Vermont Woodlands Association and Vermont Tree Farm Program

A VOICE FOR HEALTHY FORESTS

Vol. 16, No. 3 September 2020

MEMBERSHIP NEWSLETTER

VERMONT WOODLANDS ASSOCIATION

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TABLE OF CONTENTS

Front cover photos: Mark Olsen on Unsplash (left), VWA (right top/bottom)
Back cover photo: VWA (left), David Izquierdo on Unsplash (right)

AN INVITATION TO OUR MEMBERS

We welcome your submissions for the VWA and Tree Farm newsletter. If you have a story to tell or news of interest to share with other landowners, please send along so we may consider for future editions. We can accept articles, photos, or news tidbits via email to info@vermontwoodlands.org.

Mission Statements:

Vermont Woodlands Association is a 501(c)(3) nonprofit corporation whose mission is to advocate for the management, sustainability, perpetuation, and enjoyment of forests through the practice of excellent forestry that employs highly integrated management practices that protect and enhance both the tangible and intangible values of forests - including clean air and water, forest products, wildlife habitat, biodiversity, recreation, scenic beauty, and other resources - for this and future generations. VWA objectives are to communicate the benefits of working forests, recognize exemplary actions of woodland owners and managers, provide educational opportunities, and represent its membership before governmental bodies.

The **American Tree Farm System**, first organized in 1941, is the Nation's oldest certifier of privately owned forestland. Tree Farm members share a unique commitment to protecting watersheds and wildlife habitat, conserving soil, and providing recreation; and at the same time producing wood products on a sustainable basis. The Vermont Woodlands Association strives to educate, train, and support private forest landowners in sound management practices concerning wildlife, water, wood, and recreation. We do this by managing and enhancing the American Tree Farm System® Program in Vermont.

NEWS FROM VWA

I Love Rocks!

by Kathleen Wanner,
Executive Director

I love rocks! That's a good dang thing since my piece of Vermont pretty near needs an excavator to dig a hole for a dahlia. When we were excavating for the house back in 1990, I was taking a geology class, and that's how I learned to love these rocks. It's all about patience: just wait a million or so years and we'll have beautiful soil. In the meantime, I grow rocks. I've come to appreciate that unlike a garden, they take very little tending; no weeding or watering required. They're also perennials and great propagators, coming up every year and bringing along their young.

So, back to that excavator. My neighbor has been here for the last 2 weeks piling these rocks, or should I say boulders, into yet another wall. Our property, located appropriately on Cobble Hill Lane, is dotted with rock walls built at various times during the last 30 years, generally in conjunction with a construction project.

This summer's wall commemorates the work done when I moved my office to the basement and we added a front porch. Our front "porch" used to be a beautiful moss-covered stone that now graces the driveway and will be our "house marker" for millennia. A dump truck and two pick-ups were chained together to get it from the house to its new home, so I anticipate it will not move again.

One of the benefits of digging up and moving all these boulders is that it leaves just a bit of bare ground where I perhaps can plant a tree or two and lay a mat of wildflower seeds. Everything I do outside needs to fit my desire for a symbiotic relationship with my surroundings. I will let you grow in peace if you don't expect me to mow, whack, water, chop, etc.

If you are one of those deprived folks who have no rocks, stones, boulders, cobbles, scree, rubble, goolie, gravel, tarsus, granules, nuggets, crags, or cairn – I'm so sorry. I have more than an ample supply, so feel free to come right along with a dump truck and fill it to the brim with all the rocks you can handle. My mom, who lived in New Jersey where the soil was rich and beautiful, used to fill her trunk with rocks on every trip north. Who'd have thought anyone would need to import rocks.

These truly magnificent formations stand as a testament to the creative power of the earth. My rock walls are among the special sites on this little 18-acre tree farm, along with the tiny patch of blue cohosh and maiden hair fern that grow beneath one of the many outcroppings of ledge – another reminder of the earth's magic.

PRESIDENT'S COLUMN

The Woods Life

by Allan Thompson

I strive for a healthy woods life. A life based in, and benefiting from, the woods. Healthy woods. Vermont Woodlands Association strives for a good woods life for all of its members. My woods life is going to be different from your woods life, but there is common ground that I think we can work with.

Photo: VWA

There are two complex, parallel ideas in my woods life. One is a tangible one: more utilitarian. This idea is that trees offer valuable resources, and many eventually will be cut to serve those resources. In my own life, the closest examples are firewood to heat my home and lumber for structures.

The other idea is the more intangible one and is also more difficult to articulate. It is more of an IDEAL. This ideal comes from woodland experiences that excite the senses and create this intangible appreciation for the woodlands and woodland life. When we hear the sounds of the first spring hermit thrush, or in the fall when leaves collect at our ankles, we're experiencing life in the forest through distinct observations and interactions. Collectively, this creates an awareness and appreciation of life around us, seemingly without us, emanating from and in a wild and natural state. These are things that I crave every time I enter the woods. And, likely, you do, too.

The contradictions of these ideals are difficult to untangle. The idea that forests, sometimes even a single tree, can both provide utilitarian values and these natural experiences is often where our common ground breaks down. The utilitarian instinct to harvest wood is difficult to realize if we're protecting every piece of forest life and function. Similarly, it is

difficult to appreciate forest life if the most conspicuous parts, the trees, are removed. They often come to a head when a forest that we appreciated for its "natural state" undergoes a harvest and the very conditions that we appreciated are no longer present. The shade, the unbroken green, the symmetry of trees and canopies. Gone … or at least temporarily changed.

However, my perspective is that these ideals are not in contrast to each other. Rather, the common ground still holds strong. These complex forest ideals co-exist, sharing a mutualistic relationship. When I see a spruce leader with twice the growth in the new sunlight than the previous years where it struggled under the shading suppression of a split stem red maple, I celebrate the invigorated life of the spruce, the now-gone life of the red maple, and the anticipation of warming by the winter's fire. I also celebrate the work: the labor and fruits of the cutting. And I celebrate the recognition of forest life and the very, very humble position to have to choose to kill a tree for the life it gives me. And in truth, I'm glad it's me.

Forest utilization requires a land ethic that values forest life and, through thoughtful forest management, preserves the ability for that forest to persist. Without it, our forest resources degrade and eventually are gone. We also live in a state, a society, where forest products are a part of our culture, and wood utilization is inevitable. In many areas, it is the very idea of utilization that keeps forests as forests while being able to provide economic benefits and materials for their communities and protecting the very forest ecosystem we hope to protect. So, the land ethic also must include the assumption that resource use, that is, woodland management and logging, is inevitable, appreciated, and an integral part of our woods life.

You don't have to be a landowner or have a specialized understanding of our natural world to practice an ethic that celebrates a healthy woods life. This complex land ethic can be practiced by each of us so that it permeates into our natural resource protection, education, woodland management, cultural appreciation for woodland workers, as well as the state policies and organizations that we support.

Over the last few years as a member, board member, and, now, Interim President of Vermont Woodlands Association, I recognize that this is where, as an organization, we play best. We're working to keep members informed through our ongoing webinars, advocating for wildlife and habitats through our Woods, Wildlife and Warblers program, keeping you up-to-date with legislative activities, participating in policy discussions, participating in Forest Industry networks, promoting long-term planning with our Land Succession programs, and our WOW initiative, empowering women as woodland owners. Throughout all of this work, we're promoting this woodland ethic – a woods life that recognizes our role in our woodland world. That we are not apart from it but rather willful players IN it. Vermont Woodlands Association hopes to not only support willful players but also create skillful woodland players for the collective benefit of our healthy woods life ... so that when complex and the very humbling decisions that relate to our woods are required to be made by someone, I'll be glad that it's you.

Thank you to all our members for your continued support.

Put Blodgett's Legacy lives on in the Upton Wildlife Endowment

In the March 2020 newsletter, Put's article on "Supporting Wildlife" references a $20,000 commitment from the Jack and Dorothy Byrne Foundation if VWA could raise an equal amount for the Upton Wildlife Endowment. I visited Put in Dartmouth on February 28 and shared with him the news that we had received an anonymous donation of $50,000 for the wildlife endowment. He was wildly happy and directed me to let the Foundation know. It was just days later, on March 3, that Put passed away. However, his legacy lives on. I have recently spoken to Dorothy Byrne who is sending us a check for $20,000 with congratulations on our ability to match their pledge. The kudos belong to Put who was tireless in his fundraising efforts and determined to leave VWA in good financial condition. Thanks to Put's outreach, the Upton Wildlife Endowment has grown by $70,000 this year.

– Kathleen Wanner

NEWS FROM VERMONT DEPARTMENT OF FORESTS, PARKS AND RECREATION

Barberry (Berberis thunbergii)

by Elizabeth Spinney, *Invasive Plant Coordinator, Vermont Department of Forests, Parks & Recreation*

In September, summer nights are sliding into chilly autumnal mornings. Since many of us have been spending more of our free time outside, you may be in search of fall activities that can do some conservation good as well. Consider scouting for invasive plants. One such plant is Barberry (*Berberis thunbergii*), also known as "Japanese Barberry," "Thunberg's Barberry," "Red Barberry," "Crimson Pygmy Barberry," "Rose Glow Barberry," or "Berberis Aurea." This perennial woody shrub has canes like a rose, and it has been found to be highly invasive in habitats like forest edges, forests, meadows, fields, and disturbed areas. During the fall, Barberry plants will hold onto their leaves, which turn red, and can have bright red berries drooping underneath each cane. And even in the spring, the plants will leaf out earlier than many native species, and they will stand out as pops of green through the greys and browns.

Originating from Japan, Barberry has historically been a popular landscaping shrub. Introduced as an ornamental plant in 1875, Barberry can be found throughout the East Coast and the Atlantic Provinces, and it is spreading west. It can send up sprouts from shallow-growing rhizomes, and the long-bending canes of this shrub also can root if they bend enough to touch the ground. This plant produces many seeds (hundreds to thousands depending on growing conditions) on each mature plant every season. The germination rate is high (~90%) in the first year, but the germination potential drops dramatically after that. Those seeds get spread by wildlife and humans, and many seeds fall and grow near parent plants, resulting in thickets that can appear in a matter of years once it is newly introduced to an area.

Barberry is a member of the barberry family (*Berberidaceae)*, which includes native species like Blue Cohosh (*Caulophyllum thalictroides*). Species within the barberry family all have alternately arranged leaves, and the woody shrub species in this family have spines located at nodes along the stems. The leaves of Barberry are small (~1"), green, spatula shaped, with smooth margins, grouped in clusters along each cane and paired with a single spine. The flowers, just like the fruit, hang below the cane, and fruit can be produced in sun or shade.

Barberry can have an impact on forest soil cycling by raising soil pH and increasing nitrate levels, and these changes can persist long after the Barberry is removed. It can also alter the humidity of the understory by growing so densely the plants increase ground level humidity to 80%. That

Japanese barberry on April 21, 2017 in Burlington, VT, showing bud break and leaves starting to emerge. In the fall and spring, you can look for fruit and spines.

Barberry in the woods through the seasons in Connecticut (Spring, Summer, Fall). Photo credit: Leslie J. Mehrhoff, University of Connecticut, CC by 3.0 [5270039, 5456895, 5456843].

fact, combined with the shade these thickets create, makes good nursery habitat for larval ticks. This plant also has the potential to alter forest successional patterns in stands where it has invaded. The negative impacts that this plant has on New England natural resources has led to its listing as a Class B Noxious Weed in Vermont, including cultivated varieties (cultivars), and is listed on prohibited species lists across New England.

If you'd like to add your Barberry observations to a growing Citizen Science dataset, check out Mapping for Healthy Forests, Vermont at *https://www.inaturalist.org/projects/mapping-for-healthy-forests-vermont.*

To learn more about the biology and control of Barberry, check out *www.VTinvasives.org.*

Information and Guidance to a Successful Timber Harvest

Timber harvests come with a lot of questions–some answers you need to know, some you don't. To help you answer those important questions about your woods, the Vermont Department of Forests, Parks and Recreation has created the **Landowner Guides to a Successful Timber Harvest**. They're simple and concise guides that handle topics including: Overview of a timber harvest, Water, Wildlife, Economics, and Working with Foresters and Loggers. Download the series or just the booklets that pertain to you at **VTCutwithConfidence.com.**

NEWS FROM AUDUBON VERMONT

Forest Management with Birds in Mind – Part 1

by Steve Hagenbuch, *Senior Conservation Biologist, Audubon Vermont*

Mature forest habitat. (Photo courtesy Audubon VT)

For many private landowners, managing the forest in a way that gives due consideration to the various wildlife species that currently, or could in the future, reside on the landscape is of high priority. If you are among this segment of forest stewards, what could you do to achieve your objectives? How do the various concepts of forest and wildlife management relate to your specific property? Is the use of patch cuts the best tool for enhancing wildlife habitat? Are there other silvicultural prescriptions that can balance the need for a sustainable yield of forest products while at the same time "doing good" by the wildlife? To help answer all of these questions and more, we'll look at a particular wildlife group, forest-nesting songbirds. This group, which includes Wood Thrush, Blackburnian Warbler, and White-throated Sparrow, provides a great focus because they can be readily observed, utilize a variety of forest conditions, and respond relatively quickly to changes in forest structure and composition as a result of active management. To begin, let's address a couple of key questions.

What's the Big Picture?

Before considering what to do on your own property, it is important, even critical, to take a broader look at the landscape in which you are embedded. Think about what your property offers that your neighbors' property does not and vice-versa. The amount of young forest, or early-successional habitat, which "should" exist on the landscape is one of the more commonly asked questions in this vein. Query 10 people, and you might get 11 answers. Audubon Vermont's Healthy Forests Initiative suggests a target of 3-5% of a 2,500-acre landscape be in some form of early-successional habitat (1- to 20-year-old regenerating forest, shrubby old fields, margins of beaver

Young forest habitat. (Photo courtesy Audubon VT)

Blackburnian Warbler. (Photo courtesy Shirley Donald, Audubon Photography Awards)

ponds, etc.) at any given time. This is based on the natural stand dynamics of northern hardwood and associated forest types in New England and is consistent with Vermont Conservation Design, published by the VT Agency of Natural Resources. This target is a bit more conservative than that recommended by some other groups. Keep in mind, however, that you can always go back and cut more. It'll take much longer, 100 years to be exact, to grow a 100-year-old forest. Once it has been determined what the landscape context is that you're dealing with, it is time to turn your attention to your own property.

Warblers, Thrushes, or Sparrows?

How should you determine what bird species to focus on through your management? It all depends. What's good for the goose isn't necessarily good for the gander (so to speak). The nesting habitat requirements for Blackburnian Warbler (extensive areas of mature, closed-canopy softwood or mixed forest) are quite different from those of a Chestnut-sided Warbler (open-canopy, regenerating hardwoods). For this reason, a single-species approach to forest management is generally not recommended, although there may be specific situations where it is warranted. Instead, think about managing for habitat conditions. Fortunately, there are a number of silvicultural options available to maintain, enhance, and/or create the full suite of commonly desirable forest conditions. This increases the chances that what you do on your property will benefit the greatest number of bird species while minimizing the number of species that may be affected negatively.

In the next VWA newsletter, we will continue the discussion by directing our attention to specific silvicultural options designed to integrate songbird habitat management with other ownership objectives.

OUR WOODLANDS AND WATER QUALITY

Waterbars

by Dave Wilcox, *Watershed Forester*

The waterbar, the simplest and most important practice we use to protect water quality.

For this and future segments of "Woodlands and Water Quality," I will be writing about the tools, practices, and principles which are important to help us protect water quality in our woodlands. I thought it fitting to start off this series of segments by talking about the practice that is relied on the most to protect water quality: the waterbar. This simple practice is key to the protection of our road and trail systems as well as preventing sediment from leaving its appropriate and important place in our woods and reaching streams and other waters. It is the guardian of our infrastructure and the last line of defense against sedimentation. An assessment of the quantity and quality of the waterbars on a site will tell you very quickly how well those trails will hold up over time, and if water quality is at risk.

What exactly is a "waterbar?" Well, a waterbar can be a pile of dirt, a log, or anything else that deflects water in order to change its path. The principle behind a waterbar is to reduce the distance that water can flow down a sloped surface. Our skid trails and truck roads are great places for us to travel in our equipment and trucks, and they are also a great place for water to flow, pick up speed, and start to take soil, rocks, and anything else it can, with it. The idea of a waterbar is to put a turn in the water's path to divert it off the trail and into a vegetated area where the water will slow down and be absorbed into the forest floor.

Waterbar on "closed out" truck road.

This raises the question, how can you have waterbars and use a road or trail at the same time? This is an interesting topic that landowners, foresters, and loggers have been struggling with for decades. Like many other aspects of a logging operation, the solution starts with planning. Good layout uses the existing topography to minimize slope, and to reduce the length of steeper sections. It is inevitable nonetheless, that we will have some steep sections of roads and trails to contend with. This is where the Department of Forests, Parks, and Recreation's Acceptable Management Practices (AMP) manual comes into play. Table 1 recommends the maximum distance between waterbars based on the slope, and is broken up by the type of road or trail, and for which point in the harvest, whether it's during the logging operation, or during "close out." Close out is the point when the harvesting is done, and the next activity on those roads and trails won't occur for several years. Basically, more waterbars are required after close out because there won't be the same degree of maintenance as there was during the harvest. During harvesting, it's a combination of constant maintenance, and using structures like log-reinforced waterbars or piles of brush to protect the trails from erosion. Keeping a keen eye on the weather report is also important so that when heavy rain hits, the job is buttoned up. It cannot be overstated how much the weather plays into a successful logging operation, and sometimes when the weather isn't cooperating, there may be several days when you simply can't risk using a skid trail or truck road because it's too wet, or too soft.

Log-reinforced waterbar.

The job of a waterbar is not only to protect our system of roads and trails by minimizing erosion and soil movement. Perhaps the most crucial waterbars are those that are at the interface between the road or trail and the forest buffer. As we know from the AMP manual, the forest buffer is the forested area around the stream that filters out sediment and protects the stream from temperature increases. When we have a stream crossing on a road or trail, we are creating an opportunity to introduce sediment directly into that waterbody. AMP 6.5.7 states that ***"On approaches to stream crossings, waterbars, turn-ups or broad-based dips shall be correctly installed on truck roads and skid trails to divert the surface water runoff into a filter area. They shall be installed as close***

Trail with stream crossing: waterbarred, seeded, and mulched.

to 25 feet away from the top of bank as existing soil, rock, ledge and ground conditions allow."

These waterbars that are closest to the streams are very important because they are the last line of defense in "disconnecting" the trails and roads from waterways. Therefore, they are oftentimes a little larger and constructed with even more care. Also, any waterbar within 50 feet of a stream needs to be seeded and mulched to increase the rate at which it grows vegetation and is stable.

A well-built waterbar is constructed on an angle across the trail in a location that allows for the outflow of the waterbar to continue into the forest or forest buffer far enough that the deposited sediment doesn't build up and plug the waterbar too quickly. Eventually, even the best designed and installed waterbars will need to be re-shaped and cleaned out due to weathering and pedestrian or vehicular traffic. They need to be constructed based on the planned use for that trail or road. If constructed well, and at the correct spacing, waterbars will withstand the use and prevent erosion from happening, protecting the infrastructure that we rely on, as well as protecting water quality.

A digital version of the AMP manual can be found at this website: *https://fpr.vermont.gov/sites/fpr/files/Forest_and_Forestry/Forest_Management/Library/FullDocument-7.29.pdf*
Printed manuals can be picked up free of charge at your county forester office, or at any Department of Forests, Parks, and Recreation district office. Due to COVID-19 safety measures and remote staffing locations, please contact your county forester or district office before coming in person.

Dave Wilcox - Watershed Forester
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We can accept articles, photos, or news tidbits via email to info@vermontwoodlands.org.

HOW CAN YOU HELP YOUR FOREST?

Work with a consulting forester to manage as best as possible in these difficult times. With the complexity of the problems facing us, it is imperative to have professional help, just as we do for our medical, dental, legal and accounting needs. Also, your consulting forester's assistance is needed to make sure forest management is allowed if you should ever decide to put your property into a conservation easement.

HOW CAN YOU HELP VWA?

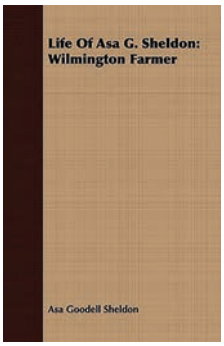
Introduce a friend, neighbor, or family member to VWA. Membership really matters!

Attend a workshop or walk in the woods to learn from and network with others.

VERMONT TREE FARM COMMITTEE BOOK REVIEW

Coppicing for firewood

by Allen Yale, *landowner and tree farmer*



Sheldon, A.G., *Life of Asa G. Sheldon: Wilmington Farmer*, E.T. Moody, 1862: Woburn, MA.

While many look to Gifford Pinchot as the father of modern forest management, I have come across an example of a prescription for woodlot management in a book first written in 1862. The book, *Life of Asa Sheldon: Wilmington Farmer*[1], relates his life from childhood on his parents' farm in the 1790s, through his several careers from farm laborer, teamster, logger, sawmill operator, trader, to contractor for the construction of several of the earliest railroads in the Boston area in the 1830s-1850s. Throughout the narrative, it becomes evident that Sheldon was a hardworking, intelligent, and enterprising individual with a critical perspective on the cost-benefit analysis of economic decisions.

The second section of the book gives Sheldon's opinion on several aspects of the operation of a farm. One short section, entitled "Forest Trees" (pp. 171-175), opens with the quote: "To make an oak growth profitable, it should be cut once in twenty-five years."[2] Initially, when I first read this, a couple of decades ago, I was shocked to think someone would recommend a 25-year rotation for oak. As I read further, I realized that Sheldon was referring to "coppicing," with the end-product as firewood.

Coppicing refers to the cutting of a woody stem at or close to ground level to encourage regrowth of stump sprouts. Sprouts coming out of the stump have available the pre-existing root system of the original tree whereas a seedling has to grow a new root system as it grows. Sheldon recommended that trees be cut as close to the ground as possible and cut during the fall or winter. This agrees with current literature on coppicing.

I became acquainted with coppicing accidentally while working in my own woodlot. Over the years, my pine plantation began to develop a hardwood understory of sugar maple, red oak, white ash, and black cherry. Being on rich northern hardwood soils, the land favored hardwoods. Wanting to increase diversity and transition from the monoculture of Red and White pines, I decided to encourage these young hardwoods. I discovered that these shade-tolerant hardwoods shot up through the canopy, so that eventually they overtopped the red pine. Ultimately, the density of the hardwood regeneration suggested that I should thin some of the hardwood saplings. The next spring, I noticed that many of the stumps had dozens of "stump sprouts" emerging from the cambium layer of the stumps like a halo. The next thing that I noticed was that many of the sprout rings were being browsed by deer. However, on some of the stumps, the sprouts survived to become saplings.

At this time, a couple of decades after I first thinned these trees, I have pole trees 6 inches or so in diameter at breast height (DBH). These are not competing with the trees for which I originally cut them, but instead form an understory to those trees, increasing structural diversity. At their current size, these coppiced sugar maples would make prime firewood, as few would require splitting.

If I cut these coppiced maples, next spring the next generation of firewood would have sprung from the stumps, making the third generation from the same stump.

The common strategy for managing a coppiced woodlot is to divide the area by the expected rotation cycle. Thus, a 20-acre parcel managed for a 20-year rotation would permit 1 acre per year to be cut. Each of these annual sections is called a "coupe," French for "cut." That acre would be clear cut, close to the ground while the trees are dormant. The result is a woodlot with structural diversity, providing diverse habitat, resulting in a diversity of wildlife species utilizing the site.

Brett McLeod, associate professor of Forestry and Natural Resources at Paul

A coppice maple. Note the rotting stump at the base.

Smith's College, suggests two benefits of coppicing:[3] "the first benefit is reduced establishment time, meaning that you won't need to wait for a seed to germinate, establish itself, and develop a full root system. The second benefit is that, because coppiced trees form multiple stems as opposed to a single trunk, you'll have the opportunity to grow significantly more wood." He justified the latter statement with the following example: "First, I cut down a 40-year-old American beech with a single trunk, likely established from seed. The tree measured 8 inches DBH and yielded one face cord. I then harvested an 18-year-old, coppice-grown American beech that had four stems. The coppiced American beech also produced one face cord. In other words, coppicing encourages equal wood production in less than half the time."

The frequency of cutting cycle depends on all the factors that influence tree growth: species, site, size of original stump, and desired firewood diameter. McLeod states: "I tend to harvest most of my coppice firewood on a 8- to 12-year cycle. For my more productive trees, this will yield firewood that's 3 to 4 inches in diameter – small enough to avoid splitting."[4]

Allen Yale entered the Tree Farm program in 1976. He is the 2012 Vermont Tree Farmer of the Year, the 2013 U.S. Regional Tree Farmer of the Year, and a member of the Vermont Tree Farm Committee. His tree farm is located in Derby, Vermont.

Foresters do not recommend coppiced trees for saw log production for several reasons. This photo shows a small coppiced White ash. You will note the structural weakness where the sapling is attached to the decaying stump.

[1] Republished in 1988 under the title *Yankee Drover: Being the Unpretending Life of Asa Sheldon Farmer, Trader, and Working Man 1788-1870*. Foreword by John Seelye, University Press of New England
[2] Yankee Drover, pp. 171-175.
[3] https:www.motherearthnews.com/homesteading-and-livestock/coppicing-trees-for-firewood-zm0z18fmzmul
[4] Ibid.

Welcome New Tree Farmers

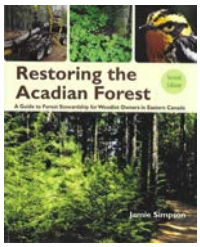
1741	Joseph & Linda Camardo, Jamaica
1742	Everett McGinley, Montgomery
1743	Hazen's Notch Woodlands, Enosburgh
1744	Dawn Hall & Charlotte Reed, Underhill
1745	Dawn Hall & Charlotte Reed, Underhill
1746	Jessica Boone, Richford
1747	Dan Backus, Westfield
1748	Sarah Caldwell & Elizabeth Martin, Montgomery Center
1749	Charles & Mary Jane Mattina, Enosburgh
1750	Tom & Cecile Branon, Fairfield
1751	David & Erin Perry, Jay
1752	David & Erin Perry, Belvidere
1753	Paul Haible, Bakersfield
1754	Jackson & Lydia Clemmons Trust, Charlotte
1755	Allan Thompson & Melissa Boreanaz, Waterbury
1756	Otho Thompson, Waterbury

Thanks to our Tree Farm Inspectors

Thank you to our Tree Farm Inspectors whose service to the program in completing inspections helps to maintain our integrity and keeps us growing.

Kathy Beland
Markus Bradley
Caitlin Cusack
Ryan Kilborn
Tony Lamberton
Harris Roen
Dan Thompson

NEWS FROM THE VERMONT TREE FARM COMMITTEE



Restoring the Acadian Forest

by Alan Robertson, *landowner and tree farmer*

Jamie Simpson
Restoring the Acadian Forest; A Guide to Forest Stewardship for Woodlot Owners in Eastern Canada
2nd Edition, Nimbus Publishing Ltd, 2015, 170 pages

For members of VWA and our Tree Farm community, I think all of you have heard of the terms Northern Hardwood forest type and the Boreal forest type. For most Vermont residents, the Northern Hardwoods are an accurate reflection of their woods, likewise in Canada, Boreal forest is a pretty common expression of what many landowners have.
But what if you're in between the two? Like me, many of us in the northern reaches of Vermont-NH-Maine and areas of NY have elements of both forest types and often wonder if this "tween" forest has its own history and silvicultural basis. Based on the content of this book, the answer is yes.

As you might have suspected, this is a Canadian book written by a Canadian author with a geographical emphasis on the Gaspe Peninsula and Maritime provinces where the **Acadian forest** – the Canadian name for the "tween" forest – is most prevalent.

The text is written for the layman and is a detailed, well-written guide to the history, silvicultural characteristics, and management guidelines suggested for this forest type. It is written in a style and content similar to Beatty's *Working with Your Woodlot, Long's More than a Woodlot*, and Northern Woodland's *The Place You Call Home* series.

The book also includes detailed background information on the tree species prevalent in the Acadian forest as well as profiles of ten woodlot owners. The bibliography at the end is extensive and includes many of the references and texts that we include on the VT Tree Farm website. If you are a 'tween forest owner living in northern Vermont, New Hampshire, or Maine, this is an excellent book to own!

The NEW 2020-2025 ATFS Standards – What's new?

by Al Robertson and Kathy Beland

The NEW 2020-2025 ATFS Standards of Sustainability for Forest Certification are presently undergoing public review and tweaking before finalizing the language and implementation in 2021. The is the fourth iteration of the standard, and, as has been required in the past, all of our forester-inspectors will be required to train again to maintain their certification before working in the program, designing and updating management plans, and using the standards with landowners.

So, what changes are proposed? Here is an opinionated review of the significant changes by a long-time Tree Farmer as well as a very experienced Tree Farm forester.

Standard 1 (Commitment to Practicing Sustainable Forestry): The new standard now includes the suggestion that the landowner pursue continuing education in sustainable forest management as proof of commitment.

In Indicator 1.1.2, a new definition has been added – *conversion* (removal of natural or historical vegetative cover to convert land use from forest to non-forest, or non-forest to forest) – to required resource elements to

be included in considerations to the landowners objectives.

Standard 2 (Compliance with Laws): No changes

Standard 3 (Reforestation and Afforestation)
In Indicator 3.1.1, the standard had been broadened to address the difficulties in establishing adequate stocking levels; in addition, there is a language change for minimal growth after harvesting, from 5 years to "appropriate time frame for local conditions." We think this is to deal with the challenges associated with invasives or other undesirable plantings that many landowners are now experiencing – a welcome recognition.

In the "guidance" section, new definitions have been added – *naturalized* (A non-native plant that does not need human help to reproduce and maintain itself over time in an area where it is not native. Notes: Even though their offspring reproduce and spread naturally [without human help], naturalized plants do not, over time, become native members of the local plant community – NRCS definition). Norway spruce is a good example as the ASTM structural rating systems now acknowledge that tree as acceptable in construction equal to white and red. And that means it can be used on mass timber projects.

And, for the first time, the standard guidance seems to recognize the presence of *plantations* (forest of introduced or native species established through planting, of the same age and generally the same species). The plantation may be established in areas described as *severely degraded* (forested land with a long-term significant reduction to the overall potential to supply benefits from the forest).

Finally, the standards guidance section defines and deals with *genetically modified organisms* (any organism whose genetic material has been altered in a way that does not occur by naturally mating and/or natural recombination) as well as *genetically modified trees* (trees that have had genetic modifications resulting from the direct introduction of one or more genes from another non-tree organism using recombinant DNA technology, planted with the intention to produce short-rotation feedstocks. Clones and trees produced via grafting, vegetative propagation, or tissue cultures as well as hybrids developed by natural processes are not considered GMOs under the ATFS Standards).

These changes indicate that they are officially recognizing the work of The American Chestnut Foundation (TACF) on chestnuts but only the backcross method-type trees. These are not scientifically considered GMOs and could, if available, be planted in a TF. They aren't commercially available. They probably won't be because they are being used to improve the species' resistance to root rots. The other half of the research of TACF involves a transgenic tree, which is considered a GMO. That tree is presently being reviewed by three federal agencies for eventual public release, and it is the real solution to re-establishing the American chestnut in our forests. Eventually that tree will be crossed with both local pure American chestnut (the reason there are so many local TACF plantations) and the back-cross trees to come up with a local tree that is both root-rot-resistant and blight-resistant. That tree is still a few years away. **AFF has punted on the GMO saying it does not support GMOs in the new standards.** Five years from now – if the GMO chestnut is approved by the government and commercially available – there could be a real reckoning with PEFC as all of the resistance to GMOs is coming from the PEFC bureaucracy in Europe where GMO resistance in society was born. These are the European versions of our "antivaccxers" and 'no mask' wearers.

Standard 4 (Air, Water, Soil Protection): The standard now more clearly emphasizes the maintenance and enhancement of – more new definitions – *ecosystems* (biological community of interacting organisms and their physical environment) and ecosystem services (benefits obtained from ecosystems: Provisioning Services or the provision of food, fresh water, fuel, fiber, and other goods; Regulating Services such as carbon, water, and disease regulation as well as pollination; Supporting Services such as soil formation and nutrient cycling; and Cultural Services such as educational, aesthetic, and cultural heritage values as well as recreation and tourism.)

In Indicator 4.2.2 Guidance, the standard now requires that the landowner now should document all use of pesticides.

Standard 5 (Fish, Wildlife, Biodiversity and Forest Health): In the Guidance for Indicator 5.1.1, there are significant improvements on determining the presence and identification of RTE species, a very good improvement over the present language.

Standard 6 (Forest Aesthetics): No changes

Standard 7 (Protect Special Sites): No changes

Standard 8 (Forest Product Harvests and Other Activities): No changes

We should note that the standards are still being revised and comments are still being received, so there's no guarantee that the changes that they are proposing will be included until AFF approves the new standards in the late fall, but, in the past, the changes identified this late in the process have been included in the final standard. We'll review again late next winter as to what was accepted.

VERMONT TREE FARM
INSPECTOR'S LOG

August 10, 2020: "A Jubilant Opportunity"

by Kathy Beland

My dog Cooper is an opportunist. If there is a mudhole, he will jump in without abandon and begin to look for rocks, sticks, or whatever may be on the bottom of the hole. Inevitably, this will turn into a great deal of splashing and stirring up of large amounts of black mud, which coats his Chesapeake Bay Retriever fur like mashed potato soup. If there is no mud, he will attempt to dig up any rock, even if it is gigantic. The entire time this is taking place, he is barking at the rock, as if he can get it to let go of the earth that it is encased in, if he is just loud enough. Also, he will never pass up the opportunity to rub his head and neck into the most stinky pile of turkey poop that he can find. Dead animals are a good choice also. Sometimes I am not sure if this is a means to an end, in order for me to find a place for him to swim, to get the mud out or the stink off. I know it is NOT so that I give him a bath, which is generally how it ends up.

I think I would like to be as jubilant in opportunities as my dog shows me on a regular basis. Are you? As we are completing inventory work on updates, are you combining this as a field inspection and then taking the time to complete an 004-inspection form for Tree-Farm certified properties? I myself have done a couple and am planning a few more. I can honestly say that I don't necessarily approach it with abounding jubilation or reckless abandon! It's not like the 004 form is giving back any positive feedback to us when it is completed. We don't have the satisfaction of a good swim in cool water when it is all finished. However, I do figure that I can be in air conditioning as I fill it out, in all this really hot and humid weather that we have had this summer. Vermont Tree Farm is also providing $100 stipends to our inspector corps for those completed inspections in 2020. Our first mailing of $100 gift cards should have been received by the time this issue is mailed. I am hoping that this is that swim in cold water on a hot day that you all need to help the opportunity make you feel a little more jubilant. But remember, it is first-come-first-served, so get those inspections finished! This is not just an exercise; Vermont will be involved in the 2021 assessment, so having our records up-to-date helps to maintain our Tree Farm Certification in Vermont and our region.

If you realize that you are no longer current on your Inspector Certification, you do have the opportunity to take an

Happy, but not clean!

Clean, but not happy!

online refresher course as long as you have completed the 2015-20 standards training. It only takes about an hour of your time, and I would say do it on a rainy day, but we really haven't had that many of those this summer! So … do it on that extra hot afternoon, when you don't really want to be crawling through the blackberry bushes, uphill, through a swamp, over the ledges, and make it almost back to your truck where you trip and fall in nettles. Or poison parsnip. Or poison ivy. Or step on a yellow jacket nest and watch your business partner run 200 yards through the woods with said yellow jackets following. Anyway, the refresher course is way better than all of those scenarios. It is all about opportunity. And credits. Don't forget you receive continuing education credits. And once that it finished, you can complete that 004, upload it to ATFS, and then get on the list for the stipend. Unless, of course, you are TOO LATE. We have limited funds, and want to use all of them!

This is not an impossible task, but I realize it IS a task, which is such a sad word in itself. It makes our shoulders slump at the thought of the follow through, but hey - "things are only impossible until they are not, (yes, a Star Trek quote). Just think of my dog, Cooper, as you are filling out the 004, leaping into the mud hole with reckless abandon, and I guarantee it will be a little LESS of a task and a little MORE of a jubilant opportunity.

Are you a VWA member who is NOT a tree farmer? Now is a great time to enroll.

Do you:

- Have a desire to leave the land better than you found it
- Own 10 or more forested acres
- Have a management plan, or wish to have one
- Have a stewardship ethic that makes you proud

Tree Farm may be for you. Join now as a "Pioneer" while you prepare for full certification. VWA will waive the $30 annual administrative fee for the coming year.

If your plan already meets the Tree Farm standard, you may be eligible to enroll as a certified Tree Farm – and we'll still waive the fee. Call the office to get information on how to enroll or check with your forester.

SYNERGY – by definition: the interaction or cooperation of two or more organizations, substances, or other agents to produce a combined effect greater than the sum of their separate effects.

SYNERGY – by example: VT WOODLANDS AND VT TREE FARM

Are you a Tree Farmer who is NOT a VWA member? Now is a great time to join.

Do you:

- Have a desire to leave the land better than you found it
- Wish to learn more about sound forest management
- Want to be part of an organization that advocates for private landowners
- Have a stewardship ethic that makes you proud

Vermont Woodlands Association may be for you. Join now and get your first year of membership, with your compliments.

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Kathleen 802-747-7900 or email info@vermontwoodlands.org

SUSTAINABLE FORESTRY INITIATIVE
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NEWS FROM SUSTAINABLE FORESTRY INITIATIVE

COVID-19 impacts on SFI

by Ed Larson *SFI VT Coordinator and* **Bill Sayre**, *Chair SFI VT*

This pandemic continues affecting some aspects of SFI. From the perspective of the State Implementation Committee (SIC), loggers' training is a key component of SFI as program participants need certified trained professional logging contractors to maintain their SFI status. Vermont's LEAP program has been postponed until this fall at the earliest, and we are expecting (hoping) it will reopen as soon as possible. In the meantime, SFI has allowed for some lapse in maintaining certification because of these cancellations due to Covid-19.

We are already seeing some interesting changes in how loggers' training is delivered. We are seeing some creative techniques utilized around the country. Some states are using webinars for many topics, and some in-person training programs have been reopened by employing Department of Health slow-the-spread guidance. Because many components of a quality logger training program require hands-on training, not everything can be delivered remotely through a webinar platform. This could be an advantage for loggers as they may find a huge variety of online courses available to them. They may find new interesting topics and have the ability to more quickly maintain their certification. The challenge for participants and SICs will be to evaluate the quality of these opportunities to assure loggers are getting the quality they deserve.

The annual **SFI VT Legislative Breakfast** was cancelled. This occurred very early in March, even before the Governor's Stay Home / Stay Safe order. We do plan to host this event in 2021, so stay tuned.

The summer **SFI / AIV Forest Policy Task Force** was also cancelled, but we are all in for a rock maple solid program this December.

SFI VT also has a booth at the Northeastern Forest Products Equipment Exposition, otherwise known as the **Loggers' Expo**, held every other year at the Champlain Valley Exposition in Essex Junction, VT. As readers know, this had been postponed until October 16-17 but since has also been cancelled.

SFI Standards – Revisions are proposed

The public comment period ended June 30, with over 2,300 individuals and organizations participating in many of the nine webinars and offering comments. This was the final public comment opportunity before these standards are finally implemented, and they are expected in January 2022. This was a fairly comprehensive rewrite of the standards, adding several new components, including climate-smart forestry and a more rigorous set of protocols to verify sustainability of managed forests. Moving from "knowledge to practice" is the general theme motivating these new, more stringent standards. The last revision was done in 2014. Some changes are also made to logger training programs to recognize changing priorities on the landscape, including more coverage of rare and threatened species and invasive species.
It was interesting to observe how SFI staff pivoted from in-person workshops to the nine webinars because of Covid requirements. These webinars were specific, topic-focused, and of very high quality. They can be viewed on their website at *https://www.sfiprogram.org/sfi-standard-revision-process/*.

Project Learning Tree

PLT is widely recognized as an acclaimed education curriculum bringing understanding of our forest and forestry into the classroom.
SFI and SFI VT have embraced the additional opportunity to reach out to community members, especially our youth, and provide a platform of activities and projects that are hands-on opportunities to teach about the importance of working forests, potential careers in our working forests, and the benefits that we derive from an active forest economy.

There is a very strong emergence of moving to outdoor activities due to this pandemic. The outdoors offers greater opportunities to conduct social distancing to avoid spreading the virus.

This includes more use of outdoors for education, and, with the Covid requirements, schools are scrambling to figure out how to do this well. PLT is in a perfect position to increase teacher participation and reach more students. National PLT has online workshops available, and Vermont Coordinator Rebecca Roy is working on a Vermont-specific online workshop (with videos modeling activities). She has been talking with numerous schools around the state, offering them guidance in planning outdoor learning at their schools. We are encouraging school teachers and staff to take the PLT online workshop courses.

Covid-19 also appears to have increased interest for more students to be home-schooled. PLT has some great activities to enhance the curriculum in homes with families. If you want to see and perhaps try some of these activities, visit *www.plt.org*. Check out the link to Family Activities.

Stay Safe everyone!

Vermont Woodlands Consulting Foresters

Committed to promoting and strengthening the long-term conservation and management of Vermont's natural resources.

VWA Consulting Foresters are licensed by the State of Vermont and meet all continuing education requirements.

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TSP: NRCS Technical Service Provider
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www.vermontwoodlands.org

Can Vermont's Forests Help Save the Planet?

by Christine McGowan, *Director of the Vermont Forest Industry Network.*

Long valued for timber, recreation, wildlife habitat, and solace, Vermont's forests are being recognized for providing another, more global, benefit: carbon storage.

Situated within the largest remaining intact temperate broadleaf forest on the planet, Vermont forests are part of a critical natural resource in the fight against climate change. Biologically adept at both drawing carbon out of the atmosphere through photosynthesis and storing carbon within their roots, trunks, and leaves, trees have an important role to play in the global effort to curb greenhouse gas emissions and ensure a healthy planet for future generations. And, thanks to a combination of growing carbon markets and some innovative thinking by Vermont's forest industry, landowners stand to benefit from managing their forests for carbon storage.

Unlike the large tracts of forestland being managed for carbon storage in other parts of the world, 80 percent of Vermont's forested land is privately owned, with a majority of parcels totaling 50 acres or less. Smaller parcels and multiple landowners complicate the extensive inventorying and monitoring requirements of entering forested land into a carbon market, the mechanism for monetizing forests for climate benefit, making the process prohibitively expensive for many.

Recognizing Vermont's opportunity as well as its challenges, consulting forester Charlie Hancock and Vermont Land Trust president, Nick Richardson, hatched an idea to aggregate land in Vermont's Northeast Kingdom. With support from The Nature Conservancy, Hancock and Richardson launched the Cold Hollow Carbon project, the first pilot demonstration forest project in the U.S. to successfully enter aggregated land into the carbon market. The pilot, which is now being viewed as a model for other parts of the country, consists of 12 parcels across ten landowners, totaling just shy of 7,500 acres. This spring, it was chosen by Amazon as part of its $10 million commitment to offset the company's carbon footprint.

Pointing to conservation easements and Vermont's Current Use program, both of which reduce tax burdens, as well as more traditional forms of income, such as maple syrup production and timber harvesting, Hancock sees the carbon market as another way for landowners to afford to keep their forests intact and prevent development or conversion to a non-forest use. The Cold Hollow Carbon project is expected to return between $25 and $47 per acre/year to landowners for the first 10 years.

Key to this pilot, the Cold Hollow Carbon project remains working land, with timber harvesting worked into the holistic management plan. The carbon offset, therefore, becomes an additional source of income for landowners, not an all-or-nothing proposition.

Jim Shallow, director of strategic conservation at The Nature Conservancy, agrees with Hancock's approach. "Forests have an important role to play in addressing this global crisis, and now there is a marketplace to pay landowners to manage their forests with climate change in mind. If we do forestry right, we can keep the working lands and enhance carbon storage on the site."

So how does it all work?

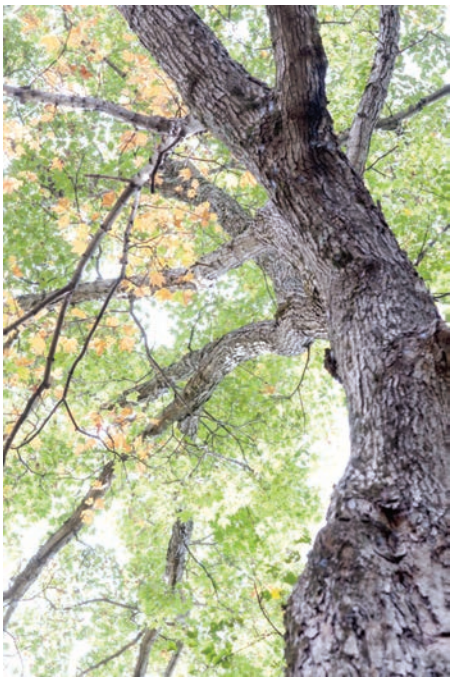
Managing a Forest for Carbon

As UVM professor and co-author of "Forest Carbon: An Essential Natural Solution for Climate Change," Tony D'Amato explains, forests collect and store different amounts of carbon at various stages of growth. While younger forests (30 to 70 years old) will have a high rate of carbon sequestration—i.e. the process of pulling carbon dioxide from the air through photosynthesis to support growth—a forest's ability to store carbon increases with age, peaking at around 200 years.

Estimates of the carbon stored in old-growth forests range from 100 to 120 metric tons of carbon per acre. Vermont's forests, which were largely clear cut in the 1800s to create agricultural land, are relatively young, averaging around 100 years old, and store approximately 60-80 metric tons of carbon per acre.

While the obvious conclusion might be to simply allow Vermont's forests to age, D'Amato presents a more nuanced recommendation.

"Forest carbon projects that incentivize working lands, like the Cold Hollow



Carbon project, are the most exemplary and most sustainable in the world," said D'Amato. "It's a risk to take a single-focus approach to managing such a diverse resource without thinking through the consequences."

He points, for example, to the fact that wood used for construction and furniture building, continues to store carbon, sometimes for multiple generations. Sourced locally, that table or timber frame beam has a minimal carbon footprint. However, if local timber is unavailable, that wood is more likely to be shipped from other parts of the U.S. or overseas, often traveling around the world before finding its permanent home, which adds considerable carbon emissions to the atmosphere.

What's more, Vermont's forests are not pristine, old-growth forests. Due to clearing for grazing in the 1800s, most of our trees are "teenagers" and the forests lack the diversity of composition that is not only ideal for carbon sequestration and storage, but also the most resilient to invasive species and severe weather events.

Snyder, Hancock, and D'Amato all advocate for climate-adaptive approaches to forest management that optimize carbon storage and sequestration, while also improving forest resiliency and supporting a local forest products economy. "The most important and effective thing we can do is keep forests as forests," said Snyder, "and that means managing for integrity and health with carbon storage in mind."

In practice, that may mean preserving pockets of forest for old-growth and selectively clearing other areas to open up the canopy. It may mean incorporating a timber harvest, or mountain biking trails into the management plan as a source of income for the landowner, or it may mean exploring treatments that encourage migratory songbird nesting. Or all of the above. "There are always trade-offs," said D'Amato, "but managing for resilience, carbon storage, recreation, and wildlife are not at all mutually exclusive."

Mike Snyder, Vermont's Commissioner of Forests, Parks, and Recreation, says that forests are part of the solution to climate change yet also vulnerable to the effects of climate change. Photo by Erica Houskeeper.

Cold Hollow Carbon: A "Carbon Co-op Pilot

To prove the point, the Cold Hollow Carbon project remains working land. Even if foresters and environmentalists agree that incorporating carbon storage into a forest management plan makes sense for the planet, landowners are not necessarily able to make those kinds of decisions for purely altruistic reasons.

Enter the carbon market.

UVM Professor Tony D'Amato and Vermont State Climate Forester Alexandra "Ali" Kosiba inspect an ash tree in West Corinth. Vermont's forests, which were largely clear cut in the 1800s to create agricultural land, are relatively young, around 100 years old, and generally store 60-80 metric tons of carbon per acre. Photo by Erica Houskeeper.

Under increasing pressure from both a regulatory and consumer values standpoint, organizations are looking for ways to offset their carbon footprints by investing in solutions to climate change that negate or balance the negative impact of their business operations. The voluntary carbon market relies on registries such as the American Carbon Registry to verify, trade, and track offsets, allowing businesses to purchase carbon offsets and in turn support offset projects around the globe, including Improved Forest Management.

Eligibility, however, requires extensive inventory measurement and strict monitoring to ensure that a forest provides the carbon benefit promised. For most Vermont landowners, whose parcels range from 10 to 200 acres, the cost of that level of monitoring is prohibitively expensive.

Aggregating the land in the Cold Hollow corridor and entering it into the voluntary carbon market was step one. Step two was pitching it to businesses. "Amazon liked the story," said Shallow, who was instrumental in bringing the project to Amazon's attention. "People can visualize supporting happy landowners and preserving a beautiful landscape here in Vermont. We have the story and the charisma, which is important to both the

PLANET *continued on next page*

PLANET, *continued from pg. 21*

companies and their customers." More broadly, Shallow sees an opportunity to export the co-op model that Vermont led the way in developing to other parts of the world. The Nature Conservancy is currently looking at lessons from the Cold Hollow Carbon project to see if the model could work for two other locations in North America.

Vermont's "Special Sauce"

Shallow points out that Vermont was uniquely situated to pilot the co-op model. Communities of scale, a history of government, non-profits, and the private sector working together for the common good, and a rich tradition of working forests all came together in the Cold Hollow Carbon project. Hancock adds that most of the landowners who agreed to participate were people he knew personally through his work as a consulting forester.

While The Nature Conservancy pursues those opportunities, Mike Snyder, the Vermont Land Trust, and others continue to push the carbon conversation here in Vermont. Snyder is looking at the role state lands might play, perhaps as an anchor for larger aggregated parcels or to launch additional pilots.

"Forests are the lungs of the planet," said Snyder, "and keeping them healthy and intact is the most important thing we can do."

Snyder has also hired the state's first climate forester, Alexandra Kosiba, a "brilliant and energetic" UVM-trained forester who will take the lead on educating Vermont stakeholders about the benefits of managing for carbon.

"We have been overlooking nature as part of the solution to climate change," said Shallow. "Vermont is a critical location in North America and is leading the way in demonstrating how actively managed forests can support both the local economy and climate health of the planet."

Several generous donors have already contributed to our Memorial and Honorary Funds, naming those who touched their lives in special ways. You may see your loved ones in this list.

Contributions to the Memorial Fund have been received for:

Thomas Beland
Putnam W. Blodgett
George Buzzell
Robert Darrow
Azel S. Hall
John Hemenway
Edward Osmer
Michael Tatro
Jim Wilkinson

Contributions to the Honorary Fund have been received for:

Kathy Beland
George Buzzell
Leo Laferriere
Thom McEvoy
Paul Harwood
Ross Morgan
William Sayre
Steve Sinclair
Kathleen Wanner

If you would like to make a donation to the memorial or honorary fund, please make note of whom your donation is for and how you would it invested (Upton Wildlife Endowment, Executive Director Endowment, Bizzozero Tree Farm Fund, or general operating fund).

NEW MEMBER APPLICATION

(Note: existing members will receive an invoice)

Vermont Woodlands Association is a 501(c)(3) nonprofit corporation whose mission is to advocate for the management, sustainability, perpetuation, and enjoyment of forests through the practice of excellent forestry that employs highly integrated management practices that protect and enhance both the tangible and intangible values of forests–including clean air and water, forest products, wildlife habitat, biodiversity, recreation, scenic beauty, and other resources–for this and future generations.

ANNUAL DUES INVESTMENT *(check one)*

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- ☐ 101-200 acres $50
- ☐ 201-500 acres $60
- ☐ 501-1,000 acres $70
- ☐ 1,001-5000 acres $100
- ☐ Over 5,000 acres $250
- ☐ Friend/Supporter $40

Natural resource professionals

- ☐ Individuals $50
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Wood products companies & equipment suppliers

- ☐ Individuals $50
- ☐ Firms and crews $100

☐ **VWA Accredited Consulting Foresters** $160
(Subject to VWA acceptance. Call for details.)

Name _____

Address _____

Town _____ State _____ Zip _____

Telephone _____ FAX _____ Email _____

Woodland town(s) _____ County(ies) _____

Woodland acres _____ Tree Farm member? _____ Enrolled in the Value Appraisal Program? _____

Forester _____

Please make checks payable to Vermont Woodlands Association and mail with the completed form to: VWA Treasurer, PO Box 6004, Rutland, VT 05702-6004.

MEMBERSHIP BONUS!

Northern Woodlands

As a benefit of membership, the Vermont Woodlands Association offers a free subscription to Northern Woodlands, a quarterly magazine that offers readers a "new way of looking at the forest." Northern Woodlands mission is to encourage a culture of forest stewardship in the Northeast by increasing understanding of and appreciation for the natural wonders, economic productivity, and ecological integrity of the region's forests. Members also receive the VWA newsletter published quarterly and E-News, offering articles of interest and educational opportunities for woodland owners.

northernwoodlands.org

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