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# WIIILIT TIP



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# **FALL 2016**

# **Programs**

#### Friday, February 3, from 1:00 to 3:30 p.m. — Timber Harvest for Habitat at Mollie Stark State Park

WRWA and Hogback Mountain Conservation Association will sponsor a tour of an active timber harvest at Mollie Stark State Park in Marlboro, Vt. The intent of the harvest is to enhance habitat for snowshoe hares while protecting existing recreation trails and park infrastructure. The program will focus on balancing several management goals in a Park that directly abuts HMCA land. We will observe mechanical harvesting, where the operator sits inside a protected cab and uses joy-stick-type controls to fell, de-limb, and cut logs to length. Tim Morton, State Forester from the Department of Forests, Parks and Recreation, will lead the tour. Representatives from Long View Forest Contracting will be there to explain details of the harvest.

If you plan to attend, please notify Tim Morton at *Tim.Morton@vermont.gov*. He will contact people if the tour must be rescheduled due to weather or if the habitat work has been postponed. *Dress warmly and bring snowshoes*, as there may be significant snow cover at that elevation.

**Directions:** From exit 2 of I-91, take Route 9 West about 14 miles. After passing the Hogback Mountain Gift Shop on the left (south side of Route 9), turn right into the large parking lot on the north side of Route 9. We will carpool from this meeting location to the park, where parking is limited in winter.

#### Saturday, February 25 — Winter Tree Identification Walk and Potluck Lunch

County Forester Bill Guenther will lead a winter tree identification walk on Ballou Mountain in Halifax, VT. Ballou Mountain has an interesting diversity of hardwood and coniferous trees. The walk will begin at 10 a.m., followed by a potluck lunch around noon. Bring your snowshoes. For those who may not be up for snowshoeing, you are welcome to come inside to sip hot cider and talk about trees while the others are on the walk.

Please e-mail *LindaALyon@gmail.com* or call (802-368-2211) by 19 February if you plan to attend and for directions. Parking is very limited, so it will be necessary for people to carpool in four- or all-wheel drive vehicles to get up the steep driveway. When you contact Linda, please let her know how many people you will be coming with; whether you have a suitable vehicle for the driveway and, if so, if you are willing to provide rides; what town you will be coming from; whether you plan to stay for the potluck; and your contact information. Given that we hope for deep snow and we will be on a hill, the activity level is moderate. But we will stop often to look at trees, so it will not at all feel like a forced march. If you have never snow-shoed, don't let that discourage you. If you can walk, you can snowshoe. If you prefer to use poles, please bring them. This is a family-friendly event, and friendly dogs are also welcome.

# Saturday, March 25, at 11 a.m. — Sugarhouse Tour Bunker Farm Sugarhouse 857 Bunker Road, Dummerston, Vt.

The Bunker Farm is run by two families with expertise in raising naturally raised meats, annuals, perennials, and maple syrup. The farm is also an agricultural educational center for students and the community. Located in the heart of Dummerston, the farm is 170 acres, 100 of which are woodlands.

The old sugarbush, which the families brought back into production, is 16 acres, contains 1,100 taps, and includes beautiful old sugar maples that are more than 100 years old. Sap also is collected from a nearby leased property with 3,300 taps. The new sugarhouse, converted from part of an old barn, has a Leader Special evaporator that is fired with wood harvested on the farm. Using sustainable tapping methods, combined with the latest in maple technology, the aim is to harvest sap in a way that will keep the sugarbush healthy and productive for many more generations.

Sugar season at the Bunker Farm is a busy and fun time, and the families invite you to join the action. Watch the boiling process, visit with the farm animals, take a tour of the working sugarbush, and sample the delicious syrup, which won Best In Show at the 2016 Maplerama tasting competition. This event is family-friendly, free, and open to the public.

From Brattleboro, go north on Route 5 (Putney Rd). At the traffic circle, continue north on Route 5 for 3.7 miles. Turn left at School House Rd. After about 1 mile, turn right on Miller Rd. After 1.8 miles, bear left to continue on Miller Rd. Make a right at a stop sign onto Bunker Rd. The farm is on the left.

#### **President's Column**

#### By Martha (Marli) Rabinowitz

The WRWA annual meeting in September was at the Green Mountain Camp for Girls in Dummerston. This was a comfortable, old-timey gathering place for us, with picnic tables both outside and under cover, even a restroom, with plumbing and pictures of happy girls and encouraging phrases on the walls. We heard from Camp Director Billie Potts about the activities of the girls (mostly local), and how life changing it can be for them to spend time in the woods.

We took an informative walk through a nearby property led by Dan Healey, Andy Sheere, and Roger Haydock, discussing a recent harvest, forest regeneration, and a view into the ancient geology of the glaciers and resulting shape of the river and hills. After a lunch of great potluck dishes, with Lilac Ridge hamburgers and Brooklyn hotdogs grilled by Sam Schneski, Jaclyn Comeau of Vermont Fish and Wildlife treated us to a slideshow about bears. It was a quick overview of the yearly cycle of bears, human interaction, and a project by F&W to monitor where the bears' activity will shift when high-use beech groves are cut for wind towers in western Windham County. Then Bill Guenther and John Caveney updated us on tree health, pertinent activity in the Statehouse, and timber markets, which are strong except for the low-grade market.

Although our fiscal year starts in July, it feels as though the annual meeting concludes the summer and fall outdoor activities that we do, and the election of officers creates a new and re-energized board. Looking ahead to 2017, we hope to hold programs in all parts of the county, so please send Carol suggestions for walks or programs you would like to see.

A term on the board is three years, and after two terms the by-laws say you must take at least one term off. This year, John Caveney of Cersosimo Industries had to step down after two terms. He has been a great supporter, and he promised to still hold tours of the mill and related activities. Thank you John! We also want to thank Ross Thurber, Wim Van Loon, Hayden Lake and Aaron Hurst for their time on the board. Please stay in touch and let us know how you are doing and what you are seeing in the forest.

Dan Healey is staying on for another term, and his colleague Josh Wilcox was elected to join us. George Weir, Margaret MacDonald, and Charlie Richardson were also elected and will re-join the board; they are former board members and presidents and we are excited to have their expertise and energy back with us.

Officers now are: President: Marli Rabinowitz; Vice president: Linda Lyon; Treasurer: Phyllis Weltz; and Secretary: Carol Morrison. Carol is also our staff member. Arthur Westing, Bob DeSiervo, and Mary Heller Osgood, round out the ranks, with Barbara Evans gracefully overseeing the production of this newsletter.

Bill Guenther and San Schneski remain as ex officio board advisors. I have been told that with the new forester licensing requirement, Bill was first in line and is now Vermont Licensed Forester #1!

I hope this is not a boring list but a happy retelling of the human side of WRWA's collaboration with the land and forests of our region. All these people have a lifetime of fascination and experience with the forest and forest dwellers—human and otherwise—and many stories and much expertise to share. What I also enjoyed about the annual meeting were the many informal discussions between members old and new about forest, friends, family, history, trends, opinions, and other news. Some great stories to hear, and I look forward to more time with all of you in 2017.

**WRWA Members!** Share your thoughts about the woods with fellow members! Is there a woodlot that you love, perhaps your own? What have you learned from the woods? What concerns do you have for our forests? Write down your woodland thoughts and email them to *windhamwoodlands@gmail.com* for publication in a future issue of Woodlot Tips. You don't need to write a long article—a paragraph is fine. **See our first member response from John Spicer in this issue.** 

### **WRWA Annual Meeting 2016**

By Margaret MacDonald, Andy Sheere, and John Caveney

Marli Rabinowitz, WRWA president, welcomed the attendees and then introduced Billie Slade, executive director of Green Mountain Camp. Billie explained that the camp will be 100 years old in 2017 and is the oldest continuously operating camp in Vermont. It hosts girls aged 5 to 13 for one-week sessions; campers can sign up for up to six sessions each summer. Three hundred girls attended in 2016—74 of them on scholarship. The camp has some unusual rules: it allows no mirrors and no use of technology (cell phones, computers, etc.). After some initial grumbling the girls find this frees them to be themselves, rather than be constantly worried about how they look and how others view them.

#### **Business Meeting**

Carol Morrison presented the secretary's report, and Phyllis Weltz presented the treasurer's report, noting that Debbie Cohen had reviewed the Association's books. The members unanimously voted to accept both reports, without comment.

Marli then reported that Josh Wilcox has volunteered to join the Board of Trustees, and that the Nominating Committee had approached former trustees Charlie Richardson, George Weir, and Margaret MacDonald about rejoining the board. The membership approved the committee's nominees unanimously.

Program Chairman Sam Schneski said that the 2017 sugarhouse tour will be at the Bunker Farm, whose syrup won the top award at Maplerama this year. He also noted that, thanks to Arthur Westing, the WRWA now collaborates with the Vermont Learning Cooperative (VLC), and that VLC now hosts several WRWA programs as well as the WRWA library. Sam also reported that the June 23 tour of the Cersosimo lumber mill in Brattleboro was a huge success, attracting more than 50



people and some media attention (see the previous issue of *Woodlot Tips* for a description).

Bob DeSiervo, who chairs the Scholarship Committee, reported that WRWA received no qualifying applications this year, so no scholarship will be awarded.

WRWA always seeks to attract new members. Carol Morrison has distributed copies of the WRWA brochure at town meetings; Mary Ellen Copeland suggested that having WRWA members speak about the organization at their town meetings would improve outreach. Other possible venues where WRWA representatives might offer to speak include the Green Mountain Club and area Conservation Commissions.

#### Field Trip

Marli then turned the meeting over to Dan Healey and Andy Sheere of Long View Forest Management, who had supervised a harvest on the property of Doug Patriquin and Linda (Patriquin) Waldron in April–May of 2015. Dan and Andy, aided by Charlie Richardson, and "self-taught geologist" Roger Haydock, led the tour, stopping at four sites on the property. Andy and Dan explained that Long View had performed the harvest to foster the growth of the best trees and to free growing space for regeneration of the pine and oak that grow so well on the Patriquin land. The sandy soils, which occur in benches along the West River (see below), provide great ground for growing white pine and red oak—the beautiful mature overstory proved this.

Roger Haydock explained some of the main geological features of the property. It is located at a bend in the West River, and takes the form of several kame (a flat-topped mound) and flood plain terraces created by geological processes. The top of the hill, a kame terrace, consists of dry, sandy soil on granite, which, 18,000 years ago (the end of the last ice age), was under 4,000 feet of ice. The lower levels are flood plain terraces that represent what is left of Glacial Lake Hitchcock, formed about 15,000 years ago when northern Vermont was 700 feet lower than it is today. Roger's hypothesis is that originally there were two lakes in Brattleboro, and that every 100 years or so a catastrophic, Irene-type event would occur

and cause large amounts of erosion. These events would create a lower flood plain stage, and leave the abandoned flood plain as a terrace.

At the first stop on the tour, Andy pointed out the results of the harvest and explained that the primary goal was to grow more great trees while at the same time using them to seed in and shelter the next generation of trees. He emphasized that it's not enough for foresters to revisit a harvest site every 10–15 years because so much can happen from year to year. Instead, they should go back every year to spot opportunities for improving forest regeneration. For example, they could determine if they could get a better effect by removing more of the overstory or by weeding the young forest garden to favor the growth of the best saplings. The harvest did not include pruning the mature residual pines. Although pruning can be a great way to add value to the tree because it can increase the amount of clear, knot-free wood, it is typically done in a stand with smaller diameter trees so that a higher percentage of knot-free lumber can be produced. Andy also noted the importance of performing a crown assessment, which determines the ratio of live crown to the full length of the tree. Foresters would like to see about a 30 percent ratio in pines like the ones on the site.

Andy also noted that it is sometimes hard to get good soil scarification with a cut-to-length harvesting system, which is what was used. Scarification can help improve the chances for tree seeds to set and germinate. Bringing in a bulldozer to lightly rough up the soil after a harvest would aid regeneration. You can often see how so much regeneration occurs along the skid roads, exactly where scarification is usually highest. John Caveney pointed out that each landowner has to decide what he or she wants when the harvest is done. This is a key point. Andy emphasized that the forest will look newly harvested for three or four years after the cutting is complete. While some landowners do not like this aesthetic, it is important to remember that, like most things in the forest, it is transitory. Landowners and land managers must balance multiple goals throughout the management process—balancing evolving perceptions of what a forest should look like with the ecological considerations of maintaining a healthy and diverse forest resource.

The second tour stop was on the other side of the hill and was the site of a thinning. Given the tim-



Tour leaders Roger Haydock, Andy Sheere and Dan Healey at the first stop.

ing of seed release, no pines are coming in, and years after a harvest. At present, beech is the primary species coming in; the landowner can decide if that should be allowed to continue. Cutting beech saplings reduces the amount of money the landowner makes in the short term, but can be important for setting the stage for the long term success of the forest. Bill Guenther has suggested that landowners set up a stewardship fund and put part of what they make on the timber sale back into the land. Landowners should make a 10-year budget and decide when to spend the money they gain.

Roger pointed out that this location is at the level of Glacial Lake Hitchcock—and the same level as Brattleboro Memorial Hospital. The terrace level is that of the abandoned flood plain. During a flood event, sand and gravel form deltas in the river. The calmer the water, the smaller the material that drops down and becomes the flood plain.

The trees in the site's overstory are becoming mature. The best time to take timber to the mill is when the trees reach economic maturity, but landowners should keep some as seed sources. John Caveney said that Cersosimo's mills can handle trees up to 30 inches in diameter; the problem is with debarking. It can sometimes take 150 years for the tree to get to 28 inches; John asked "Why not cut it at 18 inches and shorten the regeneration cycle?" This is certainly a topic for discussion.

Overall forest succession in this area favored beech, striped maple, and a little black birch. Left unmanaged right now, this piece of forest is losing biodiversity; beech and striped maple are dominating the regeneration. But with lots of light and the cutting of the beech saplings in the newly



Dan Healey and Roger Haydock

harvested areas, oak and pine will have a chance to succeed and become the next round of towering giants on the site.

The Natural Resources Conservation Service will help landowners pay for combating invasive plant species; there are a number of invasive plant management firms in the area. With backlogs of deferred maintenance, landowners often face an uphill battle with these nasty plants, but in some areas focused treatments are having success. Long View had treated a few acres on the Patriquin/ Waldron property before performing the harvest in order to hold back invasive species so that desirable trees can grow. Once the desired species have established themselves and become taller than the invasive competition, foresters can then work to grow the trees of the future.

Roger pointed out that the third stop was on a terrace: either lake bottom from above or the top of the river flood plain. He noted that the streets in Brattleboro go steeply up and down because they're going around such terraces.

Long View did not expand the logging road system very much because a good road system was already in place. This is key to good management. Andy emphasized that the landowner must inform the logging contractor which roads to keep, and in what condition. Planting perennial rye on the roads helps stabilize the soil; conservation mix is also an option but the exact mix needs to be paired to the light environment of the area.

In response to a question about the power line that crosses the property, Andy noted that VELCO (Vermont Electric Power Company) has been good to work with. Invasive plants are a serious issue in the open, disturbed areas under power

lines, and it is important to treat the invasives there so that they do not become a seed source for surrounding woodlands.

Before the group moved on to the last stop, Windham County Forester Bill Guenther gave a brief report about current threats to white pine and handed out fact sheets on the Caliciopsis canker, needle browning, and canopy dieback. Bill noted that high humidity can exacerbate these issues causing poor needles at the lower levels of the pines and thinner crowns. Caliciopsis stimulates extreme sap flow, which stresses the pines; having to cope with multiple problems further weakens them.

When we returned to Green Mountain Camp, grillmeister Sam Schneski dished up superb hamburgers, hot dogs, and veggie burgers, and the members sampled the various potluck dishes brought by members.

#### Living with Black Bears in Vermont

After lunch, Jaclyn Comeau, Wildlife Specialist with the Vermont Fish and Wildlife Department, gave a slide presentation about "Living with Black Bears in Vermont." Her program has four prongs: conserve and manage habitat, perform research, manage population and hunting, and manage conflicts between bears and humans. To help the program in this mission, landowners should know more about bears and how to manage and prevent conflicts.

Comeau provided detailed information about bear characteristics and habits, and focused particularly on actions that landowners should take to prevent bears from damaging their property. She described bears as "opportunistic omnivores" who – as we know all too well—like the same food that humans, and birds, do. Bird feeders have been called "the gateway drug for bears." Bears remember where they found feeders in the past and return to the site even after homeowners have removed the feeders, and they also may visit the neighbors. The Department of Fish and Wildlife advises homeowners not to feed birds from April 1 through December 1—the birds should have enough food anyway during that time.

Game wardens must kill bears that try to break into houses, but, before they can take lethal measures against a bear, they must advise homeowners on measures to avoid attracting bears to

their property in the first place. In brief, homeowners should store food and garbage in secure places (not screened porches or flimsy sheds); feed pets indoors and away from windows: remove bird feeders: and protect outdoor beehives or chicken coops with electric fencing. (Despite the common view—perhaps inspired by Winnie-the-Pooh—that bears are addicted to honey, bears actually break into beehives primarily because they want to consume the larvae in the honeycombs.) Manufactured bearproof garbage cans are available, or homeowners can spray their garbage area with ammonia.

In the fall bears eat as much as possible to gain weight before the winter.

Their main food consists of hard mast—nuts, especially beechnuts and acorns (preferably from white oak). Bears prefer beechnuts; bear-scarred beech trees show they keep going back to the best sources. Comeau commented that her department has observed very bad beech scale/beech bark disease in one habitat area, but the bears are still actively using the trees.

Comeau also described the Department's ongoing study on the impact of the Iberdrola Deerfield Wind Project in Searsburg/Readsboro on bear movement from their home range to the turbine area. The project is committed to conserving 144 acres of land, but the acreage does not have to be contiguous. The Department of Fish and Wildlife undertook the study because the wind turbines will be built very near, and in a few instances right above, important beech stands where bears feed. The study has followed 12 bears wearing radio collars since 2012, but this method is imperfect, so the study team has deployed cameras in the area of the new turbines and will compare the data on bear movement to and from the feeding areas before and after the turbines were erected. The team will not have the final results until 2020, and will publish the findings at that time. For more information, see: https://www.windwatch.org/news/2016/04/12/state-deployscameras-into-national-forest-to-study-how-windprojects-affect-wildlife/

Comeau ended her presentation with the message "Be a good neighbour: keep Vermont's bears



Wildlife Specialist Jaclyn Comeau

wild!" She announced that landowners can sign up to have someone from her department walk their property and make suggestions about habitat management; several members immediately added their names to her list.

#### Legislative Update

Bill Guenther then presented a brief update on the most recent legislative session, focusing on the requirement for trip tickets for all timber harvests, timber trespass, and forester licensing (see the summer issue of *Woodlot Tips* for details). A proposed bill would have re-

quired landowners to notify FPR of practically all harvests, but a study committee will look at this. Bill was disappointed that the provisions related to the right to practice forestry were not approved, but the issue may come up again next year. A study will examine issues related to intergenerational transfer of forestland—a topic of particular importance in Windham County, where the vast majority of the forestland is owned by people over 65.

The Office of Professional Regulation (OPR), under the Vermont Secretary of State, studied the advantages and disadvantages of requiring foresters to be licensed; the legislature passed the bill and Governor Shumlin signed it in to law in June 2016. Bill stated that "three people from OPR learned a lot about forestry by the end of the yearlong study." George Weir commented that foresters view this bill as a vote of no confidence in what they have been doing up to now, and that the criterion for deciding if a forester has acted inappropriately should be if the forest has been harmed. In fact, Vermont has seen very few incidents of incompetence by foresters. For more information on these topics, see the summer issue of Woodlot Tips.

#### Market Conditions

Trustee John Caveney gave an overview of current market conditions, noting that the bottom line is that hardwood and softwood logs are moving well but that nobody wants to buy pulp, firewood, or pellets and that mills can't get rid of their stocks.

For example, Cersosimo has 90,000 tons of pellets ready to be sold. Customers have firewood left over from last year's warm winter, so they aren't buying. The chip mill only runs 4 hours a week, and there is no market for clean chips or sawdust. Fortunately, Cersosimo has enough sawlogs.

The price for red oak is up, but prices for sugar maple and ash have declined. The red oak in Windham County is known to be of very high quality. Many ash trees have been cut and the market rapidly absorbed the lumber with no decrease in price, but now the market has reached the saturation point.

Maine has subsidized two biomass mills; New Hampshire has eight. All are on quota. Maine and Connecticut have larger "renewable" hydropower projects. The price of natural gas, currently very low, sets the bar for the biomass market; for example, Sappi Paper has shifted from biomass to natural gas, and Finch Paper will do the same soon.

John reported that low-grade lumber is a real problem for lumber companies and that the problem will likely persist. George Weir noted that because of the low price of low-grade lumber, he has gone back to girdling the trees or felling them in place, rather than attempting to sell the timber. Bill Guenther reminded landowners that they should not expect to receive a penny for their low-grade lumber, but that for the sake of forest health they should cut poor trees in order to free the betterquality trees, and in turn, essentially "increase the interest rate" on their higher quality sawlogs.



WRWA members Mary Ellen Copeland, Ed Anthes, and Stuart Thurber at the start of the field trip.

# Hanging on for Dear Life

by John Spicer, WRWA Member

Was it last summer in the heat of our mid-August dog days that I rediscovered the coolth of my own woodlot? I had been in the recovery months of a replaced left knee joint and was beginning short, fairly level trail walks out my back door into the trees. Our lot extends largely downstream from our farmhouse on terracing which overlooks the Rock River valley, much of it flood plain, which went under water during Irene.

Large maple, oak and white pine hang along on our farm's steep terracing, using extended root systems now well exposed by the erosion of similar flooding. Incredibly, their strength must come from this network of roots, which now reach well back to reach their friends above on the terrace. Other large trees on the plain below were washed away in Irene's ferocity. They lined Rock River's banks and islets below where I stand, walled up as an embankment, which may have saved a neighbor's house on the opposite shore.

My trees and I are hoping for a longer respite for their own recoveries.

### **Changes to Vermont's Endangered Species Law**

by Bill Guenther, Windham County Forester

As I wrote in our last newsletter, there was a flurry of activity in the 2016 Vermont Legislative session regarding forestry matters. In addition, there was a large omnibus bill dealing with a wide variety of issues relative to the Fish & wildlife Dep't.—House Bill 570, which can be found at: <a href="http://legislature.vermont.gov/assets/Documents/2016/Docs/ACTS/ACT145/ACT145%20As%20En">http://legislature.vermont.gov/assets/Documents/2016/Docs/ACTS/ACT145/ACT145%20As%20En</a> acted.pdf

A number of changes were to Vermont's Endangered Species laws. I will try to give you a condensed overview of this very complex bill. The first deals with the ESC (Endangered Species Committee). This group advises the Secretary of the Agency of Natural Resources on all aspects of the law. In addition to state agency/department heads, there are six members of the public appointed by the governor. Two of these members in the past would have to be actively engaged in agricultural activities. The law was now amended to also allow folks engaged in *silvicultural* activities to serve on the committee. This will give forestry a seat at the table.

A number of new definitions were also added, and those relating specifically to forestry are:

Accepted silvicultural practices: the accepted silvicultural practices defined by the Commissioner of Forests, Parks and Recreation, including the Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont adopted by the Commissioner of Forests, Parks and Recreation.

Forestry operations: activities related to the management of forests, including a timber harvest; pruning; planting; reforestation; pest, disease, and invasive species control; wildlife habitat management; and fertilization. Forestry operations include the primary processing of forest products of commercial value on a parcel where the timber harvest occurs.

"Critical habitat" for a threatened species or endangered species: a delineated location within the geographical area occupied by the species that has the physical or biological features that are identifiable, concentrated, and decisive to the survival of a population of the species; is necessary for the

conservation or recovery of the species; and may require special management considerations or protection; *or* a delineated location outside the geographical area occupied by a species at the time it is listed under section 5402 of this title that was historically occupied by a species; contains habitat that is hydrologically connected or directly adjacent to occupied habitat; contains habitat that is identifiable, concentrated, and decisive to the continued survival of a population of the species; and is necessary for the conservation or recovery of the species

Several key phases that include these definitions are:

"The Secretary shall not adopt rules that affect farming, forestry operations, or accepted silvicultural practices without first consulting the Secretary of Agriculture, Food and Markets and the Commissioner of Forests, Parks and Recreation."

"No rule adopted under this chapter shall cause undue interference with farming, forestry operations, or accepted silvicultural practices. This section shall not be construed to exempt any person from the provisions of the requirements of this chapter".

These law changes now give the Secretary of ANR the ability to adopt or amend by rule a critical habitat designation list for threatened or endangered species. Critical habitat may be designated in any part of the State. The Secretary shall not be required to designate critical habitat for every statelisted threatened or endangered species. This process though must go through a number of rigorous steps and cannot be applied without considerable oversight.

Another change to the law was allowing limited "takings" of an endangered species if a strict set of criteria are met. Some examples where this would be allowed would be for scientific study, educational purposes, ceremonial or cultural reasons, botanical or zoological exhibitions and if there was an imminent risk to human health. There are various fees and fines associated with an unauthorized taking. The law is very detailed and complicated in this area, so I will refer the reader to the law should they want more specifics.

These law changes have both added protections to Rare & Endangered species, while also not overly restricting the rights of landowners, especially where silvicultural practices are going to be implemented. I will continue to follow this process and report on any future changes or Rule additions.

### **Abenaki Sugarmaking**

by Carol Morrison

Abenaki legend tells us that when the Creator first made sugar maple trees, sap flowed from them year round, as thick and sweet as maple syrup is today. Then one day Gluskabe, hero of Abenaki mythology, visited the Abenaki and found their cooking fires cold, and their gardens full of weeds. The people were off in the sugarbush, lying on their backs with closed eyes as maple syrup dripped into their open mouths. Gluskabe could see that they would not survive long that way, lazily dreaming their days away. So he filled the trees up with stream water and told the people that now the watery sap would only run in late winter when there were no crops, and game was scarce. Henceforth, the Abenaki would need to work hard for their syrup, gathering sap and boiling it down.

Ever since that time, during the month of the Sogalikas, the "sugarmaker" moon, the Abenaki women made maple syrup. First they asked permission of the maple trees and gave thanks to them for their precious gift of sweet sap. A V-shaped gash was cut with a hatchet in the trunk of the maple tree, and an elderberry twig with the pith bored out, or a split sumac-wood trough, was inserted into the lower edge of the gash to guide the flow. Sap was collected in birch bark pails, and boiled down in either a birch bark container or clay pot. Birch bark containers can be used in cooking over a low fire, though they tend to be one-use vessels because the bindings get singed. However, an alternative method of boiling sap

used birch bark troughs. Rocks were heated in a fire and set into the sap-filled troughs. Cooled rocks were replaced with hot ones fresh from the fire, gradually boiling off the water as the sap darkened and thickened into syrup.

To test if the syrup was ready, a twig was dipped into it. If the liquid dripping from the twig formed a bubble when blown upon, the syrup was done. When poured onto the snow, it turned into a taffy-like substance and eventually solidified. An Abenaki account says that syrup "accidentally" poured on the snow by elders was quickly devoured by children—if the dogs didn't get it first. The solid syrup was packed into small birch bark cones about 9 inches long, for storage. The maple sugar in the cones was eaten when needed for quick energy. Often the cones were given as gifts.

Early settlers eagerly learned the skill of sugarmaking, and introduced the Abenaki to technology that speeded up the process: the drill for making a tap hole instead of the V-shaped gash, and iron pots for boiling down the sap. Since that time there have been many improvements to the process, but the sugar maple's sweet gift endures. Like the Abenaki, I give thanks to these bighearted trees. But I also thank Gluksabe. Without his intervention, we might all be dreaming our lives away, lying on our backs in the sugarbush with eyes closed and mouths open, drinking in the sweet syrup.

## Why You Should Care About Invasive Exotic Plants in Your Sugarbush

By Sam Schneski and Bill GuPenther, Windham County Foresters

Barberry, buckthorn, honeysuckle, garlic mustard. These are just a few examples of invasive plants that you may find in your sugarbush. What is an invasive exotic plant? An invasive exotic plant is non-native to an ecosystem under consideration. It is considered invasive if its introduction causes or

is likely to cause economic or environmental harm or harm to human health. Invasive exotics that become a problem in a sugarbush tend to share many characteristics. For example, they all produce abundant viable seeds, the seeds germinate, and the plants leaf out early in the spring and stay late into the fall, giving them a photosynthetic advantage over native plants. They have few pests or diseases, they can succeed in a wide variety of soil types and with varying amounts of available sunlight, and they can grow and reproduce so fast that they can form monocultures occupying any available growing space for native plant growth. Additionally, they can reproduce through seed and root sprouting, and they may produce chemicals that inhibit the growth of plants in close proximity.

Sugarmakers have learned from the past and used that knowledge, coupled with current practices and technology, to influence the future. The story of invasive exotic plant management is not much different. Most invasive exotic plants were introduced decades or more ago as ornamental plants. We didn't understand what impact they would have on ecosystems and management of our forestlands until the problem was very large and past the point of being able to eradicate.

We now know that early detection, rapid response, treatment, restoration, and monitoring are essential steps in retaining and growing sugarbushes for future generations. Simply ignoring invasive exotic plants in your sugarbush is a path to long-term failure. Not only do we want to make sure the next generation of maple trees can get established, but we want to ensure that current mature sugarbushes thrive as much as possible.

We have also observed some *native* plants that have morphed into being invasive. In areas of high deer browse, woody vegetation is very challenged in getting established. Heavy browsing of seedlings will often allow matting native ferns (predominantly hay-scented and New York fern, which deer are not fond of) to rapidly colonize the ground cover and inhibit any native woody tree seedlings from becoming established.

Treatment of these plants can vary based on personal philosophies and/or organic certification. There are various methods used to control the spread of invasive exotic plants. The most common are chemical controls with specific herbicides and application techniques; manual control consisting of pulling, covering, and sometimes burning; and mechanical control that can involve pulling, shredding, and mulching with the use of equipment.

Invasive exotic plants are in all corners of Vermont and unfortunately are well established throughout Windham County. As land managers, sugarmakers, and good land stewards, we all have a responsibility to work together to control invasive exotic plants. There is no one piece of technology that is going to solve the problem. It will take a type of cultural shift to recognize that these plants must be controlled if current and future generations are to continue to enjoy sugaring as we have in the past.

The days of an old decadent maple falling in the woods and making room for the flush of new young maple saplings are becoming a rarity. Detecting invasives before they can multiply and get a stranglehold on your woods is essential. Doing something about it early will cost far less and have much more immediate impact than if delayed. Treating the plants using a systematic approach and a regular monitoring schedule will pay off in the long run.

Finally, monitoring your woodlot and sugarbush for regrowth or new growth of invasives will make the task of controlling them far less daunting and much more rewarding. In some cases, after invasives are controlled, planting of sugar maple seedlings may be needed.



#### Windham Regional Woodlands Association

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# Upcoming Programs (See inside for details)

Friday, February 3, from 1:00 to 3:30 p.m. Timber Harvest for Snowshoe Hare Habitat at

**Mollie Stark State Park** 

Saturday, February 25 Winter Tree Walk and Potluck Lunch, Ballou Mountain

Saturday, March 25, at 11 a.m. Sugarhouse Tour Bunker Farm Sugarhouse, Dummerston

#### Mission of Windham Regional Woodlands Association

WRWA is a non-profit association of woodland owners and managers, members of the wood products industry, and other interested parties in the Windham County Region who advocate both sustainable management practices and the enjoyment of forests and their ecosystems. In support of these ends, WRWA offers educational opportunities for all age groups. Areas of interest include: biodiversity; clean air and water; cultural and historic resources; fair and equitable taxation of woodland; forest products; recreation; scenic beauty; and wildlife habitat. We recognize that these concepts are continually evolving and therefore will strive to consider the most current thinking and values regarding them.