Woodland Owners Association, Inc. 11 University Way, Suite 4, Brattleboro, VT 05301
802-257-7967 ext. 302

WOODLOT TIPS

SPRING 2012

Saturday and Sunday, June 2–3 — Strolling of the Heifers

WOA will have a display under the forestry tent at Strolling of the Heifers. Other organizations under the tent include, among others, Game of Logging, Department of Forests, Parks, and Recreation, Natural Resources Conservation Service Vermont Woodlands Association and Vermont COVERTS.

Sunday, June 3, at 10:30 a.m. — Family Hike on Round Mountain

George Weir will lead a family hike to the top of Round Mountain on the Thurber Lilac Ridge Farm in West Brattleboro. The hike is easy and we can picnic and enjoy views from the top.

We will meet at 10:30 a.m. at the west end of Abbot Road, just before it joins Ames Hill Road. We will park in the field there. Bring a lunch or snack.

Save the Date!

Saturday, September 15 — WOA Annual Meeting, at the Margaret MacDonald property in South Newfane

The MacDonald woodland consists of approximate 475 acres and has been actively managed for many years. We will observe and discuss white pine management, shelterwood harvesting, hard-wood crop-tree management and invasive plant removal. Expect a full meeting announcement in early September.

New WOA Email Address: ***woodlandownersassociation@gmail.com***

President's Column

By George Weir

California Dreamin'

In April Joan and I spent nine days in and around San Francisco, visiting friends. Joan and our friend Peter love to plan excursions and activities, and so spent the evenings poring over maps, reading guidebooks and making lists of places to visit. Peter's wife Gail and I are decidedly less organized, and were certainly willing to follow their lead. Among the full and wonderful itinerary they developed I only had two requirements, first, visit redwoods and second visit Napa Valley to experience a vast landscape committed to growing wine grapes.

And vast it is. Mile after mile, grape vines seem to fill up every available space. Planted in former pastures, back yards, between ball fields, school yards, car dealerships, along highways, in front of restaurants and other businesses; there didn't seem to an end to it. Imagine every maple tree in Windham County with tubing or a bucket attached. It's about on that scale, but I suspect more profitable than sugaring.

On to the redwoods. When one thinks of redwoods near San Francisco, automatically Muir Woods comes to mind. But redwoods extend south of the city along the coast, not only in numerous public preserves and parks, but in natural woodland settings as well. Gail lived in the small town of La Honda for a number of years and mentioned redwoods there. So we travelled to see her former home and I expected to see a few redwoods as well. I didn't anticipate that redwoods lined the roads and filled the valleys along the creeks. These weren't trees only set aside in parks; they were part of the natural vegetation. Her small former home lay in a narrow valley on a branch of Pescadaro Creek. Trees towered a couple of hundred feet above her cabin and the site was continually damp, dark and gloomy. Gail spoke of her neighbors, giant slugs. She lasted about a year and then moved to a sunny hillside nearby.

We stopped at Memorial Woods along the creek. It is contiguous with several other county and state parks that create a broad forest area with stands of redwood. We were the only visitors hiking around that day. We wandered among forest giants four to five hundred years old. The word full comes to mind. It amazed me that trees this close together could be so big. We think of fully stocked Vermont soft wood stands as having basal areas around 220 sq. ft. per acre. Redwoods commonly have basal areas of 800 to 900 sq. ft. per acre. To me Individual crowns in the crowded canopy did not seem broad enough to nourish trees of this size. Of course craning one's neck to look up 200 feet interferes with making estimates. Perhaps the fact they photosynthesize 12 months of the year allows them to get by with seemingly less foliage. And maybe the roots graft with roots of neighboring trees and they all function as a single organism.

That's certainly how it feels; the stands seem to be one big living thing. We've all read how trees cool the earth and clean the air, but standing among the redwoods takes it from the abstract level to the absolutely tactile level. The air feels clean, cool, damp, decidedly saturated with moisture. Leaving the redwoods and emerging into the sunlight is like walking out of an air-conditioned building in August. The trees perpetuate an environment necessary for their growth and existence and the stands have a living presence that humbles one.

The redwoods inspire awe and display the power and potential of nature. But I think our woods are the same, perhaps on a different scale or in different form, certainly more diverse and expressing other aspects of nature's potential. An occasional visit to the coastal redwoods renews my sense of wonder about forests, and returning home I look at our forest with fresh eyes. For me, not much compares with a mature oak or northern hardwood stand.

Sugarhouse Tour 2012

By Margaret S. MacDonald, WOA Trustee

On March 17, Steve and Maria Glabach, their son Ted, daughter Theresa, and their assistant Colby, welcomed WOA to their sugarhouse in Dummerston. Steve admitted that because of the unusually warm winter the family would have finished sugaring earlier in the week, but they had reserved some sap so visitors could see the sugarhouse in action. Warm winter or not, the day of our tour was grey and chilly,

so many of the visitors huddled around the wood-fired arch of the sugarhouse and welcomed the blast of heat when the doors were opened for re-stoking.

Throughout our visit all of our questions were cheerfully answered on topics ranging from the equipment used by the Glabachs to the maple sugaring industry in general. They were happy to demonstrate all aspects of their sugaring operation to us. Steve takes a very conservative approach in tapping the sugarbush: he determines how many taps to use per tree by literally being a tree hugger. If his hands touch, or almost touch, around the tree trunk he uses only one tap. If there is a large distance between his hands, he uses two taps, but never more.

The Glabachs use both buckets and pipelines with vacuum pumps to collect sap. Syrup collected using buckets can be slightly sweeter because sugar can stick to the lines, but the vacuum system is far more efficient. While vacuum pumps are expensive, they pay for themselves in one or one-and-a-half seasons, because vacuum use enables a tremendous increase in sap volume. Some have estimated that the volume almost doubles, and Steve reported that this year there were a few days when it actually did. In general, however, the volume increases by about 50 percent. Even with a vacuum system the trees are not stressed; the sugaring operation only draws off 10–15 percent of the total sap produced.

Because of the low-to-nonexistent snowfall this year, the taps were placed lower than usual to facilitate sap collection; in most years very low taps would be covered by snow. Colby and Ted, who attended the sugaring school held by the Proctor Center of the Extension Service, told us they had learned that at 28 feet trees exert a natural vacuum. It is unlikely, however, that many sugarmakers would find it practical to place their taps at that height simply to avoid using vacuum pumps!

The Glabachs pay special attention to cleanliness throughout their sugaring operation. They use a salt filter to remove impurities from the sap before running it through an eight-membrane Lapierre reverse osmosis system, which raises the sugar content of the sap from approximately 1 to 5 percent before it goes into the boiler.

The multiple compartments in the pan create a longer flow, which steams more water out of the sap. The flow in the pan is reversed every four hours. Normally at the height of the sugaring season the Glabachs draw syrup off from the boiler every 15 minutes; on the day of our tour they first drew off around noon. The syrup is filtered again after boiling to ensure purity; if it clings to the filters, it's boiled again. Before putting the syrup into containers for sale, the Glabachs reheat it to 180^{o}, which gives the flavor an extra edge.

The Glabachs made about 1,100 gallons of syrup this year — slightly under their usual quota — from 5,500 taps. However, on three record days they made more in a single day than they had previously made in a year. Maria showed us samples of syrup drawn on every day of operation this year; on some days, when the syrup grade varied significantly, she had drawn more than one sample. This year began with a longer than usual run of Fancy syrup, and then went almost directly to Grade B. On the day of our tour Steve estimated that he was making commercial grade syrup, which would be sold in bulk to wholesalers for use in various types of flavoring.

The Glabach sugaring operation ties in to other activities. During the summer the family operates an excavating business; they use the scrap wood they collect from excavation sites to fire the boiler at the sugarhouse. The water extracted from the sap by the reverse osmosis process is so pure that Steve has been approached by an entrepreneur interested in bottling the water – and perhaps even capturing the steam emitted from the pan. At the other end of the "purity" spectrum, Maria showed us samples of what looked like milk chocolate waffles, but was actually the "sugar sand," or residue scraped from the filters. The "sand" consists largely of minerals and dirt removed from the sap before it is boiled; apparently it still has a slightly sweet taste (we didn't test it). Its high mineral content makes the sand useful in gardens or in composting systems.

In the course of our tour Steve mentioned that the International Maple Syrup Institute has proposed a universal grading system for maple syrup; if the new system is accepted, it will go into effect in both Canada and the United States for the 2013 sugaring season. However, the new system might actually harm Vermont sugarmakers, because the current Vermont grading system differs from the U.S. and Canadian standard by requiring slightly greater syrup density – obtained by boiling the sap longer. That has given

special meaning to the "Made in Vermont" label. Under the new system, Vermont syrup would fall into one of four categories within the "Grade A" classification. For example, "Vermont Fancy" will fall into the "Golden Maple Syrup" category, which will include a far broader range of density and flavor than the current Vermont grading category does. Fortunately, the new system still requires that producers label their syrup with the state of origin; we will have to hope that buyers who value the special quality of Vermont syrup today will continue to seek out syrup that carries the Vermont label.

At lunchtime Theresa provided us with maple milkshakes, hot dogs, and hamburgers, and visitors had an opportunity to buy syrup at special discounted rates. We are very grateful to the Glabach family for its hospitality.

For a summary of the proposed new grading system, see:
http://andersonsmaplesyrup.com/files/Revised_Grading_System.pdf

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How the Use Value Appraisal Program Fared under the Legislative Spotlight This Year

by Bill Guenther, Windham County Forester

This legislative session ended up with a mixed bag of changes to the Use Value Program. The major bill, H.237, which would have changed the way the Land Use Change Tax (LUCT), sometimes called the "penalty tax," was calculated, ended up dying a slow death in the Senate Finance Committee. There was a lot of testimony on this bill in the early part of the session, but many other issues seemed to be more hot button, such as the power company merger that put numerous bills on the side burner — the fate of H.237.

Last year a very controversial and unclear law that became known as "The Westman Amendment" was passed that basically said if a Use Value parcel had a development permit of several types it could be considered developed. This would remove the parcel from the UVA Program and impose the penalty. The intent of this proposal was to try to put a halt to the concept of "parking" lands in the UVA program. The landowner gets the tax savings for a short period of time, but then develops the land in the near future.

This year there was a move to try to repeal this part of the law due to its complexity and lack of clarity. Senator Westman was persistent that some form of his goal of "anti-parking" legislation be implemented, so an outright repeal was not going to happen. Several different versions were put on the table for discussion and in the end language was inserted into the Miscellaneous Tax Bill that did alter the Westman Amendment of last year.

The key part of the language that was added to the Use Value statute (Chapter 124 V.S.A.) inserts an additional definition under the word "development". Below is how the new part of the UVA statute will read with the underlined portions being the new sections added:

Enrolled land is also considered "developed" under this section if a wastewater system permit has been issued for the land pursuant to 10 V.S.A § 1973 and the commissioner of forests, parks and recreation has certified to the director that the permit is contrary to a forest or conservation management plan or the minimum acceptable standards for forest management; use of the parcel would violate the conservation management standards; or after consulting with the secretary of agriculture, food and markets, the commissioner certifies that the permit is not part of a farm operation. The commissioner of forests, parks and recreation may develop standards regarding circumstances under which land with wastewater system and potable water permits

will not be certified to the director. The term "development" shall not include the construction, reconstruction, structural alteration, relocation, issuance of a wastewater system permit under 10 V.S.A § 1973, or enlargement of any building, road, or other structure for farming, logging, forestry, or conservation purposes, but shall include the subsequent commencement of a use of that building, road, structure, or wastewater system permit for other than farming, logging or forestry purposes.

So what will this mean for folks already in the Program? We're not exactly sure as there are lots of ways to interpret some of this language. But basically if you have a state wastewater system permit that could impact your ability to manage the forestland in that area, you could be subject to the LUCT and have some or all of your land removed from the UVA program. Our department will be working with the Tax Department and Agency of Agriculture to ensure that we get out a clear interpretation of how these changes will specifically affect parcels either already enrolled or ones just entering the program. So stay tuned and we'll provide a future update.

Woodland Secret #6 — Vernal Pools and Their Secrets

By Arthur H. Westing, Former WOA Trustee

Woodland vernal pools are relatively small and shallow bodies of water filled annually from snow melt and runoff into an isolated woodland depression, their hydro-period lasting at least during the spring season before drying up. Such a wetland is generally less than 0.5 acre in size (if round, thus having a radius of 83 feet or less), is often less than two feet deep at its maximum, and is free of fish. A survey not so long ago of some 900 woodland acres in Windham County suggests that on average there exists about one such seasonal wetland for every 50 forested acres.

Amphibians are a class of small cold-blooded vertebrates. Perhaps not so widely appreciated is that our local woodlands provide the home for about 15 species of those amphibians: seven salamanders, seven frogs, and one toad. All of those species but one require either a pond or stream during their juvenile (egg and larval) stages. Then as adults, about half of them become terrestrial creatures, with the remainder splitting between semi-aquatic and fully aquatic.

It turns out that while 14 of our 15 woodland amphibians utilize these pools to a greater or lesser extent as a site in which to lay their eggs, four of them — three of the seven salamander species (the Spotted [*A. maculatum*], Jefferson [*Ambystoma jeffersonianum*], and Blue-spotted [*A. laterale*], or, more likely, hybrids of the latter two) — plus one of the eight frog and toad species (the Wood frog [*Rana sylvatica*]) — depend essentially exclusively on them. The eggs deposited in the vernal pools by any of them then develop into larvae (tadpoles) which live there during the several months it takes for them to become adults, at which time those that have not been eaten by turtles, birds, or other predators, migrate into the surrounding woods. Those three vernal-pool-requiring salamander species then live in the woods for up to perhaps 20 years, that is, unless eaten by snakes, birds, mammals, etc.; and the vernal-pool-requiring frog for perhaps up to five years. (As adults, those three salamanders, all in the genus *Ambystoma*, live underground most of the time and are thus collectively known as mole salamanders.) Subsequently, the amphibians try to return annually to their natal vernal pool to lay another mass of eggs. The characteristic of special relevance to the four species dependent upon the woodland vernal pools is that no fish live in them (thus not being present to feast on their eggs and larvae).

In order for the vernal pool to be a suitable habitat for amphibians, the water must generally persist for about four months, and in order for it to be a sustainable amphibian habitat, it must be surrounded by a zone of woodland of some six acres (if round, having a radius of 288 feet or so). More would be better. The soil in the water-body depression generally supports essentially no higher plants, whether aquatic or emergent. It is also of interest to note that small (one inch long) crustaceans known as Fairy shrimp (locally especially *Eubranchipus bundyi* or *E. vernalis*) are found only within vernal pools. Thus, the three mole

salamanders, the Wood frog, and the Fairy shrimp are all considered to be reliable indicator species for a viable vernal pool. As aquatic larvae, the amphibians feed largely on green algae and insect eggs; as terrestrial adults, they feed largely on insects, spiders, worms, and slugs. Our woods are likely to support well over 1,000 individual amphibians per acre (a significant fraction of that ecosystem's animal biomass) and are thus an integral intermediate component of the food chain (or web) and thereby also an integral component of our forest ecosystems.
Finally, the innermost one acre (if round, radius of 118 feet) of the six or more acres constituting the necessary amphibian life zone ideally should be left essentially undisturbed in order to provide adequate shade and wind protection to the pool; and if cutting is carried out from time to time in the remaining area, that should be done only lightly (no more than 25 percent of the basal area to be removed at any one time). Moreover, as tempting as it might be, the annually dry and open vernal pool site should not be utilized for the skidding or yarding of logs. Although none of our 15 woodland amphibians are as yet threatened or endangered species, they are declining in numbers (both here and elsewhere) for various, certainly in part climate-change related, reasons.

WOA Scholarship Fund

By Jeremy Schrauf, WOA Trustee

Most woodland owners today depend on the professional expertise of others to provide good management of their forest lands. In particular, foresters, loggers, and wildlife management experts often play an important role in most forest management efforts.

Over the years the Woodland Owners Association has had as one of its goals to help ensure the continued availability of well trained and educated professionals in those and related fields. For example, providing subsidies for participation in the Game of Logging makes it possible for loggers and others to practice the best and safest techniques to do their work.

Those choosing forestry or wildlife management face the need for years of college education to be able to learn the complexities of increasing information and how to deal with the growing issues of quality and sustainability.

The WOA college scholarship program is intended to help with this latter need. For several years we have provided scholarships of $1,500 each to help defray the increasing costs of undergraduate education in forestry, wildlife management or a related field. Typically we have awarded one scholarship to a high school graduate planning to attend college and another to a student already in college. On occasion we have even made awards to two students already in college and showing special promise.

As the economy has been difficult, college costs for students seem to have gone up faster than the cost of living. We would like to be able to increase the amount of the awards to reflect that increase. When we have helped a student to get started and they prove to be outstanding college students, we would like to be able to continue to support them even as new students are added to the list.

While donations to the scholarship fund have been sufficient to cover the existing awards, they are not enough to make the significant increases we would like to provide. There is also the concern that in any particular year there might not be sufficient funds for even the current awards.

Many of you specify additional gifts to the scholarship fund beyond your WOA dues each summer. Your donations to the fund over the years are much appreciated.

If at all possible, an increase in that giving would be most welcome — to ensure the continuation and usefulness of the program. Your increased generosity also would allow WOA to build an endowment fund for scholarships.

Emerald Ash Borer (EAB) Readiness Drill

By Bill Guenther, Windham County Forester

On April 26 a roomful of natural resource personnel gathered in a church meeting room in Randolph, Vermont. The goal was to see how well we could mobilize a wide variety of folks to put together a rapid response survey team should EAB be discovered in the state. The Department of Forests, Parks & Recreation was the lead unit, with other participating organizations being the U.S. Forest Service, Vermont Agency of Agriculture, UVM Extension, and USDA's APHIS (Animal Plant, Health Inspection Service). We also had some observers from New Hampshire's state natural resource organizations.

We used the Incident Command System (ICS) to manage this drill. This is a great way to develop the structure that will oversee an "Incident," such as wildland fires, floods or any other sort of emergency that calls for building a quick, efficient and successful management team to oversee the incident.

Our mock scenario was that a student had found what he believed to be an EAB up on the Vermont Technical College campus. Survey teams were sent out using a protocol that attempts to determine how large the EAB infestation area is. Our regulatory partners were also along to confirm the sighting and then recommend any particular areas that could be quarantined. We also invited the press and got some great news coverage in the Burlington Free Press and on Vermont Public Radio. We had never tried to put a major drill like this together with our sister agencies, but we all agreed at the end that it came off well. There was good cooperation and survey teams that did an excellent job in determining the extent of the spread of the insect for our mock readiness drill.

We are now much more prepared. If EAB does arrive, we can gather our forces for an immediate response, and we will be ready to rapidly deploy survey teams to determine the insect's level of infestation. Early detection is so critical with this insect and another foreign invader, the Asian Longhorned Beetle. We took away some great lessons from the drill and will fine tune our command system and be ready should a real find of Emerald Ash Borer occur.

2012 Game of Logging Workshop

September 22, 23 and 29 at the Morey Property in Windham, Vermont
Sponsored by the Windham County Woodland Owners Association and the Windham County Natural Resources Conservation District

What to Wear/Bring

- Sturdy boots
- Dress for the weather (layers recommended)
- Lunch and beverages
- Hardhat with eye and ear protection. All participants must bring a hardhat. The instructor can provide eye and ear protection if participant does not have it.
- Chaps *
- Chainsaw if you own one; otherwise there will be saws provided by instructor

*Our instructors have a limited supply of chaps available for use during training sessions. We recommend that you wait on purchasing new equipment until after the first day of training.

Start Time: Classes start promptly at 8 a.m.

Directions to the Site:

FROM NORTH-WEST — From Londonderry, Vermont go east on Route 11 approximately 4.9 miles to the intersection of Route 121 East. Please note the signs for Route 121 East and the towns of Windham and Grafton. On Route 121 you will climb a long hill then start down. You will come to a four-way intersection after approximately 2 miles.

Take a right onto Windham Hill Road, proceed through the small town of Windham, and after approximately 4 1/2 miles from the intersection, you will see on your left, Wheeler Road. Please note six mailboxes on the left side of the road. The Morey House, 342 Wheeler Rd., is the second driveway on the right. It is a steep, approximately one-half mile to the homestead.

FROM THE SOUTH — From West Townshend, Rte 30, take Windham Hill Road, a diagonal right across from an old white building with the WT Post office, up approximately 3 miles to South Windham —a few houses and a brick church on the right. One mile past church, on right at an angle is Wheeler Road. The Morey House, 342 Wheeler Rd., is the second driveway on the right. It is a steep, approximately one-half mile to the homestead.

Payment and Refund Policy

We require payment in full upon registration. You may cancel your registration up to two weeks prior to the workshop date and receive a full refund, less a $25 administration fee.

Cancellations made less than two weeks prior to the workshop will not be eligible for refund, unless we have someone on a waiting list that can fill your space, in which case you will receive a full refund, less a $25 administration fee.

In the event that we do not have enough registered participants to cover workshop costs, we will cancel the workshop. In the event of such a cancellation, we will issue a full refund to all registered participants.

If you are interested in reading more about the Game of Logging Course, visit our instructors' website, www.woodlandtraining.com.

2012 Game of Logging Registration Form

(Please be sure to sign and date the form below, indicating that you have read and accept the cancellation policy)

Course Dates
GOL Level I: Saturday, September 22, 2012
GOL Level II: Sunday, September 23, 2012
GOL Level III: Saturday, September 29, 2012
All classes begin promptly at 8:00am

Name_____
Address _____
City_____, State_____ Zip _____
Phone (h)_____
(w)_____
(cell)_____
E-mail _____

Which Class(es) will you be attending? Level I ___ Level II ___ Level III ___

Please Note: Preference will given to registrants attending all three levels

Do you own a chainsaw? ☐ Yes ☐ No

Registration Fee: $150 per training level or $400 for all three classes.

I plan to attend and enclose payment for $_____

Please make checks out to the Windham County NRCD.

Please see the previous page for information about cancellations and refunds.

I have read and accept the cancellation and refund policies.

_____ _____
Participant Signature Date

Send Registration form and payment to:
Jolene Hamilton
Windham County Natural Resource Conservation District
28 Vernon Street, Suite 332
Brattleboro, VT 05301-3623

WOODLAND OWNERS ASSOCIATION
11 University Way, Suite 4
Brattleboro, VT 05301-3669

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CHANGE SERVICE REQUESTED

Upcoming Programs

(See inside for details.)

Saturday and Sunday, June 2–3	**Strolling of the Heifers**
Sunday, June 3, at 10:30 a.m.	**Family Hike on Round Mountain**

Save the Date!

Saturday, September 15	**WOA Annual Meeting at the MacDonald property in South Newfane**

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.