

Association, Inc. 11 University Way, Suite 4, Brattleboro, VT 05301-3669 802-257-7967 ext. 12

WIIILIT TH



WINTER 2010

Annual Sugar House Visit: Saturday, March 20, at 1 p.m.

On **Saturday March 20**, sugarmaker Mark Hastings invites WOA members to visit his sugarhouse on Locust Hill Road in Guilford. Weather cooperating, Mark should be boiling sap in the early afternoon.

Mark writes:

Black Bear Sugarworks, a 250-acre maple farm, is located in the southern Green Mountains of Vermont on the Waits River Limestone formation. This vein of limestone running through our property provides optimum soil conditions for our 140-acre maple stand, giving us a distinctively good flavored maple syrup. The land was formerly the Higley farm and has been a functioning sugarbush for more than a century. We are the proud recipients of the Vermont Seal of Quality.

We are currently setting 9,000-plus taps and estimate that the entire sugarbush contains close to 12,000 tappable sugar maples. The operation uses state of the art approaches and equipment in collecting and processing maple sap. We use a double line vacuum system, 5/16 stainless steel taps, reverse osmosis, and we introduced variable frequency drives to maximize power efficiency in our vacuum pump. With good weather, we should process close to 160,000 gallons of sap this season. All syrup is stored in food grade stainless steel barrels.

The entire forest is comprised of 20 varieties of trees and supports a rich array of wildlife. There is at least one bear living up on the ridgeline and we seem to bring it out when we are tapping up there. He or she has bitten into a main line in

roughly the same spot for each of the past several years.

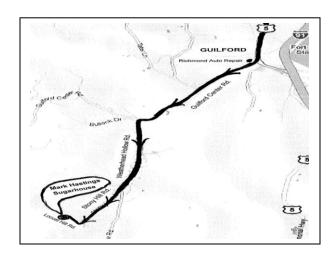
Directions:

South on Route 5 to Doug Richmond's Auto Repair in Algiers (Guilford Village)

Right (West) onto Guilford Center Road for 1.6 miles to Weatherhead Hollow Rd.

South on Weatherhead Hollow Rd. to Stony Hill Rd. (across from Fairgrounds)

Up Stony Hill Rd. and bear **right** onto Locust Hill Rd. Sugarhouse will be around the bend and then on your left.



Lilac Ridge Farm: Saturday, May 1, at 10. a.m.

WOA president Stuart Thurber will host a program on how to control invasive species using mechanical and manual methods. In addition to discussion, there will be a walk to see interesting sights and sites on the farm property (see President's Column, below).

Directions:

From Western Ave. (Route 9) in West Brattleboro, **left** onto Greenleaf St. for 1.4 mi. to Ames Hill Rd. **Go 0.5 mi.** on Ames Hill Rd., and Lilac Ridge Farm is on your left. (The farm stand is close to the road.)

Crop Tree Release: Saturday, May 22, from 9 a.m. to 1 p.m.

Join Sam Schneski and Bill Guenther at Mark Hastings's Sugarbush in Guilford. We will assess some of Mark's immature trees and their potential to grow into high quality, thriving members of the forest. We'll look at tree form, including V crotches, cankers, stem girdling roots, and other defects that can make a poor quality tree that ultimately results in low vigor and/or catastrophic stem failure. After

determining a tree to grow as a "crop tree," Sam will demonstrate the Game of Logging felling technique discussing the open-face/bore-cut method, execution of a felling plan on individual trees, and the sequence of events for removal of competing trees.

Dress for some walking and bring water and lunch. See Sugar House visit for directions.

President's Column

By Stu Thurber

On January 27 I attended an informational meeting on the Hemlock Woolly Adelgid (HWA), which was held at the Wilmington town offices. This little aphid-like insect can do considerable damage to the hemlock tree, and under certain conditions will kill the tree. The hemlock tree, as well as this insect, metabolizes during the cold months. The HWA is spread by

birds or any way it can hitch a ride. You probably have noticed how hemlocks grow well in a hardwood over story. The HWA is species specific to hemlock. The state is introducing a predator insect, which only eats the Woolly Adelgid. Other controls were discussed. It is important to spot this pest early. Late winter is the best time to notice little specks of white

wool at the base of each needle where infestations occur. Parts of Brattleboro, Dummerston and the Townsend State Forest have partial infestations. Thanks to John Whitman of Readsboro for promoting this program.

On May 1, Lilac Ridge Farm will be hosting a get-together to discuss control of invasive plants using mechanical methods. Since we have

organic food production, chemical methods are not used, although we might discuss them. We will take a hike and inspect invasive species in the field and woods. Bring your camera, because I will show you a unique spring in the forest. Also, we could view some interesting stone walls. I always learn when I go on a group hike, because people share their knowledge. *Save the date!*

WOA Scholarship Student Earns High Honors

Nicholas Haskell, recipient of a WOA scholarship at the University of New Hampshire Thompson School of Applied Science in Durham, N.H., earned High Honors for the Fall 2009 semester. He is a Forest Technology major.

Nicholas writes that he enjoys being on the UNH Woodsmen team, a club

sports team that competes in lumberjack events with other colleges in the area. In addition to his studies and sports, Nicholas reports that he now



also has a work-study job at the UNH Sawmill. "This is a great place to work. It's fun, I have learned a lot, and of course the extra money isn't that bad either."

Nicholas concluded: "... if I'm not learning about wood in my classes, I'm cutting it

either at the sawmill or at practice for the team." Congratulations to Nicholas from everyone at the Woodland Owners Association!

Update on Proposed Changes to Use Value

By George Weir, Consulting Forester

The 2010 state budget directed the legislature to reduce payments to towns in the 2011 budget for foregone tax revenues resulting from use value appraisal (UVA). The state payments are based on the difference between property taxes a town collects from properties appraised at use value and what the town would collect if use value properties were appraised at full fair market value. The payments are dedicated to municipal services.

In the present 2010 fiscal year, the reimbursements amount to around 8.4 million

dollars. They have grown annually by leaps and bounds as towns reappraise, increasing grand list values, and as more lands come under use valuation in reaction to consequent tax increases.

Over the summer of 2009, a study group formed that included a variety of interests: the Vermont Land Trust, the Vermont Listers Association, Rural Vermont, and the Vermont Farm bureau, as well as others. The group developed H.485, a bill that has quickly made its way through the House, and as I write, resides in the Senate

finance committee. Here is a summary of the primary features of H.485:

- The bill includes a one-year moratorium on use value enrollments. The moratorium would affect individuals who applied for UVA last summer and submitted management plans in late summer and early fall. The moratorium is estimated to save \$1.15 million.
- The property transfer tax on UVA lands would increase from 0.5 percent to 1.25 percent. This is estimated to raise \$300,000 in fiscal year 2011.
- The Land Use Change Tax (LUCT) on UVA lands withdrawn and developed would increase to 10 percent of the appraised market value of the land developed. Present penalties are prorated on the grand list value of the entire parcel. To clarify, assume a town appraises a 100acre property at \$100,000 in the grand list, — \$1,000 per acre. Under the present penalty, if the landowner develops two acres, the penalty is assessed on \$2,000, at a 10 percent rate, or \$200. Under the LUCT change, assume the two acres has a market value of \$50,000. A \$5,000 penalty would result. The joint fiscal office estimates the revised LUCT would raise between \$3 million and \$4 million per year. This amount would be divided equally between the state and towns where land is developed.
- To ease effects of the change in LUCT on landowners, the bill allows a 90-day period from the date the bill finally passes the House and Senate for landowners to withdraw land under the present penalty system. The joint fiscal office estimates the 90-day withdrawals will raise \$550,000.

Quite obviously, the bill goes well beyond saving \$1.6 million. And that was the study group's intent. Their thinking was that the moratorium and 90-day withdrawal period would raise the \$1.6 million, the increased transfer tax receipts would fund improvements

in computer systems at the tax department, and the increased penalty would provide the state and towns with a permanent funding source.

The WOA trustees discussed H.485 at our January meeting and opposed the moratorium as unfair to those who applied last summer and fall and as creating inequity between those in UVA and those who would now be denied entry into the program for a year. The Vermont Woodlands Association and the Vermont Consulting Foresters Association took similar positions.

An alternative was quickly developed by Vermont Forest Products Association and others. It would strike the bill's language completely and replace it with a surcharge of about \$100 on every use value parcel to raise the \$1.6 million. We did not come up with a sponsor for the amendment.

H.485 progressed to the Senate, and I and others testified on the bill on February 2nd. All the testimony heard opposed the bill and particularly the moratorium. An alternative was offered that would eliminate the moratorium. but retain other features of H.485. I was prepared to speak in support of that alternative, but remarks committee members made prior to my testimony convinced me that the committee was looking for more than H.485 would provide, if not this year, in later years. The great concern of the committee chair and vice-chair is the more than \$25 million shortfall in property/homeowner tax rebates expected for 2011. This would obviously hurt many homeowners. The chair expressed the view that use value should share in making up that amount or, as they put it, "share the pain." The chair questioned whether use value was becoming too expensive for the state.

Without going into all my testimony, I informed the committee WOA and CFAV opposed the moratorium. In reaction to committee remarks, I pointed out that the ever-widening gap between use value and full fair market value was driven by increases in property values and development. I stated that ski towns as well as property-rich towns such as Norwich and

Woodstock receive the highest reimbursements. I also stated that in Windham County there is a seven-fold difference between the town receiving highest reimbursement per enrolled acre and the town receiving the lowest. I said comprehensive study of UVA finance should precede changes in law.

Jonathan Wood, Secretary of Natural Resources, spoke after me and informed the committee the \$1.6 million savings was not in the

administration budget, the administration opposed change at this time, and that H.485 did not address the complexities of UVA finance problems. He testified that the administration was prepared to take a full look at UVA financing this summer (2010).

By the time you read this, this all may have been settled. I hope the bill fails and the state takes a fuller look at financing and considers all options.

A First Hand Look at the Asian Long Horned Beetle Infestation

By Bill Guenther, Windham County Forester

Late in the summer of 2008 we got the bad news that an outbreak of Asian Longhorned Beetle (ALB) had been discovered in the city of Worcester, Massachusetts. This find puts this voracious destroyer of trees less than 60 miles from the Vermont border.

Last month, a group of foresters from my department — Forest, Parks and Recreation — got to take a day-long tour of this veritable war zone. In Worcester we were met at the ALB Incident Command Center by Incident Commander Clint McFarland, an entomologist employed by the U.S. Dept. of Agriculture's Animal and Plant Health Inspection Service (APHIS), which has legal federal jurisdiction over this quarantined area. Ken Gooch, a forest health specialist with the State of Massachusetts Dept. of Conservation and Recreation (the state's forestry agency), is working in partnership with Clint in the war against the ALB.

We started with a presentation that gave an overview of the control project. It was determined that the beetle had been in Worcester for nearly ten years before it was discovered by an astute landowner who saw the beetles in her back yard and noticed holes in her Norway Maple trees. Once ALB was confirmed,

APHIS initiated a quarantine of the area, meaning that no wood could move outside of this restricted zone.

The next step was to initiate a survey of each and every host tree to look for signs of the beetle. These could include the round exit holes, depressions in the bark caused by the beetles chewing out a site to lay eggs, sap oozing from trees and dieback in the tree. All of this work was originally done from the ground, but it was later found that infested trees could be missed, necessitating a tree climber to go up into the trees to look more carefully in the upper reaches of the crown. This made the survey and detection a much more time consuming and tedious process. As the survey progressed, the quarantine area got larger and larger, and a buffer zone was added beyond where the last known beetle was found. The regulated area currently stands at 74 square miles or 47,360 acres.

Research was being conducted to determine which types of trees the beetles liked. There were 12 genera that the beetle would feed on, with the maple family at about the top of the list. This information was very helpful in determining what species should be considered in the upcoming re-planting projects.

Worcester experienced a big tornado in 1953 that led to the city planting a huge number of shade trees, of which most were Norway maple, a preferred host of ALB.

At present, the only realistic control method is to cut down infested trees and run them through a chipper while the insect is living in the wood in the overwintering pupal stage. By June, the beetles are adults and will chew their way out of the trees (creating that round exit hole) to start the life cycle all over again. This means that winter is the critical time to implement the control plan.

Extreme measures needed

Last year the project removed 15,325 infested trees and 10,250 high-risk host trees that were not yet infested. For 2010, there are 2,000 trees slated for removal. These somewhat extreme efforts seem to be paying off, as the beetle count went from "thousands' in 2008 to only 29 in 2009.

Our first stop in the field was to a big staging area at an industrial site where the harvested trees were taken for chipping. The massive chipping machine cost \$989,000 and could handle trees that were over two feet in diameter. To ensure that the beetle was killed by the chipping, two dimensions of the chip needed to be less than one inch. The chips were then trucked to biomass facilities used to generate electricity.

We then traveled into a residential area to watch tree-felling crews doing removals. On a street of mostly duplex homes, we watched some precision felling of trees in back yards and on adjacent steep, naturally wooded hillsides. The scale of this work was incredible as crews not only had to get the material from behind the house, but a stump grinder then was employed to get below ground level to ensure complete eradication.

There were several instances where no easy access existed to get large trees out, so very tall cranes were used. After the tree was felled, it

was attached to the crane by slings, and then the *entire* tree was picked up into the air and moved over the house. (I wouldn't want to have to pay the insurance premiums!)

With the near monoculture of Norway maple from the '53 tornado, entire streets lost nearly all of their trees. This earlier poor decision allowed the ALB to make great headway in Worcester's street trees. But now there is an opportunity to turn this around and add diversity by planting non-host species. As was later discovered, Norway maple does have many negative qualities, so this outbreak offers some consolation, as in the great Chinese proverb, "In crisis is opportunity."

Currently there are several groups involved in the re-planting, and Clint McFarland is trying to ensure that there is a coordinated approach, as in some areas, earlier re-planting frequently was with a single species.

Our last stop of the day was to a 134-acre forested tract in the city where a mechanical harvester and forwarder were conducting a harvest. An initial attempt was made to survey



"Stop, Spot, Stop!"

Metropolitan Boston Transportation
Authority (MBTA) buses have been
displaying posters with the headline
"Stop, Spot, Stop!" and a photograph of
the Asian Longhorned Beetle, urging
passengers to report any sightings. The
good news is that the ALB has been
eradicated in several locations around the
country and is being controlled in treated
areas of Massachusetts.

each tree to determine if it was infested, but it was so time consuming that the landowner agreed to remove all trees in the host species category to keep the cost from being prohibitive. The logging contractor was being paid about \$15,000/acre to do this work. All of the material was going into the big chipper we had seen earlier, even though there were some nice looking sawlogs that would've made some darn good lumber. But the team did not want to take a chance that beetles might survive in the wood and ordered all removed trees to be completely chipped.

Lessons learned

We learned that the beetle is most strongly attracted to vigorous healthy trees. Once a tree is weakened the beetle would likely move on to a healthier host. Our big fear in Vermont is that if this bug gets here, it could have a huge negative impact on our northern hardwoods, which include quite a bit of maple birch and ash — some of ALB's most preferred species.

Probably the easiest way that this invader can spread is through the movement of infested wood. All it would take is for a Worcester resident to bring one piece of firewood to a second home in Vermont, and it could be off to the races. APHIS did see some illegal movement out of the quarantine area at first and

so raised the fine to the stratospheric level of \$25,000 for violators, and this amount could be levied on each *piece of wood removed*.

Here in Vermont our department is trying to be proactive and has undertaken an awareness program, as well as a survey. We did a search of all of the land records in the entire state, and anyone who lives in the zip codes of the Worcester infestation received a letter asking if we could survey their Vermont property if they happened to bring any wood or nursery stock to the Green Mountain State.

It was sobering to visit this war zone in Worcester, but the bright side is that eradication is possible, as Chicago's earlier outbreak is now deemed controlled. So I feel that should we be unlucky enough to have an outbreak, we could control it. A big plus has been that the USDA has seen fit to make large emergency appropriations for eradications where ALB outbreaks have occurred.

For more information on the Worcester ALB outbreak, I encourage those with internet access to check out the excellent article in the November 2009 Smithsonian Magazine http://www.smithsonianmag.com/science-nature/Invasion-of-the-Longhorns.html. You'll get to experience what a day in Clint McFarland's life is like!

Heavier Trucks Can Use State's Best Routes

A one-year pilot program allowing trucks heavier than 80,000 lbs. gross weight to travel on Interstate routes 89, 91, and 93 in Vermont went into effect January 13. It is scheduled to expire December 16, 2010. Trucks heavier than Federal law allows have been restricted to state or town highways until now.

Trucks with five axles may weigh up to 90,000 pounds, and trucks with six axles may weigh up to 99,000 pounds. A truck must be legally registered for its maximum Federal limit and

obtain a Special Excess Weight Permit from the state of Vermont. Most truckers hauling unprocessed forest products have had the permits anyway. Vermont has allowed trucks to travel on state highways at these load limits for many years.

Vermont is surrounded by states that have similar exemptions. From a safety and fuel efficiency standpoint this program should be a winner for all. Over time, freight costs will factor in the trip-time decrease Interstate travel will provide.

Conservation District Plant Sale

From now until April, the Windham County Natural Resources Conservation District (NRCD) is holding its 20th annual plant sale. Hardwoods, conifers, fruit trees, and wildlife/songbird shrubs and trees, as well as fruits, vegetables, and spring perennials that will thrive in southern Vermont are available.

According to the NRCD: "Our current offerings seek to highlight plants for their landscape value, conservation value, and food value, both for ourselves and our feathered friends. We have also tried to focus on providing mostly native plants for our shrub varieties in an effort to combat the spread of invasives." The Conservation District uses the revenues from the sale to help fund professional and general interest workshops on natural resources topics.

The NRCD will accept orders for plants until April 12. You can pick up your stock on April 24th between 9 a.m. and noon from the Natural Resources Department at the Trade and Industrial Center in Brattleboro.

For more information on the plant sale and to get an order form, visit

http://www.vermontconservation.org/News/20th -Anuual-Conservation-District-Plant-Sale.html (this is the correct URL, despite the misspelling of "Annual"), or contact the Windham NRCD at (802) 254-5323, Ext. 104.

The Conservation District also offers rainbow and brook trout for stocking private ponds. More information is available at the telephone number above, or from jolene.hamilton@vt.nacdnet.net.

Update on the Emerald Ash Borer in Quebec

By Barbara Burns, Forest Health Specialist Vermont Department of Forests, Parks, and Recreation



On December 10th, a delegation from the Vermont Forestry Division and the Agency of Agriculture traveled to Quebec to meet with Hugo

Frechette, the Emerald Ash Borer Specialist covering the Carignan infestation for the Canadian Food Inspection Agency, and Eric Sarrazin, a local CFIA inspector. Following an indoor presentation, we visited an infested stand, a municipal garage which receives tree waste, and some firewood dealers.

Take home messages:

 The Canadian government is making a serious effort to slow human-caused spread.

- No attempt is being made to eradicate or isolate the infestation ... because this has never worked.
- It was nearly impossible to detect signs of the insect in a lightly infested stand.

Details:

The infestation in Carignan was detected in June 2008 by an arborist. The origin is unknown, although firewood is suspected.

To delineate the infested areas, the area was divided into survey blocks. If there was a positive find, the block was marked as infested, and no additional surveying was done within it. All blocks within a 5 km radius of the known infestation were surveyed on foot. The remaining blocks within a 16 km radius were surveyed by car. The survey was completed by October.



By Ministerial Order, a quarantine area was established, following municipal boundaries, including most of the area within the 5 km radius. Regulated materials are ash logs

and all firewood. Anything less than 1" in diameter is okay to move.

Each municipality in the quarantine area has a controlled area to receive yard waste. The material is chipped at least once a year (at town expense). Chips can be used within the quarantine area, or moved out of the area if they are less than 1".

Control, not eradication

Although some local officials remain hopeful that removing known infested trees might help slow the spread, the federal government is cutting trees for research purposes only. Tree removal for eradication or to isolate infestations has been tried repeatedly (in Canada and the U.S.) ... and failed. One notable example: in 2004, a 10-km wide, host-free 'firewall' was created in Ontario by cutting all ash trees along the eastern edge of the quarantine zone, between Lakes Erie and St. Clair. About 100,000 healthy trees were destroyed. Infested trees were found at a number of sites east of the firewall later that year.

Beginning in 2002, the Canadian government has been trying to help the wood industry move regulated materials out of the quarantine areas without spreading emerald ash borer. Materials cannot be moved at all during the high-risk period, between April 1 and September 30th, when adults may be emerging from ash. During the low-risk months, materials can be moved to facilities with a compliance agreement. The receiving facilities develop their own strategies to meet quarantine standards. Facilities are

audited every month for the first year, and less frequently in subsequent years.

The inspectors are also working with firewood dealers in the quarantine area to identify ways to certify that firewood has no ash in it (for example, visiting a stand cut for firewood preand post-harvest to ensure that no ash was removed).

Regulation of logs coming from the US is state by state. Since New York has an infested area, ash logs from NY can only move into Canada during low-risk months, and must go to a mill with a compliance agreement.

There is a second quarantine area in Quebec, just across the river from the small infestation centered in Ottawa.

Based on its range in China, the insect should do fine wherever ash grows in Quebec. It is more likely to have a two-year life cycle where the growing season is shorter. The longer life cycle increases the likelihood of moving the insect in infested firewood.

At the field site, we visited a wooded area in the infested neighborhood, with a high percentage of green ash. This stand was known to be lightly

infested. A couple of trees on the edge of the stand had some missing bark where the diagnostic galleries were obvious. Otherwise, we saw no sign of the insect. Notably, we couldn't find any exit holes. There was very little dieback, epicormic sprouting, or bark cracking. This is consistent with previous reports that, early in an



infestation, most of the activity goes on, undetected, under the bark.

What's your story about your woodlands?

Call Barbara Evans, 258-2688, to contribute to Member Musings in the next WOA newsletter.

WOODLAND OWNERS ASSOCIATION

11 University Way, Suite 4 Brattleboro, VT 05301-3669 NONPROFIT ORG US POSTAGE PAID BRATTLEBORO VT PERMIT NO. 78

CHANGE SERVICE REQUESTED

Upcoming Programs

(See inside for details.)

Annual Sugar House Visit: Saturday, March 20, at 1 p.m.

Lilac Ridge Farm: Saturday, May 1, at 10. a.m.

Crop Tree Release: Saturday, May 22, from 9 a.m. to 1 p.m.

Mission of Woodland Owners Association

WOA 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, WOA 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.