hubbard Brook Research Foundation, and Cornell University, and has been generously supported by grants from USDA NE Climate Hub, Cornell University Office of Engagement Initiatives, and the National Science Foundation.

PEOPLE MAKING A DIFFERENCE

A Calling to Conserve

The Forest Society's 2019 Conservationist of the Year

By Kelly Whalen Cioe

When Northern Pass announced its plan in 2010 for a 192-mile overhead powerline that would bisect New Hampshire, and her property in Easton, Susan Schibanoff decided to take action. She started a blog called *Bury the Northern Pass*, which became the touchstone for thousands of New Hampshire citizens who opposed the project. With her website, which featured the latest news, calls-to-action, and next steps, Schibanoff kept a growing community of activists informed, engaged, and ready to act.

"The unanimous decision of the Site Evaluation Committee to deny Northern Pass' siting permit and the unanimous decision of the New Hampshire Supreme Court to uphold the SEC decision were each directly attributable to Susan and her decade of committed work," says Jane Difley, former Forest Society president/forester. "Northern Pass was a long and arduous fight won by many; and one good thing I can say came from our collective experience with Northern Pass is the incredible friendships that were formed. I count Susan among those friendships."

At the Forest Society's Annual Meeting in September, the organization honored Susan as the Conservationist of the Year for her role in helping to defeat Northern Pass. This prestigious award honors people whose work to promote and achieve conservation is exemplary and whose actions have made a difference not just in their own backyards, but also have advanced the protection and stewardship of land statewide.

Schibanoff has worked tirelessly for more than a decade to help conserve the landscapes that make New Hampshire beautiful. She lives in Sugar Hill, where she retired from her work as an English professor at the University of New Hampshire. Born and raised in New Jersey, she received her B.A. from Cornell University and Ph.D. from the University of California. Schibanoff taught early English literature at UNH for 35 years, while maintaining a second home in Easton. She and her partner have hiked all of the 48 4,000-footers in New Hampshire, the additional 20 4,000-footers in New England, and most of the 46 High Peaks in the Adirondacks.

Schibanoff's current projects include researching and writing about White Mountain history. She recently wrote "White Mountain History and the 'Communications Revolution'" for *Appalachia*, the journal of the Appalachian Mountain Club, which will be published this year.

Kelly Whalen Cioe is the communications director for the Forest Society.

Learn More:

From balloon makers and designers to photographers and sign wavers, thousands of people took part in the grassroots fight to defeat Northern Pass. Read some of their stories on page 13.

FOREST SOCIETY FILES

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For information on business memberships, please contact Anne Truslow at 603-224-9945 or via email at atruslow@forestsociety.org.

Focusing on the Floodplain: An Educator Reflects on a Season of Teaching

By Linden Rayton

What stories best represent my inaugural season as the Merrimack River floodplain education coordinator? That's a tough question. There are too many to choose from, but the following are some of my favorites.

The first story that stands out to me took place in mid-June when I went boogie boarding on the river. The Merrimack River Outdoor Education and Conservation area, known as "the floodplain," is defined by the river and its late-summer ebbs and mighty spring flows. When I first started in this position, I walked the reservation's trails to get the lay of the land, but I knew I needed to explore the river as well. So one sunny morning, I lathered on some sunscreen and walked down to the river's edge to contemplate the Merrimack's dark, wide waters before me. The river was low, but I knew the current would carry me slowly and surely down to the end of the Forest Society's property.

My boogie board seemed like a paltry floatation device for this large watercourse. I was a little uneasy as I pushed off, as I often feel when swimming in dark water, so I kept an eye on the river underneath me as I floated along. In the middle of a particularly deep section, a hard surface appeared under the water. I threw down my legs and awkwardly steered myself until I could probe the surface with my toes. It was a huge rock! Could I touch it? Yes. I slid off my board and stood on it bracing myself against the steady current. The water around me was deep, easily 20 feet or more, and yet here I was, standing on an enormous glacial erratic hidden underwater. As I continued on my paddling journey that day, I felt very small and humbled by what the river held.

In September, a couple of memorable stories were also firsts for me. Early in the

Linden Rayton shows English Language Learning students from Rundlett Middle School in Concord how to create leaf color charts (top) before taking them on a nature walk through the floodplain's river bank fields (bottom).

month, I revamped and hosted this year's Conservation Community Night. What was in years past a complaint session for abutting neighbors of the floodplain turned out to be a productive two hours of thoughtful conversation in the Forest Society's Conservation Center conference room. Twenty-three people came out and discussed all sorts of matters relating to the property, including education programs, interpretive signage, and resolving community concerns. I left that night feeling hopeful about the community I was helping to build and to support around the floodplain.

My next "first" experience happened a few weeks later when I co-led a bird watching program on the floodplain. I was a little nervous about leading this event, as I knew the group would likely encounter some warblers passing through on their southern migration, and I am not great at identifying them. They are fast-moving, well-camouflaged, and often too high in the forest canopy to see. The outing went off without a hitch, but as I was thinking I'd be spared of any embarrassing moments, our group encountered a flock of mixed sparrows and a warbler towards the end of our walk. I took a breath, got out my trusty bird book, and turned to the page helpfully, yet terrifyingly, labeled "Confusing Fall Warblers." With our whole group on the lookout for the various identifying characteristics of this highly energetic bird, we successfully identified it as an immature Black-throated Green Warbler. #Winning!

The creation of my position comes at a time when many Americans are searching for ways to re-connect with what might be called "basic nature." People are wondering what types of trees are around them, what kind of plants and mushrooms are edible, and why some species live here and others do not. Humanity has lived along the Merrimack River for more than 10,000 years; and yet we have lost a lot of nature knowledge that, not too long ago, would have been commonplace for those residing here. I have met a lot of people on the floodplain who are searching for this knowledge again. Enter programs such as "Tree ID" and "Catching Dragonflies and Damselflies," which were filled almost to capacity this summer and ended with folks asking for more.

The day was capped off with Rayton teaching the students how to measure a tree's summer growth.

RYAN SMITH (X3)

I'm painting a rosy picture of my first year in this position, but I did have some setbacks as well. Excited by the presence of so many freshwater mussels in the river, I created a program called "Musseling on the Meander," but only two people signed up and I had to cancel it. My guess is that my satisfyingly alliterative title was not descriptive enough. Next year I'll call it something like "Wade in the Water on a Hot Day; Catch Some Fish and Mussels!" Who wouldn't want to do that, right?

My position is seasonal, and so on October 31, I said "see you later" to the floodplain—for a few months that is. When the job begins again in May, I plan to return and start drafting next year's slate of programs. What's on the docket, you might ask? The schedule isn't completely nailed down yet, but I can tell you that there will be courses on plant IDing, birdwatching, and kayaking. And I'm available for private programs, too, such as the outings I led in September and October 2019. These custom field trips included a "Project Science and Environmental Education" program for Concord Elementary 2nd graders, a pilot program with the Rundlett Middle School English Language Learning students, a tree program for Shaker Road School kindergarteners, and the planning of outings with Havenwood Heritage Heights residents, a continuing care retirement community in East Concord.

This winter, the river will keep flowing while I'm away and the floodplain will continue to hum with activity. I encourage you to explore the reservation during these beautiful months; and I hope to find you on the trails or at a program come spring.

Linden Rayton is the Merrimack River Floodplain Education Coordinator for the Forest Society.

Online

To download a new Merrimack River floodplain map and guide, visit forestsociety.org/floodplain, or pick up a copy at the trailhead.

To read more about Rayton's pilot program for New American middle schoolers, visit forestsociety.org/merrimackoutdoored.

Left: *Susan Morse points out a fisher's scent mark during a winter mammal tracking workshop at the Forest Society's Hay Forest Reservation in Newbury.*

Right: *Morse uses a black bear skull to help illustrate an ursine territorial bite pattern left on a red pine trunk.*

On the Right Track: Winter Provides Ample Opportunities to Study Wildlife

By Dave Anderson

Snow season has arrived in New Hampshire's forests opening a window of opportunity for tracking winter wildlife. The tracking season lasts reliably for four months, perhaps less as winters become more erratic and annual snowfall decreases, from late November until late March.

In November and December, we are offered a rare glimpse into the lives of nocturnal animals. The conditions this time of year are perfect for reading tracks before the snowpack becomes too deep and full of drifts. A fresh snowfall of an inch or two over a solid crust resets the "whiteboard," the equivalent of shaking an Etch A Sketch.

With some patience and a keen eye, trackers can trace nightly movements of animals unlikely to be seen by day: weasels, fishers, foxes, coyotes, bobcats, and deer. The most common tracks you'll find are diurnal species that visit backyard birdfeeders: gray squirrels, red squirrels, and wild turkeys. These hungry critters tend to retrace their steps in similar locations, for example, a gray squirrel's tracks from tree trunk to birdfeeder.

Tracking is as much of an art as it is science. Students poring over guidebooks can

be overwhelmed with track measurements of stride (length of the track) and straddle (width of the track). For newbies, it helps to learn the four basic groups of animals that register distinctive tracks:

1. Walkers look like they only have two feet because each hind foot steps exactly where the front foot, on the same side, had stepped previously. They include deer, moose, coyote, and bobcat.
2. Gallopers will place their smaller front feet down first and then the larger hind feet land in front as the front feet lift up. They include snowshoe hare, squirrel, and mice.
3. Bounders hop and leap. In one motion, they lift their front feet up and place their hind feet down in the exact same spot where the front landed and leap forward again. They include ermine, martin, and fisher.
4. Waddlers lack the regularity of other track patterns. They often seem to move to one side of the body then the other. They include raccoon, porcupine, beaver, and black bear.

Another tip is to count the number of toe prints and the arrangement of the toes. Canines and felines register four front and hind toes (canines might register claw marks and felines won't). Weasel family members have five toes in front and back and claw marks might be visible. Rodents have four toes in front and five in back.

In addition to recurring track patterns, it's important to consider the habitat you're tracking in, such as wetlands, dense conifers, and hardwood forests. The availability of food and water and the creation of territorial scent marks and other mating behaviors influence wildlife movements in winter, too.

Identifying tracks often requires the process of elimination. Start by determining which animals are inactive or hibernating in the winter. Think bears, woodchucks, and jumping mice. Then rule out animals that don't live in New England, such as badgers, wolverines, caribou, and wolves.

DAVE ANDERSON (X3)

As part of a winter mammal tracking workshop at The Fells, Susan Morse teaches participants about wildlife habitat and breeding behaviors.

Taking a class with a knowledgeable tracker is a good way to learn and practice. Vermont-based master wildlife tracker Susan Morse leads dozens of tracking workshops throughout New England every year, sharing tracking tips, habitat clues, and wildlife breeding behaviors.

Morse leads indoor presentations, youth programs, and field workshops for Keeping Track, a nonprofit she founded 25 years ago. Equal parts forester, biologist, conservation planner, wildlands advocate, and philosopher, Morse teaches thousands of rookie trackers and budding naturalists the art of tracking. "Half of wildlife tracking is knowing where to look. The other half is looking," she says. Morse also advocates for a better understanding of landscape-scale conservation planning. "Many people are first attracted to our tracking workshops because they are sucked in to the idea of following animals. They think that is what Keeping Track is all about; but the next thing you know, they are learning more about the plants and finding local game trails the animals need to survive." For Morse, it's her passion for a holistic understanding of wildlife habitat needs in the face of a changing landscape in New Hampshire that makes her work worthwhile in the end.

Naturalist Dave Anderson is senior director of education for the Forest Society.

Learn More

Join Susan Morse on a winter tracking snowshoe tour at The Rocks and Hay Reservation in February. For more details, turn to page 5. To learn more about Morse's current work and publications, visit keepingtrack.org.

Fifty-Plus Years of Current Use: Yes, It Still Matters!

By Matt Leahy

In 1968, the people of our state approved Proposition 7 allowing "*for the assessment of any class of real estate at valuations based upon the current use thereof.*" Those italicized words, while dry and legalistic, set the constitutional underpinning of New Hampshire's current use program. Five years later, the Legislature approved the enabling statute (RSA 79-A) needed to ensure the fair taxation of undeveloped farm and forestlands.

Over fifty years have passed since voters made that milestone decision to amend the state's Constitution, so it seems like an appropriate time to ask if current use has met its stated purpose: to encourage the preservation of open space, and, if so, has New Hampshire benefitted?

The first question is the easier one to answer. RSA 79-A does not actually mandate a specific number of acres which must be enrolled in current use (remember, the program is voluntary) nor does it provide a definition of what signifies success. However, we do know that in the last 20 years, the enrollment number has been remarkably consistent. In 2018, 3,008,456 acres were enrolled out of a total 5,742,659 acres in New Hampshire. In 2010, 2,948,901 acres were enrolled, approximately the same amount as was in the program in 2000. The fact that such a significant percentage of land is being kept as open space surely means the fundamental goal of the original program supporters is being met.

However, the second question, Has New Hampshire benefitted?, is the more important one to consider. Admittedly, we can only speculate and imagine what New Hampshire would look like if current use did not exist (picture the northern section of the New Jersey Turnpike). While that may be a fun exercise, the fact is we can talk conclusively about the benefits to the people of New Hampshire as they relate to conserving open space, forested areas, and agricultural lands. It is important to keep in mind these benefits go beyond maintaining just the natural beauty of these places.

From left, Richard Kelley, Paul Bofinger, Miriam Jackson, and Tudor Richards pose with the original license plate used to promote "Yes on 7," the name of the citizen campaign to amend the state's Constitution allowing for the establishment of the current use program.

For example, the protection of the state's drinking water resources is a priority issue for both state and municipal officials. Scientific evidence strongly shows that maintaining forested buffers along and on top of drinking water resources helps to reduce the costs to treat drinking water. Gifford Pinchot, the first chief of the U.S. Forest Service, described this connection in much plainer terms when he said, "The relationship between forests and rivers is like father and son. No father, no son."

Economically, current data highlights the positive impact that land protection has on economic activity. According to a report from the North East State Foresters Association, forest-based manufacturing adds to the state's economy nearly $1.15

billion with 8,160 jobs and payroll of $384 million a year. In addition, the Outdoor Industry Association has determined that New Hampshire's outdoor recreation economy has created 79,000 jobs statewide and generated $8.7 billion in annual consumer spending. All those people who hunt, hike, cross-country ski, and snowmobile here do so because of the amount of protected open space in the state. In short, protecting land increases local employment.

As stakeholders and policy makers debate how to confront climate change, the defining environmental challenge we face, forested landscapes are actually one of the most effective natural solutions available to address this emergency. Forests remove CO2 from the atmosphere and therefore play vital roles in mitigating the effects of climate change on the environment.

The potency of all these benefits would be greatly diminished if New Hampshire had far fewer acres of open, undeveloped space. Therefore, the challenge today is, as it was back in 1968, how to keep forests as forests. A program like the New Hampshire Community Heritage Investment Program (LCHIP) is an important tool to meet this goal; but not every open space parcel meets the program's criteria. Likewise, support from the federal Forest Legacy Program has helped to preserve key areas, but the program is allocated under a nationally competitive process that tends to focus on large parcels of forested areas. There are, of course, other federal and state land protection programs, but none of these are as accessible to small, private landowners as current use is. New Hampshire's program is straightforward and allows even moderate income families to hold onto the land they love. While it is true a landowner can pull out a parcel from current use, the fact that the total number of acres enrolled has remained consistent shows the program's original vision is being met.

So, has current use helped to make our state a more vibrant and healthier place to live? The answer is a resounding "yes." As our state continues to seek ways to promote economic vitality while protecting our natural areas, we would be wise to remember this effective solution has been on the books already for five decades.

Matt Leahy is the public policy manager for the Forest Society.

Learn More

For more information on current use, refer to this helpful document: https://bit.ly/32GrnUb.

Visitors to Sullivan Farm in Nashua will find a lot to fall in love with, including its iconic red barn and pick-your-own orchards.

Protecting Nashua's Last Working Farm

By Kelly Whalen Cioe

In December, the Forest Society closed on a conservation easement to protect Nashua's last remaining working farm. The 52-acre Sullivan Farm has been a long-time fixture in Nashua, dating back more than 100 years. The closing marks a collaborative effort between the Forest Society, City of Nashua, the Land and Community Heritage Investment Program (LCHIP), NH State Conservation Committee Land Conservation Grant Program (Moose Plate), 1772 Foundation, and the Natural Resources Conservation Service (NRCS) Agricultural Land Easement Program, as well as many local residents and businesses, to complete the $1.4 million campaign to purchase this conservation easement.

Sullivan Farm has a long history in Nashua as a working family farm. Kathy Williams, owner of the property, and her family have farmed the land since 1911. Acquired by Williams' grandfather, Joseph Sedlewicz, Sullivan Farm was used for dairy cows and vegetable farming. When her father, Leopold Sedlewizc, took over the farm from Joseph, he planted an orchard.

Today, the farm, with its familiar red barn, features a farmstand, pick-your-own orchards, annual agricultural events and activities, as well as walking trails. The conservation easement protects the property from being developed and will keep the land as a working farm.

"With my family having farmed this land for more than a century, I wanted to ensure its protection while I still could," Williams says. "It's such a big part of our family history and of the fabric of this community. As agricultural land continues to disappear, I wanted to do my part to keep our farm from becoming just a memory."

The City of Nashua used about $300,000 from its Conservation Fund to help preserve the property and another $213,000 it received from LCHIP. "Sullivan Farm is Nashua's last working farm and is very special to our city," Nashua mayor Jim Donchess says. "We are lucky to have a place in the heart of Nashua offering fresh, local produce grown by members of the same family for over 100 years—not to mention all the fun family events and walking trails. Now, thanks to the tireless efforts of many individuals and groups, Nashua can keep this treasure for years to come."

The conservation easement consists of agricultural lands, Coburn Pond, Lincoln Brook, wetlands, and about 12 acres of forest. Agricultural land includes nearly three acres of cultivated cropland (mostly blueberries and vegetables), about 16 acres of orchards (primarily apple, with small orchards of peach and pear), 1 acre of pasture grazed by sheep, and half an acre for flower beds and greenhouses. Coburn Pond, approximately 3 acres, provides a critically important source of water for irrigating crops. The forestland includes a stand of mature hardwoods: large red oak, sugar maple, hickory, and white ash. Forested wetlands along Lincoln Brook and Coburn Pond provide storage and purification of drinking water, help remove carbon from the atmosphere, and mitigate periodic flooding, as well as provide a habitat for a number of wildlife species.

The NRCS Agricultural Land Easement Program provided the Forest Society with

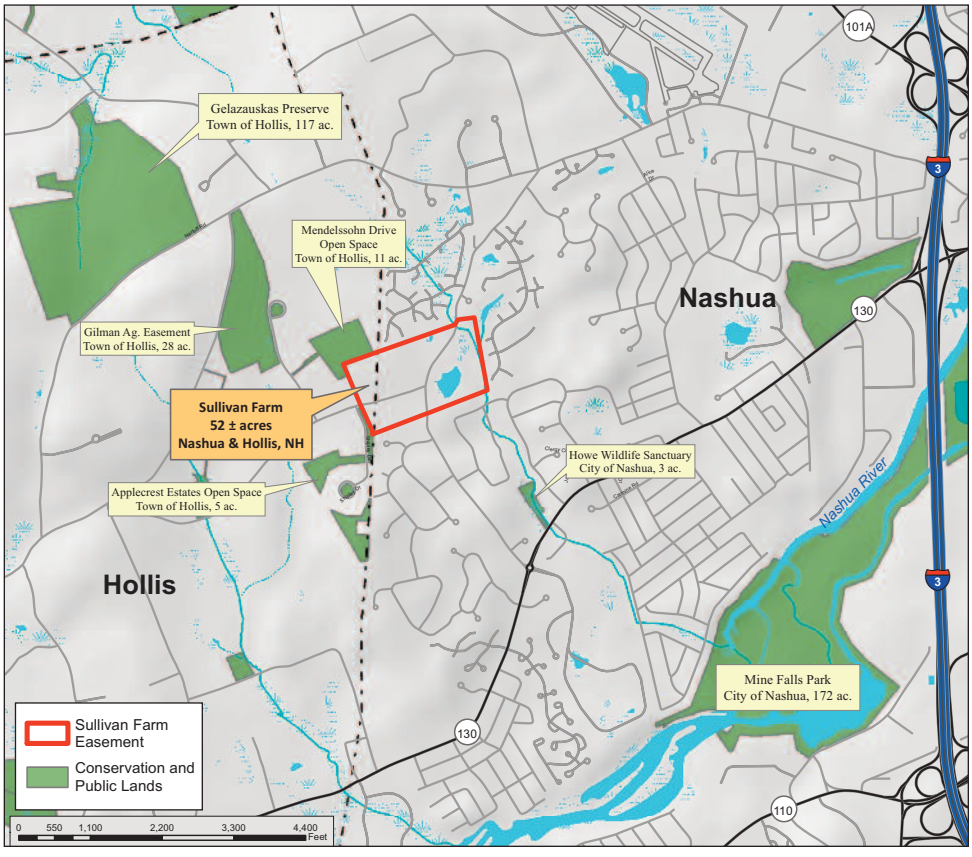
Right: *With her husband Bobby looking on, Kathy Williams, owner of Sullivan Farm, signs papers for the closing of the conservation easement with the Forest Society. Williams and her family have farmed the land since 1911.*

(OPPOSITE PAGE) JERRY MONKMAN/ECOPHOTOGRAPHY (X2); (THIS PAGE, FROM LEFT) JERRY MONKMAN/ECOPHOTOGRAPHY, TOM HOWE

a grant of $650,000 to assist with the project. The program helps landowners, land trusts, and other entities protect, restore, and enhance wetlands, grasslands, and working farms and ranches through conservation easements. Through the sale of New Hampshire state moose license plates, the New Hampshire State Conservation Committee Land Conservation Grant Program provided a grant of $20,000. The grant program helps protect, restore, and enhance the state's most valuable resources. The 1772 Foundation, which works to ensure the safe passage of historic buildings and farmland to future generations, awarded the Forest Society $103,000 towards Sullivan Farm. The remaining funds were raised through generous donors and businesses. The NH Community Loan Fund also played a critical role in providing a short-term loan that helped Kathy Williams get through the longer-than-anticipated process leading to this recent closing.

"This project demonstrates a real strength of the Forest Society in its land conservation work," said Tom Howe, senior director of land conservation at the Forest Society. "We were able to bring together multiple partners, funding sources, and community resources to save this important property and community gathering spot. We also had a dedicated partner in Kathy Williams. Her patience and vision to protect this property never wavered, despite the complexity and time it took to complete our project. She no doubt had many other opportunities to sell the property, but she held to her vision of seeing this land protected."

Kelly Whalen Cioe is the communications director for the Forest Society.



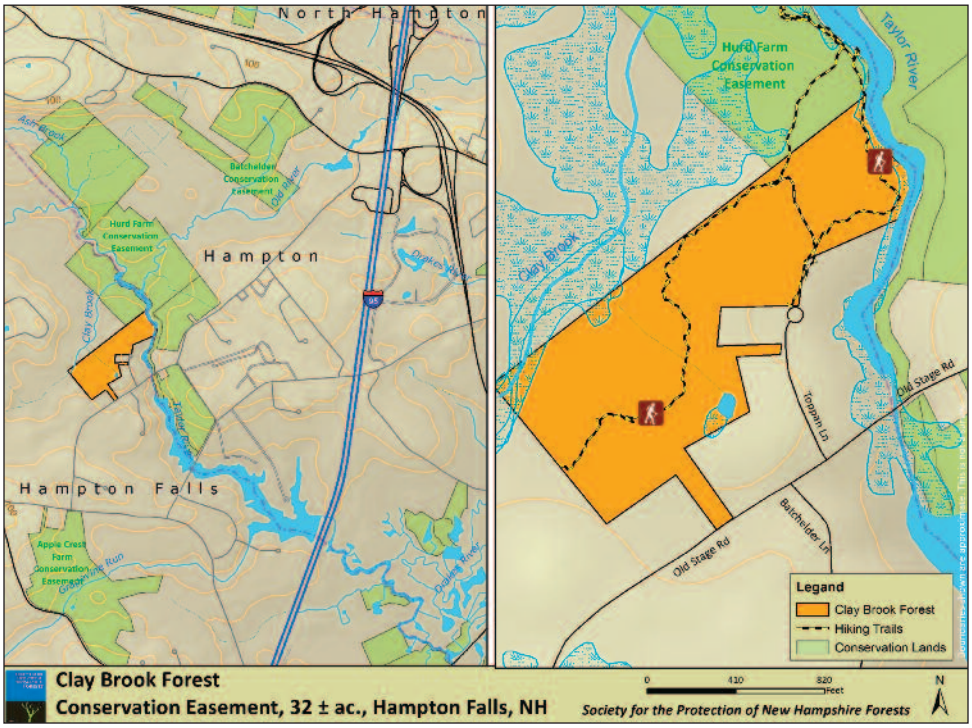
Clay Brook Forest in Hampton Falls borders the Taylor River (left) and is important habitat for barred owls (right) and other wildlife.

Clay Brook Forest: A Seacoast Property Worth Protecting

Located off Old Stage Road in Hampton Falls, N.H., the Clay Brook Forest, historically known as Toppan's Ox Pasture, is a scenic 32-acre property that boasts a quarter-mile of frontage along the Taylor River and a network of trails fit for hiking, snowshoeing, nature observation, and dog walking.

Recorded history of the Clay Brook Forest property dates back more than three centuries. The remnants of the Upper Dam, used on the Taylor River from 1680–1700, is just one of the many relics that visitors can explore on the property. Public access to lands like these for recreation are part of what makes Hampton Falls the special community it is.

In early 2016, Clay Brook Forest was placed on the market, putting the land



under direct threat of development when a developer made an offer to purchase it. Hampton Falls residents, including James and Kate Kibler, whose land abuts the property, were concerned that the access to the property's trails would be severed and the rural character of the neighborhood would be changed forever. "Initially, we just fell in love with the land and especially the otters. As we learned more about its ecological value and its connectivity, we began to realize the true importance of this forest as a conservation property. We knew we had to act," James says. In August 2019, the Kiblers stepped forward as conservation buyers, purchasing the land to secure it until a permanent conservation solution could be reached. Now they are working with the Town of Hampton Falls and the Forest Society to sell a permanent conservation easement on the property that will ensure its continued public use and natural integrity.

Accomplishing this conservation outcome will take many helping hands. To raise the total project cost of $732,000, the town of Hampton Falls has committed $375,000 and the Kiblers will contribute $100,000. The Forest Society is preparing applications to state grant programs and will seek to raise up to $255,000 from other grant sources and private individuals to purchase the easement, cover project expenses, and set aside funds for long-term stewardship. At the conclusion of this project, the Kibler family will continue to own the property subject to the permanent conservation easement held by the Forest Society.

In winter, Clay Brook Forest's trails are a perfect getaway for cross-country skiers.

In addition to its high historical value, the property provides the only overland access to the Hampton Falls section of the Hurd Farm conservation land on the west side of the Taylor River. Along with Hurd Farm and other conservation projects, Clay Brook Forest would be part of a 400-acre conservation corridor along the river, protecting water quality and wildlife habitat. "The Forest Society is pleased to be working with the Hampton Falls Conservation Commission and the Kiblers to conserve this important land and its wildlife and recreational opportunities," says Brian Hotz, Forest Society vice president for land conservation. Clay Brook Forest's woodlands, wetlands, and riverfront are home to otter, fisher, bobcat, fox, beaver, muskrat, and mink, as well as barred owl, great blue heron, and even the state-threatened red-shouldered hawk, which has been spotted on the land.

As this issue goes to press, the Forest Society has raised 67 percent of the needed project funds. You can help the Forest Society reach its goal by making a contribution today to protect Clay Brook Forest forever.

☐ **YES, I WANT TO HELP PROTECT CLAY BROOK FOREST**

Name: _____

Address: _____ Town/City: _____ State: _____ Zip: _____

Telephone: _____ Email: _____

☐ Enclosed is my tax-deductible contribution for $_____

☐ VISA ☐ MasterCard Number: _____ Exp. date: _____ Security code: _____

Please mail the completed form to:

Society for the Protection of New Hampshire Forests
CB19CFN / 4104T122
54 Portsmouth Street, Concord, NH 03301

Or donate online at forestsociety.org/claybrookforest.

For more information, call Anne Truslow at 603-224-9945 or email atruslow@forestsociety.org.

Thank you for your help!

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JAMES KIBLER (X3)

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THE MANY FACES OF CONSERVATION

PHOTO: AL KAREVY

Sofia Lemons
Farmington, N.H.
Member since 2018

"I grew up in the middle of Indiana where finding more than a few acres of trees all in one place was a rare thing. That made it even more special when I would go hunting or fishing with my grandpa or hiking in Mounds State Park and mushroom foraging with my dad. Both of them taught me that I could not just have an abstract appreciation of forests, but instead, that I should play an active part in their protection and ecosystems.

The Forest Society helps me to continue my relationship with forests here in New Hampshire, individually and as a part of a larger community. As a volunteer land steward, I get to enjoy and care for the many species of trees, fungi, and animals at Jones Forest in Milton. I've been lucky enough to attend classes about building benches with natural materials and identifying species of mushrooms that I never encountered in the Midwest.

As a mother, I get to pass on my inherited sense of interconnectedness with nature to my kids. Whether it's climbing Mount Major, picking blueberries at the Morse Preserve, visiting Powder Major's Forest to see the bridge I helped build, or showing them how to steward Jones Forest, I hope that they remember the beauty they see in the woods and the responsibility we have to protect it."

MEMBERS MAKE THE DIFFERENCE!

Sofia Lemons is among the 10,000 members who help the Forest Society protect more than a million acres in New Hampshire. To join her, use the envelope in this issue or call Margaret Liszka at 603-224-9945.