2016 Indiana Consulting Foresters
Stumpage Timber Price Report

This stumpage report is provided annually and should be used in association with the Indiana Forest Products Price Report and Trend Analysis. Stumpage prices were obtained via a survey to all known professional consulting foresters operating in Indiana. Reported prices are for sealed bid timber sales only (not negotiated sales) between a motivated timber seller and a licensed Indiana timber buyer. The data represents approximately 10 to 15 percent of the total volume of stumpage purchased during the periods from April 16, 2015 through April 15, 2016. This report has been published since 2001.

The results of the stumpage price survey are not meant as a guarantee that amounts offered for your timber will reflect the range in prices reported in this survey. The results simply provide an additional source of information to gauge market conditions.

The prices reported are broken into three sale types; high quality, average quality, and low quality. A high quality sale has more than 50 percent of the volume in # 2 or better red oak, white oak, sugar maple, black cherry, or black walnut. The low quality sale has more than 70 percent of the volume in # 3 (pallet) grade or is cottonwood, beech, elm, sycamore, hackberry, pin oak, aspen, black gum, black locust, honey locust, catalpa, or sweet gum. The average sale is a sale that is not a low quality or a high quality sale as defined above.

In the 2008 report some minor adjustments were made in the categories from the previous surveys. White ash was previously included as a component of the high quality sales and hickory was previously in the low quality group. No changes have been made in the categories so the 2016 data should compare well with the data collected since 2008.

SALE ACTIVITY STAYS HIGH: In 2016, there were 339 sales (plus 20 negotiated sales) which is down slightly from the record 368 sale (plus 12 negotiated) in 2015 but similar to the 330 sales (plus 14 negotiated) reported in 2014 (Table 1 on page 3).

The same 18 consulting firms that reported in 2015 also reported in 2016. Fourteen of the 18 firms have reported every year since 2011. The data from these 14 firms represents 95 percent of the total sales reported; therefore, the data should be very consistent. The high number of sales for the last three years is due to the relatively strong timber markets and an increase in the landowner’s awareness of forest health concerns, particularly emerald ash borers.

cont’d on page 3

This publication is funded in part by the Renewable Resources Extension Act (RREA)

visit us online at
www.inwoodlands.org
Calendar of Events

October 1
Walnut Council Field Day
9:30 AM - 3:00 PM
Clinton County
Call 765-583-3501 or email lfarlee@purdue.edu.

October 4
Historic Hoosier Hills RC&D Tour and Dinner
4 PM - 8 PM
Selmaier State Forest, Jennings County
Includes free meal.
RSVP or questions to 812-689-4107

October 8
Tree Farm Field Day
Cool Springs Education Center, Huntingburg
Call 812-630-3070 or email d.wehr@twc.com.

October 11 - October 12
Indiana Urban Forest Council Annual Fall Conference
Indianapolis Zoo
Contact assistant@iufc.org or 317-517-9180.

October 25
Chain Saw Safety & Tree Felling
1 PM - 4 PM
Columbus, Bartholomew County
Free, RSVP by October 17.
RSVP or more information at 765-583-3501 or kmedic@purdue.edu.

October 29
Forestry and Wildlife Habitat Field Day
9 AM to 3PM
Martell Forest/Purdue Wildlife Area
Contact 765-494-2153.

November 1
Importance of Oak on the Landscape
7 PM
Butlerville, Jennings County
RSVP or questions to 812-689-4107.

November 4 - November 5
Annual Landowner Conference and IFWOA Annual Meeting
Clarion hotel, Columbus.
More info at www.ifwoa.org or call 765-583-3501.

December 8
Callout meeting for Jackson County area Cooperative Weed Management Area
6:00 PM
USDA Service Center
1350 Woodside Dr, Brownstown
Call 812-358-2367 x3

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The total stumpage volume sold declined to 29,044,240 board feet (plus an additional 1,257,863 board feet in negotiated sales) from the record high reported of 36,773,866 board feet (plus 683,235 board feet in negotiated sale) reported in 2015. This volume, however, is very consistent with the volumes sold in 2014 and 2013 (28,931,192 bd.ft. and 28,650,085 bd.ft., respectively). Historically the average amount sold each year had been around 25 million board feet with the exception of the recession years in 2009-10.

The volume for the high quality sale totaled 7,728,890 board feet which is considerably lower than the 11,861,259 board feet sold reported in 2015 but only slightly lower than the 8.5 to 8.7 million board feet reported between 2011 and 2014. The decline in the volume in high quality sales may be due to the foresters need to salvage ash killed by emerald ash borers or tulip mortality in southern Indiana which moved those sales into the medium quality category.

The medium quality sales totaled 19,782,273 board feet which is down from the 22,606,525 board feet reported in 2015 but up from the 17,690,376 board feet reported in 2014. The past increases in the volume of medium quality sales has been due to the shifting of ash from high quality to medium quality and hickory from low quality to medium quality in 2008. The impact of the ash has likely had more influence due to the increased amount of ash on the market due to mortality or pending mortality caused by emerald ash borers.

Lower quality sales declined to 1,533,077 board feet from 2,486,082 board feet and 2,657,366 board feet in 2015 and 2014, respectively. The volume of lower quality sales has generally been around 3 million board feet. The decline may also be due in part to the result of more ash being on the market and an increase in sales salvaging tulip mortality which would shift the sales into the medium category.

Total timber value sold in the 2016 reporting period declined to $14,939,352 from the record high of $19,207,898 reported in 2015. Although lower than 2015, the 2016 value is still $2.5 million higher than all other values reported since the survey began in 2001. The high quality sales brought $7,728,890, the medium quality sales $8,353,596, and the low quality sales $293,844.

High Quality sales get more interest: In 2016, a total of 1,668 bids were received on the 339 sales for an average of 5.14 bids per sale. This is somewhat higher than the 4.62 bids per sale received in 2015 and 2014. The majority of this increase was on the high quality sales which increased to 6.43 bids compared to 5.82 bids in 2015 and 5.85 bids in 2014. The 4.40 bids this year on the medium quality sale was slightly higher than the 4.24 bids in 2015 and very similar 4.43 bids in 2014. The number of bidders on the low quality sales decreased to 2.55 bids this year from 2.89 bids in 2015 and 2014.

The increased number of bids on the higher quality sales reflects the strong market for the better quality timber. This increase is also visible in the higher price obtained for the high quality timber. The drop in the number of bids on the low quality sales is also reflected in the low prices reported.

Stumpage prices: The average stumpage price for all the sales reported was $514/MBF which is the second highest value reported down only slightly from $522/MBF reported in 2015. The only category with an increase was the high quality sales with an average stumpage value of $814/MBF (median value of $744/MBF) which is an increase from the previous average high of $750/MBF in 2015 (median = $733/MFB). The main reason for this increase is the high value of black walnut. The average stumpage price for the medium quality sales is $422/MBF (median value $415/MBF) which is also $8 less per MBF than the average stumpage value of $430/MBF reported in 2015 which was only slightly less than the highest average stumpage price $433 reported in 2004. The average stumpage value for the low quality category declined

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**Stumpage Report (cont’d from page 1)***

**Table 1. Statistical summary for High, Average, and Low quality sealed bid timber sales, April 16, 2015 thru April 15, 2016. BF = board feet, MBF = thousand board feet.**

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significantly to $192/MBF (median value $190/MBF) from a record $290/MBF reported in 2015. Although this shows a large decrease in the price for low quality sales, the range for the stumpage price has generally been between $200-$230/MBF since 2001. Although pallet prices have dropped from those reported last year the low number of low quality sales reported and a few larger very low quality sales likely had a significant impact on the value being so low.

This year there were 31 sales (9.2%) that brought over $1.00 per board foot. This number is fairly close to the 36 sales (9.8%) reported in 2015 which is higher than in the past. This increase is largely attributed to the high prices associated with black walnut and white oak. These very high value sales are generally outliers that may distort the stumpage value for most woods.

Landowners should keep in mind that markets are only one factor to consider when selling timber. The condition of the tree is one of the most important factors that determine when is the right time to sell a specific tree (is the tree increasing in value or declining – is the tree condition (health and vigor) going to decline, stay the same, or improve). Sell trees based on their problems or lack of potential than their value. Sell your good trees when they have reached their peak. Another factor to consider is what impact that tree will have on the health, vigor, and resiliency of the future stand (is it competing with a better future crop tree or will it benefit or negatively impact natural regeneration, etc.). Although this report shows a decline in the stumpage value for the lower quality sales, these sales are generally improvement harvests and the opportunity cost in lost productivity of the remaining forest by delaying these sales is usually much higher than a slightly lower price received for the timber.

Figure 1 shows the stumpage prices for all sales, high quality sales, medium quality sales, and low quality sales held between April 16, 2015 and April 15, 2016. The data shows a nice bell curve for medium quality and all sales. The bell curve indicates the range in values that most sales fall into and is generally consistent from year to year.

All sales—low, medium and high quality—can be affected by sales with potential veneer or by the presence of a few high value trees, particularly black walnut and white oak. It is important for landowners reading this report to realize their timber typically will fall within the range of stumpage prices but probably will not fall into the outlying values. This makes it important to work with a professional who works for you when selling timber so that you know exactly what you have.

The weighted average stumpage price by sale type (obtained from this survey in 2000, 2002, 2004, 2006, 2008-16) is reported in Figure 2. The weighted average of the stumpage price is the total dollar value for each sales category. The median stumpage price per year for each sales category is reported in Figure 3. The median price is the amount where half of the sales are higher and half are lower. The price reported is per 1000 board feet ($/MBF) for standing timber.

COMMENTS: Standing timber prices often vary during the year and can change rapidly based on supply and demand. The prices are influenced by many factors including tree species, the tree quality and size, where you are in the state, the distance to a sawmill, the access and accessibility of the trees, the size of the harvest, the terms of the sale, etc. This report and the comments below are merely a snapshot in time. It is therefore important to work with a professional forester to get an up-to-the-minute view of the existing markets.

• **Black walnut** prices, especially for larger trees were very strong throughout 2015. Late last year and this spring walnut prices were still good but demand seemed to be slowing – This is often the case as the supply has meant the demand. Demand often peaks in late summer and early fall.

• **White oak** (species) prices, especially for the larger trees, were very strong throughout 2015. White oak, especially the stave market has been in high demand and is moving great this year. One consultant commented that white oak prices were the highest I’ve seen in the 15 years that I have been selling timber.

• **Red oak**, especially larger, higher quality trees have been in good demand. Another consultant reported that markets and prices for red oak are generally good but the market is still volatile.
• **Sugar maple** markets are generally good in the northern part of the state. The site and the area has a huge influence on how white the wood is and the subsequent price.

• **Soft maple** continues to move well.

• **Black cherry** markets are still down and may not return to the high prices of the past for a long time.

• **Tulip Poplar** has dropped slightly from last year but still seems to be moving well and brings a good price.

• **Ash** – Emerald ash borers are now present throughout the state with the tree quality and price dependant on how long the trees have been infested or how long they have been dead. Overall the market in southern Indiana is still good.

**GENERAL MANAGEMENT COMMENTS:** Several of these comments have been made in years past but they are still very true today.

1.) **Manage your woodland - have a plan, know what you have,** and what you need to do, timber is valuable, and taxes are low, 2.) Grow quality, 3.) If you want the best price and want to leave timber for the future, then hire a consulting forester and 4.) Don’t plow or blacktop the access road and expect to get your timber out of the log yard to the county road.

• **Access and terms are very important** when selling timber. Timber sales that had year round harvest access were in high demand and were of higher value to buyers. Limitations to access such as “no harvesting during deer hunting season” or “no access when crops are in the field” will reduce bidders and result in lower bids. Give access strong consideration. In most cases the higher income from the timber will be more than the income lost from the acre or so of crops

• **Invasive plants** (bush honeysuckle, ailanthus) continue to spread. Too many stands are being cut without pre-harvest control (poor planning) and the stand is overrun within a year or two of the harvest, negatively impacting the long term health and productivity of the woods. Invasive species need to be controlled prior to any harvesting. Cost share assistance may be available to control the invasive plants thru the local Natural Resource Conservation Service office.

• Foresters are recommending that landowners think ahead and bring invasive plant problems under control prior to harvesting timber. I am behind on my marking jobs mainly due to the number of invasive species or brush management removal jobs I have had for clients. Fortunately more landowners are reinvesting a percentage of their timber sale income back into the woods in the form of forest stand improvement, tree planting, and invasive species control.

• Seeing a lot more **high graded** woods with **young walnuts** cut **prematurely**.

• Seeing too many diameter limit harvests with trees cut too early. Tree size is not a reason to harvest the tree and trees mature at different sizes on different sites.

• **Woodland clearing** (converting to cropland) is still too prevalent. With the decline in crop prices it is happening way too often, especially on marginal soils.

**Consulting Foresters that have contributed to this report in alphabetically order include:** Arbor Terra Consulting (Mike Warner), Crowe Forest Management LLC (Tom Crowe and Jacob Hougham), Christopher Egolf, Gandy Timber Management (Brian Gandy), Glen Summers, Gregg Forestry Services (Mike Gregg), Habitat Solutions LLC (Dan McGuckin), Haney Forestry, LLC (Stu Haney), Multi-Resource Management, Inc. (Thom Kinney and Doug Brown), Meisberger Woodland Management (Dan Meisberger), Pyle Timber Sales and Management (David Pyle), Quality Forest Management, Inc (Justin Herbaugh), Ratts Forestry (Chuck Ratts), Schuerman Forestry and Bear Forestry (Joe Schuerman and Abe Bear), Stambaugh Forestry (John Stambaugh), Steinkraus Forest Management, LLC (Jeff Steinkraus), Turner Forestry, Inc. (Stewart Turner), and Wakeland Forestry Consultants, Inc. (Bruce Wakeland, Mike Denman, Andrew Suseland).
It started as a conversation between land managers. “I’m at the edge of the forest, spraying the purple wintercreeper that’s taking over the place, and I can see the neighbor actually planting this stuff in his yard!.” We saw the same thing with privet, Japanese barberry, Asian bush honeysuckle, and many other species – land managers killing these invasive plants, and well-intentioned, but uninformed, landowners continuing to plant them. The insanity of this led us to form a group in 2000, the Invasive Plant Species Assessment Working Group (IPSAWG), that brought together everyone with an economic interest in plants – those who sold them, designed with them, planted them, or killed them for a living. We came to the table with very different perspectives, but a shared agreement that there should be a way to measure how invasive a plant species is, and that truly invasive plants should not be bought, sold, or planted in Indiana.

For six years we met. We developed an assessment tool with a set of multiple choice questions and point values for each answer. Add up the points at the end, and the species would be ranked as high, medium, or low invasiveness, or caution (meaning there wasn’t enough information to complete the assessment, but there are indications of invasiveness). Simple, right? Not really. There was a lot of debating and discussing these ornamental plant species over the years, and though the process was long, we all learned a lot.

What surprised me most was learning that many in the green industry (those who design with, grow, or sell plants for a living) already knew the troublemaker plants. There were plenty of businesses that not only designed and built landscaping, but maintained it. And planting species that took over the landscaping meant a lot more work to maintain it. With that shared understanding – species that can take over the landscaping may also take over our forests, prairies, and wetlands – we moved forward together.

After six years of meetings and assessments, we printed a brochure in 2006 on our results – “Making the Right Choice: Landscaping with Non-invasive Alternatives”. We handed out 100,000 of these brochures, and hoped that this would decrease the sale of invasive plants in Indiana.

It did not.

So in 2009, when the new Indiana Invasive Species Council (IISC) wondered what they should do about invasive plants, I told them we needed an official invasive plant list, and that what IPSAWG had developed was a good starting point. In 2010, the IISC created the Invasive Plant Advisory Committee, which I chair, to work on this list and other invasive plant projects. We spent a couple years updating the assessments, making county maps showing where each species is invading, and assessing new species. And then (drum roll, please) – we asked the IISC to make the invasive plant species that were ranked as ‘highly invasive’ illegal. No buying, selling, planting, or transport in Indiana. They agreed it was the right step to take, and asked the Department of Natural Resources – Division of Entomology and Plant Pathology (which holds authority over most invasive plant issues in Indiana) to examine taking this step.

They did, and they wrote a rule for all the plant species that ranked as ‘highly invasive’ (you can see all the species that ranked as high at www.entm.purdue.edu/iisc/invasiveplants.php) would make them “restricted species” which would be illegal to “sell, offer or grow for sale, gift, barter, exchange, or distribute a species”, “transport or transfer a species” or “introduce a species”. That covers pretty much all the bases! For a few species that are not yet well established in the state, there is also a “prohibited species” category, which mean that the species may not even be possessed in the state.

That rule is now moving slowly through the rule-making process. It must first get through the governor’s “Regulatory Moratorium Committee”, which decides which rules may go forward. It is unclear whether the rule will get past this first hurdle. If it gets through...
Black Bears and Other Large Predators in Indiana

By Brian MacGowan

Last summer, the sighting of a black bear in northern Indiana was the first confirmed for the state in 144 years. This July, a second bear swam across the Ohio River from Kentucky. Several years before we had a similar sighting of a gray wolf in Indiana—actually it was shot in killed by a farmer. Some may be surprised that the black bear and many other species of wildlife including wolves, cougars, fisher, porcupine and bison were historically present in Indiana and other parts of the Midwest. These species have been extirpated (i.e., locally extinct) since the 1800s. So what do these recent encounters with large predators in Indiana really mean?

The majority of large predator sightings in Indiana are either mistaken identity or internet hoaxes. However, sometimes they are real. The truth is as long as there is a source population of animals in neighboring states, we can always get a “stray” animal every now and then. A young male was observed in the cases for both the black bear and wolf sightings. Common with many species, young males will travel a distance to establish a new territory. This type of movement is called dispersal and is important for maintaining wildlife populations, especially in landscapes where the habitat is fragmented. Occasionally, these distances can span hundreds of miles. Think of that stereotypical teenager on the couch. One day mom and dad come home and might say something like, “it’s time to get up, make something of yourself – get out.”

Sometimes, the source of a predator sighting may be much closer. The last confirmed sighting of a mountain lion in Indiana was in May 2010 in Greene County pictures were definitely a mountain lion, but close inspection also revealed an ear tag – evidence of an escaped pet. Indiana allows the possession of exotic animals including bears, wolves and wild cats. Occasionally, these animals may escape. Up until recently, the Indiana Department of Natural Resources regulated these activities, and oversaw enclosure and care requirements.

According to an August 9, 2014 Indianapolis Star article, there were permits for 300 exotic and wild animals in Indiana; some of these for more dangerous animals. However, an Indiana Court of Appeals last year ruled that the DNR has no authority over their possession and now owners of exotic animals no longer require a permit.

In the case of black bears, free-ranging populations exist in Ohio, Kentucky, Michigan and Wisconsin, although not in parts immediately adjacent to Indiana. Dispersing bears have to go a long distance through a lot of less than optimal habitat to reach Indiana. This explains why the occurrence of bears have been, and will continue to be, rare. The bears will typically spend a bit of time in an area and move on, or back where they came from. With no female bears in the area, a breeding population can’t become established. Even so, we can expect to see more come back in the future, albeit infrequently. The populations in our neighboring states are doing fine. Reported bear sightings in Ohio have increased since the late-90s.

What does this mean for you? It’s impossible to tell if bears will eventually become established in Indiana on their own. While we can’t predict the occasional bear sighting in Indiana, we can be more prepared on how to prevent problems with bears when they do arrive for a visit. Unfortunately, the bear that visited Indiana last year was eventually euthanized on April 9, 2016 by the Michigan DNR because of continued behaviors considered to be a threat to public safety. Our most recent visiting bear has remained at Big Oaks National Wildlife Area since August 9th as of this writing.

Black bears, along with several other large carnivores, have become extirpated from Indiana with only a few rare records after 1830. Credit: Steve Hillebrand/USFWS

2016 Annual Woodland Owner Conference

November 4-5 • Clarion Hotel, Columbus, Indiana

Friday November 4th: Field tours of Jackson-Washington State Forest
Saturday, November 5th: Indoor sessions on managing your woodlands, creating wildlife habitat, pond management, chainsaw maintenance, and other topics.

All woodland owners are invited for single day sessions or the full program. See www.ifwoa.org for details or call 765-583-3501.

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Tree Farm: The Sign of Good Forestry

By Ken Day

In your travels, have you noticed the green and white “Tree Farm” signs posted along the highways and byways in Indiana and the nation? Since 1941 the American Tree Farm System has educated and recognized the commitment of private family forest land owners to sustainable forest management.

Indiana Tree Farm has two primary objectives—education and recognition. Learning opportunities for landowners are provided through landowner clinics and field days. Clinics have been held in major cities throughout the state since 1970. Recent clinics have been held at: Brown County State Park, Clifty Falls State Park, McCormick’s Creek State Park, Spring Mill State Park, and Warm Springs.

Some examples of topics covered at these clinics include best management practices, considerations for selling timber, forest health, forest road and trail layout and maintenance, forest taxation, invasive insects and plants, investing in forest lands, regenerating your woodlands, forest stand improvement, valuing forest lands, wildlife habitat improvement, and working with your forester.

Recognizing excellence is an important part of the Indiana Tree Farm program. The Indiana Tree Farmer of the Year, Indiana Logger of the Year, and Outdoor Laboratory of the Year demonstrate the highest standards of forest stewardship. The 2015 Tree Farmer of the Year was John and Stephanie Sutton of Worthington and the 2015 Logger of the Year was Scott Pingleton of Poland, Indiana. Landowners who have been in the program for more than 50 years are recognized at the landowner clinics.

Participants in the American Tree Farm System (ATFS) are committed to following the sustainable forest management practices and techniques. To be eligible participants must 1) own at least 10 acres of forest land, 2) implement a written forest management plan, 3) follow American Forest Foundation standards, and 4) have their land inspected every five years by an ATFS certified forester.

To become a Tree Farmer, you need to complete and return a short application form (see below for more information).

The State Tree Farm Committee will review your request and connect you with a forester who will inspect your forest property. If your property qualifies, the inspecting forester will recommend Tree Farm certification. You will be issued a certificate and a Tree Farm sign to post on your property. When you become a Tree Farmer, you have joined the oldest and largest forest conservation and advocacy program in the United States.

The Indiana Tree Farm Committee consists of 29 members. These members are active or retired representatives of Hardwood Tree Improvement and Regeneration Center, Indiana Department of Natural Resources, Indiana Farm Bureau, Indiana Hardwood Lumbermen’s Association, Natural Resources Conservation Service, and U.S. Forest Service as well as consulting foresters or Tree Farmers.

For more information please visit www.treefarmsystem.org. For more information about the Indiana program contact Robert Burke, Chairman, 2896 Centennial Road, Martinsville, IN 46151 or at kingwalnut@sbcglobal.net.

Ken Day is a retired forester and former Woodland Steward Institute board member. Prior to his retirement, he most recently served as Forest Supervisor for the USDA Forest Service, Hoosier National Forest.
Ask the Steward

QUESTION: I have a very large White Oak tree on my farm and heard there is a list of the biggest trees in the state. Where can I get more information?

ANSWER: The Indiana DNR Division of Forestry has been maintaining a Big Tree Register for many years, as do most other states. Champion tree measurement is a fairly simple formula which combines tree height, circumference 4.5 feet above the ground and the average width of the tree’s crown. Add together the tree height in feet, plus the tree circumference in inches. Then measure the average width of the tree’s crown. Divide the width measurement by 4 and add this to the height and circumference measurements for your total score.

The current champion White oak measures 110 feet tall, 313 inches in circumference, and an average crown spread of 138 feet for a total score of 457.5 ((110+313+138)/4 = 457.5).

A few Big Tree facts: the tallest Indiana Big Tree listed is a Bitternut hickory located in Perry County at 154 feet tall. The tree of largest girth is a Bald Cypress in Knox County at 331 inches (that’s a diameter of almost 9 feet). Not all Big Tree champions are huge. For example the largest Paw-paw tree in Indiana is located in St. Joseph County and is just shy of 20” in circumference and 48 feet tall. That’s massive for a Paw-paw, but small compared to the mighty White Oak.

For an application form and detailed listing of Indiana’s Big Trees go to www.in.gov/dnr/forestry/8169.htm

QUESTION: Almost every fall my walnut trees have webs around the ends of some of the branches and leaves, with small worms inside eating the leaves. Is this damaging?

ANSWER: What you have observed is the ‘fall webworm’. This late summer pest is widespread throughout Indiana and their gray silken webs are a sure sign autumn is on the way. The larval (caterpillar) stage of this insect feeds on many species of deciduous trees and shrubs, but Black Walnut is certainly one of the favorites in Indiana. Crabapple and hickory are also commonly affected. Full-grown caterpillars are covered with grayish hairs originating from black and orange warts.

The fall webworm’s tent starts small and by late August is quite conspicuous and fairly large (2-3 feet in length). Unlike Eastern tent caterpillar, the caterpillar stays within the tent eating the leaves and expanding the tent to consume additional leaves as needed.

The damage caused is more cosmetic than injurious to the affected trees. This is especially true for healthy well established trees since relatively few leaves are consumed and the injury occurs primarily after the tree’s main growing season. The affected branches will usually not die and will leaf out again next year.

Controlling the insect in a woodland setting is generally not needed since the damage done is quite small. In an ornamental setting where aesthetics is a concern, the easiest control is to clip off and destroy the affected branches. Or, simply break apart the web and destroy the insect by hand or let natural predators (birds, wasps, etc.) do the work for you. Insect sprays labeled for caterpillars can be used, but should be done while the web is small, typically before mid-August. Since the caterpillar feeds and stays within the web only the web and leaves within the web should be treated. Treating the entire tree is not necessary and should be avoided to protect injury to other beneficial insects and pollinators.

Eventually the mature caterpillars leave the web and overwinter as pupae in the soil or leaf litter. The old gray webs will hang on the trees much of the winter and the cycle begin anew as soils warm and adult moths emerge in mid-June.

Daniel Ernst is an Assistant State Forester with the Indiana Division of Forestry. He oversees the state forests in Indiana and has authored the “Ask the Steward” column for years. Have a question for the column? Email Dan at dernst@dnr.in.gov.
How hard is it to build a skyscraper without a construction plan designed by an architect? How difficult is it for a substitute teacher to manage a class without a lesson plan from the teacher? How tough is it to plan out a retirement without a retirement plan from a qualified retirement professional? The answer, very difficult. So why would a woodland owner manage their woods without a Forest Management Plan from a professional forester?

What is a Forest Management Plan?
A Forest Management Plan is simply a plan with a specific statement of the objectives you have for your land, followed by a series of activities that will take place in order to meet those objectives. In essence, your plan is a “road map” to guide you from where you are to where you want to be. It can enable you as a landowner to make educated decisions concerning the future of your forest, keep you from making costly forest management mistakes, and help qualify you for cost-share and other financial incentive programs.

What information is included in a Forest Management Plan?
A Forest Management Plan will include an inventory of the forest resources such as tree species, size, density, and volume. The plan will also include a description of the forest soils and their productivity for growing trees. Additional inventory information will depend on your objectives for wildlife, timber production, invasive species, water quality, or any other wide variety of natural resources. The plan will also identify existing or potential problems dealing with soil erosion, water quality, air quality, tree/plant health, and animal habitat. (Natural resource professionals like to call these problems “Resource Concerns.”) The plan will outline management recommendations to help you meet your goals and solve the identified resource concerns, along with a yearly schedule of activities (or conservation practices) for the next 5 to 10 years. Examples of activities might include thinning trees (Forest Stand Improvement), timber harvesting, wildlife habitat development, invasive species control, and erosion control associated with a timber harvest. Lastly, all this information will be identified on a map so that you will know exactly how much work to do and where.

How do I get a Forest Management Plan?
If you are interested in having a Forest Management Plan written for your property, the USDA Natural Resources Conservation Service (NRCS) provides funding to help you hire an approved forester who will develop such a plan. Funds for forest management plans are only available through the Environmental Quality Incentives Program (EQIP).

NRCS continually strives to put conservation planning at the forefront of its programs and initiatives by giving top priority for funding Forest Management Plans and other similar conservation activity plans through EQIP. A Forest Management Plan is also a requirement to receive additional EQIP funds to implement the recommended conservation practices in your woods. Because a Forest Management Plan is required before you can receive funding, the process often takes two years: one year to get a plan written and another year to start implementing the plan’s recommendations.

When can I get a Forest Management Plan through EQIP?
EQIP is a continuous sign-up program that allows landowners or operators to apply for financial and technical assistance for specific conservation practices. Applications can be submitted at any time, however, specific application cut-off dates are set to consider applications for funding. If
you apply after the application deadline, your application will automatically be deferred to the next funding period which may be the next year. Contact the USDA service center in the county in which you own or operate land.

**What is the application process like?**

Once you come into a USDA service center to apply for EQIP, NRCS will likely direct you to work with a partnering agency called the Farm Service Agency (FSA). The FSA will help you establish or update your farm records by filling out some paperwork and looking at your deed. This paperwork will help determine if you are eligible for EQIP. Typically, the majority of forest owners are eligible, however, policy requires NRCS and FSA to check and document.

Once you receive approval and funding, the local NRCS office will direct you, from a list or internet site, to contact a Technical Service Provider (TSP) who will write your plan. TSP's are qualified private professional foresters that will help you apply conservation practices to your land according to NRCS standards. Since NRCS does not staff field foresters, TSP's and other agency foresters, such as Indiana Department of Natural Resources District Foresters, are essential in this process.

**How much does it cost?**

There are some important information you need to know when working with a TSP. TSPs must negotiate directly with you for their services and their costs. When the technical services are completed, the TSP provides the documentation and invoices both you and NRCS. You will pay the TSP; then NRCS reimburses you at a set payment rate according to the EQIP contract with the USDA. The TSP can charge more or less than the payment you receive. You will receive a set payment from NRCS regardless of the amount billed by the TSP.

Communication is essential when working with a TSP. Give the TSP as much information as possible. The more detailed information you provide, especially regarding your forest objectives, the better the product and planning. Make sure that you and the TSP agree about expectations and what services are being provided. Additional services that are not typically covered in a Forest Management Plan, such as estimating merchantable board foot and value, may be an additional cost.

If you have any questions, please feel free to stop in at your local USDA service center and speak to a NRCS employee. Our goal is to help you help the land.

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**Brian Kruse is a forester with the USDA Natural Resources Conservation Service at the Indiana State Office.**
Indiana Division of Forestry • www.IN.gov/dnr/forestry

Indiana State Forest Facts

- Indiana State Forests were established in 1903 to protect and conserve the timber, water resources, wildlife and top soil of these lands. “By the employment of good husbandry, timber which has a substantial commercial value may be removed in such a manner as to benefit the growth of saplings and other trees.

- Most of the lands acquired for the State Forests from the 1920’s - 40’s was comprised of eroding farm fields, pasture, or cut-over timberland considered to be of little value. Most of the woodland that was acquired had been high-graded – a practice that removes only the biggest and best trees, leaving low quality, undesirable trees.

- State Forests are the only state owned forest lands that include timber production as part of its mission. Timber is harvested on the State Forests to improve forest stands, increase diversity, enhance wildlife habitat, and bring in revenue.

- 13 State Forests. 158,000 acres. Managed for multiple uses: timber production, forest management demonstration areas, outdoor recreation, wildlife habitat, watershed protection. Working landscapes.

  - Timber management
    - 2014-15: 97,002 trees harvested (out of estimated 58.5 million live trees on State Forests)
      - 51,771 sawtimber trees (11” diameter and larger)
      - 45,231 pole/cull trees (less than 11”, dead or dying, undesirable)
      - Total harvest: 0.2%

  - Most volume is in white oak
  - Sugar maple and beech are the most abundant species
  - Fifteen percent of State Forest timber sale revenue is returned to the counties in which the timber sales are conducted. In 2015, 16 counties received $442,000 to help support county government and public safety efforts of rural and volunteer fire departments.

  - Recreation
    - Trails
      - More than 300 miles of hiking trails, including the Knobstone Trail, Adventure Hiking Trail and Tecumseh Trail for backpacking.
      - 270 miles of horse trails
      - Over 40 miles of mountain bike trails

    - Camping
      - 423 Class C (primitive)
      - 210 Class B (electric)

- Hunting and Fishing
  - Over 125 lakes and 150,000 acres of woodlands await and challenge Indiana anglers and hunters

- Wildlife
  - Managing for wildlife is a priority for State Forests. Encouraging forests with a variety of stand ages and habitat types to provide the greatest benefit to the widest range of species.

  - State Forests are managed by professional foresters with at least a 4-year degree in Forestry/Forest Management/Forest Science

  - Indiana State Forests are certified sustainable by two world-recognized bodies www.in.gov/dnr/forestry/7532.htm

  - Forest Stewardship Council® (FSC®) (FSC-C012858): promotes environmentally responsible, socially beneficial and economically viable management of the

***Erratum – In the 2016, Issue 1, we failed to list Ken Day as the author of the Logger of the Year article. Ken Day is a retired forester and former Woodland Steward Institute board member. Prior to his retirement, he most recently served as Forest Supervisor for the USDA Forest Service, Hoosier National Forest. Please accept our apologies, Ken.***

cont’d on page 15
Predators in Indiana (cont’d from page 7)

There are no breeding populations of mountain lion or other large predators in Indiana. However, it is possible for one of these large animals to pass through Indiana from established populations in other states.

When living around bears, an important key is to prevent them from associating people with food. For example, storing pet food, garbage containers and outdoor grills in the garage can help. Removing bird feeders around the house may help too. Most important of all is to never intentionally feed a bear. This is also a good practice to follow for other Indiana wildlife such as coyotes and raccoons. While seeing a bear wandering around the Hoosier countryside can be eye opening, the fact is this is nothing new for many parts of the country who live with bears on a daily basis. A little common sense and precaution can go a long way the next time a young bear decides to visit Indiana on its summer vacation. If you think you have seen a bear or other large mammal, the Indiana DNR has created an online reporting form at www.in.gov/dnr/fishwild/8497.htm where visitors can upload pictures and video, information about the animal and the location of sighting.

Resources
Cougar Network (www.cougarnet.org/confirmations) The Cougar Network is a nonprofit research organization dedicated to studying cougar-habitat relationships and the role of cougars in ecosystems. They maintain an online map of confirmed cougar sightings outside of their western range since 1990.

Stopping Sale of Invasive Plants (cont’d from page 6)

that committee, it then goes to the Natural Resources Commission, the rule-making body for the Department of Natural Resources, for preliminary adoption. If it gets through the Regulatory Moratorium Committee, it would be heard at the September 20 meeting of the Natural Resources Commission. We expect a fair hearing at the NRC, and it is likely to be ‘preliminarily adopted’. This means that there would be an open public comment period on the rule. Here is How You Can Help: We need all the public comments we can get to demonstrate the level of concern about the continued sale of highly invasive plants. If you want to know when the comment period is open, and how to comment, send me an email at ejacquart@tnc.org and I’ll add you to the email list to which I send updates on the rule.

Once comments have been received, the DNR will evaluate and respond to comments, and bring it back to the NRC for final adoption, probably around 9 months after it goes up for preliminary adoption. If there is final adoption – that’s it. Highly invasive plants will be illegal to buy, sell, plant, or transport in Indiana.

Does that make all problematic species in the state illegal to sell? No. A few highly invasive species, Callery pear and Norway maple, have already been removed from the rule to avoid a fight with green industry that could kill the rule. A few other species – like burning bush – came out as ‘medium’ in the invasive assessment, so don’t qualify to be in the rule. This is not a complete fix, but a giant step forward. There will be more species to assess in the future, but if this rule goes forward, it will be easier for land managers and landowners to address highly invasive plants and the problems they create.

Ellen Jacquart is the Director of Northern Indiana Stewardship for the Nature Conservancy in Indiana. She has worked in Indiana’s natural areas since 1987. She is also the Chair of the Indiana Invasive Plant Advisory Committee.
If we are interested in the conservation of the forests and woods of the United States, we must be interested in those who control its fate: the forest and woodland owners. Woodland owners make decisions related to land use and forest management that impact the forest and, and these decisions influence the wealth of benefits these forests and woodlands provide, from timber supply to water supply to carbon sequestration to wildlife habitat.

The USDA Forest Service, Forest Inventory and Analysis program, through the Family Forest Research Center (FFRC; www.familyforestresearchcenter.org), conducts the National Woodland Owner Survey (NWOS; www.fia.fs.fed.us/nwos/) to better understand: who owns the woodlands, why they own it, what they have done with it, and what do they intend to do with it. The results presented below are based on responses from 232 randomly selected woodland ownerships with 10+ acres in Indiana that participated in the NWOS between 2011 and 2013.

• Family Forest Owners Dominate: Woodland ownerships control 73% of Indiana’s woodland - more than any other ownership group.

• Size of Holdings Makes a Big Difference: The average woodland ownership in Indiana has 37 acres of wooded land. 54 percent of the ownerships have relatively small holdings between 1-9 acres, but 90% of the woodland area is owned by ownerships with 10 acres or more.

• Beauty, Wildlife, and Nature are What Matter: The most commonly cited reasons for owning woodland in Indiana are related to beauty, wildlife and nature protection. Passing land on to children or heirs is also important to Indiana landowners.

• They Love Their Land, but they are not Engaging: The vast majority of owners, 91%, agreed or strongly agreed with the statement “I want my wooded land to stay wooded.” But most are not involved in traditional woodland management practices.

• They are Old(er): The average age of woodland owners in Indiana is 62 years with 40% of the woodland owned by people who are at least 65 years of age.

Conclusions

People interested in woodland conservation must also be interested in those who own the woodland. Across Indiana, families and individuals own a significant number of acres, and this land has great potential for conservation.

Additional Information

For more results from this survey, visit the U.S. Forest Service’s National Woodland Owner Survey website at www.fia.fs.fed.us/nwos.

To learn more about the services and resources available to woodland and forest owners in your state, contact your local forestry agency or association (http://www.familyforestresearchcenter.org/landowners/).

A Snapshot of a WSI Member Organization

The Indiana Society of American Foresters
By John P. Stambaugh

The Society of American Foresters (SAF), founded by the first chief of the US Forest Service, Gifford Pinchot and six other foresters in November 1900, set out to create a society that would define and guide a profession that was new to the United States. They well understood Europe had a long history of practicing sustainable forestry. These founding foresters united a dedicated group of professional who would promote a similar attitude of land use in the United States.

Today, the SAF has student and professional member chapters, regions, and individual state societies throughout most of the US and its territories. Purdue University has a student chapter. The Indiana Society (INSAF) was formally organized in 1949. At that time, shortly after WWII there were many new graduate foresters leaving colleges and universities having been assisted by the GI bill.

To this day SAF remains the accrediting organization for universities and colleges offering professional two and four year forestry programs here in the US. SAF also offers the certifying designation of CF, (Certified Forester), credentials often seen following a forester’s name. As a professional society, SAF continually seeks to guide its members in conduct and purpose. The mission of SAF includes this language: seeks to advance the science, education, and practice of forestry; to enhance the competency of its members; to establish professional excellence... etc.

The SAF Code of Ethics details how members are to protect and serve society by the conduct of their professional lives, plus it addresses how foresters treat the land.

When the Woodland Steward Institute, which publishes this newsletter, was formed 25 years ago, the Indiana Society of American Foresters was among the organizations providing guidance, support, and financial backing. INSAF remains actively engaged with private landowners in many areas. The most prominent way is through its members in the workforce. These natural resource professionals often work for government agencies such as the Indiana DNR, Department of Defense, and USDA Forest Service and Natural Resources Conservation Service. Others are often employed by industry, not-for-profit organizations, colleges and universities, and private consulting firms.

Other ways INSAF assists landowners include providing position statements and information papers to decision makers at the state and local levels; providing funding and supporting field days for educational outreach, such as Project Learning Tree; and we offer staffed displays at events where forest landowners are present. Find out more about Indiana SAF at indiansaf.net.

John P. Stambaugh is a consulting forester. He represents INSAF on the Woodland Steward Institute board.

Indiana Division of Forestry (cont’d from page 12)

world’s forests, by establishing a worldwide standard of recognized and respected Principles of Forest Stewardship.

- Sustainable Forest Initiative® Program: promotes sustainable forest management through standards based on principles that promote sustainable forest management, including measures to protect water quality, biodiversity, wildlife habitat, species at risk, and Forests with Exceptional Conservation Value.

- Indiana State Forests are audited annually by both programs. State Forests have been found in compliance since the initiation of certification for both programs.

- Best management practices (BMPs) are included in every timber sale contract and enforced on State Forests. Forestry BMPs are a foundation for water quality protection and provide guidelines for protecting water quality during forest operations. The purpose of BMPs is to minimize the impact of forest activities that may affect soil and water quality.

- There are 20 dedicated Nature Preserves protecting over 2600 acres – these are significant natural areas that have been permanently set aside for their unique natural features. These nature preserves ensure that older age trees will always exist in the State Forests.


- The HEE is a comprehensive, long-term project begun in 2006 that is investigating the impact of different forest management practices on flora and fauna.

- Early results are showing that timber management has no significant impact on a variety of threatened and endangered wildlife, and in fact appears to enhance the presence of other woodland species.

Gandy’s Timber Management

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“Creation Conservation”
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15 Summer 2016
Three large gum and two elm logs delivered to the Basket Company in Bloomington, Indiana (left). Small factory showing the manufacture of baskets (right). Photos by Roy C. Brundage.

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