

# The **WOOD**land Steward

Promoting the Wise Use of Indiana's Forest Resources

## 2011 Indiana Consulting Foresters Stumpage Timber Price Report

by *Indiana Association of Consulting Foresters*

This stumpage report is provided annually and should be used in association with the Indiana Forest Products Price Report and Trend Analysis written by Dr. William Hoover in cooperation with Indiana's forest products companies. Dr. Hoover's report is published in the Fall issue of the Woodland Steward Newsletter.

Stumpage price was 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, 2010 through April 15, 2011. This reporting period has been modified from previous reports where data was collected from June 16 thru June 15. Some overlap of the reporting period did occur.

The results of this 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.

### WHAT ARE SEALED BID

**TIMBER SALES:** The sealed bid timber sale process is for trees marked by a professional forester.

The species, number of trees and volume in a sealed bid sale are determined prior to the notice of sale. A notice is sent to licensed timber buyers who then inspect the timber and offer a price for said trees at a predetermined time and place. Under conditions determined in the bid notice, the owner then accepts or rejects the bids.

Upon acceptance of the bids by the owner and the fee paid, the owner then conveys the right to cut the advertised trees to the purchaser. This is frequently referred to as a lump sum timber sale. More detailed information on this process is available in Purdue FNR publication 111 – "Marketing Timber" or FNR – 138 "How to get the Most from Your Timber Sale". These publication and others are available on line at: <http://www.agcom.purdue.edu/agcom/Pubs/fnr.htm>

This report reflects "spot market" prices, not the average price paid by timber buyers. The bidding process used by consultants "spots" the maximum amount any buyer is willing to pay for a particular lot of timber at a particular time and place, not the average price paid for timber. High bids frequently reflect an urgent need for timber because of special orders for lumber or veneer, low log inventories at the buyer's mill, poor logging conditions due to wet weather, or other special conditions.



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## Ask the Steward

By Dan Ernst

### Just when are the official dog days of summer?

While there is no official date, the Dog Days of Summer generally correspond to the sultry period of summer when the days are long, hot and humid. According to the Old Farmers Almanac the traditional timing runs for 40 days from July 3rd to August 11th and is linked to the ancient cycles of the Dog Star, Sirius. References to the Dog Days go back to Ancient Rome and has its place in many cultures around the world- particularly the Northern hemisphere. Today, in casual conversation the dog days often refer to the hot summer days when dogs laze around to avoid the heat and folks are generally dragging from the summer's high humidity and heat.

Interestingly, the annual cicada (locust) is often called the 'dog day cicada'. They emerge from the ground in mid to late summer and live for 5-6 weeks. Their familiar cicada buzz is strong during the Dog Days of summer. Some even note the 1st sound of the cicada saying "Ah- only 40 days left of this summer heat and humidity and return of summer quiet."



David Cappaert, Michigan State University,  
Bugwood.org

### Are Indian Turnips edible?

The Indian Turnip is most commonly known as the Jack-in-the-Pulpit (*Arisaema triphyllum*) and is a beautiful spring wildflower with a characteristic white and purple striped hood (spathe) sheltering the actual flower head- referred by many as the 'Jack'. The name Indian Turnip comes from the bulbous root (corm) of the plant that had many uses by Native Americans and is used today in various herbal remedies. But, beware the root is not all that edible. One bite of the raw root will immediately cause you discomfort and pain. The root contains small needle-shaped crystals (calcium oxalate) that when chewed will cause a burning sensation and swelling of the tongue and soft tissue of the mouth. While generally just a very unpleasant and painful experience, it can be fatal. One taste and you won't forget this plant- and why it has also been called 'memory root'.

While Native Americans ate the plants berries and leaves surrounding the flower, they generally considered the root poisonous. However, with proper drying, cooking and other preparation the root too was used for various foods. Note- even the leaves and flowers contain some of the crystals and consumption can be unpleasant if not handled properly.



William M. Ciesla, Forest Health Management  
International, Bugwood.org

Dan Ernst is an assistand state forester with the Indiana Division of Forestry. He oversees the state forests in Indiana and has authored the "Ask the Forester" column for years. Have a question for the column? Email Dan at [dernst@dnr.in.gov](mailto:dernst@dnr.in.gov)

**Price Report** (cont'd from cover)

Hardwood lumber is sold in a highly competitive commodity market. Competition comes from mills within the state, region, and hardwood lumber producers in the Lake States, Northeast, South and Southeastern production areas. This market competition means that the cost of stumpage in other producing regions determines in part the amount Indiana mill and loggers can pay for stumpage. If all timber were sold on a bid basis the spot market would no longer exist and the average of the highest bid price offered would be lower than now observed. This explanation isn't meant to deter you from seeking the best available price. It's meant to explain the apparent discrepancy between the two price reporting systems.

**CATEGORIES OF TIMBER REPORTED:** The prices reported are broken into three sale types; high quality, average quality, and low quality. A high quality sale is one where more than 50 percent of the volume is # 2 grade 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 sale or a high quality sale as defined above.

In the 2008 report some minor adjustments were made in the categories from previous surveys. White ash was previously included as a component of the high quality timber sales and hickory was previously in the low quality group. No additional changes in the groups have been made since, so the 2011 data should compare well with data collected from 2008 thru 2010.

**SALE ACTIVITY INCREASING:** In 2011, 271 sales (plus 13 negotiated sales) were reported compared to 206 sales in 2010, 247 sales in 2009, and 283 in 2008. Seventeen consulting firms report data in 2011, compared to 21 firms in 2010, 16 firms in 2009 and 11 firms (representing 14 to 15 current firms) in 2008. Most of the 14 firms that reported in both 2011 and 2010 showed a 39% increase in the number of sales, increasing from 169 to 235 sales during the period. All consultants that reported had sales in this reporting period, whereas 4 firms had reported no activity during the last period.

There appears to have been a drop off in the number of sales at the end of 2010 and in early 2011, but activity is picking up again. The drop in activity was likely impacted by a short term oversupply of available / accessible timber due to the ideal logging conditions most of the state experienced during the fall and may have been influenced by a rush to sell timber before the Bush tax cuts (capital gains) expired at the end of 2010 (extended until 2012). There is also typically a seasonal drop that is due to a reluctance of some consultants to sell prior to spring thaw (wet weather).

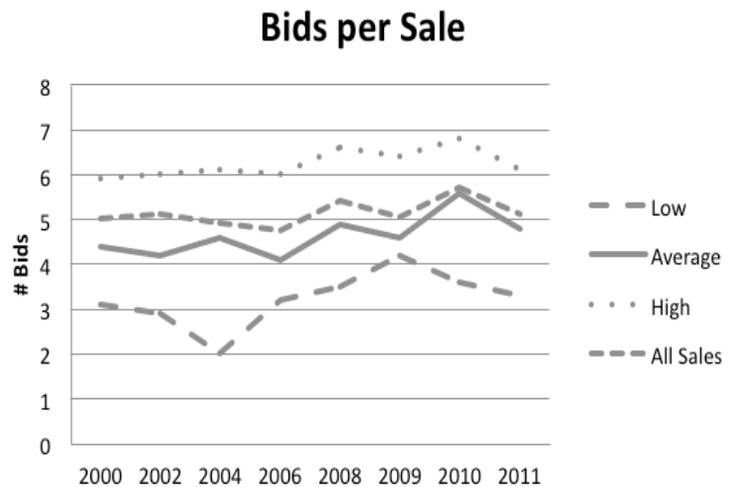


Figure 1 – Average number of bids per sale by sale

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quality type and all total sales. Sales by quality type for the 2010 period were 101 high quality sales (67 in 2010), 145 medium quality (111 in 2010), and 25 low quality sales (28 in 2010).

**BIDDING REMAINS STRONG:** In 2011 a total of 1,391 bids were submitted for the 271 bid sales or 5.13 bids per sale (Figure 1). This is down from 2010 (5.7 bids per sale – the highest since the stumpage report began in 2000) but is virtually the same as the average of all sales since 2000 (5.14 bids per sale). The 2011 average of 5.13 of bids offered per sale includes 6.0 for high quality, 4.8 for medium quality, and 3.3 for low quality. Each shows a decline from 2010 (6.8, 5.6, 3.6 bids per sale, respectively) but are very similar to the 11 year average (6.2, 4.7, and 3.2 bids per sale, respectively). As stated above, the higher number of bids last year may be in part due to a decreased volume of timber on the market. The volume of timber on the market this year has returned to levels submitted prior to the beginning of the recession in 2008.

**VOLUME / VALUE SOLD, RETURNS TO PRE-RECESSION LEVELS:** A total stumpage volume of 24,367,251 board feet was reported to have been sold during the current period, up considerably from 17,687,648 board feet sold during the 2010 reporting period and 19,256,439 board feet in 2009. The volume of timber sold in the last year is very similar to the volume of around 25 million board feet sold in 2008 and 2006 (Figure 2).

High quality sales totaled 8,598,937 board feet up considerably from around 5 million board feet in 2010 and approaching the 10 million board feet levels of 2008 and 2006.

Sale Activity by Year

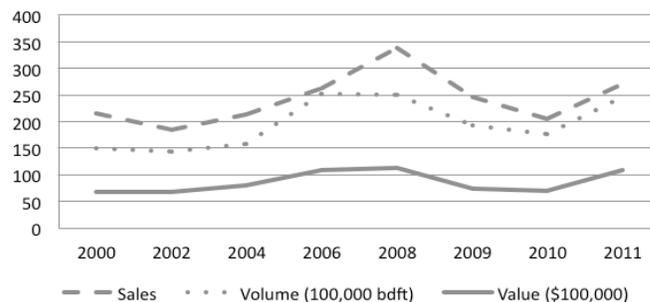


Figure 2 – Total sale activity per year.

Medium quality sales totaled 14,077,574 board feet up from the 11 to 12 million board feet from 2006 thru 2010. Low quality sales totaled 1,690,740 board feet up from 1,457,071 board feet in 2010 but down from nearly 3 million board feet in 2009, 2008, and 2006. The adjustment in the reporting categories that occurred in 2008 likely impacted the volume sold in each grouping with a decrease in the volume of high quality sales due to a drop in ash timber prices and decrease in low quality sales due to an increase in the price of hickory.

Total timber value sold in the 2011 reporting period was \$10,678,849 up from 2010 and 2009 (\$ 6,889,190 and \$ 7,278,302, respectively) and similar to the values reported in 2008 and 2006 (volume of timber sold was also similar during these periods). Total value by type was \$ 5,257,530 for high, \$ 5,052,387 for medium, and \$ 368,932 for low. Last year several consultants reported a reluctance to sell high quality timber. The data shows a large increase in the number, volume, and value of high quality timber sold by consultants in Indiana from April 2010 thru April of 2011. Strong demand for white oak and black walnut fueled much of this activity. Demand for sugar maple and black cherry was still weak while red oak seems to be improving slowly.

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*Price Report (cont'd from page 5)*

**EFFECTS OF THE ECONOMIC DOWNTURN:**  
 Due to the drastic change in the economy in 2008, it was decided in 2009 to collect information on the date of the timber sale in order to track month by month activity.

partially attributed to an oversupply of logs at many sawmills in the region due to the ideal logging conditions last fall. Since then activity and interest appears to have increased.

Most consultants are continuing to sell timber although there are some concerns that higher fuel costs (increased operating costs for the timber industry) will potentially adversely affect the economic recovery.

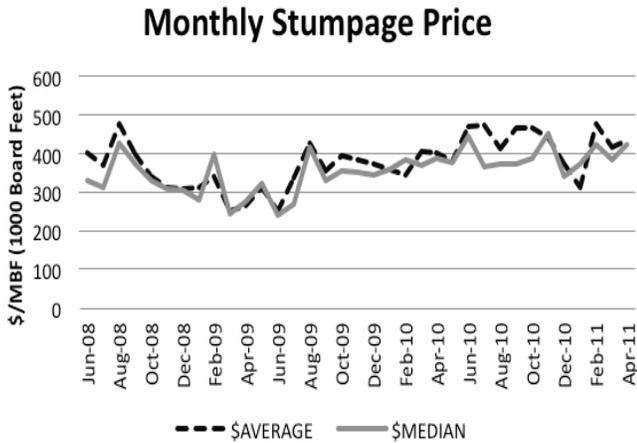


Figure 3 – Average and median monthly stumpage prices.

The Monthly Stumpage Price (\$/MBF) for all sales dropped from June 2008 through June 2009 (Figure 3). The trend is mostly upward since with the exception of the temporary drop that occurred this winter attributed in part to a short term oversupply of inventory. The median price appears to be a better indicator due to less influence of higher quality sales that can distort the average price. Stumpage value by year are approaching pre-recession levels (see Figure 4).

Beginning in December 2008 and generally continuing through July 2009 the number of sales and timber marketed dropped considerably. Since then activity has generally increased with the data reported in April of 2011 showing similar numbers to those reported prior to 2008. The data shows an apparently short drop in activity in late 2010 and early 2011, that has been at least

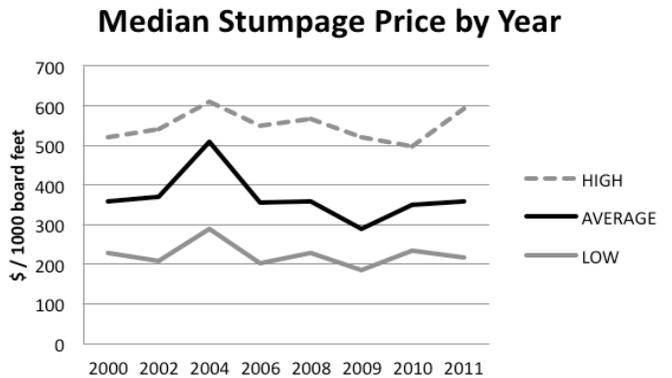
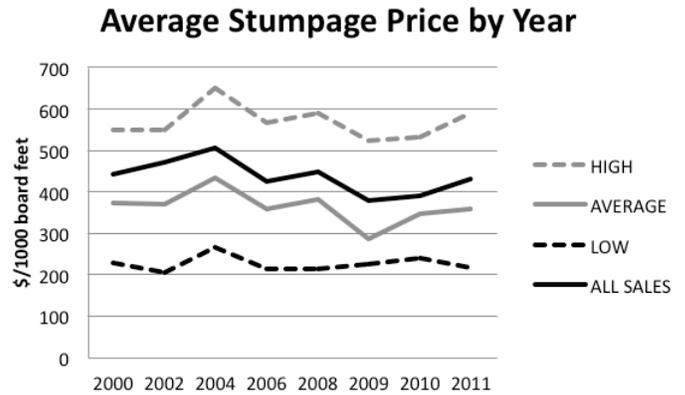


Figure 4 – Average (top) and median (bottom) stumpage price by year.

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Table 1. Statistical Summary for High, Average, and Low Quality Sealed Bid Timber Sales. June 16, 2010 thru June 15, 2011.

	HIGH (101 sales)				AVERAGE (145 sales)				LOW (25 sales)			
	Bd. Ft	Price	Bids	\$ MBF*	Bd. Ft	Price	Bids	\$	Bd. Ft	Price	Bids	\$ MBF
Total	8,598,937	\$5,257,530	607	\$589	14,077,574	\$5,052,387	702	\$359	1,690,740	\$368,932	82	\$218
Low	3,971	\$3,375	1	\$263	7,524	\$2,645	1	\$137	8,783	\$1,150	1	\$110
High	487,353	\$361,078	16		803,634	\$290,307	10	\$679	167,545	\$36,851	7	\$402
Mean	84,446	\$51,615	6.0	\$589	94,040	\$34,010	4.8	\$359	67,630	\$14,757	3.3	\$218
Median	60,368	\$37,979	5	\$592	65,008	\$22,982	5	\$358	54,510	\$11,882	3	\$217

\* One sale was excluded from the statistical summary (mean price) due to high prices.

**STUMPAGE PRICE RECOVERING WELL:**

Figure 5 shows the stumpage price for all sales, high quality sales, average quality sales, and low quality sales held from April 16, 2010 thru April 15, 2011. High quality sales generally have a wide range of stumpage prices due to higher quality timber or veneer potential. All sales can be affected by sales with a potential veneer component. This year one sale was excluded from the analysis for this reason. It is important for landowners 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 when selling timber so that you know what you have. For example a few walnut trees can greatly distort the value of a low quality improvement sale dominated by pallet material.

The average stumpage price of high quality sales was \$589 per 1000 board feet (MBF) up from \$532/MBF (2010) and \$572/MBF in 2009 (median price was \$592/MBF in 2011 compared to \$498/MBF in 2010 and \$549/MBF in 2009) (See Figures 2 and 3).

**2010-2011 Stumpage Price by Sale**

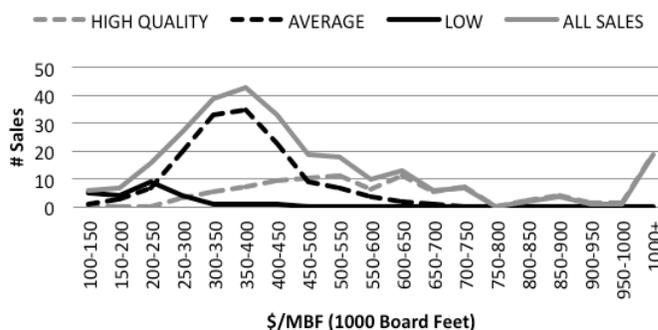


Figure 5 –Stumpage prices by number of sales for sale quality type and all total sales, 2010-2011.

The average stumpage price for average quality sales was \$359/MBF in 2011 compared with \$347/MBF in 2010 and \$320/MBF in 2009 (median price was \$358/MBF for 2011 compared to \$352/MBF in 2010 and \$314/MBF in 2009). The median price for average quality was similar to the median stumpage price in 2008 (\$359/MBF) and 2006 (\$357/MBF).

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**Price Report** (cont'd from page 7)

The average stumpage price for low quality was \$218/MBF with a median price of \$217/MBF in 2011 compared to \$239/MBF in 2010 and \$225/MBF in 2009 (median price \$234/MBF vs. \$228/MBF in 2010 and 2009, respectively). The data shows a slight drop in the price for lower quality sales, likely due to higher operating costs which are likely to increase in the future due to energy costs.

The weighted average stumpage price by sale type (obtained from this survey in 2000, 2002, 2004, 2006, 2008, 2009, 2010, and 2011) is reported in Figure 2. The weighted average of the stumpage price is the total value (\$) for each sales group (high, average, low) divided by the total volume by sales group. The median stumpage price by sale type per year 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) of standing timber. To obtain a price per board foot, divide the price by 1000. An average price of \$378 per thousand (MBF) is the same as 37.8 cents per board foot stumpage. The average stumpage price for all sales was \$430/MBF, \$589/MBF for high quality sales, \$359/MBF for average quality, and \$218/MBF for low quality (see Table 1, page 7).

**SUMMARY:** The last few years have been very volatile. Fortunately things are looking up. Prices for the most part have returned to levels prior to the recession, so more timber is going on the market. Demand for some species, such as black walnut and white oak is very strong which is largely responsible for the increase stumpage price for high quality sales. Demand for high quality timber remains the strongest, as usual, with prices for average quality also up. The data shows a slight drop in the price for lower quality sales, likely due to higher operating costs which are likely to increase in the future due to energy costs. Low quality

sales are generally improvement cuts where trees are harvested that are impeding the growth of future higher value crop trees, therefore the opportunity costs of leaving the trees may cost more in lost productivity, so it generally is not advantageous to delay selling lower quality if the price is reasonable

When the economic downturn began many sawmills had large inventories of standing timber, logs, and lumber. Those inventories have been reduced resulting in an increase in demand for standing timber. The industry still seems to be carrying a smaller inventory and cutting sales quicker than in the past, creating more of a spot market for timber sold. There is still some reluctance from some consultants to market some species.

The comment section below is offered to our readers by the consulting foresters who participated in this survey:

- The higher costs of operating for loggers and sawmills is impacting timber prices.
- Larger diameter trees in high demand, I attribute this mostly to productivity issues (higher costs) of processing smaller trees.
- Most mills are keeping lower inventories of standing timber than in the past.
- Better terms, lower up front deposits matter even more in this economic climate.
- Demand for standing timber strong last summer and fall. Appears to be continuing into 2011, following a short end of year dip.

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- Excellent logging conditions last fall and winter resulted in an oversupply of logs at many mills slowing demand temporarily.
- Sales heavy to tulip saw less interest in late 2010 and early 2011.
- Sales heavy to tulip saw less interest in late 2010 and early 2011.
- White oak demand strong, especially for higher grades and larger diameters
- Walnut demand extremely strong
- Tougher grading of delivered logs, particularly red oak, sugar maple, and cherry.
- Black cherry and sugar maple market still soft, so I am not marking when healthy.
- Red oak improving, but stumpage price seems to fluctuate widely.
- Extremely wet logging conditions this spring has had some mills struggling to get logs.

Consulting Foresters that have contributed to this report in alphabetical order include: Arbor Terra Consulting (Mike Warner) Jim Akard, Crowe Forest Management LLC (Tom Crowe), Christopher Egolf, Gandy Timber Management (Brian Gandy), Gregg Forestry Services (Mike Gregg), Haubry Forestry Consulting, Inc. (Rob Haubry), Multi-Resource Management, Inc. (Fred Hadley, Thom Kinney, Justin Herbaugh), Meisberger Woodland Management (Dan Meisberger), North Slope Forestry (Don Duncan), Schuerman Forestry (Joe Schuerman), Stambaugh Forestry (John Stambaugh), Steinkraus Forest Management, LLC (Jeff Steinkraus), Glen Summers, Tree Inc.(Tim Martin), Turner Forestry, Inc. (Stewart Turner), and Wakeland Forestry Consultants, Inc. (Bruce Wakeland).



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## Managing Tree-of-Heaven (*Ailanthus altissima*)

by Dan Shaver

If you own land in Indiana, there is a very good possibility that you have non-native invasive plants to deal with. In the Fall 2010 issue of the Woodland Steward we covered “Where do I Start?! Prioritizing Invasive Plant Control.” This article can be found at <http://www.inwoodlands.org/where-do-i-start-prioritizing>. This article was aimed at helping you figure out what you want to do with your land, what invasive species you have and how much of them you have. By knowing what you want from your land you can prioritize which invasive species are going to cause you the most trouble and where to start your control efforts.

For this article, let’s assume you want to grow native hardwood trees, but you have the invasive Tree-of-Heaven on your property. Tree-of-Heaven is a fast growing tree from Asia that vigorously sends up root sprouts forming dense colonies. Tree-of-Heaven has a large, compound leaf that is up to 3 feet long with as many as 30 leaflets, and a distinct glandular notch at the base of the leaflet.

The winged seeds are produced in abundance and help the species colonize new areas quickly (photo below).



Tree-of-Heaven grows well on poor soils and capitalizes quickly on canopy gaps in the forest. Tree-of-Heaven is a serious threat to the long-term productivity of forests in the central hardwood region. There are areas in southern Indiana along the Ohio River where Tree-of-Heaven has completely taken over acres and acres of native forest and formed a monoculture of Tree-of-Heaven. If you have this species on your property, you need to control it. The best way is through an Integrated Vegetation Management (IVM) approach.

Integrated Vegetation Management (IVM) is a system where you use information on the life cycle of the plant pest and knowledge of how it interacts with the environment, combined with the most economical and effective control methods to remove the plant with the least possible hazard to people, property and the environment. For most IVM plans there are four approaches:

- Mechanical: using equipment such as mowers, chainsaws, brush axes, loppers or other tools
- Cultural: altering management techniques or incorporating native or more appropriate plant material to out-compete the unwanted vegetation.
- Biological: relying on natural predators or introduced predators to control noxious weeds or unwanted vegetation.
- Chemical: utilizing EPA-approved chemicals per product label to control unwanted vegetation.

For Tree-of-Heaven we primarily rely on Cultural and Chemical means to control the plant. Mechanical treatment can be used in limited circumstances. There are currently no Biological controls available, but there is mounting evidence that a verticillium wilt caused by *Verticillium albo-atrum*, a soil fungus, may prove to be a viable biological control for Tree-of-Heaven.

### Cultural Control of Tree-of-Heaven

One of the best cultural treatments for Tree-of-Heaven is to control the plant before you disturb the forest canopy or soil. If you are planning to build roads on your property, clear a wildlife food plot, or do any sort of timber stand improvement or timber harvest, control the Tree-of-Heaven first.

By pulling young sprouts or chemically treating this species prior to disturbance, you can drastically reduce the spread of this species following disturbance. After the disturbance follow-up to make sure you have not spread the invasive species.

## Chemical Control of Tree-of-Heaven

There are several chemical treatments that are effective for controlling Tree-of-Heaven. Whenever using chemicals the landowner or applicator must follow the herbicide label. The preferred treatment methods are foliar application and basal bark application. Foliar application is most effective after full canopy development to fall color (mid-June to mid-September). Unless you are treating right-of-ways, foliar application is typically a low-volume spot treatment on young trees less than head high. The herbicide label will provide recommended herbicide rates for low-volume foliar treatment.

Basal bark applications typically involve wetting the lower 12-20 inches of the stem all the way around and down to the root collar. The treatment should not overflow and wet the soil around the stem. Basal bark treatments are extremely effective on any size stem and can be done most times of the year with the exception of the spring during heavy sap flow or when there is snow on the ground. Full canopy development to fall color (mid-June to mid-September) is one of the most effective times for basal bark treatment as long as the temperature is below 85° F.

- Foliar application-1% Arsenal AC or 30% Krenite S or 2% Garlon 3A or 2% Accord, 0.6 dry ounces per 3 gallons Escort XP or 30% Krenite S+0.6 dry ounces Escort XP (based on recommendation from Purdue University Researchers)
- Basal bark application-15% Garlon 4 Ultra+3% Stalker+ 82% basal oil or 20% Garlon 4Ultra +80% basal oil during growing or dormant season (based on recommendations from Purdue University researchers)

## Mechanical Control of Tree-of-Heaven

Very young seedlings can be pulled out of the soil when soil conditions are suitable. There is the potential for seedlings to re-sprout if they break off at the soil level or if they are established enough to sprout from the roots that are not pulled up. Pulling up seedlings is only recommended when other treatments are not available. It is better to pull up young seedlings than to leave them to grow for another year. Remember where they were or mark the location on a property map. Follow-up the next season to treat with herbicide or pull any re-sprouts.

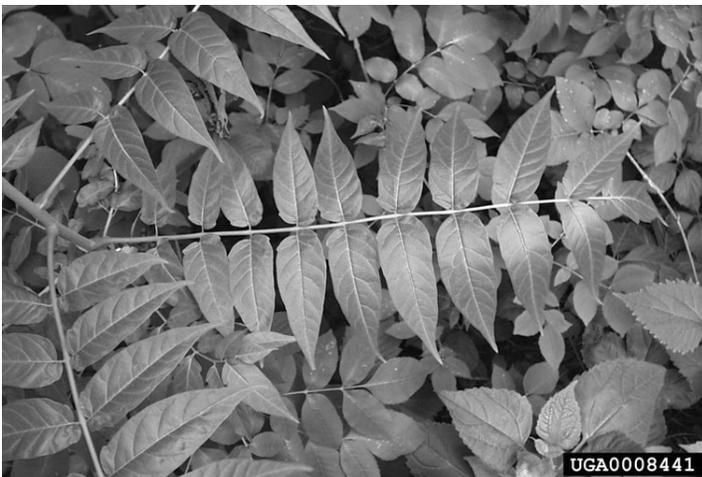
For any Tree-of-Heaven besides first or second year seedlings, any sort of cutting, mowing or girdling will result in aggressive root sprouts and make the problem worse.

If you have Tree-of-Heaven on your property, don't wait to control this species. Every year you wait is one more year that tree-of-heaven will add new root sprouts, potentially reach seed bearing age (2 – 3 years), and spread vigorously with any natural or man-made disturbance. If you don't have Tree-of-Heaven on your property, be vigilant because it will suddenly appear in small canopy gaps, along roads and in wildlife openings. Treat it as soon as you identify it.



*Above - Glandular notch, near the base of the leaf, is a distinctive feature to help tell Tree-of-Heaven from Black Walnut or Sumac.*

*Below - Each compound leaf can have up to 30 leaflets.*



## Feral Hogs in Indiana – What it Means for You

By Brian MacGowan and Joe Caudell

Domesticated pigs (originally bred from Eurasian wild boar about 8,000-10,000 years ago) were intentionally introduced into the New World by Christopher Columbus. Since then, they have expanded due to numerous releases for hunting and open range livestock practices. Today, feral pigs and Eurasian boar hybrids are numerous and widespread throughout the United States.

Feral hogs are variable in appearance ranging in black to multicolored. They are very adaptable and can be observed in a variety of habitats although dense brush and cover is preferred. Feral hogs have social groups or “sounders” that include adult females and piglets – adult males are solitary. Their size is variable with average adult weights of about 75-250 pounds.

Due to the problems discussed below, feral hogs have received increasing attention from wildlife professionals around the country. The good news for Indiana is their range is limited and their control is manageable. However, while they have been reported in Indiana since the early 1990’s their primary breeding range is limited to only a few counties including Jackson, Lawrence, and Wayne counties. However, it is important to know that a wild hog, such as escaped domestic hogs, illegally released Eurasian boar, or even Vietnamese pot bellied pigs, could be encountered in almost any county in Indiana. Any sighting of a wild hog can be reported to USDA APHIS Wildlife Services at 765-404-0382.



*Figure 2. Feral hog tracks can be difficult to distinguish from white-tailed deer tracks. Compared to white-tailed deer, feral hog tracks are more rounded at the tips of the hooves and have widely spread dew claws. Picture by Alabama DCNR-WFF Chris Jaworowski, Wildlife Biologist*

*Figure 1. Example of rooting damage in a pasture caused by feral hogs. Damage can lead to equipment damage and costly repairs for landowners. Picture by Alabama DCNR-WFF Chris Jaworowski, Wildlife Biologist*



## Problems Caused by Feral Hogs

Disease threats from feral swine include domestic diseases such as trichinosis, tularemia, swine brucellosis, and pseudorabies, and foreign animal diseases such as classical swine fever. Feral hogs can damage crops including corn, wheat, melons and pastures. Feral swine are also known to eat and damage morel mushroom patches. They can also impact native wildlife by consuming eggs of ground nesting birds or outcompeting others for resources including hard mast (e.g., acorns). Tusking and rooting by feral pigs can also damage dikes and impact forest restoration.

## Laws in Indiana

Laws are designed to facilitate the elimination of feral hogs in Indiana while eliminating future introductions which is thought to be a major contributor to their population growth across the country. Feral swine can be taken year round by any legal means. However, the possession and relocation of live feral hogs is illegal in Indiana. Contact the Indiana Department of Natural Resources for more information about feral hog laws.

## What Can Landowners Do?

Damage caused by feral hogs is substantial in the southeastern United States. Wildlife professionals need your help in identifying where feral hogs occur in Indiana

- Report all feral swine to the Indiana Department of Natural Resources or USDA Wildlife Services in Indiana.
- Rooting, scat and tracks are good signs of feral hog presence in an area.
- Do not release feral swine on your property.
- Do not feed wild pigs – feeding pigs can increase their productivity. Feeding wildlife is generally not a recommend practice and can artificially increase densities of local wildlife

## Additional Information Sources

West, B. C., A. L. Cooper, and J. B. Armstrong. 2009. Managing wild pigs: A technical guide. Human-Wildlife Interactions Monograph 1:1-55. [www.berrymaninstitute.org/publications](http://www.berrymaninstitute.org/publications)

Indiana Wildlife Conflicts Information Website, <http://www.ag.purdue.edu/entm/wildlifehotline/pages/default.aspx>

National Feral Swine Mapping System, [www.feralswine.org](http://www.feralswine.org).

*Figure 3. The characteristic scat of feral hogs is a reliable sign of their presence in an area. Picture by Alabama DCNR-WFF Chris Jaworowski, Wildlife Biologist*



*Brian MacGowan is an extension wildlife specialist with Purdue University's Department of Forestry and Natural Resources, [macgowan@purdue.edu](mailto:macgowan@purdue.edu). Joe Caudell is a wildlife disease biologist with the USDA AHIS Wildlife Services, [Joe.N.Caudell@aphis.usda.gov](mailto:Joe.N.Caudell@aphis.usda.gov).*

## Hog Wild on Mushroom Hill

by Dave Wagner

It was Monday, December 15th, two days after the beginning of the annual deer hunt, which my two brothers, Joe, Tom and I look forward to all year. The buck pole on our southern Indiana cattle/wildlife ranch usually has a nice buck or two hanging by this time; however, we'd come up empty-handed so far and I had promised my wife that I'd have a least a doe hanging by now. So I decided to head up the Mushroom Hill, a steep-grade hill with a slope exceeding 30%. Joe had been sitting here and said he'd seen several does in the past couple of days. The haul-out would be simple because the steep grade ended at the end of my hay field, which we could easily drive up to. This was a productive area which had yielded me several bucks over the years, but I had moved my stand last year and Joe had moved in to try his luck on the old Mushroom Hill. He had put up a quickie stand with a ladder strapped to the tree. In sneaking up the hill, I spooked a young doe, which had been watching me from right underneath the stand. It was still early, about 4:00 P.M. and I figured "Well, just my luck" but I still had plenty of time for some does to wander by. This stand was at the break at the top of the ridge, and as I snuck the last 20 yards to the stand, I heard some rustling in the leaves about 40 yards over the break and behind a large greenbrier patch. I thought maybe it could be a nice buck, so I quietly crawled up into the stand with my Thompson muzzleloader, which had just barely been broken in last year on a nice 9-pointer.

As I settled into the stand, my attention focused more intently on the rustling behind the greenbriers. They were so thick that Sleeping Beauty's Prince Charming would have had trouble hacking through them to steal a kiss. Now I was getting really curious, as I'd heard a few twigs snap, so I knew it was larger than a squirrel, but I'd seen nothing to this point. Another twenty minutes went by with continued rustling...now it came from different spots around the greenbriers. I quickly came to the conclusion that it was a band of turkeys. But just as I sat down and began to ignore them, I heard an unexpected grunt/squeal coming from where the rustling was. Immediately the mystery was resolved...there were wild pigs in the vicinity and they were close!

I stood up in the stand and watched in their direction, listening to try to determine how many were there. The one I heard grunt sounded heavy-voiced, which I figured had to be an adult, but then, coming from the 3:00 position from the adult, it sounded like two smaller animals rus-



ting. I concluded it was probably a mother with a couple of pigs, but still I could not spot them. Joe had screwed a couple of steps about arm level behind the seat for something to hang his gun on, so I grabbed a hold and stood on the seat, hoping to get a higher vantage. Looking toward the area where I had heard the smaller pigs, I got a glimpse of one, and then within the minute, I saw it again. It seemed very intent on heading down the trail away from me. I figured they had winded me and might be heading out of the area, so when the second pig showed himself, I dropped him with a heart shot in the middle of the trail. That's when the forest came alive!

Still standing on my seat 25 ft. up, the greenbriers erupted with wild hogs. As I was trying to reload my muzzleloader, I saw three head up to the high hay field to the west, turn and go south. Three more large ones hit the hayfield and went north. Three ran under my stand and headed down to the low hayfield. Off through the woods, heading towards the big train tunnel, was a single large hog that looked to be the size of one of my 500 lb. Angus weanlings. Must've been the boar. Meanwhile, the rest of the herd was in a state of total confusion, circling the area around my tree. By this time I got my senses back and climbed off the seat and got my muzzleloader reloaded. No sooner had I got my ramrod in place, a large sow showed herself about 20 yards from my stand. -- Click-- Forgot to load the primer. By the time I got the primer in, the sow had disappeared into the greenbriers. Then suddenly I saw her at the side of the dead pig. She was heading away on the trail; I didn't want to let her get away, so I chanced a shot through her loin into her lung. When I shot, she squealed loud enough to be

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heard for over a mile. This must have been the matriarch of the clan, because when she squealed, the whole herd went into a worse state of confusion than they already were. Some that had run off had circled back around, and there were still about twenty pigs of all sizes milling around through the greenbriers and underneath my tree stand, wondering where to go. As I looked down, I noticed the stand and the seat had come loose in all the excitement. I figured I'd better give them a quick tightening before I reloaded, so I hung my gun on the screw step and knelt down to ratchet the strap tight. Much to my surprise, this old stand was not the ratchet type.... it was the old seat belt type, that when you pull on that buckle, it comes loose! I don't remember much except grabbing for that tree like a scairt bear cub and hanging on for dear life. The stand didn't come completely off and I managed to swing my foot around onto the ladder and tighten it up properly. I finally got back in the stand, reloaded my gun and surveyed the area. It appeared that all the hogs had left during my fumbling, but even after fifteen minutes, I could still hear the sow behind the briers in her final death throes. I felt it was safe enough to go down and finish her off. As I crept down, and carefully walked toward the area where she had dropped, I was startled by some rustling. I took a few more steps and out hopped two more small pigs (about 75 lbs.).

As I raised my gun to take even one more pig, the sow, which I had not seen and was 5 ft. from me, made one last twitch before expiring. As you can imagine, I very nearly wet my pants. And the little pigs got away. At that point, I decided I'd better keep my gun loaded just in case.

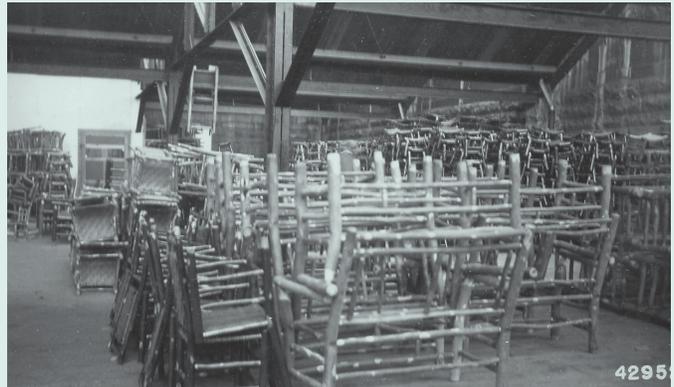
The final episode involved the retrieval. Since I'd shot the hogs uphill, towards the high hay field I figured I'd better go back and get help and the truck and come in from the top. It was getting dark and one shot didn't seem enough for thirty hogs. My entourage to the top included Joe, Tom and Dave Melloh, Nancy, Joe's wife and my wife, Jan. We were all equipped either with shotguns, 06's or spotlights, and walking through the woods in the thick greenbrier patch, in the dark, wondering if pigs would coming charging out at us, was like a combination of Schwartzeneger in "The Predator" and "The Blair Witch Project". Anyway, we got the pigs out without incident, the sow weighing in at 210 lbs. and the smaller pig at 75 lbs. Considering the close calls, we felt lucky to be two up on the pigs.

*Dave Wagner is a farmer and woodland owner in southern Indiana.*

# Days Gone By



Picture to the left: hickory chair stock poles



Picture to the right: Hickory Chair, Stools, and Benches in Factory Circa 1944.

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