

Spring 2024

As Windham Regional Woodland Association turns 75 we are looking forward to celebrating the organizations history and exploring the possibilities for the future. In the nineties when the organization changed its name from the Woodland Owners Assoc. the switch to the Windham Regional Woodland Assoc. expanded the focus to include learning opportunities and information for anyone interested in. the woodlands of Windham County. This year we are working hard to pull together a variety of programs which we hope will be of interest to a wide audience, whether you own woodlands or not.

This issue of our Woodland Notes differs from some others, focused on just a selection of the events being offered this season. We are excited about upcoming programs focused on natural history like our programs on song birds and native plants, as well as programs focused on what might be thought of as homesteading skills like our program in propagating your own mushrooms and managing invasive plant species on your property. Keen observers may notice that we are also working to expand our programming further by strengthening partnerships with other local organizations. In addition to programming we have been sponsoring through Northeast Woodland Training to provide a discount for members to get chainsaw training, our programs this year include partnerships with the Southeast chapter of the Vermont Audubon, the Southeastern Vermont Cooperative Invasive Species Assoc. and the Hogback Mountain Conservation Assoc. In addition to these partnerships, board member Matt Stinchfield's, who is offering the program on mushroom propagation, has founded the organization Pine Hill Voices, and will be offering upcoming programming, some of which may be offered at discounted rates to members.

Whatever interest brought you to WRWA, I hope that this year's programming strikes your interest, or introduces you to something new, and I look forward to seeing you outside.

Andrew Morrison : President WRWA

<u>Upcoming Events</u> note: Events are open to members and non <u>members alike</u>

Timber Stand Improvement Workshop

Saturday June 1, 10:00 AM . Hicks Woodland, 870 Tyler Toad Road Vernon,

Join Sam Schneski and George Weir to learn about pre-commercial thinning in stands of young trees. We will focus primarily on white pine, but also spend time discussing thinning in hardwoods.

Pre-commercial thinning does 2 important things. It identifies the crop-trees with excellent sawtimber characteristics and reduces competition from neighboring trees. It also removes unhealthy and lower economically valued trees to promote overall value and health of the stand. The workshop will cover crop-tree selection, spacing of released trees, thinning tools and methods, and expected increases in growth and value and how thinnings may affect a landowner's overall goals ownership.. Prior to the workshop, Sam and George will have carried out some thinning for demonstration purposes, but attendees will have the opportunity to participate in crop-tree identification and spacing.

<u>Forestry Practices to Support Breeding Birds</u> <u>- Birding Walk and Workshop</u>

Sunday, June 2, 2024, 7:30 am 273 Hatch School Road, Halifax

Do wildlife patch cuts really work? The theory is that when you cut all the trees in a several-acre patch, the dense new growth that springs up will be very inviting to a wide range of wildlife, including a specific suite of breeding birds. Lee & Diana Todd had a six-acre patch cut created in the fall of 2014 using a forest mulcher (aka "Brontosaurus"). An EQIP grant helped offset some of the costs. The patch is now entering its tenth season of regrowth. Is it attracting the birds that were expected?

Southeastern Vermont Audubon Society (SVAS) is co-hosting this walk and workshop. They will be providing the expertise in identifying birds, and will have binoculars to lend out to those who don't have their own. The early start time is recommended by SVAS because the birds we'll be looking for are only active in the early morning hours.

A representative from NRCS (USDA's Natural Resources Conservation Service) will also be on hand, to describe the EQIP co-funding program and other potential funding sources. WRWA has toured this patch cut twice already, once in 2014 as the work was underway and the huge forest mulching machine was still on site, and again in October 2017 when the regrowth was three years old. If you joined either of those tours and have some memory of the conditions then, you will be amazed at how dense and thick the growth is now.

Participation will be limited to 30 people, so you'll need to sign up in advance. (There is no cost to attend.) Scan the QR code below, or type this into your browser:

https://forms.gle/yxrxZ2ZfvtUNhoED6

"If you can't access the sign-up system, or need directions on how to find the Todd property, email Diana Todd and she'll help you out. <u>diana.r.todd@gmail.com</u>"



<u>Plant Walks</u>

June 8th and August 24th Places to be determined Check our website for further details

Allison Turner (PhD, Pharmacognosy) will be leading plant walks identifying the lowergrowing plants at the edges of forest and in nearby fields. We will see native and non-native plants, invasives and possibly rare specimens.

Mushroom Cultivating Workshop

Sunday, June 16, 2024, 9am-1pm, Guilford, VT.

with Matt Stinchfield

If you would like to learn how to begin cultivating mushrooms in the woods, I will be offering a specially-priced workshop in association with the Windham Regional Woodlands Association in June. WRWA members can register for \$30 and nonmembers for \$50, for the four-hour class. Nonmembers will receive a year's membership in the association as part of their registration fee. Everyone goes home with their own inoculated mushroom log.

Class details:. \$30-50 per person, prepaid, ages 12 and up. Keep your dogs at home. Class size is limited to 12 persons. Rain or shine. Register at: pinehillvoices.love/workshops.html, click through to June on the calendar. Questions? email Matt at palatejack@gmail.com or call/ text 802-258-8748.

"Registration and advanced payment is required to cover course materials. Registration is transferable to another person, but nonAllison will explain the medicinal uses for several local plants, both according to folklore and modern science. This will be an easy walk, as we will be stopping every few feet to look at a new plant.

refundable. Space is limited. Contact the host, <u>Matty@pinehillvoices.love</u>, with any questions."

"https://tockify.com/matt.stinchfield/detail/ 19/1718542800000"



Read the article appearing later in the newsletter for more information

Do invasive plants have you Overwhelmed?

with Andrew Morrison, President WRWA

June 29th 10am-2pm. 147 Greenhoe Road, Dummerston Vermont"

Invasive plant species can be a major problem for landowners. Discovering that your property has invasive plant species can really feel like an overwhelming experience for many, but it doesn't have to be that way. Like many of life's hard tasks, having a plan in place can be the first step in turning this scary problem into something that feels more manageable. In 2014 I had just finished graduate school and hired on with a company treating invasive plant species. Over the next 5 years I discovered just how important it is to spend the time to assess each situation, put together a map of a property and perform some triage to set goals and priorities. A good map can help to track success, focus work time on the most important locations and even identify if a contractor is needed to help get things under control. If this sounds like the lifeline you've been looking for, or your call to action, then please

program. We will work with tools for property mapping, from paper maps to phone based apps, we will talk about how to simplify the mapping process and what information you need for a plan and then practice putting together a plan. We will discuss the principles of integrated pest management and what tools should be part of your toolbox in the work to control invasive plants on a property and lastly we will get hands on demonstrations with some of the most common tools available to a landowner and talk about the pros and cons of each and the context in which they can be most beneficial.

No registration is required but would be appreciated, to register please email Andrew at forestcarevt@gmail.com with the subject "WRWA event", please bring your own bag lunch.".

Growing Mushrooms al Fresco

By Matt Stinchfield

Oh mushrooms! Aren't you so varied? Aren't you so peculiar? Neither a plant nor animal, and with DNA more animal than plant. The latest science reinforces what some have already known: that mushrooms are amazing forest community members that can decompose woody substrates, provide essential nutrients to living trees, and on occasion, even cure disease in humans.

come join me for this outdoor, hands-on

As with any story that sounds too good to be true, mushrooms aren't all coming up roses. Some mushrooms can decompose things we'd like to keep, and others can cause such serious sickness upon ingesting or inhaling spores. Perhaps these complicated organisms just like to keep us on our toes.

There are many peculiarities of fungi that got me excited about trying my hand at growing them. Mushrooms ticked a lot of boxes for me... gourmand, nature boy, and citizen scientist. About six years ago I began by taking a threeday class at Sterling College in Craftsbury, Vermont. It was taught by one of the renowned experts in the field, Trad Cotter, a mycologist and entrepreneur from Easley, South Carolina.

Whether you are growing nutritious or medicinal mushrooms, you first decide if you will grow them outside in nature's variable environmental conditions, or in climatecontrolled rooms? The former allows you to grow on wood, wood chips, compost or perhaps coffee grounds. The wood substrate can come from one's own woods and can be part of a forest management plan. You will have to learn the best species and harvesting methods to lead to a good yield.

Growing indoors allows growers better control, timing of fruiting, and cleanliness of the mushrooms. But indoor methods typically use plastic bags. In addition to plastics, most commercial operations use a lot of energy, added nutrients, and even fungicides to boost production and avoid undesired crop spoilers. A basic mycology lab for culturing varieties and monitoring for contamination is expected.

I knew I wanted to grow mushrooms as naturally as possible, so I leaned into growing them on logs in various configurations. I would grow them in the woods on wood resources from my land. They might be stored in ricks, stacked totem-style, or half buried in the ground as rafts. Some projects never yielded. Some yielded a only a scant flush or only after an extended period of two to three years. But enough of them burst forth with such abundance as to assure this became my new forest superpower.

For shiitake, the best method is drilling 50 to 70 holes into a 40-inch hardwood bolt that is three to six inches in diameter. Oak is best. After all, shiitake means "oak mushroom" in Japanese. After filling the holes with either an inoculated wooden plug or similarly seeded sawdust spawn, the hole is capped with wax to keep it moist and a little harder to get at by forest critters. The logs are stacked crisscross in a rick for up to a year before telltale white splotches on the cut ends indicates "spawn run" has occurred. After that, depending on temperature, moisture, and the suitability of wood species, mushrooms begin to "pin," or sprout, as little nubbins along the log. In a week or so, these grow to become magnificent shiitake fruit.

I also experimented with growing oysters in totems, on stumps from freshly felled trees, and in rafts. I have had some success with chicken of the woods and with nameko. You may have seen chickens in the wild, growing fluorescent orange shelves on old hardwoods. Nameko is a small, firm mushroom excellent for ramen soup. It has a nutty flavor and crisp texture. The slick caps turn off some folks, but the goo disappears upon cooking. Some chefs say the slickness helps the body of the soup in the same way as okra richens a gumbo.

Along the way, one learns little tricks to being a better mushroom shepherd. Learning to force the mushrooms to emerge with overnight soaking and log thumping is one trick. Another is knowing how to contend with our forest friends that also like mushrooms: squirrels, snails, and beetles. Taking the losses with the wins is part of the fun of mushroom cultivation.

If you would like to learn how to begin cultivating mushrooms in the woods, I will be offering a specially-priced workshop in association with the Windham Regional Woodlands Association in June. WRWA members can register for \$30 and nonmembers for \$50, for the four-hour class. Nonmembers will receive a year's membership in the association as part of their registration fee. Everyone goes home with their own inoculated mushroom log.

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Oyster mushrooms emerging from beech totems.



Wine caps growing in compost-enriched soil and straw.





Shiitake on oak bolts in full fruiting. Watering trough used for force fruiting.

Shiitake bolts showing mycelium growing throughout the logs.

Sugaring Season 2024

By: Sam Schneski Windham County Forester

"I've been hearing mixed reports regarding this year's sugaring season. I think I could just use that as the opening sentence for every maple update that I write for WRWA. It always seems to be true, but there are trends to report. Most sugar makers I've spoken to in southern Vermont had an average to below average season." That's a quote from my article last year describing the 2023 season. It holds exactly true for 2024 as well.

There are many similarities between last season and this season. Both seasons started earlier than when we used to think of as the "traditional" start to the season. This year many of the neighborhood folks, in my area, who don't typically tap early did and are probably glad they did. Many of us tapped in early February (bigger producers even earlier) and made syrup in the first or second week of February. The sugar content was low this year. From what I heard that was universally true.

The good news is that I broke my production record this year! The bad news is that it was the record for lowest production on my current set up. An early start is one thing. Typically, that early start is followed by more traditional weather for at least a little bit and maybe even periods of inactivity in the form of never rising above freezing for days on end. This "traditional" weather would be days in the mid 40's and nights in mid 20's. The minute the long-term forecast showed a long stretch of daytime highs in the low to high 50's and at least 5 nights in a row with no substantial freeze I knew it was going to be a crummy season. If I had a sugarbush that was north facing I think the story would have been a little different for me. As it is, one bush I tap is south facing, and the

other is southeast facing. They warmed up and stayed warm resulting in heavy sap flow initially, but really petering out after the lack of freezing nights. Trees need freezing nights to recharge sap stores. As a result of that scenario and low sugar content I made mostly dark syrup. I always say that dark syrup is just as good or better than lighter stuff, but it's nice to make a proper amount of every grade for variety's sake.

Most of the sap I boiled this year was in the 1.3-1.5% range. That means that it takes roughly 66-57 gallons of sap to make a gallon of syrup. Remember what they told us in school that it typically takes 40 gallons of sap to make 1 gallon of syrup? That is true only if the sugar content is in the 2.1-2.2% range. My last 3 or 4 boils the sap sugar content was at or below 1%. Sap at the 1% mark means 86 gallons of sap are needed to make a gallon of syrup. Some folks call it quits at that point but having a reverse osmosis (RO) on my small set up makes it so I feel it worth it to continue boiling if I can.

Having an RO saves time and wood needed to make syrup, but it doesn't increase the amount you can make. I might RO sap down to boil 200 gallons of 5% (17:1) sap to make 11.5 gallons of syrup. That 200 gallons of sap was initially 650 gallons of 1.5% (57:1) that would also make, you guessed it, 11.5 gallons of syrup. What the RO has done in that example is remove 450 gallons of water before I ever began boiling. I've written about the Jones Rule of 86 before in another article. As a refresher, to figure out the gallons of sap needed to make a gallon of syrup divide 86 by the percent sugar content.

As the season progresses and I get more brave and I begin Ro-ing sap instead of waiting until I'm through Ro-ing my example above of 450 gallons before starting up the evaporator, I start a small fire in the evaporator (which is full of sap). I slowly add wood, turn on the blower, get all floats checked and double checked, and then before you know it, I'm at a full boil while the RO is running. This year I really honed it in to have my evaporator keep up with the amount of concentrated sap I was feeding it. I figure I was able to evaporate 80 or so gallons of water an hour on my evaporator while simultaneously removing roughly 120 gallons of water an hour with the RO. So, essentially, I was removing 200 gallons of water an hour. Not too bad on a relatively small 2'x8' evaporator set-up. Boiling 650 gallons of raw sap would have taken me roughly 8 hours, but with the RO it took me 3.25 hours. Start up and shut down/ clean-up takes time too but those 3.25 hours are the ones where I really never sit and just keep moving. I head from tank to tank checking levels, to the RO to check and adjust pressure levels, to the arch to fire it and bring in wood for the next firing (every 8 minutes), to the draw off side of the my rig to check for syrup doneness, to eventually drawing off syrup a few times during the boil, to bringing that freshly drawn off super-hot syrup to the filtering container to begin filtering, to filling up 5 gallons jugs for future storage and canning when needed, to cleaning and replacing sugar sand and nitre dirtied filters in the 200 degree water I'm collecting that is running off the preheater in the form of steam condensation. Phew!

Oh, and sometimes I can syrup into tins or jugs during that process instead of going right into 5gallon barrels.

Another interesting note about this season compared to last, was that my season ended basically on the same day as last year. March 13th was the last day I boiled this year and was the day of the big storm last year when sap flow abruptly shut down. I've anecdotally heard that producers up north are having a better year than last year. For them last year was low production and this year looks like it will be average. This is a broad and general statement but is what I have heard the way things look to be trending regionally. If these short so-so seasons keep up, I might have to figure out how to hook a vacuum system to at least one of the areas I tap. The natural vacuum 3/16th tubing that I use works well but doesn't do well during marginal really warm stretches. In those situations, a mechanical vacuum could be a big help to get a large enough volume of sap to boil. Some runs I just didn't get enough to bother so I had to wait and hope it didn't warm up so much that the sap I had didn't spoil. Sap has a shelf life similar to, but a bit longer than, milk. Here's looking to next year!

An Expert

by Walter Hard

Alexander Seaton had grown up with logs. As a child he had played around his father's sawmill Which was run by the water that came from the brook Up above the millpond in the pasture. What the mill needed came down in a wooden flume Which ran under the road

Alexander often went with his father Up the mountain road where timber grew. Some of it belonged to the Seaton family. More often Alexander's father would be cutting On land owned by someone else where he had stumpage rights. By the time Alexander took over the property He knew about all there was to know about timber, From the log to finished lumber. He was shrewder than the old man, folks found out. When he bought logs outright he always managed To pay for fewer feet than there really were. If he cut over a piece of land Somehow he managed to get a few logs from the next lot. His talk was smooth and, anyhow, It wasn't enough to bring him into court. He might sell a load of planks with a few short ones Tucked in where they wouldn't show at first, Or some off grade lumber would get mixed in With what was supposed to be a top grade. He was always short at the bank so if anyone inquired, Hoping to get some redress, they'd get little encouragement. In spite of continual skating upon thin ice He managed never to fall in. When, in later years, he got more careful, And rheumatism kept him from getting around, He put much of the management into the hands Of a young chap from out of town who was eager to learn the business. Alexander was careful not to let him know Too much about his former business methods. One day two city slickers talked to the young man, Offering what looked like an attractive deal in pulp wood. The young man, however, was somewhat suspicious. Somehow the deal didn't seem quite on the square; So he decided to counsel with his employer. He explained the deal and the old man told him To bring them in and let them talk to him. "I doubt, young man, if there's any crookedness Possible in anything to do with lumbering With which I am not entirely familiar."

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Spring 2024

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.