New York Forest Owners Association Capital District Chapter Newsletter Volume 24, Issue 3

July 2014

Message from the Chairman



Yesterday Walter Kersch and I traveled to Pittsfield. MA to visit a job site where a local logger was working. The main point of this was to witness a modern tree harvester at work. Of course modern machines hold some attraction just because of what they enable a good operator to do. A

large unit dangles from the arm of what could be an excavator instead of the excavator bucket. Hydraulics and computer controlled, the unit has grapples, a big chain saw, and fluted gripping rollers that can move a tree, strip off the limbs as needed, and then cut a log to a desired length all in a matter of seconds. The logs are piled to the side and a forwarder removed them to the landing a long distance away through steep and difficult terrain.

All of this is fine and wonderful and interesting to observe, especially if you have a native love for machines. However the main point from Walter's and my perspective was the virtual elimination of damage to any remaining trees, protecting the forest for future growth and harvests long into the future. The forwarder also was important in this regard as there were no "bumper" trees marked up and damaged in over a mile of removal tracks, even when the trail was a foot away from trees to be left. No marks, period. Sure this equipment is expensive and is a fundamental change from what I have thought was proper logging practice. Sure, any of these machines can leave damage to the remaining forest in the hands of a poor operator. Heck I make more damage skidding a few firewood limbs with my tractor winch than this operation does harvesting hundreds of trees.

On the way to this site we passed by another logging site that had been examined and noted that virtually every single tree not cut was damaged badly. Bad careless operator using antiquated equipment, with landowner likely not knowing how important leaving un-damaged trees is to the future of

sustainable forestry. Most likely no professional forester involvement either. This was a good educational day for me.

I hope you take advantage of some of the CDC-NYFOA Woods Walks that are coming up and use these opportunities to meet other forest owners and learn important tips for your own woodland management.

Dick Gibbs



Logger John Ruebel and his feller-buncher in a Rensselaer County woodlot

Welcome New Members!

The following members recently joined the Capital District Chapter. Welcome everyone!

> James Hanneman, New York, N.Y. Darryl Hunt, Schenectady, N.Y. Michael Moy, East Durham, N.Y. Cliff Pawlowski, Amsterdam, N.Y.

Keep In The Loop by Phil Walton

The Capital District Chapter maintains an email service to remind members and 'friends' of upcoming events. If you are not receiving occasional emails from nyfoa-cdc-news, and would like to get our reminders, send a request with a working email address to pwalton518@gmail.com and you will be added to the list. No worry, I will not flood your inbox!

Niskayuna Woods walk at Most Holy Redeemer Cemetery by Phil Walton

A cool sunny day created an inviting atmosphere for our June 7 woods walk highlighting NYFOA's theme of Restore New York's Woodlands (RNYW). Led by private consulting forester Mary Spring, we had a great chance to view the results of the 2009 harvest managed by our departed forester friend Mike Greason. Many tall straight red oak and white pine trees remain with room for the crowns to grow among the other mixed mostly hardwood species. The harvest had been completed with a feller/buncher. Canopy damage was minimized and butt scarring of the remaining timber was limited to locations where clearance for the large harvesting equipment was very tight. This was a careful harvest, completed in a suburban neighborhood, providing a forest with great potential for the near future.

Typical of today's conditions, the appearance of the forest floor provided a less optimistic outlook. Evidence of deer browsing abounded especially in the more open areas. Where slash from the harvest was densely piled, some seedlings were surviving especially where a steep gulley abutted a side of the slash pile. The slash, now in decay for five years, won't protect the re-growth much longer, however. Skid trails, scarified by the harvesting equipment hosted a denser seedling population than slash areas but unfortunately these open areas evidenced their vulnerability to browsing. As frequently happens in populated environs, the invasive Japanese barberry is also gaining a strong foothold, growth undeterred by hungry foliage feeders, wider distribution aided by hungry berry eaters. In another location on site, a vine (possibly Asian bittersweet?) threatens to smother all that it grows upon, totally shading the ground surface preventing future growth.

Mary had many more examples of the healthy 'immediate' forest and the struggling 'next generation' forest to show us, but alas the clock ran out. We returned to the parking area after an informative 1½ hours, to enjoy cookies provided by our host Rick Touchette, property manager of the RCDA cemeteries, and to pick the winners of the door prizes. New member Darryl Hunt went home with a blue bird nest box, and forester Mary Spring now has a NYFOA coffee mug to grace her desk. More important, we all went home with a greater understanding of the challenges facing our next generation forest. Thank you, Mary and Rick, and all who attended.



Consulting Forester Mary Spring, second from right, talks about the timber sale.

Pine Ridge Cross Country Ski Area Workshop

Master forest owner, Walter Kersch, held a woodlot management workshop on May 31st at his property, the Pine Ridge Cross Country Ski Area in Rensselaer County.



After a short class and discussion Walter led attendees on a walk through a hemlock stand that he had selectively marked for commercial thinning. His goal is to remove trees of poor quality without opening up the stand too much. A heavier cut might result in the expansion of beds of hay scented ferns which currently cover most of the old skid roads. Once the ferns are well established they have the ability to prevent the germination and survival of tree seedlings.



Invasive Hay Scented Ferns at Pine Ridge Cross Country Ski Area



A tree with an old trunk wound marked for harvest

Thoughts on the Draft Thermal Biomass Roadmap: Sustainable Forests and Thermal Biomass Harvesting

By Dick Gibbs

The New York State Energy Research and Development Authority (NYSERDA) has commissioned a project to examine and develop a "Roadmap" for NYS that would bring biomass for production of thermal energy to a more robust level, recognizing that the forest resource in NYS is considerable but faces barriers as a significant contributor to the energy needs of NYS. On June 2 this project had a draft presentation with a wide range of participation reflecting the stakeholders.

There is no debate about the fact that NYS has a huge quantity of forest lands that potentially could be harvested for thermal biomass purposes. With fossil energy process high and increasing, one asks what are the barriers to the significant increased use of forest-stored carbon fuel as increasing contribution to the total energy needs for NYS? The roadmap study by NYSERDA will come out in the Fall and contain answers to some of these barrier questions.

As representatives of the Capital District Chapter of the New York Forest Owners Association [NYFOA], Carl Wiedemann and I were listening to all of the presentations as they reflected on the goal of sustainable forestry. There were many slides with much data and fact finding presenting, but as these will not be available until the final report comes out and also since my vision was poor due to cataract surgery, I had to concentrate on the "big picture" and just listen, which was fine.

Of note, is fact that the large majority of private forested lands in NYS that could be used for thermal biomass are small parcels that are privately owned. It is these forest owners that form the base of the NYFOA membership. If one is seeking to increase the use of these forests for biomass thermal energy production the small-scale forest ownership pattern must be a starting point. Yes, there are large-scale forests owned by commercial firms, but these are more likely already managed toward goals of production of saw timber, pulp, biomass, or firewood. For me, one of the key take-away facts that was presented by Eric Kingsley, VP of Innovation Natural Resources of ME, and one of the study contributors, was something like this [paraphrased for memory]:

"...If you look at a typical tree in the forest, and ask what can be done with it to make value, virtually all of the value is in the <u>rectangular boards that can be cut</u> <u>from it</u>. There is value for sure in the woody biomass for combustion, this value might be in the sawdust, chips from sawing, slabs from turning round trees into rectangular boards, limbs, and defective trees, and more. However, the value that brings a logger and equipment into the forest is mostly all contained in the good saw timber stems. All other value is a parallel byproduct stream associated with the best timber...."

By extension of this understanding into forest harvesting operation, the first question to ask the private forest owner is "what trees have timber value in your stand?" Once there is value in the timber, then other values such as thermal biomass may well contribute to a harvest package that will have several parallel streams: saw logs, pulp wood for paper, biomass for thermal energy production, local firewood, mulch for landscaping. But seldom if ever will a harvest proceed in the other direction of coming in with expensive equipment and required time to gather biomass for thermal energy needs, with only incidental saw logs as a buy-product to the harvest package.

There is no real news in this for the small private NYFOA forest owner. We already know that growing high guality timber over decades of management is the best path for our forests, and that to do this we often need to "weed our garden" and remove poor quality trees and over decades, improve the total stand so that eventually [once or twice in our typical lifetimes] we will have a real commercial harvest. At that time, the big money logs will pull along other sales of less desirable biomass for other markets, such as thermal biomass. It is not uncommon for a NYFOA member to pay [not receive payment] to have a logger come in and only remove less desirable trees decades before a commercial harvest-these are called Timber Stand Improvement [TSI] cuts. I note that the two pages of glossary terms handed out the Roadmap presentations does not have TSI listed as a term of usage. I suggest that this be added.

If we talk about large tracts of forest, and bringing in large-scale equipment [such as whole tree chippers, feller-bunchers, forwarders], and are looking to maximize the immediate cash payment for the total forest resource, then harvesting for thermal biomass in a large way makes sense, and is done. Usually this might be clear-cut where every single tree is cut and

chipped, and the few good saw timber logs set aside and sold for high value product. While there is nothing inherently wrong with this clear-cut approach, it is not a harvesting approach that most small land owners will take, which leads back to point number one-most forested land in NYS is owned by small private landowners. We in NYFOA know that clear cutting is in fact a valid forest management approach, and can lead to best regeneration of more desirable forest stock over the long decades it takes to re-grow. As a trained Master Forest Owner [MFO] I have seen clearcut lands that have the most vigorous regeneration of highly desirable hardwoods emerging from what looks like devastation. However, the period of time between harvests of good saw timber using this approach is measured in 100's of years, possibly 150 or more. More commonly, private forest owners who have invested their lives, time, money and equipment into improving the forest in their small holdings, want a different approach: We want to still see a forest when a harvest is done [so our descendants can walk in the woods], we want to conduct successive harvests during our own short life span of active ownership [say 15-30 years between harvests] and we want to leave our forests in better shape than when we bought them so that they will stay forested [undeveloped] when we are dead and gone from the scene.

The Roadmap for vastly increased use of biomass for thermal energy should have as a key tenant, the production of high quality saw timber in well-managed forests by a typical NYS forest owner that will in parallel, yield significant quantities of biomass for thermal needs. Sustainable forestry on a 15-50 year time-scale for small private landowner properties is key to accessing the large potential quantity of biomass material for thermal needs. Only large-scale clear-cut harvesting will attract the logging industry to the work required absent production of high quality saw timber as part of a harvesting job.

Last weekend the NYFOA and Rensselaer Plateau Alliance [RPA] held a "Woodswalk" hosted by an MFO who wants to do a TSI cut on a small stand of his larger holdings. The area had been high-graded [is this a glossary term?] in successive cuts for at least 30 years, so there was virtually no saw timber left, yet the tract had a huge number of good sized trees. It would have to be all pulp wood or biomass chips. The MFO had marked about 100 trees, many 75 ft tall [it is a vigorous site with many trees], for a TSI cut and in the woods walk our group reviewed these and why he had marked them. A well-respected logger was in the group, and he indicated that absent any more valuable saw timber, this tract would not merit a logger coming in unless he could cut a much larger number of trees in the over-stocked site. The landowner might have to even pay to have these TSI trees taken out, that is not

certain, but there is not a lot of dollar cash value in harvesting defective TSI trees. There are other forest regeneration issues at play in the tract-deer browsing killing hardwood regeneration, and growth of hayscented fern that dominate the forest floor if too many trees removed [deer will not eat these], My point in this anecdote for the Roadmap is that the path to greater thermal biomass resource use must lead through high quality timber production that is managed over long time periods in a way that is sustainable [and desirable] in the eyes of the forest owner who still wants to see a real forest when a harvest is done.

This will be a slow-growth approach to the various stakeholder barriers to use of biomass: combustion technology, regulations, education of public on use of clean biomass energy, assistance for low income people who depend directly on biomass heating but do not have means to buy new technology, and more. However each of these has a somewhat separate roadmap and agenda, but unless we anchor all of these in sustainable forestry aimed at high quality saw timber production that will in parallel produce biomass for thermal energy, none of this will happen. I suggest that truly sustainable forestry is at the very heart of any roadmap that will advance thermal biomass.

NYFOA Board of Director's Meeting – June 14, 2014

Fifteen members of NYFOA's statewide board met at Camp Arnot, part of Cornell's teaching forest near Cayuta, NY. The agenda for this meeting was quite ambitious, and our objectives included trying to identify ways to bring greater value to NYFOA memberships, better support for the work of Chapters, and strategically think about whether the organization can afford another staff member/consultant to help carry out the mission. Two areas of focus requiring different outside skills might be enhancing NYFOA's public visibility, and major upgrading of the website.

Do you have ideas how NYFOA could offer more to the members or have greater effectiveness at delivering our message to larger numbers? Rene Bouplon, Ron Pedersen, or Phil Walton would like to hear your ideas.

Website Improvements

NYFOA's website continues to undergo improvements. A work in progress, archived issues of the Forest Owner magazine are now available online, and they are searchable by keyword topic. On the nyfoa.org website, hover over the Education tab and a menu appears with links to the Forest Owner and other valuable resources to read or hear.

Events Calendar

What: Capital District Chapter Picnic When: July 20, 2014 11:30 a.m. – 3:00 p.m. Where: John Boyd Thacher State Park, Glen Doone picnic shelter

Our annual chapter picnic is being held at the Glen Doone shelter. The site has spectacular views of the capital district from the Helderberg escarpment. The BBQ chicken will be served around 12:30 or so. Please bring a dish of your favorite picnic accompaniment to share with others. The \$6 per adult includes the park admission, a BBQ chicken half, drinks and "dinnerware". Take a hike on one of the many trails, or challenge someone in pitching horseshoes. This is a great place to relax on a hot summer afternoon.

What: Wind Turbine & Post Harvest Woodlot Tour When: August 17, 2014 9:30 a.m. – 2:00 p.m. Where: 813 Crawford Road Schenectady, New York 12306

Tracy Lamanec purchased a wind turbine as an alternate power source three years ago. A turbine company representative will attend and Tracy will share his experiences. Tracy will lead a woodlot tour in afternoon where timber was harvested several years ago. This will be an opportunity to learn more about the advantages and challenges of residential wind turbines as a power source and selling timber. Bring a brown bag lunch. For further information contact Tracy at 518 864-5068

Lichens in the Woodlot

Lichens are small but common organisms in most woodlots. Lichens derive from a relationship between two distinct organisms: a fungus and a photosynthetic partner, either algae or cyanobacteria. The fungus in lichen species, which can't produce its own food, relies on the energy created by the algae or bacteria. The relationship is complex and flexible, and has been compared variously to that between a human being and its intestinal microorganisms or even a farmer (the lichen) and a crop (the alga or bacterium). Lichens have been used in making dyes and perfumes, as well as in traditional medicines. It is estimated that 6% of Earth's land surface is covered by lichen. In Scotland, the dye-producing lichens are known as crottle.

Identification

There are hundreds of lichen species, and three main types. Foliose lichens look like leaves. Crustose lichens look flat and crusty. Frutose lichens are upright or hang down and tend to display some bright colors.

Oaks and Lichens

Lichens can withstand harsh extremes of weather, which gives them the ability to colonize everything from treetops to bare rock to desert pavements. Many tree trunks are ridged, rumpled or corky, which make them ideal environments for lichens. Most lichens also require a relatively moist environment which is one reason they are so common in the woods.



Lichens on tree bark

Appearance

Multiple kinds of lichens may flourish on a single oak tree. They are often discernible because of outstanding physical characteristics, like color, texture and shape. Beard lichens, as the name suggests, are often wispy and scraggly. They tend to colonize northern red oaks in New England. Others, like members of the Allocetraria genus, are bunches of flattened, round-lobed structures rather resembling corals.



Common roll-rim

Environmental Indicators

Lichen on oaks and other environments can absorb chemicals like sulphur dioxide from air and precipitation. That ability makes them good indicators of air quality. Negative effects of poor air quality to one or the other partner in the lichen relationship will dramatically affect the whole. The authors of "Lichens of North America" write of a "lichen desert" downwind of pollution sources. A forest rich in well-developed lichens, conversely, suggests good air quality.

What We Can Accomplish by Conserving and Managing Our Forests*

• Forests currently cover more than 60% of New York State. We can ensure that most of today's forests stay forests via land conservation, including tools such as working forest easements and ecological reserves.

• Supply wildlife habitat for all native species, including enough old and young forests to service the specialized habitat needs of both plants and animals.

• Contribute billions to the state's economy each year with strategic investments in forest-based recreation.

• Manage and protect our forests to lessen the degree of climate change, protect us from damaging rain storms and drought, and help us all live as comfortable as possible in a changing climate.

• Improve air quality, thus reducing health care costs and crop damage, averting losses of millions per year.

• Purify rainwater through natural processes saving billions in costs to produce clean drinking water.

• Grow higher quality timber and double the amount and value of wood we are now producing.

• Strengthen and diversify the forest products industry to better compete in a global marketplace keeping thousands of jobs and increasing national and international trade.

• Develop new cottage industries built around nontimber forest products such as mushrooms and ginseng.

• Keep carbon out of the atmosphere by using locally grown wood instead of steel and concrete in our buildings.

• Save billions in oil costs and mitigate climate change by shifting homes now heating with oil to renewable wood energy.

• Produce enough wood to match or exceed our current consumption of wood products through better forest management.

*Adapted from <u>New England Forests: The Path to</u> <u>Sustainability</u>, a new publication of the New England Forestry Foundation. www.newenglandforestry.org

Steering Committee

ph 355-4471
ph 758-2621
ph 765-4600
ph 929-7832
ph 943-5047
ph 283-0155
ph 674-8720
ph 596 9040
ph 785-6061
ph 577-4101
ph 237-8327
ph 482-1288
ph 895-5346
ph 895-1028
ph 622-9820

*Director – member of the NYFOA state board of directors

Join NYFOA Help Support Sustainable Forestry

The New York Forest Owners Association is a not-for-profit organization established to encourage sustainable forestry practices and sound management of privately owned woodlands. Members include woodland owners and all others who care about the future of New York's trees and forests. Please consider joining because your support helps make a difference. Regular annual dues are just \$30.00 for an individual or \$35.00 for a family.

Contact: NYFOA, P.O. Box 541, Lima, New York 14485 1-800-836-3566 www.nyfoa.org