CATSKILL FOREST ASSOCIATION, INC.

CFA NEWS

THE WINTER ISSUE

INSIDE: The Growing Deer Debate | Improving Habitat | Coyotes & Bark Beetles | Hickories

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CFA News

EDITOR: Daria Chadwick
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Catskill Forest Association, Inc.
43469 State Highway 28
PO Box 336
Arkville, NY 12406-0336

Phone: (845) 586-3054
Fax: (845) 586-4071
cfa@catskillforest.org
www.catskillforest.org

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Inside This Issue

Thank you to all our members for making 2017 our best year yet. We are excited to continue providing forestry education and services to you in 2018, continuing our mission of creating healthier Catskill forests for generations to come.

From all of us at CFA -

Thank You, and Happy Holidays!

From the Director of Forest Services

By Ryan Trapani

I want to remind members about CFA's new program – Apple Tree Pruning – beginning this winter. This program is aimed at both restoring mature and neglected trees, as well as shaping younger trees for the future. How to begin?

Well, first you can start by scheduling a Consultation with one of CFA's staff members. As a member of CFA, you're entitled to a free Consultation (Mileage for travel not included). During this Consultation, we can assess whether an apple tree is worth saving and investing time or money into. If your tree is healthy enough, then there are some attributes which might make it a better candidate for pruning.

1) First, is the tree open to sunlight? Apple trees are cranky if not shown adequate sunlight. CFA can "release" your apple tree from overhanging woody neighbors hogging the spotlight.

2) Is this tree more for wildlife or yourself? If for wildlife, then "releasing" from competing trees is most important, while minimal pruning (if any) can be practiced.

3) Does the tree have good fruit? Taste some the year before. If it's a keeper, then definitely invest beyond releasing & begin the pruning process. Size of fruit is mostly dictated by both fruit thinning and pruning.

That "crabapple" tree is most likely just a wild or volunteer apple tree; true crabapples are more uncommon in the Catskills in comparison to volunteers.

The purpose of pruning isn't too much different than thinning a forest.

Thinning of forest strives to remove some trees in order to shine more sunlight onto the healthiest or most desirable trees. In pruning, simply substitute branches for trees; we're trying to shine more sunlight onto the healthiest branches to improve health and of course, fruitfulness. Pruning (as does thinning) improves air circulation.

As many of you witnessed last fall, many apple trees suffered from leaf diseases and early leaf-drop. Trees less impacted by these diseases were those that had been pruned, since air circulation inhibits fungal spore accumulation.

Lastly, pruning strives to enhance overall structure of your tree; mainly to increase its strength. Structural strength is needed not only to hold all those pounds of apples, but also those lousy fruit-pickin' arborists (black bears as well as high winds).

If your tree is severely overgrown and large, it might take 3 years to untangle and reveal its "inner" apple tree silhouette from its current cluttered chia-pet mess. The first year normally includes large cuts and the most work, while the next couple years fewer cuts and less work.

In any case, apple tree pruning is a great way to enhance and preserve what you already have; an established apple tree. Pruning is oftentimes much easier than establishing a younger apple tree that requires deer protection, vole protection, watering, mulching, lots of love, and some luck.

May the Forest Be With You,

Ryan Trapani

Director of Forest Services

Welcome, New Members!

September

Korneel Bouman
Ed Ostapczuk
Donna Calavecchio
Marylyn Donahue
Evelyn Zornoza
David Sherman
Jolene Adams
Renee Zalles
Peter Griffin
Michael Allen
Robert Axelrod
Kim Makins
Staci Pierson
Deb Myers
O'Brien Family
Brian Hehir
Craig Colfelt
John Hagan
Kylan Hoover

October

Carmine Faro
Joe Steketee
Gary Gardner
Naja Zarzour
Solveig Harden
Joshua Brown
Timothy Ryan
Toby Gardner
Eileen Counihan
James Donowick
Carolynn Ward
Tim Sessler
Justin Waldstein
Jonathan Kowalczyk

November

Karen London
Ellis Tobin
Valerie Levine
Graham Brooks
Paul Nute
Thomas Sawyer

President's Message

By Mike Porter

Merry Christmas and Happy Holidays, no matter what you celebrate, I want to wish you all the best. The 2017 year brought tremendous growth to CFA and hopes are that 2018 will show similar growth. Each year for the last few, we have created new offerings in programs and events. We are looking forward to upgrades in our event calendar as some topics have showed a need for change recently.

Co-sponsored events displaying the economic side of our forests will be developed to be informative and inspirational.

Joining forces with NYFOA (New York Forest Owners Association) we will be able to share resources and expand the reach of both organizations. Ideas are being "tossed around" where CFA will sponsor an event or events with locally, lesser known, organizations on the fringes of our 6-county service area.

Goals for these events will be to expand interest in CFA and the other organizations that would be involved. The more CFA is the leader or, even, an invited participant at events the more exposure we will get. With CFA's emphasis on education and being able to carry out plans developed through the consultation program at members' property, more members may choose to participate in our new and existing programs.

All of these new events are strictly in the early stages of planning but you should stay tuned for further information. Also, I encourage you to participate in these events to give CFA good representation.

Have a great Holiday season.

Mike Porter, CFA President

Welcome, Nick Masucci

CFA's Newest Forest Program Technician

Hello, my name is Nick Masucci. I will be working with the CFA this upcoming season as a Forest Program Technician. With this position I will assist the CFA team with on-site consultations, mapping, forestry for wildlife, and other various projects.

I come from a small town called Treadwell, located in Delaware County NY, where I discovered a passion for the outdoors at an early age hunting and fishing with friends.

During this early age, I knew I wanted to find a career where I would be working to better manage our local forests and wildlife populations. From this passion I decided to further my education after high school and enrolled with Paul Smith's College, where I received a degree in Fisheries and Wildlife Sciences.

At Paul Smith's, I was able to learn valuable information regarding modern day forest and wildlife management practices. With these new skills, I am now prepared to enter a field where I can better manage our region's natural resources for generations to come.

I am excited to accept this amazing opportunity with such a fantastic organization as the CFA. It is truly amazing to find an organization that cares for and shares a passion for our local forests as much as I do. I hope to bring the knowledge and skills I have learned to aid the CFA and its members in the best way possible.

Cover:

Breathtaking winter views atop the Balsam Lake Fire Tower, Ulster County.

The Growing Deer Debate

By Donna Deeprose

Most local residents are only too familiar with the problem: the movement of deer from our forests into our backyards, vegetable gardens, and flower beds. Ryan Trapani, Director of Forest Services for the Catskill Forest Association, put the issue into historical context when he spoke at a recent program sponsored by the Town of Lloyd Historical Preservation Society (TOLHPS) in Highland, Ulster County.

Trapani described both the history of the problem and the current search for a solution, which he termed the "deer debate," between those who want to reduce the deer population and those who seek to manage the deer habitat and lure the animals back into the woods. He presented the pros and cons of both sides of the argument. Trapani's speaking style – amusing his listeners by reading the minds of the deer as well as the humans (and sometimes the trees), – frequently made it seem as if the best solution would be a deal between humans and deer.

Humans to deer: You are beautiful, and we like to see you and hunt you, but you must stay out of our gardens. Deer to humans: If you want us to stay out of your neighborhoods, we need forests with plants we can eat instead of just tall shade trees with only bad-tasting ferns growing below.

From the forest's point of view, the success of the deal requires maintaining healthy, diverse woodlands. Trapani stressed that the most significant impacts on forests today come from humans and deer.

From Forests to Farms and Back Again

For centuries, the deal between humans and deer was managed by fire – some purposeful and some probably accidental. Native Americans, Trapani said, managed diversity in the forest by periodic burning. They created "a pyrogenic landscape with a fruitful legacy." After each burning, the forests grew back, with young oak, hickory, chestnut, walnut, and several berry bushes, providing abundant food for deer. In turn, the deer provided food, tools, and leather for the humans. The arrival of European settlers destroyed the cycle, as they cleared the land. Whether for pasture or, more recently, for parking lots, they didn't want the trees to grow back. While the deer were a significant source of meat for early settlers, the newcomers were really managing the land for domestic livestock or crops. "Ask a corn farmer how he feels about deer," Trapani suggested. "Wildlife is not desired. Deer are just a nuisance."

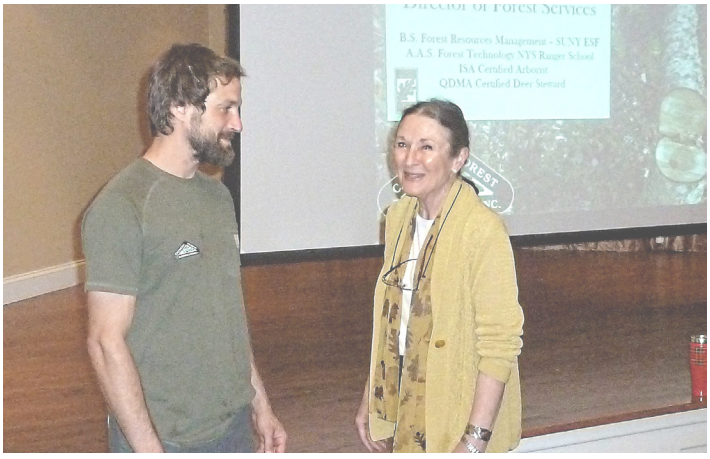
Thousands of sawmills spread across the northeast, and industry peaked in the late 19th century. With the disappearance of their habitat the deer left too, except from areas with the worst farmland, high up in the Catskills and the

Then the landscape changed again, as farms were abandoned in the late 19th and early 20th centuries. Trapani, who grew up in New Paltz and has family in Highland, continued the story with a personal note. "My grandfather, who was born in 1921, never hunted for deer. There were no deer. My father hunted rabbit." But by the 1970's, he said, "The young forest was coming back like crazy," and when Trapani began hunting in the 1990's, the deer were back too.

But the story doesn't end there. Unlike post-burn forests in the earlier centuries, these new forests didn't begin with a variety of seeds burst open by fire. There was less diversity, and as the trees grew taller, the understory was too shaded to survive except for the carpet of fern in nearby forests today.

That's good if you are a hemlock, says Trapani, "You think, 'I can sit in the shade for 100 years.' But if you are a deer, you think, 'We ate everything here already.'"

Who is to blame? Trapani made clear that people are, to a large degree, because land clearing for agriculture and eventually abandoning the farms is not good forest management. Deer themselves are also partly responsible. The Nature Conservancy, Trapani reported, has labeled deer browsing worse for our forests than global warming. By the time deer have eaten everything palatable in the young forests, there's little left but a high tree cap blocking out sunlight, with only shade-resistant plants like ferns below. As Trapani pointed out, it's fine habitat for black bears, but deer don't have stepladders to climb up into the high branches.



Speaker Ryan Trapani chats with Town of Lloyd Historical Preservation Society Vice President Vivian Wadlin, at the Society's recent program, held at Vineyard Commons in Highland.

"My kids will probably be bear hunters," Trapani said. "There's less deer for hunters."

Statistically, deer population peaked a few decades ago, but those that remain have discovered a new habitat – ours. There is plenty of sunlight to nurture young, nourishing vegetation. "When you see a deer by the side of the road, it's not there to see what the new Nissan Pathfinder looks like," Trapani quipped. It's there to find food. Deer, he said, like everything we like. Imagining a deer's thoughts, Trapani exclaimed: "Look, some people even plant gardens without a fence!"

"So what do we do?" Trapani asked. It comes back to the same two choices: reduce the deer population or manage the habitat. But he added a caveat. It's not about the number of deer, he explained, but instead it's the number of deer for the quality of the habitat. "There used to be more deer, but less impact," he stated. The deer population in the Catskills peaked 30-40 years ago, he said, and in Highland 5-15 years ago. Reduced numbers haven't brought about reduced impact.

The Solution: Messy Forests

Trapani recommended making a mess in the woods – but doing so in a very specific way, by cutting trees and leaving them on the ground. Best of all are hinge cuts – cuts made several feet up with the upper part of the tree still connected but bending right down to the ground. The cut trees provide food for wildlife for two to five years, and seedlings start to come up. They also provide safe coverage for small animals. Are deer bothered by the cutting? "Nope," said Trapani. "They move right in. It's a good sign when you see does and fawns moving in."

Reducing the deer population also has its advocates, but it is more controversial. In our own backyards we have some success with commercial deer repellents, and we build fences. On a large scale, humans have tried contraception, but it is expensive, costing $500-$1,500 per doe and must be redone periodically. Surgical sterilization is also costly.

So far, the most successful method has been depending upon recreational hunters. But it's expensive, and the typical hunter's meat-to-table costs about $45 per pound. Professional sharpshooting costs about $200-$400 per deer plus $70-$125 for processing. Then the meat gets donated to food banks because it is illegal to sell wild meat. "You can sell a gall bladder from a bear but not meat from wild deer," noted Trapani. Ownership rights also present an issue. The deer are owned by the government, but live primarily on private land. There's something to be said, Trapani maintained, for compensating hunters for their time and incentivizing landowners for managing their deer habitat.

He concluded by reminding listeners that deer are not pests. They just need to be reconnected to our woodlands. "If your woods have only fern and red maples, you need a mess," he reaffirmed.

Golden Eagles of the Eastern United States

By Mike Porter

Not many easterners are aware of the population of Golden Eagles (GOEA) that visit our environs on a regular basis. There is an eastern "race" of the circumpolar species that ranges from the eastern provinces of Canada, where they breed and spend the summer months, to southward along the spine of the Appalachians as far as Georgia and the Carolinas where they over-winter. The eastern "race" varies only slightly from its other worldly counterparts in that it hunts open fields and roosts in hemlock forests.

GOEAs are true eagles while our National symbol, the Bald Eagles (BAEA) are actually sea eagles. The GOEAs are essentially predators of mammals and birds (especially Wild Turkeys). They too have a penchant for easily obtainable meat found in carrion on their wintering grounds. Our BAEA is almost exclusively found living near bodies of water where it hunts for its preferred prey, fish. Though they are opportunistic in nature, they will take whatever prey is available as well as carrion.

It is GOEA's penchant for carrion that lends itself to study by a group of people all along the wintering flyways and feeding grounds. West Virginia University is leading a study to learn more about the eastern "race" by setting up camera trapping sites, often leading to actual cannon-net trapping where birds are fitted with "cell phone transmitters" to allow for tracking the bird's movements throughout their lives.

A typical trap site is located in a small clearing, usually an acre or two, with good perch trees around it. Rather than an easily attainable location, the site is chosen at a remote high elevation to attract GOEAs as they hunt ridges and other high elevation haunts. The trap sites also attract many BAEAs and Common Ravens, as their scavenging tendencies make deer-baited sites attractive. It is actually believed that the ruckus created by feeding ravens serves as an attraction to the GOEAs.

Volunteers locate, set up and maintain trap sites from just after deer hunting season until about March 1. Most valuable data is collected in January and February when migration has ceased and over-wintering has commenced. Data collected later usually involves north bound migrants. The transmitters placed on the eagles begin sending location information immediately via cell phone service. Maps of individual GOEA movements are produced monthly that show over-wintering movements and timing and routes to the breeding grounds in Canada. Once in Canada, the transmitter continues to register movements on the breeding grounds and uploads the data upon return to the U.S. cell service.

Trap site maintenance involves sometimes daily visits to the remote sites to re-supply the bait, which consists of road-killed deer, and replace the camera card to be analyzed. One busy trap site can lead to the consumption of up to 60 road kill deer per winter season. GOEA, BAEA and Ravens consume most of the meat. At night coyotes and foxes, along with occasional bobcats, fishers and a rare black bear are the clean up crews. These animals, especially the coyotes, remove all signs of the carcasses, helping the volunteers with site maintenance.

Up to 50 ravens and as many as 10 BAEAs have been seen feeding together at a site. The GOEAs, on the other hand, are much less populous but still are found in surprising numbers for us easterners. One trap site here in the Margaretville area has had three GOEAs showing up at one time. Analysis of the photos showed that there were, conceivably, 10 - 15, and maybe more, different GOEA showing up throughout the winter. In one recent season, four different individuals were trapped and tagged with transmitters.

At the time of capture, exacting measurements are taken including blood and feather analysis. These are analyzed for genetic makeup and chemical presence in the blood. The exact size measurements can be used to do comparisons of the bird if it is captured again. Typically, as with most raptors, females are larger than males. A large female may weigh as much as 14 pounds. A normal male about 9-10 pounds. Transmitter information will be used to map migration routes, breeding grounds and wintering grounds. This data will increase the level of understanding about a species that is little known in the east.

The Franklin Mt. Hawkwatch site has regularly been reporting high numbers of GOEAs passing by as winter approaches. The numbers have been high enough to draw the interest of researchers mapping migration routes. Information gleaned from this route research may become valuable in scientifically choosing wind farm locations along the eastern ridges. Ideally knowing the bird population densities and timing of migration, as well as wintering territories can lead to intelligent location of the large wind structures to avoid bird fatalities, a large problem in the west where an estimated 8,000 GOEAs are killed each year by collision with windmill blades.

The eastern population is estimated at 5,000 individuals so they are “spread thin” over the wintering range. Any interactions with windmill blades could, percentage wise, decimate the population.

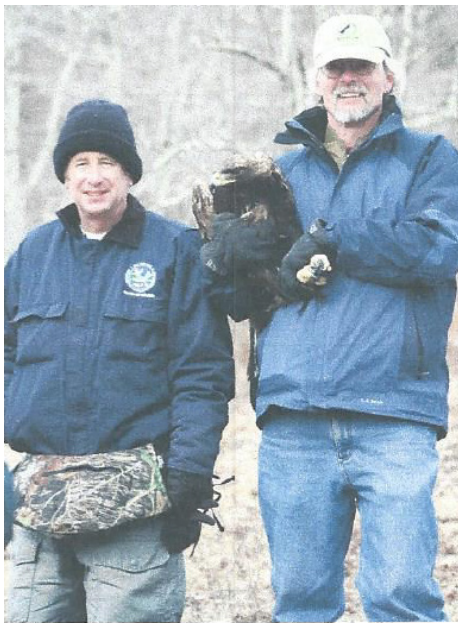
As it is becoming increasingly evident, our Catskill Mountain forests are an important environment for these relatively rare eastern GOEAs. As secretive and elusive as they are in their winter habitat, it is critical to our understanding that the research be as thorough and accurate as possible.

Knowledge of their habits is important to their safety and well-being. Though all the knowledge gained will most likely not cause a population increase, our data collection will make the GOEA a better-understood member of our ecological community.

For more information and additional resources, email cfa@catskillforest.org.

A Golden Eagle is tagged with a transmitter in order to map igration routes, breeding grounds and wintering grounds.

Striking tail markings displayed by a typical young Golden Eagle.



Retired NYSDEC Biologist Scott Van Arsdale (left) and Hawkwatch Co-Chairman and Golden Eagle Research Coordinator Tom Salo (left).

Improving Habitat for Rare and Declining Species in Your Forest

By Elizabeth Marks
Biologist with the USDA Natural Resources Conservation Service

Over the past 100 years, there has been a dramatic decrease in the amount of shrubland in New York. Human development, decline in farming, maturing forests, fewer large beaver impoundments, and wildfire suppression have all led to a decline in shrublands and the many wildlife species that depend on them. For some species of wildlife, such as the American Woodcock, Whip-poor-will, Ruffed Grouse, Golden-winged Warbler, and many other song birds, shrublands provide necessary cover to escape predators and raise young. These shrubs and young trees also provide an abundance of berries and fruit that are eaten by many birds and mammals. Game species such as deer and turkey need shrubland habitat too.

Shrubland habitat is characterized by the dense growth of shrubs, young trees, grasses and herbs. As trees grow, they shade out grasses, wild flowers and shrubs. One way to create shrubland habitat is to cut trees and remove the canopy cover to allow sunlight to reach the forest floor. This encourages the growth of young trees and shrubs such as raspberry, dogwoods, winterberry, and viburnums. Flowering shrubs and trees are also an excellent early season food source for pollinators.

The United States Department of Agriculture Natural Resources Conservation Service works with private landowners, farms, businesses and non-profit organizations to improve wildlife habitat on private lands and can help fund shrubland habitat creation.

How to Apply:

Contact your local NRCS office and fill out an Environmental Quality Incentive Program (EQIP) application. NRCS has additional funding for shrubland projects through a Regional Conservation Partnership Program Young Forest Initiative. You will also need to register with the Farm Service Agency (FSA and NRCS are often in the same office). Applications are accepted year-round. Once you've applied, an NRCS staff person will come out and walk the land with you and discuss your goals. Applications will be planned and ranked. If funded, NRCS will develop a plan and you will enter into a contract. You can hire anyone you wish to do the work or do it yourself. Herbicide must be applied by either the landowner or a certified pesticide applicator.

A Typical Project:

Trees are cut with chainsaw and left on the ground where they fall to mimic a natural blowdown. Most cuts happen in the winter to avoid impacting nesting birds and roosting bats. About 10 nut and fruit trees, such as oaks, apples, cherries, and hickory nut trees are retained per acre. These high wildlife value trees become seed sources for new growth. Five snags are created or retained. Snags (standing dead trees) provide a wealth of food and habitat. They directly support 35 bird species 35 bird species who nest in cavities (i.e. wood ducks) or eat insects in the tree (i.e. woodpeckers). Snags also provide essential habitat requirements for cavity-using amphibians, reptiles and mammals. Stands of aspen (Quaking and Big-toothed) are targeted since they regenerate quickly through stolons. Hinge cutting can also help provide quick shrubland habitat.

If a property has invasive or interfering vegetation such as Japanese barberry, multi-flora rose, honeysuckle, autumn olive, burning bush, Japanese stilt grass or hay scented fern, it is recommended to eliminate these species with herbicide prior to cutting the overstory. Invasive vegetation can crowd out native vegetation. Average project size ranges from 5-15 acres. For more information, please contact your local NRCS office:

Kathleen Capella: (Ulster Co.) 845-883-7162 X 6079

Tony Capraro: (Delaware, Sullivan, and Otsego Counties) 607-547-8337 Ext. 3

Jim Unser: (Greene Co.) 518-267-3312

Tom Lacko: (Schoharie Co.) 518-295-8600 x3

Information source: USDA NRCS and the New York Habitat Stewardship brochure on shrublands produced by Cornell Cooperative Extension.

Cuts are done in a way to mimic blowdowns, a natural process that creates shrubland habitat. Leaving trees where they fall protects regenerating shrubs and saplings from deer browse.

Member Spotlight

Pia Davis

I always thought grants were something other people got. They were for people who had taken grant-writing workshops, could hire a professional grant writer, or simply had enough time and motivation to construct a grant proposal. But last year I received a grant to do the work in my forest that I'd wanted to do for more than twenty years, but didn't have the money to carry out.

My love of nature and wildlife, particularly birds, led me to information about how our forests – the forests of the entire northeast portion of the U.S. – are in an unhealthy state. This is due to the imbalance of the three layers comprising a healthy forest: the canopy, the mid-story, and the understory. Why does a forest need these layers, and how does cutting down trees improve them?

When a forest has only canopy (like nearly all the forest in this region) there is no place for wildlife to carry out the business of their lives. Many birds, for example, can't nest in treetops as they are programmed to nest nearer the ground, in the shrub layer. Even birds who nest in the taller trees still need the shrub layer for the food that it produces.

The three layers are also important for other wildlife. A dense shrub layer provides protection from predators. An open canopy allows oaks and other nut trees to flourish and produce the food so many of our wildlife species depend on. The disappearance of this habitat – healthy habitat – is one of the major reasons for the alarming and tragic decline of almost all our summer migrant songbirds.

I was reading an article on the American Bird Conservancy website about a hunting club in Pennsylvania that had gotten a grant to improve their forest for the benefit of Golden Winged Warblers. It was the same work I wanted to do in our forest, as it improves habitat for other birds, like Woodcock. Woodcock is one of my top three favorite birds, and one that did not come this year for the first time in twenty years. They depend on trees and shrubs that require full sunlight and open canopies that only come from disturbance to forests, which has been drastically reduced by fire suppression and the reluctance to fell trees.

The club had gotten a government grant through the Natural Resources Conservation Service (NRCS) a sub-department of the USDA. At first I was skeptical; yes, they'd gotten a grant, but they were an entire club and had lots of people to work on it. I decided to do some research on the USDA website anyway.

The site clearly lays out the steps and forms to apply for the funding, provided through a program called EQUIP (Environmental Quality Incentives Program) and administered by the NRCS. You need to get a farm tract number by registering your parcel, and if you don't already have it, you can get one from USDA's Farm Service Agency.

Cutting aspen (shown here) can help jump start shrubland habitat. Photo shows growth after 1 growing season.

The first step is to visit your local NRCS field office. I live in Ulster County, and I am very fortunate that this put me in touch with Kathy Capella, our District Conservationist. She walked me through everything, and this would be my recommendation to anyone contemplating this process: get the help of the person who understands it all.

I started my correspondence with Kathy, emailing her about the article I'd read and that I wanted to do the same kind of work. She asked for the property address, confirmed there were programs available, and said she would like to come out with a biologist from the NRCS to look at the property. She asked if I had a Forest Management Plan (for thinning, clear cuts, and selective cut recommendations) or a Forest Stewardship plan (a forest management plan that also takes additional resources like water, soil, and wildlife into account).

I did, but was in the process of getting another, as I wanted to somehow make money from timber harvesting so I could pay for the wildlife improvements I wanted to make.

Like everyone else, I have too much going on and lost my drive on the project. It was a year later until I wrote to Kathy again. She responded the next day suggesting a date two weeks later for the site visit from her and the biologist from NRCS. I couldn't believe it. Two weeks later, Kathy and Elizabeth came to my property and we walked around. Afterwards, we sat down and they told me I could apply for a grant to do the work I'd always wanted to do. I had tears in my eyes, literally.

From that point on, Kathy walked me through the process of applying. It wasn't bad at all. She knows absolutely everything.

It came with applications and contracts, and looking back I can say it was new to me and in that way, new material I had to learn. Totally worth it in this case, and it wasn't all that difficult. I was going to "manage for wildlife". Yes!!!

Things were rolling along. Until I encountered one last, formidable obstacle: my husband.

My husband didn't pay a lot of attention to my ongoing whining about transforming our forest, as for 20 years, nothing had come of it. But suddenly the drone of dueling chainsaws was an imminent reality, and he started paying attention, amounting to him objecting the entire project. He was not at all in favor of cutting down trees and leaving them there in a total mess. I'm guessing 99% of people would feel the same way. He also didn't want to look out his window at that kind of view. "Anyway, forests should be dark," he said (too many 'Grimm's Fairy Tales' as a child), "and I want to be able to walk through it."

I agree, forests can be dark in some parts, but light in others. As the two wildlife biologists (Elizabeth, and John from CFA) pointed out, soon the deer will make paths through the cut, and we can walk on those. Meanwhile, in truth, we didn't walk there that much anyway, and there is no shortage of other places in the woods to walk.

I later received an alarming email from my forester, Chris. He explained that while he liked the recommendations for the project, he was also concerned: in his experience, most people doing forestry for the first time are shocked by the mess of such a heavy cut and the aggressiveness of it all.

Clear-cut aftermath: An area that was 'aggressively' cut, 3-4 years before.

I told Elizabeth of our worries. She acknowledged that heavy density clearing can be quite 'shocking', and that it can be upsetting to see the trees cut. But, this was found to be necessary to create a shrubland habitat, explaining it will take at 3-4 years before things start to regrow and thicken up.

Elizabeth attached a photo (see above) of what a clear cut – more dramatic than my cut – would be after three growing seasons. The area is now full of goldenrod, raspberry bushes, small trees (mainly growing as suckers from stumps) shrubs that are 1-2 ft. tall, and aspen.

That photo looks pretty good to me! Wouldn't it be nice to have a spot like that up in the woods?

Finally came the issue of finding someone to do the cut. But then I remembered: hadn't I read something about CFA doing some cutting? That possibility was obviously too good to be true. It turned out Ryan and John would do the work through CFA's Forestry For Wildlife Program. Any remaining anxieties I'd had up until that point melted away.

When Ryan and John started the cut, they hinged-cut many of the trees instead of just cutting them down. Hinge-cutting doesn't cut the tree all the way through the trunk, but lays it on the ground, allowing it to stay alive for another three or four years.

This is advantageous as it provides shelter and a lot of food for deer. It also gives those little oak saplings a chance to grow before the deer get to them, keeping the area greener while the new shrub layer grows.

They also left snags (dead trees, providing nest cavities and insects for birds to eat) and nut trees (for food and for creating new stock) that are going to be so happy to have more light! They also put up a barred owl box and a screech owl box, and mounted my trail camera.

When they were done, after three (non-consecutive) days of cutting, Elizabeth came out and certified the cut. There was no detriment to our view. My husband relaxed.

Now it's "post-cutting-blues"! I'm laughing today as I'm writing this. I am so happy with my cut, I can barely articulate it.

I sit around reviewing my trail camera footage: the bobcat, raccoons, bucks and does, the bear, a fox, and mice. With all the less healthy forest around me, it would probably be good to clear our entire property in this way.

And I've already applied for next year, to cut another six acres.

Bobcat footage captured on Pia's property in November this year.

Coyotes and Bark Beetles

By Ryan Trapani

Last year found me visiting a member's property in Sullivan County. The member had already lived there for many decades and noticed fewer deer. He's an avid hunter and wanted to do something to reverse this trend. Before arriving, I spoke to him over the phone. "It's the coyotes," he said. "They're eating all the deer; I hear them all the time back there."

We walked around his forest for a while and it became evident to me that coyotes weren't the root cause to his general deer decline. Instead, I pointed to a shrub as an example; it was withering beneath the shady forest. There were dozens of these withering plants; some still alive, some already leafless skeletons. These undernourished shrubs were highbush blueberry. Once upon a time, they pioneered a freshly abandoned pasture some 40 or 50 years ago.

I asked the member how the hunting was back then. "It was a lot better." The underlying statement – that "the hunting used to be better" – is becoming more common throughout these mountains. In navigating backwards 40 to 50 years, we find not only that disco music was in vogue but more deer, despite more deer hunters then too. What happened between now and then? Did the deer and deer hunters leave our woods for polyester pastures beneath strobe lights?

Some Things Don't Age with Maturity

The massive farm abandonment that occurred 40 – 50 years ago accidentally produced abundant new growth that filled in the blank spaces that were once pastures; there was plenty of food "within reach" for the white-tailed deer. Not only was there more food, but more cover as well.

It was supposedly more common for does to give birth to 2 or 3 fawns who could more easily seek cover for their newborns in shrubby growth or a stand of tree seedlings. Following this resurgence was a wave of deer hunters that filled our hollows and mountain-sides throughout the 1970s and 1980s.

In 2017, the forest has since matured. The once flowering and fruiting blueberry bush is now overtopped by small-sawtimber sized maple trees. Many of those hunting camps have now either been mostly converted to mouse-infested palaces or luxurious summer homes. Mountain hollows today are more absent the hunter's footprints in pursuit of deer. Most of the old hunters' camps I find in the middle of the woods contain "ancient" beer cans with "prehistoric" drinking holes from the 70s or 80s; their fires have long grown cold and moss now covers the fire-ring. That doe that once dropped 2 or 3 fawns/year, now drops 1, and there are fewer areas with young growth to serve as cover from predators. Today, there are more deer in the bigger valleys encompassing these mountains where a diversity of forest ages exists.

Simultaneously, coyotes too have moved into the area; bears as well. According to the Quality Deer Management Association, bear predation can be most significant on fawns. Well, anecdotally, deer numbers are also decreasing in areas where few bears exist too, perhaps insinuating another cause. SUNY College of Environmental Science & Forestry claims that most coyotes are scavenged upon, not predated. "Their study tracked coyotes with GPS collars, researchers located 62 deer carcasses visited by coyotes. Cause of death was determined in 39 of the carcasses: 36 were scavenged, and only 3 were killed by coyotes."

Blaming Symptoms Not Causes

It's easy to blame coyotes (or bears). You see a deer being chewed up by one of these animals and the perpetrator has been identified. A few coyotes yipping in the middle of the night also gains our attention easily, especially as it echoes throughout the mountain on a still dark night. But, perhaps the real "perpetrator" or cause for deer decline is something far subtler; something that takes place over decades; like habitat. A mature forest offering less food and cover simply can't produce as many deer. Similarly, reducing pasturage or feed to a standing herd of cows will eventually lead to fewer in the future regardless of predation.

Perhaps blaming coyotes for fewer deer is like blaming bark beetles for killing trees. Barring emerald ash borer, few borers kill trees; instead they normally finish them off. Initially, it's almost always a variety of predisposing or contributing factors that began the tree's "spiral of decline": poor drainage, planted inappropriately, too much shade, root compaction, too dry, etc. Perhaps coyotes – like bark beetles to trees – simply hone in on those deer that are already unhealthy or at risk to predation due to habitat restraints. Maybe instead of cutting down more coyotes to save deer, we could invest more long-term by cutting the right trees in the right places to better habitat and reduce forest impacts from starving deer.

As for saving your tree from bark beetles? If you got 'em, it's probably too late.

Hickories

By Mike Kudish

Reintroduction to Mike Kudish

On December 7, 2007 then CFA Director Jim Waters asked me if I would like to write articles on forest ecology and forest history for the CFA News. I agreed without hesitation. In the winter issue 2007-2008, volume 26, number 1, I introduced myself to CFA members in my first article. The series was at first called "Mike's Corner". But a decade has passed and there are many new members who have joined the CFA. Perhaps some new members might want to know who is writing these articles – articles that present a proliferation of new discoveries -some controversial - about Catskill forests made only in the last five, ten, or fifteen years. The following article on hickories is the 32nd.

I graduated from the New York State College of Forestry at Syracuse (now ESF) with Vegetational History of the Catskill High Peaks as a doctoral thesis. This thesis was not the end of a study but rather the beginning of a life-long inquiry. I then accepted a position at Paul Smith's College in the Adirondacks, teaching a variety of forestry courses, for 34 years. During that time, I would come to the Catskills annually for a month or two to continue mapping forest history, applying what I learned in the Adirondacks to what I saw here, and vice versa. I "retired" from teaching in 2005 and moved to the Catskills where I could continue full time attempting to reconstruct the development of forests over the last 15000 years.

Hickories

I have written before that most CFA members have little difficulty in identifying trees, but some members may not be aware of the distribution of native Catskills species that do not occur commonly throughout the region. Good examples are the hickories. We have three species:

Carya ovata. Shagbark hickory.
Carya glabra. Pignut hickory.
Carya cordiformis. Bitternut hickory (called by some confusingly also pignut).

A LITTLE ON IDENTIFICATION

Shagbark and pignut are very close cousins. They both have five or seven leaflets per leaf. Both have plump terminal buds, almost as wide as long, with scales often of two different colors – dark brown and silvery-gray.

To separate them, shagbark has rough, shaggy bark at maturity while pignut has bark with low slender ridges, more like white ash. Shagbark has larger edible nuts, while pignut has smaller nuts which most people find inedible.

Bitternut is more distantly related to the other two, and as a result has some major differences. There are 7 or 9 leaflets per leaf, these leaflets often much narrower than those of its cousins. Terminal buds are slender, a few times longer than wide, and bright sulfur yellow. The bark and nuts resemble those of pignut, not shagbark. Bitternut should not be confused with butternut, *Juglans cinerea*, which is a walnut, not a hickory.

A friend recently asked me about the controversy regarding pignut hickory and red hickory (*Carya ovalis*). I told him I know nothing about it. Apparently, some foresters think that our Catskills pignut is really red hickory. My reference books are divided on the subject. Some consider the two as separate species with very minor differences. Other books consider red hickory only a variety of pignut.

FURTHER READING

I have in my files three articles on shagbark that provide good background material on identification, ecology, and uses, plus fine illustrations:

Jim Waters in Kaastskill Life, volume 17, number 4, winter 2002, page 15.

Jim Waters in CFA News, volume 20, number 4, fall 2002, pages 8 and 9.

Ryan Trapani in Kaatskill Life, volume 27 number 1, spring 2012, pages 76 through 79.

I do not have articles specifically on pignut or bitternut.

DISTRIBUTION: WHERE ARE THEY?

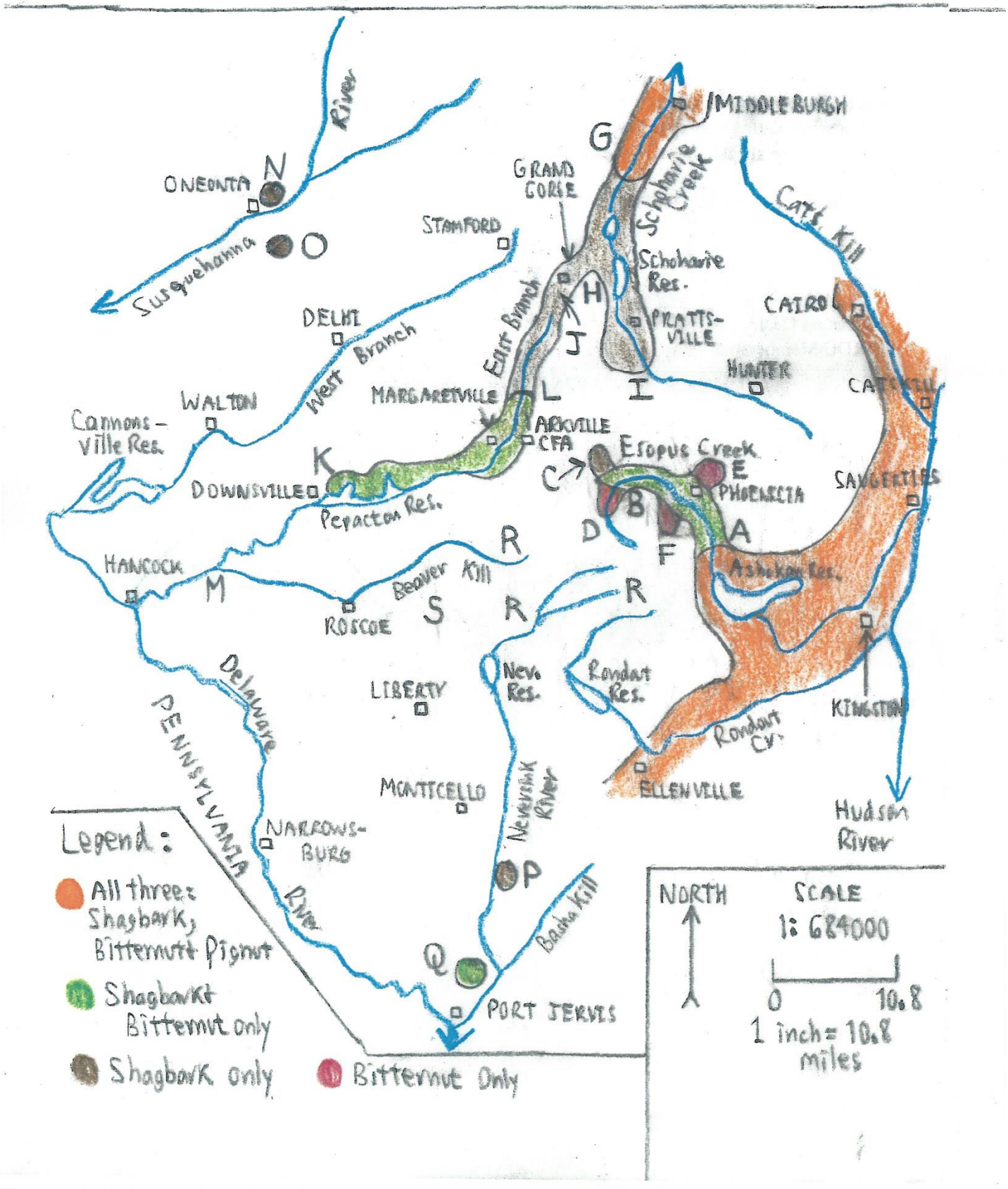
The distribution of hickories in the Catskills is not all that different from that of oaks, chestnut, and mountain laurel (see references below in the Ecology and History section). In the Catskills interior, hickories follow the main watercourses, most commonly on the flood plains and lower slopes adjacent to the flood plains. They can, however, also grow well on slopes up to several hundred feet above flood plains, but rarely attain elevations above about 2000 feet. Because this observer, even after a half-century of exploration in the Catskills, cannot map everywhere, CFA members will certainly fill in the gaps, finding hickories in places where I have not.

Esopus Valley -

All three hickory species are common in the Hudson Valley, base of the Catskills Escarpment, and around the Ashokan Reservoir Basin. Pignut has migrated up the Esopus Valley about as far as the Catskill Interpretive Center area in Mount Tremper (letter A on accompanying map). Shagbark and Bitternut both climb as far upstream as Big Indian (letter B on map), but here they split. Shagbark has found its way up Birch Creek, a tributary, to the base of Rochester Hollow (C). Bitternut has climbed up the main Esopus Valley almost as far as McKenley Hollow (D). Bitternut has also managed to travel up the Stony Clove Valley to Warner Creek (E), and

HICKORIES DISTRIBUTION IN THE CATSKILLS REGION

Michael Kudish for CFA News Winter 2017-2018



up Woodland Valley to the Pantherkill area (F).

Schoharie Valley -

All three hickories are found in the Schoharie Valley as far upstream as Max Shaul State Park (letter G on map). Here, pignut and bitternut appear to have stopped, but shagbark continued on much farther. At Gilboa (H), some of the shagbarks stayed in the Schoharie Valley and followed it upstream almost as far as Lexington (I). Other shagbarks headed southwest and crossed the two divides, one on either side of what is now the hamlet of Grand Gorge (J), and on down the East Branch Delaware Valley.

East Branch Delaware Valley -

Only the shagbark and bitternut occur in the East Branch. Their populations are spotty, here and there, not continuous. Shagbark has the wider distribution, from Grand Gorge (J) all the way down to Downsville (K). Bitternut begins just above Kelly Corners (L) and continues downstream also to Downsville. Between Downsville and the hamlet of East Branch (M), I have not yet found any hickories – probably a gap in their populations from those in the Delaware Valley far downstream.

Here's a thought on shagbark migration: Did the East Branch population march north toward Grand Gorge (J) from the lower Delaware, and over the two divides into the Schoharie? Or did shagbark march south FROM the Schoharie Valley, over the two divides, and into the East Branch? Or were there TWO populations, meeting at Grand Gorge with a great "crash"?

Outliers -

Well outside the Catskills region, there are locations where I have found hickories. These may be of interest to some CFA members. I have found shagbark on the hill just northeast of downtown Oneonta (N), and some along Ouleout Creek at North Franklin (O).

There is some shagbark at the Neversink Gorge in Sullivan County (P), and some shagbark with bitternut in the lower Neversink Valley around the hamlets of Godeffroy and Huguenot (Q).

Where hickories are absent -

Hickories are absent in the High Peaks, especially the Slide Mountain-Peekamoose-Balsam Lake Mountain region (R), all the way west to Mongaup Mountain (S). They are absent in High Peaks of Greene County, too, and in the Delaware County hills (except along the East Branch Delaware).

ECOLOGY AND HISTORY

The distribution of hickories is mainly dependent on where Native Americans had repeatedly burned areas for millennia. Because of the burning, the northern hardwoods (beech-sugar maple)-hemlock forest had been replaced by hickories, oaks, chestnut, and often mountain laurel. The latter take advantage of the increased sunlight resulting from the opening of the forest and sprout better after burns.

The clearing of land for pastures and crops by European farmers in more recent times, and the subsequent abandonment of these fields, has also helped hickory populations persist. Also, heavy logging for the wood products industry in the 19th century in some areas helped keep stands open and more conducive to the persistence of hickories.

On sites where there is hickory today, but no further opening of the forest because of burning or logging, the more shade-tolerant northern hardwoods-hemlock forest should eventually, in a century or two, replace the hickories – and any oaks, chestnut sprouts, and mountain laurel that may occur along with the hickories.

For those CFA members who would like to read more about the distribution of other burn species, please see the following issues of the CFA News:

"Shavertown Oaks", volume 32, combined numbers 3 and 4, summer-fall 2014, pages 5 through 9.

"American Chestnut Follows People", volume 34, number 2, spring 2016, pages 5 through 9.

"Mountain Laurel Thickets: An Alternative to Radiocarbon Dating?", volume 34, number 3, summer 2016, pages 5 through 7.

NEXT ISSUE – For the spring 2018 issue of CFA News, I'd like to write about a little-known and rare tree in the Catskills – black ash. It is susceptible to the emerald ash borer, but will the borer ever find it?

Winter Shagbark Hickory

Summer Shagbark Hickory

Hickory Nut

Programs & Services

FREE CONSULTATION

CFA will conduct a 1-hour visit at your property to make recommendations and help you develop your property management goals. Mileage fee included.

ON-SITE VISIT

CFA will conduct a 1-3 hour visit and walk your property with you, no matter the size. You will receive a comprehensive property report containing impartial advice and management suggestions. Drone use optional.

MAPPING PROGRAM

We use the latest GPS technology to create personalized, detailed maps of your property, highlighting unique features and showing points of interest like trails and boundary lines.

APPLE TREE PRUNING

Undermanaged trees make for poor crop yield. We provide pruning services for trees to make them healthier. Precision matters: we carefully develop the structure of the tree to support crop load, improve sunlight penetration, and increase air movement throughout the tree to make it healthier and yield better produce.

APPLE TREE GRAFTING

If you have an old, negelected apple tree on your property that doesn't produce tasty fruit, we can help bring it back to life through grafting. If you want multiple types of apples on the same tree, we can do that too!

TREE SAVER

Perhaps you have Eastern hemlock being devastated by Hemlock Woolly Adelgid, or Ash trees devastated by Emerald Ash Borer. These invasive species are rampant in the Catskill Region, and removing a large, diseased, hazardous tree near your home can cost anywhere from $1,000 to $3,000. Schedule a consultation to receive an on-site quote for economically feasible treatment options.

FOREST SAVER

Invasive plant species like multiflora rose, Japanese barberry, and European honeysuckle can cause damage and compete with other forest management goals: wildlife, timber, recreation, or any other purpose. Schedule today to prevent lasting, widespread damage throughout your forest.

FORESTRY FOR WILDLIFE

Learn how to make your forests more fruitful for wildlife. We specialize in small scale habitat management to attract (or detract) certain types of wildlife to your property. Learn more about which methods of increasing forest diversity will work best for you, and your land.

FORESTRY BIRD PROGRAM

Create a habitat for birds through High Nesting Bird Boxes and Canopy Bird Feeders, or just one or the other! High Nesting Bird Boxes: Birds such as owls, wood ducks, and American kestrels prefer to nest in cavities found high up in trees, overlooking fields, or near, or over water. We can put boxes wherever they need to go. Canopy Bird Feeders: Feeders are installed high in the tree canopy on a specialized feeder system, free from the threat of damange from unwelcome wild-life like squirrels and bears. Complete 3 programs to get the Bird Feeder free!

TRAIL CAMERA

Get cameras strategically placed to capture footage of wildlife on your property. Perfect for hunters wanting to understand local deer populations - we offer Trail-Camera Surveys to help you learn about deer density, sex ratio, buck age structure, fawn recruitment, and more.

TREE MARKING

Looking to profit from lumber on your land? Maybe you'd like to cut your own firewood. Either way - it's all about quality, not quanity of trees, so call us before you cut. We can help guide you in which trees to cut and which to leave behind.

CATSKILL FOREST ASSOCIATION, INC.

PO Box 336
Arkville, NY 12406

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I believe in enhancing the quality and productivity of woodlands in the Catskill Region through proper forest management. I am interested in joining the Catskill Forest Association, taking advantage of all it has to offer, and supporting its efforts.

Name: _____

Mailing Address: _____

_____

Property Address: _____

_____

Total Acres: _____ Forested Acres: _____ Pond Y / N Stream Y / N River Y / N

Phone #: _____ Email: _____

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(Select your membership level and if you'd like, make an additional donation):

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CONTRIBUTING – Same as Basic + 20% discount on CFA Programs + CFA Tote Bag	$150 + $_____
BUSINESS – Same as Basic + 10% discount on CFA Programs + Free Table at the Catskill Forest Festival, Email advertisement twice per year, CFA Website listing	$200 + $_____
SUSTAINING – Same as Basic + 30% discount on CFA Programs + Free On–Site Visit (only mileage will be charged) + CFA Backpack	$500 + $_____

Unrestricted gift for CFA's General Operating Fund	$ _____
Restricted Endowment Trust Fund (permanent fund from which CFA receives interest in perpetuity)	$ _____
Unrestricted gift for CFA's Scholarship Fund	$ _____

Please attach your check and mail to: Catskill Forest Association, Inc. PO Box 336, Arkville, NY 12406
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