2020 Illinois Forestry Association Board of Directors

Executive Committee

PRESIDENT Mike McMahan (Region 4) Vienna, IL 618/977-3415 mcmahan3465@hotmail.com

VICE-PRESIDENT Landon Satterfield (Region 4) Boaz, KY (Benton, IL) 270/704-2687 lsatter@siu.edu

SECRETARY Dave Gillespie (Region 2) Chatham, IL 217/494-6982 dandgisp@aol.com

Interim TREASURER Mike McMahan (Region 4) Vienna, IL 618/977-3415 mcmahan3465@hotmail.com

IMMEDIATE PAST PRESIDENT Joe FitzSimmons (Region 4) Vienna, IL 773/852-7120 fitzsimmonslawoffice@gmail.com

PROGRAM COORDINATOR Zach DeVillez Makanda, IL 618/8410932 ilforestry@gmail.com

Regional Directors

Region 1

Bill Fern Chicago, IL 773/551-5561 bill@billfern.com

Tom Walsh Durand, IL 815/248-2234 walsh10@stateline-isp.com

Tricia Bethke Naperville, IL 630/234-7325 tbethke@mortonarb.org

Region 2

John Lovseth Jerseyville, IL 618/374.5291 John.Lovseth@principia.edu

Lee Rife Springfield, IL 217/652-2634 Lee.Rife@comcast.net

Kevin Bennet Hopewell, IL 618/954-0113 kbennett@treesforever.org

Region 3

Stan Sipp Mansfield, IL 217/714-1855 sksipp@illinois.edu

Region 4

Roger Smith Benton, IL 618/927-2057

smithtreefarmllc@hotmail.com

Bill Buechel Highland, IL 904/480-0006 wmjbuechel@yahoo.com

Jeff Biethman Red Bud, IL 618/282-3651 jcbiethman@gmail.com

IFA Technical Advisors

Chris Evans (Chair) University of Illinois **Extension Forester** 618/695-3383 (office) cwevans@illinois.edu

Wade Conn State Forester, USDA-NRCS 217/353-6647 (office) wade.conn@il.usda.gov

Paul Deizman **IDNR Forest Resources** 217/782-3376 (office) paul.deizman@illinois.gov

John Edgington University of Illinois (retired) 217/840-5162 johnedg@illinois.edu_

Jay Hayek University of Illinois **Extension Forester** 217/244-0534 (office) jhayek@illinois.edu

Stan Sipp Forester 217/489-9003 sksipp@illinois.edu

Gary Stratton Forester - Retired IDNR 618/736-2854 stratton@hamiltoncom.net

Chris Whittom **IDNR Forest Resources** 217/785-8264 (office) 217/280-3659 (cell) chris.whittom@illinois.gov

Our Mission...

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

Our Goals...

- Promote forest management and help landowners manage their forests
- Educate members and the general public about rural and community forestry
- Advocate for favorable legislation and policies to benefit/protect landowners managing their forests
- Understand and engage our members, and increase IFA membership
- Govern the IFA efficiently and effectively to better serve our charitable mission

https://ilforestry.org

Message From the IFA President

Fellow IFA Members -

We have all been directly affected by the COVID virus and its associated restrictions. We have learned to social distance, wear masks and stay at home if possible. Although this was not the lifestyle we were accustomed to, it has given us opportunities to do things we were putting off for one reason or another.

Building a greenhouse is something my wife and I have wanted to do for years. Early on we simply could not afford it but in recent years that excuse was less and less valid. Not only will we be able to grow seeds but I also plan to get serious about learning how to germinate walnuts and acorns and plant the resulting trees. That too is something I have put off for years with no good excuse other than "Maybe next year".



Figure 1: Greenhouse

Once we decided to actually start this project, we discussed the lay-out and the size, how we could incorporate the log siding on our existing barn and what materials to use.

I had started building the superstructure when I decided to get some professional advice regarding the roofing materials and finalize our plans. I contacted a greenhouse materials supplier. One of their salesmen, Jeff, was a huge help. I sent him pictures and he gave solid advice on what to do. We decided to make a trip to the Greenhouse Megastore in Danville, Illinois to meet Jeff and pick up the materials we needed – the trip was well worth the day. Now our greenhouse is almost ready to go – seeds are here and when the weather allows, a small propane tank will be installed to provide heat.

I encourage you to act on your forestry and/or gardening dreams as soon as you can. Don't delay. Making the decision to put that first shovel into the ground has been fun for us and, hopefully, we will have years to enjoy the "fruits" (and "vegetables") of our labor.



Figure 2: Greenhouse interior



amazonsmile You shop. Amazon gives.

If you shop on Amazon, consider entering the site through this link:

https://smile.amazon.com/ ch/27-0134781

Even without the specifics, it's easy to search for the Illinois Forestry Association as your preferred charitable organization. Just remember to enter "smile dot" before amazon dot com. At no cost to you, Amazon will donate 0.5% of eligible purchase totals to the IFA.

Every little bit helps.
Thanks for your support!

IFA News and Updates

by Zach DeVillez

Upcoming Projects:

This year, the IFA is undertaking a few projects that we are very excited about. A big thank you goes out to the Illinois Forestry Development Council who has agreed to fund the projects listed below.

IFA/Heartlands Conservancy Woody Invasive Control Demonstration:

Last year, the IFA collaborated with Touch of Nature at Southern Illinois University Carbondale to conduct a substantial woody invasive control project. Thanks to the hard work from everyone involved, the project was a major success. The crew, made up of student workers and led by IFA board member Roger Smith, eradicated dense infestations of woody invasives, such as bush honeysuckle and autumn olive. This project was transformative to the forest health and recreation at Touch of Nature. A demonstration area with intepretive signs was also created at the sight that compares no control with successful control of woody invasives.

The IFA plans to replicate this project by partnering with another great group, the Heartlands Conservancy. The Heartlands Conservancy, located in Madison County, owns forested land that could benefit from invasive control. IFA board member, Roger Smith will work with a forestry mower to create a demonstration area that will compare different levels of control. Landowners in the area who are interested in this management technique should benefit from the demonstration area.

Landowners' Guide to Non-native Invasives:

The IFA is currently developing a guide booklet about non-native invasive plants. This booklet, written specifically for private landowners, should provide an excellent resource for landowners who have infestations of invasive plants. The guide booklet will introduce many of Illinois' more serious forest invaders. It will include detailed backgrounds about each plant, pictures and written descriptions of identification characteristics, and lists of control methods. With this booklet, we hope that private landowners will learn to recognize non-native invasive plants in their forests and begin taking the proper steps to eradicate invasive plants for a healthier forest.

Regional Field Days:

Last year, the IFA attempted to organize four regional field days to tour some different sites that demonstrate different aspects of forest management. These events are important because attendees can learn and visually see the positive impacts of responsible forest management. However, due to the need for responsible social distancing during the pandemic, the IFA had to switch gears to a virtual webinar series instead. The webinar series was a success, however, we still missed meeting with our members in person to discuss these topics. There is still much uncertainty regarding meeting publically today. However, the IFA will plan these field events and follow state guidelines to hopefully hold in person field events.

IFA Gift Memberships:

The IFA gift membership campaign thus far has been a success in recruiting new members to the IFA. However, we still need our members to spread the word about IFA. If you have friends, family, or neighbors intersted in healthy, well managed Illinois Forests, why not give a gift membership? The Illinois Forestry Association believes that more Illinois citizens should cherish and care for the forests that benefit us in so many ways. If you can, do your part to ensure that future generations can enjoy Illinois forests as we do today.

IFA to Continue Spreading Awarenes About Non-target Herbicide Drift Damage:

The IFA has continued to have dialogue with private landowners who are concerned or who have experienced non-target herbicide drift. The IFA wishes to place no blame on any individual or group. However, this is a real issue that has real consequences for those unfortunate enough to experience rapid tree decline or mortality due to herbicide drift. The IFA plans to continue its educational outreach efforts so that landowners can recognize the issue before the tipping point of tree mortality. This issue can be avoided if chemical applicators are aware of the problem. Learn more about this issue in the Forest Health Highlights article in the newsletter.



How Soil Dictates Tree Species Within A Site

By Zach DeVillez

If one were to walk through a stretch of forest, they might realize that the dominant tree species in one area might be completely different from the dominant species in another. Believe it or not, parts of Illinois have some of the richest tree species diversity in the country.

Many factors dictate what species grow where. Factors such as soil, water availability, topography, aspect (direction an area faces), and light availability all play major roles in what species will thrive in an environment. In this article, we will specifically discuss how soil characteristics and water availability influence species composition.

What Makes Up Soil:

Soil can be broken down by four major factors; mineral particles, organic matter, water, and air.

Mineral Particles - Mineral particles are inorganic particles that come from rocks and parent material that formed the soil. These mineral particles are classified as either clay, silt, or sand.

Organic Matter - Any living thing that has died and decomposed into the soil is considered organic matter. The technical term for this product of decomposition in the soil is called humus. Humus can give plants nutrients and help bind particulate together.

Water - Water is continually supplied to soil through the water cycle. Precipitation, surface runoff, and water table depth influences water availability in soils. Gravity forces water downward in the soil. However water is held in soil pores that is available for plants to uptake.

Air - Air is constantly exchanged between soil pores and the atmosphere. That air is stored within pores in the soil. Pores are essentially just distance between soil particles. Pore frequency and size in soil has a major impact on water behavior.



Figure 1: Layers of soil.

© Andrew Koeser, International
Society of Arboriculture,
Bugwood.org

How Water Interacts With Different Types of Soil:

Some terms used to explain how water interacts with soil are infiltration and percolation. Infiltration refers to water entering the soil surface, while percolation refers to water movement within the soil. The varying rates at which water infiltrates and percolates in any given soil can help understand water availability for plants within that soil.

Percolation and infiltration rates vary with differant ratios of sand, silt, and clay. Sand is very porous. Therefore, water infiltrates and percolates through soils with high sand content very quickly. Atlternatively, soils high in clay content are generally less porous, which leads to slow infiltration and percolation rates. Soils with high silt content tend to fall in the "just right" category. Water infiltrates and percolates at a rate which holds enough water for plants, but drains at an adequate speed.

If you wish to test this theory, it is quite simple. Just pore a bucket of water into sand and pour a bucket into clay. The water should move very quickly through sand, but very sowly through clay.

Xeric to Dry Soils:

Xeric soils, which are very dry, thin, and nutient poor, are often found on bluff tops and have a high sand content. This means that species that grow in this environment have to be able to tolerate less water availability. Dry upland soils generally occur on steep ridges and bedrock outcroppings. These soils are thin, but not as thin or dry as xeric environments. Dry upland forests grow here.



Figure 2: A blackjack oak growing on a dry bluff outcropping.

Species Found in Dry Soils

Driest Xeric Sites

Blackjack Oak Post Oak Farkleberry

Dry Upland Forest

Blackjack Oak
Post Oak
Black Oak
Chestnut Oak
Pignut Hickory
Black Hickory

Mesic Soils:

Mesic soils are the most common forest soil type in Illinois. Since these soils are well balanced in terms of moisture content and drainage rates, these soils provide for a wide variety of Illinois species. Mesic soils can be broken down further into the categories dry mesic, mesic, and wet mesic. Dry mesic upland forest, mesic upland forest, and wet mesic forest are categoried by drainage rates.



Figure 3: A white oak growing in dry-mesic upland forest.

Wet Soils:

Wet, often flooded, nutrient-rich soils are usually located next to rivers or swamps. The forest type found in these environments is bottomland forest. These areas provide exceptional habitat for wildlife. The plants that grow in these environments have to be able to tolerate poorly drained soils.



Figure 4: A Bottomland forest.

Species Found in Mesic Soils

Dry-mesic Upland Forest

Red Oak Black Oak White Oak Flowering Dogwood

Mesic Upland Forest

Red Oak Beech Sugar Maple

Wet-mesic Upland Forest

Bur Oak American Elm Hackberry

Species Found in Wet Soils

Bottomland Forest

Green Ash Sycamore Sweet Gum Cottonwood Silver Maple Sugar Maple Red Maple Pin Oak Shumard Oak

The History in Your Woods

By Dr. John Lovseth Professor of Biology and Natural Resources, Pricipia College

When you walk in the woods, do you find yourself wondering about why the forest looks a certain way? Why are the lower branches on that large white oak dead? Why is there a patch of persimmon, dogwood, and redbud on the field edge but not down in the ravine? If you are like me, every walk in the woods is a chance to gather more clues and assemble parts of the story into a timeline that helps me bring recent events into perspective. The locations of piles of rock, old fence lines, burn scars at the base of trees, low branching trees or long slender trees with high branches only, invasive species, stumps, and certain trees are great hints for assembling the ecological narrative of your area. Perhaps you have been observing your woods closely, but there are still a few unsolved mysteries that just won't crack. Here are four resources for the state of Illinois that will bolster your observations and perhaps give you an insight.

LiDAR:

LiDAR is a recent mapping technology that scans in the earth's surface to provide exceptionally detailed images of the terrain. In fact, the laser that is used for scanning can penetrate the vegetation to provide clues about old roads, field edges, and orchards or vineyards. Visit the Illinois LiDAR website (https://clearinghouse.isgs.illinois.edu/data/elevation/illinois-heightmodernization-ilhmp) and use the viewer to find your property.



Figure 1: LiDAR compared to aerial photo.

Historic Aerial Photos:

Historic aerial photographs from the late 1930s and early 1940s provide the first photographic glimpse of the landscape from above. Visit the Illinois historical aerial photography site (http://clearinghouse.isgs.illinois.edu/data/imagery/1937-1947-illinois-historical-aerial-photography) and use the viewer to navigate to your area and find images. In combination with LiDAR data, you will be able to find ridges that were open and are now forested or forests that are now fields. My research in Jersey County showed that since the late 1800s,



forest cover increased nearly 27% on the college campus I studied. For more recent history use the time tool in Google Earth Pro (https://www.google.com/earth/versions/) to scroll back in time, typically to the early 1980's.

Alternatively, you can visit Global Forest Watch and see how forest cover has changed in your area over the last 20 year (spoiler alert: there has been very little recent change in forest cover in Illinois).



Figure 2: Historical photo compared to present aerial photo.

Continued on the next page -

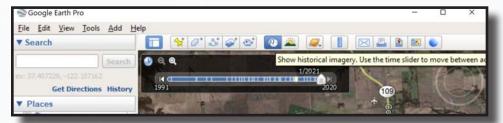


Figure 3: The time tool in Google Earth Pro

Witness Trees:

As Illinois was mapped in the 1820s, surveyors used trees to mark the section corners and midlines. The trees were identified and measured. Then the distance and direction of the corner or midline was measured. These witness trees provide a crude, yet effective, record of the forest conditions prior to settlement. Search for nearby witness trees in Illinois through the Chicago Region Tree Initiative (http://chicagorti.org/WitnessTrees).

Plat Maps:

Early plat maps are excellent for providing information about the location of general land cover types. Plat maps generally identified forest cover, open field, vineyards, orchards and other types of development like roads, railroads, structures, and cemeteries. Your local library might be a good place to start, but the Library of Congress has ample online resources for plat maps in Illinois (https://www.loc.gov/maps/?fa=sub ject%3Alandowners%7Csubject%3A maps%7Clocation%3Aillinois&all=tr ue&dates=1800-1899&st=slideshow). You might even find more than one plat map from the 1800s. Try comparing current maps and the aerial photographs from the early 1940s with the forest cover found in the plat maps. Find key landmarks that are consisted in all the maps to orient yourself within each time period.

Historical Records:

Many of the early ecological descriptions within Illinois have been compiled into volumes entitled "Early Accounts of the Ecology of..." and you will need to search for your watershed (https://www.ideals.illinois.edu/ handle/2142/13862). I happen to be located in the Big Rivers Area. Within the volume, search for terms related to your interest, for example, fire, timber, or individual species. For example, in 1818 Gershom Flagg wrote of the land in Madison County that "Wherever the land is high and dry enough for the fire to run in the spring and fall, the timber is all destroyed." You might enjoy searching for records of currently extinct species, such as the passenger pigeon or Carolina parakeet. Although you might not find descriptions of your land, it will give you a general feeling for the ecology of the area, perhaps going as far back as the 1600s.

amazonsmile

You shop. Amazon gives.

If you shop on Amazon, consider entering the site through this link:

https://smile.amazon.com/ ch/27-0134781

Even without the specifics, it's easy to search for the Illinois Forestry Association as your preferred charitable organization. Just remember to enter "smile dot" before amazon dot com. At no cost to you, Amazon will donate 0.5% of eligible purchase totals to the IFA.

Every little bit helps.
Thanks for your support!



Forest Health Report Herbicide Drift Damage

By Fredric Miller IDNR Forest Health Specialist

Signs of herbicide damage to trees were reported statewide in 2020, particularly on state and private lands bordering agricultural fields, continuing a trend seen in recent years. This mirrors reports of herbicide damage in agricultural crops that have also been increasing in the past few years. According to the Midwest Center for Investigative Reporting (31 August 2019), "Farmers in Illinois, the nation's leading soybean producing state, have reported record levels of crop damage caused by herbicide drift in 2019, with 590 dicamba-related complaints as of 23 August." "In 2017, Illinois had 246 dicamba-related complaints. In 2018, the state had 330."(8).

Types of Herbicides:

In general, herbicides are classified based on the types of weeds they control (grasses, broadleaf plants, woody plants, etc.), when they are applied (i.e. pre or post emergence), and their mode of action. Post emergence broadleaf herbicides selectively kill actively growing broadleaf plants and include growth regulator herbicides containing active ingredients found in 2,4-D, 2,4-DP, MCPA, MCPP, and Dicamba. These products have broad application including homes, farms, and industry. They are prone to drift and volatilization. Injury symptoms associated with these herbicides include twisted and downward cupping of leaves, and narrow, strap-like leaves on the youngest growth (Figure 2). Root uptake of these chemicals is usually more damaging to the plant and on grape the leaves will cup upward (Figure 3). These herbicides are fairly soluble

and can move through the soil as well as air. As their name implies, grass herbicides kill grassy weeds. They may be applied pre or post emergence. Common preemergence herbicides include trifluralin and DCPA. Post emergence herbicides include fenoxaprop, sethoxydim, and fluaziop-P. These products cause yellowing/bleaching of leaves and dieback of actively growing regions. Pre-emergent products are less likely to drift compared to post emergence herbicides. Non-selective, post emergence, broad spectrum herbicides are basically designed to kill a wide variety of plants and include paraquat, glufosinate, and glyphosate.

Herbicide Drift:

Like with all pesticides, herbicide drift can be a problem. Factors affecting drift potential include formulation, application method, air temperature, wind, and soil factors. For example, 2,4-D (low volatile ester formulations) can vaporize and be carried by the wind while 2,4-D (amine formulations) are less likely to vaporize. Granular formulations rarely move or volatilize. It is well known that the smaller the droplet size the higher the drift potential. To avoid drift issues, it is recommended to produce larger droplet sizes along with lower pressures or use sprayers with larger orifice nozzles. Weather factors such as air temperature, wind, and relative humidity (RH) may also contribute to herbicide drift. Some herbicides may vaporize at temperatures greater than 85° F during or immediately after application. Herbicides in a



vapor state can move large distances and can cause plant damage considerable distances from the point of application. Producing larger droplets and applying them closer to the target plants can minimize wind drift. Soil factors also play a role in herbicide drift. The amount of uptake by a soil-applied herbicide depends on the type of herbicide, location of plant roots in the soil, soil type, and soil moisture. Some herbicides are mobile and move rapidly in sandy and/or porous soils while others may persist in the soil.



Figure 1: Suspected herbicide damage to oak leaves.



Figure 2: Herbicide damage on grape, most likely due to root intake (upward cupping leaves).

Table 1: Sensitivity of various tree species to broadleaf weed-killers (Taken from Hibbs, 1978).

Sensitive

Apple Ash Birch

Box Elder

Amur Corktree

Elm

Hackberry

Hickory

Horsechestnut

Maple (sugar, red, amur)

Redbud

Sycamore

Walnut

Intermediate/Unknown

Cherry Cottonwood Honeylocust Mulberry Oaks Silver Maple

Tolerant

Catalpa Linden

Diagnosing Herbicide Drift Damage:

Be careful not to jump to premature conclusions when attempting to diagnose for herbicide or other chemical injury. Correct tree diagnostics is all about "patterns, patterns, patterns". For example, are several different tree species impacted, or just one species? Is only one part of the trees impacted, or is damage more widespread? Possible factors contributing to herbicide drift damage include low temperature injury, foliar diseases (i.e. anthracnose), insect feeding (i.e. plant bugs, leafhoppers), herbicides and air pollutants. Some tree species may show damage while others will not. A question to ask is, is only the new growth affected or is the entire canopy impacted? If it is a onetime event, then later new growth should look normal. In some cases, leaf tissue analysis may be required to determine which chemical is involved in plant damage. Are there other insect and disease issues present at the same time? Has there been any disturbance to the soil

around or near the tree(s) (i.e. addition of fill, construction activity, soil compaction, etc.), are there of girdling roots present, and has there been a drought or flooding? Remember, most of our problems we see with trees usually start below ground.

Managing Chemical Drift Damage:

Unfortunately, for rural forested areas and woodlots, there is really no practical treatment other than to reduce stress factors (i.e. livestock grazing) in areas where tree symptoms are being observed. Trees growing in urban areas and home landscapes should be protected from predisposing stress factors such as construction injury, soil compaction, changes in drainage, competition from turf, and drought. Focus on tree health by mulching, watering during dry spells, and fertilizing where appropriate if nutrient deficiencies are present. Remember, older mature and over-mature trees do not react well to changes in their immediate growing environment.

In most cases, healthy trees will recover from chemical damage the following season, but chronic exposure to herbicides along with the aforementioned pre-disposing factors may be enough to cause the tree to begin to decline ultimately resulting in death. If you have to apply an herbicide for any reason, avoid herbicide drift by not spraying when cross winds exceed 10 mph, using lower pressures, and using spray nozzles that produce large-sized droplets.

Herbicide Damage Survey Results:

We still have a lot to learn about spray drift and all of the related factors contributing to herbicides moving off-target. In 2018, we initiated a statewide survey to obtain a better idea of how extensive the problem is and to better understand the causes contributing to leaf tatters and/or herbicide drift and the relationship between chronic chemical drift exposure and its effect on long-term tree health. In 2018, 2019, and 2020, leaf tissue samples were taken and submitted to a lab to test for evidence of dicamba and/or 2,4-D damage. In 2019, of the 27 leaf damage samples collected, 26 had 2, 4-D residue ranging from 4 to 237 parts per billion. All 27 leaf damage samples showed Dicamba residue, ranging from 3 to 50 parts per billion. Only 7 of the 27 samples contained triclopyr residue. Samples collected in 2020 have yet to be analyzed but more samples were submitted in 2020 than in 2019.

State Forester Report

By Paul Deizman IDNR State Forester

The Division of Forest Resources (DFR) continues to operate its programs, mandates and mission by conducting business according to current state government agency COVID-19 protocols. The physical offices of the DNR continue to be closed to the public with majority of staff still working out of their homes. The DNR leadership succeeded quite well in adapting as an agency to keep the DNR open from the onset of the Spring 2020 stay at home orders as have most specific divisions, including forestry.

Congratulations on retirement to three outstanding individuals DFR lost on December 31, 2020.

- Barb Burgett, Mason Nursery operations staff one of the best that has ever worked there.
- Kelley Shoemaker, office coordinator for Dixon Springs field office she is simply irreplaceable.
- Chris Walker, Region 5 forestry tech - an excellent forester who exceled in all forestry work.

We thank Chris, Kelley and Barb for their years of hard work and dedication. Significant is too small a word to recognize these three people who chose to serve the missions of the forestry division as public servants most all their professional careers. We are lucky to have had them. They are dearly missed.

The Mason State Tree Nursery has progressed beyond the recent adoption of accepting credit cards to now accepting on-line sales. The approval for credit cards literally took years which enabled the ability to offer on-line sales. The nursery continues to produce and sell top quality native plant material as tree seedlings and as clean, live seed of native plants for restoration and pollinator habitat.

Staffing issues continue to be a challenge for the IDNR and the forestry division. COVID-19 restrictions combined with the budget crisis facing the state has bottlenecked the hiring process at the agency. Priorities for the division continue to be nursery staff, field foresters, field office associates and key program positions we desperately need. Good news is the hiring process is moving forward with interviews now occurring by use of virtual platforms instead of in-person.

The DFR is committed to the health and active management of all Illinois forests and continues to be engaged in new and ongoing projects and initiatives toward that end in the core programs of forest management, forest utilization, urban forestry, fire and forest health.



"The ultimate test of a moral society is the kind of world it leaves its children."

- Dietrich Bonhoeffer

Tree Health Monitoring - A Walk in the Woods

By Tricia Bethke Illinois Forest Pest Outreach Coordinator

In the late 1860s, Etienne L. Trouvelot, Medford Massachusetts, never imagined that the non-native gypsy moth eggs he was rearing would become one of the most significant invasive pests in the U.S., but it did and it is one of over 40 forest pests found in Illinois.

European gypsy moth, (Lymantria dispar L) caterpillars prefer to feed on oak (Quercus sp.) leaves and lay eggs on the trunk and branches of oak trees. While gypsy moths won't kill trees, they can cause stress through repeated defoliation, especially when populations are high. Presently, there is an effective way to slow the spread of European gypsy moths (see figure 1), through a cooperative program with the **Illinois** Department of Agriculture (IDOA) and the United States Department of Agriculture Animal Plant Health Inspection Service, USDA APHIS. Fluctuating populations are managed through an integrated pest management (IPM) plan that is based on the results of insect pest surveys conducted throughout the state and in coordination with the Slow the Spread (GMSTS.org) program.



Figure 1: European Gypsy Moth

As a homeowner and/or woodland landowner, you might be wondering what you could do to help protect trees, especially oak trees, from potential invasions of pests like gypsy moth (established in Illinois), and/or spotted lanternfly (Lycorum delicatula) (not currently established in Illinois). The answer is simple, especially in winter, go out and look at your trees—a five-minute walk to inspect trees for egg masses could prevent the spread of these highly invasive forest pests in the spring, reduce populations, and help protect trees.



Figure 2: Spotted Lanternfly

Winter is a perfect time to view trees, the tall silhouettes, musty bark, and solitary buds make it easy to spot unusual things. Take a few moments to look at the trunk and branches of the trees for signs of egg masses; gypsy moth egg masses (see figure 3) and spotted lanternfly egg masses (See figure 4) overwinter during the dormant season and typically hatch in the spring usually to coincide with bud break. The gypsy moth egg masses are buff-colored and have a 'cottony-like' texture with brown hairs from the female's body. The egg masses can be seen individually or in clusters

on the trunk and the under-side of branches, and each egg mass can consist of 100-1000 individual eggs.



Figure 3: Gypsy moth egg masses
© John Ghent, Bugwood.org



Figure 4: Spotted lanternfly egg masses © Emelie Swackhamer, Penn State University, Bugwood.org

Spotted lanternfly egg masses are similar to gypsy moth egg masses, with single or clusters of egg masses that can contain over 500 individual eggs per mass, however, they are different in color. Spotted lanternfly egg masses are 'putty-like' in color and have a smooth protective 'waxy 'coat which allows the eggs to overwinter. When the egg casings are removed, the underside of the egg mass (and often last year's egg masses) look like 'tire-tracks or sausage links' which is different than gypsy moth egg masses. Spotted lanternflies and gypsy moths can lay their eggs in sheltered areas and hard surfaces such as firewood, picnic tables, poles, etc. so it is important to look for egg masses during the winter when they are easier to see and remove.



Figure 4: Comparing spotted lanternfly egg mass (left) and gypsy moth egg mass (right)

How can you help slow the spread of forest pests like the European gypsy moth and spotted lanternfly? If you see something that looks like one or both of these egg masses, take a photo or video, and contact either one of the following agencies (see below) for further instructions on reporting and potential removals. Additionally, don't move firewood around the state or country, it is the number one way that humans spread invasive tree pests. (Buy local firewood and burn locally.)

Contacts:

- Illinois Department of Agriculture, Scott Schirmer, Nursery & Northern Field Office Section Manager, SPRO, 815-787-5476, Scott.Schirmer@illinois.gov
- USDA APHIS, Greg Rentschler, State Plant Health Director
 Illinois, 847-699-2417 (desk), greg.j.rentschler@usda.gov

All spotted lanternfly inquiries can be emailed to <u>lanternfly@illinois.</u> edu.

Enjoy your winter walk, and thank you for keeping an eye out for those egg masses.



New IFA Board Member Spotlight



Tricia Bethke is the Illinois Forest Pest Outreach Coordinator. Her position is funded through a cooperative grant with USDA APHIS and The Morton Arboretum. Tricia's responsibilities include statewide education, training, and outreach to key stakeholders on the USDA APHIS Hungry Pests program, forest pest identification, high-risk pathways, regulations and quarantines, and reporting protocols. Tricia has a Master's of Science in Natural Resources and Environmental Sciences (NRES) from the University of Illinois.

Extension Forestry Update

by Chris Evans, University of Illinois Extension Forester



In early February, the University of Illinois Extension Forestry Program held a three-day Winter Tree Identification Course. Day one covered the basic characteristics needed to identify trees in winter, such as buds, twigs, arrangement, bark, etc. Day one also covered resources and how to use keys to identify unknown species. Day two focused on how to identify common trees in Illinois. Around 20 species were covered in this session, include black walnut, sugar maple, green ash, and sycamore. Day three focused on more difficult groups to identify and mostly focused on oaks and hickories but also covered some less common tree species in Illinois. This virtual event drew in over 1,000 registrants each day. All three sessions were recorded and are now available for viewing on the Extension Forestry Youtube Channel. You can access the session recordings as a playlist at https://www.youtube.com/playlist?list=PLyMFgPGbelc9LocotX7raSPtnORKvtj3y or view them, along with all the other Illinois Extension Forestry videos at https://www.youtube.com/channel/UCrs9vcfUQDO-flreZJchjlw.



History of Conservation in Illinois

Installment #34 by Dave Gillespie, IFA Secretary

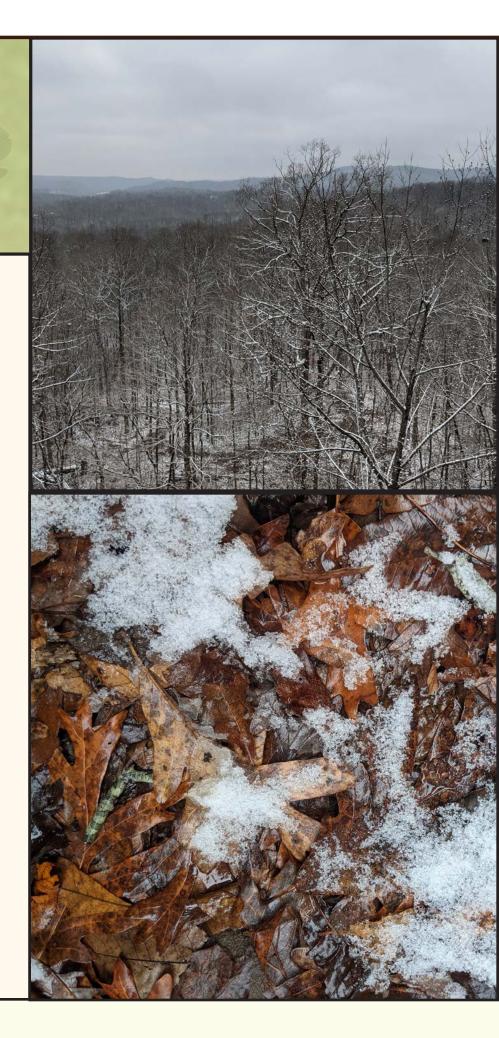
This account of the history of conservation in Illinois was written by Joseph P. Schavilje in 1941. This installment begins where installment # 33 ended.

The forest regions studied were the northern part of Johnson County as part of the Ozark Hill region, parts of Williamson County north of the Ozark Hill region and along the Big Muddy River, the bottomlands of the Kaskaskia River, the more hilly land along the Illinois River from LaSalle County to the mouth of the Sangamon River, and the tract of native white pine in Ogle County. Some conclusions were: the majority of the timberlands in the State have been cut over; the supply of wood products is not sufficient to meet the local demands in various sections throughout the State, except for a short period of vears: there is need for the conservative use of timber and for the management of woodlands by the individual owners; adequate fore protection should be obtained.

Attention was turned to the woodlands of the State in 1909, when a survey of wood-using industries was made by H. S. Sackett of the U. S. Forest Service under the direction of the Department of Horticulture of the University of Illinois.

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





Find Illinois Forestry on Facebook:



Illinois Forestry Association www.facebook.com/ILForestry

Illinois Tree Farm
www.facebook.com/IllinoisTreeFarm

Illinois Extension Forestry

www.facebook.com/IllinoisExtensionForestry

Illinois Walnut Council

www.facebook.com/IllinoisWalnutCouncil



Fall is but a distant memory and winter has finally settled in. It is the second week of February, and I will soon celebrate one full year of selfimposed isolation to try to avoid the corona virus. Last year the Mrs. and I were in Destin, Florida for a month long holiday when the virus hit. As I recall, it was quite stormy and unusually cold, so we cut our stay short, and went to some plantations north of New Orleans, It was Mardi Gras time in New Orleans. However, we heard of the virus and elected not to take the chance. Instead, we went to a city about 20 miles north and headquartered while we visited several sugar plantations in the area. From there, we headed back to Central Illinois.

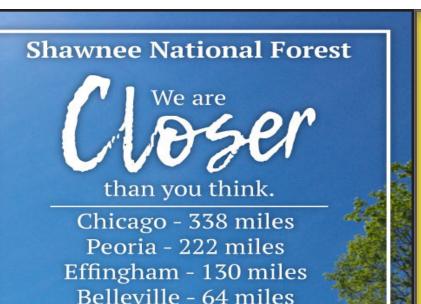
Upon arriving home, we learned that the corona virus had arrived in several places here in the United States. By mid-March, corona virus had become a fact of life for many people. We decided to self-isolate to avoid catching the bug and to avoid spreading it to others, just in case we did come down with it. As just about everyone and their brother knows,

isolation has become more or less mandatory. I said to my wife that this would be a game changer, and it has. Who of us knew anything about zoom one year ago. Today, that is how IFA holds its meetings. Indeed, rather than having their annual meetings in Chicago, Springfield, or Saint Louis, most, if not all farm organizations are holding meetings via zoom. You register with the organization in advance, pay your registration via credit card and attend the zoom meeting. I know of at least one group that is hosting its trade show via zoom.

It isn't that just meetings and conventions have changed, but most schools until recently went to "remote learning" to avoid spreading the malady around. We are all aware that stores closed, many permanently. Restaurants and taverns also closed in most places. Churches worked out many unique ways to worship without having to meet at church on Sundays. Many people started working from home and many others were either working reduced hours or were laid off from

their work. At this time, we are rapidly approaching the number of deaths from the virus that is twice that of deaths from German and Japanese soldiers in World War II, a statistic that I for one would rather not see. However, I do believe that many of the changes that we have seen will become permanent.

Not all this is gloom and doom. For example, I recently heard that Anna, Illinois is thinking of becoming a tree city. In Chicago, a group has formed to plant a tree in each ward, each year. Various organizations are at work throughout Illinois and other states encouraging the planting of trees. In rural areas, I have heard of tree plantings around livestock facilities. I believe that we may see conservation programs that will encourage tree planting to cut back on erosion.







Check Out the IFA Instagram Account!

Get Connected

Learn With Us

Grow as Land Managers

Find Us @ illinois.forestry.association



Purple Paint Sign Order Form

Name	# of Signs x \$12 (Member Price)
Street Address	# of Signs x \$18 (Non-Members)
City/State/Zip Code	Shipping & Handling
E-Mail Address	TOTAL

Shipping: 1 sign - \$8.00 | 2 signs - \$9.00 | 3 signs - \$9.00 | 4 signs - \$10.00 | 5 signs - \$11.00

Orders in excess of 5 signs must be shipped in two mailers

Mail Order Form to: (Check or Money Order made payable to Illinois Forestry Association)

Stan Sipp

Director, Region 3 P.O. Box 111 Mansfield, IL 61854

Signs are shipped via U.S. Postal Service

Invoice will be included with signs

Questions? Contact Stan by email at sksipp@illinois.edu

The Forming of a New Burn Association

By Scott Moss

A new Prescribed Burn Association is forming in the Alton Illinois area with the mission to assist private landowners in the use of fire to manage the natural communities on their land. When it comes to management of natural landscapes, few forces in nature are as misunderstood as fire. Prescribed Fire has long been recognized as a useful, and economical, tool for landowners and managers that is often recommended in private land conservation programs. The challenges here, however, are numerous. Poor public perception, risk management, insurance, and a general high cost of equipment tend to make this a difficult technique to apply. Following the innovative model of the Southern Illinois Prescribed Burn Association (SIPBA) this new group will provide organizational, planning, and on the ground support for a diversity of private, not for profit, and public landowners to safely and effectively use prescribed fire as a recommended management tool.

Tentatively named the Great Rivers Prescribed Burn Association; the new organization will cover the majority of nine Illinois counties; Calhoun, Greene, Jersey, Macoupin, Bond, Madison, Clinton, St Clair, and Monroe. Startup funding to organize, establish the necessary partners, and enroll members is provided through a grant from the National Fish and Wildlife Foundation (NFWF) administered through Pheasants Forever /Quail Forever. Additional grant funds are being sought and are available to begin the process of purchasing equipment and PPE. Using the SIPBA model and cooperative agreements with multiple state and private partners, the Great Rivers Prescribed Burn Association will accept interested members who will pay a small annual membership fee. Coordinators from the Association will then assist individual members in the planning, preparation, and eventually the application of a prescribed fire on their land to meet their specific management goals. The structure allows for a regional level of mutual support among the multitude of diverse stakeholders seeking to apply best management practices on their land.

Historically a function of State and Federal agencies, it is an unrealistic expectation for conservation practitioners already stretched thin to provide adequate coverage relative to the need. Recognizing that this is a statewide management deficiency, this second of its kind Association is intended to be the template for continued establishment of these types of organizations structured under the guidance of Ignite Illinois, a collaborative of prescribed burn practitioners whose mission is to promote prescribed fire by providing a standard for training, organization, and public involvement in Illinois. For more information about joining the association as a partner or member, please contact Brent Masiero at brent masiero@yahoo.com or call (618)-977-2851.







