

# The Woodland Steward

Promoting the Wise Use of Indiana's Forest Resources

## Early Years of Indiana's Forestry Movement - John P. Brown and The First Indiana Forestry Association – Part 1

By Bill Hoover and Robert Mayer

Very few leaders in Indiana at the end of the 19th Century were concerned about the impact of “exploitative” harvesting of timber. A national forestry movement had been ongoing since at least 1875 when the American Forestry Association was established. The first American Forest Congress was held in 1882 in Cincinnati, Ohio. Charles Schenck, Director of Biltmore Forest School published in 1905 his Lectures on Forest Policy. The Second Part summarized Forestry Conditions in the United States. His review of the forestry movement in Indiana was “recent, but energetic propaganda, influenced by John P. Brown (of Connersville), State forest association.”

The movement developed slowly in Indiana because of the economic importance of clearing forest land. The first history of Indiana (Haymond, S. A. 1879. *An Illustrated History of the State of Indiana*, 3rd ed., S.L. Marrow & Co., Indianapolis, 798 p.) reported 5 million acres of improved farmland in 1850, 8.2 million in 1860, and 10.1 in 1870. Farm woodland in 1870 was estimated at 7.2 million acres. (p. 319) Neither the significance of Indiana's forest resource, nor woodland conversion are discussed. Forests and forest products are discussed in detail in a 1915 history. (Cottman, George S. 1915. *Centennial History and Handbook of Indiana*. Max R. Hyman, Publisher. 202 p.) My focus in this article is the role of John Pickney Brown in the early forestry movement. Arguably, he initiated it in Indiana.

In his time John Pickney Brown (Brown) was nationally recognized as a leading advocate for forest conservation in general and tree planting in particular. The clear-cut timberland he observed in his travels throughout the United States and demand for railroad ties and timbers convinced him that a timber famine was eminent. His solution was tree planting, using catalpa where feasible. Advocacy of catalpa had been on-going for many years before Brown's advocacy.

His network of contacts and associates included many of the major advocates of forest conservation. At the time of his death in 1902, J. Sterling Morton was President of the International Society of Arboriculture (ISA) founded by Brown, replacing the short-lived Indiana Forestry Association (IFA). Morton founded Arbor Day in 1872 in Nebraska and was US Secretary of Agriculture from 1893 to 1897. Other advocates included Will Cumbach, Indiana Representative to 34 Congress, 1855 to 1857, and Lt. Governor 1868. Brown knew President Harrison well enough to get his support, and with Secretary of Agriculture, John



1842-1915 John P. Brown  
Source: Brown, John P. 1906. *Practical Arboriculture*, (p. 456) The Henneberry Press, Chicago, 459 p.

*Continued on page 3*

### IN THIS ISSUE

- Early Years of Indiana's Forestry Movement  
1
- The Birders' Dozen Profile 5: Yellow-breasted Chat  
4
- Conservation Stewardship Program  
6
- Coyotes 'Make a Go of It' in Indiana  
8
- Foresters Honored with Statewide Award  
12
- 2021 Outdoor Laboratory of the Year  
13
- Woodland Owners Honored for their Stewardship  
14
- Ask the Steward  
15
- SWCD  
16

visit us online at  
[www.inwoodlands.org](http://www.inwoodlands.org)

This publication is funded in part by the Renewable Resources Extension Act (RREA) and made possible through a grant from the USDA Forest Service

*The Woodland Steward Institute is an equal opportunity service provider*

# Calendar of Events

## March 8

Southern Indiana Conservation Happenings  
9:00 am - 3:00 pm  
Muscatatuck National Wildlife Refuge, Jackson County

## March 8 - April 26

Forest Mgmt for the Private Woodland Owner  
6 pm - 9 pm  
Morgan County  
Learn more: <https://bit.ly/3XBoi5a>

## March 8

Observing Seasonal Change: IFWOA webinar series  
7:00 pm - 8:00 pm  
Register: <https://INPhenologyMar8.eventbrite.com>

## March 9 through April 20

Forest Mgmt for the Private Woodland Owner  
Virtual Workshop  
6:30 pm - 8:30 pm Three nights  
Learn more: <https://bit.ly/3wt5HMz>

## March 18

Ohio River Valley Woodland and Wildlife Workshop  
8:00 am - 5:00 pm  
Loveland, OH  
Learn more: <https://tristatewoods.ca.uky.edu/>

## April 8

Wildflower Hike  
10:30 am - 2:00 pm  
Feldun Purdue Ag Center, Lawrence County  
Register at (812) 279-8117, ext 3.

## April 12

Magnificent Trees of Indiana: IFWOA webinar series  
7:00 pm - 8:00 pm  
Register: <https://intreesapr12.eventbrite.com/>

## April 18

Breakfast with a Forester  
8:00 am - 9:30 am  
Dutch Café, Peru, Cass County  
Event information:  
See all forestry and wildlife events for woodland owners at [www.ifwoa.org/events](http://www.ifwoa.org/events).  
Upcoming local invasive species management events in your area: See <https://www.entm.purdue.edu/iisc/> for times, locations, contact info.

Did you know the **Woodland Steward** is online? View past issues and articles and save some paper!

Sign up for the email version at:

[www.inwoodlands.org](http://www.inwoodlands.org)



The WSI solicits and accepts donations from private individuals, agencies and organizations with a kindred spirit, and businesses operating within the forest management and forest products industry. Advertisements offered to the WSI for printing within the "Steward" will be reviewed by the board of directors and approved or rejected based upon available space, content and their alignment with the mission of the WSI. The WSI does not endorse any of our advertising sponsors.

## BUYER OF DOMESTIC AND EXPORT GRADE STANDING TIMBER & LOGS

- Timber Management
- Professional Harvesting
- State Licensed & Bonded
- Fully Insured



BRENT L. DANIELS  
Phone: 317-834-0128 1061 Overpeck Rd.  
Cell: 317-753-0458 Mooresville, IN 46158  
"I won't treat you like family  
I'll pay you first and do what I say."

**RATHERT'S**  
FORESTRY SERVICE

BRAD MEAGHER, FORESTER

812-889-2857 • Mobile: 812-595-1384  
e-mail: bmeagher13@hotmail.com

The Woodland Steward Newsletter is published by the Woodland Steward Institute, Inc.

Send inquires or donations to:  
Woodland Steward Newsletter  
P.O. Box 490, Nashville, IN 47448  
or [www.inwoodlands.org](http://www.inwoodlands.org)

Woodland Steward President  
Dan McGuckin  
[danmcguckin@yahoo.com](mailto:danmcguckin@yahoo.com)

Woodland Steward Editorial Board Chairperson  
Brian MacGowan  
[macgowan@purdue.edu](mailto:macgowan@purdue.edu)

The opinions expressed by the authors do not necessarily reflect those of the Woodland Steward Institute. The objectives of the newsletter are to provide general and technical natural resource information to woodland owners of Indiana, improve information distribution and build support for responsible forest resource management.

## Member Organizations Indiana Woodland Steward Institute



Michael Denman CF, ACF  
South Bend, Indiana  
(574)-292-9217

[mdenman@rootedinforestry.com](mailto:mdenman@rootedinforestry.com)  
Andrew Suseland ACF  
Plymouth, Indiana  
(574)-952-8030  
[ajsuseland@rootedinforestry.com](mailto:ajsuseland@rootedinforestry.com)

<https://www.rootedinforestry.com>





## Early Years of Indiana's Forestry Movement Continued from page 1

W. Noble, to obtain a position within the US Department of Agriculture, Bureau of Forestry. In 1890 Brown was employed in the Department of the Interior at Washington, while John W. Noble was Secretary of the Interior. Indiana native, Benjamin Harrison was U. S. President at the time. The President was an advocate for forestry, creating the first national forest reserves, later to become National Forests. Brown's major benefactor was William J. Palmer, railroad tycoon and founder of the City of Colorado Springs, Colorado. Palmer also served as ISA President.

Brown is essentially lost to history because he's not viewed as having had a significant impact in Indiana. Although he established IFA, followed by ISA; both were short lived. Additionally, he lived outside Indiana for many years and traveled extensively. Closing IFA and starting ISA caused hard feelings among Indiana colleagues. The seminal Indiana Forest Classification Act (I.C. 6-1, 1-6) passed in 1921, well after Brown's death, was a revision of an earlier act credited to IFA, i.e. An Act for the Encouragement of Forestry (S.L. Ch 256, p. 570), 1899. Its provisions were too cumbersome to be effective. It was repealed on February 27, 1905 (S.L. ch 49, sec 3, p. 64)<sup>1</sup>, it was the first act in the nation providing a fixed assessment for forest land. It required County Auditors to conduct inspections of land to be enrolled to determine the number of trees and their health. He and other IFA leaders also played a leading role in passing the act establishing the Indiana Board of Forestry, of which he was expected to be secretary.

John Pinkney<sup>2</sup> Brown was born January 19, 1842 in Rising Sun, Indiana, an early settlement on the Ohio River at the Ohio border. He married Mary Ellen Stevens (1848-1928) in Baldwin, KS on March 18, 1868. They had three sons and seven daughters. Daughter Mary E. Brown was a supporter of his forestry campaign. She served as a Christian medical missionary in Korea, explaining Brown's interest in this country and the many photos from Korea included in "Arbiculture."<sup>3</sup> A great grand-daughter, Sherry H. Olson, authored *The Depletion Myth: A History of Railroad Use of Timber*. In her acknowledgement she described Brown as "A peculiar responsibility must be attributed to my great grandfather, John Pickney Brown, the 'Johnny Catalpa

Seed' of the railroads, and author and publisher of *Practical Arbiculture* (Connersville, IN 1906)."

The Indianapolis Star published a long article about him that included a description of his personality: "The personality of Mr. Brown' kindly and helpful is known throughout the length and breadth of the middle West. No surgeon hurrying to the bedside of a patient has greater anxiety than possesses Mr. Brown when hastening to examine a sick forest or to the first aid of a distressed tree planter."<sup>4</sup>

James H. Bowditch, Chairman, Massachusetts Forestry Association, in an August 6, 1902 letter to the editor of "Arbiculture" praised Brown:

"Mr. Brown's name is a common one, and he has the good gift of seeing and handling common things in a masterly way. Practical, businesslike, tireless; one day perhaps in California, next week in Boston. Distance seems to lend enhancement to the view, and his far-reaching grasp of the situation is interesting and inspiring. Presidents of great railway systems employ him as an expert on growth and encourage growth of tie timber. Mine owners of the West accept his forestry advice. Their acceptance means they see a business end to his advice. ISA is made up almost wholly of men and women who believe that Mr. Brown can and will manage their public and private forestry affairs conscientiously and well."<sup>5</sup>

Bowditch advocated joining both ISA and the American Forestry Association (AFA). ISA competed with AFA, founded in 1875 in Chicago.

Brown described in a 1905 article in the ISA magazine "Arbiculture"<sup>6</sup> how he became interested in trees and forests generally, and catalpa specifically. His interest started as a school boy and his knowledge was acquired by observation, not books or universities. The woods were a greater attraction than social functions or employments. One source reported that he briefly attended Hanover College, Hanover, Indiana, where he studied civil engineering. Another implies that he graduated from Hanover. Regardless, he referred to himself as a civil engineer, specifically a railroad engineer. The archivist

*Continued on page 10*

**Gandy's Timber Management**

**Brian Gandy**

Consulting Forester

*"Creation Conservation"*

Graduate of Purdue  
School of Forestry  
phone 765-571-0501

**Nathan Kachnavage**  
Consulting Forester

Cell: 812-521-7745  
Office: 812-883-2969  
Email: nkachnav@gmail.com  
2430 W. Skylight Rd., Salem, IN 47167



Timber Marking & Marketing  
Timber Stand Improvement  
Invasive Species Control  
Management Plans

## The Woodland Steward

Ad space available!

Contact Brian MacGowan at  
macgowan@purdue.edu  
for more information.

# The Birders' Dozen Profile 5: Yellow-breasted Chat

*Dr. Jessica Outcalt, consulting bird biologist*

Welcome to the Birders' Dozen! Over the next several issues, we are going to continue introducing the bird species from Forestry for the Birds. The Birders' Dozen are forest birds that can benefit from targeted management practices, as most are declining due to habitat loss. We've curated this list to cover a wide range of habitat types, from young to mature forest, open to closed canopy, or dense to non-existent shrub layers. Our goal is to engage landowners and foresters in the process of managing forests for wildlife, or "forests for the birds."

Today's bird is a unique one, and many people have no experience with it, unlike favorites like the Baltimore Oriole. Once considered a warbler in the family Parulidae, the elusive and talkative Yellow-breasted Chat is now the only member of its own family, Icteridae. Chats are often hard to find, in large part because their preferred habitat is difficult to access – dense, scrubby vegetation on edges or in cleared areas. As forests in eastern North America have matured, the chat has lost suitable habitat and its population has declined in many areas.

## Natural History

In its breeding range, the Yellow-breasted Chat is a young forest specialist. Regenerating clearcuts, old fields, and other forest openings or edges are consistently used by chats, particularly areas with high availability of fruits and invertebrates. This habitat usage, especially when it's near streams and wetlands, overlaps with other species such as Common Yellowthroat, Prothonotary Warbler, and Prairie Warbler, species that are also in need of proactive management. Dense thickets that offer shelter from predators are among the most important characteristics that management can target for Yellow-breasted Chats. Chats breed across the United States and migrate around the Gulf of Mexico to wintering grounds in Central America; due to the chat's secretive nature, information about migration is sparse.

The chat is well-named – it's a chatty, loud bird, despite its tendencies to skulk and hide in thickets. Males cultivate a broad repertoire of sounds and songs, which can be quite variable, including sounds ranging from chirps and whistles to squawks and caws. The male sings from prominent perches or while hidden in thickets, defending its territory and attracting its mate. Chats are generally monogamous during the breeding season, though males and females might find new mates in subsequent years.



*Yellow-breasted Chat, image courtesy Matt Williams Nature Photography.*

Nests, constructed entirely by the female, are located near the ground in dense shrubs, often in blackberry thickets. Females lay 3 to 5 speckled, cream-colored eggs, which incubate for 10-12 days. Both parents feed the young until they leave the nest around 9 days after hatching.

The Brown-headed Cowbird, a medium-sized glossy black bird with a dull brown head, is what's known as a brood parasite. These birds lay their eggs in other birds' nests, forcing the host to raise young cowbirds as their

## Dan Ernst

Professional Forester

Specializing in woodland planning & management since 1977



**Ernst Forestry LLC**  
FOREST & WOODLAND MANAGEMENT

Serving woodland owners in  
Central & North Central Indiana

317-695-0068  
foresterdan@yahoo.com  
PO Box 122  
Westfield, IN 46074

## Hoosier Forestry Consultants

David Vadas

4297 E. Farr Road, Bloomington, IN 47408  
Cell: 812-361-1759 ~ Home: 812-323-8347

Email: HoosierForestryConsultant@gmail.com

Timber Inventory ~ Resource Plans ~ Timber  
Marking ~ Timber Stand Improvement



LUMBER COMPANY, INC.

• Free Forestland Inspections  
• 10 Professional Foresters

Since 1904

PO Box 247 • Akron, Indiana 46910  
800-356-4554 • [www.pikelumber.com](http://www.pikelumber.com)





own. Brown-headed Cowbirds' geographic range overlaps with most of the Yellow-breasted Chat's, and since they inhabit very similar habitats (edge or shrubby areas), chats are frequently parasitized by cowbirds. Some chats may abandon parasitized nests, while others may raise cowbird chicks alongside their own young, which can be exhausting for the parents. This additional strain can exacerbate threats to the chat's population, such as habitat loss.

### Habitat Management

Yellow-breasted Chat populations have decreased considerably since the mid-1900s, largely attributed to loss of breeding habitat caused by maturing forests. Mature forests can benefit many birds, like the Wood Thrush whom we'll meet in the next issue, but the trade-off between old and young forest has shifted heavily towards old forests. This means that young forest specialists like the chat have lost considerable habitat. Management techniques that create young forest patches with dense foliage and an open canopy are important tools that can benefit this charismatic species.

The chat's habitat is, by nature, present only for a few years. Regenerating clearcuts, regularly cleared power line corridors, abandoned cropland, and other ephemeral habitat areas can foster chat breeding populations. Though clearcuts are often viewed unfavorably, the dense shrub and young tree growth that occurs after harvesting is often beneficial for a large number of species. Clearcuts and large shelterwood harvests, especially when shrubs like blackberry and dogwood are present, create ideal chat habitat.

### Conclusion

While the mental image many of us conjure when we hear "forest birds" involves an old-growth or mature forest,

the truth is that many Indiana forest birds depend on young forest as well as old. The Yellow-breasted Chat is the perfect example of this, depending on regenerating forest, often only a few years old. Though habitat management has historically focused on mature forest, provision of young forest through the use of techniques like clearcuts and large shelterwood harvests can greatly benefit these secretive and talkative little birds.

Special thanks to the Alcoa Foundation, the Indiana Forestry Educational Foundation, and The Nature Conservancy for their support and leadership of Forestry for the Birds.

---

*Jessica Outcalt was an independent consulting biologist who worked with The Nature Conservancy to develop the "Birders' Dozen Profiles." She is now an Agriculture and Natural Resources educator with Purdue Extension in Grant County. She completed her BS in biology at Taylor University, her PhD in wildlife ecology at Purdue University, and is passionate about birds and getting people involved in conservation and scientific processes.*

### References

- Ricketts, Matthew S., and Gary Ritchison. "Nesting Success of Yellow-Breasted Chats: Effects of Nest Site and Territory Vegetation Structure." *The Wilson Bulletin* 112(4), 510-516, (1 December 2000). [https://doi.org/10.1676/0043-5643\(2000\)112\[0510:NSOYBC\]2.0.CO;2](https://doi.org/10.1676/0043-5643(2000)112[0510:NSOYBC]2.0.CO;2)
- Thompson, C. F. and K. P. Eckerle (2022). Yellow-breasted Chat (*Icteria virens*), version 2.0. In *Birds of the World* (P. G. Rodewald and B. K. Keeney, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. <https://doi.org/10.2173/bow.yebcha.02>



**MEISBERGER FORESTRY LLC**

**Matt Meisberger, ACF**  
Forestry Consultant

1816 N County Rd. 950 W  
Holton, IN 47023  
Cell Phone: 812-756-1075  
email: mmforestry@gmail.com

Woodland Management  
Timber Sales/Marketing  
Timber Appraisals  
Woodland Advice


Family Business Since 1977



**TIMBERLAND CONSULTING, LLC**

Timber Sales—Invasive Control  
Appraisals—Forestry Mower  
Timber Stand Improvement  
Tree Planting  
Habitat Improvement  
Forest Management Plans  
Property Line Maintenance

Phone: 765-247-2240  
Brad Engle, ACF/IHLA  
[TimberLandConsulting.com](http://TimberLandConsulting.com)  
[TimberLandConsulting@gmail.com](mailto:TimberLandConsulting@gmail.com)



**Haubry**  
Forestry & Wildlife  
Consulting

**Rob Haubry**  
Consulting Forester  
Facilities Manager

■ Timber Sales ■ Appraisals ■ Marketing  
■ Whitetail Habitat Management  
■ Wildlife Management Plans ■ Tree Planting  
■ Real Estate Sales

P.O. Box 216 ■ Brownstown, IN 47220 ■ (812)525-8998  
[www.haubryforestry.com](http://www.haubryforestry.com) ■ [rob@haubryforestry.com](mailto:rob@haubryforestry.com)

# Conservation Stewardship Program – A Good Option for Good Woodland Owners

By Dan Shaver

There are multiple conservation programs offered through the Natural Resources Conservation Service (NRCS) and Farm Service Agency (FSA) as part of the Farm Bill that is approved every 5 years to impact farming livelihoods, how food is grown, and how timber is managed. The variety of programs can often be confusing, but there is a strong network of conservation planners working in every county in Indiana to help landowners understand the programs and navigate the enrollment and application process. To find your local NRCS Service Center follow this link (<https://www.nrcs.usda.gov/contact/find-a-service-center>) and enter your state and county or just stop by your local county office.

Some conservation programs like the Environmental Quality Incentives Program (EQIP) are aimed at fixing problems on the farm or the forest. The Conservation Stewardship Program (CSP) is a program designed for woodland owners and farmers that are practicing good conservation but want to build on existing conservation efforts and strengthen their operation.

For woodland owners that have a forest management plan and have done some forest management in the past, CSP may be a program that will help you manage your forest and provide some financial assistance to improve your property.

***A Commitment to Conservation – How CSP Works***  
CSP represents a genuine commitment to conservation and requires a landowner to enroll all of their forested acres in the program as part of a 5-year contract with opportunities to compete for contract renewal at the end of 5 years.

The 5-year contract includes two parts. An annual payment based on the acres enrolled and landuse included in the contract and the current level of existing stewardship (minimum \$1500 per year), and payments to implement additional conservation activities on all or part of the landowner's property.



*Completing forest openings, oak regeneration, and forest stand improvement are all potential activities that can be done as part of the CSP program.*

## ***What additional conservation activities are available to woodland owners?***

In CSP, additional conservation activities are called enhancements. For woodland owners there are enhancement related to tree planting, brush management, and forest stand improvement. A complete list of CSP enhancements for Indiana can be found at <https://www.nrcs.usda.gov/programs-initiatives/csp-conservation-stewardship-program/indiana/conservation-stewardship-program>.

## ***Example of some Enhancements for Woodland Owners:***

**Brush Management to Improve Wildlife Habitat:** Controlling low levels of woody invasive plants to improve understory composition and wildlife habitat (\$20.86 per acre\*).

**Sugarbush Management:** Establish or maintain a diversity of trees and shrubs in an active sugarbush operation to enhance pollinators and wildlife habitat (\$874.50 per acre\*).



*The CSP Enhancement to create snags for forest dwelling bats focuses on creating snags of different diameters to create a variety of snags across a property that can be used by bats and many other wildlife species.*





**Adding food producing trees and shrubs to existing plantings:** Plant additional food producing trees and shrubs in existing tree planting for human consumption and wildlife food (\$212.24 per acre\*).

**Crop Tree Management for Mast Production:** 3–4-sided release of crop trees to increase mast production and improve growth and quality (\$386.29 per acre\*).

**Summer Roosting Habitat for Native Forest-dwelling Bats:** Create new and potential roost trees for bats by deadening trees in various size classes to create dead and dying snags (\$222.46 per acre\*).

**Forest Songbird Habitat Maintenance:** Conduct a breeding bird survey and implement silvicultural practices from the Indiana Forestry for the Birds program (\$206.86 per acre\*).

There are many more enhancements to help meet

landowner objectives and fulfill your conservation goals. All enhancements require the landowner to update their forest management plan and fulfill all the national requirements. The enhancement payment includes the cost to update the plan and implement the land management practices. Indiana CSP practice rates can be found at <https://www.nrcs.usda.gov/conservation-basics/conservation-by-state/indiana/payment-schedule>. Your local NRCS Conservation Planner can assist you with the application and enrollment process and work with you and your forester to understand which enhancement may be right for you and your woodland.

\*Rate listed in this article area based on FY2023 rates for CSP in Indiana.

*Dan Shaver is the Indiana NRCS State Forester and works to develop technical guidance tailored to woodlands in Indiana for USDA Conservation Programs.*

### How to get started with USDA Programs

If you have never worked with the United States Department of Agriculture (USDA) and don't have a farm and tract number, you will need to make an appointment with the Farm Service Agency (FSA) at your local USDA Service Center to establish eligibility for USDA programs. You can find your local service center by visiting Farmers.gov at <https://www.farmers.gov/service-center-locator>.

You will need to bring the following information to the appointment:

- Proof of Identity – you may be required to show a valid state driver's license, passport or other personal identification, as well as provide your Social Security or Employer Identification (EIN) numbers, address and other related information.
- Copy of deed or lease agreement
- Copy of legal entity documents, if applicable

It takes time for the paperwork to be processed and additional information may be needed. Plan to start this process early to ensure you meet program deadlines. If you apply for a USDA program and the system does not show you or your entity as eligible, your application will not be funded.

### APPLYING FOR USDA-NRCS PROGRAMS

If you are already a USDA program participant, your records

should be on file with FSA, which will streamline the process to apply for USDA-Natural Resources Conservation Service (NRCS) programs.

### USDA-NRCS Forms

You will need to submit the following paperwork to the NRCS office at your local USDA Service Center prior to the any program sign-up cutoff dates. The office will have these forms and can assist you with the paperwork. Additional items may be needed for specific programs.

NRCS CPA 1200 – Signed and dated by all applicants

- Land Ownership or Control – evidence you own or operate the land
- Signature Authority – If you apply as an entity, article of incorporation or other legal documents
- Conservation Plan - Developed by NRCS, a Technical Service Provider, or partner organization
- Program Application and Ranking – Once your application is entered for a specific program, it is assessed and ranked based on federal, state, and local resource concern priorities.

For more information about USDA-NRCS programs or applying for a program, please contact your local NRCS office. You can find your local NRCS office by visiting the Indiana NRCS website at: <https://www.nrcs.usda.gov/contact/find-a-service-center>.

## The Woodland Steward

Ad space available!

Contact Brian MacGowan at  
[macgowan@purdue.edu](mailto:macgowan@purdue.edu)  
for more information.



Dan McGuckin, CF,CWB  
12875 W. Sawmill Rd.  
Columbus, IN 47201  
Phone: 812-320-3678  
[habitatforestry@yahoo.com](mailto:habitatforestry@yahoo.com)  
[www.habitatsolutionsforestry.com](http://www.habitatsolutionsforestry.com)

Timber Sales/Appraisals  
Timber Stand Improvement  
Tree Planting  
Native Grass/Wildflower Planting  
Forest & Wildlife Mgmt Plans  
Invasive Plant Management  
Prescribed Burning

### Indiana Woodland Owners Conference

NOVEMBER 4-5, 2022

CLIFTY FALLS STATE PARK, MADISON

Learn more at [www.ifwoa.org/events](http://www.ifwoa.org/events).

Sponsored by Indiana Forestry &  
Woodland Owners Association

# Coyotes 'Make a Go of It' in Indiana

By Geriann Albers

Indiana has many connections to the coyote. Coyote bones and skull fragments were unearthed at historic Native American sites like Angel Mounds and Anderson Mounds. Their pelts show up in old fur sale records as “brush wolves” or “prairie wolves”. County documents show bounty payments for coyotes in the late 1800s and early 1900s.

Even the American naturalist who gave the coyote its scientific name, Thomas Say, lived and is buried in New Harmony. The *Canis latrans* scientific name (meaning “barking dog”) for the coyote was earned and recorded by Say during an expedition he went on to explore the Missouri River with Major Stephen Harriman Long.

Early European settlers had negative views about predators like coyotes, and there were no wildlife laws or wildlife management at the time. Indiana, like many states and territories, enacted bounties on “wolves”, a term that then included coyotes, in 1799. These bounties, along with habitat changes that happened as many forests and prairies were turned into farms, eventually eliminated true wolves from Indiana.

The coyote remained, secretive and elusive. For the most part, they were found only in remnant prairie pockets, but they held on. Naturalist Walter Hahn talks about coyote populations increasing in his “Report of the State Geologist on the Mammals of Indiana” in 1909. But numbers still were not high, as the bounties, along with a lack of regulations and environmental changes kept coyotes cryptic and rarely seen through the early 1900s.

In the 1970s, coyote populations began to expand. With no competition from wolves, and people providing new food sources like fruit trees, coyotes adapted to new places and habitats, no longer limited to prairies. Now, coyotes are found in every nook and cranny of Indiana.

What does a day in the life of a coyote look like? In July, a coyote might wake up just as the sun is starting to set, stretch its legs and check on its gamboling pups that are just starting



Photo Credit ODNR Division of Wildlife

to have enough mobility to learn to hunt for themselves. Pups often start building hunting skills pursuing something easy, like an apple or a grasshopper.

Males and females stay together year-round, and the males help raise pups. But often the adults split off separately to look for food. Most often, they will try to hit a field edge in pursuit of mice, voles, or rabbits. They use their nose to follow trails, trying to find fresh scent. Then they use their hearing to zero in on slight movements before they will leap into the air to pounce on their prey.

While mice, voles, rabbits, squirrels, fruits, and nuts are their staple foods, coyotes will eat almost anything. They occasionally eat livestock and poultry, so owners must be thoughtful about husbandry practices, using things like secure fencing or guard dogs to protect their animals.

But not every coyote eats livestock. Some Western ranchers have learned that if they see coyotes on their property but are not having coyote issues, it is best to ignore them rather than



**ALLEN ROYER**  
“Trees enhance our lives and make us smile.”

✉ allenroyer1751@gmail.com  
☎ (765) 720-8446  
☎ (765) 739-6135  
🏠 2148 N County Rd 440 W  
Greencastle, IN 46135

**Multi-Resource Management, Inc.**  
Professional Foresters



Doug Brown, ACF  
Anthony Mercer, SAF

6800 S. Kyana Rd.  
Birdseye, IN 47513  
812-639-9724  
MultiResourceMgmt@gmail.com  
[www.mrmforestry.com](http://www.mrmforestry.com)

**GREGG FOREST SERVICES**



Michael Gregg Consulting Forester, ACF  
B.S. Forestry • Purdue University

Serving Southeastern Indiana

Timber Marking/Sales    Timber Stand Improvement  
Tree Planting    Timber Inventory/Appraisal

**812-987-4060**  
Email: [greggforestservices@gmail.com](mailto:greggforestservices@gmail.com)





killing them and risking new coyotes that might not ignore their livestock replacing them.

Coyotes also eat deer, primarily fawns. This is sometimes voiced as a concern by hunters as hurting the deer population. But Indiana is fortunate to have a healthy deer herd. Delaware, which has no coyotes or bobcats, has the same proportion of fawns die as Midwestern states like Indiana. With no wildlife predators in Delaware, the weakest or sickly fawns die of exposure, disease, and starvation. These are the fawns coyotes eat, the sick and weak, thus coyotes do not negatively affect Indiana deer populations. With Indiana leading in Boone and Crockett big-buck statistics for two years running, and the state's hunters having harvested more than 100,000 deer since the 1990s, Indiana's white-tailed deer populations have proven healthy and resilient to predation.

Coyote's food choices also provide benefits, reducing mice populations near homes, crop fields, and grain storage. They have also been shown to keep urban goose populations in check in places where geese do not face hunting pressure. In urban areas, they raid nests for eggs and occasionally eat adults.

If successful at their hunt, coyotes will bring a portion of the food they catch back to their young, then head back out to hunt more. In July and into August, they may occasionally bring pups along on short hunts to start training them. If their hunt is not successful, they may keep at it through the daytime. Therefore, seeing a coyote during the day is not necessarily a cause for concern. Feeding hungry mouths is a lot of work for any species.

When rest time for coyotes arrives, they will search for a resting spot with cover. When their pups are young, coyotes use dens, typically hollow logs, culverts, enlarged abandoned groundhog dens, or something similar for cover. Once the pups get a little older and throughout winter, coyotes will rest in any type of dense cover that offers protection, such as thick grass, rock overhangs, or fallen logs.

In addition to hunting, training, and resting, coyotes may also do other things like grooming both themselves and their pups and inspecting their territory for intruders. Pups will also appear to play, but most of that is training for the future of being an adult coyote.

Young coyotes disperse from their parents to go find their own territories between 8–11 months old. They will wander for a while, trying to find unoccupied space. Eventually they will find somewhere with suitable food, water, shelter, and no other territorial coyote pair. In the process, they will often find a mate, though a rare coyote will stay solitary for longer. Those that do find a mate will start the cycle over, with daily hunting, keeping other coyotes away from their home range, and pups being born in spring.

I often get asked how many coyotes we have in the state. The short answer is we don't know. Populations change daily as animals die and pups are born in spring. For animals like coyotes, we look at trends—or whether a population is increasing, decreasing, or staying the same—instead of trying to count them. We track coyote trends using the Archer's Index, in which volunteer deer archery hunters tell us how many hours they were hunting and what wildlife they saw while sitting quietly in their tree stand. The index, which started in 1992, shows coyotes increasing until the 2010s, then dropping slightly and stabilizing in recent years. Coyote populations are stable and healthy in Indiana.



Photo Credit ODNR Division of Wildlife

*Continued on page 12*

**TURNER FORESTRY INCORPORATED**  
TIMBER SALES • TREE PLANTING  
TIMBER STAND IMPROVEMENT • PRESCRIBED BURNING  
**STEWART TURNER**  
CONSULTANT FORESTER  
8464 S 950 E, UPLAND, INDIANA 46989  
STURNER@TURNERFORESTRY.COM  
WWW.TURNERFORESTRY.COM  
765 998 1161



**Egolf Forest Management, Inc.**  
Serving Forest Landowners Since 1985  
**Christopher J Egolf, ACF**  
Consulting Forester  
3207 N 860 W  
Ligonier, IN 46767  
*Timber Marking & Marketing  
Inventory & Appraisal  
Woodland Consultation and Advice*  
  
260-856-2345  
egolfholz@gmail.com

**Genetically Superior Black Walnut, White Oak and Black Cherry Grafts and Seedlings**  
• Improved form and growth rates – 30 year harvest cycle possible  
• Grafted White Oak for heavy/wet soil sites  
**Curly Poplar**  
• Attractive highly figured wood grain  
• Annual growth rates of 1 inch caliper or more per year are expected  
• Grows well in poorly drained soils  
To purchase or for a free full-color informational brochure call:  
**260-749-0891**  
[www.advancedtree.com](http://www.advancedtree.com)  
**ADVANCED TREE TECHNOLOGY**  
12818 Edgerton Rd. New Haven, IN 46774 • 260-749-0891



## Early Years of Indiana's Forestry Movement Continued from page 3

at Hanover found no record of his having ever attended.<sup>7</sup> We found no explanation of how he acquired railroad engineer skills. He served in the Sixteenth Indiana Regiment during the Civil War. He died at age 72 on November 15, 1914, in Norwood, Hamilton County, Ohio<sup>8</sup> and is buried in Spring Grove Cemetery, Cincinnati, Hamilton County, Ohio.<sup>9</sup>

Daniel Den Uyl, Purdue University, Department of Forestry, frequently mentions Brown in his *"History of Forest Conservation in Indiana."*<sup>10</sup> He refers to Brown's article "An Enlarged Forest Area a Necessity to the State," published in the Transactions of the Indiana Horticulture Society in 1898. Also, that an IFA representative was a designated member of the State Board of Forestry established by the Indiana State Legislature on March 1, 1901.

Noted jurist and historian, Daniel Wait Howe, authored a frequently cited history of the founding and early years of the State of Indiana, and its first capital in Corydon, "Making a Capital in the Wilderness."<sup>11</sup> Howe describes the region's "wonderful resources" with a quote from Brown's paper read before the Indiana State Board of Commerce, February 8, 1900. Brown was introduced in the quote as IFA Secretary. Based on the speeches and papers he offered, Brown was recognized as the major authority on Indiana's forests and its wood products industry. Purdue University was at this time just starting to become a factor in the understanding of the state's forest resources.

Indiana's centennial celebration included the publication of the *Centennial History and Handbook of Indiana*.<sup>12</sup> Indiana forests are the focus of the natural resources chapter. The negative impact of forest "destruction" is discussed in two categories: the reduction in timber available for manufacturers, and environmental impact on the balance of nature and effect on climate, conservation of soil and water, and reduction in productivity of farms. The discussion of the forestry movement in Indiana includes the influence of IFA, Albert Lieber president and Brown secretary. The author emphasized that one of IFA's purposes was to promote the passage of a forestry law. A result was the statute establishing a State Board of Forestry. The board members included by statute an IFA representative. The extensive Who's Who in Indiana appended to the *Centennial History* included Albert Lieber, an Indianapolis brewer, but not John P. Brown.

Brown was introduced at presentations and referred to in newspaper articles as a forestry expert. At the August Wayne County Horticulture Society, he was introduced as "regarded as Indiana's most eminent authority on the timber question."<sup>13</sup> On his visit to Mexico the President of Mexico invited him to a meeting.<sup>14</sup> He was frequently asked by investors to inspect forest holdings in the West.<sup>15</sup> He knew many because of his railroad work and relation with Palmer.

He worked as a civil engineer in the survey of the Pacific Railway east from California in 1866, the survey of the state line between California and Nevada in 1866, and on various railway engineering projects. He surveyed the boundary of the Crow Indian Reservation for the Federal Government in 1890. He made forestry studies in the field, including the Rocky Mountains, Great Plains and southeast. His work with railway companies provided him with train passes. He originated the plan for extensive tree planting by railroads for timber purposes with twenty-five million planted. He traveled over five hundred thousand miles in North and Central America in the study of forests. In 1902 he established the magazine "Arboriculture," devoted to economic forestry. Articles and editorials advocated tree planting by the federal and state governments, corporations, and individuals. It was published monthly from 1902 until May 1906, and bimonthly thereafter. Publication ceased in 1908. Brown was the author of most of the articles. It was not an academic journal.


He had no formal forestry training, but, his enthusiasm for forest conservation and preservation is evident in his presentation to the State Horticulture Society of Michigan in 1900. His introductory points show a recognition of the economic impact of the timber industry and wood processing, forests as a regulator of climate, and ecological conditions.

Scientific forestry focused on conditions in the U. S. was in its infancy at the end of the 19th century. The primary source was the work in Europe and silvicultural recommendations based on observations of existing forests and the effects of manipulations. The depth of Brown's knowledge is provided by a paper he presented to the Indiana Horticultural Society in 1898.<sup>16</sup> He starts with an assessment of what we would now refer to as the ecological impacts of reduced forest acreage. He pointed out that a result was an increase in noxious insects in fields, orchards and gardens resulting from the loss

FAX: (260) 244-5694  
CELL: (260) 609-4724

BUSINESS: (260) 244-6149  
1-800-222-5376

**HOLMES**  
MANUFACTURERS  
AND WHOLESALE



**& Co., Inc.**  
FOREST  
PRODUCTS

"THE EXTRA CARE COMPANY"

ANDREW KESSIE  
BUYER OF LOGS & STANDING TIMBER

P.O. Box 370  
COLUMBIA CITY, IN 46725



**INDIANA**  
Timber and Veneer LLC

Free Timber Valuation  
Top Prices for Timber  
Selective Timber Harvesting

**ARAM W. WRIGHT**  
Owner and Forester  
B.S. in Forestry - Purdue University

(812) 797-7509

indianatimberandveneer.com

4413 State Road 60 East  
Mitchell, IN 47446



**Justin Herbaugh, ACF**  
Consultant Forester

8537 W. 675 S.  
Huntingburg, IN 47542

phone: 812-639-8378  
email: herbaugh@psci.net





of forest habitat for birds. Also, increased temperature and reduced precipitation and a significant increase in soil erosion, especially in the rolling hills of southern Indiana.

Emulating European foresters and as a welcomed harbinger of modern forestry, Brown provided recommendations on species to plant based primarily on their market value. His focus was intensively managed monoculture plantations. Small trees had value because they were used for small parts of wagons, fence posts, bent wood for furniture and horse rigging. He included in “Arboriculture” his estimates of the rate of increase in girth for thirty species. He held that a primary reason for land clearing in the post-pioneer period was the taxation of crop and forest land at the same rate. He hypothesized that leaving an acre of forest land for every ten acres of crop land would provide a better financial return than crops alone. He estimated that ten acres of any of the prime species in twenty years would have a value of \$1,000 “at interest,” but his estimates didn’t include the time value of money. Planted walnut groves in 25 years would have a value of \$75 per thousand board feet, or more than \$2,000 per acre. He discusses the establishment, uses and management of wild black cherry, American chestnut, larch, and mulberry. He also discusses nursery practices focusing on seed collection, preparation and planting in nursery beds.

His work to improve conditions in his community and state predates his work leading to the bills providing tax relief for timberland owners and establishment of the Indiana Bureau of Forestry. In the late 1800’s landowners could pay their property taxes by working on nearby roads. As the importance of roads increased with the growth of the economy it became obvious that adequate roads were not possible with only tax-paying laborers. Brown was a founder and vice president representing the Fifth District of an association organized at the 1892 Road Congress.<sup>17</sup> It was called the Indiana Highway Improvement Association. He gave papers in many locations promoting a requirement to pay property taxes in cash.

Brown used the term “arboriculture” in his later years to capture his work. The modern definition is the science of and practices related to the cultivation of trees and shrubs for ornamental purposes. It contrasts with “forestry,” the science of and practices related to the management and development of forests. Brown used the term more broadly.<sup>18</sup>

His introduction to “Arboriculture: A Monthly Magazine,” defines arboriculture as “. . . a science that teaches how great are the influences which forests or trees exert upon a community; not only from the economic uses for which wood is adapted for man’s benefit, but in their far-reaching effect upon climate and thus the welfare and permanence of nations and peoples.”<sup>19</sup> “Ecosystem services” captures these points. He listed the topics related to arboriculture: economics, entomology, ornithology, fire protection, irrigation, planting trees, nurse trees, wood preservation, how soils are made, river

navigation, levee systems, watersheds, permanence of springs, and underground rivers. His book and magazines include articles on all these subjects.

“Arboriculture” did, however, publish many articles about what is now called “urban forestry.” “Shade Trees for Town and City Streets” went into detail on why trees were important, problems encountered in the planting and care of trees, and details on the major species suitable for city streets.<sup>20</sup> He included numerous full-page photos of exemplary trees in city settings. Brown was a pacesetter.

---

*William L (Bill) Hoover is a Professor of Forestry, Emeritus at Purdue University. During his tenure, Bill was a leader and nationally known expert in the application of the federal income and estate tax laws to family forest owners. Robert W. Mayer, MS is owner and operator of Mayer Forest Product Services located in Connersville, Indiana.*

## Footnotes

- 1 Fairchild, Fred R. 1935. Forest taxation in the United States, US Dept. Agr. Misc. Pub No. 218.
- 2 Both Pickney and Pinkney are common spellings in references
- 3 The Indianapolis Journal, Indianapolis, IN, March 1, 1904, p. 3.
- 4 The Indianapolis Star, November 6, 1909, p. 6
- 5 “Arboriculture.” 1902. 1(1):7
- 6 “How I became interested in the Catalpa tree: The story of John P. Brown.” 1905. “Arboriculture.” 4(4):89-97. 7 Jennifer Duplaga, Archives and Public Services Librarian, Duggan Library, Hanover College, 812-866-7181, duplaga@hanover.edu, contacted February 7, 2019. <https://www.indianahistory.org/wp-content/uploads/sixteenth-indiana-regiment-muster-roll-1863.pdf> Accessed October 18, 2019.
- 8 State of Ohio, Bureau of Vital Statistics, Certificate of Death No. 60988.
- 9 Find A Grave, [https://www.findagrave.com/memorial/18313507/john-p\\_-brown](https://www.findagrave.com/memorial/18313507/john-p_-brown), accessed 2/8/2020. Find a Grave Memorial #18313507, Plot: Section 113, Lot 228
- 10 Proc. Indiana Academy of Sci., Vol 66 (1956), pp. 261-267.
- 11 “Indiana Historical Society Publications.” 1908. IV(4):299-338. Indianapolis, E.J. Hecker.
- 12 George S. Cottman and Max R. Hyman, editors. 1915. Max R. Hyman publisher. The Hollenbeck Press. Indianapolis, IN, 463 p.
- 13 Timber Supply Worries Brown. The Richmond Item, August 12, 1907, p. 2.
- 14 Mr. John P Brown Returns. The Indianapolis Journal. August 10, 1903, p. 8.
- 15 The Columbus Republican, Columbus, Indiana. June 4, 1903, p. 1. This article appeared 2 other papers.
- 16 Brown, JP. 1898. An enlarged forest area a necessity to the state. Proceedings of the Indiana Horticultural Society, Indianapolis, Dec. 6 – 8, 1898. IN “Transactions of the Indiana Horticultural Society for the Year 1898.” P. 152 -161.
- 17 The Rushville Republican, Rushville, IN. December 20, 1892, p. 4.
- 18 The Republic, Columbus, IN. December 29, 1898, p. 2.
- 19 Brown, John P. 1902. “Arboriculture,” 1(1):5-7. International Society of Arboriculture, Chicago, IL.
- 20 “Arboriculture.” VI(6):353-391. November 1907.

## Coyotes ‘Make a Go of It’ in Indiana

*Continued from page 9*

Coyotes have a natural fear of people. To date, we have not had a documented coyote attack on a person in Indiana. People can help keep it that way by thinking about doing their part to live safely with coyotes around. Make sure to keep garbage secure. Keep livestock and poultry penned when possible. Supervise pets when they are outside and keep them in a kennel with a secure top when they cannot be supervised. Coyotes see cats as food and dogs as a threat to their pups and intruders in their territory.

If you see a coyote around your yard and have concerns, think about what food sources may be attracting it. Take down bird feeders for a few weeks and move any outdoor pet food to a garage or shed. Pick up any fallen fruit from fruit trees. You can reinforce a coyote’s natural fear of people by shouting or making loud noises. Bang pots and pans, spray it with a hose, or toss small stones toward the coyote, but never corner it; always allow a clear path for it to escape.

We have coexisted with coyotes for a long time and will continue to do so. They are fascinating animals that can adjust to wherever they live. They eat persimmons when they live in the south and snowshoe hare when they live in the north. They adapt, just like people often do. I’m a native of Illinois, and I have lived in nine states on the course of my career journey. I ate barbecue when I lived in North Carolina, and I eat pork tenderloins and sugar cream pie now that I am in Indiana. I have been all over the U.S. and the one thing that has pretty much always been there too? Coyotes. That is why they are my favorite animal; I see a little of myself in their “make a go of it” spirit.

It is the same spirit Thomas Say had, moving to Indiana to catalog the natural world and go on expeditions. And it’s the same spirit his wife, Lucy Way Sistare Say, had. A naturalist and illustrator, she was the first woman elected to the Academy of Sciences. Also a resident of New Harmony, she is just one of the Indiana women who blazed the trail for me to become Indiana’s furbearer biologist, writing about our native and adaptable coyote.

---

*Gerianne Albers is a furbearer biologist with the IDNR Division of Fish and Wildlife.*

## Foresters Honored with Statewide Award

Three foresters with exemplary careers were recognized with the John F. Datena Distinguished Forester Award at the recent Indiana Forestry & Woodland Owners Association annual conference.

Ken Day and Burney Fischer of Bloomington and Joe Schuerman Jr. of Versailles were honored for their leadership in forestry and support for Indiana woodland owners. The award was named after former state forester John F. Datena to honor his commitment to Indiana forestry.

Ken Day retired after nearly 40 years working with the USDA Forest Service, with 17 years as the Hoosier National Forest supervisor. He served in various national, regional and state leadership positions, with a focus on using science to improve our forests.

Fischer spent 15 years as a Purdue University forestry professor before being called to serve as the state forester in the Indiana DNR Division of Forestry. He finished his career as the first forester at Indiana University O’Neill School of Public and Environmental Affairs. Fischer’s passion is urban forestry, where helped create and lead the Indiana Urban Forest Council and established urban forestry classes at IU.

After a 17-year career with the IDNR Division of Forestry, Joe Schuerman Jr. pivoted to a private consulting forestry business, providing assistance to private woodland owners in 20 counties. In his career Joe has planted over 1 million tree seedlings. He hosts an annual regional Timber Industry Appreciation dinner and was instrumental in republishing Charles Deam’s “Trees of Indiana and “Shrubs of Indiana.”

The awardees were selected by the Indiana Hardwoods Lumbermen’s Association, Indiana Association of Consulting Foresters, Indiana Society of American Foresters, and Indiana Forestry & Woodland Owners Association.



*Burney Fischer, Joe Schuerman Jr., and Ken Day*



# 2021 Outdoor Laboratory of the Year

By Ken Day

The STEM Connection at Moore Road Farm in Indianapolis, Indiana was selected for the 2021 Outdoor Laboratory of the Year. The award was announced at the Tree Farm Breakfast at the Indiana Hardwood Lumberman's Association convention and presented at the Hoosier Association of Science Teachers, Inc. (HASTI) convention in Indianapolis in February 2022.

STEM (Science, Technology, Engineering, and Mathematics) Connection was established eight years ago as a non-profit corporation to facilitate hands-on, minds-on, feet-of-the-ground STEM experiences at the Moore Road Farm and other education sites. The laboratory is a 30 acre outdoor learning site. The ecosystems at the farm includes deciduous forest, Eagle Creek, fields of crops, and garden for exploration and learning. Programming is structured on Indiana Academic Standards and connected with ongoing conservation projects to honor land and waterways of Indiana.

The outdoor laboratory has a staff of 13 that utilize the learning space and other teachers and staff to assist with field trips. In 2021, over 4,000 students participated in the various programs with over 2,300 students participating in-person at the farm. The first five months of the year were significantly impacted by COVID.

STEM Connection runs year-round programs including field trips, day camps, summer camps, STEM Future Leader events, and other special events. All in-person participants have time to explore and learn in the gardens, fields, forest, Exploration Station, and/or creek. STEM Future Leaders, who are middle school and high school students, participate in service projects to create enhancements to learning spaces and help maintain the spaces by cleaning spaces, mulching areas, planting gardens, and repairing equipment.

STEM Connection participates in a number of citizen science opportunities and partners with local resource conservation organizations. The Moore Road Farm is home to seven

raised bed learning gardens, pollinator gardens, alfalfa fields, two honeybee hives, and a portion of Eagle Creek. Youth participants have opportunities to engage in activities connected to Hoosier Riverwatch and Marion County Soil and Water Conservation District. Other partners include Citizens Energy Group and Corteva Agriscience.

The staff does not follow a specific conservation education curriculum but incorporates lessons and activities from a variety of sources. However, they create their own lessons and activities that are specific to the Moore Road Farm. The staff has dedicated time to develop STEM Quick Wins Program which is a library of free, easy STEM activities that can be done with easily accessible materials. Currently the library contains over 115 activities which fall under the environmental and conservation education themes of Earth Science, Engineering for Good, Let's Go Green, Soils, Water Science, and Wildlife Champions. STEM Quick Win activities include a one-page activity sheet, bilingual in English and Spanish, and a short video about the activity. They also use lessons and activities from Project WET, Project Wild, and Purdue Extension.

STEM Connection has programs appropriate for preschool through high school students. Most day camps and summer camps are open to youth in kindergarten through 5th grade. Field trip opportunities for preschool through high school students are offered and aligned to content appropriate for grade level.

Day camps, summer camps, and field trips have themes. Some past and upcoming themes are: Animals as Engineers, Biotic and Abiotic Things, Energy Flow in Ecosystems, Exploring Earth Processes, Exploring Energy, Healthy Soil and Water, Investigating Adaptations, Is it Alive?, Is the Creek Healthy?, Organism Interactions, Time to Fly, Scientists Use Their Senses, What's in the Garden?, and Working with Weather. They offer numerous themes and topics that are seasonal in nature.

Education is one of the key objectives of Indiana Tree Farm, recognition is the other. The outdoor laboratory of the year is selected by the Indiana Tree Farm Committee which is composed of a cross section on 30 natural resource professionals throughout the state.

*Ken Day is retired Forest Supervisor of the Hoosier National Forest.*



**ARBORTERRA**  
Consulting<sup>SM</sup>  
FOREST & NATURAL RESOURCE MANAGEMENT

Mike Warner, ACF & Jennifer Boyle Warner, ACF

PO Box 148 • Lizton, IN 46149  
Phone: (317) 994-6125 • Cell: (317) 796-7154  
mwarn@arborterra.com; jlbwarn@arborterra.com  
www.arborterra.com





**3rd Generation**  
Chris Fehribach (812) 639-3561  
chrisfehribach@gmail.com

*Timber Consulting & Forest Management*  
Over a half-century of tree farming heritage

Services Include:  
\* Timber Marking & Marketing \* TSI  
\* Tree Planting \* Invasive Control  
\* Habitats \* Ginseng Management

\* Fees for Timber Sales - 7%  
\* Licensed Chemical Applicator



**Cox Forestry LLC**

David Cox  
Consulting Forester  
CoxForestryConsulting@gmail.com

1318 Cherokee Road  
Louisville, KY 40204  
CoxForestry.com

(502) 802-6021

# Woodland Owners Honored for their Stewardship

Four Indiana families were recently recognized with the 2022 Charles Deam Forest Stewardship award by the Indiana Forestry & Woodland Owners Association (IFWOA).

David and Mary Ray of Monroe County are state winners of the 2022 Charles Deam Forest Stewardship award. The Ray's manage 310 acres of woodlands in Jackson County.

They use the property for multiple objectives but have a great interest in creating wildlife habitat. They are engaged with the Indiana DNR to create grouse habitat, the National Wild Turkey Federation to promote turkey habitat, and have developed watering ponds, edge feathering, and wildlife food plots to create food and cover for various wildlife. A highlight of their efforts is a 10-acre bee and butterfly habitat planting under the power line easement.

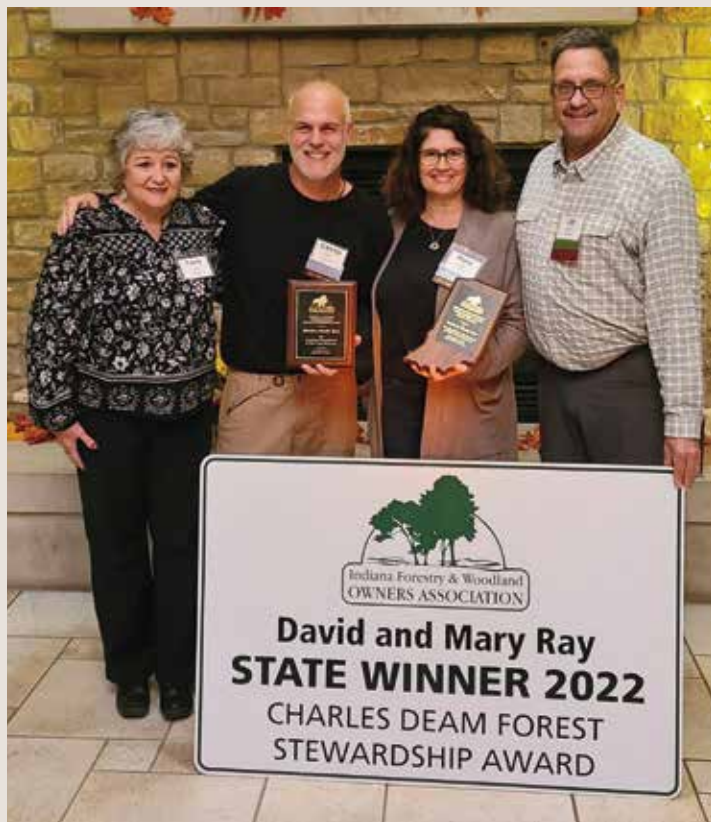
Mark Krumanaker was honored for his stewardship of 108 acres in Huntington County, representing the northern 1/3 of the state. He is actively pursuing oak regeneration on his property, using prescribed fire and mid story tree removal to encourage new oak seedlings. He has planted 35 acres of seedlings on his property and is diligent in keeping up with invasive plants like multiflora rose and Ailanthus (tree-of-heaven).

Bill, Karen and Stephen Beard of Putnam County were finalists from central Indiana. The Beards have implemented sustainable timber management for almost 30 years, with 3 timber harvests and ongoing timber stand improvement. They manage 140 acres of woodlands, working closely with their DNR district forester and consulting forester Jack Nelson. They are past Sycamore Trails RC&D Woodland Owners of the year.

Ray Chattin of Knox County was honored as a finalist from southeastern Indiana. Ray has worked for many

decades on his property and has been honored with the Tom Wallace award and Indiana Tree Farm of the year award. He is quite active with statewide invasive species organizations and has worked hard on eradication on his own property. He also has planted 22 acres of tree plantings.

The Deam award honors outstanding Indiana woodland owners who demonstrate good forest stewardship. Charles Deam, Indiana's first state forester, was a pioneer in recognizing the need for protecting woodlands and managing our forests. Nominations for 2023 will be accepted starting in May 2023, learn more at [www.ifwoa.org](http://www.ifwoa.org).



[www.bearforestry.com](http://www.bearforestry.com)

**Bear Forestry**  
Forest and Habitat Management

**Abe Bear**  
Consulting Forester

812.583.1004  
abraham.bear@yahoo.com  
6600 North 933 West  
Deputy, IN 47230

**STEINKRAUS FOREST MANAGEMENT, LLC**

**JEFF STEINKRAUS**  
Consulting Forester

18623 Marcellus Hwy.  
Marcellus, MI 49067  
[www.steinkrausforestry.com](http://www.steinkrausforestry.com)

E-mail: [jeffsteinkraus@gmail.com](mailto:jeffsteinkraus@gmail.com)  
Cell: (269) 228-0139  
Home/Fax: (269) 646-7306

**HANEY FORESTRY, LLC**

Professional Forest Management  
**Stuart Haney**  
Consulting Forester

"Serving Woodland Owners since 2002"

Timber Appraisals • Harvest Planning • Bid Sales

Phone: (812) 243-1323  
P.O. Box 512, Riley, IN 47871  
[stu@haneyforestry.com](mailto:stu@haneyforestry.com)  
[www.haneyforestry.com](http://www.haneyforestry.com)





## Ask the Steward

By Dan Ernst

**Question:** What causes knots in lumber and why do some knots fall out?

**Answer:** Knots in lumber are caused by tree branches and the bigger the branch the larger the knots. As the branch and the tree grow, wood fibers are woven together to create a strong union between the two. When the logs from the tree are then milled into lumber the branch growth shows up as a tightly held knot in the lumber. Depending on the angle of the branch and pattern of milling the knot may be a circular cross section of the branch, or a diagonal or elongated cross section.

On the other hand, when a tree grows around a dead branch the knots are not tightly held. Since the branch has no live growth cells the tree trunk simply grows around the dead branch, but without the interwoven wood fibers of a live branch. Sometimes these dead branch knots are so loose they may fall out of the board.

From a timber and lumber value standpoint, the fewer the knots the higher value the lumber and hence the tree. And, veneer trees, which command an even higher value have very clear lumber with few if any knots and defects. When assessing whether trees in your woods may potentially be veneer quality trees look for trees of larger diameters and tree trunks clear of bumps, splits, scars and other indications of defects. That little bump you see may be an old branch scar or other defect.

**Question:** Where do box turtles go in wintertime?

**Answer:** When the weather gets cold in mid-October to early November Box turtles find themselves a cozy spot underground to brumate and conserve energy. Brumate? Yep- Brumation is a hibernation-like state very similar to hibernation and in this article we'll use the terms interchangeably. The major difference is cold blooded



animals, such as turtles, brumate. While warm blooded mammals, such as chipmunks, hibernate. As the cool fall weather rolls in the activity level of box turtles decrease. They'll stay close to, or even inside, their winter homesite, eventually digging in for winter's long deep sleep. In brumation the heart rate slows and body temperature drops, perhaps even to the mid-forties. Box turtles may open their eyes periodically or move slightly during their 5-6 month winter slumber, but will not become active or emerge from their brumation hideout until the soil warms in March or April. Then life begins anew as hungry turtles feed on insects, worms, slugs, mushrooms, berries and more. They have a small home range and generally will not travel much more than 100 yards from their hibernation site- often using the same winter burrow year to year. Which is a very good reason not to pick-up and move box turtles for they will struggle greatly if moved and released back into the wild outside their home range. The Eastern box turtle is actually one of many species on Indiana's "special concern" list. Another reason to observe them in place, but leave them be.

*Dan Ernst is a professional forester and past Assistant State Forester with the Indiana Division of Forestry. He has authored 'Ask the Steward' since 1992 and can be reached at [foresterdan@yahoo.com](mailto:foresterdan@yahoo.com).*



**STAMBAUGH  
FORESTRY**  
Since 1989

Comprehensive Forest Land Management • Timber Sales  
Appraisals • Tree Planting • TSI • Carbon Assessment  
**John P. Stambaugh ACF**

182 Pinhook Road  
Bedford, IN 47421

Cell: (812) 384-5887  
(812) 278-0256  
[forester@custom.net](mailto:forester@custom.net)

Buyers Of Cut Logs And Standing Timber

**INDIANA VENEERS**

PETER LORENZ  
President

1121 E. 24th Street  
Indianapolis, IN 46205

Phone: 317-926-2458  
Mobile: 317-501-7104  
FAX: 317-926-0569  
[plorenz@indianaveneers.com](mailto:plorenz@indianaveneers.com)

**Tom Bauters**  
CPA

**TAX  
SERVICE**

Individual | Business | Farm

**574-505-0813**  
By Appointment Only

9581 E. 100 N., Akron, IN 46910  
E-mail: [tom@tombauterscpa.com](mailto:tom@tombauterscpa.com)

 CPA  
America counts on CPAs



# Soil and Water Conservation District

## Woodland Steward Supporters 2022

Allen	Dubois	Jefferson	Newton	Starke
Bartholomew	Floyd	Jennings	Orange	Steuben
Brown	Fountain	Johnson	Owen	Vanderburgh
Carroll	Hamilton	Knox	Parke	Vermillion
Clark	Harrison	LaGrange	Perry	Vigo
Clay	Hendricks	LaPorte	Putnam	Wabash
Crawford	Howard	Lawrence	Randolph	Warren
Dearborn	Huntington	Marshall	Rush	Washington
Decatur	Jackson	Miami	Shelby	Wayne
DeKalb	Jasper	Morgan	St. Joseph	Wells



Thank you to all the supporting SWCD's. Supporting the Woodland Steward Newsletter puts timely, relevant and science-based information in the hands of woodland owners in Indiana.

Please stop by and visit your local SWCD. They have a wealth of information about invasive species, conservation programs through the Farm Bill, wildlife, soil conservation and many other natural resource related topics. The SWCDs work locally in your county to bring a critical environmental perspective to land use and economic development issue and help develop local solutions to natural resource related problems. Visit your local SWCD and thank them for supporting the Woodland Steward Newsletter.

### Board Members:

- Jennifer Boyle Warner, Treasurer
- Michael Chaveas, U.S. Forest Service, Hoosier National Forest
- Liz Jackson, Indiana Forestry & Woodland Owners Association
- Brian MacGowan, Purdue University
- Dan McGuckin, Indiana Association of Consulting Foresters
- Ray Moistner, Indiana Hardwood Lumbermen's Association
- Chris Neggers, The Nature Conservancy
- Liz Rice, IN Assoc of Soil & Water Conservation Districts
- Jack Seifert, IDNR Division of Forestry
- John Stambaugh, Indiana Society of American Foresters
- Stewart Turner, Indiana Tree Farm Committee



Thanks for allowing us to be your **Woodland Steward** printer



*Lafayette Printing*

[www.lafayetteprinting.com](http://www.lafayetteprinting.com) • 765.423.2578 • 800.564.5294

If you are no longer interested in the Woodland Steward, please notify the editor at the address on Page 2. This newsletter provided with support from your local Soil and Water Conservation District.

**Mailing courtesy of:**  
Woodland Steward Institute  
PO Box 490  
Nashville, IN 47448  
Postmaster: Change Service Requested