CFANEWS



The Newsletter of the Catskill Forest Association, Inc. Volume 28, Number 2 - Spring 2010







CFA News Volume 28, Number 2 Spring 2010

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 2010
The Catskill Forest Association, Inc.
Contents may not be reproduced without permission.

Board of Directors:

Robert Bishop II, Vice President, DeLancey
Susan Doig, Secretary, Andes
David Elmore, Treasurer, Davenport Center
Joseph Kraus, Gilboa
Seth LaPierre, Delhi
Douglas Murphy, President, Stamford
Jake Rosa, Arkville
Gordon Stevens, Vice President, 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.

SPECIAL ANNOUNCEMENT!

For a CURRENT listing of CFA's EVENTS you must visit CFA's Website!

www.catskillforest.org

Cover Photo: Taken by Jim Waters of Maple leaves, just springing out. Who says "Fall" color is best? Take the time to go outside and look carefully at all the different flowers and emerging growth of our trees.



Maple Leaves Emerging From Last Year's Bud Scars.

Table of Contents:

New Members2
Executive Director's Message
Forestry As An Acceptable Rural Land Use4 & 5
Deer, Winter & Mortality6
Some of CFA's Spring Events7
CFA Tree Sale8
Taste From The Forest (recipe)9
2010 Forest Festival
A Shade Tolerance Scale For The Catskills11 & 12
Website Info
CFA's Tree Marking Program
Membership Application Back Cover

Welcome New Members!!!

January 2010

James Brown - Philadelphia, PA Sandra Foster - Delhi Robert Herbst - Margaretville Lynn Rathgeber - NJ

Febuary 2010

Merrieworld Club - Forestburgh

March 2010

Finch Paper LLC - Glens Falls

April 2010

Ralph Lamberti - NJ
Ray Rice - Rifton
Larry Schacher - Ellenville
Christopher Broadwell - Roxbury
James Ellsworth - Lew Beach
Gale Wilson - Andes



EXECUTIVE DIRECTOR'S MESSAGE



What an up & down spring that we are having! Hot/Cold - Wet/Dry - Early Leaf-Out/Frost. It will be interesting to see what the effects on the already, caterpillar-stressed maples will be - especially in the higher elevations.

I hope that you all had a good winter and are making it through the troubled economy. I know quite a few that have been forced to change their career tracks and take on new jobs at lower compensation. I also know people that have benefited from a "push" and

have found something that they've always wanted to do but were "stuck". My philosophy -- always look for the positives, otherwise you'll never find them / never look for the negatives, because if you do, you will find them.

Personally, in our life, My wife, Cindy and I are final-



ly purchasing a home in the area. It's at 2,000 ft. in elevation, has beautiful views, but very few trees. A blank slate as I like to call it. Finally -- some permanency and a place we can call our own.

The Council of Forest Resource Organizations' (CFRO) "Forestry Awareness Day" (FAD) in Albany was a great success.

We must remember that we can't complain when poor legislation is passed when it is our fault that the legislators vote on issues that they have little knowledge about. Thanks goes to the 4 board members that went with me and helped lead legislative visits at FAD. It was a great show of support from CFA and I appreciate it especially since I've put so much effort into it as chair of CFRO. I only hope that next year I get support from some of CFA's members at large. Thank you Sue Doig, Doug Murphy, Jake Rosa & Frank Winkler!

I have been nominated to the Governor's Wood Products Development Council (WPDC) as a representative from a state-wide non-industrial private forest owner association. Because CFA is regional, it is under New York Tree Farm's hat, but your interests will be represented as private forest owners. This is a really good thing for CFA.

The legislation passed adds a new article to the agriculture and markets law creating the WPDC, providing for its membership and directing it to, among other things, work closely with the state's leading rural economic development agency, the Department of Agriculture and Markets. Representing all stakeholders, from lumber to maple syrup, from forest owners to furniture manufacturers, the Council will advise the Governor on forest products policy, raise public awareness of the benefits of a healthy forest products industry, provide technical assistance to forest product businesses, help ensure that forest resources are put to beneficial use, and develop the wider value-added forest product industry.

I also would like to take this opportunity to express my personal gratitude for the stupendous work that Ryan and Michele have given to me and CFA. I want to publicly recognize them for their dedication, long hours and extremely hard work which has taken CFA to a whole new level. I wish that it were possible for CFA to reward them with pay raises and trips to lavish far-away places, but that is not possible right now. The one thing that you as the backbone of CFA can do for them, is to show your support and interest by taking part in CFA activities, such as workshops, the July 17th Forest Festival and our Sept. Annual meeting. You could also talk to those you know that are not members and convince them to join. Ryan & Michele are working hard for you.

Well, the summer will be off & running. Lots of CFA stuff going on - from edible forest gardening to workshops and festivals!

Naturally,

Jim Waters



WHAT A DEAL!

Gifts For A New Member:

<u>Package 1</u> -- Any of the Membership Levels at a 20% discount for the first year.

<u>Package 2</u> -- Package 1 together with an on-site visit for \$80 (\$20 off the normal rate of \$100) plus the normal mileage fee of \$.50 per mile.

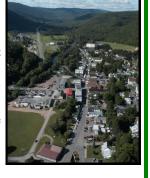
<u>Package 3</u> -- Packages 1 and 2 together with tree marking at \$40 per acre (\$5 off the normal rate of \$45 per acre) for a maximum of 10 acres.

Gifts For Current Members:

<u>Package 4</u> -- An on-site visit for \$80 (\$20 off the normal rate of \$100) plus the normal mileage fee of \$.50 per mile.

<u>Package 5</u> -- Package 4 together with tree marking at \$40 per acre (\$5 off the normal rate of \$45 per acre) for a maximum of 15 acres.

This offer expires on the 1st of August, 2010. All visits and marking appointments need to be scheduled by the 1st of September, 2010, but may be scheduled after that date. Call Michele at (845) 586-3054 to arrange the gift timing. CFA will give you a gift letter or mail it directly to the recipient with a message from you. All gifts must be pre-paid to CFA.





Forestry As An Acceptable Rural Use

- by Ryan Trapani



Farming is *ingrained* in our culture. Point intended. Although the Hudson & Catskill regions do not have as many farms as they used to fifty years ago, the nostalgia remains. Last week I was out driving on a back road and seriously enjoyed the smell of manure. Our nostalgia and love of farms and farming is also reflected in our town comprehensive plans, zoning, marketing and promotion as it should be.

Farming and farmers are a big hit for a variety of reasons, but namely one. We like food. We need food. Food comes from farms. Farms are then good. Farmers are probably good. Marketing and promotion of fresh, locally grown farm products has been well underway for some time through buy local advertisement campaigns. New York State Department of Agriculture & Markets funds many of these advertisement campaigns such as Pride of New York among others. In order to help ensure that farmers are not interrupted in their quest to farm, New York State also passed Right to Farm laws that protect the practice of farming from local nuisance laws that would interfere with generally accepted agriculture practices. This means that if you are one of those people who is driving on a back road and are utterly offended by the sight of 800 pound animals and the odor that emanates from the manure that is scattered like islands among the trimmed grass blades, then you're out of luck. Hey, you're in the country and this is an acceptable rural use, and we've got to eat, right? I agree.

This is not the case with forests. It goes something like this. We need wood. Wood comes from trees. Trees come from forests. Cutting trees is bad. Loggers & Foresters are probably bad. What? You cut the trees down to make the farm and that was good. Why is it bad now? And that's land-clearing for conversion.

Of course, it is more complicated than this. Forests provide much more than a farm and mean many different things to many different people. Forests provide not only food, but also shelter and clean

water. The more complicated aspects that forests provide are the intrinsic benefits that are difficult to define especially since forests are constantly changing as well as society and the individuals that make them up. Aside from the intrinsic benefits, there are and always will be raw materials required by humans from forests. Buying locally grown forest products such as wood products from standing timber to build houses, maple syrup and blueberries to eat, wildlife to harvest or look at, or clean water to sustain life from are just some of the locally grown products and entities that forests provide. If we can no longer reap these benefits from forests locally, then we will have to go elsewhere to procure them. This involves forests and watersheds from far and away places that will require even more resources from the environment. In other words, buying local should pertain to forest products too. And this may be in our future, since the New York State Department of Agriculture & Markets is beginning to look at forests in this way.

Similar to farms, most forest operations occur on private forest land. In fact, forest land in New York State is 85% privately owned. Also, New York State is 62% forested and is growing more timber than is being harvested by a margin of 3 to 1. In other words, it is not the state, county, town or private preserve that is providing most of the timber and other ecological services forests provide, but instead the small, non-industrial private forest owner (NIPFO).

Growing a good crop of timber, providing quality wildlife habitat, biodiversity or maple syrup requires a lot of work. Simply fencing and forgetting does not work in the long run. Thinning operations may be required to enhance the current stand of trees. In other cases, regeneration cuts may be required to enhance new growth of trees that require ample sunlight or food and cover for a variety of wildlife species to live in. Cutting the best quality trees for sawtimber pays for itself (and more) and markets currently exist for doing so. It is easy to find a Logger to cut your best red oak, black cherry or sugar maple. But finding a Logger or Forester to cut your poor quality trees to enhance forest health, regenerate a stand to perpetuate pitch pine or chestnut oak for biodiversity or provide good quality ruffed grouse habitat is difficult and requires time and labor. In other words, government and society need to think not just of the farmer, but the NIPFO.

Many towns are unaware that forestry, just like farming should be promoted as one mechanism to preserve environmental quality. Many surveys conducted by towns locally reveal that the people desire a clean environment and a preservation of rural qualities. It seems that people do not fear cutting trees really as much as they fear forest-land conversion where cutting trees creates development, impervious soil and greater impacts upon water quality. These issues are more related to stormwater than to forestry. Research shows that the impacts upon water quality from development and agriculture far outweigh those from forest practic-







es. This is probably true since bare soil is re-vegetated naturally, immediately after an operation is performed -- unlike development and agriculture where impervious, compacted soils dominate the landscape leading to soil erosion year after year.

One of the most significant levers towns have at their grasp is in town planning and zoning. Towns can promote forestry and working forests by including the practice as an acceptable rural use on par with agriculture in their comprehensive plans. In doing so, forest landowners will be more apt to manage a forest and keep their land in a forested condition. Currently, many towns have zoning that includes agriculture, but fail to mention forestry.

Logging ordinances that are unfair, discriminatory and/or require site plan approval, variances or special use permits should be discouraged since they discourage forest management. *Right to Farm* laws were developed for a reason in New York State probably because the benefits from farming outweigh the impacts from it such as odors, truck and tractor traffic, noise and high impacts on water quality. Forestry also has its drawbacks. First, trees live so long while humans live so short. It is difficult for some to grasp cutting down a tree that they have grown accustomed to. Though cutting a tree is one-half the picture. The oth-

er is what one is leaving behind, but that is another topic and many textbooks long. The other drawback is that chainsaws are loud and trucks are used to haul wood away. Nothing is perfect. However, logging ordinances that discriminate against forest practices should be discouraged for the same reasons they are in dealing with agriculture. Examples include uneven application of ordinances that specifically mention logging trucks when they should mention weight instead. Whether it is a bus, oil man, housing contractor or logging truck is irrelevant. Emphasis should not be on what is carried, but on its impact to public resources. Another example includes redundancy as pertaining to stream-bank crossings when skidding logs. NYS DEC already enforces Environmental Conservation Laws (ECLs) pertaining to stream-banks. Other examples include overly specific requirements such as how many trees the logger will be cutting or are vague such as preserve aesthetic qualities. Aesthetic values are too subjective. They also raise the issue of private property rights. These aesthetic values being enjoyed by the public are occurring on private land on which taxes are being paid. In comparison to agriculture, a farmer would find it cost-prohibitive if he had to involve government in every step of the way when performing simple tasks such as mowing, weeding, tilling or harvesting a crop.

Instead of ordinances, towns may desire to adopt positive re-enforced programs for landowners who practice good forestry. Incentive-based programs that use tax incentives or credits in lieu of payment for good forest management may serve as one avenue. Education is always a good addition too.

I believe the benefits of managing a forest or at least leaving it in a forested condition far outweigh the costs. Most of the impacts from logging operations occur not from cutting the tree down, but from skidding the tree out and hauling it away. These practices should be implemented using Best Management Practices (BMPs). BMPs are recommendations for preserving water quality developed by the New York State Department of Environmental Conservation (NYS DEC), Watershed Agricultural Council (WAC) and Empire State Forest Products Association (ESFPA). Other sources towns can use are NYS DEC Foresters in the planning process. There does exist in New York State Senate Bill #1783 - Right to Practice Forestry. However, it lacks some of the teeth that the Right to Farm offers farmers. Under Right to Practice Forestry, NYS DEC Foresters are required to review, under a town's request, any ordinance or comprehensive plan pertaining to forest practices. Of course, towns can and should consult the Catskill Forest Association as well. For more information contact CFA @ (845) 586-3054 or visit us online @ www.catskillforest.org



DEER, WINTER & MORTALITY



Deer were easy to find this winter, especially after the area received some heavy snowfall amounts. As the snow kept falling, deer could be seen herding up under stands of Norway spruce or hemlock in order to save energy wading through less snow. As these wintering yards filled up too with snow, deer soon poured into the roadways en masse.

Though temperatures were not that cold this winter, snowfall was abundant. In the central Catskills snow depth easily reached 3 feet, while the surrounding hillsides and mountains received between 4 and 5 feet. In the Hudson Valley snow accumulations were over 2 feet. The significance of the storm for wildlife had more to do with its timing and severity. The months of February and March are the final months of winter and finding food for many species of wildlife for survival becomes most critical. Unlike humans whave most of their food distributed to them through mass transportation systems, deer must move to their food. Expending energy in search of food through deep snow causes significant stress, loss of nutrition and even mortality across a range of age classes of deer.

Similar to cows, deer are ruminants. Ruminants have a 4-chambered stomach that breaks down food as it passes from one chamber to the next. During the warmer months, deer store up fat from feeding on green succulent vegetation. Fat is stored as subcutaneous fat located under the skin, mesentery fat found in the gut cavity, and fat stored in the bone marrow. As food becomes scant, fat reserves are used first from the subcutaneous area, mesentery and lastly in bone marrow. Field biologists inventory these areas from winter-killed deer to monitor individual and herd health during these months.

As the winter progresses and food becomes scarce deer will slowly browse the buds and other dormant parts of plants of species they normally do not prefer. I myself do not prefer peas. When left with nothing else, I'll consider them though. Also, deer may venture into undesirable areas that are dangerous to feed around such as in a human's garden, or town centers. Aside from hunting, winter mortality impacts deer the most mainly because it effects a wide range of age classes. Yearlings are impacted the most especially those that were born in late spring or early summer. Next on the list are old, injured or infirm deer. Yearling bucks are also susceptible to winter mortality because of their small body size and fat depletion from chasing does the previous fall.

Other types of mortality that significantly effect deer aside from hunting are predation and roadkills. According to a Pennsylvania study, half of the fawns born in late spring do not survive past the first 8 months of their lives. Predation can be from black bear, coyote, bobcat, or domestic dogs. Roadkill is usually most common during the spring and fall. In spring deer are found browsing near roadsides after vegetation has greened up. Since most of our forests are evenaged and are maturing, green succulents found in the understory are most abundant where sunshine reaches the ground. Roadsides, powerlines, a human's vegetable garden, or clover growing over a leech field serve this purpose well. New-born fawns are also susceptible to being roadkill since they are unfamiliar with their surroundings. In the fall, when bucks are chasing does, roadkill numbers also peak since deer have other things on their mind.

So what's the remedy to helping the deer get through these tough times? Many will advocate the reduction in deer herd density. Though this may be true, it may serve to fight half the battle. If we are frustrated with the impact deer are having inside the lines of our vegetable gardens, we must know and manage what's going on outside these lines. By managing our forests, more food can be provided in our forests which will ultimately reduce browse pressure in our gardens and plantings around our houses. Deer are interesting. They can serve as a barometer of how well we are doing in respect to our environment. Management or disturbance that is too intense such as occurred in the 19th century through mass forest conversion to pasture reduced deer populations to near extirpation. One big field just doesn't do it for deer. The same holds true for overdevelopment for example on the island of Manhattan. Doing nothing also has its impact. Fire suppression and the absence of forest cutting for regeneration create a homogenous, mature forest that creeps towards similar species composition of shade-tolerants. Similar forest stands of similar age and species offer little forage and cover especially in the midstory and understory for many species of wildlife including deer that are cosmopolitan in their ecological requirements. For more information please visit www.catskillforest.org

Information provided in this article was in part provided through the Hudson Valley Quality Deer Management Association (QDMA). Visit them online at www.hvqdma.com





CFA Maple Tour

This spring CFA hosted a maple tour in Margaretville and Arkville. The tour showcased some of the area's

backyard and commercial maple producers.



The tour began in Margaretville at Mike Porter's sugarhouse. Mike has been tapping trees since the 1980s and usually collects sap from 100 taps or more.

Next, the tour moved over to Steve Miller's sugarhouse on Cemetery Road. Steve is a larger producer and taps hundreds of maples each year.



The tour then stopped at Ernie Bilzner's brand new sugarhouse further up the hill. Ernie used to help make syrup at Ruff's farm in New Kingston years ago, but has decid-

ed to start his own backvard operation this spring.





The tour end-

ed at Ryan Trapani's sugarhouse in Arkville where refreshments were served. If you missed the tour this year and are thinking about tapping in the future, the maple tour is a great place to ask questions from producers and help begin your operation.



Forest History Talk For Delhi **Historical Association**

On April 14th, CFA gave a talk on Catskill Forest History for the Delhi Historical Association. Over thirty Delhi residents attended the talk. The talk focused on forest land-use history beginning with the Native Americans and ending in the present. As you can imagine, being a Forest Archaeologist is not an easy task and there is still a lot to learn about the history of our forests. Stay tuned!



Talk On Tapping Trees & Makin' Sugar

On Saturday, March 27th CFA gave a presentation on Backyard Sugaring at the Jeffersonville Public Library in Jeffersonville, Sullivan County. CFA's Education Forester, Ryan Trapani discussed the basics of maple sugaring on a small scale. Topics included (1) choosing which trees to tap; (2) sap collection; (3) sap storage; (4) evaporation of sap into maple syrup; (5) filtering & packaging of syrup; & (6) sugarbush management. The presentation ended with a live demonstration on how to convert a quart of maple syrup into granulated maple sugar. Granulated maple sugar is a great, valueadded maple product that has the consistency of brown sugar and can be used in a variety of recipes. In attendance were individuals who attended last year's talk at the library. They had some photos and stories of how they made their own maple syrup. Try it for yourself and if you already made syrup please send us some pictures of your operation.



CFA TREE SALE!

CFA is offering RPM (Root Production Method) restoration/conservation grade native hardwood trees. These native hardwoods and shrubs are well known for their extraordinary fast growth, high survivability and earlier seed production. Read more about the advantages of RPM trees and how they are grown at www.rpmecosystems.com





l yr. old conventionally grown root mass





This spring's sale went very well. CFA sold 150 trees!



10" diameter potted trees - ready to plant.

We'll be putting in another order in July to be picked up end of September! We can't guarantee that all of the following species will be available, but the sooner you get your orders in, the more likely we will be able to get them:

Sugar maple, Acer saccharum

River Birch, Betula nigra
Shagbark Hickory, Carya ovata
Hackberry, Celtis occidentalis
Flowering Dogwood, Cornus florida
Black Walnut, Juglans nigra
Eastern Red Cedar, Juniperus virginiana
American Sycamore, Platanus occidentalis
Northern Red oak, Quercus rubra
Northern White Cedar, Thuja occidentalis
Nannyberry, Viburnum lentago

CALL TO ORDER: (No credit cards)

First paid, first filled. Limited quantities!

We will be getting these trees in sometime in Sept.. You will be required to pick them up at CFA's office in Arkville.

(845) 586-3054







"Taste From The Forest" Recipes by Nicole Day

Email: ediblecatskills@yahoo.com

Wild Mushroom & Venison Bundles topped with Cilantro Cream

1 package of Puff Pastry Sheets- thawed

2 cups – Venison-thinly sliced and cooked medium

1 cup - Wild Mushrooms (your choice: Shiitake, Hen or Chicken of the Woods, Puff Balls, Oyster, etc.) **

1/2 cup - Carrots - diced

1/4 cup - Bell Peppers (I prefer Red Bell Peppers for their color & sweetness)

1/4 cup - Celery - diced

1 teaspoon - Basil & Thyme

1/4 teaspoon - Fennell Seed

1/4 teaspoon - Crushed Red Pepper (optional)

Salt & Pepper to taste

1 Tablespoon - Worcestershire Sauce 1 teaspoon - Dijon or Whole Grain Mustard

1 Tablespoon - Maple Syrup

1 Tablespoon - Olive Oil (I prefer a Crushed Red Pepper-Fennell Infused Oil that I prepare beforehand)

1 Beaten Egg with 2 Tablespoons Water – mix in a small bowl separately to lastly use as an egg wash

METHOD

Heat the oven to 400°F.

Heat Olive Oil in a skillet, mix prepared vegetables in a bowl then add to heated oil. Lightly sauté vegetables as they will be cooked again in the oven. I like to add approximately 1/4 cup Mushroom Broth or Water at this point to blend flavors though making sure to not make it to wet. Mix Venison with cooked vegetables then add spices, Worcestershire Sauce, Mustard & Maple Syrup.

Unfold 1 pastry sheet on a lightly floured surface. Roll the pastry sheet into a 14-inch square. Cut into 4 (7inch) squares. Repeat with the remaining pastry sheet, making 8 in all.

Place venison/vegetable mixture (approx. 1/4 cup) in the center of each square. (an option at this point would be to add your favorite cheese on top). Brush the edges of the squares with water. Fold the corners to the center over the filling and pinch the edges to seal. Flute the edges, if desired. Place the filled bundles onto the baking sheet. Brush with an egg wash (or use olive oil if desired)

Bake for 25 minutes or until the bundles are golden brown. Remove from the baking sheet and let cool on wire racks for 10 minutes.

Cilantro Cream

1 cup fresh Cilantro – packed 2 Tablespoons Red-Wine Vinegar

1 Tablespoon Sour Cream (low fat works well)

2 Garlic Cloves - peeled

1 teaspoon Chile Powder (amount is optional)

1 teaspoon Cumin

½ teaspoon Sea Salt

Place all ingredients in a blender and cream together. I like to place the bundles on a bed of Spring mix. Once Venison meal is plated, top with Cilantro Cream and garnish with a sprig of fresh Cilantro.

If no hunter is in your family, you can substitute a **very lean** cut of beef.

**use your choice of mushroom (s), if wild mushrooms are not available use Button or Portabella



One of the stops in CFA's maple tour visiting 3 local syrup producers.





ARE THEY BACK?

Forest Tent Caterpillars are always present. It's only when their population explodes that they are a real problem. These young ones were on a 2" diameter sugar maple outside CFA's office in Arkville.

(We squashed them.)



Historically, land in our region was cleared for farming practices.

Today, our region is dominated by forests since many or our farms have been abandoned. Our forests provide us with incredible benefits that are often overlooked or taken for granted. Some of these benefits include:

- Source of Timber
- Maple Syrup & Sugar
- Food
- Recreation
- Water Filtration
- Fuelwood
- Economic Growth
- Air Quality

Most of these products are provided by Forest Landowners that society has and will depend upon for its resources.

Brought to you by:





Last year a Forestry tent was set up at the Cauliflower Festival in September hosted by the Catskill Forest Association. Due to the feature's great success, the 1st Annual Catskill Forest Festival will be scheduled for Saturday, July 17th at the Pavilion in the Village of Margaretville, Delaware County, conveniently located on State Route 28 just 15 minutes west of Belleayre. Margaretville is centrally located in the Catskill Mountains. Events here draw people from throughout the region.

The purpose of the event is to foster an appreciation for the many benefits our **Working Forests** provide for our local **communities** and **society**.

At the festival there will be:

- Maple Producers
- Wood Products
- Forestry Equipment
- Firewood Processor & Sawmill
- Forest Management Education & Services
- Arts & Crafts Made From the Forest & More!!
- Recreation Vendors

Help the Forest Festival grow and help promote our region's working forests by sponsoring this event. This event relies mostly on support from the region's forest industry.

Sponsorship Levels Maple Syrup (\$100)

- Receive a Sign @ Festival Indicating Support Level
- Listed in Forest Festival Program

Maple Cream (\$500)

- Receive a Sign @ Festival Indicating Support Level
- Listed in Forest Festival Program
- 1 year membership to Catskill Forest Association

Maple Sugar (\$1,000)

- Receive a sign @ Festival Indicating Support Level
- Listed in Forest Festival Program
- 1 year membership to Catskill Forest Association
- Free Booth Space
- Recognition of Sponsorship & Advertising on CFA's website and any other advertising and marketing activities

Call Michele at CFA's office (845) 586-3054



A Shade Tolerance Scale For The Catskills

by Michael Kudish

The shade tolerance scale that I learned in graduate school may be backwards. It ranked tree species arbitrarily from one to ten along an arbitrary, relative scale from the least tolerant of shade to the most tolerant, respectively. The scale might better be revised so that it more closely parallels the incident light, measured in foot candles, reaching the forest floor; such a scale would not be relative and arbitrary, but based on light measurements.

The idea of a reversed shade tolerance scale came to me in my back yard one sunny summer day in 2009.

Learning from white ashes on my lawn:

I became tired of constantly picking up dead fallen white ash branches which would certainly have dulled the blade during my next lawn mowing. The adjacent red maples, black cherries, and sugar maples were dropping far fewer branches and therefore not creating such a nuisance.

The lowest, oldest branches of the ashes had died because their leaves had become shaded out by the leaves on the younger branches above them. The leaves on the lowest branches had promptly reached the *compensation point* (when the photosynthetic rate equals the respiration rate, and sugar produced equals sugar consumed). It was time for the ash to drop its lowest branches (one might draw an analogy of a grocery or pharmacy chain closing those stores where the expenses equal or exceed the profits).

Because of the relatively early (for the life span of the tree) drop of these lower branches, a white ash crown (sum total of all the live branches near the top of the tree) usually remains small.

As the tree grows taller, the top of the crown is raised farther and farther above the ground. The base of the crown dies at almost an equal rate, so that the crown height (from top to bottom) remains almost a constant.

Therefore, mature white ashes, especially those in the forest, resemble a lollipop with a long stick: the live branches are all clustered near the top of the tree and are far apart so that light can readily infiltrate among them. The candy "pop" becomes much smaller than the stick.

This is not true for more shade-tolerant species such as sugar maple, beech, and eastern hemlock. These usually resemble a lollipop with a short stick; live branches cover most of the trunk. The candy "pop" can be almost equal in size to the stick.

The shade cast by white ash is moderate. Some lawn grasses will grow under it. In the forest, ground cover plants are usually diverse and lush. White ash seedlings have moderate success growing under their parents. Typically, white ash is replaced in the forest over time by the more shade-tolerant trees such as sugar maple, beech, and eastern hemlock. White ash in the forest in any abundance usually signifies that, historically, there has been a disturbance of some kind and at least some sunlight had reached the forest floor.

Learning from sugar maples on my lawn:

In contrast, the shade under the sugar maples was so intense that no lawn grasses could grow; only a few ground cover species could survive beneath them. Sugar maple crowns are dense, the leaves from one branch strongly overlapping and shading out those of other branches below them. Light does not infiltrate too readily. As the tree grows in height, the crown height increases slowly (unlike in white

ash where the crown remains of almost constant height) because the lowest branches are not in such a hurry to drop off.

Sugar maple seedlings can readily grow under the parent trees (unless deer browse is excessive) and the stand is regenerated.

Learning from red maples and black cherries in my wood lot:

The shade cast under the red maples and the black cherries was intermediate between that of white ash and sugar maple. Grasses could grow moderately well and ground cover in the woods nearby was ample.

Learning from beech and eastern hemlock in the forest:

These two species can cast so much shade on the forest floor that practically no plants can grow beneath them. Hemlock reproduction is usually confined to canopy gaps (i.e., small openings) in hemlock groves and under hardwoods. This is also true for dense stands of balsam fir and red spruce. Occasional small patches of intermediate woodfern (*Dryopteris intermedia*) and some bryophytes (i.e., mosses and liverworts) are all that survive. Not only is the shade under these evergreens great, but it is there all year. Under deciduous trees, many seedlings and ground cover plants can grow well at least in the spring before leaf-out and in the fall before leaf-drop.

Beech can regenerate under dense beech stands but not always by seedlings; beech is the only shade-tolerant forest species which can reproduce vegetatively by means of root sprouts (also called suckers). Many of these sprouts can survive at or even below the compensation point because they are partly dependent upon the parent tree for sustenance.

<u>Learning from trembling (quaking) aspen along the edge of</u> the field:

At the other end of the shade-tolerance scale from beech, eastern hemlock, and sugar maple is trembling aspen. Walk into a copse (i.e. a grove) of aspens and look around. The crowns are very open, the branches far apart, and much light infiltrates to the forest floor. Many herbaceous plants, including pasture grasses and weeds, can grow beneath them. But trembling aspen seedlings find it difficult to regenerate under their parents because they are so intolerant of shade. More shade-tolerant trees can thrive in large numbers under trembling aspen – including red maple, black cherry, northern red oak, and even white ash – as well as the most tolerant trees such as sugar maple, beech, and hemlock.

A general rule:

The degree of shade cast on the forest floor by the crown of each tree species, and the height of the live crown compared to the full height of the tree, are directly related to the shade tolerance of that species, and especially to its seedlings.

Open sunny, non-forested places:

On a sunny summer day, those plants in large natural openings, i.e. in places without a tree canopy, receive full sunlight as do plants growing in a field or pasture. Examples of natural openings in Catskill forests are glades of either hay-scented, mountain wood, and/or New York ferns. These



fern glades are typically at least one-quarter of an acre in size. Some openings often may fill in with raspberry (Rubus strigosus or idaeus), blackberry (Rubus alleghaniensis), and climbing buckwheat (Polygonum cilinode) in addition to or in substitution of the ferns.

Other examples of natural openings are seeps of at least a quarter acre, located on terraces between ledges, and beaver meadows. In such open wet places, composites such as white flat-topped aster (Aster umbellatus), rough-leaved goldenrod (Solidago rugosa), and joe-pye weed (Eupatorium maculatum) thrive.

<u>Difficulties in light intensity measurement:</u>

Trying to propose a new shade tolerance scale has not been easy. I have an old Weston light meter, once used in association with older film cameras that had no built-in light meters. The Weston still works well, but the method of measurement on Catskills hikes over four decades has been inconsistent and sporadic, because — until last year — there was no long-range plan to organize the data and prepare an article for the *CFA News*. Many variables must be taken into account as one runs around in the woods with a light meter.

The new scale will be based on the degree of shade cast down upon the forest floor by the tree's crown. This scale will have the least tolerant trees with the highest numbers, measured in foot-candles, and the most tolerant trees with the lowest numbers, again measured in foot-candles. This is in reverse of the arbitrary relative scale that I learned in graduate school.

I will be working to perfect the method. Because more readings in the field and ensuing calculations are needed to control all the variables, the proposed new Catskills foot-candle scale will have to wait for another issue of *CFA News*.





Game of Logging: Chainsaw Education Class

Last fall CFA began hosting the *Game of Logging* and will be hosting the classes quarterly this year. These classes are hands-on and require each participant to demonstrate directional tree-felling with a 90° face-notch using a bore cut while adhering to all the safety requirements. The *Game of Logging* is for the beginner and experienced tree worker since it not only teaches safety skills, but also proficiency. The last *Game of Logging* class was held on April 10th and will be held at the same place in the future near the Village of Margaretville on a CFA member's property. The property is ideal for *Game of Logging* since it has been already marked using CFA's *Tree Marking Program* and needs plenty of thinning. Sign up now! (845) 586-3054

NEW CFA WEBSITE: www.catskillforest.org CHECK IT OUT!



If you have not received an email with your user ID and password or if you have lost it please send an email to: cfa@catskill.net with the following information:

Name e-mail address Home Address Telephone Number

Without this information you will not be able to access the areas open to members only or purchase from the store with the member discount.

Soon we will be posting the Newsletters there and adding more items to the store. We need to crawl a little before we can run.



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.



WE MARK ALL YEAR-ROUND!!!

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! 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 on CFA's web site.)



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

Phone #: Membershi	p Categories (Select the lev	_ E-mail: vel & if you'd like, mal	ke an additional donation):
	Membership Contributing Business / Supporting Supporting Sustaining Benefactor ad in the Catskill Region?	\$150 + \$ \$250 + \$ \$750 + \$ Yes	No
Telephone #:		County:	
Total acres:	Forested acres:	Pond Y / N Stream	n Y / N River Y / N
	g you impartial and confident		d 3 hours walking your forest, ma \$100 plus our mileage to do so.)