

# *CFA News*

The Newsletter of the Catskill Forest Association, Inc.  
Volume 27, Number 2 - Spring 2009



## ***INSIDE THIS ISSUE:***

● ————— ●  
**Fund-Raising Campaign for CFA's Roof  
Calendar of Events**

**5th of a Series on Maple Sugaring & This Year's Results**

**CFA's Tree Marking Program**

**Mike's Corner - A Forest Historian**



**CFA News**  
**Volume 27, Number 2**  
**Spring 2009**

**Editor: Jim Waters**  
**Published Quarterly**

**Catskill Forest Association, Inc.**  
**43469 State Highway 28**  
**PO Box 336**  
**Arkville, NY 12406-0336**  
**(845) 586-3054**  
**(845) 586-4071 (Fax)**  
**www.catskillforest.org**  
**cfa@catskill.net**

**Copyright 2009**

**The Catskill Forest Association, Inc.**

**Contents may not be reproduced without permission.**

Board of Directors:

Robert Bishop II, *President*, DeLancey  
 Susan Doig, *Secretary*, Andes  
 David Elmore, *Treasurer*, Davenport Center  
 Joseph Kraus, Gilboa  
 Seth LaPierre, Delhi  
 Douglas Murphy, Stamford  
 Jake Rosa, Arkville  
 Gordon Stevens, *VP*, Margaretville  
 Jeff Wiegert, New Paltz  
 Frank Winkler, Andes

CFA Staff

Jim Waters, Executive Director  
 Michele Fucci, Office Manager  
 Ryan Trapani, Education Forester

Subscriptions: *CFA News* is mailed quarterly to members of the Catskill Forest Association. If you are interested in joining CFA, give us a call, visit our office or fill out and mail in the form on the back cover of this publication. Contact information is located above. Please submit address changes to Michele at the address above.

### **Cover Photo:**

**A Red Maple budding out early in the spring near Margaretville, NY. Any questions on why they call it "Red Maple"? Trees have flowers too! Happen to notice the diversity of species and elevation influence? What a great place we live in! -- and just think, if managed well, it's contributing more to clean water & air, wildlife habitat, aesthetics, recreation, tourism, forest health, carbon sequestration and the local forest products industry with all of the jobs and products that it provides us with.**



**CFA's tree planting workshop in Margaretville - 5-2-09**

## **Table of Contents:**

|  |                    |
|--|--------------------|
| <b>New Members.....</b>                      | <b>2</b>           |
| <b>Executive Director's Message .....</b>    | <b>3</b>           |
| <b>Maple Sugaring #5 of a series.....</b>    | <b>4 &amp; 5</b>   |
| <b>Calendar of Events .....</b>              | <b>6 &amp; 7</b>   |
| <b>This Year's Maple Syrup Results.....</b>  | <b>7</b>           |
| <b>Observations of a Forest Historian ..</b> | <b>8 &amp; 9</b>   |
| <b>CFA's Tree Marking Program.....</b>       | <b>10 &amp; 11</b> |
| <b>Membership Application.....</b>           | <b>Back Cover</b>  |

## **New Members**

### **February**

Steve Dobson -- Meridale

### **March**

Daniel Weeks -- Saugerties  
 Matthew & Alicia Tether -- Newburgh

### **April**

Jackie Morris -- Ellenville  
 Fred & Wanda Schukal -- Grand Gorge  
 Fay Aronson -- Margaretville  
 Steve Koester -- Margaretville  
 Lowel & Bel Consuegra -- Delancey  
 John & Susan Murdock -- Harpersfield  
 Jill Harris -- Margaretville

### **May**

Nola Tully -- Margaretville  
 Robert Stork -- Arkville  
 Frans & Catherina Stassen - Freehold



## EXECUTIVE DIRECTOR'S MESSAGE

Good Spring to everyone! Precipitation remains low for the area and temperatures are ALL OVER THE PLACE! I hope that everyone had a good winter and that economic hard-times have not shown up in your lives.

I have not asked for monetary help since we were fundraising for CFA's new building, but I need to ask you now for your help. It is not easy for me to ask people for things, but the office needs a new roof badly and I will just have to "suck-it-up". I am placed in this position despite the dampened economic climate. We have entered into a contract with a local contractor that meets all of our requirements and has an excellent reputation. CFA needs to have the roof replaced in order to protect your investment in our office building. It is way beyond patching's effectiveness. The board of directors and I have decided to proceed with this work regardless of the success of the fundraising because we have come too far to let the largest asset of the organization be harmed. As you can see by these pictures, the chimney needs to be taken down & the roof replaced.



The existing roof has 2 layers of cedar shingles.

gles and 3 layers of asphalt shingles on top of them! It will need to be stripped and plywood put down. We are putting on "lifetime" architectural shingles that should last a minimum of 50 years.

The cost will be \$15,000. This was a non-budgeted item and if we are not able to raise the funds, it will result in cut-backs in the services that we provide. **PLEASE** send in a contribution, no matter how small to help us pay for this.

Now that that is over with.....On-Site-Visits and the Tree Marking Program are really ramping up. We are seeing a lot more interest by new landowners, as well as the "old-timers", in getting out in their woods and making changes in order to meet their goals. There is no better way to do this than to contact us and get our advice. We work closely with you, listen and elicit your opinions, then give you our expert, impartial advice to help you meet those objectives. We are not funded by the government and therefore do not have to follow guidelines or report to them. We are inexpensive and can advise you on anything from forest income and property taxes, estate planning and property management, to timber and wildlife management. Just give us a try. The membership should only be the beginning. The real value is in taking advantage of the workshops and everything else we have to offer.

Soon there will be a new website up at the same address -- [www.catskillforest.org](http://www.catskillforest.org). I think you will be pleased. Members will have access to everything including our blog. (No tweetering or facebook stuff, though.) There, you will be able to get questions answered without a call. It will be more convenient for you and for the staff. We are very excited about this and it will become a work in progress in that we will be adding new things to it over time -- such as videos the newsletter and a CFA "store".

I would love to hear from you and/or see you at one of our many events that we will be involved with this year. Have a great spring!

Naturally, *Jim Waters*



A White Ash Tree Flowering.

### Wikipedia says:

**Forestry** is the art and science of managing forests, tree plantations, and related natural resources. Silviculture, a related science, involves the growing and tending of trees and forests. Modern forestry generally concerns itself with: assisting forests to provide timber as raw material for wood products; wildlife habitat; natural water quality management; recreation; landscape and community protection; employment; aesthetically appealing landscapes; biodiversity management; watershed management; erosion control; and a 'sink' for atmospheric carbon dioxide. A practitioner of forestry is known as a forester. Forest ecosystems have come to be seen as one of the most important components of the biosphere, and forestry has emerged as a vital field of science, applied art, and technology.



## Article 5: Stand Tending

*This is part of a series of articles that will be dedicated to informing and educating local Sugarmakers of the Catskills. Local Sugarmakers consist of both commercial and backyard producers. Topics that will be included in this series include Factors that Affect Sap Flow, Healthy and Productive Tapping Techniques, Stand Structure, Species Composition of Maple Stands, Stand Tending, and other tricks of the trade. Stay tuned!*

Eventually even a sugarbush (a stand of sugar maples used for maple sugaring operations) succumbs to old age, insects, disease, drought, competition and a host of other stressors. It can take as long as 40 years for a sugar maple to reach tapping maturity. Therefore, it is important that maple producers plan or prepare for the regeneration of sugar maples to provide for the future. This becomes especially important for forest owners that operate family-owned maple farms and plan on perpetuating the practice into the future.

Similar to a garden, sugarbush managers must tend their forests in order to sustain healthy and abundant yields of sweet maple sap. In order to accomplish this, sugarbush managers must **(1) Establish sugar maple regeneration (sugar maples that are ¼ inches – 3 ½ inches in diameter at breast height) by creating adequate gap spaces between mature trees;** and **(2) Ensure proper spacing between tree crowns once the stand is established and has matured.**

### 1. Regeneration in the sugarbush

Regeneration of young sugar maple will probably be a sugarbush manager's most challenging task. Humans tap maple trees for their delicious maple syrup. However, herbivores such as white-tailed deer also like sugar maple. Deer browse on maple buds especially during the winter when other food sources are not readily available and are covered up by snow. Consider yourself lucky if you have maple seedlings (trees that are ¼ inches in diameter at breast height) or saplings (trees that are 1 inch – 3 ½ inches in diameter at breast height) growing in the understory. If you already have regeneration of maple seedlings that are approximately the size of your finger you can assess their health and vigor quite easily by pulling on them. If they are easily pulled out then they have been suppressed for too long. Otherwise, they are most likely healthy and ready to be released. Regeneration cannot adequately establish unless it has adequate sunlight. Mature trees in the overstory must be removed in order to allow adequate levels of sunlight. If like many forest owners your understory is barren or is occupied by species that are unpreferred by deer such as American beech, striped maple, or New York or hay-scented fern then you may have more work to do before regenerating the stand to a new one. These interfering species should be removed first before removing the overstory. Hopefully, there is still a good seed-bank of sugar maple in the soil. Obviously, the deer population will have to be dealt with by either: (1) Increasing hunting pressure to reduce deer browsing; (2) Building deer exclosures which is time-consuming and expensive; and/or (3) Creating larger gap openings that result in desirable regeneration that is abundant enough to overwhelm the appetites of browsing herbivores.

Once regeneration is established, healthy trees should be selected as crop trees. These trees are the ones that are the fastest growing, have the best stem form, and crown density. Since we are talking about young maple trees at this point that range from ¼ inches in diameter at breast height (DBH) – 3 ½ inches in DBH, spacing between trees will be a short distance. As trees grow larger and taller, it will be necessary to take out trees to increase spacing since their crowns require more room to grow. Spacing recommendations for regenerating these young sugar maples is approximately 6.5 feet between their stems or small trunks. Remember, to leave some companion species along with the sugar maples to enhance species diversity such as yellow birch, basswood, ash, hop-hornbeam, and even some beech. Species diversity offers protection from pests that prefer to feed on sugar maple and may thrive where a monoculture of

sugar maple exists. However, some managers may not find it feasible to tend a stand of sugar maple when they are this small. They may be satisfied in establishing sugar maple regeneration in the first place and waiting until the trees have reached a pole-sized stage (trees that are 4 inches DBH – 11 inches DBH). However, thinning in the smaller size classes may better ensure desirable species composition for the future rather than leaving it up to *natural* competition.

### 2. Ensure proper spacing between tree crowns once the stand is established and has matured

Thinning when trees are considered pole-sized (4 inches DBH – 11 inches DBH) is the best time to release healthy trees since this is the stage where trees are voraciously competing for



sunlight. Pole-sized stands are also known as the *stem-exclosure* stage because crowns are interlocking tightly and very little sunlight reaches the understory. Growth begins to slow down for those that do not reach a slight position advantage over their neighbors in the race to reach the sun. It is very important that the sugarbush manager choose the proper crop trees (the trees you want to leave and tap for maple syrup in the future) and those to cut that are in competition with these trees. This is like weeding in a garden, but on a long term basis.

The answer lies mostly in the crowns. Crowns are the food factory of the tree. The larger the crown, the faster it will grow and reach tapping maturity, and the healthier and sweeter the sugar content will be in the future for making maple syrup. Many spacing models have been based upon distance between the trunks or stems of trees. This can be used to get an idea of spacing and works better when the trees are smaller (seedling and sapling stage). However, spacing between the crowns is most important. There should be at least 3 – 5 feet of spacing between the crowns of crop trees. Crop trees should have full and healthy crowns with very little dead and dying branches. A healthy crop tree typically has a crown diameter (measured in feet) that is approximately double the diameter of the trunk at breast height (measured in inches). (Refer to the following table.)

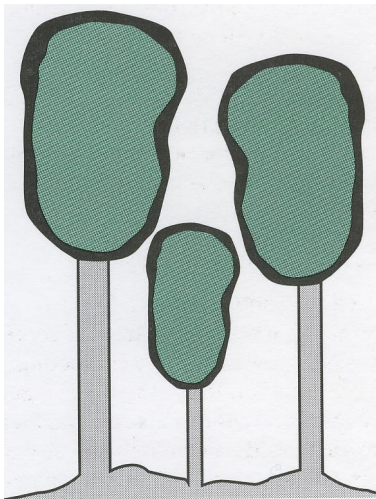
### Crown diameter of maple trees relative to trunk diameter



| Trunk Diameter<br>(measured at breast height or<br>4.5 feet above the ground) | Crown<br>Diameter |
|---|-------------------|
| <i>Inches</i>   | <i>Feet</i>       |
| 4 to 6  | 16                |
| 6 to 8  | 16                |
| 8 to 10   | 20                |
| 10 to 12  | 23                |
| 12 to 14  | 26                |
| 14 to 16  | 30                |
| 16 and over   | 33                |

Only trees whose crowns are competing should be considered. Those crowns located at different canopy strata should not be considered as being in competition with crop trees since crowns located at different strata of similar species can represent different age classes. Healthy, shorter growing maple trees may represent another age class and serve as stock for the future sugarbush. (Refer to the following Figure).

*Canopy competition*



*The crowns of the 2 trees in the upper canopy stratum are far enough apart and are not competing for sunlight. The shorter tree in the middle represents another age class. Its crown is also not competing with the other taller trees since its crown is below the others.*

The spacing model of 3 to 5 feet between crowns applies only to trees of the same height. The shorter tree is most likely in a different age class and is not competing with the taller, older ones. In addition, by leaving the shorter tree, soil moisture is retained and the threat of sunscald (freezing and thawing that cracks the bark of trees) is reduced. Only when regenerating a stand or starting it over, such as to enhance growth of maple seedlings and saplings, should the overstory of all canopy strata be removed.

Another way to assess a crown's health is to look at the main stem or trunk from the base to the tip of the tree. If at least 40% of this main stem is occupied by healthy photosynthetic or crown material, then the tree is most likely healthy. After assessing the crown, then assess the tree's form. Mark crop trees that have the best form, are straight and do not have tight angled branch unions

that may attract moisture and lead to rotting and breakage in the future. Some guidelines in deciding whether or not to remove a tree are listed below:

**Is very old;**  
**Has a poor growth rate, and, in the case of a maple, limited sap flow;**  
**Has considerable bark canker;**  
**Is in a serious state of decline;**  
**Is competing with a number of good crop trees;**  
**Is a companion species and there is a fairly high proportion of these trees (companion species help to maintain stand diversity)**

### Conclusion

Cutting operations in the sugarbush should be kept on existing forest roads as much as possible in order to prevent erosion, which damages regeneration and existing root systems of your maple trees. If skidding out trees, a winch or cable should be used whenever possible, instead of driving up to each tree in order to



minimize the aforementioned impacts. In addition, it is always a good idea to leave some coarse woody debris (such as crown and trunk material) in order to provide protection from soil erosion and habitat for mycorrhizae that help tree roots assimilate nutrition. Coarse woody debris also provides food and cover for many species of wildlife and hinders the deer's ability to get to the regeneration.

Remember, it is ultimately the quality of the stand that will determine the yield of sap and how sweet it will be. By ensuring that there are a wide variety of age classes, and adequate spacing between maple trees, a sugarbush manager will ensure a productive sugarbush both in the short term and long term.

*Information in part provided by:*

Rodrigue, Simon. *Guide to Sugarbush Management*. Association des propriétaires de boisés de la Beauce. Ville de Saint-Georges, Quebec: Beauce Modern Printing; 1999.

### \*Attention Sugarmakers\*


If you would like to submit an article about something you would like to share that is related to your maple syrup production, please call CFA and let us know. Article topics may vary from fun maple stories, anecdotes and production levels to sugarbush and evaporator management. Also, any producers who would like to advertise their maple products and/or supplies should also call our office. Help us promote a forest product and **preserve our working forest** while promoting you... the producer.

## Calendar of Events For 2009

**(June 13<sup>th</sup>/14<sup>th</sup>, 10:00am – 5:00pm): Meredith Dairy Festival** -- CFA will be attending the Festival celebrating the area's dairy heritage located in the Town of Meredith. CFA will be serving forest education, advice and information to the public and giving tree identification walks nearby each day. Learn some of the names





of our trees and how to identify them. For more information call CFA @ (845) 586-3054.


 **(July 11<sup>th</sup>, 9:00am – 12:00pm): Wildlife Management Workshop** -- Whether you do something or nothing to your forest, wildlife will be affected. What wildlife can you manage for or against on your forested property? Walk a CFA member's property for one example of wildlife management. (Location TBA) To pre-register or for more information call CFA @ (845) 586-3054. \$5 CFA members \$10 non-members.


 **(July 12<sup>th</sup>, 10:00am – 12:00pm): Introduction to Woodlot Management** -- There are many options for owners who have forested property. Learn the basics of managing your woodlot at the Phonocia Library, 48 Main St., Phonocia. To pre-register or for more information call CFA @ (845) 586-3054.


 **(July 18<sup>th</sup>, 10:00am – 5:00pm): Deposit Lumberjack Festival** -- CFA will be attending the Festival celebrating the area's logging heritage located in the Village of Deposit. CFA will set up adjacent to the Woodsmen's competition and be serving forest education, advice and information to the public. For more information call CFA @ (845) 586-3054.


 **(July 25<sup>th</sup>, 9:00am – 3:00pm): Chainsaw Safety Workshop** -- The chainsaw can be a valuable tool in managing a forest. However, safety precautions and efficiency must first be understood in the Napanoch area. (Exact location TBA) Learn basic safety skills. Pre-registration is a must and for more information call CFA @ (845) 586-3054. \$75 CFA members \$100 non-members, class limit 10, bring your lunch, chainsaw & gear.


 **(August 8<sup>th</sup>, 9:00am – 12:00pm): Logging Job Tour** -- Thinking about cutting some trees on your property? Come and see a forest whose trees are being harvested while in progress. Roads planning, tree marking, cutting and removal are just some of the important aspects we will cover. Exact location TBA, but it will be on the DEP's property. To pre-register or for more information call CFA @ (845) 586-3054. \$5 CFA members \$10 non-members.

 **(August 14<sup>th</sup> – 16<sup>th</sup>, 9:00am – 7:00pm): Grahamsville Fair** -- CFA will be attending the Festival celebrating Sullivan County's agricultural heritage located in the Town of Neversink. CFA will be serving forest education, advice and information to the public. For more information call CFA @ (845) 586-3054.


 **(August 22<sup>nd</sup>, 9:00am – 4:00pm): Huckleberry Festival** -- CFA will be attending the Festival celebrating the area's blueberry & huckleberry heritage located in the Village of Ellenville. CFA will be serving forest education, advice and information to the public. For more information call CFA @ (845) 586-3054.


 **(August 25<sup>th</sup>, 7:00pm – 9:00pm): Crop Tree Management Workshop** -- Whether you do something or nothing to your forest, wildlife will be affected. What wildlife can you manage for or against on your forested property? Callicoon Library at 11 Lower Main St., Callicoon. To pre-register or for more information call CFA @ (845) 586-3054.


 **(August 26<sup>th</sup>, 7:00pm – 9:00pm): Crop Tree Management Workshop** -- Whether you do something or nothing to your forest, wildlife will be affected. What wildlife can you manage for or against on your forested property? Jeffersonville Public Library at 19 Center St., Jeffersonville. To pre-register or for more information call CFA @ (845) 586-3054.


 **(August 27<sup>th</sup>, 7:00pm – 9:00pm): Crop Tree Management Workshop** -- Whether you do something or nothing to your forest, wildlife will be affected. What wildlife can you manage for or against on your forested property? Narrowsburg Library at 198 Bridge St., Narrowsburg. To pre-register or for more information call CFA @ (845) 586-3054.

 **(September 12<sup>th</sup>, TBA): Edible Forest Gardening** -- Find out what trees and shrubs to plant for edible products. You may even have some of them already and just don't know it! To pre-register or for more information call CFA @ (845) 586-3054.

 **(September 20<sup>th</sup>, TBA): Apple Tree Pruning & Cider-Making** -- Properly pruned fruit trees grow vigorously, efficiently allocating the sun's energy to making delicious and abundant fruit. Ellenville public Library & Museum at 40 Center St., Ellenville. The first half will cover pruning while the other will teach how to make your own cider. To pre-register or for more information call CFA @ (845) 586-3054.

 **Cauliflower & Forest Festival (September 26th)** The 1<sup>st</sup> Annual celebration of our region's forests is a major focus at the Annual Cauliflower Festival this year -.located at the pavilion behind the new Freshtown Market, in the village of Margaretville, Delaware County. The purpose of the event is to foster an appreciation for the many benefits our **Working Forests** and **Farms** provide for our local **communities** and **society**. This year, we will showcase maple syrup as one local forest-based product. There will also be forestry demonstrations and exhibits.

 **(October 20<sup>th</sup>, 7:00pm – 9:00pm): Apple Tree Pruning & Cider-Making** -- Properly pruned fruit trees grow vigorously, efficiently allocating the sun's energy to making delicious and abundant fruit. The first half will cover pruning while the other will teach how to make your own cider. Callicoon Library at 11 Lower Main St., Callicoon. To pre-register or for more information call CFA @ (845) 586-3054.

 **(October 21<sup>st</sup>, 7:00pm – 9:00pm): Apple Tree Pruning & Cider-Making** -- Properly pruned fruit trees grow vigorously, efficiently allocating the sun's energy to making delicious and abundant fruit. The first half will cover pruning while the other will teach how to make your own cider. Jeffersonville public Library at 19 Center St., Jeffersonville. To pre-register or for more information call CFA @ (845) 586-3054.

**(October 3rd, 9:30am – 3:00pm): Catskill Forest Association's Annual Meeting --** Hear from your peers as well as experts on how land is being effected and managed in the Catskills. Andes Hotel.



(October 22<sup>nd</sup>, 7:00pm – 9:00pm): **Apple Tree Pruning & Cider-Making** -- Properly pruned fruit trees grow vigorously, efficiently allocating the sun's energy to making delicious and abundant fruit. The first half will cover pruning while the other will teach how to make your own cider. Narrowsburg Library at 198 Bridge St., Narrowsburg. To pre-register or for more information call CFA @ (845) 586-3054.



(October 24<sup>th</sup>, 9:00am – 12:00pm): **Firewood Management Workshop** -- Learn the basics about firewood! We will cover choosing the right trees to cut, harvesting techniques, species ratings, transportation, processing, and heating techniques. Outdoor wood furnace & fireplace distributors will also be available for information and advice. To be held at CFA's office at 43469 State Hwy 28, Arkville. To pre-register or for more information call CFA @ (845) 586-3054. \$5 CFA members \$10 non-members.



(November 7<sup>th</sup> 9:00am – 3:00pm): **Chainsaw Safety Workshop** -- The chainsaw can be a valuable tool in managing a forest. I safety precautions and efficiency must first be understood. Learn basic safety skills. (Location TBA) Pre-registration is a must and for more information call CFA @ (845) 586-3054. \$75 CFA members \$100 non-members, class limit 1, bring your lunch, chainsaw & gear.



Check out our website at [www.catskillforest.org](http://www.catskillforest.org) for a current listing of the 2009 Events!



### **Maple Season 2009: A Dark Year**

Another season for maple sugaring has come to a close. The forecasted daily low temperatures have steadily climbed to above freezing temperatures ending the freeze and thaw mechanism that directs the sap to flow. Add in the nearing phenomenon of bud-break and any sap that does run turns sour in what is often referred to as *buddy sap*. Though the season is closing, plenty of sap ran from the trees this season. The 60 taps I tended this year yielded approximately the same amount of maple syrup as last year. On average each tap-hole yielded approximately 0.38 gallons which produced, in total, 23 gallons of syrup. I have been told and have read that the average tap should yield approximately a quart or 0.25 gallons of maple syrup. The trees I tapped are somewhat sweeter than the average sugar maple since they are large yard maples that receive plenty of sunlight creating high photosynthesis rates and carbohydrates in the form of sucrose.

Although the yield of sap may have been fairly similar to last years season, the grade of syrup differed considerably. Last year, maple producers from New York State

seemed to be able to boil down their sap into *light* and *medium* grade syrups with ease and abundance. Light and medium grades are typically made mostly in the first half of the season. However, this year the sap boiled down mostly to *dark* and *grade B* syrups right from the get-go. The reasons why syrup grades vary from season to season help keep conversation running in many sugarhouses. Typically, darker syrups usually result from longer durations of boiling time and microorganism and bacteria accumulation throughout a season. Maple sugar makers who boil down their sap into syrup in one pan will most likely always make dark syrup since sap is continually added to one batch. The same batch is cooked for long periods of time. Larger producers who have sectioned pans and drop-flues that boil at rapid rates have a better chance of producing lighter amber syrups.

We may live in the age of information and technology, but still there are things we just don't understand. These mysterious phenomena and occurrences are what make conversation sometimes more interesting. *Just why is the syrup darker? The sap looks just as clear as it did last year.* My personal hunch was the abundance of *tree fuzz* in the sap this year. I cannot say what this "fuzz" exactly was. I could see some of it floating in the sap bucket and on the filtering cheese cloth as a yellowish residue. I did not remember seeing it last year and therefore have blamed the darkness upon its existence. Luckily for me and many others, I happen to prefer dark syrup over the lighter ambers because of its fuller body and greater maple taste -- especially when used as a seasoning. Nevertheless, I do enjoy a diversity of ambers and the dark stuff always seems more difficult to filter after the sap has transitioned into the stage where it is called pure maple syrup. But maple syrup, like ice cream, is all good!

Sweetly Yours,

*Ryan Trapani*





**Mike's Corner:**  
**Observations by**  
**a**  
**Forest Historian**

*(Part 5 of a series  
by Dr. Michael  
Kudish)*

**“Forest Products on the Ulster & Delaware Railroad”**

*[Addendum: When the article, Bogs with Lost Hemlocks (CFA News, Winter 2009, page 10) was written, I had not yet received the radiocarbon date from the laboratory. The hemlock-containing peat at the bottom of the bog at Sid's Notch, on the northwest spur of Eagle Mountain, was dated at 6250 years; this bog has since long-lost its hemlock.]*

When CFA Director Jim Waters first suggested that I write about Catskills railroad history, I wondered how many of our organization's members would be interested. After some thought, I asked Jim if I could relate the two disciplines – railroad history and forest history – and Jim concurred.

The Ulster & Delaware Railroad (U&D) and its successor owners, from Kingston eventually to Oneonta, operated from 1868 through 1976. Its primary function was to transport dairy products and bluestone out of the Catskills; coal, feed, and grain into the region; and summer visitors in and out of the Catskills. However, there were several forest industries which used the railroad to transport their products out of the region, resulting in heavy use of the forest in a strip a few miles wide along both sides of the railroad and its branches.

Much detail on these forest product industries is available in numerous books, newsletters, and other publications. Only a brief outline of selected shippers can be offered here. The following interdisciplinary sequence is geographic, following along the U&D from east to west, with most industries peaking during the



last two decades of the nineteenth century and the first and second decades of the twentieth.

Along the Stony Clove Branch line between Phoenicia and Kaaterskill Station, the U&D served two major forest product industries. The Fenwick Lumber Company had a sawmill along Myrtle Brook and a lumber road which crossed Stony Clove Creek and climbed up the south bank to a railroad siding. The lands owned by Fenwick were primarily on the summit and west shoulder of Hunter Mountain. At what is now the Devil's Acre, a stationary steam engine lowered logs, mainly red spruce, down Myrtle Brook to the mill on an ingenious and steeply-inclined cable railway. In addition, there were a second cable railway on the Spruceton side, and a network of rail lines and horse-drawn log roads between Hunter and Southwest Hunter Mountains. Fenwick operated between 1903 and about 1917.

Catskills' surveyor Rick Brooks, who has studied the Fenwick intensively, has offered lectures and led field trips (both of which this writer attended) on this fascinating operation. Rick found the mill site and remnants of the inclined planes. If only the cable railway could be resurrected as an educational-historical tourist attraction featuring rides up and down the mountain on a newly-rebuilt cable railway! But no, the land is now Forest Preserve.

The second forest products industry I've chosen, served (eventually) by the railroad, began in the late 1860s. The Chichester Family built a large furniture-manufacturing operation in the hamlet which now bears their name. From 1870 through 1882, their products had to be drawn by wagon over the highway all the way to the railroad at Phoenicia; but in 1882 when the Kaaterskill Railroad Branch opened, their furniture needed to be hauled only across Stony Clove Creek to a nearby siding. The business was purchased in the early 1890s by William O. Schwarzwaelder Company, famous for its chairs, cradles, and office furniture, and ran until 1938. The mill stood on the north side of Route 214, a short distance east of the Ox Clove stream (I remember the huge, abandoned building from my dissertation days – since removed - but alas, I did not photograph it).

See Reginald Bennett's book, *The Mountains Look Down – A History of Chichester, a Company Town in the Catskills*, published by the Purple Mountain Press in 1999. The Schwarzwaelder company owned thousands of acres of land in Ox Clove, on the southeast slopes of West Kill Mountain eastward into the Diamond Notch; there were also lands in the Warner Creek Valley (Silver Hollow). Some historic maps in my collection, prepared by state forester Karl Schmidt between 1917 and 1919, show the location of their log roads; who would like to try to find and follow them today?

Continuing westward, along the U&D Main Line at Allaben, Big Indian, Pine Hill, and Grand Hotel Station (High Mount), were at least four sets of beehive-like, brick charcoal kilns. Northern hardwoods (beech-birch-maple-cherry mostly) were cut on the



hillsides above the railroad along Esopus and Birch Creeks, and brought down by wagon to the kilns where charcoal was made. Some charcoal was used locally, but most was shipped by rail as fuel to the Millerton Iron Works in Dutchess County. Drawings, prints, illustrations, and photos of these kilns are common in publications during the last three decades of the nineteenth century. Additional beehive-like charcoal kilns, whose



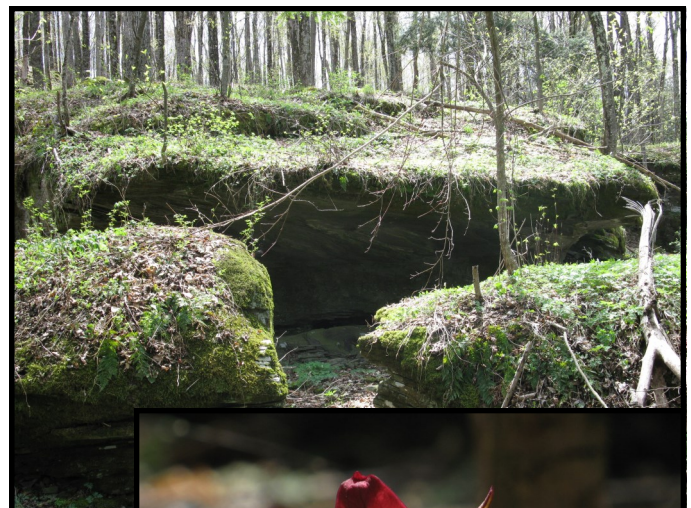
remains exist to this day, had been built in the Moonhaw, i.e. Maltby Hollow; the charcoal produced there was hauled out by wagon to the siding at West Shokan to be loaded on railroad cars headed for Miller-ton. The once-former northern hardwoods forest cut over for charcoal is dominated today by maturing white ash, northern red oak, and black birch.

The Treyz, later Lucerne, Chemical Company plant in Arkville was located along the U&D one-half mile northwest of the depot. The acid wood industry made chemical distillation products such as wood alcohol, wood tar, formaldehyde, wood acetate, as well as charcoal; see Frank Meyers' book, *The Wood Chemical Industry in the Delaware Valley* (Prior King Press, Middletown, Orange County, NY, 1986) for details on this industry. A photo caption in Meyers' book located the Treyz factory along the Delaware & Northern Rail-



road instead of the U&D, causing this writer to go on a years-long "wild goose chase" fruitless search in the wrong place trying to find the siding remains! A recent tour by the Town of Middletown Historical Society, correctly in the area along the U&D, revealed no trace of the Arkville factory except a portion of the railroad siding embankment.

Treyz cut over Pakatalan Mountain from about 1900 through 1915, resulting in an "explosion" of white ash, northern red oak, and black birch (see *CFA News*, Summer/Fall 2008, page 11) for more detail. The effect of the acid wood industry on the northern hardwoods forest was very similar to the effect of the charcoal industry: both involved a near clear-cutting of the forest and the resulting "explosion" of long-lived pioneer species. Treyz, by the appearance of the forest today, also cut over the hill immediately behind the CFA Offices in Arkville and along the east side of Dry Brook locally as far upstream (southeast) as Haynes Hollow. On a Middletown Historical Society field trip in July 2008, I led a group of people over some of Treyz's log roads on Pakatakan Mountain; I'm still mapping them.



**Spring  
in the  
Cats-  
kill  
Moun-  
tains!**





## CFA's Tree Marking Program

CFA has now developed a Tree Marking Program. This program was developed in response to the current and prospective forest management occurring in the Catskill Region on private land. Unfortunately in most cases, private landowners resort to a practice called *high-grading*. High-grading is a practice where the best quality and economically valuable trees are *selectively* chosen and harvested, while the poorest quality trees are left behind. As a result, the condition of the forest is left worse than before since these poor quality trees then occupy the growing space and become the future forest. High-grading is most likely to occur on parcels where short-term economic gain is needed. In many cases a professional Forester is not involved as well. Landowners may be more susceptible to high-grading their forest due to (1) High property taxes; (2) Lack of a Forester and/or Forest Management Plan; (3) Lack of an adequate timber contract; & (4) Lack of impartial and good forest management advice. High-grading often goes unnoticed and is sometimes referred to as the *green lie*. Though we may have more forest in New York State than 100 years ago, the quality of our forest is diminished by this practice and other biological circumstances such as over-browsing from white-tailed deer. (More about this in later issues.)

In addition to high-grading, forest management in the Catskills has other challenges as well. Forest and Natural Resources Management Professor (SUNY ESF), Dr. Rene Germain's findings in the Catskill Region were mostly what CFA had expected, while some things were unexpected. Compared to other landowners in the north-east, Catskill landowners are more educated, have a higher income and are slightly younger. In fact, 44% have a Bachelor's Degree and 41% have a Master's Degree. 66% of surveyed landowners were 55 years or older with average incomes of over \$55,000. The average parcel size in the Catskills is less than 17 acres.

Dr. Germain and his team sent out questionnaires to landowners in order to find out their level of awareness in forest management. Afterwards, they visited the forest of the surveyed landowners to see if there was any kind of correlation between awareness and on-the-ground forest management. What they found was surprising. There was none. This includes landowners who have forest management plans as well! Forest management conditions become worse as parcels decrease in size since access and practicality of managing on smaller parcels becomes less feasible. Parcels that are subdivided have a considerably better chance of being developed and thereby removed from forest management, especially when less immediate income can be realized from one's forest. These parcels are also managed far less since length of ownership decreases below 17 years and sustainable forest management can demand decades of time and money.

As you may think, this was deeply troubling to a non-profit forestry education organization such as CFA. As parcelization (splitting up large parcels into more than one ownership) increases, more forestland is taken out of forest management. Biodiversity and forest health decrease since more landowners are left "doing nothing" with their forest. Passive management can sometimes help your forest if you are managing only for one age and size class and tree species that are able to regenerate in the shade.

From our observations in working with landowners, smaller landowners are less willing to go through the trouble of hiring a Forester and writing a Forest Management Plan. In addition, New York State offers tax incentives for landowners who own at least 50 forested acres and are willing to manage only for timber. Remember, most landowners own less than 17 acres. Many of these landowners are not interested in timber management, but instead view wildlife, water quality, recreation, maple sugaring and forest health as more important goals. How can CFA reach out to these landowners who make up the majority of our forests? .....

CFA's new Tree Marking program is uncomplicated to implement. It's easy to get us on the phone and to come over, take a look at your property, assess your forest and develop specific forest management goals and objectives. From this initial *On-Site Visit*, trees can be marked accordingly. Trees that are marked are considered crop trees. Trees that are not marked and are competing with marked trees should be girdled, removed for firewood or left on the ground. Leaving woody material on the ground provides habitat for fungus such as mycorrhizae that help tree roots fix nitrogen. Woody debris also protects young tree seedlings from deer browsing and cover for many species of wildlife. The crop tree you release will almost always result in a healthier tree and forest since photosynthesis and carbohydrate production is enhanced. The immune system of the tree is invigorated and as a result is less susceptible to insects and disease. Landowner benefits are also



released sooner and more abundantly. A maple producer who releases their sugar maple crop trees will have higher sugar contents. A wildlife manager who releases apple, black cherry and shagbark hickory will have higher yields of fruit and nuts and more forage for wildlife. In addition, sunlight penetrating the understory will provide space for herbaceous growth for wildlife species seeking food and cover. Biodiversity is increased by enhancing size, age and species composition. And a bi-product will be enhanced timber value for future income. Crop Tree Management is very similar to gardening, but demands more patience. At first, the aesthetic impacts may seem a burden, but the benefits that can be realized can far outweigh these costs.

The program consists of marking trees on up to 10 acres of a landowner's forest per calendar year. Our Forester will take his time and consider each tree. Marking the best trees and removing poorer growing trees that are in competition is one of the best practices a forest owner can implement. Our forests in the Catskills have had a long history of high-grading that have made them more susceptible to insects and disease and have provided fewer benefits for landowners. By marking the right trees, CFA and its members are reversing this trend. More importantly, the Tree Marking Program is designed to teach landowners how to mark crop trees so that they may implement the practice for themselves in the future. In this way, a landowner can sustain proper forest management for themselves and their family into the future without the need of extensive and expensive management plans and going through a lot of red tape. Our forests will only be as sustainable as our communities and their landowners allow them to be. We are a part of the forest and an important piece. By marking the right trees, we can help you manage for (1) Forest health; (2) Wildlife; (3) Timber; (4) Maple sugar; (5) Aesthetics; (6) Water quality and more. Call us about marking your trees.





# *CFA Tree Marking Program!*

This is a great way to get an area marked that will provide you and others with firewood as well as improve the health of your forest. You are welcome to join us during the marking to learn how to do it yourself. This could save you money down the road as it will sharpen your understanding of forest management and you will be developing your own tree selection skills. Thinning out the forest will make it more resistant to insects and disease, a better water filter, better wildlife habitat and increase the value of the timber.



## DETAILS:

1. You must be a CFA member.
2. An "on-site-visit" fee of \$100 plus mileage will be charged for selecting, designating on the ground the area to be marked, and determining the acreage to be included.
3. After reviewing the forest management plan (if there is one) and taking into account the landowner(s)' objectives, a prescription for that stand will be recommended by the representative and the marking guidelines agreed upon by both the representative, the landowner(s)' forester (if there is one) and the landowner.
4. A maximum of 10 acres will be marked for each landowner in any one calendar year.
5. A fee of \$45 per acre will be charged for the marking.
6. \$15 of this \$45 can be claimed as a tax deductible contribution to CFA, a 501-c-3 not-for-profit organization.
7. The trees marked will be the trees that are considered "crop" trees (These are the trees that are the "keepers".) They will be marked by tree-marking paint at or just below eye height, most of the way around the bole of the tree, and on the stump.
8. It will then be up to the landowner to remove or kill all of the trees without paint. In most cases these trees will not be useful for anything but firewood. There may be an occasional saw-log tree, but unless there are a sufficient number of them, it will not be worth-while to have them delivered to a mill. The goal with this program is to improve the forest by removing the "weed trees". In some cases the trees can be left as fertilizer and wildlife habitat.
9. In the case that the landowner does not want to do the work themselves, a list of professionals will be given to them by CFA to contact in order to have the work done.
10. There is a limited amount of this we can get to, so sign up soon! Just fill out the application below and mail it in. We will call to schedule.



A thinning typically removes about 4 to 5 cords per acre. If you had 10 acres marked, that would be about 45 cords of firewood being made available to you! That means that for an on-site fee and somewhere around \$10/cord you would get a rare and valuable educational experience along with the wood marked by a professional forester from CFA.

CFA is holding several special programs in chainsaw safety and use for landowners. (See the Calendar of Events in this issue.)



## CFA TREE MARKING

## APPLICATION

Name \_\_\_\_\_

Address of Property \_\_\_\_\_

Email address \_\_\_\_\_ Date \_\_\_\_\_

Phone Number and best time to call, where you can be reached during the weekday \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



PO Box 336  
Arkville, NY 12406

## **MEMBERSHIP APPLICATION**

I believe in enhancing the quality of the forest land in the Catskill Region through proper forest management.  
To that end, I am interested in joining the Catskill Forest Association and supporting its efforts.

Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

Phone #: \_\_\_\_\_ E-mail: \_\_\_\_\_

### **Membership Categories (Select the level & if you'd like, make an additional donation):**

|                              |                         |
|------------------------------|-------------------------|
| <b>Membership</b>            | <b>\$50 + \$</b> _____  |
| <b>Contributing</b>          | <b>\$75 + \$</b> _____  |
| <b>Business / Supporting</b> | <b>\$100 + \$</b> _____ |
| <b>Supporting</b>            | <b>\$150 + \$</b> _____ |
| <b>Sustaining</b>            | <b>\$250 + \$</b> _____ |
| <b>Benefactor</b>            | <b>\$750 + \$</b> _____ |

Do you own land in the Catskill Region? Yes \_\_\_\_\_ No \_\_\_\_\_

Property address: \_\_\_\_\_

Telephone #: \_\_\_\_\_ County: \_\_\_\_\_

Total acres: \_\_\_\_\_ Forested acres: \_\_\_\_\_ Pond Y / N Stream Y / N River Y / N

**Would you like a CFA forester to come to your property and spend 3 hours walking your forest, making suggestions and giving you impartial and confidential advice? (It just costs \$100 plus our mileage to do so.) Y / N**  
**(If so we will call you to schedule an appointment.)**

**Amount enclosed \$** \_\_\_\_\_

All membership dues and donations are fully tax deductible to the extent allowed by law. A copy of the most recent financial statement filed with the New York Department of State is available upon request.