Volume X Issue IV OAKtober 2015

The Voice for Illinois Forests

Acting on issues that impact rural and community forests and promoting forestry in Illinois

Inside this Issue

IFA Website
www.ilforestry.org

President's Message

By Mike McMahan

Welcome to this Special Edition of the Illinois Forestry Association newsletter!

Normally a quarterly offering reserved exclusively for our members, this issue has been created with new opportunities and audiences in mind.

First, we are excited to observe the first-ever Oak Awareness Month in Illinois. You will notice that several articles in this issue relate to oak trees and forests, and the need to maintain their presence on the landscape. Governor Rauner signed the Oak Awareness Month proclamation on August 20th.

Second, we are using this special issue to reach beyond our membership to those who might join us. I'm asking you to share this newsletter with your friends, neighbors, colleagues, and family so they will know that the Illinois Forestry Association exists, and why!

One of the many things I've learned since joining IFA is that our oak forests - so important to the quality of our lives and native ecosystems here in Illinois - are at risk. "OAKtober" gives us a chance to raise awareness about serious threats to our oak trees and forests - and what we as landowners and citizens can do about it.

The decline of oak dominance is a concern that can be addressed through technical support to property owners - that is, getting the advice and on-the-ground assistance you need from trained professionals. Programs that share the cost of management planning and implementation are often a necessary incentive to stimulate progress. The IFA exists to encourage both!

This year marks our 10th Anniversary of promoting policies and programs that result in healthy and productive forests throughout the state. We formed the Illinois Forestry Association to be a strong, united voice -- to influence the people that hold the forests of Illinois in their hands.

From the average rookie landowner like me, to the veterans that have been managing their land for years - from the novice tree lover to the most studied expert out there -- all hands on deck. It's going to take more resources, coordination, and leadership to advance the policies and practices that are needed to defend our oak forests from decline.

As President of the IFA, I'm lucky that I'm not alone in this situation. I'm grateful to the dedicated volunteers on our board and committees, and to our faithful members for doing their part to make IFA "The Voice for Illinois Forests." Come and join us. Happy OAKtober!

Mike McMahan

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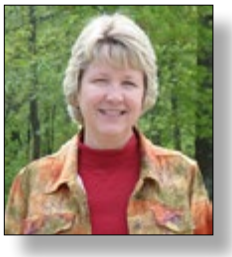
In a Nutshell

by Stephanie Brown, Executive Director



Welcome to our special "repurposed" edition of the IFA Newsletter! Members may notice some similarities with last month's Fall issue. With this one we are striving to reach more people with information about the decline of oak forests, and what we can do to address this very real threat.

You see, 90% of our state's forests are privately-owned, and less than 10% are managed. On unmanaged properties, no one is minding the store - monitoring for the invasion of exotic weeds, creating openings for the sun to reach the forest floor, using practices like thinning or prescribed burning to create the conditions in which oaks will thrive.

While relatively few landowners have and follow a management plan, most will have a timber sale at some point in their tenure. We are here to encourage proper management from tree planting to harvest, because leaving it alone, or harvesting without a professional forester's assistance is not doing Illinois landowners or forests any favors.

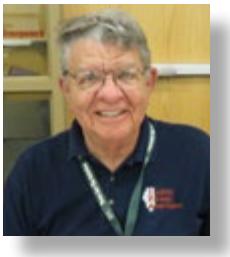
Our oak forests are falling into a state of decline - shifting in composition and quality to a mix that is less desirable. Most owners want to provide homes for wildlife. Turns out, forestry IS for the birds! And the bees, and the hunters, and the trees. And yes, forestry is especially important to those who might want to harvest some timber one day.

While IFA is mainly focused on rural forests, the concern about oak trees extends to the city and all of the land in between. We're working with our partners in urban and community forestry to get the word out and to make a positive difference across Illinois.

If you would like to learn more, consider joining the IFA. We need more people on board who "get it" and want to help. Many thanks!

A Growing Organization

by Dave Gillespie, IFA Secretary



Today I want to write about something great that is currently going on with the IFA. That is a substantial gain in members.

Beginning in the middle of August, two things occurred that brought this influx of member growth. First, the IFA Membership Committee, chaired by Carol Bryant, sent a letter from IFA President Mike McMahan to IFA members whose membership had expired within the last year. The letter asked them to renew their membership. Along with the letter was a Membership Registration Form, a Survey regarding the IFA, and a stamped return envelope.

Second, the IDNR, Division of Forest Resources, began the mailing of the Illinois Forestry Development Act (FDA) certification letters to nearly 11,000 FDA participants. Every two years the FDA participants are required to certify they are following their forest stewardship plans. The IFA included a letter from our President regarding the IFA and a Membership Registration Form with this mailing.

So far, between the two membership initiatives, the IFA has grown by 214 members! Many of these are new members gained from the FDA response. Approximately one-third of these members are lapsed members who renewed their membership. The survey returned by those renewing their membership is currently being evaluated to help the IFA better serve our membership.

Good things are happening. If you are an IFA member, we thank you for your support. If not, please consider joining. The more people we have, the more we can do, and the stronger we will be. We formed the IFA to be "The Voice for Illinois Forests." Help us continue to grow and foster healthy and productive forests and woodlands throughout Illinois.

http://ILForestry.org

Illinois Issues: State's Oaks Squeezed Out by Other Species

State Forester Update

by Tom Wilson

In spite of a historically low number of foresters and employees, the Division of Forest Resources continues to function as well as can be expected, thanks in part to the exceptional quality of our staff. Our headquarters and field offices manage a number of statewide programs vital to the core practice and science of forestry - including Urban and Community Forestry, Fire, Forest Health, State Forests, Timber and Wood Utilization, Private Forest Stewardship, Forest Legacy, Forest Inventory, and others. Our District Foresters and limited staff continue to successfully manage sixteen field offices statewide serving all Illinois counties.

Here are some news items from our world, though at the time of this newsletter a state budget impasse is causing unknown ramifications to our annual budget. We cannot predict how this will affect forestry at this point, nor how long we will be able to operate "business as usual."

- A Timber Output Survey of the 75 operating sawmills in Illinois is underway in cooperation with the US Forest Service (Paul Deizman, manager).
- The IFDA forest stewardship program biennial renewal mailing to 11,000 landowners to verify each is following their forest management plan is in the final stages (Chris Whittom, manager).
- The IDNR and a local licensed timber buyer just finalized an agreement to implement a forest management harvest at Trail of Tears State Forest, which will be done sometime over the next two winter seasons (October 01 - March 30). We expect the operator will begin around December 1st (Paul Deizman, manager).
- Competitive grants to Volunteer Fire Departments to better prepare local fire jurisdictions for fighting wildland fire are being graded and awarded this month. These and other fire preparedness programs are expected to be available again next year (Tom Wilson, manager).
- Urban & Community Forestry programs, grants and initiatives continue to be available as is our guidance and advice to communities for their trees, forests, parks and natural resources. The Urban Forestry program has a dedicated webpage, as well, which is available via the division website and independently (Reinee Hildebrandt, manager).
- The DNR's 10 year Forest Action Plan - endorsed by the Forestry Development Council, the DNR Director, the US Forest Service and important conservation agencies and partners - is 5 years old. The document is being updated and re-written to include the latest forestry information, assessments and actions needed statewide for forestry and the forest resources of Illinois. A draft is expected prior to November (Paul Deizman, contact).
- The Illinois Forestry Development Council has postponed normal meetings, held six times a year, due to having no operating budget. Key council functions and communications continue for now, thanks to many dedicated individuals (Tom Wilson, contact).
- The Division of Forest Resources is changing and updating our division's website to make all information easier to find and use. This process will ultimately take a few months. Meanwhile, most critical information continues to be available (DNR I.T. Staff, manager).

FDA Program Renewal Process Underway - Free Electronic Newsletter Offered to Participants

Landowners with an IDNR-approved forest managment plan may be eligible to enroll in the IL Forestry Development Act (FDA) program. In doing so, their good stewardship is rewarded with lower property tax rates. To maintain compliance and stay in the program, periodic renewal is required, usually once every two years. The past three renewal notices from IDNR have contained an invitation to join the Illinois Forestry Association. This time around, we have added a new twist.

IDNR is partnering with the Illinois Forestry Association to offer a **free electronic newsletter** to all FDA participants who choose to opt in. It will be much shorter and more more focused on FDA compliance than IFA's member newsletter, and free, thanks to a small grant from the IL Forestry Development Council. Look for the first issue to come out sometime this winter, and again next summer, with up to two other helpful offerings provided in between.

http://ilforestry.org/FDA-News

Find IFA on Facebook!

Are you on Facebook? Please help us reach new people! "Like" and "Share" the Illinois Forestry Association page, as well as our occasional posts. This doesn't replace any of our regular forms of member communication, but offers a new way for people within and outside IFA to learn about forestry. Our success depends on the extent of people like you sharing, so thanks in advance for helping to grow our tree and forest loving audience!

www.facebook.com/ILForestry

Improving Access to Fire Science Information

by Joe Marschall

The Oak Woodlands & Forests Fire Consortium (OWFFC) is one of fifteen fire science exchanges nationwide, funded by the Joint Fire Science Program, serving much of the Midwest region of the U.S. (see brown area of map). The OWFFC's mission is to improve access to and consideration of the most relevant fire science information for anyone making land management decisions. The fire science needs of oak ecosystems in the eastern U.S. are primarily related to fire management and restoration as opposed to fire suppression and protection. These characteristics set a unique stage for the topics addressed and activities offered by the OWFFC. The consortium's efforts are guided by principles emphasizing inclusiveness, neutrality, and innovation.

The OWFFC was created in 2012 and serves the region's fire science needs through hosting webinars, conferences, workshops, and field tours as well as through the publication of research briefs, quarterly newsletters, and brochures. The OWFFC website (www.oakfirescience.com) aims to be a clearinghouse for regional fire science information. Early in the organization's development, the consortium surveyed over 300 regional land managers to identify the topics in most need of fire science information for oak ecosystems of the Midwest. The OWFFC continually refers to the survey results to determine what topics to address, including: how fire affects game species, invasive species, ground flora diversity, and timber management.

Private lands are very important in our region and we look forward to interacting with you. Particularly, private landowners may find the following links useful: Research Briefs, Webinars, and 'Captured' Presentations.

We encourage you to check out our fire science resources and reach out to us to let us know how your fire science needs can be served!

Joe Marschall is the Coordinator for the Oak Woodlands & Forests Fire Consortium (marschallj@missouri.edu).

Three of the Captured Presentations found on the Oak Woodlands & Forests Fire Consortium website...

Why Are We Here (2012) Introduction to the Oak Woodlands & Forests Fire Science Consortium

Missouri's Woodlands: Ecology, Management, and Restoration

Contrasting Forests and Woodlands: Stand Structure, Dynamics, and Site Productivity

Don't Fence Me In:

The impact of deer exclusion on oak regeneration

by Eric J. Holzmueller and Kálmán K. Csigi XIV, SIU Department of Forestry

As many IFA members are aware, concern over reduced regeneration of oak and hickory species is a common theme in Illinois forests. Much of the decline has been attributed to a shift in land management practices (e.g. fire suppression, reduced harvest intensity) that favor shade-tolerant species at the expense of hard mast species. Further complicating the issue however, is the increased abundance of white-tailed deer in the United States over the past 100 years. In states with high deer densities such as Pennsylvania and West Virginia, deer have been reported to have a negative impact on forest regeneration based on their browsing preferences when in large numbers.

We wanted to examine the effects of deer in southern Illinois, an area where deer populations are not as high and hunting pressure is relatively strong. To do this we examined the vegetation inside eleven deer exclosures and compared it to vegetation outside of these exclosures (control area). The five foot tall exclosures were located at Dixon Springs Agricultural Center and had been in place for eleven years at the time of sampling.

Our results showed seedling density was similar between deer exclosure plots and control plots for all species tested. There was no statistical difference in white oak height between deer exclosure plots and control plots, however, red oak and hickory had greater height inside the deer exclosure plots compared to control plots.

While seedling densities did not significantly differ, our results indicate that deer may have a negative effect on the regeneration success of woody species in Illinois due to the decreased heights observed outside of the exclosure plots. Of particular concern is the reduced height of red oak and hickory species given the decline of hard mast species in Illinois. While density is statistically similar, the reduction in height further reduces the competitive advantage of these species and may be enough to prevent hard mast species from reaching the overstory. In addition, while not significantly different, the smaller size of white oak seedlings outside of the deer exclosure plots may portend to problems for regeneration of this species as well.

While other studies have shown reduced success of hard mast regeneration, these results have typically occurred in states with high deer densities. Our study showed similar results despite lower deer densities and relatively high hunting pressure in the area indicating that deer may be hindering development of hard mast species regeneration at a population density lower than previously thought was acceptable.

Kálmán Csigi recording data at a deer exclosure plot.

Across the region, regeneration of oak and hickory is failing due to unfavorable conditions, caused by understory shifts from both direct and indirect effects of deer browse. Proper management of these woodlands is required if oak/hickory mast wish to be regenerated and must include the reduction of deer populations as well as creating conditions in which oaks and hickories are preferred.

However, reductions in deer density are not always easily implemented. In any given area there are multiple stakeholders, e.g. hunters, farmers, foresters, and motorists that can have conflicting perspectives on the 'ideal' deer density. For example in Illinois, DNR biologists recently announced statewide populations levels are currently at desired objectives, but 41 counties within the state are below objective populations levels and populations could be increased. These comments reflect the need for wildlife biologists and foresters to continue to work together in order sustainably manage the forest ecosystems and mitigate the effects of deer in Illinois forests.

Oak Recovery Plan

by Lindsay Darling, The Morton Arboretum

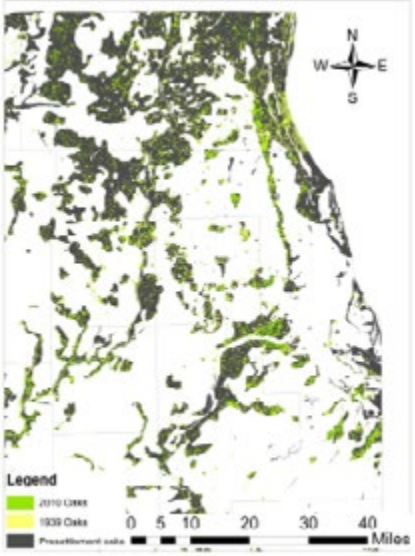
Historically, oak ecosystems were the most abundant forest type in the Chicago region, but in the last 150 years, development, changes in fire regime and the prevalence of invasive species has caused dramatic reductions in their abundance. In the 1830's, oaks made up 60 percent of the region's trees, but currently they account for only 5 percent. Oaks are not regenerating in our natural areas, and without action we could lose our oak dominated forests.

In order to restore oaks across the region, The Morton Arboretum, The Lake County Forest Preserve District, and Chicago Wilderness worked together to research and write a comprehensive oak recovery plan for northeastern Illinois. The plan aimed to create widespread understanding about the importance of oaks in our region, and to give management recommendations across land use types: from natural areas, to private property, municipal plantings and nurseries. While most of the management recommendations were created through collaborations with forest managers in this region, they can be broadly applied to oak forests across the Midwest region.

A key part of the Oak Ecosystems Recovery Plan (OERP) was mapping out the location of remnant oak ecosystems. To do this, we compared records from pre-settlement surveys with 1930's and current aerial imagery. We found that only 17 percent of the regions oak ecosystems still remain. One of the most important findings of this mapping-project was that 70 percent of the remaining ecosystems are located on privately held property. Protection and management of these privately held properties is paramount to the long term persistence of our regional oak ecosystems.

The OERP details a wide variety of management goals, and gives recommendations on how to implement them.

Below are a few of the recommendations that the plan makes for natural areas, both publically and privately owned:



- Eradicate invasive species such as buckthorn and honeysuckle
- Reintroduce regular fires or fire surrogates
- Remove some canopy level trees to increase light to the forest floor
- Manage deer populations to sustainable levels
- Promote conservation easements and conservation reserve programs focused on privately owned oak ecosystems
- Offer property tax relief to encourage the retention and good management of oak ecosystems

The OERP is written and currently in press (check the Chicago Wilderness webpage for further updates), but the work to restore oaks and oak ecosystems is just getting started. Our efforts are now shifting towards engaging land managers and the wider public in order to get the word out about why oaks are important. One of our first events is OAKtober. Governor Rauner will soon declare October to be oak awareness month, and we are encouraging groups across Illinois to plan oak related events. The Chicago Region Trees Initiative will promote your event on its webpage and together we can show that Illinois is dedicated to protecting its oak heritage.

The OERP is still growing and changing. Check back often for more updates. If you'd like to register an OAKtober event, contact Melissa Custic (mcustic@mortonarb.org), and feel free to contact me with more questions about the OERP (ldarling@mortonarb.org).

OAKtober: Oak Awareness Month

by Melissa Custic, The Morton Arboretum

Oak ecosystems have been a significant part of the Illinois landscape for more than 5,000 years and are now in a state of threat and decline across the entire State of Illinois.

Oaks represent strength and stature. In fact, the white oak is the Illinois State Tree! Majestic oaks create a sense of awe and wonder. These trees work for us by cleaning our air and water, reducing ambient air temperature and usage of energy. They reduce flooding and support our native wildlife. Our oaks, and trees in general, improve our well-being and support a sense of community.

That's why organizations and individuals across Illinois petitioned Governor Bruce Rauner to sign a proclamation designating October 2015, "Oak-Awareness Month." With support from 42 partners across Illinois, including forest preserve districts, commercial associations, conservation groups, state forests, and municipalities (partners listed here: http://chicagorti.org/resources/oaktober-oak-awareness-month), the proclamation was sent to Governor Rauner with hopes that state-level support would bolster efforts to conserve, protect, and restore threatened oak ecosystems. He signed the proclamation on August 20th!

Oak Awareness Month - known by many as OAKtober - is a chance for Illinois residents, organizations, communities, park districts, forest preserve districts, private landowners and managers, and commercial entities to celebrate our oak woodlands.

Oak-related events will be hosted across the state of Illinois this fall to boost awareness for the beauty, utility, and needs of our oak ecosystems.

How can you be part of OAKtober?

There are many ways your organization, community, friends and neighbors can facilitate OAKtober—Oak Awareness Month—and help create awareness of the value of oaks across Illinois. Here are some suggestions:

- Host an oak workday. Individuals can help to remove invasive species to improve growing conditions for an oak ecosystem. Or plant, water, and mulch oak trees.
- Sponsor a campout. Individuals and families can camp under the oaks and learn about the history of our region and the importance that oaks play.
- Lead a walk through an oak woodland. Help participants notice all of the wildlife and plants that make up the oak ecosystem.
- Host a talk. Have a local oak expert give a public talk and invite your organization's members, and their friends and neighbors.
- Collect acorns and plant them in pots. Plan to plant them out into the community or parks in a few years.
- Find your largest oak. Identify the largest oak tree in your community or park, determine its approximate age and introduce community members to the tree and its history.
- Host an OAKtober beer or wine fest to benefit a local conservation effort.
- Engage the local schools. Encourage students to write essay or create posters on the importance of oaks to our communities and our ecosystems.
- Hug an oak tree!

Join the effort- Register your event with Melissa Custic, Chicago Region Tree Initiative Coordinator at mcustic@mortonarb.org to have it posted on the Chicago Region Trees Initiaitve website. Happy OAKtober!

Invasive Species Impacts on Oaks

by Chris Evans

We are learning more and more about how invasive species impact wildlife, native plant communities, and habitat, but with October being the first Oak Awareness Month in Illinois, it is a great time to take a close look at invasive species and what we know about how they impact oaks.

There are several invasive plants common in Illinois that directly impact tree species, including our oaks.

Bush honeysuckle is such a good competitor for water and nutrients that a dense stand can impact the growth rate of mature overstory trees by up to 50 percent. It is amazing to think that a 15' shrub can have that much of an impact on mature trees! Besides the competition factor, bush honeysuckle infestations cast a very deep shade, which basically eliminates all tree seedling survival, including oaks. So honeysuckle has the potential to both slow your oak trees' growth and prevent them from regenerating. This double-whammy on oaks can have significant impacts on forestlands across Illinois. Other dense-growing invasive shrubs, such as buckthorn and autumn olive, may have similar impacts.

We know that some of our invasive vines can have big impacts on our trees. Species like Japanese honeysuckle and Oriental bittersweet twine tightly around trees. This can lead to truck deformation and girdling. This is especially a problem with young saplings or in tree plantings. Other vines, like kudzu, can completely overwhelm trees by growing over them and shading them. Even mature overstory trees can fall victim to a kudzu infestation.

A couple of invasive grasses could impact oak seedling regeneration. Both Japanese stiltgrass and reed canarygrass can form very dense stands in bottomland forests. The thatch mats in these stands can keep acorns from coming into contact with the soil, and any acorns that do happen to make it to the soil and germinate have to battle with the invasive grass for space and light.

The dense thatch produced from the invasive Japanese stiltgrass can impede tree seedling establishment and survival.

Invasive plants aren't the only threat. Feral hogs, which already occur in Illinois in a few counties, are aggressive rooters and have been known to completely devastate tree plantings or ruin the seedlings in established forests. Luckily, the feral hogs in Illinois are being heavily managed and no large populations exist currently.

There are several invasive species that are not yet in Illinois but, if they arrive, could be devastating to our oaks. One is Sudden Oak Death, caused by an invasive pathogen. Sudden oak death has been found in the western United States and is a risk of introduction through infected nursery stock. Although this pathogen can kill oak trees, many other woody species can serve as a host and spread the disease.

The golden spotted oak borer and the oak splendor beetle are both closely related to the emerald ash borer but feed on oaks. Luckily neither has been found in Illinois. If they were introduced, we could potentially see impacts to our oak species equivalent to what emerald ash borer has done to ash trees.

Oak Awareness Month is a great reminder of how important it is to recognize threats to these trees that are vital to our ecosystems and economies. Managing existing invasive species and preventing new ones from being introduced is essential to protecting and preserving our oak species.

Featured Invasive: Bush Honeysuckle

(Lonicera maackii, L. morrowii, L. tatarica, and L. xbella)

Perhaps the greatest invasive plant threat to forests in Illinois is bush honeysuckle. This invader is actually a complex of several species, all of which look similar and have comparable impacts, though Amur honeysuckle (Lonicera maackii) is by far the most common.

Bush honeysuckle is an extremely aggressive invasive shrub in Illinois. Stands can crowd out native plants, restrict tree seedling establishment and survival, and slow the growth rate of mature trees. Infestations have been shown to impact bird nesting success and even change the chemistry of streams that it grows adjacent to.

Fall is the best time to identify bush honeysuckle because it often stays green when our native shrubs and saplings lose their leaves. In fact, you can often identify bush honeysuckle easily in late fall after most of other species have dropped their leaves by simply driving down the road and looking for color within the woods. In the fall, honeysuckle also has bright red berries (for Amur honeysuckle, other bush honeysuckle species might also have orange berries).

If you think you have a honeysuckle plant, look for the red berries, opposite leaves with pointed tips, and light tan stringy bark. This is a plant that you do not want to leave alone. As soon as you identify this as being on your land, you should start controlling it. Waiting even a year can result in a drastic increase in its population size.

Once a suspected bush honeysuckle plant is found, a great way to verify its identification is to cut open a small stem. Honeysuckle stems have hollow piths. Keep an eye out for this species in woodlands and forests throughout Illinois.

Featured Tree: White Oak

Quercus Alba

Alternate Name: stave oak

Uses

Wildlife: Acorns are eaten by squirrels, blue jays, crows, red-headed woodpeckers, deer, turkey, quail, mice, chipmunks, ducks and raccoons.

Timber: White oak's wood is strong and durable for barrel staves, lumber, flooring, and interior woodwork.

Recreation and Beautification: White oak is an excellent ornamental tree because of its broad round crown, dense foliage, and purplish-red to violet-purple fall color.

Description

Quecus alba L., white oak, grows from Maine to Minnesota southward to Florida and Texas. It is a large, stately tree that grows up to over 100 feet tall, and 38 to 50 inches in diameter, with a round to wide spreading irregular crown. White oak bark is whitish or light gray, varying from scaly to irregularly platy or ridged and furrowed. Leaves are simple and alternately arranged on the stems; they are 5-6 inches long and have a rounded tip and wedge-shaped base, with evenly notched edges; leaves are bright green above and whitish underneath. Male flowers are green and 2-4 inches long, while female flowers are reddish and they appear as single spikes with the leaves. White oak acorns are oval; about a quarter of the acorn body is covered with a cap which drops off at maturity. There are approximately 120 seeds per pound.

Adaptation and Distribution

Although found on many soil types, white oak does best on coarse, deep, moist, well-drained, with medium fertility, and slightly acid soils. It is well adapted to heavy soils and north and east-facing slopes. Natural stands are often found in areas with loam and clay soil. White oak is moderately resistant to ice breakage, sensitive to flooding, and resistant to salt spray and brief salt-water submergence. It is sensitive to fire injury, coal smoke, and fly ash deposit on the soil's surface.

For a current distribution map, please consult the Plant Profile page for this species on the PLANTS Website.

Establishment

Fall seeding is preferable to spring seeding. White oak acorns have no dormancy and germinate immediately following seeding. Acorns are drilled in rows 8 to 10 inches apart, or broadcast and covered with ¼ inch of firmed soil. In the nursery, seedbed densities of 10 to 35 per square foot are recommended. Fall sown beds should be mulched to protect the seeds and seedlings. Partial shade is beneficial for germination. Seedlings are transplanted after the first year.Because of its deep root system, white oak is fairly tolerant of a range of soil conditions and fairly drought tolerant when well established; however, because it is taprooted, it is difficult to transplant. Production in the nursery is difficult as well and growth is slow.

Photos by John Edgington

Management

White oak is generally classified as intermediate in its tolerance to shade. Its tolerance decreases as a tree becomes older and larger. Thinning combined with fertilization can boost diameter growth. White oak usually becomes dominant because of its ability to persist for long periods of time in the understory, its ability to respond well after thinning, and its great longevity. Even-aged silviculture is most suitable if oaks are growing in pure or mixed hardwood stands. Reducing both over story and understory competition is likely to accelerate the growth of seedlings.

Pests and Potential Problems

White oak is attacked by several insects: leaf eaters including gypsy moth (Lymantria dispar), orangestriped oakworm (Anisota senatoria), oakleaf caterpillar (Heterocampa manteo), oak leaf tiers (Psilocorsis spp.) and walkingstick (Diapheromera femorata); Golden oak scale (Asterolecanium variolosum); gall forming insects like Cynipid wasps; and twig pruners, but none of these pose serious insect problems. White oak is also susceptible to perennial cankers induced by bark diseases like Strumella coryneoides and Nectria galligena; root rot caused by Armillaria mellea, Armillaria tabescens and Inonotus dryadeus; irregular brown areas on leaves and shoots caused by Gnomonia veneta; and oak blister caused by Taphrina caerulescens. The species has good resistance to oak wilt. Existing trees are very sensitive to disturbances in their root zones caused by grading, soil compaction, or changes in drainage patterns; if severe, these disturbances can lead to mortality. Cultivars, Improved, and Selected Materials (and area of origin) Seeds are commercially available at forest seed companies.

Prepared By & Species Coordinator:

Lincoln Moore, Forest Biologist
USDA NRCS National Plant Data Center
Baton Rouge, LA. For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Website: http://plants.usda.gov or the Plant Materials Program Website: http://Plant-Materials.nrcs.usda.gov

Learn How to Identify Common Oak Diseases with New Quick Guide

The U.S. Forest Service has released a publication to help people to spot visual differences between common diseases of oaks by looking at symptoms found on oak leaves, branches and trunks.

"How to Recognize Common Diseases of Oaks in the Midwest: A Quick Guide," is a convenient reference for landowners and forest managers.

The Northeastern Area State & Private Forestry published the publication to help forestry professionals, forest woodland managers, and homeowners identify and manage the most common diseases of oak trees in Midwest.

"It compares and contrasts key features of each disease to help you distinguish one disease from another," said Jill Pokony, a Forest Service plant pathologist and author of the publication. "Knowing what disease is present will help to determine what management options are appropriate."

The USDA guide covers the most common oak diseases present in the Midwest, some of which can be easily confused with others. These diseases include: bur oak blight; anthracnose; oak wilt, oak leaf blister; bacterial leaf scorch; Botryosphaeria twig canker; and oak decline.

The 17-page publication includes dozens of full-color photos and illustrations to help people spot the different looks of one disease from the next as they appear on oak trees. It also includes a variety of diagnostic features for each disease:

- host range
- causal agent(s)
- symptom expression
- timing and distribution of symptoms within the tree
- impact on tree health
- pattern of tree damage on site, and
- general management options.

The publication is only available online in PDF format. It is designed to be downloaded and printed by individuals. To explore more Northeastern Area publications, visit: http://www.na.fs.fed.us/pubs/index.shtm

Walnuts & Acorns

by Lee M. Rife

I just returned visiting the Farm Progress Show in Decatur, Illinois. One of the first places that I went was the Illinois Department of Agriculture (IDOA) exhibit where I looked up some old colleagues and friends to find out what was going on in the Department. We discussed several things, and then I asked a question that had me concerned: does the IDOA still inspect nursery stock? Let me explain.

Several years ago when I was working for the Illinois Wood Products Association, I gave a presentation about Oak Wilt which at that time was hitting coastal oaks along the Pacific Coast very hard. This wilt had been brought to the United States from Holland, I believe, on some nursery stock (not trees), which apparently had been brought in without undergoing an adequate phytosanitary inspection. In some manner, spores were transferred to coastal oaks, and trees started dying. It was soon discovered that diseased stock was being sold by a number of itinerant dealers out of trucks parked at intersection in rural areas.

Now nursery stock sold at nurseries, "big box" stores, farm stores and others has, in all likelihood, been inspected, IDOA has a very thin line of inspectors (17 at last count) to make sure all plant stock is free of disease. As I write this, some people have to be let go. Hopefully the situation will be resolved by the time you read this blog. However, if not, then we need to make sure that no plants, or tree stock is brought into the state by people out to make a quick buck. We certainly don't need any wilt or fungus attacking our oaks. They are under enough pressure from other exotic plants such as bush honeysuckle, autumn olive, garlic mustard, etc. If you do see someone selling out of the back of a truck, ask to see the phytosanitary certificate for the stock. If one is produced, fine. If not, call the Illinois Department of Ag and they will send an inspector as quickly as possible. However, each inspector covers several counties. It may take a while.

Catching Fire: Oak Forest Restoration in Southern Illinois

9 a.m. - 3 p.m.
Friday, October 16th
Trail of Tears State Forest

IFA is working with a host of partners and field experts to offer a one-day workshop and tour focused on the restoration of oak forest ecosystems.

We'll begin with a series of four presentations in the historic White Barn, enjoy a BBQ lunch, and finish with a field tour in the afternoon.

Topics will include the role of fire in maintaining oak forests; the relationship between oak ecosystem management and wildlife; and a look at oak restoration through the eyes of a natural heritage biologist.

The progressive strategy underway at the State Forest offers a unique opportunity to view different practices alongside untreated areas, so visitors can see the results first hand. Leading experts and front line managers will be on hand to help interpret the landscape and explain the whys and hows of restoring oak dominance in the forest canopy.

This workshop is free, and open to the public. Space is limited to the first 50 people who register online in advance. Contact Stephanie Brown at 618/949-3699 or email ilforestry@gmail.com with any questions.

Sponsored by the Oak Woodlands and Forests Fire Consortium and the National Wild Turkey Federation. Planning coordinated by the Illinois Forestry Association, in cooperation with the IL Department of Natural Resources, Southern Illinois University Forestry, and the USDA Natural Resources Conservation Service.

CUTTING EDGE

You Are Here:
Using Google Maps

by Dr. Susan Romano

Tracking our way through the woods is now easier since smartphones have become part of our everyday lives. According to Pew Research Center, 64 percent of American adults now have smartphones. For forest landowners, this internet access - from just about anywhere - can provide important aerial photo and location information. The bird's-eye view delivered by your smartphone, can help you find your way to your deer stand, tree planting, favorite hiking trail, or your way out of the woods after a long day of timber stand improvement.

The most common and easily accessible phone app for smartphones is Google Maps. This free smartphone application may have already been installed on your phone when you purchased it, or you can download it through the App Store on your phone. Other map apps may be available on your smartphone to provide driving instructions as GPS navigation resources.

Once Google Maps is active on your smartphone, it will initially provide a road map. When in use, you will see a blue dot with a moving arrow that marks your current location. The dot and arrow will continuously follow your movements as you walk or drive. To access an aerial photo, you will need to change the setting by touching the triple bar symbol (☰) to view the menu. This symbol is located on the left side of the Google search bar at the top of the screen. Choose "Satellite" from the menu, and an aerial photo will appear along with the road map. To zoom in or out, place 2 fingers on the screen and move them apart or together.

Some considerations when using map apps are wireless availability, dense crown cover, and phone battery usage. There are bound to be pockets of "dead zones" where phone service is not available due to wireless tower locations and the type of phone service coverage (Sprint, US Cellular, etc.). Dense crown cover may be a problem, but moving to the forest edge or an opening in the canopy, and often a little patience, will likely resolve the issue.

Finally, Google Maps uses a lot of juice, so be prepared with a charged phone and an extra charged phone battery on hand if you plan to use it for more than several hours.

Google Maps and similar smartphone applications provide a bird's-eye view of your woodland, guide you through the property, and can be a useful land management tool. And, if you are truly lost, you can (almost) always call for help.

Products and other innovations featured in the Cutting Edge are not necessarily endorsed or recommended by the author or the Illinois Forestry Association.

Helpful IFA Website Links *At-A-Glance*

Click on any item to open a new window with this content...

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IFA's Strategic Plan
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IFA is a 501(c)(3) not-for-profit organization

Download IFA Member Application to Print and Mail
IDNR District Forester Map and Contact Information
IL Consulting Forester Directory

Check back for updates and website improvements...

http://ILForestry.org

Oak Forest Restoration on the Rural-Urban Interface

IFA to Offer Special Session at Illinois Arborist Conference on October 21st

As part of our ongoing effort to strengthen partnerships, IFA will be participating in the Illinois Arborist Association's Annual Fall Conference, October 20-21, at the Holiday Inn Convention Center in Tinley Park. We'll have an exhibit booth and offer a special session from 1 to 3 p.m. on the 21st, focused on the restoration of oak forests along the rural-urban interface.

Participants will hear from two leading experts who have conducted extensive research in forest and avian ecology. Dr. Dan Dey is the Project Leader for Sustainable Management of Central Hardwood Ecosystems and Landscapes with the Forest Service. He will help explain why oaks are losing their dominance in central hardwood forests and how various management practices can make a difference. Dr. Jeff Hoover is an Avian Ecologist with the Illinois Natural History Survey. His research has involved the impact of land management activities on bird populations.

Session attendees will learn how our understanding of oak-hickory forests has evolved, and what kind of management techniques can be used to reverse the trends we are seeing in forest composition, while providing optimal habitat for birds and other wildlife species.

We'll cap it off with a short talk about OAKtober – Illinois' first ever Oak Awareness Month – the inspiration behind this new conference session. IFA members will be offered the IAA member rate to attend the day's programming, which includes meals, breaks, and the exhibit hall. For more information, visit the IAA website at:

http://illinoisarborist.org/agenda

Wood Projects for Illinois Wildlife: *Bats!*

The information and project plans in this article are protected by copyright and shared with permission from the Illinois Department of Natural Resources.

Who in the world would think of building a house for bats? The idea sounds farfetched. Once bats are understood, however, their desirable qualities exceed even those of the popular purple martin. For example, some people claim that purple martins eat up to a thousand mosquitoes per day. Other persons dispute that total, saying that the daily total of mosquitoes is much lower because martins don't actively feed when mosquitoes are most active. A single, big, brown bat can eat 3,000 to 7,000 mosquitoes each night! Bats are also devoted parents.

Expectant mother bats join together in "nursery" colonies where hundreds or thousands congregate to raise their young. Mother bats help each other with rearing their young, and each female recognizes her own young. The big brown bat raises just one young per year. Males cooperate during this reproductive phase by either bringing food to their mates or leaving the maternity cave to reduce competition for limited food supplies – depending on the species.

Since bats are such an important form of natural control for insect pests like mosquitoes, it is in our own best interest to perpetuate them. This is already being done in much of Europe where bats are totally protected and where people build "bat houses" much like we build martin houses. Figure 9 shows a European-style bat house.

The most likely occupants of bat houses in Illinois are the big brown bat and little brown bat. The most critical dimension is the three-fourth-inch width of the entry space. All inner surfaces must be roughened with a chisel or saw cuts to permit bats to climb on them with ease. Rough outer surfaces are also preferred.

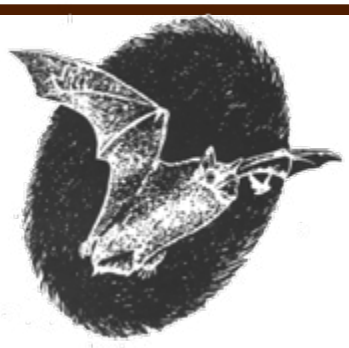
Daytime temperatures in the bat house must be very hot – about 80^{O} to 90^{O}F. One way to achieve this is to cover the bat house on top and extending a couple inches down the sides with two or more layers of tarpaper. The dark color of the tarpaper absorbs heat from the sun and helps protect bats from the rain. The tarpaper may be hard to attach and weather badly. Another alternative would be to paint the bat house black so it would absorb heat from the sunlight.

Bat houses should be securely fastened to a tree trunk or the side of a building roughly 12 to 15 feet above the ground. Preferably they should be on the east side of the house or tree where they will receive the morning sun but will be shaded during the afternoon. Bats also seem to prefer sites that are protected from the wind.

The best habitat for bat houses is relatively near rivers, lakes, bogs or marshes where insect populations are high. The closer bat houses are to such places the greater the probability of being used. Those located more than a half miles from these habitats have a low probability of being used.

Bat houses should be placed by early April, but it may take a year or two for bats to find the house. Once used, it does not need to be cleaned. Chances of occupancy are greater if bats already live in nearby buildings.

Another technique that may work to attract bats is to nail a 2-foot wide piece of tarpaper around the tree trunk. Nail the tarpaper around the top edge, like a tight-fitting skirt. This will prevent water from leaking under the tarpaper from



above. The bats will enter from below and can cling to the bark of the tree. To regulate their body temperature they can move laterally around the tree trunk as the sun moves during the day.

Sometimes bats create sever problems for people by establishing huge colonies in the attic of homes. The best way to solve this problem is to hire a carpenter in the winter to exclude bats at the holes where they enter the house. Since most bats migrate, it is possible to exclude the bats while they are not present.

Sometimes it is possible or desirable to set up alternative bat houses so they don't take up residence in someone else's house.

A Missouri-style bat roost structure may be desirable for large bat concentrations. Such structures may be useful at state parks or on other public park and wildlife lands where bats are causing problems in residences or out-buildings. These structures are expensive to build and difficult to erect. A successful colony relocation into one of the structures is dependent upon several factors. The Department of Natural resources will provide technical advice and assistance to those who wish to erect this type of structure.

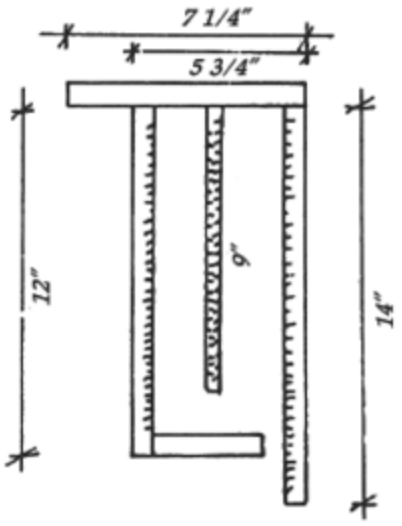
At the time of original publication, citizens who erected bat houses or roost structures were asked to send the results of their efforts to:

Illinois Dept. of Natural Resources
Division of Natural Heritage
One Natural Resources Way
Springfield, IL 62702
ATTN: Mammal Ecology Program

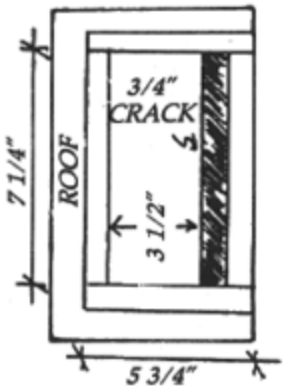
This information on bats ad bat houses has been provided by Dr. Merlin D. Tuttle at the Milwaukee Public Museum in Milwaukee, Wisconsin.
You can access a scanned copy of "Wood Projects for Illinois Wildlife" at http://www.dnr.illinois.gov/publications/Documents/00000211.pdf.

Nest Box 7

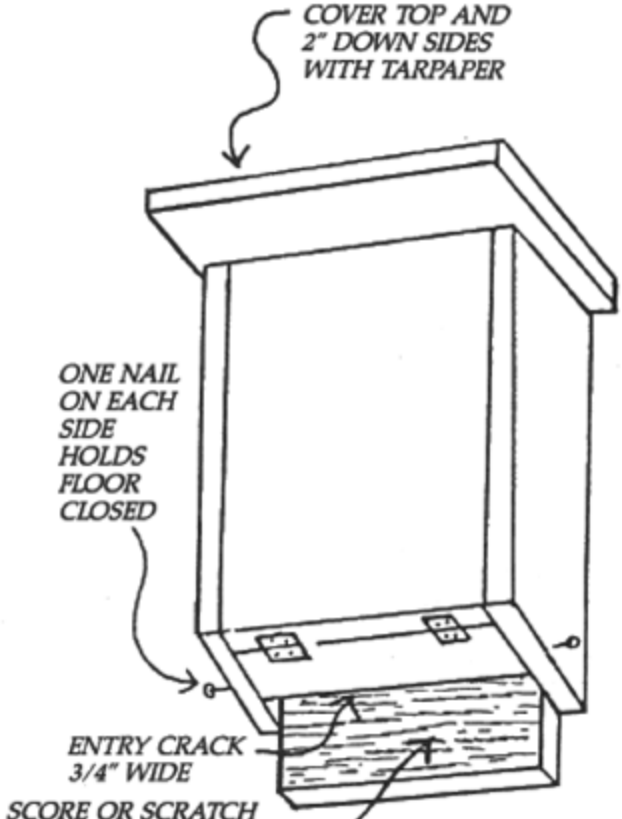
BAT HOUSE



SIDE VIEW
(cut-away)

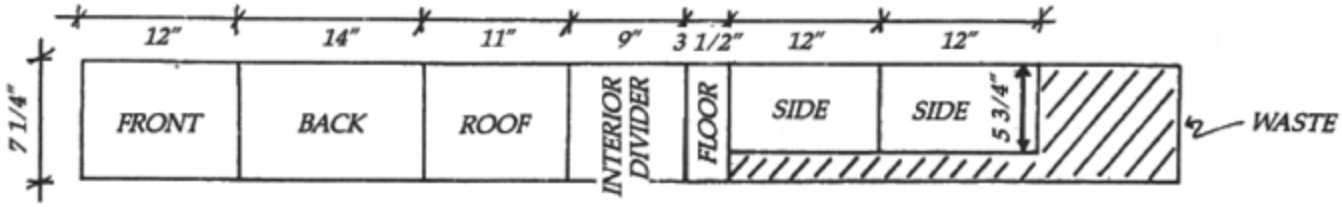


BOTTOM VIEW



FRONT VIEW
as mounted
on building

LUMBER: ONE 1" x 8" x 8'0"



Membership Registration Form

Privacy matters to us. We will not sell or share this information.

Name(s):_____ Date:_____

Representative, if business or group: _____

E-mail Address: _____

Address: _____

City: _____ State: _____ Zip: _____

Home County: _____ Land County: _____

Home Phone:_____ Cell Phone: _____

Membership Category:_____ Term:_____ Amount Due: _____

See below for categories and term options

Would you be interested in a volunteer role of any kind? _____Yes _____ No _____ Maybe

(*We are always on the lookout for potential committee or board members. Aside from that, we need help with events, mailings and other tasks from time to time. If you have special skills or interests that might apply – forestry, clerical, legal, real estate, marketing, information technology, etc., please let us know!)*

Please return this form and your payment to: (or join and pay online at **http://ilforestry.org/join**)

Illinois Forestry Association
P. O. Box 224
Chatham, IL 62629

For IFA Administrative Use
(8/15) IFA: ID #_____Region _____

Membership Category	1-year	2-year*	3-year*	Life**
IFE – Basic Membership with email address	$25	$45	$60	$500
IFM – Basic Membership – US Mail only	$35	$65	$90	$500
IFS – Supporting Membership	$50	$90	$125	$750
IFX – Sustaining Membership	$100	$180	$250	$1500
BUS – Business Membership	$50	$90	$125	$750
NFP – Not-for-Profit Organization	Please use Basic or Supporting category amount			
STU – Student (high school & above) non-voting	$10	$20	$30	----

* Multi-year discounts available through 12/31/2015, after which 1-year rates apply

** Lifetime membership dues can be paid in two installments, up to 6 months apart

IFA is a 501(c)(3) not-for-profit charitable organization.
Donations above/beyond basic dues are tax deductible!

Join IFA Online at http://ilforestry.org/join

"The VOICE for Illinois Forests"

Illinois Forestry Association
Stephanie Brown, Executive Director
Phone: 618/949-3699 (office)
Email: ilforestry@gmail.com

IFA Mailing Address:
P.O. Box 224
Chatham, IL 62629

Click to learn...

Why Leaves Change Color

http://www.na.fs.fed.us/fhp/pubs/leaves/leaves.shtm

State's Oaks Squeezed Out by Other Species

http://wuis.org/post/illinois-issues-state-s-oaks-squeezed-out-other-species

Forestry Word Search -- "OAKtober"

ACORN
BARREL STAVE
BLACK
BLACKJACK
BUR
CHERRYBARK
CHESTNUT
CHINKAPIN
COOPERAGE
HARDWOOD
LUMBER
NORTHERN RED
OAKTOBER
PIN
POST
QUERCUS
REGENERATION
RESTORATION
SCARLET
SHADE INTOLERANT
SHINGLE
SHUMARD
SOUTHERN RED
SWAMP CHESTNUT
SWAMP WHITE
WHITE
WILLOW

S S S A V E T H E O A K S B M W H A R M
T O H K C A J K C A L B C W Q H X A M A
U G U A D R A M U H S Q E S U C R E U Q
N E S T D S D O O W D R A H T U D O C R
T G H W H E W R E G E N E R A T I O N E
S A I O L E I A K T P K W O U C W T V B
E R N L X O R N M Y I R B O S B O A C M
H E G L Q N B N T P N H Y Y J O T R C U
C P L I N A Q F R O C F W C Y S E H N L
C O E W I V T F D E L H H P L E I T M N
N O R T H E R N R E D E E E M N O H Z A
B C K U L L U Q Q Q R H R S K A G U K K
U L R R I A Z G L R Q R P A T G W F K P
W V A F L P T G Y A A F P M N N R S C D
W C N C N V A B Q B A I B Q L T U X T V
S H D E K E A Z M C N Y M B I G O T Y M
T P I M F R S G R E B O T K A O U E R A
T O O T K V R E S T O R A T I O N B N Z
U S T W E U C W S B D N R U J S U O S W
U T E I X G R P B E S D Q Z Y N I M X U