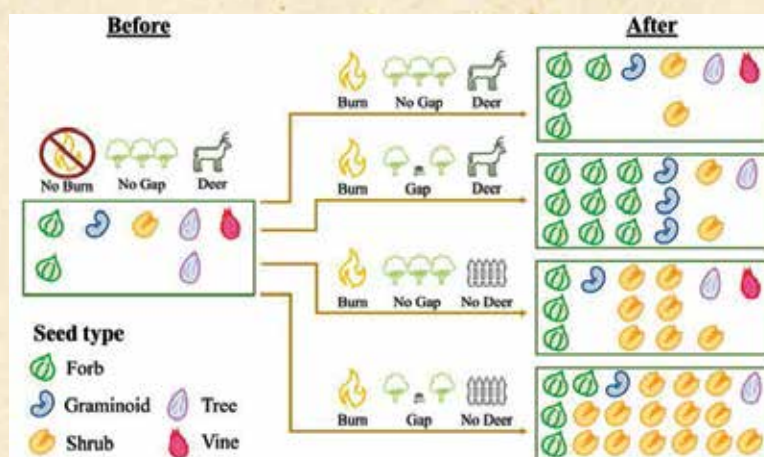


Restoring Future Forests: How Fire, Deer, and Canopy Gaps Shape Forests and Regeneration Potential

By Andrea Brandon

Soil seed banks are the hidden reservoir of forest plant diversity. Seed banking is a reproductive adaptation that allows plants to persist belowground as dormant seeds, where the soil serves as a buffer from aboveground disturbances. They play a key role in the recovery of forests post-disturbance, and it's the post-disturbance plant recovery that replenishes, or makes seed deposits, in the seed bank. Since certain plant species are favored or disfavored by the type of forest disturbance, seed banks can vary depending on the disturbance affecting aboveground plants, and the abundance and diversity of seed banks wanes over time. Because of this, seed banks are strongly influenced by the reintroduction of disturbances and may be influenced by future disturbance regimes.

Across temperate hardwood forests in the eastern United States, regeneration challenges have mounted as historical disturbance regimes—such as fire, windthrow, and herbivory—have been altered or suppressed. Low-intensity fires have been largely excluded from eastern forests for nearly a century. Changes to natural disturbance regimes have led to an increase in mesophytic species such as maple over



Schematic representing disturbance pathways to different seed bank communities found in study results. Burning with a closed canopy and deer presence led to an include in forb seed abundance, and burning with deer presence and a canopy gap led to a substantial increase in forb and graminoid abundance. In contrast, burning and deer exclusion led to a substantial increase in shrub seed abundance, particularly with a canopy gap overhead. Source: Reed et al. 2025.

fire-adapted species such as oak, with long-term implications for forest composition, resilience, and biodiversity. These changes

continued on page 6

Save the Date

Annual Woodland Owner Conference October 31-November 1
Turkey Run State Park



Mark your calendars and plan to join us for field tours in Putnam County, followed by networking and learning opportunities at Turkey Run State Park. On Friday we look forward to a morning forestry field tour on a Purdue forestry property and an afternoon landowner tour. A highlight of our Saturday program at the Turkey Run Inn will be keynotes by Indiana state forester John Seifert and Purdue professor Zhao Ma. We have all kinds of opportunities to learn from experts and fellow landowners alike. See more information about the meeting on pages 9-11. See you there!

IFWOA OFFICERS

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Requesting Sponsorships for Annual Meeting

IFWOA relies on meeting sponsorships to help cover our costs and give you the best meeting possible. Please consider sponsoring all or part of an event or a general donation toward the meeting, see the registration form.

Saturday AM break	\$200
Saturday keynote sponsor (2)	\$300
Saturday lunch	\$2000
Saturday PM break	\$400
Saturday awards dinner	\$3000
Saturday bar service	\$750



UPCOMING EVENTS

See registration and more information at www.ifwoa.org/events.

September 20

@ 9:30 am - 2:30 pm
Forestry Tour Grant County

September 20

@ 8:30 am - 3:00 pm
Nature Daze, Brown County

September 27

Forestry Field Tour
Harrison County

October 3

@8:00 am
Bird walk, Nashville

October 21

@ 8:00 am - 5:00 pm
Breakfast with a Forester
Christos Family Dining,
Plymouth

October 25

@ 8:00 am - 4:00 pm
Chainsaw training Level 1
for landowners
Morgan- Monroe State
Forest Training Center

October 31 - November 1

2025 Indiana Woodland
Owner Conference
Turkey Run Inn

November 18

@ 8:00 am - 9:30 am
Breakfast with a Forester
American Table Restaurant,
Warsaw

December 6

Forestry field day, Jennings
County

Welcome New Members!

Please join us in welcoming these new annual members who have joined since the last newsletter:

Mike Brubaker, Rochester
Linda Sporleder, Carmel
Christy Rosas, Cary, NC
Lisa & Matthew Miller, North
Vernon
Ken Jones, Syracuse
Debbie Cooley, Indianapolis
Jeff & Erica Richwine, Winamac
Corey & Cherish Metcalf, New
Palestine
Russell Pitts, Indianapolis
Ryan & Michelle Webb,
Elmwood, IL
Marah Marshall, Yorktown
Height, NY

Nathanael Marshall, Wheaton, IL
Miriam Ash, Ferdinand
Jared Shigley, Haubstadt
Bill & Kristina Taylor, Bainbridge
Liz (Irk) Poland, Marion
Brian Kolesa, Bradenton, FL
Deborah Patton, Moores Hill
Les Zimmerman, Clinton
Richard Summers & Family,
Sellersburg
Kristine Worley, Salem
Marissa Hatfield, West Baden
Springs
Paul Pence, Lafayette
Augie Pence, Indianapolis

Dominique Peck, Carmel
Alex Minner, Indianapolis
Jake Minner, Chicago, IL
John Ritz, New Albany
Jason Kissel, Wabash
Dennis Feldmann, Mooresville
Scott Trumble, Granger
Jamie & Jonathan Munro,
Indianapolis
Ned & Jami Buchan, Decatur
Joel Bone, Muncie
Dan Buchan, Decatur
Sean Kelly, Climax, MI
Paul Marsh, Naperville, IL





Lee Huss, IFWOA president

My early childhood memories in Pennsylvania revolved around trains and railroads. My Grandfather Huss, worked in the rail yard in Johnstown, my Grandfather Ervin was a draftsman in the Bethlehem Steel plant that produced steel freight cars and rails, while my father used his

electrical engineering degree as a signal and communication engineer for the Pennsylvania Railroad. Being around trains as a young child was fun and exciting. Only later, while studying forestry, did I appreciate the role a railroading tycoon had in financing and developing the American system of forestry education.

George Washington Vanderbilt II was the grandson of Cornelius Vanderbilt, "the Commodore", one of the richest men in American history, who built his wealth from shipping and railroads. In the 1870's GW began to make trips to the Asheville North Carolina area with his mother. He loved the scenery and climate so much that he decided to purchase 125,000 acres of land in 1880 to build his Biltmore estate, the largest privately owned home in the United States.

Archives indicate that at the time of purchase much of the farmland was in poor condition. Nevertheless, Vanderbilt envisioned a park-like setting for his home and employed landscape architect Fredrick Law Olmsted to design the estate grounds, which included a park surrounding the house, farms along the river and replanting and managing the remaining acres as a commercial timber forest.

In 1892 Olmstead hired Gifford Pinchot, a Yale educated American newly trained at the French National School of Forestry, to manage the forest at Biltmore. During the three years that followed, Pinchot created the first large scale private forest management plan in the United States for Biltmore.

In 1896 Pinchot was appointed to lead the National Forest Commission and later became the first chief of the United States Forest Service. So, in 1895 Vanderbilt brought Carl Schenck from Germany to replace Pinchot to manage Biltmore "using the best scientific principles of forestry". As Schenck worked throughout Vanderbilt's vast forest, he filled his need for help by training young men who were interested in working for free as apprentices. Because of the growing interest in forestry, Schenck decided to formalize his forestry education program. With Vanderbilt's financial support in 1898, he started the Biltmore Forest School, the first school in the US to provide a one-year course of study in forestry, that paired traditional classroom lectures with extensive hands-on, practical forest management field training. The students learned felling, logging, sawing, operating machinery, transplanting seedlings and caring for nurseries. Students also studied botany, dendrology, fish and game and forest economics. Schenck also invented the Biltmore Stick, which is still used today to measure tree height and diameter.

Due to lack of financial support and creation of competing forestry education programs at Cornell and Yale (created by Gifford Pinchot), the Biltmore school closed in 1913. Schenck returned to Germany but is widely considered one of the most influential people in American forestry - having educated the next generation of leadership in the field and laying the foundation for forestry education in the US. In 1955 upon his death and at his request Schenck's funeral was in Germany, but his ashes were spread at the Schenck Forest in North Carolina.

With looming financial problems, Vanderbilt sold 87,000 acres of the Biltmore Estate to the federal government to form the nucleus of the Pisgah National Forest. There, 6,500 acres is set aside as the Cradle of Forestry Historic Site, which commemorates the contributions of railroad baron heir George William Vanderbilt, Gifford Pinchot and Carl Schenck for their work in establishing forest conservation and education in American.

Today 73 schools in the US offer forestry degrees accredited by Society of American Foresters, an organization created by Gifford Pinchot in 1900. Woodland owners in Indiana can find a professional forester in IFWOA's recently updated directory. Go to <https://www.findindianaforester.org/> to achieve your forest management goals.

Lee Huss, IFWOA President

l.huss@comcast.net



BOARD OF DIRECTORS BY AREA

District 1

2026: Claude Diehl

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diehl421@gmail.com

2025: Lenny Farlee

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(765) 494-2153
Lfarlee@purdue.edu

District 2

2027: Raoul Moore

11 Locust Hill
Crawfordsville, IN 47933
(765) 230-6282 C
lhmoore@tctc.com

2025: Bill Freeman

PO Box 1249
7839 Bellsville Pike
Nashville, IN 47448
(317) 432-5241
billfreeman@tudorhill.net

District 3

2026: John Stambaugh

182 Pinhook Rd
Bedford, IN 47421
812-384-5887
forester@bluemarble.net

2026: Dan Lynch

9715 Trilobi Drive
Indianapolis, IN 46236
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dflynch4@comcast.net

District 4

Open

District 5

2025: Judi Brown

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jbrown@abcbirds.org

2027: Jim Hochgesang

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jlhfarmforest@fullnet.com

At Large

(representing all districts)

2026: Richard Newton

Eastern Red Cedar Products
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richard@cedarusa.com

2027: Lee Huss

1443 Freeman Rd
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2025: Don Fry

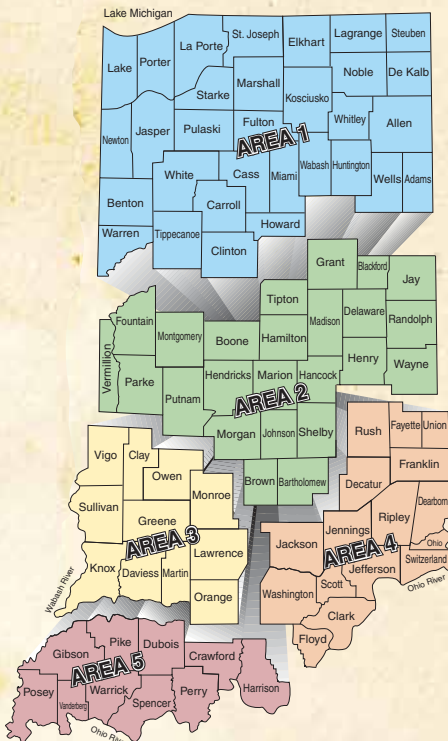
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2025: John Roark

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2027: Steve Wertz

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Goldsmith, IN 46045
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steve.a.wertz@gmail.com



Slate Selected for IFWOA Board Elections

The slate of candidates for the election of the Board of Directors for the next 3-year term (2026-2028) is:

District 1:	Lenny Farlee (Lafayette)
District 4:	OPEN
District 5	Judi Brown (Birdseye)
At large:	Don Fry (W. Lafayette)
	John Roark (Pittsboro)
	Rich Solano
	Curtis Ewbank

The final slate will be presented for approval at the November annual meeting.

IFWOA Board Seeking Interested Members

We are always looking for volunteers to serve on the board in the future. Board members are asked to participate in person or via phone at 4 board meetings per year plus provide voluntary input on monthly email discussions about IFWOA strategic directions and activities. They are also asked to judge district Deam nominations in July each year. If you are interested in serving on the board, please contact the office at 765-496-5013 or email ifwoa1@gmail.com. The Nominating Committee will review any potential candidates and select the final slate.

Indiana Landowners to be Recognized for their Stewardship

Four Charles Deam Forestry Stewardship Award district finalists, along with their nominators, will be recognized at the awards presentation at our annual meeting banquet the evening of Saturday, November 1st at Turkey Run Inn. As usual, this year's finalists embody the purpose of the Deam Award; they are model examples of landowners practicing some of the best forest stewardship in the state.

The district finalists who will be recognized are:

District 2: Evan & Mimi Kokoska, Parke County, nominated by foresters Perry Seitzinger, Jack Nelson, and Josh Wagner

District 3: Dennis Feldmann, Lawrence County, nominated by district forester Janet Eger

District 4: David Argo, Switzerland County, nominated by forester Austin Albert

District 5: Emerson/Bratton Farms, Gibson County, nominated by district forester Gretchen Herbaugh

The state winner will be selected by a team of state judges during a September tour of each of the properties. All finalists receive a plaque and the state winner also receives a property sign.

District Nominees Share their Passion

The Deam awards program accepts nominations from around the state. From the statewide nominations, a finalist from each district was selected after a property tour. There were no nominations from District 1. In the first round of judging, all the nominees from each district are visited by IFWOA board members, and one is selected to represent their district as a finalist.

IFWOA would like to recognize these other first round nominees for their stewardship and passion for woodland management. We thank them for the efforts and taking the time to let us visit their property:

- Gramelspacher Family, nominated by Liz Jackson
- R & G Pickett Farms, Stephen Pickett and Christopher Pickett, nominated by Putnam County SWCD
- Elizabeth Thorpe, nominated by Michael Warner
- Mary Huber, nominated by Michael Warner
- George & Nancy Gaddis, nominated by Brad Engle



At the 2024 judging tours, Deam finalist and eventual state winner Pence Revington (center red hat) discusses her prairie with her forester and the state judging team.

Distinguished Foresters to be Honored at Banquet

Also at the awards program, we will recognize foresters who have shown exemplary service to Indiana forestry with the John F. Datena Distinguished Forester Service award. Foresters are a critical support system and resource for private landowners across the state and can help us be successful. This "Hall of Fame" award is selected from foresters nominated and selected by IFWOA, Society of American Foresters, and Association of Consulting Foresters working together. We look forward to honoring this year's class on November 1st.

Time to order tree seedlings from Indiana DNR Vallonia nursery

If you are interested in ordering seedlings for conservation plantings in spring 2026, orders for the Indiana state tree nursery will be accepted after October 1. Orders should be placed ASAP as supplies are limited and many species sell out quickly. Learn more and order at

<https://www.in.gov/dnr/forestry/tree-seedling-nurseries/>.

Restoring Future Forests *continued from page 1*

aboveground are then potentially reinforced belowground through the seed bank.

A new study by Reed et al (2025) investigates how forest seed banks—a crucial driver of forest regeneration and successional trajectories—respond to combinations of three common forest management actions:

- low-intensity prescribed fire
- deer exclusion
- canopy gap creation

Scientists' findings emphasize that what's happening underground in the seedbank may hold the clearest signals of how today's forest management decisions will shape tomorrow's forests.

Forest disturbance regimes have changed across the eastern United States, leading to current day plant communities that are significantly different from historical species composition and diversity. While active management is underway or planned across many public lands, scientists and land managers do not fully understand how combined disturbances change soil seed banks—a critical knowledge gap land managers need filled to ensure long-term forest productivity.

At the Fernow Experimental Forest, in the Monongahela National Forest, Reed and colleagues established an experiment to examine the soil seed bank 13 years after disturbance initiation. Scientists examined how prescribed fire, deer exclusion, and canopy gap creation applied individually and in combination influenced seed bank diversity and composition in an Appalachian hardwood forest. Seed bank samples were analyzed for species composition, density, and diversity to assess how different combinations of management tools interact, and how active management—or the absence of management—can influence successional dynamics.

Synergistic Disturbances—But Fire Is the Driver

Researchers found that fire had the strongest independent effect, increasing the density of viable seeds in the soil. Neither canopy gaps nor deer exclusion alone produced major changes to the seed bank; it was only when these disturbances were combined with fire that substantial changes were observed. The most unique and diverse seed bank communities came from plots where all three disturbances—fire, canopy gaps, and deer presence—were applied, while the least diverse seed bank communities came from plots that had fire, canopy gaps, and deer exclusion. These low diversity plots had shrub seed densities that were 1400 percent higher than in undisturbed controls. This finding suggests that stacking the right disturbance regimes may be necessary for managers seeking to trigger meaningful ecological shifts and reduce competing vegetation.

What's Underground Matters

Interestingly, in all treatment plots analyzed, the seed bank composition was distinct from the current aboveground vegetation, regardless of disturbance treatment. This finding suggests that the soil may hold a legacy of past management and a reservoir of future regeneration potential that is not always visible aboveground.

Conclusion

Restoring fire was the major contributing factor that enhanced seed bank abundance and richness, replenishing the seed reservoir for future forest renewal. These disturbance-altered seed banks highlight how the restoration of disturbance can strongly and indirectly influence temperate forest community dynamics.

This was originally printed in the USDA Forest Service Northern Station Rooted in Research Issue 51, June 2025. <https://research.fs.usda.gov/treesearch/69377>.

Key Findings

- Seed banks store future forest potential, and their composition is often different from what is visible aboveground. Monitoring soil seed banks can be a useful measure for managing future regeneration potential and identifying competing vegetation risk.
- Scientists found that restoring fire regimes to the landscape was the major contributing factor to enhanced seed bank abundance and richness.
- Combinations of three common forest management actions—canopy gap creation, prescribed fire, and deer management—lead to a more unique seed bank community.
- The restoration of disturbance regimes will likely influence future biodiversity and successional patterns of temperate Appalachian forests.

Welcome new executive director Phil Woolery!

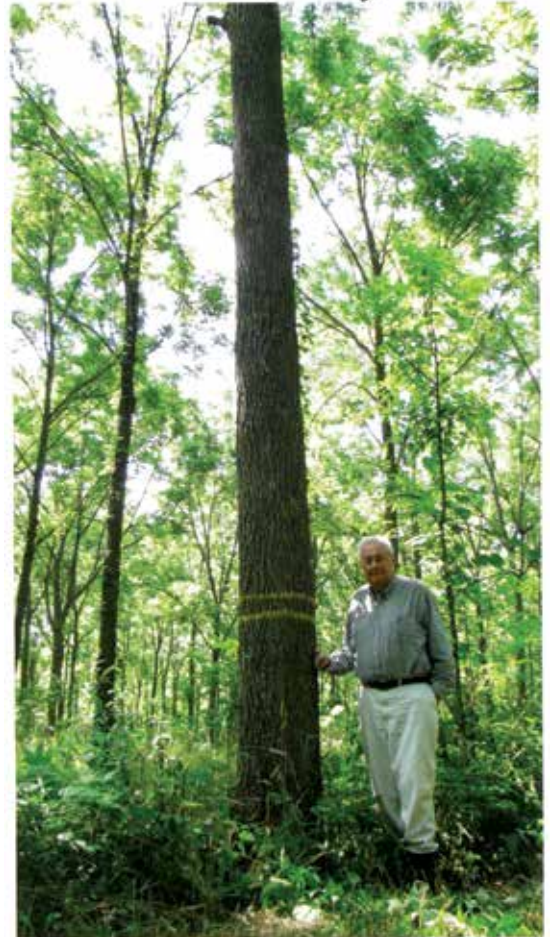
We're excited to announce that Phil Woolery joined IFWOA as our new executive director on July 14. Phil brings a strong background in forestry to the position with degrees from Iowa State University and Purdue University. For the past decade he has been working as an Agriculture and Natural Resources Extension Educator with Purdue Extension in Starke and Pulaski Counties. His work has included a wide range of projects- from maple syrup production and farm succession planning to invasive species management. Phil has also taught the 8-week Forest Management for the Private Woodland Owner and hosted forestry field days in northwest Indiana, helping landowners better understand and care for their woodlands.

"I am looking forward to meeting the members of the organization and working with them to achieve their goals for the organization and their woodlands," Phil shared. "I will be working closely with Liz Jackson for the next few months to ensure a smooth transition."

After 21 years of dedicated service, Liz Jackson will be retiring end of November, following the IFWOA annual conference. We are deeply grateful for her leadership and commitment to Indiana's woodland owners.



Pence Walnut Plantation and Hensler Nursery, Inc.



One of many of our 27-year-old *Superb* trees

"Pence Select" **Walnut Seedlings**

Available for the 2026 planting season. These seedlings will be from nuts gathered from the 200 best trees of the 44,000 in the Hugh Pence walnut plantation in Indiana.

For More Information Contact:



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Fax: 574-867-4960

www.henslernurseryindiana.com

e-mail: info@henslernurseryindiana.com

www.ifwoa.org

Help Support IFEF at the Annual Meeting

Indiana Forestry Educational Foundation will again be fundraising at our annual meeting in November. All monies raised at the auctions help support IFEF in providing educational programs throughout the year, including support of the IFWOA annual meeting and the small grants program to other partner organizations. These programs support forestry education for preK-grade 12 students, teachers, the public, and landowners like us.

This is a great place to shop for gifts for family and friends—after all, the holidays are fast approaching. It's also fun trying to outbid your competitors! There is always a very wide range of items available, and you would be hard pressed to not find something you like. The Silent Auction will run through Saturday afternoon and close by the end of the day program. The live auction will be during the evening awards banquet.

Please consider donating an item for the auction to support IFEF. Tools for working on your property, nature and outdoor items, and home goods and décor are always popular. Besides the silent auction, there will be raffles and a chance to donate directly to IFEF. Past raffle items have included chainsaws, pruners, safety equipment and herbicides. If you have something to bring to the auction or questions, contact Liz Jackson at (765) 496-5013 or jackson@purdue.edu. Thanks for your support!

Janet Eger, Auction Chair



News and Notes

Congratulations to IFWOA members Tom & Lynn Webb of Putnam County, 2024 Indiana Tree Farmers of the Year. They have been in the Tree Farm System for 33 years and were recognized at the Indiana Hardwood Lumberman's Association convention in Indianapolis.

"Rooted in Purdue," a story in the Fall 2024 Purdue Alumnus magazine, highlighted Life member and long-time board member Hugh Pence and his wife Judy and their life growing walnut trees. <https://purdueforlife.shorthandstories.com/rooted-in-purdue-fa24/>.

Woodland Management Moment video series from Lenny Farlee, Purdue Extension forester, gives you very brief and useful information to manage your woodlands. https://www.youtube.com/playlist?list=PLgoGnq-fak7VTnF4Bh9HvQnB_azYbAfY

"Agricultural Spray Nozzles, a Comprehensive Review" publication includes types of nozzles, selection criteria, cleaning and maintenance. <https://ag.purdue.edu/departments/extension/ppp/resources/ppp-publications/mobile/ppp-153/agricultural-spray-nozzles-a-comprehensive-review.html>

How Sustainable Are America's Working Forests? What if you could point to clear, credible data to show how sustainable private forests are across the U.S.? Forest Factor brings together more than 70 trusted data sources—and visualizes them in an interactive national map. Users can explore sustainability scores for regions across the U.S., each based on six key characteristics like forest growth, carbon, water quality, wildlife diversity, and more. Explore the tool at <https://forestfactor.org/>

New Resource from Purdue Extension

A team of partners from Purdue Extension, DNR Division of Fish & Wildlife, NRCS, and Pheasants Forever/Quail Forever recently developed a series of factsheets focused on managing problem plants in conservation plantings such as CRP fields, old fields, and pollinator plantings.

Topics covered include:

- Cool-Season Grasses
- Crownvetch, Sweetclover, and Birdsfoot Trefoil
- Goldenrod
- Johnsongrass
- Reed Canarygrass
- Sericea Lespedeza
- Teasel
- Thinning Aggressive Native Grasses
- Wood Encroachment and Woody Invasives

The factsheets are available on the Extension Pond and Wildlife Management website at <https://extension.purdue.edu/pondwildlife/grassland-management.html>.



Sericea lespedeza is just one of many plants that can become a problem in conservation plantings.

Indiana Woodland Owner Conference Tours

October 31 Optional Morning Tour: Purdue Nelson-Stokes property

Join the optional morning tour as we visit this 162-acre Purdue Forestry & Natural Resources Department owned property used for research and demonstration. Purdue foresters will discuss topics such as stiltgrass control, regenerating openings with desirable species, enrichment plantings to encourage more oak, management after a storm damage harvest, and management of a mature oak woods.

Lunch is on your own, eat at Hollandsburg or Greencastle or bring a sack lunch. For those who want to eat together we have reserved Harris Hall at Putnam County Fairgrounds in Greencastle, bring your lunch, desserts and drinks provided.



A mature woods at the Purdue Nelson-Stokes property.

Annual Meeting Hotel Reservations- Reserve by September 29

Call the Turkey Run Inn at 1-877- 563-4371 or at www.indianainns.com through September 29 for the special rate. A block of rooms is available for \$139.99 – \$209.99 + tax in the 1031FW block.

Note there is limited room availability and the next nearest hotel is a long distance, we encourage you to book rooms early. Rooms can be cancelled up to 4 days prior at no charge.

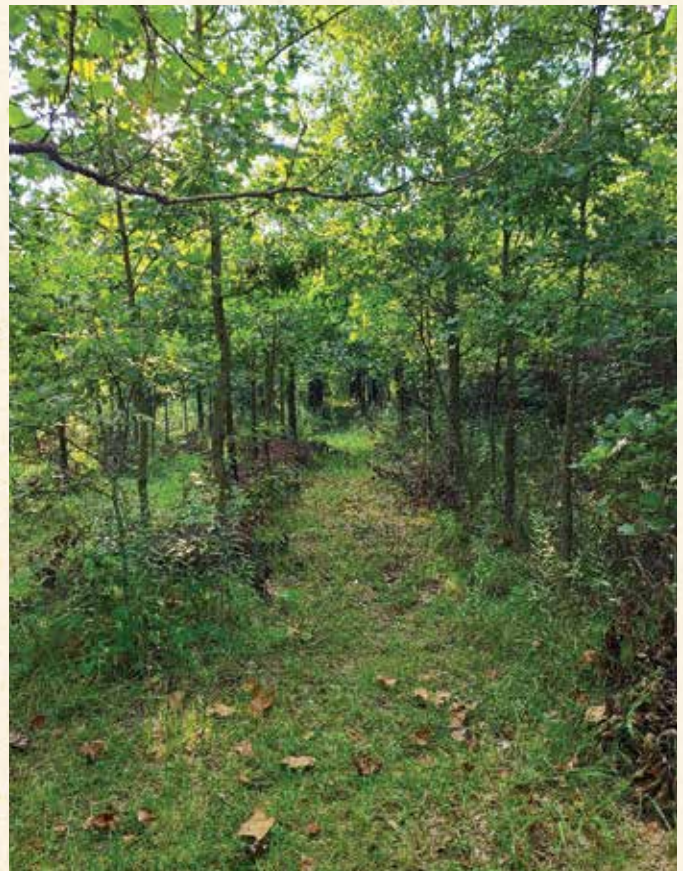
The Inn is located in Turkey Run State Park, 8102 Park Rd, Marshall. The park and inn website is <https://www.in.gov/dnr/state-parks/inns/turkey-run-inn-at-turkey-run-state-park/>.

October 31 Afternoon Tour: Allen and Peg Royer property

The Royer's have owned and managed this property of over 200 acres for over 30 years. They were recognized in 2023 as the state winner of the Charles Deam Forest Stewardship Award. They grow Christmas trees and manage their woodlands for wildlife habitat and timber production. The 227 acres has natural forest and tree plantings of different ages starting in the 1970s. Many of the tree plantings were designed to enhance wildlife habitat on their property with the variety of species planted. The native forest has had several harvests and timber stand improvements over the years to improve the economic and wildlife value of the property. Topics planned for the afternoon tour include:

- Wildlife tree plantings
- Regeneration methods after timber harvests
- Crop tree release in plantings
- Deer protection and seedling establishment

The Tour will include some walking on cleared trails and mowed grass. The property is located north of Greencastle at 2148 N CR 440 W Greencastle. The property is at the end of a dead-end road, so watch for field tour signs.



At the Royer property afternoon tour we will see tree plantings and discuss next management steps for these young stands.

www.ifwoa.org

Indiana Woodland Owner Conference 2025 Meeting Highlights

Friday October 31st Program Summary

Nelson-Stokes property tour (9:30-11:00 AM) Join the optional morning tour as we tour this 162-acre Purdue Forestry & Natural Resources Department owned property, used for research and demonstration. Purdue foresters will discuss regeneration of openings and management of a mature oak woods.

After the tour eat lunch on your own, or bring a sack lunch to the Putnam County fairgrounds Harris Hall (191 US 231, Greencastle). Drinks and dessert will be provided.

Allen & Peggy Royer property tour (1-3:15 PM) The afternoon forestry field tour will be at the Allen & Peggy Royer property (2148 N CR 440 W, Greencastle, watch for

signs). The landowners and local resource professionals will discuss various woodland management topics. See page 9 for details.

Alternate afternoon program: TBD. Other optional activities are to tour Shades State Park or Turkey Run State Park on your own.

Friday evening optional activities at Turkey Run Inn After the tours, enjoy dinner on your own. Attendees new to the meeting, to woodland ownership, or to IFWOA are invited to have dinner with board members to get acquainted before the meeting. Meet in the hotel lobby.

After dinner, meet up for a social, followed by a program by Mark Townsend of Hidden Hollow Honey about bees and beekeeping.

Saturday November 1st Program Summary

Pre-program optional activities: For those who have spent the night or live in the area we will have early optional activities before the 10 AM program start:

District discussions. Join board members and other "neighbors" from your district for networking and small group discussions where you can share your ideas and concerns about woodland management and ownership.

New landowner bootcamp. Join a table with a professional forester for an informal Q and A and discussion about woodland ownership.

Kid's program (10 AM – 4:15 PM) – Drop off your kids or grandkids (ages 5 & up) for some fun supervised activities. Lunch break is with parents. Kid's program must be reserved by October 24.

Silent auction: The silent auction tables will be open Saturday, closing approximately at the end of the afternoon business meeting. Please consider contributing an item to the auction.

Opening Keynote: Indiana DNR Division of Forestry update: John Seifert, state forester. John will update on the Classified Forest Program, district foresters, state tree nursery, and state forests.

Tree Silvics and Succession: A Biological Basis for Management: Lenny Farlee, Extension Forester, Purdue Forestry & Natural Resources (FNR). Understanding a tree's ecology and growth patterns and how they respond to the environment can help inform management decisions.

Using Phone Apps in Nature: Phil Woolery, Engagement Specialist, Purdue FNR. Phil will discuss some common phone apps that can assist you in identification and monitoring in the outdoors.

IFWOA and IFEF Initiatives Update: Leaders from Indiana Forestry Educational Foundation and IFWOA will share some ongoing and new initiatives for landowners and the public.

American Chestnut Restoration Efforts: Ben Finegan, President IN chapter The American Chestnut Foundation (TACF). Efforts have been underway for decades to restore the American Chestnut to the landscape after it was nearly made extinct by chestnut blight. Ben will discuss the current efforts and status of a national restoration campaign to revive this beautiful species.

NRCS & Farm Bill Programs Update: Daniel Shaver, Indiana NRCS forester. Dan will update us on the cost share programs and other landowner support available through the Natural Resources Conservation Service.

Today's Land Values & Fraud Risks: Rob Haubry, Haubry Forestry & Wildlife Consulting. Rob will discuss the steps for successful buying and selling tree farms, current and historical land values, and fraudulent activity that absentee landowners should stay alert for.

New Indiana Prescribed Fire Legislation: Michael Spalding, Southern Indiana Sentinel Landscape Program Coordinator. Mike will share details about new legislation that limits liability for prescribed fires and creates a training program for users of prescribed fire.

Final keynote: From Understanding to Action: Empowering Landowners and Sustaining Forests with Social Science: Zhao Ma, Professor, Purdue FNR. Dr. Ma will use examples from social science research to show how landowners think and act may be different from what natural resource professionals believe. Understanding landowners' thoughts and actions can help promote informed decisions that result in sustainable forest management and conservation.

Evening awards banquet and live auction to benefit IFEF Stay for the optional evening awards banquet as we recognize the Charles Deam Forest Stewardship Award finalists and John F. Datena Distinguished foresters. After the ceremony watch the entertaining live auction with proceeds benefiting the Indiana Forestry Educational Foundation.

2025 Indiana Woodland Owner Conference

October 31- November 1 • Turkey Run State Park, Marshall

Friday, October 31st

- 9:30 – 11:00AM **Nelson-Stokes property tour** with Purdue Forestry & Natural Resources. (7768 US-36, Greencastle)
- 11:00 – 12:45 Lunch on your own or bring a sack lunch to Putnam County Fairgrounds Harris Hall (191 US-231, Greencastle), drinks and desserts provided.
- 1:00 – 3:15 **Allen & Peggy Royer property tour** (2148 N County Rd 440 W, Greencastle)
- 2:00 – 3:30 Concurrent alternate tour TBD
- 4:00 – 6:30 Dinner on your own. New landowners/1st time guests meet in the lobby at 5:00 for optional “get acquainted” dinner with board members.
- 6:30 – 7:00 Optional social, Turkey Run Inn Lusk Room
- 7:00 – 8:00 The Sweet Benefits of Beekeeping: Mark Townsend, Hidden Hollow Honey

Saturday, November 1st

- 7:30 – 8:45 AM IFWOA Board of Directors meeting (guests welcome), Strauss Room
- 9:00 Registration desk and Silent Auction open
- 9:15 AM – 9:45 Optional networking and coffee- Choose from two options:
1-Meet at tables by district to meet others in your area for open discussion
2-New landowner bootcamp with a professional forester for Q&A and discussion
- 10:00 **Opening/Welcome**
- 10:10 – 10:55 **Keynote: Indiana DNR Division of Forestry update:** John Seifert, state forester
- 11:05 – 11:40 **Tree Silvics and Succession: A Biological Basis for Management:** Lenny Farlee, Extension Forester, Purdue FNR
- Using Phone Apps in Nature:** Phil Woolery, Engagement Specialist, Purdue FNR, Strauss room
- 11:50 – 12:20 **IFWOA and IFEF Initiatives Update**
- 12:20 – 1:25 Lunch
- 1:25 – 2:00 **American Chestnut Restoration Efforts:** Ben Finegan, IN chapter TACF
- NRCS & Farm Bill Programs Update:** Daniel Shaver, Indiana NRCS forester, Strauss room
- 2:10 – 2:45 **Today's Land Values & Fraud Risks-** Rob Haubry, Haubry Forestry & Wildlife Consulting
- New Indiana Prescribed Fire Legislation:** Michael Spalding, Southern Indiana Sentinel Landscape Program Coordinator, Strauss room
- 2:55 – 3:25 **IFWOA and IFEF business meeting and policy updates**
- 3:20 Silent auction closes
- 3:25 – 4:00 **Keynote: From Understanding to Action: Empowering Landowners and Sustaining Forests with Social Science:** Zhao Ma, Professor, Purdue FNR
- 4:00 – 4:15 Closing/Pick up silent auction items
- 4:45 – 5:15 Social time with cash bar, live auction items displayed
- 5:15 – 7:45 PM **IFWOA Awards Banquet and IFEF Live Auction**
- Sunday 10 AM Post meeting optional tour, Raoul Moore property, Crawfordsville (55 mins northeast of the park). Map link: <https://maps.app.goo.gl/m2i7qyUu2LANL1Hx5>. Call 765-230-6282 for questions.

Agenda may be subject to change. See www.ifwoa.org/resources/annual-woodland-owner-conference/ for updates.

Sponsored by the Indiana Forestry & Woodland Owners Association, Indiana Forestry Educational Foundation, Purdue University Forestry & Natural Resources Extension, and Indiana Tree Farm Committee with support from the Indiana Association of Consulting Foresters. This conference is funded in part by the Renewable Resources Extension Act (RREA).

Chainsaw Workshop for Woodland Owners

Saturday, October 25

8:00 AM-4 PM

Morgan Monroe State Forest Training Center

This workshop will have classroom plus outdoor demonstration of:

- personal protective equipment
- chainsaw safety features
- introduction to felling and TSI techniques

Registration cost \$25, Register here:

<https://ifwoachainsaw25.eventbrite.com>

Limited to 14 participants.

Participants should dress to be outdoors and bring a sack lunch, a chainsaw, and PPE if you have it. Coffee and drinks will be provided. Ending time is approximate. Instruction by Joe Glenn, certified trainer. See more info at www.ifwoa.org/events. Register at ifwoa1@gmail.com or (765) 409-3272.

This workshop is hosted by IFWOA with financial support from Indiana Tree Farm Committee and Indiana Forestry Educational Foundation in coordination with the Indiana Division of Forestry.



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Program Overview: The Southern Indiana Sentinel Landscape (SISL) Regional Conservation Partnership Program

This is a new program available to landowners within the Landscape to aid in implementing restoration activities and conservation practices on both forest lands and croplands. This program utilizes Natural Resource Conservation Service (NRCS) practices and has an application process much like EQIP or CSP. This program is only available through generous partnerships between the Department of Defense, USDA and the partners with the Southern Indiana Sentinel Landscape.

The Southern Indiana Sentinel Landscape (SISL) is a collaboration of diverse partners who are advancing the pace and scale of conservation throughout a three and a half million-acre swath of south-central Indiana to protect military missions on four critical installations and ranges. These cornerstones of the Southern Indiana Sentinel Landscape are Naval Support Activity Crane, Lake Glendora Test Facility, Atterbury-Muscatatuck Training Center, and Indiana Air Range Complex. For a complete list of SISL partners, please visit: <https://sentinellandscapes.org/landscapes/southern-indiana/>.

Forest management practices are focused on oak ecosystem restoration. Oak ecosystems are some of the most ecological and economically important ecosystems in Southern Indiana. A new practice, FSI 666- Thinning for Wildlife & Forest Health, is the focal practice of this RCPP and landowners must meet the eligibility requirements to utilize the practice. The practice must be utilized on the property to receive funding via the RCPP. Refer to the Forestry Technical Note #16 for more details. If eligible, landowners can use several other NRCS practices that aid in oak ecosystem restoration on their properties.

Practice List for Forest Management

(Notable practices listed, not an exhaustive list of all practices available):

- Forest Stand Improvement (666) Thinning for Wildlife and Forest Health *REQUIRED PRACTICE*
- Forest Stand Improvement (666) Medium & Heavy
- Brush Management (314) light, medium, heavy, very heavy
- Prescribed Burning (338)
- Firebreak (394)

Cropland management practices are focused on implementing conservation practices on farms within SISL. These practices will aid farmers in preventing soil erosion and improve nutrient management. *Cropland applications do not require forestry practices to be included*



Practice List for Cropland Management

- Soil Health Testing (216)
- Residue and Tillage Management, No Till (329)
- Cover Crop (340)
- Nutrient Management (590)
- Pest Management Conservation System (595)

For more information on RCPP land management opportunities, please reach out to the RCPP Coordinator for the Southern Indiana Sentinel Landscape, Ben Taylor (btaylor@sentinellandscapes.org), or your local NRCS office. Please note, some counties only have portions within the Sentinel Landscape. To check out whether your property is included, go to <https://www.sisl.org/>.

The SISL partnership, coordinated by the Conservation Law Center, includes federal agencies, state and local governments, and nongovernmental organizations who work with private and public landowners to advance sustainable land management practices for natural resource, agricultural, and military interests. This vast landscape contains 470,000 acres of protected land including State Parks, Recreation Areas, State Forests, Fish and Wildlife Areas, and Nature Preserves managed by the Department of Natural Resources; National Forest; National Wildlife Refuges; Land Trust properties; local parks; military installations and ranges; and private lands with conservation easements. SISL partners work to preserve and protect military missions, support sustainable farming and forestry, restore and sustain ecosystems, ensure thriving human communities, and improve climate resiliency.

What Can You Tell Me About the Dunstan Chestnut?

By Sara Fern Fitzsimmons and Dr. Bill Lord

This article was originally printed in the TACF journal, Winter 2016, Iss 1 Vol 30, pgs 21-23. https://tacf.org/wp-content/uploads/2017/03/Chestnut_Winter2016_Ir.pdf. It is being reprinted with permission of the author and TACF.

The most common question I get as an employee with The American Chestnut Foundation is, "Can I have some chestnut trees?" And my response is invariably, "What kind of chestnut tree?"

You may all be snickering, knowing that pretty much anyone would want an American chestnut, but that isn't always the case. We also have to be careful to make the distinction between a "pure" American chestnut, collected from properly identified wild specimens and/or their progeny, and the trees that we are creating with our breeding program for disease-resistance.

There are multiple goals for landowners when they decide to plant chestnut trees. Some landowners simply want to feed wildlife. Some want to feed themselves or others with a commercial crop of chestnuts. Others want a timber tree to grow in their woodlots. And some would prefer that those goals be fulfilled by a native species, while others are indifferent. Depending on what an individual's goals are, one or more type of chestnut might be suitable.

Depending on who you talk to, there are some seven to 10 species of chestnut in the genus *Castanea*.¹ "The Plant List" gives 179 names given to *Castanea* species throughout the years.² Most of these are synonyms; for example, *Castanea dentata* has been assigned up to eight different names, such as *C. americana*. All of these species can form combinations to make viable progeny, although each amalgamation interbreeds with varying levels of success. This makes for a staggering number potential combinations, especially when one starts making backcrosses, intercrosses, and any number of crosses between, among, and within those species and crosses.

Dr. Sandra Anagnostakis of the Connecticut Agricultural Experiment Station (CAES) keeps a running catalogue of named chestnut cultivars,³ a list that currently has 1,327 entries.⁴ While people have been breeding chestnuts for centuries, Europe claims the most named cultivars (701) with Italy being the top (361). Some variation of "marrone," the Italian word for "brown" and "chestnut," appears 135 times in these cultivar names.

In the US, there have been several prolific chestnut breeders. Some notable names on that list are Luther Burbank, Arthur Graves,⁴ and R.T. Dunstan. While any of these names



might ring a bell for our readers, if the amount of calls I get is any indication, I suspect that the name Dunstan is of particular interest.

Dr. Robert Dunstan was a member of the Northern Nut Growers Association (NNGA) who resided in Greensboro, NC. Another NNGA member, James Carpenter, sent Dunstan some scion wood from an American chestnut in Salem, OH. Because the Salem tree had not yet contracted the blight while nearby American chestnuts had, Carpenter believed it to have resistance to blight.

Dunstan took the scion from the Carpenter American chestnut and top-grafted it to chestnut rootstock. Around that tree, Dunstan had planted the name Chinese chestnut cultivars Meiling, Nanking, and Kuling.⁵ These trees were allowed to open-pollinate and Dunstan reportedly took F1 progeny from the Carpenter tree, presumably after it was pollinated by one or more of those three *Castanea mollissima* cultivars.

These F1 seeds were planted and grown to flowering. At this point, the trees were backcrossed to all four trees named above. Thirty of the resultant seedlings were taken by Dunstan to his retirement farm in Florida. These trees showed a mix of American and Chinese traits. Because the F1 trees were produced via open-pollination, the lineage of the offspring cannot be given as a percentage of its parents. Six of the resulting BC1 seedlings were further propagated and named.

In the 1980s, Bob Wallace, Dunstan's grandson, commenced planting a 500 tree chestnut orchard on Dunstan farm in Alachua, Florida. The four main BC1 cultivars, Revival, Willamette, Carolina, and Carpenter, were to create the orchard. Revival, Willamette, and Carolina were patented and received the first patents ever given to chestnut tree varieties, along with Heritage. Seeds from these trees were germinated

and planted, and 220 of these seedlings were grafted to the named cultivars.

At Chestnut Hill Nursery, Wallace has made selections based upon large nut size, good nut production and growth habits, and most importantly, blight-resistance. He did not select trees to propagate based upon American timber tree traits. His goal was to develop a U.S. chestnut orchard industry, with emphasis on producing in abundance nut of large size and good taste.

The orchard produces seed by open pollination, producing seedlings that are sold to the public. Bob's main market is orchardists, individuals who want a chestnut tree on their property and as a bountiful food source in wildlife plantings. Wallace believes his 500 tree orchard is reaching maturity with the tallest seedling trees reaching a height of 60-feet. The grafted trees are shorter, standing at 25 to 30-feet. He harvests about 5,000-7,500 pounds of nuts per year from this planting.

There has been confusion before regarding whether or not a "Dunstan" chestnut is an American chestnut, going back to the very early years of TACF. A 1988 advertisement for the Dunstan chestnut as "the return of the American chestnut" prompted then TACF president Phil Rutter to write to Chestnut Hill Farms for clarification. The resulting letter from Bob Wallace was published in the Journal of TACF,⁶ and repeats much of the same history presented here.

So, is the Dunstan hybrid an American chestnut? No. If performance of the parent trees is good indication, these trees will not be able to compete with the native trees in our eastern US woodlands. That said, Dunstan trees are great for those wanting nut production for wildlife. In addition, they are commercially available, including at many "big box" stores.

Note the Dunstan trees sold are seedlings. If you want to get a tree that will look exactly like a parent tree and/or be exactly a certain cultivar, you need to get a tree that has been vegetatively-propagated. For chestnuts, that usually means a grafted tree. Most trees sold or otherwise distributed in the US, however, are seedling trees. This means that the tree will exhibit characteristics of both parents. Even if the seed was collected from a known and certified cultivar, the resulting tree is not that cultivar.

The American Chestnut Foundation is one of the best places to go for American chestnut seedlings and the best place for a potentially blight-resistant American chestnut. For more information one where to purchase chestnut trees, including some grafted cultivars, Dr. Anagnostakis curates a list of suppliers accessible at: <https://portal.ct.gov/caes/fact-sheets/plant-pathology/sources-of-chestnut-trees>.

Footnotes

- 1 Anagnostakis S. 2009. Identification of Chestnut Trees. https://portal.ct.gov/-/media/caes/documents/publications/fact_sheets/plant_pathology_and_ecology/identificationofchestnuttreespdf.pdf.
- 2 The Plant List. Published on the Internet; <https://wfo.plantlist.org/>
- 3 The International Society for Horticulture Science (ISHS) maintains a database of contacts, by genus, of those who curate cultivar registries: <https://www.ishs.org/chestnuts>.
- 4 The "Graves" tree, a named BC1 tree residing at CAES, which has been used for one of TACF's major sources of resistance.
- 5 Our readers might be interested to know that each of these cultivars have been introduced as sources of resistance in TACF's breeding program, either and Meadowview and/or through work in the Chapters.
- 6 The Dunstan Hybrid Chestnuts. 1989. Journal of The American Chestnut Foundation. 3(1): 38-39. https://tacf.org/wp-content/uploads/2016/09/journ_vol3-1.pdf.

Elm Zigzag Sawfly: New Pest to Elm

This invasive insect feeds on the leaves of elm trees. It gets its name from the zigzag feeding pattern of the larvae. It is native to east Asia and has spread to Europe and North America. It was first found in Virginia in 2021 and has spread to over ten states since then but has not yet been officially identified in Indiana.

The adults look like a small black wasp that is about ¼ of an inch long. The adults are all females and produce fertile eggs without the need of a male. The larvae are green with a dark line on their head and a black t-shaped pattern on their legs. The larvae will feed for 10-18 days before pupating. There can be 4-6 generations per year.

These insects will only feed on elm trees. They will attack both native and non-native elm species and have been observed causing damage in both urban and native forested areas. The damage caused by this insect will vary depending on population size. It can be minor cosmetic damage to

defoliation of the tree. Healthy trees can bounce back from defoliation but multiple defoliations can weaken trees predisposing them to other insects and diseases.

If you suspect that you have this insect you can report it to the Indiana DNR by calling 1-866-NOEXOTIC.



Photo Credit: Tom Macy, Ohio DNR Division of Forestry, Bugwood.org

Grasslands for Gamebirds and Songbirds Program

Would you like more quail on your property? Do you want to hear the calls of songbirds in your area? Are you concerned about water quality or pollinators? If so, consider joining the Grasslands for Gamebirds and Songbirds Initiative (GGS). The program provides technical and financial assistance to improve or develop grassland and pollinator-friendly habitats in selected regions in the state.

Grasslands are declining across Indiana and throughout the nation. The 2015 Indiana State Wildlife Action Plan identified the percentage of grassland habitat loss as the largest habitat decline in Indiana. Many grassland bird populations are already showing significant decline. The loss of pollinating insects and the plants they depend on are also a growing concern addressed by this program.

Grasslands for Gamebirds & Songbirds (GGS) program biologists can visit your property in these eligible areas and provide technical assistance about how to better manage your property for grassland and pollinator species.

Eligible GGS areas

GGS targets four key areas of the state known as focal regions. These regions have been selected based on such factors as existing quail or ring-necked pheasant habitat and potential for habitat establishment and connectivity throughout a region. Data and guidance from the National Bobwhite Conservation Initiative and the National Wild Pheasant Conservation Plan was also

used to identify focal regions, which are listed below.

- **Northwest** – Newton, Jasper, Starke, Pulaski, White, Benton, Warren.
- **Northeast** – LaGrange, Noble, Steuben, Dekalb, Kosciusko, Whitley, Blackford, Jay.
- **Southeast** – Jackson, Jennings, Ripley, Dearborn, Jefferson, Scott, Washington, Clark, Floyd, Harrison, Lawrence, Orange.
- **Southwest** – Putnam, Clay, Sullivan, Greene, Knox, Daviess, Gibson, Pike, Warrick, Spencer, Vermillion, Parke, Montgomery.

Whether your interest is helping pollinators, wildlife viewing, gamebird hunting, or conservation-minded land management, GGS can benefit you as a landowner. Grassland Biologists can create a customized plan to help you manage your property to maximize benefits to wildlife and the environment.

Learn more at <https://www.in.gov/dnr/fish-and-wildlife/hunting-and-trapping/grasslands-for-gamebirds-and-songbirds-initiative/> or contact the Indiana DNR grassland biologists:

Nate Yazel, Southeast Grassland Biologist, 812-718-4117, nyazel@dnr.IN.gov

Adam Delucenay, North Grassland Biologist, 260-788-0336, adelucenay@dnr.IN.gov

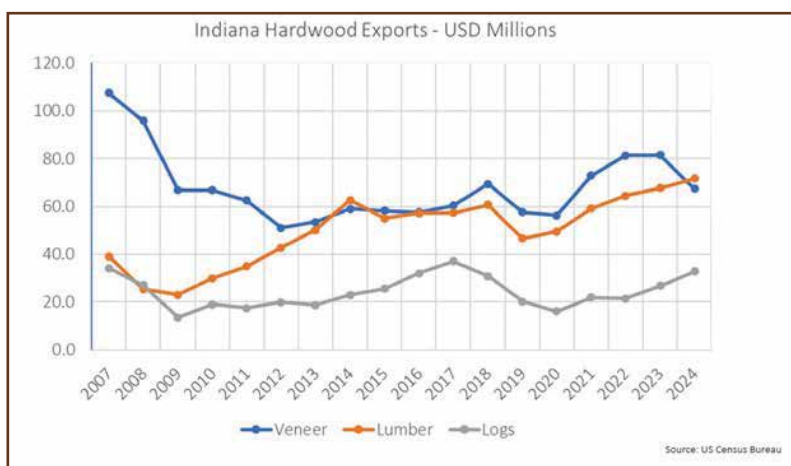
This information from the Indiana DNR website, accessed August 2025.

Forestry Economic Contributions in Indiana and the US

- 3.4 million people employed US/83,937 in Indiana
- \$254 billion in labor income/\$5.6 million in Indiana
- \$427.3 billion in GDP/\$8.7 million in Indiana

Indiana ranks 13th out of the 50 U.S. states and the District of Columbia, with forestry contributing 2.1% to its total GDP. With 4.8 million acres of total forest area, Indiana ranks 36th in the US in forest area.

From 2023 US Forestry Economic Contribution by State, Arkansas Center for Forest Business. <https://www.uamont.edu/academics/CFANR/forestbusiness/USForestryEconomicContributionbyState20230109.pdf>.



What's in a Name?

By Allen Pursell, Sam Shine Foundation, Inc.

"Every year, in the course of the months of March or April, the inhabitants set fire to the grass, which at that time is dried up... The custom of burning the meadows was formerly practiced by the natives, who came in this part of the country to hunt." – Francois Michaux, botanist and explorer, 1805

These "meadows" were the barrens of central Kentucky which stretched for many miles in all directions. They were not an insignificant feature of the landscape. From them came the name of Barren County and Barren River. The Big Barren, as it was and is still often called, extended its reach north across the Ohio River into Indiana, and south into Tennessee. Though the origin of the name has been long forgotten by those who live in Indiana now, the village of Central Barren is a marker of what the landscape once was.

Fire and the barrens were inseparable. So it was too with the woodlands. And many of the oak-laden forests. These open or semi-open landscapes were the home of bison, elk, and before them Pleistocene megafauna who established the many "buffalo traces" stretching between salt licks for hundreds of miles.

In November 1819 a traveler across the Buffalo Trace of southern Indiana remarked in his journal, "The season, called the Indian summer, which here commences in October, by a dark blue hazy atmosphere, is caused by millions of acres, for thousands of miles round, being in a wide-spreading, flaming, blazing, smoking fire, rising up through wood and prairie, ... filling the whole horizon with yellow, palpable, tangible smoke, ashes, and vapour, which affect the eyes of man and beast, and obscure the sun, moon, and stars, for many days ..."

He could not have known the true scale and therefore may have been exaggerating somewhat, but he clearly saw widespread fire, and also an abundance of quail, a bird well-known to be associated with a fire-shaped landscape. "Partridges, or quails, are here so tame, that, at noon-day, a man may kill them by throwing a stick into the covey; or, by staking a large net, coveys are drawn into it with great ease" according to his report.

Two hundred years later the call of the quail is not common across much of Indiana. And when asked, most adults raised in rural areas will also say they no longer often hear the nighttime song of the eastern whip-poor-will as they did in decades past. Perhaps there is a link.

The densification of hardwood forests and the loss of sparse woodland structure that was so common at the time of early European settlement cannot be ignored, though it often is. To those who see the slow but seemingly inevitable decline of such birds, the need for fire and thinning of stands is becoming ever more clear.



Connecting the names of places, and the loss of wildlife to the absence of fire is a powerful argument for many people, even as they acknowledge their fear of using it. But the momentum generated by this science-based, yet emotion-generating connection is a cornerstone of reasoning on which we can build.

From the Newsletter of the Oak Woodlands and Forests Fire Consortium, Volume 13, Issue 3 July, 2024, <https://oakfirescience.com/>. The Oak Woodlands & Forests Fire Consortium is an exchange for fire science information. Funded by the Joint Fire Science Program, their goal is to increase the availability and consideration of credible fire science information to those making land management decisions.

US Forestry Fast Facts

- Forests cover 663.7 million acres of land (29.3%) of the 50 states and the District of Columbia.
- The area of forest land has been relatively constant over the last century.
- Trees in the forests of the United States are getting larger.
- Each year, U.S. forests grow 58% more wood than is harvested.
- U.S. forests currently store 68 billion tons of CO₂e— more than 14 years of all CO₂ emissions in the U.S.
- Every year, U.S. forests accumulate 277 million tons of CO₂e— enough to sequester the emissions of 20% of all automobiles in the U.S.
- Annually, U.S. industrial roundwood (log) production can fill more than 16 million log trucks which could form a line long enough to reach to the moon and back more than 8 times.
- The United States produces 19% of the industrial wood used worldwide and consumes 18% of industrial wood material.

From 2023 US Forestry Economic Contribution by State, Arkansas Center for Forest Business.

<https://www.uamont.edu/academics/CFANR/forestbusiness/USForestryEconomicContributionbyState20230109.pdf>

Research on Indiana's Paoli Experimental Forest

The 632-acre (256-hectare) Paoli Experimental Forest was established in 1963 on the Wayne-Hoosier (now the Hoosier) National Forest.

The primary mission of the Paoli Experimental Forest is to conduct research on mixed hardwood species to demonstrate how to increase the number and quality of high-value species on good sites. Research includes developing prescriptions for regenerating oaks in moderately moist forests of the central hardwood region. The research has added to the knowledge of how oak regeneration dynamics vary by ecoregion in the eastern United States. In 2023, a tornado impacted the Paoli Experimental Forest and the surrounding area. Presently, research on the Paoli Experimental Forest examines silvicultural strategies for managing mature oak forests damaged by severe wind.

Location:

The Paoli Experimental Forest is located in the Tell City Ranger District of the Hoosier National Forest in south-central Indiana, Lat. 38°19'N, long. 86°18'W

Research—past and present: Past research on the Paoli Experimental Forest investigated:

- white and northern red oak planting
- effects of nursery undercutting and shoot pruning on growth of outplanted oaks
- prescribed burning to stimulate both planted and natural stands of regenerated oak trees and control competition to the oak from yellow poplar, aspen, and maple

Research on oak regeneration conducted on the Paoli has been used to develop prescriptions for regenerating oak that were published in the scientific literature, conference proceedings, and research station papers. This research has added to knowledge of how oak regeneration dynamics vary by ecoregion in the Eastern United States.

Present research on the Paoli Experimental Forest investigates:

- Structural and compositional change following tornado damage and the influence of salvage harvesting
- Long-term influence of wind and salvage harvest on tree health
- Silvicultural strategies to improve long-term oak sustainability through timber stand improvement, underplanting, and release
- Interactive influence of white-tailed deer, salvage harvesting, and underplanting and natural and artificial regeneration and ground flora
- Native seeding to resist plant invasion on skid trails, forest roads, and log landings

More information, such as current collaborators and partners, and research publications can be found at: <https://research.fs.usda.gov/nrs/forestsandranges/locations/paoli>

The Paoli Experimental Forest is administered by: USDA Forest Service, Northern Research Station 202 Anheuser-Busch Natural Resources Building University of Missouri, Columbia, MO 65211.

Seven U.S. Animal Species That Are Invasive In Other Countries

From the Cool Green Science blog of The Nature Conservancy, by Justine E. Hausheer

An article written by The Nature Conservancy, lists seven U.S. native animals that are invasive in other countries, similar to how Asian carp or privet have invaded many areas in the U.S.

These seven invaders are the raccoon, largemouth bass, red-eared slider, mink, American bullfrog, eastern grey squirrel, and rosy wolfsnail. These animals have ended up in other countries for many reasons- from people releasing pets to importing animals for their economic value. Without local predators or diseases, these species have continued to multiply and cause ecological harm. One example of these pests is the squirrel.

Squirrels Go From Garden Accessories to Invasive Species (Canada, Europe, South America, & (formerly) Australia)

That's right — those cute little squirrels gamboling about your yard are an invasive species. It all started in 1876, when a Victorian banker returned from a visit to America with two eastern grey squirrels and decided to release them into his garden. Unfortunately, this started a new trend for exotic squirrels as garden accessories, and others followed suit.

The species was later introduced to continental Europe (both accidentally and deliberately) several times throughout the 1900s.

Unfortunately, the American invaders are threatening native red squirrels by competing with them for food and habitat. Grey squirrels also spread the deadly squirrelpox virus, which causes lesions on the face, feet, and genitals. While grey squirrels often survive the disease, their European counterparts usually die within a week. And as more red squirrels die from disease, more habitat and food is available for the invaders.

Grey squirrels were also introduced to Vancouver Island, South Africa, and Australia — though Australia managed to extirpate the species in the 1970s.

Grey squirrels are also harming native plants. Squirrels weaken native trees by stripping bark from their branches, making them more susceptible to disease. In the UK, grey squirrels cause an estimate £14 million (\$18 million US) worth of damage to the forestry industry each year.

To read about the rest of these worldwide pests listed above, see <https://blog.nature.org/2019/06/03/seven-us-species-invading-other-countries/>.

Registration

2025 Indiana Woodland Owner Conference • October 31-November 1

Please register **by October 20th**, late registrations will be accepted. Register online at <http://2025ifwoa.eventbrite.com> using your credit card or by sending this form and a check payable to "IFWOA" to the address below.

Circle your registration selection

Member

Nonmember

Full registration: Includes Friday field tours/program, Saturday program, lunch, breaks, banquet.

Individual rate	\$ 100/person	\$ 90/person*
Family rate (2 adults & up to 2 children)	\$ 190/family	\$ 175/family*

OR choose a la carte registration:

Friday tour and/or evening events only:

(Includes AM and PM field tours, evening program)

Individual rate	\$ 15/person	\$ 15/person
Family rate (2 adults and up to 2 children)	\$ 25/family	\$ 25/family

Saturday Day Program only:

Includes full program, lunch, and breaks (excludes the banquet)

Individual rate	\$ 60/person	\$ 50/person*
Family rate (2 adults and up to 2 children)	\$ 100/family	\$ 90/family*

Banquet only:

Individual rate (children under 21 \$20 each)	\$ 55/person	\$ 45/person
Family rate (2 adults and up to 2 children)	\$ 100/family	\$ 80/family

Donation to support the meeting

\$ _____

Total enclosed

\$ _____

* Nonmembers receive a one-year membership

Name of registrant(s) _____

Names of other attendee(s): _____

City/State _____

Phone _____ E-mail _____

____ Enter number attending Friday morning Nelson-Stokes forest tour

____ Enter number attending Friday afternoon Royer forest property tour

____ Enter number attending Friday evening program

____ Enter number attending Saturday indoor day program

____ Enter number attending Saturday evening banquet

- ☐ Note if you would like childcare on Saturday 10 am-4 pm (you must request in advance by October 24), list ages _____
- ☐ Note if this is your first IFWOA annual meeting
- ☐ Note if you have dietary or physical accommodation needs and contact us to confirm.

Mail registrations to: IFWOA, 1007 North 725 West, West Lafayette, IN 47906-9431

Questions? Call 765-496-5013, email ifwoa1@gmail.com or see www.ifwoa.org.



**Indiana Forestry and Woodland
Owners Association, Inc.**
1007 North 725 West
West Lafayette, Indiana 47906
Return Service Requested

www.ifwoa.org



Indiana Forestry & Woodland Owners Association Membership Application

Check your membership category:

- _____ Regular – One year (landowner) \$50.00
 _____ Associate – One year (interested in forest stewardship) \$50.00
 _____ Regular – Three year \$135.00
 _____ Life member \$700.00

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____ E-Mail _____

Woodland County(ies) _____

Referred by _____

Enclose your check payable to IFWOA, and mail to:

IFWOA, 1007 North 725 West, West Lafayette, Indiana 47906-9431

OR make an online payment with your credit card at <http://www.ifwoa.org/pay-dues-now/>.

Questions? Contact the IFWOA office at 765-496-5013 or email to ifwoa1@gmail.com.