The New York Forest Owner

A Publication of The New York Forest Owners Association

For people caring about New York's trees and forests

November/December 2012

Member Profile: Jerry Michael

Volume 50 Number 6

NEW YORK FOREST OWNERS ASSOCIATION
People Caring About NY's Trees and Forests
FOUNDED 1963
www.nyfoa.org

In This Issue . . .

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Forest Owner

A Publication of The New York Forest Owners Association

Volume 50, Number 6

The New York Forest Owner is a bi-monthly publication of The New York Forest Owners Association, PO Box 541, Lima, NY 14485. Materials submitted for publication should be sent to: ***Mary Beth Malmsheimer****, Editor, The New York Forest Owner, 134 Lincklaen Street, Cazenovia, New York 13035. Materials may also be e-mailed to mmalmshe@syr.edu. Articles, artwork and photos are invited and if requested, are returned after use.* ***The deadline for submission for the Januar/February issue is December 1, 2012.***

Please address all membership fees and change of address requests to PO Box 541, Lima, NY 14485. 1-800-836-3566. Cost of family membership/subscription is $35.

This publication is printed on Finch Opaque, Smooth, 70 lb. text paper. Located in the beautiful Adirondacks, Finch has long understood that the viability of our business relies on the wise use—and reuse—of resources. Finch papers are made with renewable energy, post-consumer recycled fiber and elemental chlorine-free pulps. In addition, Finch Paper was the first integrated paper mill in the US to received both the Forest Management and Chain of Custody certifications from the Forest Stewardship Council and the Sustainable Forestry Initiative.

www.nyfoa.org

Cover: Jerry Michael is surrounded by his daughter Melissa Lapadula, son-in-law Darren, and grandsons Jesse and Holden, all of whom live on the Michael farm and grow Christmas trees. For member profile see page 21. Photo courtesy of Jerry Michael.

From The President

At your NYFOA board of directors meeting in Binghamton in late September a number of initiatives were announced or advanced. **Carl Wiedemann**, a long-time NYFOA member and former board member working on our Policy and Legislative Affairs committee headed by **Frank Winkler** is championing a couple of initiatives. One is to develop, in concert with New York partner organizations, a voluntary *Private Land Forestry Code of Practices* which will document woodlot Best Management Practices with the goal of reversing decades of poor forestry practices and resultant inferior stands. Carl is also laying the groundwork for NYFOA's proactive stance in the Council of Forest Resource Organizations (NYFOA was a founding member) that has at the top of the list "Develop property tax and assessment legislation that is fair and equitable" with the goal of reducing property taxes for those woodlot owners who follow sustainable forestry practices. This will be discussed with legislators at the Forestry Awareness Day next spring but is only the first step in getting legislation passed with subsequent further action needed by our members across the state.

Jerry Michael, another long-time NYFOA member, presented an updated action plan for NYFOA's campaign addressing New York State's critical forest health problems. The action plan, which was adopted by the Board, is described in an article on page 12. One element of that action plan is our 'Restore New York Woodlands' (RNYW) event planned for next May. An article about this activity can be found on page 5. We are most grateful to key partners in this endeavor, the Master Forest Owners led by Cornell's **Gary Goff**.

Cornell's **Shorna Allred**, who coordinates the Member Profile section of this magazine, is working to develop articles in coming issues that will help illustrate some of the issues being addressed by RNYW but she needs your help…

*As many of you know, we include a member landowner profile in each issue of the **Forest Owner** magazine. The next several issues of the **Forest Owner**, especially in 2013, will be highlighting various aspects of forest regeneration or restoration. Do you have any experiences related to your efforts, successes, or failures with forest regeneration? If so, we would love to hear from you and any others that would be interested in being interviewed for the profile. If interested, please respond to https://www.surveymonkey.com/s/OwnerProfile and we will be in touch. The time commitment is only about 30 minutes for the interview. Even if you don't have any stories to tell about regeneration we are still interested in hearing from you if you would like to be profiled for the **Forest Owner**. Questions? Please contact me (607) 255-2149 or srb237@cornell.edu .*

Finally, it's time to start nominating NYFOA volunteers for chapter and state service awards as well as put out the call for volunteers to become state board members so we can have a full ballot in

continued on page 5

The mission of the New York Forest Owners Association (NYFOA) is to promote sustainable forestry practices and improved stewardship on privately owned woodlands in New York State. NYFOA is a not-for-profit group of people who care about NYS's trees and forests and are interested in the thoughtful management of private forests for the benefit of current and future generations.

Join!

NYFOA is a not-for-profit group promoting stewardship of private forests for the benefit of current and future generations. Through local chapters and statewide activities, NYFOA helps woodland owners to become responsible stewards and helps the interested public to appreciate the importance of New York's forests.

Join NYFOA today and begin to receive its many benefits including: six issues of ***The New York Forest Owner***, woodswalks, chapter meetings, and statewide meetings.

( ) I/We own _____acres of woodland.
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City: _____
State/ Zip: _____
Telephone: _____
Email: _____
County of Residence: _____
County of Woodlot: _____
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Restoring New York's Woodlands:
A NYFOA Initiative

KELLY SMALLIDGE

What's this?
Next spring NYFOA will kick off a new state-wide initiative called Restoring New York's Woodlands (RNYW). Between May 11-19, 2013, forest owners and kindred organizations are invited to host woodswalks with the express purpose of bringing the issue of forest health, specifically forest regeneration of NY's woodlands, to the public's awareness.

Background
The topic of forest regeneration in NYS was featured in this and the previous issue of the *Forest Owner*. Specifically, Jerry Michael's articles have highlighted some of the issues surrounding this topic and provide a balanced overview of the scope and significance of regeneration challenges in NYS, and of practical solutions to address the problem(s) associated with regeneration. Those articles have been the result of careful research and analysis and provide the foundation for the RNYW Initiative. I encourage you to review the previous issue, in preparation for this and for future issues.

How can you help?
If you are a seasoned woodswalk host/hostess you may want to host a woodswalk on your property. If you want to support this initiative, yet you don't feel comfortable hosting a woodswalk, then consider reaching out to NYFOA's partners, Cornell Cooperative Extension and the Master Forest Owner volunteer(s), in your "neighborhood." Actually, there are many kindred organizations that may be willing to organize a woodswalk on your property and/or help you organize a woodswalk on a mutually agreed upon location, other than your property. In any case the RNYW committee is happy to help you make connections with other organizations that can help you. You may contact the RNYWs committee at *restoringnewyorkswoodlands@gmail.com* or call Kelly at (607) 589-7530.

Ready to make a commitment?
If you are ready to make a commitment, then let us know the date(s), time(s), name of host(s) and who may be contacted for more information. The RNYW committee will add your information to the website and will post your woodswalk on the dedicated Face Book page. Send a note to *restoringnewyorkswoodlands@gmail.com* or call Kelly at 607 589 7530.

If not this year…
Try to attend a woodswalk next spring and consider taking an active role next year.

Spread the word about RNYW
Meanwhile, encourage your friends, family, neighbors, elected officials, and NYFOA's kindred organizations to host, help organize, or attend a woodswalk in your area in May 2013.

From the President (continued)

our January/February issue. For state nominees, please contact **Ron Pedersen**, **Mike Seager**, or **Peter Smallidge** via the contact information on the inside front cover.

The newly updated Officers page on our web site (www.nyfoa.org/about_nyfoa/officers) gives more background on the individuals highlighted here. Also, a *reminder*, save the date for our annual statewide member meeting in Syracuse March 23, 2013. A full program of the day's events will be in the next issue.

–Jim Minor
NYFOA President

NYFOA STORE

Show your support for the Association! All items display the NYFOA logo.

1. Sweatshirt.....$20.00
   Green M, L, XL
   Grey M, L, XL

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All shirts are heavy weight cotton with white lettering on the green and green lettering on the grey.

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Ask A Professional

Paul D. Curtis, Gary R. Goff, and Jason R. Boulanger

Landowner questions are addressed by foresters and other natural resources professionals. Landowners should be careful when interpreting answers and applying this general advice to their property because landowner objectives and property conditions will affect specific management options. When in doubt, check with your regional DEC office or other service providers. Landowners are also encouraged to be active participants in Cornell Cooperative Extension and NYFOA programs to gain additional, often site-specific, answers to questions. To submit a question, email to Peter Smallidge at pjs23@cornell.edu with an explicit mention of "Ask a Professional." Additional reading on various topics is available at www.forestconnect.info

Regenerating Your Forest: Keys to Success

Editor's note: This article is one of many supporting the on-going theme in NYFOA related to the regeneration of forests.

Have you ever wondered what it takes to regenerate your forest? You have just completed a timber harvest and now you are ready to regenerate. All you have to do is let nature take its course, or plant some seedlings to help things along. What could be easier? However, some NY forest owners have discovered that forest regeneration is not so simple.

Understanding barriers to forest regeneration is valuable because owners and managers can adjust their management practices to offset the dominant barriers for a particular stand or site. Focusing attention on those barriers most limiting to seedling growth will improve the likelihood of successful regeneration and contribute to the goal of sustainable woodlands in New York. The key to successful tree regeneration depends on three critical components: (1) appropriate silvicultural applications, (2) removal of competing vegetation, and (3) protecting young seedlings from deer herbivory (browsing). Each of these management actions are interrelated, thus if any one of these components is ignored, the likelihood of successful hardwood regeneration is poor in much of the state.

Appropriate Silvicultural Applications

Regeneration of valuable timber species requires favorable site and forest conditions to establish seedlings. Owners can expect very little regeneration until the canopy is opened sufficiently to provide light on the forest floor to stimulate new plant growth. First, there must be either adequately dense numbers of desirable seedlings already established on the forest floor, ready to shoot up after opening of the canopy, or there must be an adequate and timely source of seeds that will provide the source of new seedlings. Some species will propagate from stump or root suckers, but for many species and stems these are subject to poor form and less desirable than seedlings. Various harvest regimes are designed to provide suitable conditions of light and seed source to "jump start" the process of regeneration. For example, using seed-tree or clear-cutting harvest regimes, will provide favorable conditions for regeneration of species that require lots of light (e.g., aspen and cherry). Assessing current conditions and choosing the right manner by which to start the regeneration process is dependent on many variables such as soil conditions, stand history, dominant species in the canopy, desired tree species, the size of the area cut for regeneration, and likely impact of deer browsing. Selectively removing a few trees from a stand has a poor chance of creating suitable regeneration where

Figure 1. Fenced exclosure to prevent deer foraging and evaluate the impacts of deer on forest regeneration.

deer populations are too high, as deer can quickly consume species they prefer. Consult a professional forester for harvest recommendations to meet your management goals.

Removal of Competing Vegetation

Even with sufficient light reaching the forest floor, problems could still occur. Often as a result of a too-abundant deer herd, in combination with relatively low light levels, an understory composed of deer-resistant plants such as American beech or hay-scented ferns, or exotic invasive species such as garlic mustard or European buckthorn, will dominate the understory. Opening the canopy (via a harvest or thinning) under such conditions will allow those species to flourish, creating beech or buckthorn thickets, and/or a mat of ferns at the ground level. Under such conditions few tree seeds survive through the germination and establishment phase. Those that survive will grow slowly due to dense shade, and thus are unable to attain a height of five or more feet needed to escape deer browsing. As you can see, successful regeneration of desirable tree species is dependent on devising a forest management plan that addresses a combination of interacting factors. Under such conditions various mechanical or herbicide treatments may be needed to control competing vegetation. See other issues of the NY Forest Owner or at *www.ForestConnect.info* for more information about this topic.

Protecting Young Seedlings from Deer Browsing

Once tree seedlings are established, an adequate number of seedling having good form must eventually escape herbivory, especially from white-tailed deer, for regeneration to be successful. Herbivory is believed to be a severe limitation on regeneration for many woody plants because of high deer densities. For example, in much of southern New York deer abundance exceeds 35 deer per square mile. With this level of foraging pressure from deer, preferred seedlings such as oaks, maple, and ash, have little chance for successful reestablishment. Species that deer generally avoid, such as American beech, black birch, hophornbeam, striped maple, and numerous invasive species may dominate the seedling layer in such forests. Foresters and wildlife biologists generally agree a deer density of fewer than 20 deer per square mile will allow for regeneration of desired trees if deer have alternative food sources, such as farm crops. However, where deer must live primarily on tree browse (such as in parts of the Catskill or Adirondack Mountains), deer densities of as low as 8 to 10 per square mile can result in complete regeneration failure.

Regeneration Success in NYS Based on 2009 Forester Survey (% of stands)

	Statewide	Adirondacks	Southern Highlands	Other Regions
Highly successful	13	12	16	8
Moderately successful	17	31	13	16
Marginally successful	45	50	47	38
Complete failure	25	7	24	38

Table 1. Potential regeneration success of forest stands in 2008 based on expert opinion of New York foresters.

The extent of deer impacts on forest regeneration in New York State was assessed in 2009. To obtain this information statewide, we conducted a mail survey to gather the expert opinions of foresters currently working in the state. A total of 514 practicing foresters was identified and we received a 54% response rate of usable surveys. While the intent of the research was to assess the relative impact of deer on forest regeneration, the questionnaire did not highlight deer in any way, to avoid the potential for biasing respondents. The survey dealt with foresters' general experiences with forest regeneration, barriers to successful regeneration, management activities they would recommend, and activities they thought landowners would implement.

Respondents indicated that they had examined almost 5,000 properties during 2008, during times when snow depth did not limit their ability to assess forest regeneration. This represents almost 17,000 stands and 700,000 acres examined. Two-thirds of respondents (65%) indicated that they always look for evidence of forest regeneration when inspecting a forest stand. Another 27% said they looked most of the time. Only 8% said they looked only some of the time or rarely.

Foresters said that 31% of all the

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New York State Tree Farm News

Erin O'Neill

The Four Sided Sign
Side Three: Water

We've been talking about the Tree Farm sign and the Tree Farm System's focus on the idea of whole ecosystem management. We believe, as do many other organizations, that good forestry is at the core of sustainability and essential to the Tree Farm program.

The third side of the sign is WATER. Water covers most of this planet and is fundamental to an ecosystem. Clean, fresh, running water provides for humans and wild animals alike. Standing or pooled water is habitat for critters ranging in size from a tiny pencil tip to the giant moose you may find bathing one morning. We know ponds and lakes hold critical places in the ecosystem for food and habitat.

Water plays such a significant role, maybe this should have been the first column! It affects all of the other elements. Water is necessary for trees to thrive and grow, to leaf out and gain in size and value, as well as aid new growth to occur after a harvest. The wildlife on your property depends on the habitat, aquatic food chain and clean drinking water flowing through and under your property. Recreation occurs in and around water all the time.

This crucial aspect of good ecosystem management can be protected on your woodlot. Ask your forester what types of Best Management Practices (BMPs) are right for the types of water attributes you have. It could be better culvert sizing in a truck road, or culvert installation in a four wheeler trail. It could be ensuring a bond as part of your contract with your certified logger to make sure he implements water bars at the close out of the job. It could be streamside management zones on brooks or riparian designations around vernal pools. If you have a pond, check for invasive species and make sure you wash your boat if it was in an different water body.

As I have mentioned many times before, each part is just one piece of the puzzle. Proper planning and a written management plan are keys to developing your goals and working toward them with your forestry professional. Check with your local DEC office or your forester for a copy of NY State's guide for BMPs.

There are currently over 1,800 certified tree farms in NY State, if this all sounds like something you would like to be a part of, remember, a Tree Farm representative is only a phone call (1-800-836-3566) or e-mail (nytreefarm@hotmail.com) away.

Erin O'Neill is the Immediate Past Chair of the NYS Tree Farm Committee.

Would you like to receive an electronic version of future editions of *The New York Forest Owner*? If so, please send Liana an email (lgooding@nyfoa.org).

You will receive an email every two months that includes a PDF file of the publication. While being convenient for you – read *The Forest Owner* anytime, any place; this will also help to save the Association money as the cost of printing and postage continues to rise with each edition.

Kid's Corner

JESSI LYONS

This could be your photo here!

Do you have a photo of you and your kids or grandkids in your forest? If so, *The New York Forest Owner* would like to see it! Send an electronic or hard copy to *Forest Owner* editor, MaryBeth Malmsheimer, and it may end up on this page!

Why Do Leaves Turn Color in the Fall?

Have you ever wondered why leaves change color before they drop in the fall? And why are they more colorful some years than others?

Trees make food by using sunlight through a process called photosynthesis. The word "photo" means light and the word "synthesis" means to take a bunch of things and turn them into something else. So photosynthesis means plants take sunlight and air and turn it into food. Cells in the leaves make different pigments, and when the sunlight reflects off the leaves, we see it as color. Notice that when it gets dark outside, it's harder to see what color things are. That's because there isn't enough light reflecting off things for us to see color.

The pigment that makes the leaves green, chlorophyll, is what the tree uses to turn sunlight into food. All through the summer the trees are making food and using lots of summer sunlight, so the trees look green. Trees also make other pigments called carotenoids and anthocyanins. Carotenoids make leaves look orange, yellow, and brown, and anthocyanins make trees look red and purple. It's hard to see the other colors in the summer because there is so much chlorophyll. But when the days get shorter in the fall, trees stop making chlorophyll and it begins to break down. When the chlorophyll goes away, the other pigments can be seen. Anthocyanin is made from some of the extra food made by the chlorophyll. Even though the days are getting shorter a tree can still be making anthocyanin as long as the days stay warm and sunny. That means you can often see more red and purple colors when it is a warm and sunny fall. But if it starts to freeze at night, the trees will shut down and stop making pigments. So we may see less color if it freezes earlier in fall.

Trees need lots of water to keep growing and making pigments. When trees don't get enough water, they won't make as many pigments. This year, New York State was in a drought. A drought means it didn't rain as much as normal and plants didn't get all the water they need to grow well. During drought years, the trees may not be as colorful because they can't make as much of the colorful pigments.

Every tree is also different. Some make more carotenoids while others make more anthocyanin. Red maple gets its name because of its red color in the fall, and the red in the stem of its leaves. Can you guess which pigment the red maple makes more of?

Jessi Lyons is a Natural Resources Educator at Cornell University Cooperative Extension in Onondaga County.

Wild Things in Your Woodlands

Kristi Sullivan

Ruffed Grouse (*Bonasa umbellus)*

The ruffed grouse is a heavy-bodied, medium-size game bird, measuring about 17 inches from the tip of the beak to the end of the tail. Both sexes are similar in color, which varies among individuals from a dark gray phase to a chocolate brown or red phase. In a given area, the population may consist primarily of individuals of either the gray phase or the red phase, with the red phase being more common in milder climates and the gray phase occurring most often in coniferous areas and regions with more severe winters. Male grouse have a large, black patch of feathers, or ruff, on each side of the lower neck, and a large crest of feathers on the head. Female grouse have a shorter tail and crest, and a smaller, less apparent neck ruff. Both sexes have a wide, black band across the tip of the tail, though in females the band is often broken or blotchy.

As you pause to catch your breath while walking through the woods, a grouse can leave your heart racing as it explodes into the air. Its cryptic coloration blends well with the leaf litter, leaving it undetected until the last minute. The startling noise created by the sudden burst into flight provides an excellent mode of escape from would-be predators. The ruffed grouse is a year-round resident and a thrill to encounter in any season.

The grouse is well adapted to living in cold, snowy climates. In the fall, in preparation for winter the grouse grows fleshy, feather-like protrusions, called pectinations, along both sides of its three front toes. When winter arrives, these growths serve as snowshoes, allowing the bird to walk on top of snow, and helping it cling to slippery branches while feeding on tree buds. The grouse also may keep warm at night by burrowing into soft snow, where it is covered and protected from the wind-chilled air above. Alternatively, a grouse may roost in conifers, where it finds protection from the wind and cold.

Once winter has passed, male grouse are heard making the familiar, bass-like drumming sound during the breeding season, from late March to early May. A male chooses a favorite displaying site, typically a large log with a birds-eye view of the surrounding area, to be the center of his territory. Here he struts and drums to attract females and stake claim to his territory. With his back straight up and tail braced against the log, he cups his wings and moves them sharply forward and back in a horizontal, slightly circular motion. The drumming sound that is produced starts with a few evenly spaced thumps that increase in frequency to a whir.

After mating, the hen selects a nest site at the base of a stump or a tree, and lays a clutch of 10-12 eggs, which hatch in 23-24 days. The chicks are able to move about and feed soon after hatching, searching for insects in forest openings and edges. Grouse eggs and chicks are vulnerable to predation by a variety of animals including snakes, weasels, mink, fishers, house cats, red and gray foxes, coyotes, gray red squirrels, bobcats, skunks, opossums, raccoons, barred or great horned owls, and a few hawk species. Cold, wet, spring weather can also affect chick survival. Grouse numbers peak and bottom out in eight- to 10-year cycles, and wildlife biologists have different theories about what causes these population fluctuations. Potential

factors include the weather, food supply, predation, habitat changes, or a combination of factors.

The ruffed grouse occurs across New York State in areas of suitable habitat and is generally more abundant in forests of higher elevations (above 1,000 ft). It is most common in extensive forests or wooded hillsides and ravines, especially those with young, early-successional stage forest, or scattered clearings. The grouse also inhabits abandoned farmlands and pastures that are reverting to brush and forest. Specific habitat features attractive to this bird include brush heaps, conifers, fallen timber, and grapevine tangles.

The adult grouse eats a mostly vegetarian diet. Adults consume large quantities of buds and catkins of aspen, birch and hop hornbeam as they appear in the spring. In the summer, they eat the leaves, fruits, and seeds of aspen, blackberry, cherry, raspberry, sedges, and strawberry. In the fall, they feed on fruits of hawthorn, apple, cherry, viburnum, sumac, and dogwood, as well as beechnuts and the buds of apple, birch, cherry and hop hornbeam. During the winter, grouse depend on aspen, birch, cherry, hop hornbeam, and serviceberry buds.

Forest landowners can provide a number of habitat features to benefit the ruffed grouse. With enough acreage, it is possible to create and maintain patches of young, sapling stage forest in close proximity to 10 to 25 year-old pole stands for wintering and breeding cover, and 25 to 40 year-old mature aspen for winter food resources. Having all of these forest stages present within a 6 to 10-acre area is ideal. Maintaining patches of conifers to provide winter cover, and leaving large logs on forest floor to serve as drumming logs, nesting sites, and escape cover, can also be beneficial. Landowners can encourage a diversity of food-producing shrub and understory species including apple, blackberries, dogwoods, grapevines, hop hornbeam, serviceberry, sumac, and viburnum. In the overstory of the forest, promote aspen growth for winter food, as well as American beech and black cherry. When cutting trees for firewood, or having a timber harvest, consider leaving the tree tops lying on the ground to provide cover. Then revisit the area repeatedly to enjoy your success and the surprises that the ruffed grouse promises to deliver.

Kristi Sullivan is Co-Director of the Conservation Education and Research Program in the Department of Natural Resources at Cornell Univeristy, and Director of the New York Master Naturalist Program. More information on managing habitat for wildlife, as well as upcoming educational programs, can be found by visiting ArnotConservation.info

NYFOA Board Adopts Action Plan for Restore New York Woodlands Campaign

Jim Minor and Jerry Michael

The September/October 2012 issue of this magazine announced NYFOA's intent to launch a multi-year campaign to restore the health of New York's forests. The campaign will address both the critical lack of regeneration in the majority of our woodlands, as well as the continuing degradation of our forest resources caused by unsustainable harvesting practices.

The NYFOA Board of Directors adopted the following series of action plans in support of this campaign at their Fall Meeting on September 29th.

1. NYFOA will encourage both the College of Agriculture and Life Sciences (CALS) at Cornell University and the State University of New York (SUNY) College of Environmental Science and Forestry (ESF) to accelerate research, and develop best management practices (BMP's) for addressing regeneration deficiencies and the restoration of forest stands degraded by unsustainable harvesting methods. NYFOA will also encourage Cornell and The Society of American Foresters to provide specialized training on these BMP's for active consulting and service foresters.

2. NYFOA will publish a series of articles in future editions of *The New York Forest Owner* to inform our membership about forest health problems, together with remedies and references to additional information. We will also leverage the critical importance of this campaign to reach and attract additional members to NYFOA.

3. NYFOA will engage other organizations with an interest in forests and natural resources to educate them about forest health issues and request their support for remedies, some of which may be controversial on a local level. Examples include aggressive control of deer populations, the use of herbicides for the control of interfering vegetation and, in some cases, even-aged silvicultural treatments. In addition, NYFOA chapters will engage and educate the general public about forest health issues by inviting them to join us on themed woods walks and other annual events starting in May 2013.

4. The "Healthy Forests Agenda" is a list of executive and legislative priorities for maintaining the size, health and productivity of New York's forestland. As a member of the Council of Forest Resource Organizations, NYFOA will request the following additions to the Healthy Forests Agenda:

- Request designated funding for Cornell and SUNY-ESF to develop the best management practices and conduct the specialized training of foresters described in #1 above.
- Request cost-share assistance to forest owners for treatments which are components of a DEC-approved management plan for regeneration and/or restoration.
- Encourage the DEC to implement more flexible and aggressive control of deer populations, especially in areas where one or more adjoining forest owners wish to undertake a management plan for regeneration. Also, request the DEC to consider incentives for private forest owners who permit public hunting on their land, similar to successful programs in Pennsylvania.

Woodland Health

A column focusing on topics that might limit the health, vigor and productivity of our private or public woodlands

Coordinated by Mark Whitmore

The Twolined Chestnut Borer — Nemesis Of Weakened Oaks

By Douglas C. Allen

The Twolined Chestnut Borer is a native forest pest that is interesting to contemplate at this time because it becomes aggressive in Oaks weakened by drought and Gypsy moth defoliation. Drought was widespread across the state this year and Gypsy moth appears to be making a comeback in the Allegany area. It is also interesting to consider that it is in the same genus as the Emerald Ash Borer, illustrating the difference in behavior of a native pest compared to a very aggressive non-native. Rather than reinvent the wheel, this issue's article was originally written in 1997 by Doug Allen and is every bit as accurate today as it was then.

In the early 1900s when American chestnut was still a widespread and valuable component of eastern hardwood forests, this inner bark borer attracted the attention of forest owners because of its association with trees infected with chestnut blight. With the demise of chestnut, the beetle gained even more notoriety due to its affinity for oaks stressed by gypsy moth defoliation.

Twolined chestnut borer belongs to a unique group (the genus *Agrilus*) within a family of insects known as metallic beetles or metallic wood borers. These common names refer to the shiny appearance or metallic sheen typical of most adults. Another frequently used common name for this family is flatheaded borer, which refers to the appearance of the larval stage.

Many species of *Agrilus* occur throughout the United States, but two stand out as major tree pests in the northeast; twolined chestnut borer (*A. bilineatus*) and bronze birch borer (*A. anxius*). Both species are "secondary" in that they successfully attack only stressed or low vigor hosts. For birches, the predisposing stress often is drought, high aphid populations, repeated defoliation by birch leaf miner, or a combination of these events.

Drought also plays a major role in the susceptibility of oaks, especially chestnut and white oaks, to the twolined chestnut borer. However, defoliation of oak by gypsy moth is the most significant source of stress that sets the stage for infestations of this beetle.

Appearance

Adults are dark colored and 0.2 to 0.5" long with two light brown to golden, longitudinal stripes on the back *(Fig. 1)*. The immature stages (larvae) are legless, distinctly segmented, and off-white to yellowish with a head that is only slightly flattened compared to larvae of other metallic beetles. The full grown larva *(Fig. 2)* is approximately 1" long and its last body segment has a pair of dark brown hook-like structures. The slightly flattened head and presence of terminal hooks separate members of

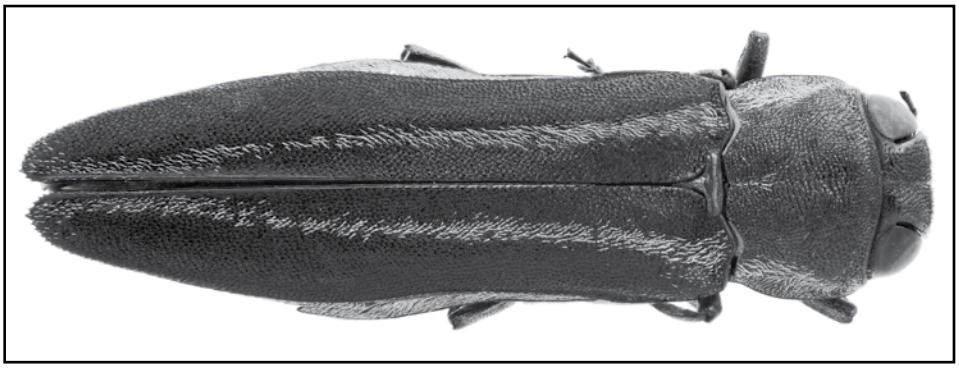

Figure 1. Twolined chestnut borer (Agrilus bilineatus) Kent Loeffler, Cornell University

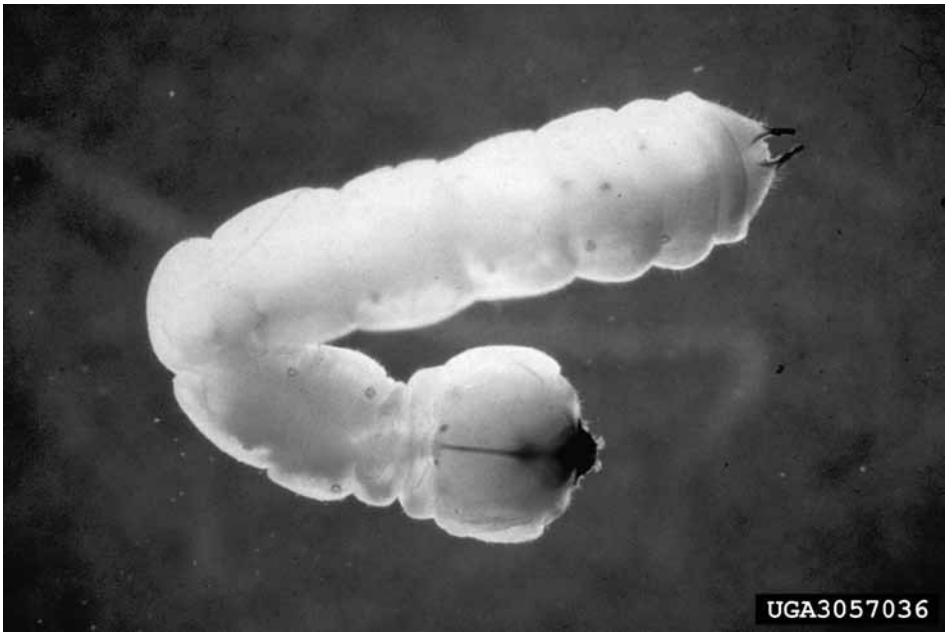

Figure 2. Twolined chestnut borer larva (Agrilus bilineatus). Robert A. Haack, USDA Forest Service, Bugwood.org

Agrilus from other flatheaded borers, which lack these hooks and have distinctly flatter heads.

Damage

The larval stages damage oaks by feeding on the inner bark and, to some degree, the outer sapwood. Feeding by large numbers of the worm-like larvae (lar-vee) essentially girdles the host. The damage is similar to that caused by true bark beetles. Usually it takes two to three years of successive attacks to kill the host.

Evidence Of Attack

The first symptom of an Agrilus attack occurs in mid- to late summer when foliage wilts and eventually turns brown. Wilted foliage usually remains attached to the tree for several weeks before dropping.

At this time, the bark of infested branches or areas of the tree trunk that have been invaded by the borer show little evidence of damage, because entrance holes are very small and the insect does not push frass (a mixture of fecal matter and wood chips) to the outside. Instead, this material is packed behind each larva in the narrow, winding galleries that result from feeding *(Fig. 3)*.

Biology

When each larva completes feeding, usually in one year, it prepares an overwintering cell in the inner bark region and with the arrival of spring transforms into an adult. Beetles exit the host through a characteristic "D"-shaped emergence hole approximately 0.2" wide. They are active throughout much of the summer.

Females deposit eggs in bark cracks, and when eggs hatch the young larvae immediately enter the inner bark. Research suggests that beetles locate suitable hosts because the latter give off an odor which is different from that of a healthy tree.

Management

Under most conditions, inner bark feeding insects such as species of *Agrilus* are difficult and impractical to control with insecticides. Preventative methods aimed at maintaining tree vigor are the key to minimizing damage. Strategies include such things as encouraging or placing a tree species on a site to which it is well adapted (soil, aspect, available moisture), preventing physical damage to the trunk and roots, applying insecticides (chemical or biological, if the latter is available) to minimize the effects of defoliation, and watering ornamentals and shade trees when soil conditions become unusually dry. Overstocked oak stands should be thinned at appropriate times to enhance the vigor of the remaining trees.

Nothing can be done to ameliorate drought conditions in forested situations, but appropriate monitoring will help to determine extent and frequency of significant defoliation. As a guide, if a stand of oak has been heavily defoliated (e.g., 70% or more of foliage consumed) for one year and indications are that there is likely to be a second consecutive year of similar damage, a concerned landowner should consider protecting foliage. Following two or more years of heavy defoliation, oaks (especially white and chestnut) usually are susceptible to attack by twolined chestnut borer.

This article originally appeared in the September/October 1997 issue of The New York Forest Owner. Dr. Douglas Allen is Distinguished Service Professor at SUNY-ESF.

Mark Whitmore is a forest entomologist in the Cornell University Department of Natural Resources and the chair of the NY Forest Health Advisory Council.

Figure 3. Twolined chestnut borer on Oak. James Tolomon, USDA Forest Service, Bugwood.org

Barriers That Caused Marginal or Failed Regeneration (% of stands)

	Statewide	Adirondacks	Southern Highlands	Other Regions
Deer browsing	72	38	76	81
Interfering vegetation	50	42	60	39
Landowner lack of interest or knowledge	27	9	23	40
Landowner did not invest adequate $$	14	16	17	9
Soil or site limitation	14	14	11	19
Forest health	10	11	6	15

Table 2. Barriers to regeneration in New York forests, 2008.

stands (and 30% of all the acreage) they evaluated in 2008 were ready to be regenerated. "Successful" regeneration was defined as desirable species that had a reached a height of at least 5 feet, and occupy the stand with an adequate number of stems per acre. About one-quarter (28%) of all the stands, and 27% of all the acreage that foresters inspected had a harvest in the last 10 years that was sufficiently intense to open the canopy for sunlight that could establish a new age class of trees. Foresters who responded to the survey anticipated regeneration success of those stands, statewide, would be largely unsuccessful. For stands where foresters could assess regeneration, statewide regeneration was moderately or highly successful only 30% of the time (Table 1).

Barriers to regeneration success were linked primarily to deer and the abundance of interfering vegetation. Foresters indicated that 72% of all the marginally-successful or completely-failed stands statewide were impacted by deer browsing (Table 2). Half of all stands were also impacted by interfering vegetation. Once again, note that these barriers are interacting forces, and it is impossible to separate out their singular impact. Forest health or soil/site limitations seldom were considered barriers to tree regeneration. Survey findings indicated that forest regeneration is a serious problem in much of New York State. Given current landowner perceptions on deer, interfering vegetation, and unsustainable harvesting practices, such issues with poor regeneration will compound over time.

Where we have constructed small deer exclosures (Figure 1) to evaluate the impacts of deer on vegetation, the results are often striking in just a few years. Ferns and other deer-resistant plants dominate vegetation outside fences. Inside the exclosures, plant diversity and height is much greater after as little as three years. Results have been similar in trials conducted in the Southern Tier and in Adirondack forests. Even relatively low deer densities can have impacts in areas with poor soils or short growing seasons. Multiple barriers could impact forest regeneration, and if there are existing site limitations, abundant deer will only compound those problems.

Foresters often recommend a specific regime for timber harvest or stand improvement to encourage successful regeneration. The harvest regime is chosen in consideration of the likelihood of achieving ownership

Figure 2. White-tailed deer will selectively browse and removed preferred tree seedlings from the forest up to a height of 5 to 6 feet.

goals, given the barriers present. In areas outside the Adirondacks, most foresters also recommend antlerless deer harvest. Fencing to exclude deer is effective, but rarely recommended presumably because the cost of fencing will not allow adequate return on the investment when the sawtimber is sold several decades later. However, small fenced deer exclosures can highlight the local impacts of deer on forest regeneration (Figure 1.)

Given the impacts, the management of deer (Figure 2) and competing vegetation limit the future sustainability of many forests across the state. If regeneration of stands is to be successful, many landowners must consider deer management. Hunting is the only management alternative that can address deer numbers and associated impacts at a landscape scale. Landowners should promote harvest of antlerless deer to attain lower densities several years prior to a harvest designed to start the regeneration process. Based on typical parcel sizes, it may be necessary to work with several neighbors to coordinate deer management efforts. Based on our experiences on university forest lands, it will take years of sustained hunting pressure and removal of adult does to lower deer densities sufficiently to achieve adequate seedling regeneration. This will be difficult to achieve for landowners in many parts of the state given the overall quality of deer habitat, resulting in high reproductive potential for the herd and abundant deer across much of the landscape.

Resources:

Connelly, NA, PJ Smallidge, GR Goff and PD Curtis. 2010. Foresters perception of forest regeneration and possible barriers to regeneration in New York State. Cornell University Department of Natural Resources Human Dimensions Research Unit HDRU 10-2. 37 pp. *http://www2.dnr.cornell.edu/hdru/pubs/HDRUReport10-2.pdf*

Shirer, R and C Zimmerman. 2010. Forest regeneration in New York State. The Nature Conservancy. 25 pp. *http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/newyork/placesweprotect/easternnewyork/final_nys_regen_091410_2.pdf*

Regenerating Hardwood Forests: Managing Competing Plants, Deer and Light. Penn State University, State College, PA. 7pp. *http://pubs.cas.psu.edu/freepubs/pdfs/uh181.pdf*

Jacobson, Michael. 2006. Forest Finance 2: Fencing for Forest Regeneration: Does It Pay? Penn State University, State College, PA. 5pp *http://pubs.cas.psu.edu/freepubs/pdfs/uh145.pdf*

Guest Authors: Paul D. Curtis, Gary R. Goff, and Jason R. Boulanger. Cornell University Cooperative Extension, Department of Natural Resources, , Ithaca , NY. Email address for the authors: pdc1@cornell.edu, grg3@cornell.edu, and Boulanger@cornell.edu

News & Notes

Retired Finch Forestry Chief Receives Statewide Honor

GLENS FALLS — Recently retired Finch Paper Vice President & Chief Forester Roger A. Dziengeleski of Moreau has been named the 2012 recipient of the Empire State Forest Products Association's annual Neil Gutchess Memorial Award for Outstanding Leadership in the forest products industry.

"Roger is a true leader and a tireless advocate for our industry and the forestry profession," said ESFPA President and CEO Eric Carlson. "Although he has retired from his 'day' job, he is continuing to put his passion for the health of New York's forests to work for the benefit of everyone who lives here through his volunteer roles."

Mr. Dziengeleski began his career with Finch Paper as a forester in 1978 after serving four years in the U. S. Air Force and earning his bachelor of science degree in forest management from the University of Maine in Orono. In 1991, he was promoted to oversee the company's Woodlands Department, including both forest management and wood procurement, a position from which he retired as a vice president earlier this year. Under Mr. Dziengeleski's leadership, Finch earned third-party responsible forest management certifications from both the Forest Stewardship Council and the Sustainable Forestry Initiative (SFI) program. He also established the innovative Finch Forest Management department, which provides consulting forestry services to landowners across the Northeast with a goal of helping them keep their forests as forests and in sustainable wood production.

In addition to his work at Finch, Mr. Dzeingeleski has held a variety of leadership positions with ESFPA and other forestry-related organizations, including a term as president of the national Society of American Foresters, the world's largest professional foresters association.

"Roger has been a tremendous representative and ambassador for Finch Paper and sustainable forestry for more than three decades," said Finch President & CEO Joseph F. Raccuia. "It is wonderful to see that his contributions to our industry and the health of New York's forests are recognized by people across the state and beyond."

About Finch Paper LLC

Finch Paper LLC operates a single, fully-integrated pulp and paper manufacturing facility in Glens Falls, at which it produces more than 255,000 tons per year of high-quality uncoated printing papers for marketing, book publishing and business office purposes. The company also continues a 100-year-old tradition of responsible forest management by offering consulting forestry services to public and private landowners, utilizing the Finch team of professional foresters. Finch graciously donates the paper that *The New York Forest Owner* is printed on.

NYFOA at the Washington County Fair

NYFOA member, Larry Phillips, is shown in the photo below, at the NYFOA display at this year's Washington County Fair in Greenwich on August 25, 2012.

Larry fielded questions about NYFOA, all things tree-related and did it all in his safety gear! The NYFOA display was the recipient of the "2012 Best Exhibit in the County Bounty Building." Kudos to Jane Jenks and Laurel Gailor who put the work into setting up the display and getting NYFOA volunteers to man the booth throughout the week-long fair.

Are you interested in a particular topic and would like to see an article about it.

Please send your suggestions to:
Mary Beth Malmsheimer, Editor
The New York Forest Owner
at mmalmshe@syr.edu

Please share this magazine with a neighbor and urge them to join NYFOA. By gaining more members, NYFOA's voice will become stronger!

Welcome New Members

We welcome the following new members (who joined since the publishing of the last issue) to NYFOA and thank them for their interest in, and support of, the organization:

Name	Chapter
Elaine & Ray Albrecht	CDC
Robert H. Atten	SOT
John Ballan	WFL
Dave Bojanowski	WFL
Bernie Buttles Jr	SAC
Alan Comstock	WFL
Michael & Diane Dambra	WFL
Cynthia & Richard Dayton	AFC
I-Shien Lei and Robert Dickey	NAC
William & Dolores Heilmann	CDC
Steven Jakobi	AFC
Jeannine & Stacey Kazacos	SOT
Carrie & Michael Koplinka-Loehr	SFL
Richard V. Lent	WFL
Rick Lynn	NAC
Cynthia Parillo	CDC
Curt Petzoldt	WFL
Jack & Gail Phelan	CDC
Cassus Phillips- Charley Pond Sportsmens Club	SAC
Jim Pingitore	AFC
Colleen & Bryan Roof	WFL
Sasha L. Salayda	CNY
Helen & John Salig	SOT
Anthony Schablowski	AFC
Ken Semanovich	SOT
Rick Thor	AFC
David Tomlinson	WFL
Amy M. Tresidder	NAC
Colleen & Dave Voellinger	WFL

NYFOA Awards

At the annual membership meeting each year, NYFOA presents several awards:

The **Heiberg Memorial Award** recognizes outstanding contributions to forestry and conservation in New York.

The **NYFOA Outstanding Service Award** recognizes outstanding service to the NYFOA membership and furtherance of NYFOA's mission.

NYFOA's **Chapter Activity Award** thanks a volunteer individual or couple from each chapter for helping the Chapter to operate in reaching members and other private forest owner outreach in the area. Each Chapter is urged to name one volunteer individual or couple each year for recognition by the state membership at the annual meeting in 2013.

Please send the name of your "Chapter Activity" awardee, and any suggestions on individuals for the statewide awards to Ron Pedersen by February 1, 2013.

Ron Pedersen
22 Vandenburg Lane
Latham, NY 12110
Email: rwp22@nycap.rr.com

Please share this magazine with a neighbor and urge them to join NYFOA. By gaining more members, NYFOA's voice will become stronger!

Member Profile:
Jerry Michael

Carly Neumann

Jerry Michael owns a tree farm in Whitney Point, NY and while he now lives about half an hour away from the property his daughter, her husband and their two sons live on a three acre parcel of the original forty acres. Jerry's grandsons are the fourth generation enjoying the property. Jerry graduated from Cornell University in 1959 and, after serving in the Army, he worked for IBM in Human Resources Management. He has been a member of NYFOA for 23 years and has served as the Newsletter Editor and Program Chair for the Southern Tier Chapter for most of that time. Jerry also served two terms as Director-at-Large and Treasurer on the State Board. He became a Master Forest Owner Volunteer in 1995.

In 1972 he purchased his parents' 40-acre tree farm, which at the time consisted of 20 acres of hardwood forest, 15 acres of plantation pine, and 5 acres of Christmas trees. His parents purchased the property in 1955 and planted the red pine plantation and Christmas trees. He has been very active in managing the land and currently spends at least one day a week working on the property.

Each of three distinct forest stands on the property have unique management practices. Jerry ran a small Christmas tree operation for 35 years, selling about 300 trees each season. Although he stopped planting new trees about 10 years ago his daughter's family has since decided to resume the operation so Jerry has been training them in planting and pruning.

Jerry Michael stands in front of one of the small deer exclosure fences protecting oak and cherry natural regeneration in the established woodlot.

Thirty years ago Jerry consulted with a DEC forester on a timber harvest of the 20 acre woodlot and more recently, he harvested large ash trees to supply hardwood floors for his new home. He started killing weeviled pine and diseased beech from the woodlot five years ago and was able to harvest the remainder of the marketable trees in a competitive bid sale two years ago. The additional light resulting from intensive timber stand improvement has encouraged good natural advanced regeneration, which is thriving under protection from brush piles and scattered small deer exclosure fences.

The pine plantation blew down in an ice storm in 2003 and, after harvesting the trees for pulp, Jerry decided to let the 15 acres revert to early succession forest. In order to maintain a good representation of valuable hardwood species he planted seedlings of sugar maple, red oak, white ash and black cherry. Some readers may remember an article in the *New York Forest Owner* in March/April of 2010 about this regeneration project. He planted 800 seedlings within a three-acre deer exclosure fence and another 600 seedlings outside of the exclosure but protected by plastic tree shelters. The stand is now a thriving young forest although he has concluded that the deer exclosure fence is more effectively used to protect advanced natural regeneration than planted seedlings.

A member of a hunting club, Jerry helps to manage the 1650 acre club-owned forest in Delaware County. The property has been enrolled in the 480A program for 33 years and Jerry works with the consulting forester on harvest and timber stand improvement activities.

Jerry considers his property to be a working laboratory and often tries different silvicultural and regeneration practices. He encourages his neighbors to hunt on the property

continued on page 22

Jerry inspecting a hard maple, one of the 600 hardwoods planted in shelters where the pine plantation blew down.

and keep the deer population at a sustainable level. The family uses the trails for cross-country skiing and hiking. Jerry's parents built a seasonal cottage now owned by his daughter that has been a retreat for family reunions for more than 50 years. The forest has been his main recreational activity since his retirement 20 years ago. He recommends that all forest owners first identify their objectives and then write a management plan that can be worked on in small increments because experiencing success on a few acres can be a motivating force.

Carly Neumann is a Forest Resources Extension Program Assistant at Cornell University, Dept. of Natural Resources, Ithaca, NY 14853. Dr. Shorna Allred is the faculty advisor for the Member Profile Series.

In 2003 an ice storm destroyed Michael's 15 acre red pine plantation. The above photo was taken a year later, after the pine had been harvested for pulp and the stand replanted with hardwood seedlings, protected by tree shelters or a deer exclosure fence

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MAGAZINE DEADLINE

Materials submitted for the January/February Issue issue should be sent to Mary Beth Malmsheimer, Editor, *The New York Forest Owner*, 134 Lincklaen Street, Cazenovia, NY 13035, (315) 655-4110 or via e-mail at mmalmshe @syr.edu Articles, artwork and photos are invited and if requested, are returned after use.

Deadline for material is December 1, 2012

The New York
Forest Owner
A Publication of The New York Forest Owners Association

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