



Minnesota Woodlands

MFA: an organization of, by and for Minnesota's private woodland owners and friends.

www.MinnesotaForestry.org

Minnesota Forestry Association (MFA)

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MFA Newsletter Vol. 15 No. 2

April/May 2013
The Minnesota Woodlands newsletter is published by the Minnesota Forestry Association.

MFA Board Meetings

Cambridge DNR
Office, 10 am – 3 pm

- April 16, 2013 (At U of M Cloquet Forestry Center, in conjunction with TELE Workshop)
 - July 16, 2013
- Conference Calls
8 – 9 am
- May 14, 2013
 - June 18, 2013
 - August 20, 2013

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Phenology for Woodland Owners

By John Latimer, Grand Rapids

Phenology is the relationship between natural events and climate. You can find many things on your land to observe and record. Beginning the process is easy, just pick things you recognize and note their development. In the case of the maple tree, it doesn't have to end with the flowers blooming. There are leaves emerging, seeds developing and falling, and, of course, in the fall there are those bright leaves to monitor. When do you note the first one? When are they at their peak? When has the first leaf fallen?

These are just the starting points. Encourage your family to get involved. Create your own list and add to it over time; you will have a very good handle on what is happening on your land with regard to nature and climate. You will have become a Phenologist! Use the entries you recognize on this list to get started.



John Latimer

Organism	Event	Average Date in Grand Rapids**	Date You Observed This Year
Trembling Aspen	First Leaves	May 2	
Marsh Marigold	First Bloom	May 3	
Juneberry	First Bloom	May 6	
Tree Frog	First Song	May 10	
Large Flowered Bellwort	First Bloom	May 11	
Sugar Maple	First Leaves	May 11	
Pin Cherry	First Bloom	May 13	
Jack In the Pulpit	First Bloom	May 16	
Lilac	First Bloom	May 20	
Columbine	First Bloom	May 24	
Star Flower	First Bloom	May 26	
Bunchberry	First Bloom	June 2	
Deer Fly	First Swatted	June 4	
Red Clover	First Bloom	June 6	
Common Raspberry	First Bloom	June 8	
Showy Ladyslipper	First Bloom	June 15	
Spreading Dogbane	First Bloom	June 18	
Common Milkweed	First Bloom	June 30	

**As a general rule, spring moves across Minnesota at about 17 miles per day. A person living in the Twin Cities would experience these events about 10 days earlier and a person living in far southern Minnesota would experience them about 20 days earlier.

If you would like to hear more about phenology, listen online to John Latimer's program at KAXE.org/programs/phenology.aspx. If you'd like to share your observations, email them to JLatimer@KAXE.org.

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MFA Board Actions

The MFA board meets every month. During January, April, July and October, the meeting is face-to-face at the Cambridge DNR Forestry office starting at 10 a.m. During all other months, the meeting is held via conference call. Any MFA member is welcome to sit in on the face-to-face meetings and listen in on the conference calls. See a list of board members and meeting dates elsewhere in this newsletter. Contact any board member for further information. For a copy of minutes from any recent meeting, contact Carol Cartie at Information@MinnesotaForestry.org or 218-326-6486.

Preparing for coming events including the TELE Workshop, Annual Meeting and Spring Field Day and Tree Farm Convention. See information about all these events on the back page of this newsletter and at www.MinnesotaForestry.org.

Discussing a New Membership Category, the Estate Category. The general idea for this category is that a landowner who is transferring title to heirs could transfer with it a long-term membership in MFA. The hope is that MFA would be a source of information and encouragement for heirs as they manage the woodland into the future. No decisions will be made regarding this category until our members have a chance to weigh in at our Annual Meeting.

Reviewing our relationship with St. Paul Foundation. A portion of our long-term funds are invested with the St. Paul Foundation. We are not unhappy with the investment performance but were not sure exactly how the relationship worked. We learned more at a recent meeting with Foundation representatives and will discuss what was learned at our Annual Meeting.

Busy Times at the Capitol

by Bruce ZumBahlen, *Chair, MFA Government Affairs Committee*

With all the news media attention on legislation on gun control, gay marriage, health insurance exchanges, and the Governor's budget/tax proposals, you are probably wondering if there is anything happening that might affect private forest management.

Well, here's what we report as this goes to press. A bill (HF 554) has been heard in the House Property and Local Tax Division to remove the \$100,000 cap on SFIA payments to any claimant. The bill also would allow lands to be re-enrolled in the SFIA that were taken out of the program when the cap was passed by the legislature. The bill was laid over for consideration in a House omnibus tax bill. The bill does not propose any changes in the \$7.00 per acre payment.

No action has been taken on the Senate version of the bill (SF 492), but there is still time. While a policy bill has to pass a committee in either the Senate or the House by March 15, and pass from committee in the other legislative body by March 22, the deadline for passing a tax bill from committees is April 19th. MFA does have a proposal to amend the SFIA. It would:

1) require registration of management plans; 2) require disclosure of penalties to buyers of SFIA enrolled lands; and 3) increase the penalty for non-compliance of the covenant. The covenant restricting development while under the SFIA is very important. Without having an effective covenant, there would be no SFIA.

Another bill (SF 57 / HF 149) would allow Soil & Water Conservation Districts (SWCD's) to continue buying DNR nursery stock for re-sale to private landowners. Under current law, the DNR can produce tree seedlings only for planting on public lands and private lands with a permanent conservation easement. Thus, without a change in the law, SWCD's won't be allowed to buy DNR stock for later re-sale to private landowners.

A clearer picture of the fate of these bills will be known by the time of the next newsletter. In the meantime, MFA will continue to watch out for the interests of Minnesota's private woodland owners, large and small.



Bruce ZumBahlen



Creature Feature



by Jodie Provost, DNR Private Land Wildlife Habitat Specialist

Flying Squirrels - "Night Gliders" (*Glaucomys sabrinus* & *G. volans*)



Minnesota is graced with two species of flying squirrels or "night gliders", the southern (*Glaucomys volans*) and the northern (*Glaucomys sabrinus*) flying squirrels. Northerns

Including their tails, which are nearly half as long as them, the southern flying squirrel is about nine inches long and weighs two ounces, while the northern flying squirrel measures almost eleven inches and weighs three ounces. The latter species is particularly adapted to the north by growing fur on the soles of its feet in winter. Both are noted for their mild nature; dense silky soft fur which is gray-brown above and white below; and large brown, wide set eyes that aid their nocturnal activity and provide a broad view. Apparently such wide set eyes gives them poor depth perception and they must "triangulate" before hurdling from their perch by bobbing and weaving their head to get multiple visual angles on their possible landing site.

range across central and northern Minnesota's coniferous, deciduous, and mixed forests, while southernns prefer deciduous forests. They belong to the Rodent Order and Squirrel Family which includes a diversity of eleven species in Minnesota, ranging from chipmunks to woodchucks. Although they are both abundant in Minnesota, we diurnal creatures seldom encounter them because they are strictly nocturnal (unlike all our other squirrels).

Flying squirrels do not actually fly, but glide from perch to perch by using a fold of skin known as patagium that extends from wrist to ankle. When their legs are outstretched, this furry vestment stretches out tightly to form a large flat surface that allows them to glide up to 150 feet - the ultimate "wing suit"! The patagium is no ordinary skin flap. It contains a complex arrangement of muscles and a cartilaginous rod that extends from the wrist in flight like a switch blade to increase the leading edge of the gliding surface. Using their patagium and wide, flattened tail like a rudder, they expertly steer during descent. For every vertical foot they drop, they can travel three horizontal feet.

Flying squirrels live in leaf nests or tree cavities such as woodpecker holes, or sometimes bird houses, cabins, or attics. My most interesting encounters with them have been when cleaning wood duck boxes. What a pleasant surprise to be face to face with them! They eat a variety of seeds, grains, fruits, nuts, buds, flowers, fungi, lichens, insects, bird eggs, even young birds and carrion, and are frequent, nightly visitors at bird feeders. Their predators include hawks, owls, fox, weasels, fisher and marten.

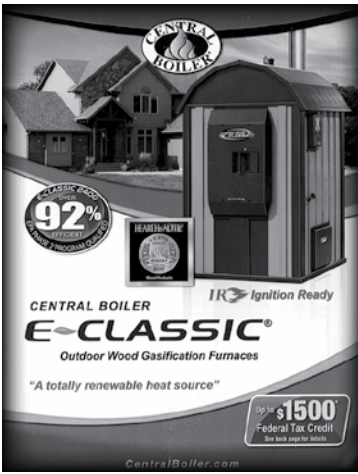
Females mate in early spring. About five weeks later, they give birth to three to six tiny, blind young. To warm their young, females balance on forehead and feet over them, spreading their patagium like a blanket. When moving their offspring, they roll them into balls to transport them from nest to nest. Southern flying squirrels frequently raise two litters each summer, while northern flying squirrels raise only one. Neither species hibernates, but instead they slow their body activity in winter and often den in groups for communal warmth.

These delightful squirrels are not harvested due to their small size, valueless fur, and nocturnal behavior. To provide habitat for them, manage for healthy, diverse forests and leave dead trees standing to provide cavities. Two informative, brief videos about flying squirrels can be enjoyed on line at <http://www.youtube.com/watch?v=xWPruY7uyeQ> and <http://channel.nationalgeographic.com/wild/videos/flying-squirrel-mayhem>. Maybe you'll want to stay up for some squirrelly, late night entertainment and watch the bird feeder for a glimpse of these curious "night gliders"?



The National Woodland Owners Association (NWOA) has a new weekly email newsletter, *The Woodland Word*. Topics include weekly how to, news from Washington DC, and useful information for landowners throughout the nation.

To receive the newsletter, simply send an email to Peck@NWOA.org and say, "Add me to the newsletter email list."



Along with the last issue of Minnesota Woodlands, most members received a copy of this booklet on the E-Classic, which is a wood gasification boiler. (We ran short of booklets so some members received a brochure instead.) The discussion continues here with this piece by MFA member Jim Ballenthin.

Hot Water Heating with a Wood Gasification Boiler

Efficient, Economical, and Environmentally Responsible

by Jim Ballenthin – MFA, Brainerd Chapter; Cass SWCD; Deep Portage, Trustee

Did you know that there is a type of wood boiler, known as a wood gasification boiler, which uses much less wood fuel than other types of wood boilers? ... that will not spew clouds of smoke and air pollution around you or your neighbors? ... that is practical to meet heating needs for a wide range of space heating and domestic hot water heating? ... and, that can directly replace or supplement LP, fuel oil and natural gas boilers and furnaces?

A wood gasification boiler is a type of wood boiler that achieves 98% or better efficiency in burning wood, as opposed to the estimated 30% burn efficiency of a standard outdoor wood boiler. A wood gasification boiler does this by burning wood in a firebox with controlled combustion air where temperatures reach up to about 550F degrees. During this burn stage about 50-80% of heat content of the wood is released, along with smoke, non-combustible particulates, aromatics, carbon monoxide, hydrogen and other chemicals, which may be described as components of wood gas.

The wood gas is then directed by a draft fan into a secondary chamber, usually constructed of ceramic materials, where additional air is admitted and temperatures up to 2000F degrees are achieved. The results are complete combustion of the wood gas, very little ash left in the boiler and very few pollutants going up the chimney.

A standard outdoor wood boiler, on the other hand, can burn green or damp wood but at a relatively low temperature of about 550F. This results in incomplete combustion, along with smoke – sometimes lots of smoke – going up the chimney. A large amount of ash (unburned wood) is left in the firebox.

How economical is a wood gasification boiler compared to fossil fuels?

The available energy in a pound of wood is about 6,050 btu's. Accordingly, 16.5 lbs will provide 100,000 btu's of heat energy. The cost of this is \$0.75 based on \$170.00/cord for red oak. The cost of the same amount of energy produced from LP would be \$1.75 and from electricity it would be \$3.11, based on \$0.106/kwh. All these costs are typical of February 2013 prices in Cass County, MN.

Why is wood as a fuel source environmentally responsible?

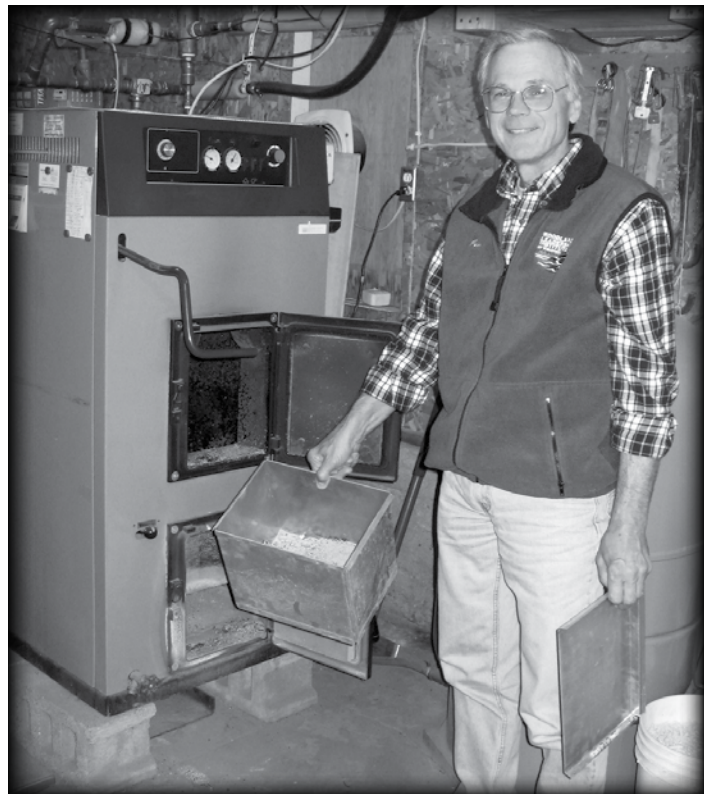
Trees produce wood – trees go through a natural cycle of growth (remove carbon from the atmosphere) and decay (release carbon to the atmosphere) – burning wood is like decay that otherwise would occur naturally.

Trees are naturally self-sustaining (growth, decay, regrowth) – forest best management practices can enhance tree growth and enhance sustainable forests and trees.

Burning wood from trees does not add carbon dioxide to the atmosphere, contrary to burning fossil fuels.

Trees and forests provide habitat for a wide range of birds, mammals, and other wildlife.

Trees and forests hold rainfall water on the land, allow the water to infiltrate into the soil to recharge aquifers, reduce erosion, filter out polluting nutrients, trap harmful chemicals in the soils, provide clean water for lakes, rivers, and fish, and provide clean drinking water.



Jim Ballenthin with a month's worth of ashes from his Tarm Wood Gasification Boiler.

For a wealth of practical information on hot water heating with wood gasification boilers, see <http://www.hearth.com/talk/>.

Other sources of information include:

www.hearth.com/talk/http://www.woodboilers.com/

www.alternateheatingsystems.com/WoodGasification.aspx

www.centralboiler.com/e-classic.html

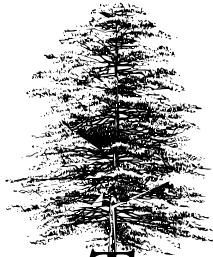
www.newhorizoncorp.com/

www.cozyheat.net/Wood-Gasification-Boilers_c_18.html

www.smokelessheat.com/varmebaronen

www.altheating.com/outdooreconoburn.htm

www.ahona.com/index.html



Meet a Tree **Northern Red Oak**

Northern red oak, also known as common red oak, eastern red oak, mountain red oak, and gray oak, is a moderately fast growing tree and one of the more important lumber species in the oak family. It grows on a variety of soils and topography and is a popular shade tree that can easily be transplanted. Northern red oak grows best on deep, well-drained loam to clay loam soils and is the only native oak that extends into Nova Scotia. Northern red oak is classed as intermediate in shade tolerance but intolerant to shade as a seedling. Mature trees range from 65 to 100 feet in height and 24 to 36 inches in diameter. Forest-grown trees will develop a tall, straight bole with a large crown. Open-grown trees tend to have short boles and spreading crowns.

The fruit from northern red oak is an acorn or nut that occurs singly or in clusters and matures in two years. They ripen from late August to late October and are brown in color. Trees may begin to bear fruit as young as 25 years old; however, abundant seed production does not begin until age 50. Good to excellent seed crops are produced at irregular intervals, usually every two to five years. Acorn production is highly variable among trees even in good seed years. Some trees are always poor producers while others are always good producers. Crown size seems to be the most important tree characteristic affecting acorn production.

Acorns are an important food source for squirrels, deer, turkey, mice, voles, and other mammals and birds. In fact, wildlife consumption can damage more than 80 percent of an acorn crop in most years and virtually 100 percent of the crop in very poor years. Some of the major pests to northern red oak in Minnesota are oak wilt, two-lined chestnut borers, and armillaria root rot.



Photo by Paul Wray, Iowa State University

Contest to Develop a Cleaner Wood Stove

A Next Generation Wood Stove Design Challenge, to be held this November in Washington DC, will seek to promote innovation in wood stoves.

The editors at Popular Mechanics magazine, one of the contest sponsors, believe innovation can overcome some of the problems inherent in the wood stove and that a “smart” wood stove may be on the horizon.

According to the U.S. Department of Energy, wood stoves produce 80% of residential renewable energy in America, while solar and geothermal combined produce just 20%. The U.S. government funnels hundreds of millions of dollars into R&D and incentives for solar, biofuels and other technologies, yet the renewable energy device used by most Americans has been neglected.

“We are excited to see what sort of innovation engineers, inventors and university teams can bring to the table to make the wood stove cleaner, and possibly re-invent its consumer image,” said James Meigs, Editor-in-Chief of Popular Mechanics magazine.

The winning design will receive \$25,000 and coverage in Popular Mechanics magazine.

Be assured we will watch for the results of this contest and publish them here.

Member Profile: The Krantzes' Goods

From the Woods Help Finance Retirement

When John Krantz, Forest Lake, retired from DNR Forestry 11 years ago, he and his wife, Marcie, went to work selling goods from their woods.

One product with which John enjoys working is willow sticks that can be made into canes and walking sticks. Each year, with permits from Itasca County, DNR and the Chippewa National Forest, John harvests about 1,000 willow sticks and 400 sticks from eight to ten-year-old aspen. "These sticks are easy to sell," John says, "especially the further south you go. We have been showing our products at a show in Kansas City for the last 10 years. People come from as far away as Arkansas to buy them."

A second product is butternut that can be made into plates, bowls, etc. by wood turners. But the main product of their business, Krantz Wood Sales, is basswood for carvers. "In the area north of the Twin Cities, we grow the best basswood in the world," John says, "probably because it grows relatively slowly here. But, even this best basswood is a low value timber that becomes high value after we prepare it for sale."

First, basswood has to be harvested in winter. If basswood is harvested in summer, it deteriorates very quickly and will not hold its bark. Some of the Krantzes' products have the bark attached.

After harvest comes the drying process. Air-dried basswood has characteristics in demand by Krantzes' carver customers. The sawmill John uses to cut the rough lumber does the first step in drying by stacking the rough lumber outdoors. During breezy, low humidity days in April, May and June, the lumber will lose half its moisture. Then the wood is moved into the loft of a barn on the Krantzes' Deer River area farm. "The barn has a metal roof which allows the summer temperatures to get into the 90s." John says.

By fall, the basswood is moved to the Krantzes' small wood shop in Forest Lake where their one part-time employee cuts and planes the wood. Most of it is ready for sale to carvers as-is but John takes one more step with a few of the boards. Some customers like wide boards on which they can carve relief images. The problem is that a single wide board will warp so John glues 4-6" boards together to make one that is 12-18" wide.

Listening to John and Marcie talk, it sounds as though their business is working almost too well. "We have enough business coming in," John says, "that we are never fully caught up." They are cutting back a little on their main marketing effort which is displaying at carving-oriented shows in the southern states. This year they skipped a show in Phoenix. For the last 10 years or so, John and Marcie would load their pickup and a trailer full of basswood and sell it all at the show. They will continue to sell to their past customers in the Phoenix area via the telephone and Internet.

As to MFA, John has been a member since 1976, the year that our association was brought out of dormancy after having been idle for several decades. In fact, John recalls participating in the very first meeting in Brainerd.

John and Marcie's country estate is a 150-acre farm located just north of Deer River that has been in the family for 109 years. When John was young, the farm was mostly pasture on which his father raised beef cattle. When John went off to forestry school at the University of Minnesota, his father began planting the pasture to red pine and white spruce. Today, all but 20 acres are forested.

For more information on preparing basswood for sale, check the Krantzes' Member Profile on our website, www.MinnesotaForestry.org. There you will find an article John wrote for *Carving Magazine* in which he describes his process in detail.



Above: John Krantz with some of their products including a plate made from butternut, a butternut board, walking sticks and basswood in various shapes and sizes, with and without bark attached.



Right: The Krantzes' received a special order for this large basswood board with bark attached.

How About a Little Love for Foresters?

Condensed from a letter to the editor in the January 25, 2013 issue of Outdoor News.

I have been involved in forest management work since 1970, primarily for government agencies, but also considerably on private lands. While wildlife managers for government agencies and advocacy groups both have an important role to play in wildlife habitat and population management, the forester is the unsung hero of the forest.

It is the forester who collects the data on forest species composition from which they and other managers can make informed decisions on the management of timber stands and wildlife habitat. It is the forester who marks the timber, delineates the harvest boundaries, reserves those islands, corridors, clones, and points of timber that turn a beneficial harvest into exceptional wildlife habitat. They also supervise the cutting and measuring of forest products so an owner gets a fair shake in the deal. The forester does for the forest and those species that dwell there what none of the other management entities can do: he makes on-the-ground management happen.

I once posed a question to two wildlife managers from northern Minnesota. "What is the single most important management tool available for forest wildlife habitat management in Minnesota?" Both of them, without hesitation, replied, "timber harvest."

Active management is the most important thing a landowner can do for his/her land. Every landowner should seek the services of a consulting forester. I'm not trying to feather my own nest; I'm mostly retired. However, I can write a long chapter about the heartache and headache landowners have caused themselves by trying do-it-yourself forest management. For the fees most foresters charge, they are one of the best bargains out there.

Cutting trees is dangerous, hard work. Contract with a reputable logger to get the job done. They also add considerable value with development of roads, openings, and trails. Your forester will know the best ones for your situation.

Sam Christianson

Blackduck

Status of Consulting Forestry in Minnesota in 2013

Consulting Forester Peter Bundy, Crosby, who does business as Masconomo Forestry, was commissioned by the Minnesota Forest Resources Council to survey the consulting forestry industry in Minnesota. Here are some of the results:

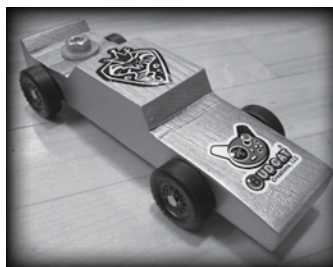


Peter Bundy

- There are at least 45 private consulting foresters working in the state. Of these, many work part time. All work alone in their business except one firm which employs five consultants.
- Most (94%) work with private woodland owners providing services such as writing Stewardship Plans and setting up timber sales. About half provide other services such as supervising planting projects, timber stand improvement projects, invasive species control, trail and road design and building, damage appraisals and tree inspections.
- The consultants generally believe the tax incentive programs, SFIA and 2-c, are of great interest to private woodland owners and have helped their business. Conversely, they do not believe other government programs, such as EQIP, FIP and WHIP, are of great interest to woodland owners nor helpful to their businesses.
- Despite recent plant closings, consultants see opportunities in the marketplace. While pulpwood harvesting is on the decline, other areas are increasing such as wildlife habitat improvement, biomass and sawtimber markets and restoration projects.

For a complete copy of Peter Bundy's report, go to www.MinnesotaForestry.org and click on Professional Help.

Thinking of harvesting timber on your land?
Call Before You Cut
A free service for members of the
Minnesota Forestry Association
218-326-6486



In January, Boy Scouts teamed up with a logger near Park Rapids to harvest enough SFI-certified pine to make 2,500 Pinewood Derby Cars for scouts throughout northern Minnesota.

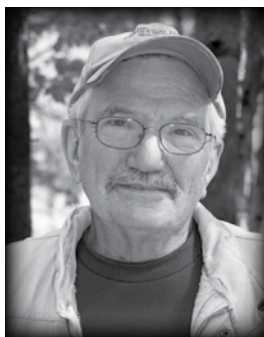
Woodland Events

On Saturday, March 9th over 100 woodland owners braved snowy, icy roads to attend the **Up North Woodland Workshop** in Grand Rapids. There was a full day of presentations, questions and answers and discussions about Minnesota family woodlands. Five of the sessions were broadcast to sites in Cloquet and Mankato. Recordings of these five presentations are available free to those who attended, and for a small fee for those who did not, at <http://z.umn.edu/UpNorth>. Find more photos of the event on our website, www.MinnesotaForestry.org.



Stephanie Kessler and Art Norton at the Up North event.

In another event, over 50 landowners participated in a workshop on **Promoting Wildlife** on Thursday evening, March 7th. The event was held at the offices of Infinite Campus, an educational software firm based in Blaine, Minnesota which provided both meeting space and refreshments.



Neal Chapman

The event was the result of cooperation between facilitator Neal Chapman (did you see his Member Profile in the last issue of *Minnesota Woodlands?*); Barb Spears, chair of the MFA Metro Chapter; Mike Vant, chair of the Twin Cities Chapter of the Ruffed Grouse Society; and Greg Solberg, MFA member employed at Infinite Campus.

Topics included the four components needed by all wildlife, the big picture or what is beyond your property lines, planning for which critters to attract and steps that can be taken to attract and hold them.

For MFA members, the two best online sources of woodland information are the MFA website, www.MinnesotaForestry.org and www.MyMinnesotaWoods.UMN.edu.



Here's what's new at MyMinnesotaWoods:

- Minnesota forest health and resilience series
- Monitoring your woods: How to identify and report new invasives
- Minnesota forest health update: What to look for in 2013
- Quiz: Monarch butterflies
- As always: News, events, and other items

Have a question about your woodland? Post it on the Discussion Board. You may be surprised at how many good responses you get!

For much more information on each topic, find a link to MyMinnesotaWoods on our website, www.MinnesotaForestry.org.

Upcoming Events

Find more events, and more information on these events, at the MFA website, www.MinnesotaForestry.org or by calling MFA at 218-326-6486.

Tuesday, April 16, 2013

- 9am - 4:30pm Women's Woodland Network Gathering (U of M Forestry Center, Cloquet). A day-long gathering of women woodland owners and leaders. The gathering is about sharing stories, learning from one another, and building relationships. This event precedes a separate, but related, workshop on Tools to Engage Landowners Effectively offered by MFA, as some may choose to attend both. Find the brochure for this event on our website, www.MinnesotaForestry.org.

Tuesday - Thursday, April 16-18, 2013

- TELE Workshop (Tools for Engaging Landowners Effectively) (U of M Forestry Center, Cloquet). See complete information and registration material on our website, www.MinnesotaForestry.org.

Thursday - Friday, April 25 - 26, 2013

- Heating the Midwest Conference (Black Bear Casino, Cloquet). This conference aims to bring together leaders of the woody and agricultural biomass industry interested in supporting and expanding the use of biomass for heat and combined heat and power in the Midwest. Details: <http://heatingthemidwest.org/conferences/2013-htm-conference/>

Saturday, May 4, 2013

- 8am - 4pm Invasive Species Blitz Volunteer Training Workshop (Cedar Creek Reserve, 20 miles north of Coon Rapids). For more information go to our website, www.MinnesotaForestry.org under Upcoming Classes and Events on the home page.

Friday evening & Saturday, May 17 & 18, 2013

- 4pm Friday & 8am Saturday MFA's Annual Meeting, Tree Farm Awards and Spring Field Day (Cabela's, Owatonna). Join Tree Farmers and fellow MFA members for an enjoyable evening on Friday and an educational day Saturday. Register TODAY with the flyer enclosed. See more information at www.MinnesotForestry.org.

Thursday - Saturday, July 25-27, 2013

- Tree Farm National Convention (Minneapolis). Find more information on our website, www.MinnesotaForestry.org.