Volume VIII Issue II Spring 2013

The Voice for Illinois Forests

To act on issues that impact rural and community forests and to promote forestry in Illinois

Message from the President

Stephanie Brown

We've Come a Long Way, Baby!

A year in the life of an IFA President goes by quickly. As I pause to reflect on my term so far, I'm struck by how far we've come, and the advancements we've made this year as a volunteer-driven association.

IFA has only been in existence since 2006, a short time in the life of a member association. And yet, look at what we already have in place. A solid foundation of resident forestry expertise, a rich collection of informational resources, and a core group of dedicated landowners, foresters, and tree lovers in general who joined and have stuck with us through these formative years.

The average member may not realize that IFA is active on many fronts, striving to grow and better serve the diverse interests that we represent.

Our newsletter content continues to improve. Our most active landowner board members developed an editorial calendar and are aiming to solicit articles that resonate with member interests and are timed to fit the season. They also added a new member benefit – timely articles and helpful information sent out every two weeks to members who receive email.

Our website was re-designed less than two years ago, but it has already gained the attention of over two thousand Illinois visitors, almost two thousand from other states, and hundreds covering every continent. The website re-design accompanied a move to centralize our member database with an integrated email system, making it easier for our volunteer board members to communicate together and to each of you. That this system offered online membership renewals and event registration was icing on the cake.

Our new Landowner Advisory Committee is building learning pathways from the newsletter, to webinars, to field days and workshops designed to help our members explore the most popular topics in greater depth.

We have assembled a diverse group of Technical Advisors representing forestry from universities, government agencies, and private consulting perspectives. These volunteers review email messages, website content, and newsletter articles to assure that you, as a member, receive accurate and complete technical advice.

This year we were awarded two small grants from the Illinois Forestry Development Council to further strengthen our outreach efforts. The phenomenal initial success of our webinar programs led to a grant to cover the second year lease of the software needed to run this program. The other small grant is allowing us to develop a new publication called "We planted all these trees: Now what?" This guide, being authored by the experts on our Technical Advisory Committee, was identified as a missing resource needed by Illinois landowners who have reforested land but need guidance in nurturing young forest stands after planting.

continued on page 2

****Inside this Issue****

IFA Web site
www.ilforestry.org

President's message continued

IFA is also active on the policy and legislative front. Our new Executive Director, Mary Murphy, monitors legislation and our Legislative/Policy Committee has developed a plan of action for the coming year. We are particularly vigilant of the Illinois Forestry Development Act and the use of the funds collected through the 4% harvest fee. On the federal side, we are actively encouraging changes to the Farm Bill that would make more cost-sharing available to landowners for forest management plans and practices.

Over the last few years with your help in contacting your legislators, we have successfully turned back legislation that would have hurt Illinois woodland owners, and helped pass legislation that made your work easier. All the while, we maintained and added to our friends in the legislature.

There is more work to do. We have refined our mission and vision statements, but we have yet to mount the kind of marketing and public relations effort needed to get the word out clearly about who we are and what we represent. That PR can also improve the general public's impression of our woodlands and how we contribute to everyone's well-being. We need to build our membership base so we will have an even stronger voice and be able to sustain our organization to serve a greater proportion of Illinois woodland owners. We need a deeper bench of members willing to step up and host field days, join our Board, serve on a committee, recruit friends and neighbors, and perhaps accept the baton of IFA leadership one day.

There are things that you can do to help. If you know others who own woodlands, mention to them the good work that we are doing and invite them to join or bring them along to an event. One article in this edition suggests that you should learn about invasive species, learn to identify the worst of them, and convince your friends and neighbors to watch for them as well. If you have an idea for an event that would help you, talk to one of your regional directors and offer to host it. Your regional directors might be able to arrange an expert and advertise the event. Give us some feedback; we'd love to hear from you.

We've come a long way, baby! But there is still a long, long way to go. With your support, we are making progress every year. Thank you for being a member of IFA!

Executive Director

Why Does Anyone Join an Association?

An association's starting roots begin with a group of people who gather together in order to organize themselves to serve an audience. In other words, they "associate" with folks who have common interests on a given subject.

The founders of the Illinois Forestry Association (IFA) banded together to assist and support the interests of woodland owners and others who help conserve and manage the trees and forests of Illinois. Charter members and founding officers included professional foresters who have dedicated their lives through studies and careers to master the art and science of forest management.

Forest landowners join IFA in order to assimilate the knowledge needed to keep their forests healthy. They depend on IFA to represent the interests of woodland owners and advocate for policies that help them manage their resources wisely.

Community leaders join IFA because they need to keep their roadways, streets and avenues attractive and safe. What they learn from the IFA website and webinars helps them make better management decisions to enhance property values and the quality of life in their communities.

Tree Farmers join IFA because they are devoted land stewards who recognize the value of an added source of information and representation on the issues that affect their ability to continue managing their woodlands.

Conservationists join IFA because they recognize the value of an organization focused on helping landowners manage their forested lands wisely. Our mission fits their core land ethic.

Legislators join the IFA because they need a GO-TO source of credible, science-based information when considering legislation that affects our natural resources.

Students and teachers join IFA because of their duties to both learn and impart information on the physical earth around them. Tree identification in summer and winter as well as conservation methods are part of that curriculum.

Homeowners join IFA to learn how to enhance the value of their property through the proper planting and care of trees.

Chances are if you are reading this article, you are already a member of the Illinois Forestry Association, but how about your family, friends and neighbors? Invite them to join in this worthwhile, educational organization. Today is the day to join forces with like-minded people in the forestry conservation world.

Secretary Comments

by Dave Gillespie

Spring has finally arrived with rain, more rain and cool temperatures. Not our typical spring. However, things as looking up with a great increase in membership in the IFA, thanks to the IDNR's Division of Forest Resources.

According to the Illinois Forestry Development Act (IFDA), forest landowners with an approved Forest Stewardship Plan must certify every two years that they are following their plan. This is the year of that certification. Beginning about a month and one-half ago, the IDNR began to mail out approximately 11,000 certification letters to IFDA participants. Along with the certification letters the IDNR allowed the IFA to enclose a letter from the IFA President who wrote about the IFA and invited the recipient to join. To date, approximately 160 forest landowners have either joined the IFA as new members or renewed their membership.

A big thanks goes to the IDNR, State Forester Michael Mason, Forest Stewardship Program Manager Paul Deizman, and Forestry Secretary Kim Wycoff for their efforts to include IFA letter with the certification letters sent to the IFDA forestry participants. I can attest that this process takes a great deal of effort, as I helped stuff envelopes about three years ago when the IDNR last sent out the IFDA certification letters. Also, when consideration is given that the Division of Forest Resources is severely understaffed due to budget cuts, the task becomes even greater. Again, thanks.

If you have any questions that I might answer, please contact me.

Legislative Report

by Dave Gillespie – for the Legislative/Policy Committee

The funding of the cost share program under the Illinois Forestry Development Act (IFDA) has been the number one objective of the IFA Legislative Committee for the last three (3) years. Some background information:

- Under the IFDA, private forest landowners pay a harvest fee of 4% of the money they receive for a timber harvest into the Forestry Development Act Fund (FDAF).
- The IFDA says that the funds in the FDAF can be used to fund a forestry cost share program to help forest landowners manage their forest resources, to fund the activities of the Illinois Forestry Development Council, and goes on to say funds can be used to administer the IFDA.
- Due to the very poor economic status of Illinois, since 2004 funds deposited in the FDAF have been swept by the State and used by the IL Department of Natural Resources (IDNR) to pay the salaries of some of the personnel in the Division of Forest Resources rather than for the purposes prescribed by the IFDA.

The IFA has drafted an amendment to the IFDA that would restrict the amount of money from the FDAF that the IDNR can use for administrative purposes; directs the IDNR to provide an accounting of the FDA funds received and then how they are spent by the IDNR; and directs the IDNR to send to the Illinois General Assembly an annual report of the expenditure of these funds.

At the recent IFA Board meeting, the Board adopted the Legislative Plan for 2013 and the draft amendment to the IFDA. For the remainder to this legislative session, the IFA will work with the IDNR to resolve the funding issue of the cost share program and work with the Illinois State Legislature proposed amendment to the IFDA.

People in Forestry

Who We Are

Behind the IFA name are many individuals working for healthy Illinois woodlands. This is an organization of people working together to improve our lands. Here are two of the 23 people who have volunteered to help you. (Subsequent editions will continue to introduce you to IFA volunteers.)

Mike McMahan, Region 4 Director

Mike and his wife, Lynn, began planting cherry and walnut seedlings on their property in Johnson County in late 2002. They planted approximately 1000 trees over several years and are currently maintaining about 650 surviving trees. This long-term project prompted Mike to search out the Illinois Forestry Association for additional education and guidance. "I am interested in spending more time and energy within IFA in an effort to simultaneously gain more personal knowledge and understanding of trees and how to help them grow to full, healthy maturity".

Mike is a retired Lieutenant Colonel from the Air Force. Following his retirement, he taught mathematics in both urban and rural school systems and held administrative positions at the high school level. His last, and probably most rewarding, job in education was at a Charter High School in St. Louis. This innovative charter school taught urban students skills to enable them to enter the construction trades after graduation. He retired from this rewarding second career in education in 2008.

continued on page 4

Lynn and Mike then began building their retirement home in Vienna which is located in very Southern Illinois. "Banberry" is 80 partially wooded acres that also includes a pond, creek, and almost complete log home. Because they are building this house themselves, it is taking some time but they are getting closer as each day passes. Mike is not sure, however, if he will ever really finish….

They have two children, Philip and Heather, and four grandchildren. They also have an extremely enthusiastic Black Lab named Knight.

Jake Hendee, Region 2 Director

Jake has BS and MS degrees in forestry from the University of Illinois and is currently the Agricultural Conservation Programs Field Manager for the National Great Rivers Research and Education Center. He is currently stationed at the Illinois Department of Natural Resources building in Springfield. He helps manage the field components of the Illinois Conservation Reserve Enhancement Program (CREP).

Jake also manages his family's 80-acre woodland in Missouri. He is a Certified Tree Farm™ Inspector, a registered USDA-NRCS Technical Service Provider, has worked as a forestry consultant, and has experience with forest land easements and land trust work.

As an IFA director, Jake will be the next generation voice for Illinois forestry. He pledges to work tirelessly to help create a stronger network of forest landowners and forestry practitioners across the region and state. He plans to leverage partnerships to amplify the message of sustainable forestry. Jake has an interest in using technological innovation to engage members and to meet the informational needs of forest landowners.

People in Forestry

Truly a Family Forest

Interview by Jake Hendee

This is Part 2 of 2 about the 2012 Illinois Tree Farm of the Year—Herman, Herman, and Sons Tree Farm. In this newsletter, we interview Bev Herman about the family's passion for forestry.

"For many years, I thought 'this is just crazy.'" says Bev Herman about their 1978 decision to take out a second mortgage on the family home to buy the Crawford County farm 2 ½ hours from home. Thirty five years later, Bev shares in the honors of being named "Illinois Tree Farmer of the Year" by the American Tree Farm System.

A Master Gardener herself, Bev leaves most of the Tree Farming on the Crawford County Farm to her husband Ray. However, the lines begin to blur between Master Gardener and Tree Farmer when Ray and Bev join together to collect, husk, sort, and wash tree seeds they collect each year. A lot of tree seeds. She chuckles at what the neighbors must think each year as their well-tended yard is taken over by bags and bags of tree seeds. Ray and Bev estimate they still collect and process 8,000-10,000 pounds of seeds each year with the help of several grandchildren. Most of these seeds go to the state IDNR tree nursery and other nurseries to grow seedlings planted on an estimated 1,000-1,200 acres in and out of state. This is actually a slowdown from the early years of collecting seeds for direct seeding CRP projects, mostly to seed riparian areas in eastern Illinois counties. At that time, it was twice those numbers. (Bev also helped Ray and others produce the Illinois Direct Seeding Handbook.)

Over the years, Bev has been a firsthand witness to the adversity of cultivating an award-winning Tree Farm. She describes Ray's many 2-½ hour drives down to the farm, only to turn around each day without overnight accommodations. She describes the many improvements over the years: a bridge to ford the creek, finishing out the barn to stay at the farm overnight, and the many hours of sweat equity improving the timber.

But you can't help but sense the pride in her voice as she describes the younger generations becoming Tree Farmers themselves. The grandkids, great nieces, and great nephews itch to head out to the farm to hunt, and the third generation of Tree Farmers each have their piece of mushroom hunting territory staked out in anticipation of the next mushroom season. The second generation is coming around too, as she describes the new pride she sees in son and nephews as they learn how to improve the woods that will one day be theirs.

In response to being selected Illinois Tree Farm of the Year, Bev says, "We have big shoes to fill." But the Hermans also leave big shoes to fill for the 2013 Tree Farm of the Year. The Hermans will host a field day on their Crawford County Tree Farm on October 5.

Opinions & Commentary

Walnuts & Acorns

by Lee M. Rife

In the last newsletter, I talked about climate change, and gave a few thoughts about what needs to be done. It never ceases to amaze me about how quickly some things can come about that will change a prospective. No, I'm not talking about how we went from a mild winter to an old fashioned winter on March 1. It came at the time when we should have transitioned into spring. On Palm Sunday, Springfield was blessed with 18½ inches of heavy, wet snow and we have had several days of cold weather since. As I write, we are expecting temperatures in the low 30's over the weekend.

That however, is not the thesis of this column. What I am concerned about is a proposed major reduction in money for soil and water conservation in the FY 2014 USDA budget submitted by President Obama. Many of the members of IFA are landowners who depend upon programs such as EQIP to make conservation practices feasible, otherwise timber stand would not be improved, and in some cases harvested, stumps pushed out and the land put back into crops which might show a little profit every three to five years. That is not good for either the landowner or agriculture in general.

I am not an environmentalist. I am however, a conservationist. We all need to utilize practices that keep our soil intact and enable us to pass along land to our heirs that are in as good or better productivity than when we received it. This includes having a forestry plan in place and carrying out the recommendations contained in it. Often, these recommendations are very costly and we need all the help that we can get. I suppose that now is the time to get in touch with our members of Congress and impress upon them that cuts in USDA's conservation programs are not acceptable.

One last thought: I would enjoy hearing from our readers about forestry subjects that they might want to discuss. Please feel free to contact me at lee.riFe@comcast.net with thoughts or ideas for future columns.

Lee Rife is retired from the Illinois Department of Agriculture and the Illinois Wood Products Association. He lives in Springfield, Illinois, and owns acreage in Union County, Illinois, which includes 35 acres of timber. He formerly served on the board of the Illinois Forestry Association for several years, retiring from that position in 2011, but remains an active IFA member.

Opinions & Commentary

The Million Dollar Tree

by Thomas L Green, Urban Forestry Professor, Emeritus

In Illinois woodlands where Emerald Ash Borer (EAB) is approaching, some have recommended a pre-emptive cutting of non-infested or "healthy" symptomless ash trees. This was the policy of the USDA Forest Service as Chestnut Blight spread south through the Appalachian Mountain states during the 1930's with the mantra "Cut your chestnut trees because they are going to die anyway". This policy made sure there were no resistant survivors and it is the wrong policy.

Similarly, ash trees should not be removed in a TSI program where honeylocust and other non-select species are girdled. Such a pre-emptive removal of healthy ash eliminates the possibility that a tree removed could have been genetically resistant to EAB. This view point comes from my training as a Plant Pathologist and Urban Forester. A genetically resistant ash (green and/or American) would be a "Million Dollar Tree" in the shade and street tree industry.

The policy for urban environments may be different because of liability and danger to property and human life. In our woods, though, unless harvested before the bark falls, our dead ash trees are most likely to harmlessly self-destruct where they died. However, if there is any genetic resistance in ash, we will more likely find it in the woods rather than in the streets. Street trees tend to be genetically "thin" because most are cultivars.

Foresters and timber owners should be on the lookout for a living ash standing in an area where EAB has run its course. They should be made aware there may be a "Million Dollar Tree" in their woods.

Does your woodland have a Million Dollar Tree? If it does, you should be aware of the process of patenting, propagation and marketing that is needed to achieve that return.

How would you get someone to pay you a million dollars for a tree? When discussing trees growing in woodlands, large diameter select species trees may be worth a few hundred dollars to an owner because their value is in board feet lumber. On rare occasions, a very large diameter Black Walnut is sold for veneer processing. In 1985, Tri-State Veneer of Borden, IN paid $20,000 for a large diameter, veneer quality, Black Walnut at the Joliet Army Ammunition Plant near Joliet, IL. Twenty thousand is not close to a million dollars. Making large amounts of money on trees is done

by finding a tree with some unique, highly desirable quality; propagating the tree (e.g. grafting, cloning); patenting; trademarking; marketing; and selling.

Unique, Highly Desirable Quality: This is usually different from the normal, average, ordinary example of its species.

continued on page 6

Silver Maple (Acer saccharinum) makes a useful street tree but has lots of undesirable features such as: multiple trunks (trees with V crotches are more subject to splitting apart, not a good trait for trees over streets, sidewalks and houses), lacks good fall color, produces copious amounts of messy seeds, and has roots that pitch sidewalks and clog sewers. However, it tolerates tight spaces between the sidewalk and street, tolerates alkaline urban soils, tolerates poorly drained urban soils, grows fast, and last for about 70 years. Red Maple (A.rubrum) makes a useful street tree but also has undesirable features such as: girdling roots, root graft failure, shorter life expectancy, and chlorotic in alkaline urban soils. Its attributes include single main leader (excurrent), cultivars with brilliant red and orange fall color, and minimal seed mess. Where both species grow together, hybrids are found (A. x freemanii). Hybrids selected by nurserymen for introduction as street and shade trees combine the advantages of both species and minimize the disadvantages. Freeman Maple cultivars being sold as street/ornamental trees tend to grow fast, have great fall color, tolerate poorly aerated and alkaline urban soils, have minimal seed mess, and a single main leader rather than multiple stems. We now have Freeman Maple cultivars with different attributes: 'Autumn Blaze' (drought resistant); 'Autumn Fantasy' (red fall color in warmer climates); Celebration® (storm resistant); Firefall™ (deeply cut foliage); 'Marmo' (seedless); Sienna Glen® (pyramidal form); and more.

Trees grown for fruit, e.g. Pecans, Walnuts, Butternuts, Chestnuts, etc. are selected for desirable fruit qualities, (i.e. size, flavor, thin shells, ease to break shells, disease resistance, insect resistance, etc.). A large size fruited northern Pecan or a Butternut resistant to Butternut Canker Disease would be of great value.

You have to know how to spot a plant that differs from the norm and has desirable features.

Propagating: Very few landscape trees are grown from seed. If you planted seeds from a Golden Delicious apple, you would not get a tree that produces an apple that we know as Golden Delicious. This is because of genetic recombination. Therefore, almost all shade trees and fruit trees are propagated from a plant selected for its special characteristics. There are various ways the mother plant is reproduced to obtain a genetically identical plant (e.g. cuttings, layering, division, grafting, cloning, tissue culture, etc.). Each tree species has a method that works best for it.

Patenting: To make money on a plant it must be patented. Without a patent the plant can be propagated and sold without any money going to the plant originator. 'Prairifire" ornamental crabapple is an excellent, scab resistant, pink flowering crabapple and one of the most widely sold. Its originator never patented it. Had that been done with a typical $.50 to $1.00 royalty per plant, its originator would be earning hundreds of thousand dollars per year. There are very specific conditions for patenting a plant. It must be cultivated (growing in your yard or garden) and produced asexually. For more information on patenting see: http://www.uspto.gov/web/offices/pac/plant/#2. Help will be needed to patent a plant, such as hiring a plant patent attorney or consultant, which can include considerable upfront cost (low thousands).

TradeMarking or Registering: Some cultivars have a small symbol for TradeMark™ or Registered®. A plant patent lasts 20 years, thereafter; the plant can be propagated and sold without royalty going to the originator. TradeMarks and Registration allows the owner to continue to receive royalty as long as the owner maintains the TradeMark / Registration. Again, help will be needed by someone knowing the process.

Marketing: You can have the best shade tree or fruit tree on the planet, but you cannot earn any money if no one knows about it. Generally, the best way to make money on your discovery is to sell all rights outright to an established nursery or grower. They already have established clients and markets. They have well-known websites and social media contacts. Many have the ability to economically propagate and grow the plants. When you sell out, you cannot make money on any royalties and generally will not make it to the million dollar threshold.

Selling: Selling plants requires you or some nursery to propagate lots of plants to be sold. Any nursery or garden center selling your tree will pay you the royalty for each tree sold. Earl Cully, Heritage Trees Inc. of Jacksonville, IL has patented several trees but has west coast nurseries propagate and distribute the seedlings and saplings. Other nurseries throughout the U.S. sell his plants, and he receives a royalty for every plant sold.
'Autumn Blaze'® Freeman Maple is a true Million Dollar Tree. I used to teach Nursery Management with a field trip to the Chicago Area including a stop at Poplar Farms Nursery (at that time located in Batavia, IL). The Nursery Owner, Bill Muetze, had purchased the patent rights of 'Jeffersred' Acer x freemanii. Bill told our class at that time (about 1996-98) that this tree was bringing in $200,000 to $250,000 per year. In 1993, just before he purchased patent rights, Mr. Muetze purchased every Autumn Blaze® liner in the country. He did this for marketing purposes. After patent purchase, he advertised this plant in nursery magazines, like American Nurseryman. Within two years his purchase price for the patent was

continued on page 7

Million Dollar Tree continued

recovered and within 4-5 he had a true million dollar tree. As an instructor of Dendrology I have been looking for and teaching my students about the million dollar tree ever since. Check out the Poplar Farm website (http://www.poplarfarms.com/index.htm) and see the "Home of the Autumn Blaze® Maple". Bill Muetze doesn't have to sell any of these trees in order to receive royalties.

The Dunstan Hybrid Chestnut is an example of a fruit/nut tree which also earns a lot of income for its originator. http://www.chestnuthilltreefarm.com/ has the story.

The Million Dollar Trees are out there and likely growing in a woodland. You have to recognize how it differs from the norm and has better qualities than the average species tree. What should you be looking for? Butternuts resistant to Butternut Canker; Black Walnuts that survive Thousand Canker Disease (after it runs its course in Illinois), Ash trees that are alive after Emerald Ash Borer has run its course; large size nuts on northern Pecan; Black Walnut fruit of large size and larger amount of nutmeat compared to average. If you like finding morels in the spring, begin looking for the abnormal tree in the fall. I think there is a million dollar tree growing in our Illinois woodlands.

Thomas L. Green worked at the Morton Arboretum, Lisle, Illinois, 1980-1993, as their Research Plant Pathologist. He taught Forestry and Horticulture classes at Western Illinois University, 1993-2011.

Opinions & Commentary

The Sahara Forest

by Dick Pouzar

More than 300 million years ago some evolutionary event changed the world of plants. It may have been a specialized insect that began cross-pollinating the ferns; it altered the genome which produced conifers. Then, around 120 million years ago, another genome-changing event occurred, possibly the angiosperms developing flowers with nectar to attract more pollinators. This led to the great diversity of hardwood species between 100 and 65 million years ago.

But what if those events took a different branch - maybe the pollinating insects were not attracted to the precursor conifer's pollen, or the early angiosperm seeds were so delicious that none survived to germinate? What if trees and other woody plants had never evolved? How would our lives be affected without woody shrubs and trees?

Our landscape would be much flatter; our summers would be hotter; winds would blow much stronger. The world's wildlife would be less diverse without forest habitat - fewer species of songbirds, mammals, reptiles, and amphibians.

No one would have invented the swing without a tree to hang it from.

No apples, peaches, pears, oranges, or cherries. No walnuts, pecans, almonds, or pistachios.

The Grateful Dead would never have written "Sugar Magnolia", nor the Beatles "Norwegian Wood". And Doc Watson playing "Cannonball Rag" on a guitar made from bone wouldn't have the same timbre. For those into classical, think of Joshua Bell on a bone violin.

Our ancestors may have remained in caves and used rocks instead of arrows and spears for another millennia. Making the leap to a Copper, Bronze, or Iron Age would have been more difficult with only grass or peat to burn in ancient smelters. And grass fires may not be hot enough for pottery kilns, so forget about china, ceramic, or porcelain dishes and cups. We would still have wool, but not the looms - our clothing would be hand-spun.

Without wood, early undertakers could not have developed the lucrative coffin business.

Trade routes could never have taken advantage of rivers and oceans without wood to build the boats, stunting civilization by suppressing the free flow of goods and information and knowledge. Native Americans would have had fewer visitors.

While papyrus and silk were precursors to paper, they are more expensive to produce and their cost limited their use to the elites. Paper from wood fiber allowed mass production of books and newspapers. Further, letter blocks used in early printing presses were made from wood. If mankind had to wait for letter blocks made from metal smelted using grasses, the printed word would have been delayed a few centuries. Try paging through a dictionary made of stone tablets.

Of course, the Rapa Nui discovered all of this 300 hundred years ago.

Thanks to that supposed pollinator, we do have trees and all of their benefits and products. Even in this digital age with electronics all around us, trees are still important for our shelter, our food, our comfort, our landscape, our recreation, our environment, and wildlife. Which brings to mind the story about the lumberjack who felled trees so fast that an observer asked him, "Where did you learn to use your saw so efficiently?". "In the Sahara Forest," he shot back. The observer replied, "Don't you mean the Sahara Desert?" The lumberjack laughed, "Oh sure, now they call it a desert."

Opinions & Commentary

The History of Conservation in Illinois

(Installment # 4)

By: Dave Gillespie, Secretary

This account of the history of conservation in Illinois was written by Joseph P. Schavilje in 1941. This installment begins where the third installment ended.

British Dominion
1765 – 1778

At the close of the last French war in 1763, the Illinois country with the rest of the northwest was ceded to Great Britain. Owing, however, to the Indian troubles connected with Pontiac's conspiracy, the British were not able to take possession until 1765. (Ill. Blue Book, 1930)

By a proclamation of October 7, 1763, the king of England forbade his subjects "making any purchases or settlements whatever, or taking possession of any of the lands beyond the sources of any of the rivers which flow into the Atlantic Ocean from the west or northwest", the policy was to reserve this vast and fertile region as a hunting ground for the Indians, and by means of the lakes place within British control their enormous fur and peltry trade and to confine the English colonies to the seaboard within the reach of British shipping. (Davidson and Stuve, 1884). During the next 13 years, the colony was governed by British officers, but there was very little English immigration. In 1778, George Rogers Clark, acting under a commission from Governor Patrick Henry of Virginia, captured Kaskaskia and the adjoining villages. (Ill. Blue Book, 1903).

The Illinois Country of Virginia
1778 – 1784

Clark in 1779 secured the conquest by the capture of Vincennes, and in 1783, the final treaty of peace with Great Britain recognized the Illinois country as a part of the United States. Under the charter of 1609, supported by Clark's conquest, Virginia laid claim to all the country north and west of the Ohio River and organized it as the county of Illinois. In 1779, Captain John Todd was appointed commandant of the new county and organized a government under the authority of Virginia. (Ill. Blue Book, 1903). Land grants to individuals were made by a court established by Colonel Todd in June 1799. Before 1783, about 26,000 acres of land were granted by the court to every applicant. (Davidson and Stuve, 1884). This Virginia government soon went to pieces, and in 1784 Virginia finally surrendered her claim to the United States. Soon afterwards, Massachusetts and Connecticut ceded their claims covering territory in northern Illinois. (Ill. Blue Book, 1903).

(To be continued in the next issue of "The IFA Newsletter".)

Opinions & Commentary

Shawnee National Forest Perspective

In anticipation of Invasive Species Awareness Month, IFA Region 4 Director Mike McMahan (MM) talked with the land manager of one of the largest properties in Illinois, Hurston Nicholas **(HN)**, Forest Supervisor of over 275,000 acres within Shawnee National Forest in southern Illinois. Their conversation focuses on invasive plants which threaten the National Forest's health, diversity, and wildflowers. This is especially timely since the Forest Service is "Celebrating Wildflowers" as part National Wildflower Week, May 19 - 25.

MM: Why is your office concerned about invasive species in the first place? And, what has happened recently that has caused you to increase your level of concern?
HN: Our primary concern is the potential impacts to unique or rare plant communities. An additional concern is the rates of spread we are seeing in some of these species coupled with their ability to significantly occupy a wide variety of upland and open field sites.

MM: Which invasive species will you be targeting in your management effort?
HN: We propose to target Amur honeysuckle, Chinese yam, garlic mustard and Kudzu. Within natural areas and their surrounding treatments zones, we plan on treating all invasive species.

MM: Can you tell me specifically what the Shawnee National Forest District will be doing over the next several months to address the invasive species you are targeting?
HN: Once the project is cleared for implementation, we will begin implementation. The approval process allows for members of the public to appeal this decision, whereby it would be reviewed. Assuming the review finds nothing inappropriate with the decision, we should be able to implement this decision by late May or early June. Work could be accomplished by employees, partners and contractors.

MM: How can property owners who have ground adjoining the Forest help? Is there anything they should know about what you are doing?
HN: The environmental assessment (EA) is located on our website and can be found at the following link: http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5407839.pdf. The EA contains maps with areas we are proposing to treat. If a landowner has land adjacent to these locations, and would like to discuss opportunities to treat invasives on their property, the potential for cooperative efforts exists. Additionally, funding maybe available from other state or federal agencies to offset some of the cost associated with treating their lands.

continued on page 9

Shawnee National Forest continued

MM: What help or advice can you offer to them? For example, which invasive should they tackle first? What is the best way for them as private landowners to approach this control measure? What commercially available chemicals do you recommend?
HN: I would ask that landowners review the EA to obtain an understanding of the species we will treat and the methods we propose. Should landowners wish to discuss our proposal, we would be glad to sit down and discuss the project with them. Another great source of information regarding invasives species management is the River-to-River Cooperative Weed Management Association. Karla Gage is the point of contact for the group. She can be contacted at (618) 998-5920.

MM: On a broader scale, how can the Illinois Forestry Association members statewide compliment your efforts, if at all?
HN: I would offer that information sharing is probably one of the biggest contributions members can make. Unfortunately, invasives have become well established, and landowners who are concerned about the potential impacts of these species on their management goals will need to understand what species are involved, their impacts and treatment options.

MM: Last, is this effort limited to the Shawnee National Forest here in Southern Illinois or are other similar initiatives being considered in other parts of the state as well?
HN: While our efforts will focus on federal land, as I mentioned previously, there may be opportunities to work in partnership with adjacent landowners. The Illinois Department of Natural Resources has an invasive species program headed by Chris Evans, and the River-to River Cooperative Weed Management Area is also involved in the management of invasives. Other sources of information related to invasives can be obtained by contacting the Natural Resources Conservation Service.

News & Events

Regional Happenings

Region 1 - Northern Illinois

Directors: Dick Pouzar, Galena, IL, 815-777-8157, pouzar@yahoo.com
Tom Vorac, Geneseo, IL, (309) 944-3678, tom_vorac@live.com

On **Saturday, June 22nd**, Keith Griebel and Brian Steines of Steines and Griebel Logging will be delivering a presentation on the felling and skidding of trees from your timber from the loggers' perspective. Steines and Griebel represent over fifty years of experience in the logging industry. This is a unique opportunity to meet and discuss with loggers what to anticipate during the harvesting of your trees. They will cover such subjects as:

- Tree selection and quality.
- Harvest contracts and the bidding process.
- Minimizing damage to trees during the harvest.
- Proper trail selection.
- Crossing waterways with equipment.

This 8:30 am event will be held at the tree farm of Larry and Sally Priske near Galena in Jo Daviess County where Steines and Griebel completed a commercial thinning operation last year. For directions and to register for this free event, see the Event Calendar on the IFA website.

On **Saturday, July 20th**, IFA members will join members of the Society of American Foresters to tour natural areas along the Mississippi River managed by the US Army Corps of Engineers. We will meet at 10 am in Carroll County at the Thomson Causeway, just south of Thomson, Illinois, and drive to the first site. Returning to the Causeway pavilion, we'll eat lunch. Then, we'll drive to afternoon sites at Eagles Landing, the former Savanna Army Depot, south of Savanna, IL. Members will receive more information about this event around the first of July.

If you missed the **tree planting demonstration** in Jo Daviess County on April 13th, then you missed a very chilly but informative morning. Typical of this spring, Saturday the 13th saw temperatures in the 30s with a damp wind, while the next day it climbed into the 60s. While consulting forester Kevin Oetken's crew machine planted 3,000 seedlings, Kevin demonstrated planting an RPM (Root Production Method) seedling with wire cage and rodent guard and compared that to planting a bare root seedling. Then, plantings from 2011 and 2009 were inspected for growth and browse damage. Some continued to the 2010 planting and then to a 1990 oak/pine planting to discuss thinning and pruning. Landowner Dick Pouzar said, "With four professional foresters here, it was a great opportunity for everyone to learn something." Given last year's drought, Kevin indicated that many nurseries were hard pressed, even with irrigation, to produce the same quality seedlings compared to previous years' production.

Plans for this year's **IFA Annual Woodland Conference** "Here Comes The Sun" are coming together. Field site visits in and around Starved Rock State Park, Friday dinner speaker, the IFA annual business meeting Saturday morning, and speakers both before and after Saturday lunch are in the works. Details will be provided later via website, newsletter, and email. This two-day event will be held in LaSalle County near the intersection of Interstates 39 and 80 at Illinois Valley Community College and the State Park on Friday and Saturday, September 20th and 21st. Mark your own calendar now.

Region 2 - West-Central Illinois

Directors: Carol Bryant, Mt. Olive, IL, (618) 444-3864, cabryant2@gmail.com
Jake Hendee, Springfield, IL, (913) 547-2541, jhendee@lc.edu
Jim Hynes, Pleasant Plains, IL, (217) 502-4528, hynesfarm@gmail.com
Dan Schmoker, Springfield, IL 62443, (217) 529-0061 – schmoker3@aol.com

With the large Shawnee National Forest at the southern end of our state, we sometimes forget that Illinois has some significant state forests as well. One of those is Big River State Forest in Henderson County. Much of this forest has been converted to a vast red and white pine plantation, replacing the scrub hardwoods that were not productive in the sandy soils. This practice was so successful that local

continued on page 10

Regional continued from page 9

landowners followed this method of land management. With such a large expanse of pines, forest fires are a danger, and the forest managers have established smaller manageable units separated by 60 miles of fire breaks, along with a fire tower in the HQ area.

The facilities are available for picnicking, camping, boating, fishing, hiking, hunting, snowmobiling, or just driving through the 15 miles of scenic roads.

The IDNR provides demonstrations and talks on their forestry practices to interested groups. If you would like Region 2 Directors to arrange such a tour and demo, contact one of us.

A **Twig ID Workshop** was held March 23rd in Macoupin County at Carol Bryant's Tree Farm. Dan Schmoker demonstrated the use of the key found in "Forest Trees of Illinois" and took the students to the woods to practice what they had learned. IFA members in attendance were Dan, Lee Rife, Arnold Huelsmann, Jake Hendee and Carol. Two others attended from the Missouri Botanical Garden, Jennifer Kleeschulte and Teresa Pafford.

Region 3 - East-Central Illinois

Directors: John Edgington, Mansfield, IL, (217) 489-9075, johnedg@illinois.edu
Anthony Kreke, Effingham, IL, (217) 536-5601, tonynjill@frontiernet.net
Stan Sipp, Mansfield, IL, (217) 489-9003, sksipp@uiuc.edu
Bob Wagoner, Charleston, IL, (217) 345-6628, rwagoner@consolidated.net

Located just north of Mahomet, the Rayburn-Purnell Woods is an excellent example of an upland oak-hickory forest. Acquired in the 1960s from the Rayburn and Purcell families by the Champaign County Forest Preserve District, the land had previously been subdivided into woodlots in the early 1900s. These woodlots had provided lumber and fuel for local families. Even with that harvesting, this is considered an old-growth forest of native species with some of the older trees estimated to be over 175 years old. In addition, there is a half-mile trail with an accompanying spring wildflower guide for those inclined.

Rayburn-Purcell Woods is part of the larger 900-acre Lake of the Woods Forest Preserve that follows the Sangamon River corridor. This preserve contains the Museum of the Grand Prairie, the Maberry Gelvin Botanical Garden, a golf course, a covered bridge (with bats at dusk and dawn), a six-story stairway tower that's topped with an observation deck, and hiking and biking trails.

If you are looking for a local day trip with outdoor experiences, this Woods and Forest Preserve offer much of interest.

Region 4 - Southern Illinois

Directors: Jim Kirkland, Stonefort, IL , 618-695-3383 , 1984kirk@gmail.com
Mike McMahan, Vienna, IL, (618) 977-3415, mcmahan3465@hotmail.com
Roger Smith, Benton, IL, (618) 927-2057, smithtreefarmllc@hotmail.com

The 24th Annual **Stewardship Week** is an annual event held at Dixon Springs Agricultural Center in Simpson Illinois. This event was a 4 day series of programs that brought together a dedicated group of natural resource professionals who voluntarily took this opportunity to share their love of the woods, waters and landscapes of Southern Illinois with school children Kindergarten thru 6th grade. Stations featured topics such as Wood is Good (a woodworking station hosted by IFA Region 2 Director Dan Schmoker), Tree Care (Hosted by IFA Region 4 Director and Certified Arborist Roger Smith), and Streams, Invasive Species, Weather, Wetlands and You are Here (a station on mapping). Overall there were 35 separate learning stations all of which were focused on getting these enthusiastic grade school children more informed and attracted to the outdoor world and the natural resources that sustain us. The event attracted approximately 1,850 students and their teachers and took place over 4 chilly and at times rainy days! Every child and teacher received a free tree and a handout with planting directions. Stewardship Week has been around long enough that we now have resource professionals who attended Stewardship Week as a child! Jim Kirkland, IFA Region 4 Director and Interim Director of the Illinois Forest Resource Center, sees this event as a way to prepare the next generation of resource professionals for their future career. Kirkland says "We are always looking for new presenters and volunteers. Feel free to contact the Illinois Forest Resource Center (618-695-3383) if you might be interested in helping out for next year's event."

Small Town Tree Inventory Initiative: Two local forestry experts, Emily G. Hanson/Urban & Community Forester/ IL Urban Forestry Volunteer Coordinator and Roger Smith/IFA Region 4 Director and owner of Smith Tree Farm in Marion, are working hard to get a volunteer program started in the southern part of our state. They have been key players in the on-going efforts in Harrisburg to help restore the trees lost or damaged in the tornado. They are also working on setting up the Benton Tree Committee to conduct a rough inventory of the trees in town and present the findings to the potential tree committee members as a photo slideshow. We will keep you posted on both of these efforts as well as any others that might spring up. If you are interested in what this program might offer to your town, you may contact Roger at smithtreefarmllc@hotmail.com.

Invasive Species and Forest Management Field Day on June 1st: Topics include:

- invasive species ecology and identification
- specification of herbicide application
- management techniques
- forest management
- NRCS programs.

Attend live demonstrations of appropriate control techniques for a variety of invasive species and infestation levels. This will be a rain or shine event, so dress appropriately for weather. Light refreshments and restroom facilities will be provided. Free and open to the public, no pre-registration necessary. Field day will be held at the Green Earth's Chautauqua Bottoms Nature Preserve.

Sponsored by Jackson County NRCS, River to River Cooperative Weed Management
For more information, call 618-684-3064, Ext. 3

News & Events

News

"Practical Advice for Using Insect-Killed Trees" is a new publication available from the Forest Products Laboratory, providing an understanding of how emerald ash borer, gypsy moth, thousand canker disease, and Asian long-horned beetle are affecting hardwoods. It also offers valuable insight into the wide variety of products and markets that are available, and practical advice for considering the many options. While it is aimed at the forestry professional, it is available for anyone to download free at the Forest Products Laboratory website - www.fpl.fs.fed.us.

The Illinois Outdoor Hall of Fame inducted IFA members Ken and Marcia Polhamus of Jo Daviess County in January. They are active as coordinators of the JAKES youth program of the National Wild Turkey Federation; are committed to transferring the hunting tradition by hosting many youth hunts; teach safe hunting practices and conservation stewardship to hundreds of both adults and youth as volunteer instructors; and support the Illinois Conservation Police through their donations. In 2012, they were recognized by Field & Stream magazine as Heroes of Conservation finalists. Congratulations to Marcia and Ken!

IDNR Funding will increase by about $20 million due to a $2 increase in state vehicle registration fees. Most of that funding will be directed to state parks' infrastructure and staffing. There are also increases to boat registration fees and stickers for dirt bikes and ATVs. It appears that none of these extra funds will help the Division of Forestry.

Drought? After this spring's flooding throughout the state, it's no surprise, but . . .the National Oceanic and Atmospheric Administration (NOAA) issued their latest national outlook and predict no drought for Illinois and surrounding states for May through July. To find out how last year's drought will affect the outlook for forest pests and diseases, join our webinar on June 4th with Dr. Fredric Miller - details on our website's Event Calendar.

CRP Signup will be open for 4 weeks starting May 20th. Those that are accepted in the sign-up can receive cost-share assistance to plant long-term, resource-conserving covers (including trees) and receive an annual rental payment for the length of the contract - from 10 to 15 years. For more information, visit your county's USDA Service Center, FSA office.

Cicadas Are Coming! - NOT! Major media outlets are reporting emergence of cicadas, but this is only happening on the east coast where those egocentric media outlets are headquartered. In Illinois, there are two broods emerging in 2014 and 2015 in small areas, but most of the state will not see them until 2020 or later.

Deer Harvest for the Illinois 2012-2013 seasons totaled 180,669 deer, down 1% from the year before, and off 10% from the record 2005-2006 seasons. Harvests were highest in these counties: Pike (7,239), Fulton (5,717), Adams (4,606), Jo Daviess (4,383), Jefferson (4,266).

News & Events

IDNR's Conservation Congress, Step 1

In February and March, the IDNR held several regional meetings as a first step in soliciting public input for the upcoming Conservation Congress that will occur in September. The second step will be an online survey, based on input from those meetings that allows the public a vote on actionable items they would like the IDNR to pursue. The survey results will inform delegates to the Conservation Congress in their developing work plans for the actionable items.

A number of IFA board members had intended to participate in the regional meetings. Unfortunately, the extended winter weather obstructed those plans. IFA Region 1 Director Tom Vorac was the only one who could attend; he participated in the March 4th meeting in the Quad Cities.

The IDNR regional meeting moderators directed the discussion to five broad topics -

- Sustainable resource development and extraction - mining, water, forestry
- Sustainable resource harvest - outdoor recreation
- Sustainable provision of outdoor recreation - public access
- Sustainable resource protection - regulation and law enforcement
- Building bridges - constituencies and partnerships

Tom reported that the moderators were not knowledgeable about forestry's role within the IDNR. As indicated in the topics above, forestry was aggregated with mining as an extractive resource, with no mention of its environmental or recreational benefits. While there was some discussion of IDNR's new funding based on the increase of vehicle license fees, the moderators were unaware of the misappropriation of the 4% timber harvest fees and were not aware if any of the new funding would support the Division of Forestry.

At Tom's regional meeting, to increase the availability of private land access for recreation, the IDNR pushed a recommendation for a law to help with landowner liability. There was discussion of resource development of gas, oil, coal, and biomass, but no mention of timber. The other broad topics were covered, but with little or no reference to forestry's fit.

The IFA will alert members when the online survey is available so that we all can provide input to help the IDNR set its future goals.

News & Events

Comparing Illinois to Other States

Every year, the USDA Forest Service (USFS) researchers inventory each state's forest resources. They use satellite imagery to gauge fragmentation, urbanization, and distances. Then, they visit field sample locations, one for every 6,000 acres, to collect various forest ecosystem data. Lastly, they check forest health indicators at one sample location for every 96,000 acres.

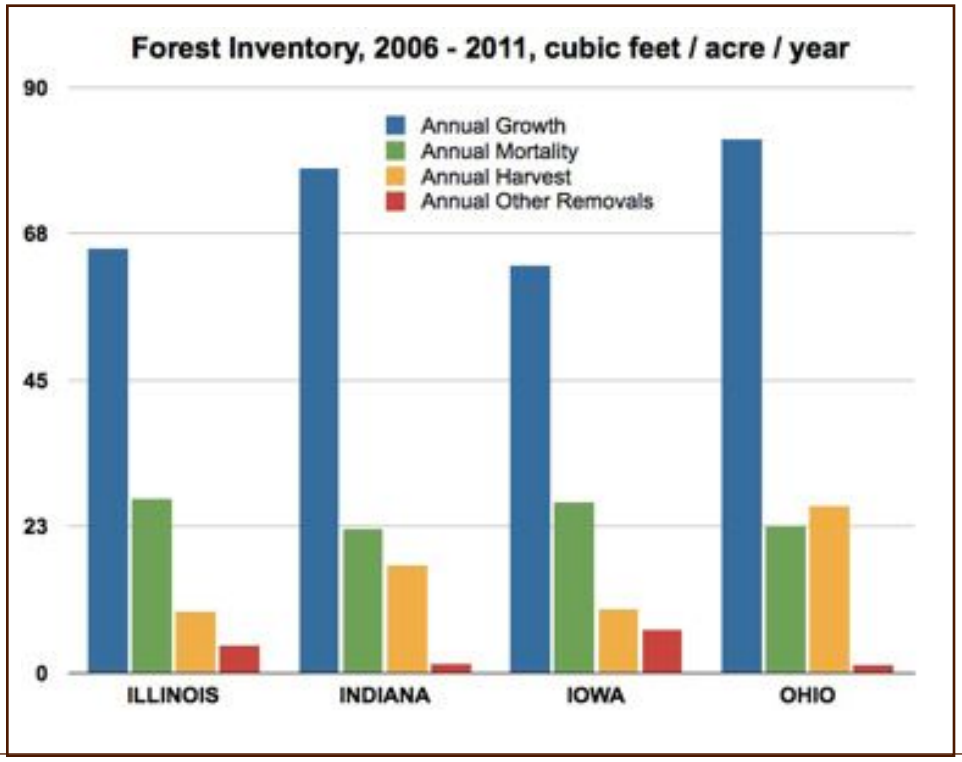
This is but part of the USFS Forest Inventory and Analysis (FIA) Program whose objectives are: "As the Nation's continuous forest census, our program projects how forests are likely to appear 10 to 50 years from now. This enables us to evaluate whether current forest management practices are sustainable in the long run and to assess whether current policies will allow the next generation to enjoy America's forests as we do today. FIA reports on status and trends in forest area and location; in the species, size, and health of trees; in total tree growth, mortality, and removals by harvest; in wood production and utilization rates by various products; and in forest land ownership."

Every five years, this program issues an update for each state. It takes some time to gather and assimilate all of this data and issue these reports, which, for the years 2006 through 2011, were released at the end of last year.

Below is a comparison of Illinois and four states at the same latitude, growing approximately the same species of trees. Since these states have varying forested acreage, the chart below shows the cubic feet per acre per year.

Note that Illinois has many more trees dying in the woods than are harvested, whereas Ohio harvests exceed mortality. All four states' annual growth far exceeds total losses from harvest, mortality, or other causes.

Illinois is the only state of the four in which an oak species (white oak) is the most populous species, and the only state in which three oak species are in the top five most populous. However, since 2006, Illinois' white oak population experienced a 5% decline due to a lack of oak planting and regeneration.



News & Events

A Brief History of Hardwood Markets and Prices

The following is excerpted from a 1998 Forest Service paper "Long Term Analysis of Hardwood Lumber Prices" by Luppold, Prestemon, and Baumgras. It describes several decades of hardwood lumber prices and associated market forces. It provides clues as to what affects hardwood prices. This article ends with some observations about current market demand.

In the 1950's and 1960's walnut was the most valuable species and other closed-grained species (cherry, hard maple, and soft maple) were priced higher than open-grained species (oak and ash). During this period, walnut was the most commonly shown wood at the furniture markets followed by maple (hard and soft) and black cherry.

Yellow-poplar was valued more than the oaks (red and white) and maple because this species was used in combination with walnut, cherry, and mahogany veneers. Although furniture made from white oak was exhibited at furniture markets in the late 1940's and early 1950's, oak furniture did not sell well.

In 1973, walnut was still the most expensive hardwood species while the oaks, the maples (hard and soft), and yellow-poplar traded at similar prices. The high price of walnut may have resulted from a low supply caused by previous over cutting rather than from strong demand because it was being used less by furniture manufacturers. The early 1970's also was a period of turmoil for both the general economy and the hardwood lumber market. Wage and price controls imposed by the Nixon Administration caused shortages of nearly every species, resulting in sharp increases in prices after the controls were lifted. In addition, the adoption of floating exchange rates during this time caused an increase in exports of oak and other species. The most significant change during this period was the increase in red oak furniture showings.

continued on page 13

As the 1970's progressed, red oak became a major species used in domestic markets while white oak was being exported to Europe in increasing amounts. The maples became less important as furniture species while cherry maintained a continual presence at the furniture market. In the 1980's, demand for oak continued to increase while showings of maple and walnut furniture continued to drop.

In the 1980's, prices of red and white oak continued to increase in value while the maples sold at relatively low prices. Red oak continued to be used by domestic manufacturers while white oak was exported. The export of white oak caused the price of high-quality white oak to increase but the price of mid-quality white oak did not increase as fast as that of red oak. Yellow-poplar prices remained low during this period due to relatively low demand and increasing sawtimber inventories.

In the early 1990's, showings of maple and cherry at the High Point, North Carolina furniture market began to increase. In addition, white hard maple was being used with cherry veneer. Oak showings hit nearly 30 percent in the early 1990's resulting in a noticeable spike in the price of red oak lumber. By the end of the decade, black cherry was the highest value species followed by hard maple, mid-grade walnut traded at the same price as red oak while white oak traded at price levels comparable to those of soft maple. The ebb and flow of lumber prices for individual hardwood species over the last 50 years can be attributed to style (preferences of consumers - ed.).

(In this paper, the authors try to establish whether there are relationships among the lumber prices of various hardwood species. That analysis is not repeated here, but their concluding remarks are of interest.)

...if relative hardwood lumber prices are erratic over the next 50 years, as they were over the past 50 years, then the selection of the best species for regeneration appears to be more of an act of faith than a predictable outcome. Still, the initial management premise we attempted to establish -- that forest managers should not concentrate on regenerating and managing for specific species but expend resources on maintaining stand quality for species most suited for a specific site -- might be valid . . . previous research has shown that high-quality timber has increased in value faster than timber prices in general.

(In a different paper published one year earlier, these same authors compared lumber prices to timber prices paid to landowners.)

Analysis of short-term relationships between lumber price and stumpage price revealed that these series did not always move in the same direction, but tended to move in the same direction when there were large changes in lumber prices. However, continual declines in lumber prices did not always result in continual declines in stumpage price because of apparent price expectations of the stumpage owner. In the long run, the market margin between stumpage and lumber price has declined in a discrete manner. These declines are related to periodic increases in lumber production and price that occur at the beginning of the hardwood production and price cycle. Theory stipulates that during periods of declining prices, the less efficient sawmills will be forced out of the market. Following these periods, inventories usually are insufficient to satisfy any increase in lumber demand. Therefore, when demand increases, lumber prices increase sharply causing surviving, efficient mills to increase production and to bid up stumpage prices to new, higher levels. This bidding transfers any short-term economic gains that result from increased production or marketing efficiency to the resource owners.

And if you are wondering what will happen to demand for hardwood lumber this year, here are some clues:

EXPORTS: "U.S. hardwood lumber exports during the first two months of 2013 were 11% higher than during those same months in 2012. Exports will continue to increase in the months ahead." - the Hardwood Review, 3/13

EXISTING HOUSING SALES (which has some bearing on hardwoods for remodeling): "Total existing-home sales are projected to increase 6.5 to 7 percent over 2012 to nearly 5 million sales this year, while the national median existing-home price is forecast to rise about 7.5 percent." - National Association of Realtors, 4/29/13

NEW HOME CONSTRUCTION (which drives hardwood demand for cabinets, flooring, millwork and furniture): "Many builders are expressing frustration over being unable to respond to the rising demand for new homes due to difficulties in obtaining construction credit, overly restrictive mortgage lending rules and construction costs that are increasing at a faster pace (see below) than appraised values," said Rick Judson, National Association of Home Builders (NAHB) Chairman and a home builder from Charlotte, N.C. "While sales conditions are generally improving, these challenges are holding back new building." - 4/13

CONSTRUCTION (PINE) LUMBER: "North American mills are sawing lumber at the fastest pace in six years after a recovering U.S. housing market, a beetle infestation in Canada and increasing Chinese demand drove the biggest price surge in 2 decades . . . Lumber surged 44 percent in 2012, the most since 1993." - Bloomberg, 5/13

Illinois Forestry Association

A non-profit, tax-exempt organization under IRS 501(c)3

News & Events

IFA Member Resources

Expert Presentations

Every month, we add another expert presentation to our library of recordings. They vary from one to two hours in length, and feature an expert on a subject of interest to woodland owners. We get them by recording our webinars, and our members can watch them as if they were watching a YouTube video. Here is the current list -

"Dealing with Forest Invasives during Fall and Winter"
Presenter Chris Evans, Invasive Species Coordinator of the Illinois Wildlife Action Plan

"Not Timber, Not Non-Profit"
About non-timber forest products presenter Richard Straight, Technology Transfer Lead of the USDA National Agroforestry Center

"Basic Winter Tree Identification"
Presenter Jay Hayek, Extension Forestry Specialist University of Illinois

"Black Walnut Management"
Presenter Lenny Farlee, Extension Forester Purdue University, Hardwood Tree Improvement Center, Forest Service Northern Research Station

"Spring/Summer Invasives & their Impact on Forest Health"
Presenter Dr. Karla Gage, Coordinator River-to-River Cooperative Weed Management Area

Access to these recordings can be found in the "Members" section of the IFA website under "Forestry Library > IFA Recorded Webinars". Access is free and you can watch them whenever you like.

Bi-weekly Member Messages

Since the last newsletter in February, we have sent the following messages to members via email. If you missed any of these and would like another copy sent, contact one of your regional directors.

Date Sent	Main Topics
March 7th	Tree Planting Best Management Practices, Newsletter Feedback Survey Results
March 21st	USFS Forest Health Report for Illinois, Indiana, Iowa, Missouri
April 4th	The Decline of Tree Species Diversity in Illinois Forests
April 18th	Bluebird Legacy
May 3rd	How To Increase Acorn Production

These messages contain not only a main topic, but announcements of upcoming events, webinars, local news, and available publications. Just a reminder to place "forrest@ilforestry.org" in your email system contact list so that these messages are not trapped by a spam filter.

Flora, Fauna, & Forestry

Invasive Species Awareness Month
Don't Be Part of the Problem

This past week, the Peoria Journal-Standard had two suggestions for all of us. One, know the most infamous invasive plants by sight; and, two, do NOT spread them. Because of the threat that they represent to their land, every woodland owner should be able to identify, at a minimum, the following -

- garlic mustard
- japanese stiltgrass
- bush honeysuckle
- common buckthorn
- glossy buckthorn
- oriental bittersweet
- giant hogweed

These plants can dominate and damage the forest - crowding out the native understory, strangling or starving trees, removing food palatable to wildlife, and destroying the forest soil's health. It's not just that these plants are non-native and aggressive; they can seriously impact your trees and their ecosystem.

The Midwest Invasive Plant Network at www.mipn.org has information and tools to help you learn about these plants. Also, your local Extension office can answer your questions or find someone who can.

When you learn to identify these plants, understand that their seeds can attach themselves to your clothing, boots, vehicles and ATVs, boats, dogs, and horses. If you vacation elsewhere or visit a park or other farm, before leaving go through these steps - brush off your clothing, brush your dog or horse, brush your boots, wash off your boat, and check your vehicles and wash or vacuum if possible. As Chris Evans suggests in his article on garlic mustard, if you have contractors bringing equipment onto your land, insist that they clean that equipment and gear before they arrive.

Many of these plants, and others, are being carried by people to other parts of the state. The evidence is that new infestations follow major interstates or in state and county parks. Don't be a part of the problem. It's far easier to get rid of the seeds before you leave than it is to fight the plant after it's established on your land.

The third action that you can take is to tell your neighbor and friends about the threat these plants pose. If your neighbors get them, you will have them soon. We are all in this together.

Flora, Fauna, & Forestry

Flooded Forests Are No Fun

by Tom Vorac

When the your nearby river comes out of her banks, the long term health of your trees may be low on your list of priorities, but the flooding can have serious consequences that add up to more than just a few lost limbs. Most trees can withstand a day or so of flooding, but repeated or prolonged time under water can cause major injury or death. Most of the damage begins when oxygen is sealed out of the soil. Trees take in carbon dioxide through their leaves, but that's only part of the story. Their roots also need oxygen to function properly. When soil is covered with water, oxygen can no longer move into the root zone. If the flood leaves behind three inches or more of sediment, the roots can still suffer from lack of oxygen even after the water recedes.

continued on page 19

Flora, Fauna & Forestry

Chainsaw Sharpening

We asked IDNR forester, woodsman, and blogger David Johnson for some advice and tips on sharpening your chainsaw. He accommodated us in spectacular fashion with the text and pictures below with this entry from his blog Truebluesam.blogspot.com with the title Chainsaw Sharpening Tips, January 13, 2010. Visit his blog for other advice, tips, and techniques.

This ad was in a little farm newspaper that we get in our mail every week, and I think it is safe to assume that many chainsaw owners believe the statement that chains can be sharpened "4-5 times," and that they are willing to pay $10.00 to have a chain sharpened for a twenty inch bar. That is a pretty good gig if you can get it, but when you figure that the saw owner is going to be paying $50 to sharpen a $15 dollar chain into oblivion, and will be cutting with a dull saw most of the time, it makes me cringe. When you buy a couple new chains for your saw, buy a box of files, a sharpening jig that will work on your saw, and take the time to learn how to sharpen. It's easy, and we will go over the basics for you.

Out in front on each tooth is the depth gauge. You will hear it called the 'raker', but its real purpose is to control the thickness of wood that the tooth can bite. As you file the tooth back the depth gauge must also be filed down to match it. You don't have to file the depth gauges every time you sharpen, and I do them only on the workbench, not in the woods. The parts of your tooth that you work with as you file are the depth gauge, the top plate, the side plate, the top angle, and the side angle. As you look at the teeth above, mentally draw a 90-degree line down from the front edge of the top plate. That line should evenly intersect the arc on the front of the side plate. If the arc is hooked forward the tooth will bite more aggressively, and if the arc is leaning back the tooth will not bite hard enough. When the side angle is correct, the angle of the edge under the front of the top plate will be very close to 45 degrees.

You can see that the third tooth in the photo above is filed so the tooth will be lazy. This can be straightened out with a filing jig or by providing a little downward pressure in the gullet as you file freehand.

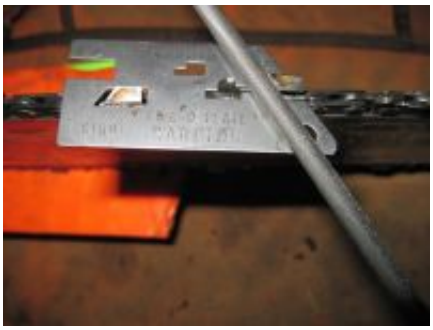
I believe in filing every time I fill the fuel and oil tanks on my saw. These teeth have cut through one filling, and you can see a little bright edge on both teeth, plus an obvious bright spot on one tooth. This is how you know whether your chain is sharp or dull. The top should disappear at the front edge with no bright spots or edge. Usually you will be able to find some bright edges after each tank of fuel, so a fill-up is a chance to keep your saw sharp.

Point the teeth into the light, put on your reading glasses, and the need to file becomes obvious.

Adjust the slack out of your chain, block up the bar and look for the dullest tooth. Check the gullet on the side-plate to see if you should press straight back, or slightly up or down, and push your file through with a straight stroke at the 25 to 35 degree angle of the front edge of the top plate. Use a file handle so you can make strokes the entire length of the file, and count the strokes needed to remove all of the bright edges. Advance the chain and repeat all of the way around the chain; then turn your saw around and do the other side.

The Carlton File-O-Plate is an easy jig to use to correct your angles if you use Carlton or Woodland Pro chain. It keeps your file at the right depth, and shows you the correct angle for the top plate.

continued on page 16



This little tool is hard enough that files barely mark it, and you can use one for years. I usually file freehand in the woods because I am afraid of losing it, but I use it at home to straighten things out.

Look closely and you can see a depth gauge peeking up through the little slot. I like to file the depth gauges after I have rehabbed the saw at the end of the day, and the File-O-Plate system seems to set them right for cutting oaks and hickories.

This little gizmo is common in lots of chainsaw departments. I picked this one up at Lowe's in a Husqvarna blister pack, and the chains hanging nearby were Oregon's. I set it on my Carlton chain, and it held the file a bit high. The good news here is that the slots can be filed a bit deeper so the rollers will hold the file in the sweet spot for you. This tool also has a gauge for filing your depth gauges, with two choices for the type of trees you are cutting. This is an easy tool to use, and most people who try it like it.

I think this little stamped guide is sold in every saw shop in the country, and it's not a bad tool to have in your kit. It shows you the correct angle for the front of the top plate, but it is not hard metal, so you have to be mindful of your side angle, and aim your pressure appropriately. If you bear downward, you will soon have the slot deepened, and you will be filing your gullets too low, making the teeth bite too aggressively.

This file guide has two slots for filing your depth gauges; one is .030", and the other is .035". Use the right one for your chain and the type of wood you are cutting. I tried the .035" slot on my saw with a .325 chain, and it made the teeth too grabby to use in hickory. It still worked OK in oak, but that was a good lesson about pushing the limits. The .035" works fine on my saws with .375 chains.

The end of this tool is very useful for cleaning sawdust and gunk out of the rail on you saw's bar, so whether you sharpen with this jig or not, you will want to have one in your kit.

Once you understand what the tooth needs, you will be able to file freehand at every fill-up so you always have a sharp saw. If you tag a rock, or other hard object, stop the saw right then and inspect every tooth. You may only have one or two dull ones, and you can fix it right then so you keep throwing chips instead of sawdust.

Flora, Fauna & Forestry

Invasive Plant Profile – Garlic Mustard

by Chris Evans, Illinois Wildlife Action Plan, Invasive Species Campaign

May is Invasive Species Awareness Month in Illinois. Events and programs are being held across the state to educate and inform Illinoisans about invasive species and what they can do to help combat this threat to our Natural Resources. To get involved in Awareness Month or to see a calendar of the events being held, check out www.illinoisinvasives.org.

continued on page 17

For this year's Invasive Species Awareness Month, I would like to highlight the forest invader – Garlic Mustard. Garlic Mustard, *Alliaria petiolata*, is a species that every forest landowner in the state needs to be familiar with and happens to be most visible and easily detected in May! Infestations can have drastic impacts on the plant and animal life in forests and timely control of new populations is the best was of managing it.

Identification

1st year plants are small rosettes

Garlic mustard is a biennial plant, meaning that it has two life stages and takes two years to complete its life cycle. The first year garlic mustard will grow as low rosettes with light green rounded leaves. Second year plants, early in spring, will grow a 2-5 foot tall flower stalk with triangular, coarsely toothed leaves. The flowers are small and white with four petals each. This plant is one of the first plants to flower in the forest. The flowers give way to a long, thin, seed pod housing hard black seeds when ripe.

2nd year plants in flower, showing the triangular leaves along the stem

When crushed, the leaves of this plant smell strongly of garlic, especially when fresh. After seed production, the plant dies and turns brown. This usually starts in early summer. The dead stalks often continue standing and can be seen well into fall.

Ecology

Garlic mustard grows in a variety of habitats but prefers moist soils and partial shade. It is very common throughout woodlands in most of Illinois, particularly the northern half of the state. Typical habitats invaded include bottomland forests, mesic upland forests, roadsides, riparian areas, ditches, and woodlots. Garlic mustard can produce up to nearly 8,000 seeds per plant and those seed can live in the soil for around 5 years. The small, hard seeds can be easily picked up in mud and dirt and unknowingly spread by hikers, bikers, hunters, horseback riders, and on tires of vehicles, ATVs, and other equipment.

Garlic mustard flowers are small and white with four petals each

Impacts

Garlic mustard can form very dense patches that can crowd out and replace native species. Garlic mustard plants can exude chemicals into the soil that hampers the growth of mycorrhizal fungi, which many plants, including most hardwood trees, utilize to help in collecting nutrients. This creates conditions that favors garlic mustard and inhibits native species.

Fruit of garlic mustard are thin seed pods, called siliques

Because of its early growth, spring wildflowers are particularly at risk from invasion. No wildlife feed upon garlic mustard so infestations that dominate the understory of a forest can greatly reduce the wildlife value and usage of the area.

Control

To prevent or reduce the damages from this plant, control of existing infestations is necessary. It is especially important to control new infestations. Finding this plant early and taking steps to eradicate the population is crucial to prevent garlic mustard from expanding and becoming well established. If your land already has a large population of garlic mustard, priority for control should be given to isolated satellite populations, high quality habitat with significant natural resources at stake, and the leading edge of larger infestations. Control these areas first and work your way towards the larger areas of the infestation.

Garlic mustard pulls out of the ground easily and small infestations can easily be hand-pulled. If flowers or seed pods are present, the plants need to be bagged and removed from the woods. For larger infestations, the best control is an application of glyphosate (Roundup or generics) or triclopyr (Garlon or generics) before flowering. Typical recommendation would be a 2-3% solution applied to the foliage of garlic mustard thoroughly but not to the point of run-off, but be sure to read and follow all label information of the herbicide to be used. All applications should be made before flowering to prevent seed set. If the plants are in flower, your best approach would be to hand-pull and remove the plants.

Be sure to clean the dirt and mud off of your boots after hiking in areas with garlic mustard

It is important to not spread this plant around. If you travel through an area with garlic mustard, be sure to remove mud off of your shoes, tires, and any part of equipment that came into contact with the soil. If someone is working on your land, be sure to build into the contracts requirements for equipment to be cleaned before it arrives on your land. Garlic mustard is just one of the invasive species a forest landowner should be concerned about in Illinois. Invasive Species Awareness Month is a great opportunity to get involved and learn more about how to deal with this important management issue.

Do you have a passion for trees and forestry?

Are you interested in serving on a regional committee?

Contact an IFA officer today to find out how you can help!

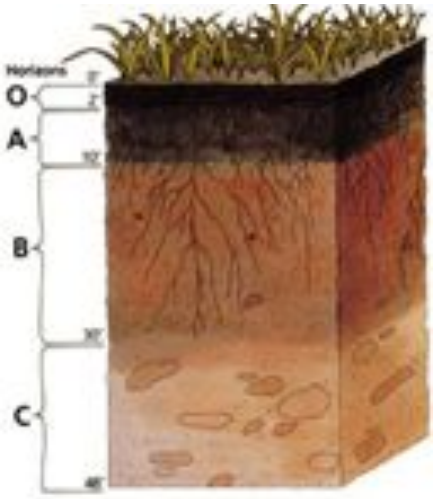
Flora, Fauna, & Forestry

Beneath Your Feet

The forest floor is critical to tree growth and health, yet many don't give it a thought. This stuff below our feet feeds our trees in complex ways; its richness determines whether our trees are well-fed and healthy, or starved and under stress.

This forest floor is composed of layers created over centuries by weathering of glacial material and the underlying rock and decomposition of forest waste. The top layers constitute a living biomass of micro-organisms, arthropods, and fungi.

The surface layer is the herbaceous vegetation low to the ground; a measure of its health is its diversity - lots of different plants, all contributing a different mix of nutrients to the soil when they die.



This top vegetation is growing in the litter and duff layer, which should be thick, spongy, and filled with forest biomass. This litter is shredded by insects, millipedes, and other arthropods so that fungi and some bacteria can continue its breakdown. The resulting partially decomposed organic material builds the next layer down, the O-horizon.

The herbaceous vegetation's roots extend down into the O-horizon (O for organic) where the partially decomposed litter is acted upon by still more invertebrates, fungi, algae, and bacteria - some of them decomposers, some of them predators. The resulting decomposed organic material feeds the next lower layer. Fine tree roots appear in this O-horizon which can be 4 inches thick or more.

The A-horizon can be called the topsoil and is anywhere from 1 to 8 inches thick. Still more tree roots appear in this layer, taking advantage of the nutrient richness. Below the A-horizon is the B-horizon layer, commonly called the "subsoil", which has more mineral content and less organic material, and the C-horizon layer where unaltered surficial material is broken down by weathering.

The soil organisms active in the O-horizon and A layers convert the organic litter into nutrients in the form of carbohydrates and mineral elements. These nutrients are then absorbed by mycorrizal fungi that have colonized tree roots. The fungi and trees are in a symbiotic or mutual relationship, each getting benefits. The fungi hyphae (threadlike filaments) are thinner than the smallest root and extend the tree roots reach by penetrating a larger surface area. The fungi can also access and provide some minerals that tree roots are incapable of absorbing. The tree provides sugars created through photosynthesis in its leaves and delivered to the fungi through its roots.

While some of the higher level soil organisms, the arthropods, play a role in decomposition by shredding the forest litter, others play just as important a role by preying on either bacteria or fungi and keeping them in balance. Larger predators, such as birds, keep the arthropods in balance.

This continually changing, living biomass that is the forest floor can be impacted negatively in several ways. Compaction from heavy equipment, livestock, or constant traffic reduces the movement of organic material as well as the ability to hold moisture. Drought can dry out the upper layers reducing the rate at which the litter decomposes. Flooding diminishes the oxygen and nitrogen needed by organisms to survive. In addition, as pointed out by Karla Gage in our last webinar, certain invasives can seriously interfere with the mycorrhizae fungi, significantly reducing the nutrient flow to your trees.

To learn more about soil the nature and composition of and the organisms that live within it, visit the NRCS website. Their section on Soil Biology is a great resource for learning about not only soils, but also its resident bacteria, fungi, nematodes, and arthropods. The above-ground forest that we can see is amazing, but just as much is happening below ground as well.

Flora, Fauna, & Forestry

A Simple Way To Measure Basal Area

by Dick Pouzar

One of the things that I learned at the recent Tri-State Forest Stewardship Conference was how to estimate the basal area of a stand of trees. Paul Tauke, Iowa DNR state forester, presented "Crop Tree Release" in which he discussed how to measure basal area as a means of determining the density of your forest and whether it needs thinning.

Basal area is the cross-section of all trees in a stand, including the trees' bark, measured at breast height (4.5 feet above ground). In other words, if you cut every tree at breast height and then measured the surface area at the cut, and added all surface areas together, you would have the basal area. It is normally expressed in square feet per acre.

Without cutting every one of your trees down, there are easy ways to estimate this measurement.

Estimating the basal area can be done with one of several devices, including your thumb. You can use a prism gauge, which costs from $40 to $75; or you can use an angle-gauge which costs about $40; or you use a "Cruz-All" which costs about $11; or you can use your thumb. Since I'm not a professional forester and only want a rough estimate of basal area, and because I still have both thumbs, this method appealed to me.

continued on page 19

Measuring Basal continued

John Edgington educated me that you must first calibrate your thumb by determining its Basal Area Factor (BAF). Choose a location around your house where the ground is fairly level for at least 30 feet. Place an 8-inch piece of duct tape horizontally on the side of your house about 4.5 feet above the ground. Holding your thumb vertical and your arm straight out in front of you, back away from the house until the length of the tape is the same size as the width of your thumb. Mark the point on the ground directly below your eyes. Measure the distance from the house to the mark. Your thumb's BAF equals 4840 / D^2, where D is the distance from your house to the mark in feet.

Now that you have your thumb's BAF, any time that you are in the woods, you can estimate that stand's basal area in this way -

In the middle of a stand of trees, hold your arm horizontal, completely extended and directly in front of you, with your thumb pointing up. Compare the width of every tree that you can see with the width of your thumb. If a tree extends beyond both sides of your thumb, count it as one. If a tree's width is the same as your thumb, count it as half. Do not count trees that are thinner than your thumb's profile. While keeping your thumb in the same place, rotate yourself 360 degrees and compare every tree that you can see to your thumb, counting. You can use the walking stick that you made using Stan Sipp's instructions in this edition to hold your hand in the same place while you rotate around it. Make sure that you're comparing the tree width at about breast height and not looking at the base of the tree; this is especially important on slopes. When you have turned a full circle, you have your count. Multiply that count by your thumb's BAF to get an estimate of the basal area of that stand in square feet per acre.

John Groninger points out that natural hardwood stands can be highly variable from one part of the forest to the next. To accommodate this, you should take several basal area readings across the stand and average them.

Basal area, by itself, doesn't tell you whether your stand is over-stocked, or under-stocked, or fully stocked. For that you also need to know the average tree diameter in the stand. That is a subject for the next edition. For now, calibrate your thumb once, and then whenever you are in your woods, practice measuring basal area.

Flooded Forests continued

On the other hand, floods that wash away topsoil leave the underlying roots exposed. These roots dry up and lose productivity, and exposed roots are more likely to get damaged by lawn mowers and weed whackers. The tree will also be less physically stable without the stabilizing layer of topsoil.

Continued long term flooding can eventually lead to rot of the root tissue and further loss of stability and productivity. Symptoms of flooding include yellowing leaves, early fall color, dropped leaves, reduced leaf size and shoot growth, new sprouts on the trunk, and crown dieback. Affected trees may produce a large seed crop in the year after flooding. These are common symptoms that can be caused by many other problems, so check your sick trees carefully for signs of pests and pathogens, and examine their site for other possible issues. Most of these reactions and symptoms will vary with the circumstances and the tree. Trees are more sensitive to flooding during their growing season, and mature, healthy trees are more resilient than young, old or sick trees. Flood tolerant species will withstand submersion better or regrow roots quicker. Some examples are bald cypress, eastern cottonwood, redbud, red maple, river birch, silver maple, swamp chestnut oak, and swamp white oak.

The tree will also have to contend with products of chemical reactions that happen in flooded soils. Alcohol, hydrogen sulfide, and manganese can all rise to toxic levels. The effects of manganese can last for many years. You can test for high manganese by sending leaves to a lab for foliar analysis. The best treatment is usually to add lime in order to bring up the pH to around 6.0. Any tree that's already under stress from a problem like flooding also becomes vulnerable to attack by pests and pathogens that target sick trees. Several fungus species thrive in wet conditions and may cause additional damage. Many symptoms are the same as flood symptoms, but may only appear in patches on the tree rather than across the whole crown uniformly. Some fungi cause cankers, or spreading wounds on the trunk or branches. Boring insects also target weakened trees, and can further damage their ability to recover.

Flooded landscape trees should receive some extra attention in the three years following a major flood. Practice good sanitation by removing dead or dying limbs at their base. Aerating the soil may help, and evenly spreading 2 to 4 inches of mulch up to the edge of the canopy will help the tree retain a good balance of water and air in the soil. Water the tree during drought with a slow trickle at the dripline for 20 - 60 minutes, 2 or 3 times a month.

Don't give up on a damaged tree right away. Give it at least until the next Spring to recover before you make the decision to remove it.

Photo by A. E. Crane, courtesy of National Scenic Byways Online (www.byways.org)

Flora, Fauna, & Forestry

Making a Walking Stick - A Handy tool in the Woods

by Stan Sipp

Over many years and many miles in the woods, I almost never go out without my walking stick. Useful for many things, but one of the most important is a third point of contact on the ground on slippery slopes, tripping over sticks, logs, brush, rocks or whatever. The stick is also handy for moving aside prickly multiflora rose branches, parting foliage to look for mushrooms, encouraging uncooperative snakes to move aside and other such tasks.

Two items are necessary as parts for a fine walking stick: A straight wooden handle with a metal reinforced end at the lower end to make the shaft of the stick, and a normal SAE (Coarse) thread bolt or lag bolt to create the point.

I made the one for the photos in this article from a 54 inch Ash wood hoe handle and a 7/16 inch diameter by 4-inch long SAE thread bolt. This particular hoe handle had a 3/8 inch hole made for installing (driving in) a garden hoe head. Because the hole would allow a 3/8 inch bolt or lag bolt to slide in or out freely, I had to bore the hole to 7/16 for about the outer two inches so that the smooth barrel of the bolt would fit as the threads were screwed into the full depth. The remainder of the depth was drilled to 13/32 so that the threads to seat into the wood. Replacement handles for garden rakes and cotton hoes are a little longer (usually 60 inches) and have a slightly larger hole in the end of the handle. The best plan is to select the handle you want to use, then go to the hardware section of the store and choose a bolt or lag bolt that will properly fit the hole. Depending on the handle and the size of hole in the end, you may need to ream the hole as I did.

After reaming the hole (if necessary), screw the bolt (or lag bolt) into the hole in the handle until the bolt bottoms out.

After the bolt has been inserted (screwed in) to the bottom of the hole in the end of the handle, mark the exposed end so that about 1 inch of the bolt is exposed beyond the reinforcing sleeve.

Cut the head and excess bolt off with a hacksaw.

Sharpen the point as you like. I generally sharpen the point to a four sided pyramid shape. Over time the point will become more or less rounded anyway.

Half Done

Finished Point

The upper stick in this picture has a few miles on it; I made it up in the early 1990's.

Your walking stick is now ready for use. Probably it's most important use is as the reference point (plot center) when you are using your thumb (or prism) to calculate basal area. Hold your thumb (or the prism) over the top of the stick and walk around the stick as you count your trees.

Flora, Fauna, & Forestry

Effective Weed Control in Young Tree Plantings

by Jay Hayek
Extension Forestry Specialist
University of Illinois

The appropriate use of herbicides is an extremely cost-effective way to control grass and broadleaf weeds in your young tree plantings. The vast majority of herbicides applied during the initial stages of plantation development are banded utilizing ATV-mounted boom or wand sprayers. The timing of your herbicide application is critical to the successful control of weeds since weed germination, growth stage, growing conditions, and soil moisture all contribute to herbicide effectiveness.

Remember, the goal of effective weed control in young tree plantings is "temporary" weed control —- bare ground treatment throughout the entire growing season is completely unnecessary and is a complete waste of time and resources. Contact your local IDNR district forester for site-specific herbicide recommendations. However, please make sure to scout your tree planting in order to identify your all your problem weeds before you contact your IDNR district forester for an herbicide recommendation.

Recommended Application Technique: Apply a 48-inch band of herbicide—two feet on both sides of your planted rows of tree seedlings. Direct spray, or angle, the herbicide application towards the base of your planted trees (i.e., away from the trees' central leader and foliage). This herbicide application technique should be utilized whenever possible in order to avoid herbicide contact, especially with broadleaf herbicides, with the foliage of your young trees.

Some definitions

• post-emergent herbicides attack plants that are already growing
• pre-emergent herbicides are applied before weed **seeds** germinate and establish a chemical barrier to prevent plants from growing. Pre-emergents generally do not affect perennial grasses and weeds.
• selective herbicides kill only specific plants when applied correctly
• non-selective herbicides kill all plants without discretion

Grass Herbicides

The bane of many foresters and tree farmers is perennial, sod forming, cool season grasses. Perennial grasses frequently outcompete young tree seedlings for precious soil moisture and soil nutrients.

Broadleaf Herbicides

The vast majority of broadleaf weed herbicides must be direct-sprayed (i.e., not applied over the top) toward the base of your young trees in order to avoid contact with the tree's foliage. For example, it is paramount to avoid over-the-top applications of glyphosate to your leafed-out tree seedlings.

Listed in the table below are some of the most common herbicides used in young tree plantings.

Neither the Illinois Forestry Association nor the University of Illinois is responsible for the misapplication of herbicides. It is the pesticide applicator's sole responsibility to adhere to the herbicide label and to follow all manufacturers' directions and recommendations.

TRADE NAME	ACTIVE INGREDIENT	EMERGENT?	SELECTIVE	CONTROLS
ROUNDUP	glyphosphate	POST-	NO	most grass and broadleaf weeds
ENVOY PLUS	clethodim	POST-	YES	certain annual & perennial grasses
POAST	sethoxydim	POST-	YES	certain annual & perennial grasses
FUSILADE DX	fluazifop	POST-	YES	certain annual & perennial grasses
PENDULUM	pendimethalin	PRE-	YES	most annual grass & certain broadleaf weeds
SIMAZINE 4L	simazine	PRE-	YES	certain annual grass & broadleaf weeds
TRANSLINE	clopyralid	POST-	YES	certain broadleaf weeds, excellent control of thistle and legumes
OUST XP	sulfometuron methyl	PRE- & POST-	YES	certain annual & perennial grass & broadleaf weeds

Illinois Forestry Association
P.O. 224
Chatham, IL 62629-0224

IFA - To act on issues that impact rural and community forests and to promote forestry in Illinois

---

EVENTS

Visit our website's Event Calendar for more information - ilforestry.org/Events
(Also, the Invasive Species Awareness Month Calendar is at www.invasive.org/illinois/)

June 1st	Jackson County: Invasive Species & Forest Management Field Day
June 4th	IFA Webinar: The 2012 Drought's Effects on Forest Pests and Diseases
June 12th	DuPage County: Urban Forestry & Arboriculture Workshop
June 22nd	Jo Daviess County: The Loggers' Perspective
June 25th	IFA Webinar: Temporary Woodland Ponds for Wildlife
July 20th	Carroll County: Forestry and Wildlife - Corps of Engineers' Management
Sept. 6th	Pike County: Illinois Walnut Council Annual Meeting
Sept. 20-21	LaSalle County: Illinois Forestry Association Annual Woodland Conference
Oct. 5th	Crawford County: Illinois Tree Farm Annual Meeting
Nov. 11th	Piatt County: Illinois Walnut Council Field Day