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### From the President's Desk - Spring 2023 By: Mike Porter - Board President

I don't know about all of you, but doesn't time seem to be flying by. It seems that since COVID began I have done nothing but write about things going on in my life to satisfy my role as President of the CFA Board of Directors. With my years of experience working with students, parents, and the public in general, I always seem to find something to discuss that I have had experiences with, good, bad or indifferent. This piece will be concerning something that has been in the good category. I am going to talk about getting started in making Maple Syrup.

The timing of this is a little late for this season's sugar making time, but it is never too early to begin thinking about next year, especially if you are beginning from scratch and need to gather all the gear necessary to have a successful sugaring season. Over the years I have helped several young people get started making Maple Syrup by loaning out pans, buckets, and other essential supplies. Some have learned the process is too time consuming and difficult, but others have grown as producers and are now reaching commercial levels of production. It does my heart good to see these people succeed in such a heritage pastime. One former student who used one of my pans as a starter when he was a young man recently asked me when is enough, enough. I told him his body and wallet would tell him when it was time to level out. This year he is now tapping about 8,000 taps and has purchased his second new evaporator in the last 5 years to take care of his blossoming business. Another young man has reached a point where he can nearly be called commercial but is restricted by easy access to good maple trees. He is now refining his process to make it take less time to produce his syrup. I am going to tap around 50 trees this season which is somewhat less than my past endeavors. The reason is that I am not as young as before and I don't have the help I used to have. I still love making syrup so just the process is worth it to me. Along the way I still introduce new people to the process and



encourage them to get started. Zane, of CFA fame, is using my equipment for his first sojourn into syrup production this year. Maybe in a few years he will be self-sufficient in his new hobby or maybe he will really enjoy the process and increase his size and use his own newly acquired equipment. It will be exciting to observe him make his discoveries concerning the process this year.

Enough about who I have helped so far. The point of this message is to give anyone looking the opportunity to make syrup a basic knowledge about how to start and in doing so, helping them. Step by step to making syrup is as follows.

Identify maple trees in your neighborhood. As Sugar Maple is the best tree to use for making syrup (has the highest sugar content sap of all species) you can also tap Red (Soft) Maple, which is the most widespread of the Maples. Its drawbacks are low sugar content and shorter season of viability of sap. You would sacrifice maybe a week on the end of the season using Red Maple as the buds grow earlier than Sugar Maple. You will have to find enough trees to meet the needs your boiling goals. Under normal conditions a tree will provide about a gallon of sap daily (more in ideal conditions). On average a tap will produce enough sap to boil down to a quart of syrup.

You now need to procure your wood supply for boiling the sap. I have found that softwood that is very well seasoned is the best to make the hot fire needed to rapidly boil the sap. You can use scrap lumber (not treated), limbs and branches from local trees harvested and cut to size, stacked, and covered or aspen or pine wood cut up, split, stacked and covered (usually most people will not want to use these woods for firewood so would be glad



to get rid of it). Also a sawmill might have slab wood available that you can get for nearly nothing. It will be best to cut it to length, split it smaller, stack and cover it during the spring and summer before boiling time arrives. Whatever source of wood you choose, make sure it is ready to be burned by early February or so.

Next you must find a boiling vessel. Experience dictates that you get a pan that has the maximum surface area for which you can build an arch. Check out a web search on "building a maple syrup evaporator arch." I found images of many types of arches that will work to give you the surface area you need. Also look here for the types of flat pans you can choose. Anything from food service pans to flat pans specifically made for maple

evaporation are going to be depicted. Based upon your technical abilities, you can choose to make an evaporator arch as elaborate or simple as you wish. From laying up some concrete blocks with a smokestack out the back to using drums used for oil or the like to constructing an arch from available materials based upon some of the photos in your search, you can have a simple arch to hold your pan/pans.



Maple season is a "moving target" as to when to start and finish. The general rule is that it is maple season when the daily temperatures are above freezing, and night temperatures are below freezing. This combination



encourages the trees to take in water when cold and release it with sugar upon warm-up. If it doesn't freeze, it won't run. If it doesn't warm up, it won't run.

You have the trees, evaporation system and wood, now you need to be able to collect sap from the trees and get it to the evaporator. You will need spouts (spiles), buckets, lids, and larger pails to gather your sap from the buckets.

Spiles can be found in either plastic or aluminum and most often are 5/16" diameter (older ones were 7/16" but are not as efficient or good for the trees. When you drill into a tree the hole never fills in, it just is covered with new growth wood, so the larger holes are prime places for bacteria and rot to enter tree after tapping. Buckets can also be plastic or metal and can hang on the spile or sit on the ground under the tap. I use galvanized sap buckets that are 3 - 4 gallons in capacity. These are getting harder to find and there are those that are scared of the galvanizing so recommend against them. Aluminum buckets are ex-pensive so limited in use. Plastic vessels can vary from bags specifically designed to be hung from the spiles to plastic sap buckets used just like the galvanized or aluminum buckets. I have never used them because they are expensive and might be prone to cracking in deep freezes. Another, usually less expensive approach is to purchase food grade 5 gal. plastic pails from a farm store or hardware store. These are set on the ground under the tap and sap is delivered to the pail via a short length of tubing (a drop) so there is no spillage. Standard sap bucket lids can easily fit on these buckets to keep rain, snow, and dirt out.

Once you have your trees tapped and evaporator set up, you need to

devise a way to store the sap until it is boiled. I am fortunate to have several 10 gal. milk cans from the old days of dairy farming. I use these to hold the sap until I boil. You can also use food grade drums that had some types of juice in them. They are commonly available online and are reasonable priced. A suggestion for these barrels is to drill a hole in the lowest point of the side and put a spigot in to draw off the sap to your pail to deliver to the evaporator. These barrels are typically 55 gal. size, and they will be extremely heavy to move around or pour from, thus the spigot. These barrels can easily be rinsed out periodically to keep them clean.

Now it is time to boil your Conventional wisdom is that you should boil your sap as soon as possible so it is made into syrup when fresh. Sometimes when you wait until it is convenient to boil. like on a weekend, the sap could spoil while waiting. This not good for quality syrup. the event that you cannot or do not have time to finish a



batch in one boiling, you can let it sit safely in the pan. Just don't wait too long as the same issue applies regarding waiting here. You should continue to boil until you have all your sap "boiled in" and are now ready to "finish." Finishing is best done in a pot in the kitchen where you can control the heat, so you don't get boil overs. It can and will happen if allowed to. A simple candy thermometer will aid you in getting finished syrup. The boiling point of water varies enough with changes in atmospheric conditions that it is necessary to check the boiling point daily, so you have a set target to boil to. The standard boiling point of stable Maple Syrup is 7.5 degrees above the boiling point of water, but 7 degrees will work okay as well. Once it reaches the Syrup "stage" it has to be filtered to remove solids and impurities. You can easily find "filters" at Maple Equipment suppliers, and they are reasonably priced and reusable. Filter the syrup hot and once done, reheat for bottling.

You can use basic canning jars cheaply and the syrup will keep nearly indefinitely if canned hot (above 190 degrees) and allowed to cool in the sealed jars.

You now have a forest product that you can enjoy on a variety of foods and in your drinks that need sweetening. If you make enough it is also a great gift for family or friends. NO ONE ever refuses a Maple Syrup gift. You are now a part of a growing population who are getting involved with syrup production. Congratulations.

A couple stream of consciousness point to make here (just random things that don't fit anyplace else). The hotter your fire the better, a good hot fire removes water faster making the syrup better quality. This is why you need your wood dry and fast burning.

There are several sites on the internet that give good basic information about making Maple Syrup. One of them is this site:

https://extension.unh.edu/resource/maplesugaring-tips-beginners-and-backyard-maplesugar-producers. This is a very complete guide to basic maple production from the University of New Hampshire that will support much of what is discussed here. Check out local equipment sources to add to your equipment supply. They include catskillmountainmaple.com and shaverhill-farm. com in Delaware County and justusmaple.com in Sullivan Co. These dealers not only sell equipment but produce maple products so are good sources of information about the process. Also check out Cornell Cooperative Extension searching for maple information or call your local county Extension office. CFA (845-586-3054) is also a good source of Maple information as many of the employees are making syrup on a regular basis. In fact, Zahra is working on a new program that will help people get started in acquiring the equipment and supplies to begin making backyard Maple Syrup. There is nothing better. Contact Zahra for more information on the rollout of the new program for next year.



## Forestry's Ivory Towers By: Ryan Trapani, Director of Forest Services

According to Wikipedia, an "ivory tower", is defined as a "metaphorical place... where people are happily cut off from the rest of the world in favor of their own pursuits, usually mental and esoteric ones." It has been used to "designate an environment of intellectual pursuit disconnected from the practical concerns of everyday life." When I graduated from the State University of New York's College of Environmental Science & Forestry (SUNY ESF) in 2005, some of those towers securely surrounded my mind-set. Now, I'm not saying that I don't appreciate my education there; I do. But some of the application of what I learned would not translate or gain traction back home in the Catskills. Let's go into that.

Forestry is a fine field. There is much talk within natural resources management and environmental sciences and studies about "sustainability." But to be proud, Forestry has been at "sustainability" far longer. Foresters must think long-term since their "crop" or plantof-choice are trees. Naturally, trees take a long time to grow, and their benefits aren't realized for decades, perhaps outside the lifetime of one Forester. For instance, "forest management plans" are written for 10, 20, 30-plus years into the future. Some of these "crops" or goals will not come to fruition for almost 100 years. Few agricultural or environmental pursuits consider such lengths of time in practice. Another misconception about Forestry, is that it isn't just about timber; it's really about any forest management goal. Examples include wildlife, water, recreation, health of course, and even today's carbon mitigation. All fall within the realm of forestry.

Back to school. We learned about "silviculture." Silviculture is most important to Foresters. It is as important to Foresters as pruning is to Arborists. One of the primary ways Arborists use to tend a tree (singular) is by pruning. "Pruning" is both the art and science of removing plant parts (i.e. branches, stems, roots, buds, leaves, flowers, and fruit) for a specific purpose. Silviculture is similar, but instead is the art and science of tending many trees (plural). The manipulation of sunlight and its timing can influence what plants grow and in turn influences the fauna that succeeds as well. It can also be used to improve other management goals beyond the scope of this article. In this way, silviculture is applied forest ecology. We learned all sorts of ways or methods to cut trees, but I won't bore you. Mainly, I'll simplify it into "regeneration cuts" and "intermediate cuts."

### Regeneration Cuts

Regeneration cuts are those used to "start a stand over." Regeneration cuts are used to foster shade-intolerant plants, enhance regeneration, or meet the needs of wildlife that require abundant food and cover from early successional habitat. These include clear-cuts, seed tree cuts, and shelterwood cuts. Clear-cuts – as you might have guessed - are the most intense since they provide the needs of plants that need open-sunlight. If we leave a few scattered trees to "seed in" the area to influence regeneration or trees that grow, we then have a "seed tree cut." Examples would be leaving behind black cherry to seed in the area. If we leave a few more trees, then we have a shelterwood cut. These are good for regeneration that tolerates a little bit more shade and requires some "shelter" from an overstory. Examples of these are oak and white pine. The above-mentioned regeneration cuts are referred to as "even-aged" since they produce a cohort of trees that are of similar age. Uneven-aged regeneration cuts are broken down into group-selection and single-tree. Group-selection cuts make small holes in the forest canopy in hopes of creating multiple age-classes. Single-tree cuts are what they say; The cutting of a tree here and there. Both group-selection and single-tree are uneven-aged cuts that will only foster regeneration of trees that are shade-tolerant since these openings are small.

### **Intermediate Cuts**

If cutting is not for regeneration, then it is referred to as "intermediate." They are intermediate because they are meant to improve an existing stand of trees that aren't ready to "start over" or regenerate. For example, you might have decent quality red oak that measures 12 inches in diameter at breast height with decent crowns of foliage. However, growing nearby are encroaching maple and ash trees that are hogging the sunlight from your preferred oak. Since this tree is valuable for wildlife (i.e. acorns) or isn't yet mature enough to harvest for timber, it would be better to "release" it from competing trees by cutting the maple and ash. This would be a "crop tree release." Or perhaps your forest is just too dense. Dense forests have slower growth rates and more susceptible to insects and diseases. A Forester who is managing for timber or health wants to reduce stand density and optimize growth by allocating the sun's energy onto fewer – but better quality – stems. It's kind of like pruning an apple tree by removing congested branches and shifting sunlight to the more fruitful ones. Reducing a stand's tree density would be a "thinning." Both cuttings represent intermediate cuts.

### Application Challenges

The above-mentioned silviculture is what I learned in school. However, after leaving those ivory towers I soon realized that their

application wasn't nearly as easy or always practical. Basically, there are three challenges that preclude good forestry from taking place in the Catskills. (1) Lacking low-grade markets. Remember the example of those encroaching maple and ash that should be cut near the oak? Chances are those maple and ash are "pole-sized" and too small to pay their way out of the woods. In other words, since the Catskills offer fewer low-grade markets (i.e. paper, woody biomass, etc.), someone must instead be paid to cut those smaller trees; this can be expensive. This is why some intermediate cuts – especially regeneration cuts – are rare in the Catskills. Instead, there exists only a market for high-grade trees. For instance, trees above 14 inches in diameter of desirable species: I.e. maple, oak, ash, walnut, etc. Foresters aren't magicians. Even if they know a stand or forest should be regenerated or more intermediate cuts are necessary, they cannot just invent markets for the smaller, less desirable trees to be cut. Instead, this cost is passed on to the forest owner, who often does not wish to pay for it. Sustainability can be an expensive investment without a diversity of markets.

- (2) Smaller parcels. Smaller parcels are less attractive to Foresters and Loggers. There are certain fixed costs that Foresters have: Visiting a property; inventorying trees; mapping trees; writing forest management plans; bidding timber; navigating town permits; and supervising jobs. Loggers too have their fixed costs: Moving heavy equipment; bidding timber; visiting properties; cutting trees; paying employees; etc. Therefore, smaller tracts of land are less likely to attract forest management from the commercial sector. A forest owner with less than 50 acres has fewer options for improving wildlife habitat or improving forest health since their land is less attractive to forest industry.
- (3) Culture matters. Culture too can be a hindrance to practicing forestry. Some individuals and towns are just against cutting trees which precludes them from practicing good silviculture and forestry. Some towns and their zoning ordinances pertaining to cutting trees as well-intentioned as they might be are a hindrance to cutting trees and hence practicing good forestry. A great resource to check out for improving forestry ordinances is the joint publication, "A Municipal Official's Guide to Forestry in NYS". It was created by the NY Planning Federation, NYS Department of Environmental Conservation, and the Empire State Forest Products Association.

I find that educating people about silviculture and good forest management works best when standing beneath their trees with them nearby. I can cover the benefits and costs of cutting or not cutting in real-time. People are familiar with the negative impacts of cutting trees. However, they are less familiar with the negative impacts of not cutting trees. They might be unaware that foregoing cutting can kill,

discourage, or say goodbye to some trees or wildlife that count on them. Still, ignorance surrounding forest cutting seems far greater in comparison to other more impacting land uses, such as agriculture. This ignorance is probably why poor forestry and logging ordinances manifest themselves into burdensome town codes. High property taxes – as researched by SUNY ESF – can also discourage good forest management. In general, if property taxes are high, then forest owners are more likely to treat their land as a liability. Overall, owners over time are more prone to liquidate liabilities. I would argue that forests are assets that should be invested in.

Many of the silvicultural techniques mentioned above that I learned in college are impractical, especially when they are small, and the goal is to create regenerating seedlings. If a cutting area – say even a clear-cut or a smaller group-selection cut - is too small and does not create enough tree seedlings to overwhelm the local deer herd's appetite, then it will "fail" to establish. Depending upon your deer browse-pressure, the timing and size of a cut will vary. Fencing may be necessary alongside more hunting. The willingness to cut more trees and kill more deer varies from town to town. As towns become less tolerant to rural land-uses, regeneration will only suffer more. Although, I personally believe that habitat quality is more important than merely reducing deer numbers. The use of fire as a forest management tool in New York State has diminished since the 1940s. Instead, "invasive" plants will thrive since they are less palatable to deer and are not being controlled by humans. This is a solvable cultural dilemma that demands hard work and sunlight at the right time and amount.

Smaller Size but Large Opportunity in "Forestry"

As a result of these three challenges, there simply are many forest owners left outside the purview of "good forestry." Remember, average parcel sizes in the Catskill Mountains are less than 20 acres leaving a severely under served demographic that represents a significant chunk of forest when added up. Where there are challenges, there are also opportunities. Catskill Forest Association (CFA) focuses mainly on this under served demographic. The small forest owner was never mentioned in my textbooks, at least not in this format. Perhaps this smaller forest owner lies somewhere between Forestry and "Urban Forestry" or Arboriculture. CFA finds itself treating forest stands for invasive species to planting individual trees in yard scapes and everything in between. I would contend that although the scale has changed, it is still Forestry with that long-range perspective for sustaining forest improvement. It's just not what I was led to initially believe behind those ivory towers.

### RED MAPLE REVELATIONS

By: Dr. Michael Kudish, Forest Historian

In two Catskills areas, the mere presence of red maple reveals much about the ecology and history of the site. But in both instances, it took me a while to figure out what had happened there. It was subtle. There were no obvious visible clues.

#### AREA 1: THE NORTH SLOPE OF LONE MOUNTAIN

Ever since I first climbed up and down the north slopes of Lone Mountain from the adjacent East Branch Neversink Valley during my graduate student days, I always wondered why there was an absence or scarcity of sugar maple. Instead was an abundance of red maple. In this area, between an elevation of 2400 to 3000 feet, the forest I expected to be dominated by sugar maple, with some beech and hemlock. It was not.

This area is not on a high-elevation ridge line, at elevation between 3000 to 4000 feet, where shallow soils retaining inadequate water keeps sugar maple out. Ledges are also places of great water stress, but ledges were quite scarce on this red maple slope. Nor was this area a swamp, where sugar maple is excluded because of an inadequate oxygen supply to the roots. Sugar maple is a very fussy tree when it comes to water; both too much and too little prevent its growth. In contrast, red maple can tolerate a wide range of water conditions and can grow almost anywhere.

It wasn't until the summers of 2018 and 2020 when I figured out what was happening here. Two attempts at climbing Lone Mountain ended in failure. One attempt was stopped by running out of time, and the second attempt was halted by an unclimbable rock wall. I was disappointed of course, but the failure to reach the summit turned out to be most advantageous in both instances; I decided to "bail out" rapidly by bushwhacking down the north slope of Lone, eventually following along Donovan Brook, down to the East Branch Neversink, and out.

In 2020 I did manage to climb to Lone's summit. What an opportunity on the descent to carefully check my observations of the two earlier hikes!



Along with the absence of sugar maple, and its replacement by its cousin red maple, was an abundance of yellow birch, mountain maple, and striped maple. A clue? This looked more like a forest that clings to ledges and talus slopes. But there were very, very few ledges around and talus boulders were not visible. However, I found myself hopping from boulder to boulder. A thick mantle of ground cover plants – herbs and mosses - were hiding the boulders. Roots, instead of quickly entering and penetrating mineral soil, were wrapping around the sides of boulders and disappearing out of sight. Who knows how far down these roots went in order to find water? Certainly much too deep for sugar maple roots.

So this was the reason! A hidden boulder field! One wonders if there are other places in the Catskills where sugar maple is absent and replaced by its cousin red – on sites that LOOK perfectly suited for sugar maple dominance but are not.

This slope forest is all in first or original growth. It had never been logged, and the tanners had peeled the hemlock bark in the East Branch Neversink Valley to barely 100 feet above the flood plain. Any human influence was therefore not a contributing factor to the abundance of red maple and scarcity of sugar maple.

### AREA 2: THE EAST BANK OF BISCUIT BROOK

The Catskills Environmental Research and Monitoring Conference has become quite the tradition. At the 2022 conference, one highlight was a field trip to look at first growth forest and the old growth trees within it.

We hike leaders brought the nearly 40 participants into the Biscuit Brook Watershed via the Pine Hill-West Branch Trail, beginning our hike at the trailhead on County Route 47. As we approached Biscuit Brook and turned north to follow the east bank upstream, the trail entered and then followed an old road.

I stopped our crew to point out a considerable number of old, large red maples – many between 24 and 30 inches in diameter. These red maples continued along the trail as far as the Biscuit Book Lean-to. I began a discussion on what we can learn from these trees: can they tell us something about the origin of the old road we were following?

The large, old red maples were growing on a well-drained, deep-soiled slope between an elevation of 2300 to 2460 feet – perfectly suited to sugar maple. In fact, there were younger sugar maple around in abundance. There was nothing "wrong" with the site for sugar maple.

I had wondered about the origin of this old road since my graduate student days. Up to the time of two hikes previewing this forest for the Conference, a number of clues had been accumulating. It took these old red maples on the preview hikes to finally solve the puzzle!

First, this old road today crosses two small tributaries of Biscuit Brook on log bridges. But when we looked under the logs, we could see old stone retaining walls – much too elaborate foundations to support only a foot trail bridge. This had definitely once been a ROAD. But what for?

Second, where this old road continues south and off state land, it leaves the Pine Hill – West Branch Trail and enters Frost Valley YMCA private lands.

Could it be an old logging road? Where was the nearest saw mill? Beer's 1875 Ulster County Atlas shows William G. Satterlee's sawmill at the confluence of High Falls Brook with the West Branch Neversink, today near the lower (or southwest) end of Frost Valley property. I think it most probable that Satterlee built his road up the Neversink and then turned up the east bank of Biscuit Brook, logging as far upstream to what is now the Biscuit Brook Lean-to. Following the logging, when the forest was partially opened up, the mid-shade-tolerant red maple was able to enter. New York State acquired the land here between 1877 and 1885 and then classified it as forest preserve. Now these red maples are about 150 years old and reaching maturity.

In the area of the Lean-to, the old red maples stop. The first growth forest that the Conference crew examined lay above it.

The conclusion? Had the forest between what is now Frost Valley and the Lean-to not been logged, sugar maple would still be the dominant. Red maple tells us that there had once been some sort of forest disturbance, but what? Putting all the clues together, I think Satterlee's Sawmill was the cause!

### MAPLE REVELATION nese location diagrams are NORT 2/18/23 LOCATION MOU NTAIN down from col to Comell SLIDE MOUNTAIN'S SOUTH SLOPES Mth. KINER Nevertink Branch East "Fisherman's Donovan RED MAPLE REVELATION BYOOK AREA LONE MTN. The Long Path Revelation avea may be larger than this TABLE MOUNTAIN PEEKAMOOSE MTN. NORTH Peekamoose-Table Trail and Love York down to Rondout Creek

Michael Kudish <u>CFA News</u> 41,1 Spring 2023 not to-scale maps - only approximate JORTH Pine Hill-West Branch trail to Big Indian Mth. Biscuit Byook Propon Brook Lean-to RED MAPLE REVELATION Stone Work AREA supporting. Buchit POMMEY Shy log road PROST Sortevlee's bridges log road NOTENNEY PT8 4 FROST VALLEY YMCA Indian WEL COME CENTER West of the Marine Wastern Charles of the Control o "CASTLE" trail head Lake Cole High Proof Falls \*ANDE Wilder North to Site of W.G. Sortevlee's Claryville > to Denning

### Thoughts on Firewood

By: John MacNaught - Forest Program Manager



Cutting and burning firewood for me is a way of life. A true symbol of independence from outside supply. A stack of wood is money in the bank all summer long, and an enjoyable sight to see for me. Right about now I'm just finishing up 'firewood season' for the wood I'll burn two years ahead of now. Next year's wood supply has been done since this time last year gaining interest in the bank as it dries to the proper seasoning. As I've got firewood on my mind, I wanted to share my thoughts and methods on cutting and splitting wood. This isn't a step-by-step guide, but rather a highlight of my thoughts on my process. Maybe you'll pick up a tip or two from me, and hopefully can share one or two of your own with me one day to better hone my methods.

For me, firewood is an activity for late fall through early spring. Its never one big event, but rather a constant process that feels like it never had a start nor stop. I do this deliberately as firewood cut and split in one big event can be miserable and daunting. Probably why many people wait until the last minute (fall) to get it cut, resulting in unseasoned wood and smoldering poor flames all winter long. I've been apart of many firewood 'weekends' at camps and other events 20

and never feel very excited about them before or after they ended.

I decided many years ago that I was going to try and prevent forming an overheating dripping sweat type workout from muscling firewood in the summer ever again. I believe cutting and splitting wood should be a workout, and helps to replace a gym membership for me, but it shouldn't be your cardio. Fatigue can be dangerous when running a saw or swinging an axe. Work when it's cool out, ideally for me that's around 25-45 degrees outside. I can go out with a light pair of gloves and an old sweatshirt and stay comfortable working. I also decided long ago that I was never going to have a firewood 'day' or 'weekend' ever again. Splitting firewood is draining, and like any good workout should not be over exerted. I try and keep firewood workouts, like the gym, to about an hour or so each time, several times per week during my firewood season. Spending an entire day or weekend cutting and splitting an entire year's worth of firewood isn't desirable.

I start by cutting my trees in the late fall. Deer feed nearly 100% on woody browse November – March and there is literally tons of food above their heads in the forest. I like to give back to wildlife when I can, so why not cut the trees at a time when they can benefit from the buds above. Once the deer have had their fill (and after the holiday season hiatus from the woods) I come back to my trees as the winter thaws come and go. As long as there isn't snow on the ground to make things more difficult, I block and split the trees in place.

I see people commonly move their wood 3-5 times before they burn it. I've reduced my moves down to two, which is about the minimum possible I've found. Splitting the firewood where it fell in the forest leaves the first move to where I stack the wood to season and dry and the second move from that outside stack into my home ready to go into the stove. Other benefits to cutting and splitting in place? Well, there's absolutely no cleanup of saw chips and bark in the forest and when you get to a block that you just can't muscle apart, leave it behind (after you've knocked the 'ears' off of course)!

Isn't it difficult to collect the wood? No, not really. I have a UTV on the property and a sporting dog that needs to run every day. In the early spring I get home from work and take a few trips into the woods and load that UTV bed full (about two wheelbarrows worth

each trip) and transport my firewood its first move to the location I stack it to season. Three to four of these trips each day for a week and suddenly the woodlot is looking tidy, and my wood stack is filled up. I normally take the dog for a run anyway, so why not let her chase the four-wheeler around while I collect wood.

Sometimes I make the mistake of cutting wood elsewhere and bringing it home. Unless the wood is something spectacular that I cannot find on my own property, like black locust, red oak, hickory, etc., or I cut and split the tree on site and brought it home processed, then I feel like I really did myself a disservice. I've just added 50% more moves to the process which is more time and energy. If I bring home blocked wood, especially something average like red maple or ash that I could have just cut at home, I am really doing a disservice to myself since it needs to be unloaded, split, and then moved once more to be stacked. Plus, bringing home those average species adds to the opportunity costs that I could have been benefiting my own wood lot by cutting those species there.

Make cutting wood on your property a two birds at once type project and create a secondary conservation activity, like releasing an apple from the shade of an ash tree, or an oak from the adjacent red maple (the image here shows an oak tree fully released via firewood management). Try to fill your firewood stack with a diversity of



tree species. I made the mistake a couple years ago to cut only ash trees due to Emerald Ash Borer projects. This needed to be done, but wow was that a boring winter heating season. Its nice to have some options of higher BTU species like oak and beech on a colder winter night. Plus, white ash just doesn't split quite as nice as red oak. There, I said it. Moving on...

Finally, my wood is stacked in a strategic location. It is an easy, straight approach from the house on a winter day and doesn't need additional shoveling or plowing for access. The stack isn't in the way for any other projects and will never need to be moved. I have it stacked in the south-west facing sun where the summer rays can bake the pile. The wood is facing into the wind so the air can circulate and take away the moisture all day long. I have it stacked adjacent to a large metal-sided pole barn that acts like an oven to help bake the wood each summer day for speedy drying. And lastly, I cover the top so water cannot take away my gains in the rain. A thick black tarp works for me, but only because this spot never sees gusty winds, just constant breezes.

I see people buying tractors, wood splitters, log winches, dump trailers, heavy duty pickup trucks, and who knows what else just to justify 'saving' money each year burning wood. Don't get me wrong, all that stuff is nice, like really nice when it comes to making life easier with firewood, but don't be ignorant to the fact that your savings went out the window about 50 grand ago. One day I too will have to grapple with the idea that I might need to purchase a \$1,000 – \$3,000 wood splitter when the ole' arm strong model 1993 wears out and its time to hang up the 4lb. splitting axe (that's right, if you haven't thrown out your 8lb triangular boat anchor splitting maul yet, then you're doing it all wrong), but when that day comes, I won't justify it to myself to save money.

I own a UTV and use it for firewood, but not because I needed it or justified the purchase for firewood. It kind of just fell in my lap for almost no cost. A wheelbarrow can work just the same, or your pickup if you have access to the woodlot. My chainsaws are nice, professional grade saws with high end, expensive bars and some modifications for performance. Cutting firewood is the secondary use of the chainsaws.

When it comes down to it, firewood can be a lot of things. Most consider it a chore, but for me it's more of a hobby in constant refinement. Cutting the trees is part of bigger conservation goals. Splitting and stacking the firewood is a fitness exercise. It's an excuse to feed the deer, walk the dog, stare at your woodlot, appreciate the forest, be a conservationist, live a lifestyle! Firewood is a process; you should enjoy it.

## Upcoming Events ...

Forest Therapy April 1st

Catskill Woodsman Education Series
April 14-16th

Portable Sawmill Demo April 22nd

Game of Logging Level 2
April 29th

Game of Logging Level 1 May 13th, June 17th

> Forest Health Woods Walk May20th

Chainsaw Sharpening and Maintenance
June 3rd

Backyard Edibles & Medicinals Walk
June 17th

Old Growth Forest Hike with Dr. Kudish June 24th

> Tree ID Walk July 8th

### 2022-2023 CFA Scholarship Recipients- ESF College Foundation

Gabriel Oakley- First Year Forest Resources Management Otsego County- Cherry Valley, NY \*\*\*New Recipient\*\*\*

William Heinric- First Year Forest Resources Management Otsego County- Cherry Valley, NY \*\*\*New Recipient\*\*\*

Alexander Schmidt- Continuing Senior Forest Resources Management Ulster County- Milton, NY \*\*\*Previous Recipient\*\*\*

Katherine Flores, Continuing Senior Natural Resources Management Ulster County- Napanoch, NY \*\*\*Previous Recipient\*\*\*

### Audubon Announces First-Ever Endorsed Foresters

We are thrilled to share that Caitlin Cusack (Vermont) and John MacNaught (New York) have become endorsed for prioritizing bird habitat in their management recommendations.

Visit https://ny.audubon.org/news/%E2%80%8Baudubon-announces-first-ever-endorsed-foresters, for full article.

## Cats Kill in the Catskills.... or A Tale of Two Kitties

By: Paul Misko

I'm not a cat person. Yet I can understand how somebody could 'love' their pet cat. Heck, people even get attached to pet snakes or tarantulas. Truth be told, I once had a pet ant. He lived in a milk carton and was fed cookie crumbs. He ran off after two days. I



learned the hard truth that ants are not loyal. You might be relieved to know I was in the second grade at the time, so I've gotten over it. But I digress. The point is that we like to see our pets be happy. However, that desire needs to be tempered with responsibility.

Today, I want to talk about cats. Two types of kitties. The first kitty is the one kept indoors 24/7, and not set free outside to roam. This kind of cat creates a low level of environmental damage, so let's set him aside, perhaps on a sunny windowsill.

The second kitty is the one who is allowed to go outdoors. The owner believes that if kitty wants to go out, kitty should go out. This decision is understandable but is made by folks who are unaware of the consequences.



The problem with sending your cat outside to roam, is that too many of them take up hunting, and spend their time going after the little creatures of the wild, both fuzzy and feathered. According to various surveys revealed by Nature magazine, NPR, the Audubon Society and others claim that in the USA, 100's

of millions of birds are killed each year by both feral, and pet cats.

The Catskill's famous naturalist John Burroughs once had some cats, but became increasingly frustrated when he saw them killing his favorite wild birds. He gradually changed his mind, and even attended an Anti-Cat Convention in Brooklyn. Afterward he declared "It is a fact, you can't have both cats and birds." He realized they were an invasive species in the Catskill Forest.

Cats also scoop up lots of wild mice, chipmunks, moles and more, thus denying these tasty and much needed snacks to the many small predators who struggle to survive in the woods. These include minks, weasels, fox, fishers, coyotes, bobcats, owls and hawks. Imagine the poor fox kit being told by his momma that he will have no supper, because the cat got it first. Both housed and feral cats will usually kill far more critters than they eat; not that eating them would make it OK. They are programed to hunt and hunt they will. Often neighbors are silently annoyed by a neighborhood puss nosing around their yard, or sitting under their bird feeder waiting to pounce on an innocent tweety bird.

So, if you are one who free-ranges your cat, please consider reconsidering the practice. Don't do it for me. Do it for the children; the children of the forest.







## My Tree Planting Philosophy By: Zane Lawyer, CFA Education Arborist

There is no shortage of quotes about trees; why we plant them, what they symbolize, how they make us feel when they flourish. In life and in literature it seems everyone has something to say about these things. We've all heard the one from that old Manitoba pioneer Nelson Henderson to his son "The true meaning of life, Wesley, is to plant trees under whose shade you do not expect to sit." Or that Lowell Mill girl, Lucy Larcom, "to plant a tree is to plant a hope."

These quotes are timeless, but they don't capture the run-ofthe-mill reasons why people enjoy planting trees. Fruit and features tend to dominate. That proverb about the best time to plant a tree was twenty years ago, the second-best time is today, is small comfort to the budding home orchardist whose goal is a future fruit crop for baking, canning, and eating out of hand. Martin Luther, that devout German monk obsessed with fears of death and eternal damnation, declared flatly "Even if I knew that tomorrow the world would go to pieces, I would still plant my apple tree." I think some of the best reasons for planting a tree are often the simplest and most sensible. Carl Linnaeus, the Swedish botanist, neatly summed up this attitude with his advice to "Just plant a new tree where the old one fell."

As an arborist I'm always being asked to have a look at people's trees. Usually out of concern for their health or potential hazard but also because of their beauty and the value they add to landowner's property. In my experience, evaluating a tree reveals a story about how well it was planted, what insults it sustained over time, and what its future holds as it continues to grow and mature. It might also reveal horror stories of transplant shock, dehydration, root suffocation, mechanical wounding, circling or girdling roots, wet feet, and a disheartening buck rub or two when not adequately protected. Weaving these stories together I can confidently assert that there are some things tree-lovers are getting right, some things they are getting wrong, and not a few things that could be totally avoided by having a good plan in place the day you decide to bring that new tree home.

This article is not so much a step-by-step procedure for tree planting as my own personal philosophy on how to think about ornamental trees on the landscape. I'll also explain what they sometimes need to reach their full potential so that we can enjoy them as they are truly meant to be and how to avoid inflicting some of the more common indignities noted above.

#### Anchors in the Earth

Everyone has their own reasons for planting a tree they like. The endless varieties of trees and shrubs that sit potted and ready for sale at the local nursery speak to all tastes depending on the benefits you want them to provide. At no other time in history has there been so many hybrids, varieties, and cultivars of trees available on the market. It's for these reasons that I want to get back to the basics of what a tree is, what planting one means, and the sorts of benefits one should expect in the short-term and long-term.

Let's start with what a tree is, fundamentally. I've read no better explanation of what a tree is then that of British biologist and science writer Colin Tudge in his book The Tree: A Natural History of What Trees Are, How They Live, and Why They Matter (Crown, 2006). A tree is a plant, he writes, yes. But what makes trees unique within the plant kingdom is that they produce wood. Wood allows trees to get big and tall. For him, trees are nothing more than a kind of plant that generates wood to make itself larger over time. Larger trees live longer for reasons of tree mechanics. Wood and its highly ordered formation allow trees to scale themselves up. It's at these greater scales that they are able to live longer. More branches, more leaves, more food. If not for insects, disease, and the limits of the site a tree might just grow indefinitely. That's why I think it's fair to make the claim that trees are the largest, most massive, and longest-lived organisms our planet has ever known. So then how is planting a tree different from other kinds of plantings? If a tree is meant to get big and tall then it will need a good anchor to support its crown. Planting a tree means it must be properly anchored in the soil in such a way that it will take root and survive to support its own weight. A properly anchored tree will thrive and live long. The longer it lives the more it grows. The more it grows the more benefits it provides. Tree planting is different from other kinds of planting because as large perennials trees are meant to be on the landscape for a very long time and require a greater degree of forethought about what their surroundings will be like ten, fifty, and one hundred years from now. The benefits from a properly planted tree can be as simple as the pride from a plan well-executed, the jaunty appearance of your sapling poking out of its mulch ring, or the joy of sharing the whole experience with friends and family. These are gratifying in the short-term but it's in the long-term where a tree delivers the goods: cooling shade, bountiful fruit and flowers, timber, fuel, fiber and chemical substances for a variety of useful materials. It's also in the long-term when people come to realize their full beauty; gathering around and underneath them for no

other reason than to draw inspiration from their staying power on the landscape. A well-planted tree can have that effect. For me, tree planting is not simply about the short-term benefits but about ensuring the long-terms ones are able to be realized as well.

The quality of future living environments is something we all think about today. Popular pledges to plant a million trees are ambitious but often fail to achieve their intended goals due to lack of follow-up care (and ownership, but we'll get to that later). Planting a million trees means protecting a million trees means maintaining them until they establish and start putting on real growth. It's when trees begin putting on real growth as they mature that the environmental gains soar. That's why I think planting a tree is a serious undertaking and should be treated with the care and attention it deserves.

#### Ground Rules

The foundational principle of all tree care is this: the right tree, for the right site, for the right reasons. My experience and observations of many trees in the landscape always come back to this credo. I have admired many such specimens in parks, cemeteries, and historic sites and have often wondered why all ornamentals don't leave the same impression. Well, it's because the planter has failed to consider one or more of these key aims.

Let's start with where to plant, aka the site. You can go about this one of two ways. First, you might already know what tree you want to plant but aren't sure where best to put it. In that case, you need to know what it requires in terms of space, water, and light. Getting to know the unique attributes of particular specimens is key here. Ask a nursery professional or local arborist who has seen what works and doesn't' work. Someone whose job it is to remove trees when they decline before their time ought to know.

Sugar maple requires a large space and deep, well-drained soil. Plant them far away from the house (usually 2/3 their expected mature height or more) and with a south and west facing aspect so that it can one day provide shade in the afternoon when temperatures are higher in the summer. Apple will also prefer well-drained soil but needs full sun to fruit. Since they are medium sized trees, you can get away by planting one or more closer to the house. Look for berms, humps, or gently sloping hillsides. These are where all the wild 'volunteer' apples seem to do best.

Secondly, you might already have a site chosen but are not sure what tree will thrive there (if ideal) or one that will tolerate its limitations

(if unideal). In that case, you can do a quick and easy exercise. Stand where you want the tree to be and look up. Do you see wires, the tops of nearby trees or just open sky? Look down. Is the ground soft and squishy hours after a downpour? Dig a little. Is it hard and compact? It might be poorly-drained and unideal for most trees. Is there pavement nearby that might limit how far the roots can grow? Avoid it or keep it at least six feet away. Look to your left or right. Are there buildings or small structures that are permanent? Are there plans for future construction? Now have a look at the same spot but from far away. What size tree would be best for it? Small (15 feet tall or less), medium (20-40 feet tall) or larger (40 feet or more)?

With some exceptions for fruit and nut bearing species, I'm biased towards promoting big and tall trees as often as I can. So much of my planting philosophy pertains to these kinds of specimens rather than shrubs or dwarf varieties. This is especially true in the Catskills where open fields and old pastureland are still common.

Now we can talk about when to plant. The best time to plant is the best time for you, not for the tree. You can plant a tree anytime of the year when the ground isn't frozen; spring, summer, fall and even some of the warmer parts of winter can all be ideal for planting. As long as you're there to care for it, it should survive to fall dormancy (a key period where trees can rest and put on more root growth during warmer stretches of winter). Caring can mean watering, staking, or keeping the weeds down. All of these are important tasks you can do in the first or second season to ensure its survival. They are easy to do when the tree is close by, harder to do when far away.

If you don't think you'll be around to care for it, then you can wait to plant in the fall where watering and weed control is less important than a good stake and fencing to protect from deer, rabbits, and mice who lack an abundant winter food source and seek out thinbarked stems for sustenance but end up girdling it with their feeding. I've seen it many times.

Lastly, the person planting the tree matters. Whomever plants a tree must take ownership of that being. This is my opinion. Only plant a tree if you can ensure it will establish successfully. Do trees fail to establish? Absolutely, but they are less likely to if someone is there to tend to it in the early stages. Show it you care. It's obvious when you don't.



### Catskill Woodsman Education Series – All Things Apples – 4/14-4/16

Do you want to learn hands-on technical conservation skills for useful purposes here in the Catskill Mountains? CFA has designed a seasonal 3-day long, in person training module series to improve your skills for Catskill Mountain Forest Living.

This is a multi-day, MEMBERS ONLY, course to provide Catskill Regional Landowners basic understanding, accompanied with hands on experience and skills to manage the forests, fruits, and wildlife of the Catskill Region at a landowner scale. We are focused to pass hands-on skills and basic concepts of forest management, wildlife management, and backyard forest-based food production to you, the active participant.

The Spring 2023 course will focus on every aspect of apple tree production and maintenance, as well as tree planting. We will also include Chainsaw Sharpening and Maintenance, and Game of Logging Level 1, as most topics discussed will involve the use of a chainsaw and tree felling in some form.

- Day 1 will include a long form discussion on chainsaw sharpening and maintenance in the morning, followed by hands-on demonstrations and participation in Apple Tree Pruning and Apple Tree Grafting in the afternoon.
- Day 2 will be Game of Logging Level 1 a full day certification course in directional tree felling and chainsaw safety.
- Day 3 will be a hands-on demonstration of releasing apple trees to full sunlight and an introduction to habitat management techniques to improve wildlife habitat on your land followed by a lecture and hands on demonstration of tree planting in the afternoon.

Come prepared with your own chainsaw with all personal protective equipment (helmet, chaps, leather boots, eye protection, hearing protection). In addition, bring a bagged lunch and water for each day. Come prepared for all weather, we won't cancel for weather.





## Springing Forward By: Zahra Bellucci, Education Forester

With each year that passes, I understand more and more what it really means to live with the seasons. In fact, I've realized that we don't really have a choice to begin with—we are cyclical beings just like everything else on the earth, and pretending otherwise is only just that—pretending. In our modern world, humans have gotten wildly creative at constructing technologies and systems that shield us from this reality. In some ways, this has been a beautiful thing that's afforded us opportunities that no other species has been able to accomplish. On the other hand, it's this same illusory buffer that allows us to feel as though we are separate from nature, or have somehow outsmarted millions of years of evolutionary design. I suppose that's why I have always been attracted to work that forces me to remember over and over again that in many ways I'm beholden to the same cycles that all creatures are.

Winter is often regarded as a time of rest and reflection. It's the season that begs us to stay inside where it's warm, to fill our homes with warm lights and glowing fires, to remember the year that has just passed, leaving behind the old to make room for the new. Of course, this is not uniquely human. Trees have their own version of the same experience. As the days begin to shorten, they draw all of summer's sugars down into their roots and shed their leaves as if to say, "time to rest, see you in the spring." When spring finally does come, the buds they set before last year's frost will swell and burst forward with new growth.

As I get closer to my one-year mark at CFA, I find myself in the midst of this process of reflection. At the same time, I can feel the bubbling potential of spring not far behind. During the past few months, my focus has been to take stock of all that I've witnessed and learned and to transform that knowledge into something deliverable. I've also spent quite a lot of time thinking about what it means to be a forester and how that definition might be changing or expanding.

Although the term can encompass many things, one thing is true across the board: foresters are problem-solvers. Many folks who find themselves pursuing a forestry career are attracted by the idea that they'll get to have a job where they work alone in the woods, dealing with trees—not people. Yet day to day I find myself exercising the muscles of communication, public speaking, and listening to, understanding, and interpreting the complex values and desires of landowners from all walks of life. It's my job to take these values and desires and synthesize them with the principles of forest ecology to propose a "solution"—a plan of action to both manage and achieve all the benefits that forestland can and does offer to us all. and we to it. That's no small task, to be sure.

In the spirit of winter reflection and spring emergence, I want to thank our members for giving us the opportunity to continue to grow all around the Catskill Mountains, chipping away at that buffer of separateness from nature and keeping our forests healthy for future generations. I'll leave you all with a lush, green photo taken on a job in early summer of last year as a reminder of the next season to come.





## Business Mem



Amex Bois Franc—Hardwood Inc. CP 186 succ Bureau-Chef Plessisville, Québec, Canada (819) 998-0520

Arkville Caboose LLC (845) 586-1122

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### LEFT BANK CIDERS

Left Bank Ciders 150 Water Street, Catskill, NY www.leftbankciders.org

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NYS Chapter American Chestnut Foundation https://www.acf.org/ny/



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Rose Mountain Cottages (718) 208-3399

Rush Brook Lodge rbl@actorsart.com



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The Hunter Foundation, Inc. / Fromer Market Gardens 518-589-4143

The Wright Law Firm, LLC (609) 759-2500 info@njlegaladvice.com

Upper Delaware Welcome Center (845) 252-3100



White Feather Farm dallas@whitefeatherfarm.org



Wolf Hollow Camp (917) 497-7670 mail@gfeazell.com If you would like to write for us, please email - membership@catskillforest.org, and let us know!!

### Programs & Services

### Learnmoreateats!dlforestory/programs

Program	<u>Description</u>	<u>Time</u>
Consultations	One-hour property visits by field staff to help you learn about what your property holds	All Year
Apple Tree Pruning	Pruning helps keep apple trees healthy and improves quality and quantity of yields	Jan March
Apple Tree Grafting	pple Tree A horticultural technique to help	
Forest Bird Program	High-Nesting Bird Boxes for ducks, owls, etc. And/or Canopy Bird Feeders that protect against squirrels & bears	All Year
Invasive Species Management	Care for trees against invasive insects, and care for forests against invasive plants	May - Sept.
Portable Sawmill Program	We bring a state-of-the-art portable sawmill directly to your property and mill your logs to lumber, on the spot	Spring - Fall
Property Mapping	Custom property maps highlighting the property features you want to see	All Year
Tree Care: Cabling	Preserving large-sized individual trees with structural defects.	Spring - Fall
Tree Care: Structural Pruning	Establish dominate leader for tree structure.	Spring - Fall
Tree Planting	CFA will find prime placements for up to 3 trees	Spring - Fall
Wildlife Habitat Management	Forestry practices to help improve your woodlot for wildlife	All Year



### **MEMBERSHIP APPLICATION**

Become a member at www.catskillforest.org/membership or send a check/cash with this application to: Catskill Forest Association, Inc. PO Box 336, Arkville, NY 12406.

NAME:				
MAILING ADDRESS:				
PROPERTY ADDRESS:				
	EMAIL:			
TOTAL ACRES:	_ FORESTED ACRES:	POND [	] STREAM [	] RIVER [ ]

#### **CATEGORIES (PLEASE CIRCLE)**

Free Booth at Forest Festival

#### **ADDITIONAL DONATIONS**

\$

\$

\$

GENERAL	CONTRIBUTING (\$175)	BASIC (\$75)
OPERATING FUND		Events free or discounted;
ENDOWMENT TRUST FUND	SAME AS BASIC + 10% Discount on Services;	CFA News Subscription; CFA Member Property Sign; Access to CFA Programs
SCHOLARSHIP	SUSTAINING (\$500)	BUSINESS (\$200)
FUND		SAME AS BASIC +
Total Amount:	SAME AS BASIC + 15% Discount on Services;	5% Discount on Services; CFA Website Listing; Email Referral Advertisements;