

FORESTS FOR INDY PROJECT REVEALS STRATEGIES TO PROTECT 4,000+ URBAN FORESTS

By Rae Schnapp, Ph.D., IFA Conservation Director

In 2017, IFA mobilized hundreds of citizens in a dramatic campaign to save Crown Hill North Woods, a 15-acre forest in the urban core of Indianapolis—a remnant of the old growth forests that once covered Indiana. After months of political effort, the bulldozers were turned back at the last second. This hard-fought, hugely satisfying victory showed that many citizens keenly understand the value of an urban forest left standing.

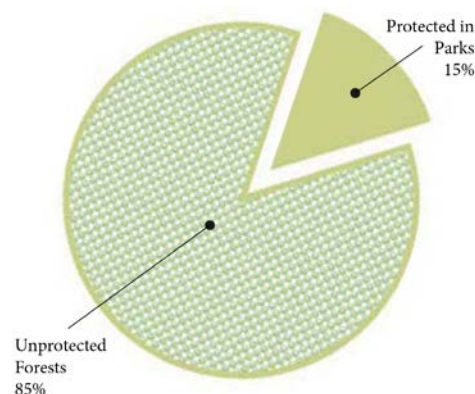
Yet, for every urban forest we can save, many more are routinely lost. A proactive vision for forests as an intentional, part of a city's future is the best way to break the pattern of destruction. IFA's Forests for Indy initiative is the first-ever data-driven effort to assess and preserve the forests remaining in Indianapolis. It's a plan for protecting our urban forests, starting

a dialogue about why forests are important to everyone's quality of life, and, ultimately, creating a vital network of forest preserves in Indianapolis.

When we looked for areas with continuous tree canopy larger than one acre outside the city's existing parks, we found more than 4,000 such forests—699 of them are more than 10 acres and 129 of those are more than 50 acres. These forests are privately owned and currently have little or no protection from being cut down, degraded or destroyed. They comprise 50 square miles, or 85% of all forests in Marion County.

As development pressure increases, demand for outdoor recreation grows, and the climate changes, conservation of urban forests takes on serious new urgency. Thanks to our partnership with Keep Indianapolis Beautiful [see sidebar story by its CEO], we have excellent data to inform this vision of a greener future for Indiana's capital city, before it's too late.

Protected & Unprotected Forests in Indianapolis



Indianapolis Forests by Size in Indianapolis

Forest Size	Number of Forests
Greater than 50 Acres	129
Between 10-50 Acres	570
Less than 10 Acres	3,538

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Eagle Creek, south of the park. (Photo: Jeff Stant, 2021)

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Nameplate Image: Hoosier National Forest, view from Charles Deam Wilderness Fire Tower.



*by Jeff Stant,
Executive Director*

The Indiana General Assembly recessed its 2021 Session on April 22, not a day too soon. It passed

Senate Enrolled Act 389 — the most environmentally damaging bill since I began lobbying for IFA in 2014.

SEA 389's enactment will result in the loss of legal protection for 550,000 to 600,000 acres of the 800,000 acres of wetlands remaining in Indiana, according to the Indiana Department of Environmental Management (IDEM). That is 69-75% of our remaining wetlands. The bill will allow forested wetlands that have been previously timbered, but are still important biological habitat, to be lost without mitigation.

In addition to removing protection for all Class I wetlands, which comprised 58% of the wetlands that were regulated by the state, SB 389 exempted many higher quality Class II forested wetlands if they're below 3/8s of an acre, which most are, or below 3/4s of an acre in a municipality. These city wetlands produce the highest ecosystem services, by absorbing storm water that would otherwise flood neighborhoods, purifying surface water that recharges public wellfields, cooling urban heat and providing islands of wildlife habitat.

The Republicans leaders who are experts in natural resource policies including Senator Glick, chair of the Senate Natural Resources Committee, and Representa-

tive Gutwein, chair of the House Environmental Affairs Committee, strongly objected to the bill. Gutwein's committee spent three weeks negotiating a compromise with IDEM's wetlands regulators and reported that compromise to the floor by a vote of 12 to 0.

But Republican leadership — Senate President Bray, Senate Majority Leader Messmer, House Speaker Huston, and House Majority Leader Lehman — backed the Indiana Builders Association's demands. Lehman and Huston led Republicans to gut Gutwein's compromise on the House floor. Their floor amendment reduced protection for the 15% of our original wetlands that remain to 5%. The Senate concurred with that amendment.

By signing the bill into law, Governor Holcomb deferred to the will of developers as well. Although he had earlier voiced concerns about the bill and allowed his IDNR and IDEM to oppose it, in the end, he would not stand up for his own regulators and therefore failed Hoosiers on an environmental matter of fundamental importance. To find out more about this travesty, read our statement at indianaforestalliance.org/blog/.

Thankfully, there were two other environmentally destructive amendments that died. The first was added to HB 1337 by Representative Ellington and would have removed county authority to regulate logging outside of a municipality. The bill, with Senator Tomes' help, died in the Senate Local Government Committee. The idea that a county should not be able to regulate logging on steep slopes that drain into the county's water supply is abhorrent public policy.

IFA TO BEGIN POLITICAL ACTION FUND

by David Seastrom, IFA Board President

This spring, IFA members received a survey concerning whether the IFA should create a 501(c)(4) political action arm or action fund that would be a separate organization from, but work in coordination with, the current 501(c)(3).

We had a relatively high response rate to this poll: 119 responses from 861 members. Nearly three fourths of participants, 73.7%, support the creation of an action fund in line with previous motions of the Board of Directors and IFA's membership at the 2020 Annual Members Meeting. As a result, a committee of IFA leaders has been tasked to move forward with this proposal.

The current IFA is a 501(c)(3) charity, not-for-profit corporation, and as such we are not allowed to endorse or oppose candidates for public office under penalty of losing our tax exempt status. The creation of a separate 501(c)(4) entity will allow us to take such steps to influence elections. The Board feels the creation of this entity is necessary to help shape a legislature that's more supportive of our cause.



Involvement in elections is as important as signs and petitions when it comes to forest advocacy. Pictured: IFA Board President David Seastrom.

I would also like to explain what this action fund will and won't be doing. Its purpose is to identify politicians from Indiana who act on behalf of the environment and forest preservation, and those who work against it, from both political parties.

It is our intention to endorse political candidates who have in the past and are currently supporting our initiatives no matter what their party affiliations may be. We will specifically identify these candidates and endorse their election or reelection based solely on their actions in this regard.

We will also identify candidates who have opposed our preservation efforts and have introduced or supported bills that will harm forests and our public lands. We will make their views and

voting records known to the IFA membership, the public, and the media.

What we won't be doing is favoring or maligning either political party. This action fund will be about creating allies and forming partnerships with political leaders who will support our goals.

The Indiana legislature is dominated by a super majority in both chambers. To succeed, we have no choice about who we work with. IFA has consistently worked with politicians from both parties, and we have gained strong support from several Republicans, and the majority of Democrats.

The leadership of IFA recognizes that it's important to continue to focus on our core mission, and not let this new effort spread our resources too thin. To that end we will make sure that this effort will be fully vetted, staffed with mature and seasoned leadership, and have an easily understood message.

Those who have been seeking to impact environmental policies have been absent in the electoral process. We can't afford to be missing in action at election time any longer. By creating an action fund, IFA will help the citizens of Indiana make informed choices about which elected officials support their values and which do not, and cast their votes accordingly. ♦

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The second was the amendment by Representative Morrison to SB 373 in the House Natural Resources Committee. This amendment would have waived most legal liability from property damage

By signing SB389 into law, Gov. Holcomb deferred to the will of developers...

lawsuits to allow Wabash Valley Resources (WVR), an energy company, to inject massive amounts of CO2 deep into the ground under the Wabash River. WVR insisted it is necessary to build their plant to create hydrogen from coal and biomass. Without hundreds of millions of dollars in federal taxpayer subsidies,

this plant would not be built. And if it is so safe, why is the legal liability waiver needed?

The world cannot afford to keep pouring hundreds of millions of dollars into subsidies to prop up coal. Nor can we afford to grant the same legal precedent of this amendment to other greenhouse gas emitters that will surely demand equal treatment. We also should not foist a boondoggle on Hoosiers that may strip biomass from our hardwood forests that is crucial to their health. This pro-polluter amendment forced Senator Glick to kill SB 373 in final conference negotiations, a move IFA supported.

Bills we wanted also died. The underlying language in SB 373, as authored by Senator Glick and passed by the Senate, would have created carbon markets for forest owners and farmers in Indiana. This would have provided financial incentives to conserve Indiana's forests at a time

when they are shrinking from real estate development.

HB 1222, a bill to set aside 10% of each state forest from logging, authored by Representatives May and Cook, was sent to the House Natural Resources Committee where it was not granted a hearing. The best thing to come out of the 2021 legislative session was \$25 million in funding for conservation land acquisition and \$60 million for trails in HB 1001, the budget bill that was passed. The infusion of federal funds to Indiana from Congressional passage of President Biden's American Rescue Act made this possible. Indiana sorely needs to acquire more public park, forest and wildlife land. The trail money can also be used to buy public land to complete trails.

Thanks to all IFA members who spoke out for nature during this embattled session. ♦

News Briefs

Waiting for the Court to Decide on Houston South

A lawsuit filed by Monroe County, IFA, Hoosier Environmental Council, and forest advocate David Simcox challenging the massive logging and burning plan in the Hoosier National Forest (HNF) at Houston South has been fully briefed. The plaintiffs and the government have each filed motions for summary judgment in the U.S. District Court for the Southern District of Indiana. Plaintiffs allege the U.S. Forest Service failed to examine alternatives as

required by the National Environmental Policy Act and ignored the devastating effects of White Nose Syndrome on the Indiana Bat in violation of the Endangered Species Act when deciding that some “take”, i.e., killing, of this endangered animal was an acceptable impact of the project. With acoustic monitoring, IFA scientists found evidence of eleven bats, including the Indiana and four other species that are listed or under review

for endangered status. Scientists have concluded that this evidence suggests that Houston South could be “an area of both regional and national importance for bat diversity.” Over 4,000 acres of national forest will be logged and 13,000 acres burned repeatedly in the watershed of Monroe Reservoir, Bloomington’s water supply, if the project moves forward. A decision by Judge Tanya Walton Pratt could come this fall. ♦

2nd Houston South at Buffalo Springs: The Nightmare May Continue



The same talk by the U.S. Forest Service about “restoring forest health” and “helping wildlife” that led to the Houston South plan is emerging for another area that could encompass as much as 19,000 acres of the HNF. The “Buffalo Springs Area of Interest” lies in the Lost River and Patoka River watersheds south of Paoli, in Orange and Crawford

The Lost River is one of the biggest underground rivers in the world. The Mid-States Corridor highway as well as logging and burning in Buffalo Springs could degrade this unique ecosystem. Photo by Jeff Stant.

counties. Streams in much of the area drain into Patoka Reservoir, another major municipal water supply, or into sinkholes feeding the world-famous Lost River, whose surface waters often flow through underground caverns supporting albino cave fish, crawfish and other pollution-sensitive, rare creatures. For USFS videos that explain why staff believe more logging and burning is needed at Buffalo Springs: <https://bit.ly/3uYCOFP>. For IFA’s response to the videos: bit.ly/3guwFvw. ♦

Eastern Hellbender and Bald Eagle Habitats To Be Logged

On May 19, DOF sold timber from 100 acres in Harrison Crawford State Forest sloping to the Blue River where the last population of Eastern hellbenders survives in Indiana. Reaching lengths of three feet, the Eastern hellbender is the largest salamander in North America. It is endangered in Indiana. The logging of as much as 34% of the standing volume of large trees on these slopes may increase sediment in the Blue River to levels that will suffocate the hellbender’s young. IFA’s sponsorship of the installation of water quality monitoring probes by the Ecosystems Connection Institute upstream and downstream of this logging should indicate whether sediment levels are rising to harmful levels. This information will allow the state to take corrective actions if it genuinely values the well-being of these animals. On the bright side, biologists recently found a single hellbender in Silver Creek, an Indiana stream that empties into the Ohio River about 40 miles upstream from the Blue River.

A creek flowing from a forest to be logged at Salamonie, April 2021. Photo by Jeff Stant.

DOF also announced last year, that it will move forward with logging as much as 31% of the harvestable trees on 121 acres in the heart of Salamonie River State Forest in 2021. IFA is working with citizens and local officials in northeast Indiana to appeal to Governor Holcomb once more to order the DOF to rethink this decision. More than 800 people signed a rulemaking petition in April

2019 to turn Salamonie and nearby Frances Slocum State Forest into state parks to save these forests for recreation. The petition was rejected by the Indiana Natural Resources Commission in July 2019. IFA is surveying Salamonie Forest for bats this summer and looking at various options to save these forests which likely harbor the largest migratory roosts of bald eagles in the state. ♦



What's Next for the Hoosier National Forest?

Every 15 years, the National Forest Management Act requires the Hoosier National Forest to update its "Land and Resources Management Plan" which charts management objectives for every acre of the forest. With the last update completed in 2006, the next one is due this year—although the USFS has discretion over the exact timing of the update's completion.

The best way to keep significant areas in the HNF from having roads built through them and being logged? Public comment. The areas in question include Nebo Ridge and at least 21 other areas outside of the Charles Deam Wilderness, which is protected by an act of Congress. These areas collectively comprise half of the HNF's 204,000 acres. Stay tuned for updates from IFA about opportunities to comment in support of protecting forest dependent-wildlife, allowing more old growth forests to return, and providing for hiking, back

country camping and recreation in wild forest in the HNF that exists nowhere else in the state. To find out more about the HNF Management Plan, go to: <https://bit.ly/3xVYW4>. ♦

Next State Forest Management Plan

Due to a shrunken budget, the Indiana Division of Forestry is one and a half years overdue in producing a new five year plan that charts management of the state forests and other DOF activities. The last plan covered 2015-2019. DOF Chief John Seifert stated in an April 2021 email that "all sections have prepared drafts for internal review." Sections addressing state forest management are "proposed to mimic the last 5 year plan;" Seifert expects DOF "to complete the new plan by the end of summer 2021." ♦

A High Conservation Value Forest!

In that same April email, Mr. Seifert announced at long last that a DOF "committee field review" is planned this summer for IFA's 2019 proposal to designate the 2,700-acre Yellowwood/Morgan-Monroe State Forest Back Country Area as a High Conservation Value Forest (HCVF). Seifert said that DOF will post the proposal on its website for 30 days of public input before making a decision. IFA's proposal, prepared by Leslie Bishop and Rae Schnapp—both Ph.D. biologists—would allow a rugged, biologically rich forest of more than four square miles to return to the old growth condition providing a great wilderness experience for Hoosiers to enjoy, less than 50 minutes from downtown Indianapolis. Stay tuned! ♦

A Glimmer of Hope on the Mid-States Highway

By Emma Steele, IFA Outreach Coordinator

The Hoosier National Forest (HNF) is still under threat from the proposed new-terrain road known as the Mid-States Corridor Highway. What began in the 1990s as a controversial local project to relieve congestion around Jasper and Huntingburg resurfaced last year and ballooned into a plan for an entirely new four-lane highway spanning from the Ohio River 70 miles north to link I-64 to I-69 south of Bloomington. Taxpayers could spend more than a billion more dollars, destroying thousands of acres of forests and farms and many businesses to build another high speed roadway barely 20 miles east of the more than \$3 billion new terrain I-69 which hasn't even been completed!

In response to public outcry, the state announced in early February that it is once again considering a simple upgrade of U.S. 231 from Crane as one of the alternatives and no longer considering an interstate-level freeway for any of the routes. Then in early June, Gov. Holcomb announced that INDOT is planning to spend \$75 million to relieve congestion at Jasper and Huntingburg and make other improvements to U.S. 231 starting next year.

While this may indicate the new terrain highway proposal is off the table, considerable destruction of open space is still possible. Furthermore INDOT is still considering five routes of new construction across the region. Two of these—Routes M and O—

would cut through the heart of the HNF in geologically unique areas home to many rare and endangered species.

According to the project website for the Mid-States Corridor, the Draft Environmental Impact Statement will be completed by the end of 2021, identifying the preferred route for the project with public hearings and a comment period to follow.

It is encouraging to see the state take a second look at a much smaller scale project to upgrade U.S. 231. It would be a tremendous relief to see the open space, farms, and forests in this region conserved

in a state already saturated with highways and drowning in sprawl. But now is not the time to relax. Powerful gambling interests in French Lick keep pushing for the route to be an expressway through the bluff and cave country of the HNF.

IFA is committed to protecting Indiana's only national forest and stands with the residents of south central Indiana working to prevent this new terrain boondoggle. Let's keep up the pressure by voicing your opposition to the governor at 317-232-4567, eholcomb@gov.in.gov, or via U.S. Mail: Gov. Holcomb, State House, Indianapolis IN 46204. ♦



The Lost River surfaces under a sandstone cliff. Photo by Jeff Stant.

How Forests Improve Indianapolis Communities

As IFA supporters know, urban forests provide an important array of ecological, environmental, and social benefits (collectively called ecosystem services) that contribute to healthy communities:

- ❖ **Provide green infrastructure** - control stormwater and flooding, improve water quality, moderate summer heat, reduce noise, sequester carbon, and provide habitat for wildlife.
- ❖ **Support a growing economy** - improve property values, beautify neighborhoods, and embrace “smart growth” principles with a mix of land uses.
- ❖ **Enhance quality of life** - provide more places to relax, exercise and enjoy nature for improved mental and physical health and reduced crime.

The Davey Resource Group’s Tree Management Plan (conducted in 2016 for the City of Indianapolis Dept. of Public Works) estimated that the 182,801 street trees (in street right-of-ways) in Indianapolis provide \$9 million in ecosystem services each year, an almost 4:1 return on dollars invested. Based on those figures, we estimate that the 4.7 million trees in unprotected urban forests provide about \$258 million in ecosystem services annually.

The city and area non-profits like Keep Indianapolis Beautiful have made an important commitment to tree planting. But the same commitment has not been made to protect urban forests, especially in the communities that need them most.

Without preserving the city’s existing forests, Indianapolis will never reach

desired tree canopy goals. Marion County’s current tree canopy averages 33% across the county, as noted in the Thrive Indianapolis plan. A goal of 40% canopy cover was recommended by the Indiana Department of Natural Resources in 2011, consistent with recommendations for cities east of the Mississippi River. To achieve this cover in Indianapolis, 2.4 million trees would need to be planted. Without conserving existing forests in the city, that’s impractical, if not impossible. The City’s most recent goal to plant 30,000 native trees by 2025, stated in the Thrive plan, will only meet 1% of the goal.

There are many reasons the city needs to work much harder to bring tree canopy to all neighborhoods. One good example is the “heat islands” that prevail in low-income neighborhoods that lack the trees and forests found in more affluent neighborhoods. According to the U.S. Environmental Protection Agency, surfaces in shade can be 20-45 degrees cooler than those in full sun. And according to the Trust for Public Lands, air temperatures in areas within a half mile of a park or forest can be 6 degrees cooler than areas beyond that range.

Another reason is crime reduction. In a 2012 study of Baltimore, published in Landscape and Urban Planning, just a 10% increase in leaf canopy was associated with a 12% drop in crime. Why? One factor is that shade trees encourage neighbors to be outdoors more where they become more aware of neighborhood activity.



Kira, an Indianapolis resident and friend of IFA, enjoys the outdoors.

Indianapolis Needs More Public Green Space

Indianapolis parks serve as places to unwind, gather, exercise and play. Indy Parks manages 11,258 acres of green space in 212 parks, **yet 65% of Indianapolis residents do not have a park within a 10-minute walking distance** (source: Trust for Public Land’s ParkScore® Rankings 2017).

Indianapolis spends \$26 per person annually on parks, while the median spending for all U.S. cities studied was about \$83 per person in 2017. The City needs to find new ways to adequately fund existing parks and protect urban forests.

Planning for Forest Protection

Over the last decade the city has identified the protection of forests and trees as a fundamental goal in numerous approved plans. For example, the preservation of forests in Marion and Hamilton Counties is an integral part of the White River Vision Plan, published in 2020, which outlines the objective:

“to identify forests that are not protected, to assess the quality of the forests, and establish priorities

Dollar Value of Benefits Provided by Trees

Benefits Provided by Trees	Street Trees Only (182,801 trees)	Trees in Unprotected Forests (4,729,580 trees)
Aesthetics & Other	\$4,832,549	\$125,031,740
Stormwater	\$3,325,193	\$86,032,168
Energy Saving	\$1,311,515	\$33,932,610
Air Quality	\$351,332	\$9,089,955
Carbon Captured	\$149,446	\$3,866,592
Total Annual Benefits	\$9,970,035	\$257,953,064

for preserving high quality forests and forest cover in general [to] orient future park selection, acquisition from willing landowners, and other conservation around the highest priority forests on private lands..."

In 2019, the city released the Thrive Indianapolis Plan which set a goal of improving preparedness for and resilience to increased flooding, droughts, and heat predicted by nearly all climate change models. Resilience is the ability to withstand changes. The Thrive Plan recognizes the importance of trees and urban forests, stating:

"the value that trees bring to a neighborhood is immense—from improving air quality to reducing temperatures and energy use to delivering mental health benefits. Our tree canopy contributes to our resilience..."

Citizen Energy Group's Long Term Control Plan, designed to reduce sewer overflows to make the White River safe for human contact, acknowledges the importance of forests in absorbing storm water to achieve this objective.

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A family walks the trail at Fort Ben.
Photo by John Toffolo.

THRIVING TREES, THRIVING COMMUNITIES

by Jeremy Kranowitz, President & CEO, Keep Indianapolis Beautiful



As I drive, bike and walk through Indianapolis, one of the sights that tugs at my emotions are the young tree saplings with their iconic white tree guards protecting the base, marking another neighborhood where Keep Indianapolis Beautiful is working to create a thriving tree canopy.

This is work measured in seasons, years, and decades. It is said that the best time to plant a tree was 20 years ago, and the second best time is right now. By the end of 2022, KIB and our volunteers will have planted and nurtured over 50,000 trees in Indianapolis. There are some obvious—and maybe some surprising reasons why this is such critical work.

Trees reduce flooding. As I write this, a brief strong storm just rolled through Indianapolis, and the streets were almost immediately flooded. A single mature tree can hold 100 gallons of water through its leaves and roots, so when those 50,000 trees are fully mature, they will prevent 5 million gallons of water from overflowing our sewer system every time it rains. In fact, KIB works with Citizens Energy Group to do just that—plant trees in flood-prone areas of the city to reduce the flooding.

Trees clean the air. While trees extract carbon dioxide and provide oxygen for people and animals to breathe, they're also great filters for urban pollutants and soot. The bumpier or "hairier" the leaves, the better they are able to trap pollutants. When there are more trees in our neighborhoods, we can all breathe easier...literally!

Trees cool us down. According to scientists at the National Centers for Environmental Information, three of the hottest summers on record have occurred since 2016. Trees provide much needed shade when the sun is at its peak. The lush the tree canopy, the cooler our buildings, homes and streets become. Good canopy also reduces demand for expensive air conditioning.

Trees help us feel better. One of the dangers of hot days is the risk of heat stroke, particularly for the elderly. Tree coverage can lower temperatures by 2-4 degrees, reducing that risk. Just as interesting, your blood pressure is lower when you walk beneath trees compared to when you are out in the open. Trees provide a sense of protection that actually improves our overall health and sense of well-being.

What should not be surprising is that some parts of Indianapolis have more trees than others. Some neighborhoods are up to two-thirds trees—while others have less than 10%. If we want to make the city more environmentally equitable, we need to focus our attention on the parts of the city that need more of the benefits that trees can bring.

We need more people to get involved. Tens of thousands of people have volunteered with KIB over the years, donating hundreds of thousands of hours of time, but we can always use more hands. One fertile opportunity is working with houses of worship. There are more religious institutions per capita in Indy than any other big city in the country! And every major religion has a tenet in their spiritual practice or sacred text that calls on the faithful to care for the world around us. KIB is tapping into that moral obligation, and working more with congregations to turn out their members to help plant trees near their churches, mosques, or synagogues and in surrounding neighborhoods.

Cities need full forests, too. That's why the Forests for Indy initiative at the Indiana Forest Alliance is so important. An "urban forest" is an acre or more of trees not interrupted by a road or building. Even mini forests are critical for all the reasons listed above, and there are too few uninterrupted areas of forest left. We need not only street trees, but also urban forests to build a healthy, thriving city for us all to live.

Come plant trees with KIB! Sign up to volunteer with KIB at <https://www.kibi.org/volunteer>. You can also request trees for your neighborhood. KIB will provide the trees, and the first three years of maintenance, including watering, mulching, and pruning, after which time the tree should be self-sufficient. Visit www.kibi.org/trees for info.

FORESTS FOR INDY

15 High Quality



1. Crown Hill North Woods
Trees like this Bur oak at Crown Hill North Woods were growing before Indiana became a state (1816).



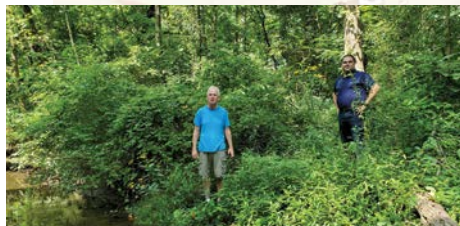
2. White River Bluffs
The Central Indiana Land Trust is working to save more of the forested bluffs in the city's northside along the White River like this one purchased last year by CILTI from the Highland Country Club.

3. Fishback Creek
Some of the best wildlife habitat in Marion County lies along Fishback Creek, north of Eagle Creek Reservoir.



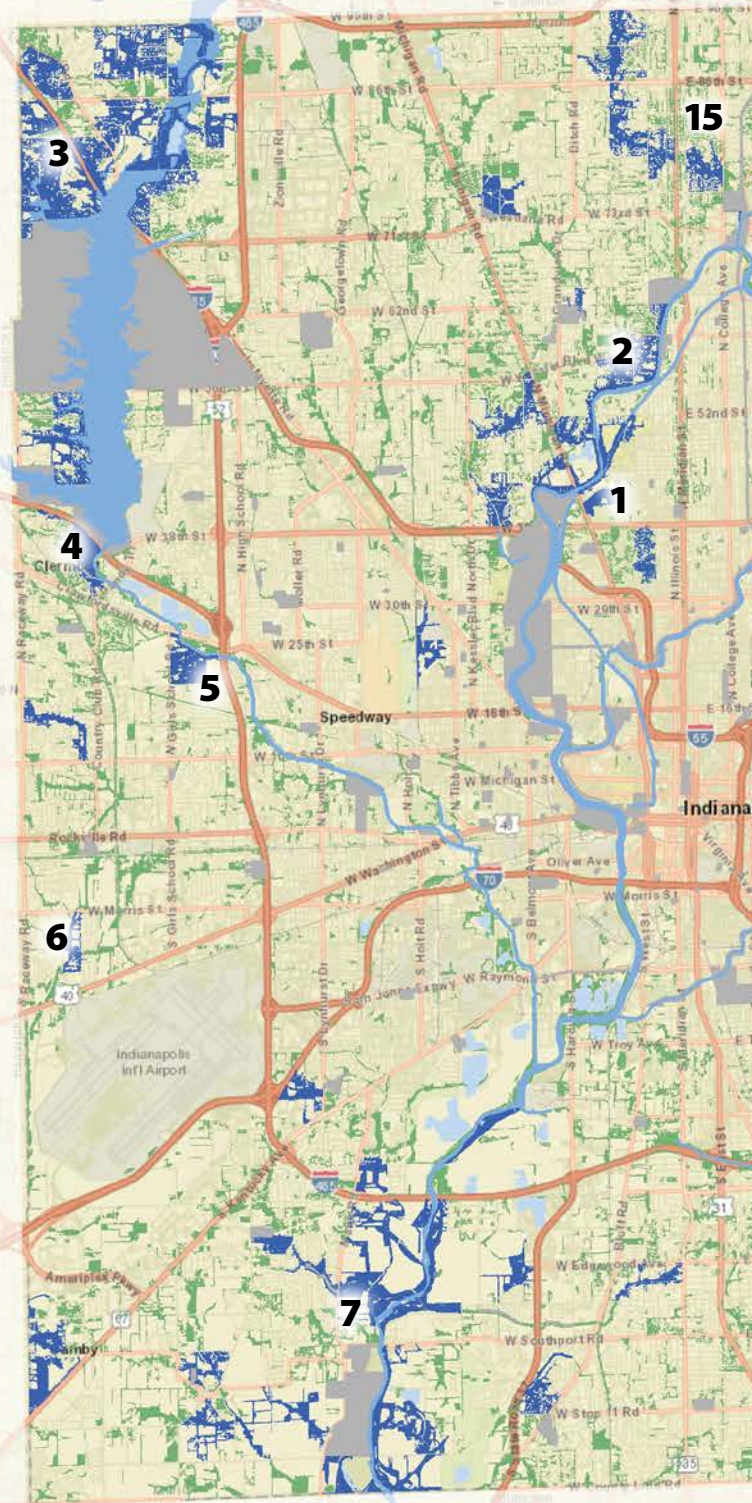
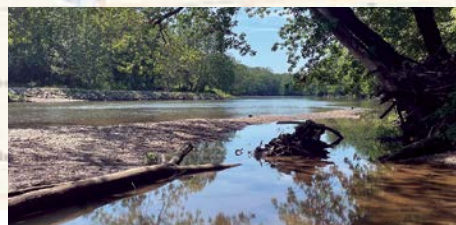
4. Eagle Creek
South of the Eagle Creek Reservoir Dam lies more than 100 acres of high quality forest on both sides of Eagle Creek Reservoir.

5. Camp Dellwood
The Girl Scouts have preserved a beautiful forest with many large trees like this sycamore on the city's west side at Camp Dellwood.

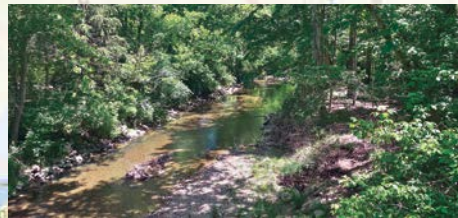
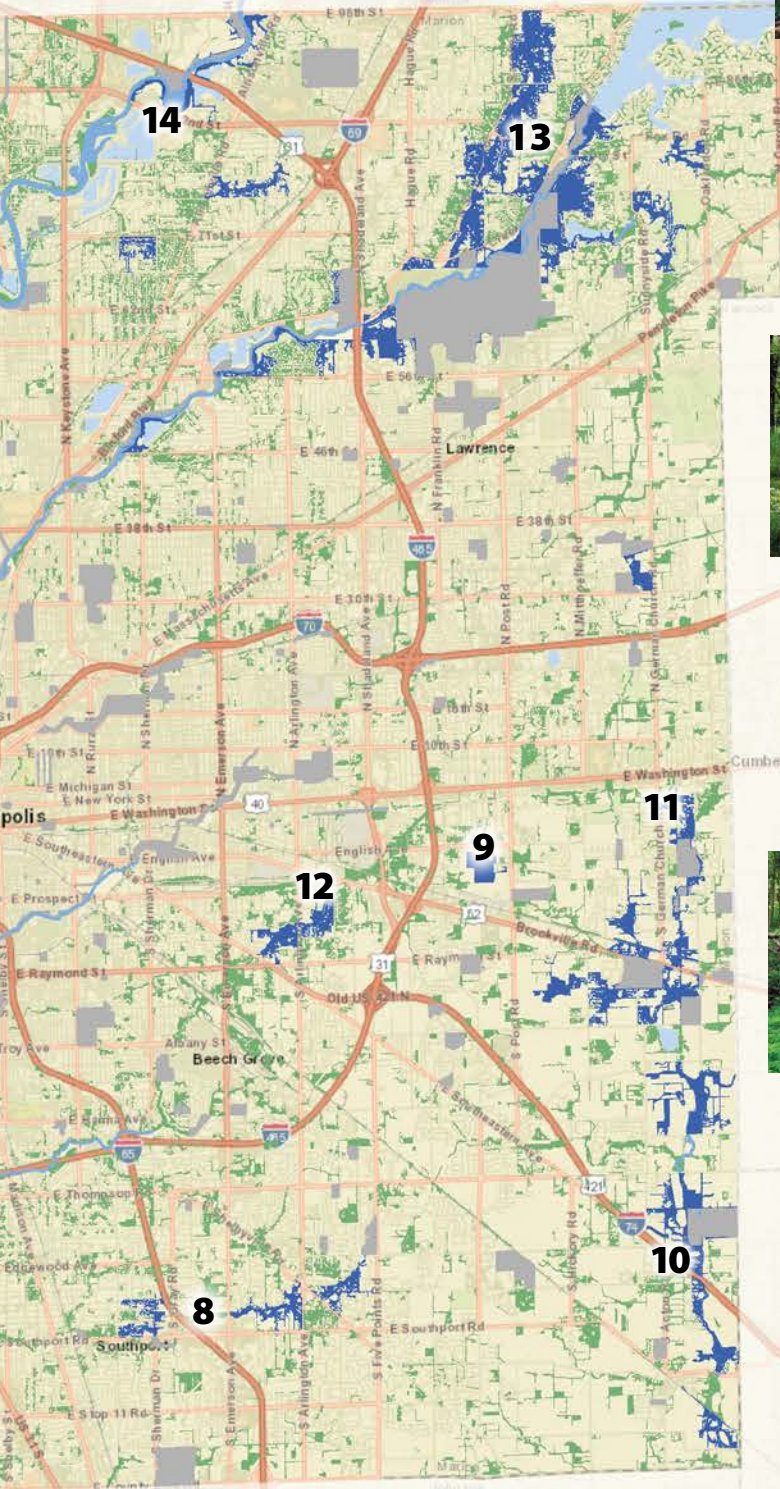


6. White Lick Creek
City-County Councillor Jared Evans (right) and Leonard Stringer, of the White Lick Creek and Vandalia Trail Alliance (left), are working to establish the White Lick Creek Greenway Trail through 15 miles of continuous creekside forest on the city's far west side.

7. White River
A large concentration of forests produces the highest ecosystem services along the White River on the city's southwestern quadrant.



y Urban Forests



15. Williams Creek
Forest extends along Williams Creek from Marott Park to the Hamilton County line. Immediately north of the Park, Williams Creek forests on the grounds of the State School for the Blind will soon be for sale.

14. Oliver Woods
Just east of Oliver Woods along the White River, bald eagles are raising young in this sycamore.



13. Mud Creek
Mud Creek Conservancy is championing protection of this nearly unbroken corridor of forest, identified as a Conservation Corridor, stretching five miles along Mud Creek from Fort Ben State Park to the Hamilton County line.

12. Lick Creek
South of Irvington, forest stretches five miles southeast to Beech Grove in an area with few parks. It's also proposed as a greenway by the City.



11. Buck Creek North End
Mature forest north of Paul Ruster Park along Buck Creek near Cumberland.

10. Buck Creek South End
High quality forest extends for nearly 15 miles along Buck Creek connecting Southeastway Park to Paul Ruster Park on the city's southeast side, also proposed as a greenway by the City.



LEGEND
 Top 100 Forests
 Forests
 Existing Parks
 Rivers & Lakes

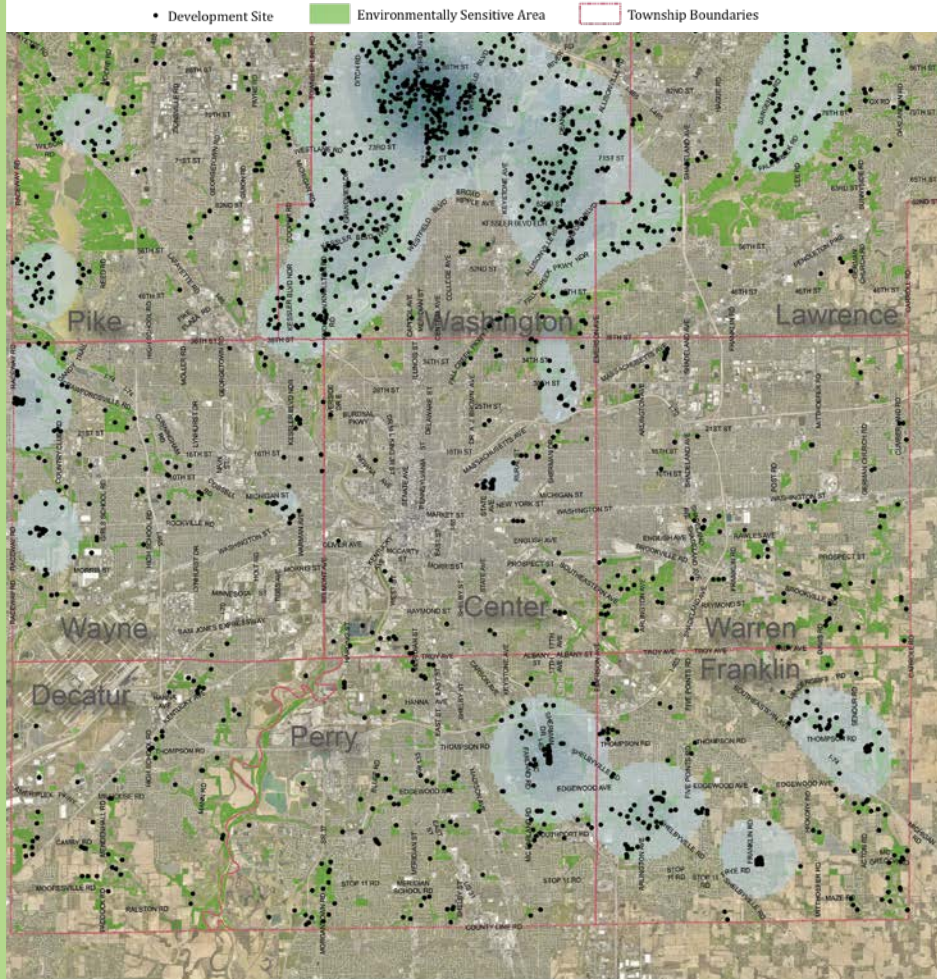
Photos by: Griffin Bruns - 7, 15.
Elizabeth Mahoney - 3, 14.
Mud Creek Conservancy - 13.
Don Miller - 9. Jeff Stant - 1, 2, 3, 4, 5, 8, 10, 11, 12.

8. Little Buck Creek
The Indy Greenways Full Circle Master Plan proposes 18 miles of largely forested corridor along Little Buck Creek as a greenway to preserve.



9. Dogwood Forest
Near Post Road on Indy's east side, about 50 of this forest's 71 acres were full-canopied in 1941 aerial photographs, making this a "remnant" of the old growth flatwood forest that once covered central Indiana but are now very rare.

Development Encroachment on Environmentally Sensitive Areas in Marion County, Indiana



Each dot on this map represents a variance, a rezone, or at least three building permits approved by the City of Indianapolis Metropolitan Development Commission. **These are significant developments that have occurred in just five years in "environmentally sensitive areas" which are "high quality forests or other natural habitats" identified in the Marion County Comprehensive Plan as habitats that should not be harmed by development.** More than 600 of these developments were approved by the MDC in Washington Township alone in that short period. Map courtesy of the City of Indianapolis, Department of Metropolitan Development.



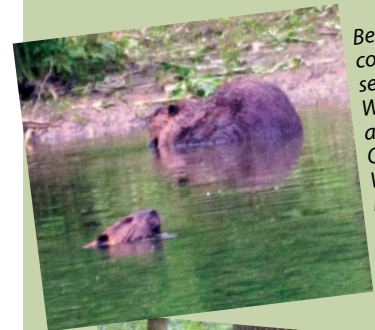
Nearly 18 acres of this forest along Crooked Creek were wiped out in early 2021. The Marion County Metropolitan Development Commission approved this development, despite the forest being an "environmentally sensitive area" which the Marion County Comprehensive Plan recommended be spared from development. Drone photo by Indy Aerial.

Indy's Urban Forest Animals

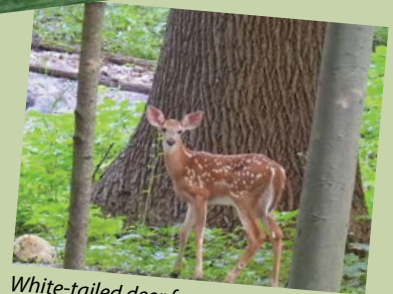


This great blue heron rookery in a private forest along Eagle Creek is one of several in Marion County. Photo by Jeff Stant.

A clawed creature leaves its marks on a log over a tributary of Eagle Creek near Clermont. Photo by Elizabeth Mahoney.



Beaver are commonly seen in the White River along Oliver Woods. Photo by Elizabeth Mahoney.



White-tailed deer fawn along Mud Creek. Photo courtesy of Mud Creek Conservancy.



Jameson Camp staff rescued this injured young great horned owl in the woods along White Lick Creek. Photo by Jennie Broady.

Other plans that recognize the importance of preserving forests and trees in Indianapolis include:

- ❖ Indy Parks Comprehensive Master Plan (2017)
- ❖ Lower Fall Creek Watershed Management Plan (2009)
- ❖ Comprehensive Plan for Marion County (2018)
- ❖ Indy Greenways Full Circle Master Plan (2014)
- ❖ Neighborhood Quality of Life Plans

City leaders recognize that forests and trees are important. The perennial question is whether they have the will to follow through. It is time to walk this talk before our most important remaining forests are destroyed.

Prioritizing Indy's Forests

Using tree canopy data provided by Keep Indianapolis Beautiful from the University of Vermont's Spatial Analytics Lab, we mapped the 4,237 unprotected forests and scored each for environmental, ecological, and social benefits. The overall ranking combines all three categories of variables to identify the unprotected forests that provide the most overall public benefit.

- ❖ **Environmental benefits** are services that the city or its residents otherwise pay for through utilities.
- ❖ **Ecological benefits** are attributes that reflect wildlife habitat and forest age and natural quality, including remnant forests present as mature forests since at least 1941, when the first aerial photos were taken.
- ❖ **Social benefits** are a function of social vulnerability and reflect needs of communities that lack access to greenspace and nature.

The map on pages 8 and 9 illustrates the interconnectedness of the city's forests along the White River and smaller streams and the value and feasibility of establishing a network of forest preserves, particularly along these waterways. Forest preserves typically require far less maintenance and management than traditional parks. Forest preserves also reduce expenses for built infrastructure while making the city more resilient to extreme weather events. This green infrastructure is already in place and serving our community—but it

Conservation Strategy	% of Marion County	Acres
Carbon offset revenue potential: Conserving forests 30 acres or more that qualify for carbon offset credits	8.9	23,074
Vacant and underutilized: Protecting forests greater than one acre that are undeveloped for future public use	6.9	17,916
Protected: Managing parks or private conservation areas to preserve forests	5.1	13,208
Municipal: Managing land owned by public agencies, school corporations, and utilities to preserve forests	4.2	10,937
Riparian (waterway) buffers: Protecting tree canopy adjacent to rivers and streams to provide corridors for trails and wildlife, curb erosion and absorb stormwater	2.8	7,292
Adjacent to protected land: Retaining and expanding tree canopy adjacent to existing parks and parkways	1.8	4,582
Wildlife habitat: Protecting parcels 20 acres and greater that provide multiple ecosystem service benefits and are eligible for federal funding	1.7	4,502
Neighborhood/backyard stewardship: Providing incentives to conserve land owned by residents or homeowner associations	1.2	2,988

is undervalued and under constant threat from development.

A Conservation Strategy for Every Forest

What are the most realistic, viable ways to preserve various forests? Thanks to IFA's partnership with The Conservation Fund—a national organization that helps cities develop approaches to conserving forests—an array of strategies has been identified (see table above).

Some parcels qualify under more than one conservation strategy, and each strategy has specific legal/programmatic requirements, funding needs, and funding sources. Creative preservation options exist, including conservation easements, deed restrictions, backyard conservation as well as land acquisition.

Every neighborhood forest exists in a different context. Variables include the forest's proximity to a waterway, pressure to develop the area, poverty rate, and racial diversity. Given the unique setting of each forest, IFA is working with neighborhood organizations to match the right strategies to the highest priority forests, with the goal of establishing a network of forest preserves.

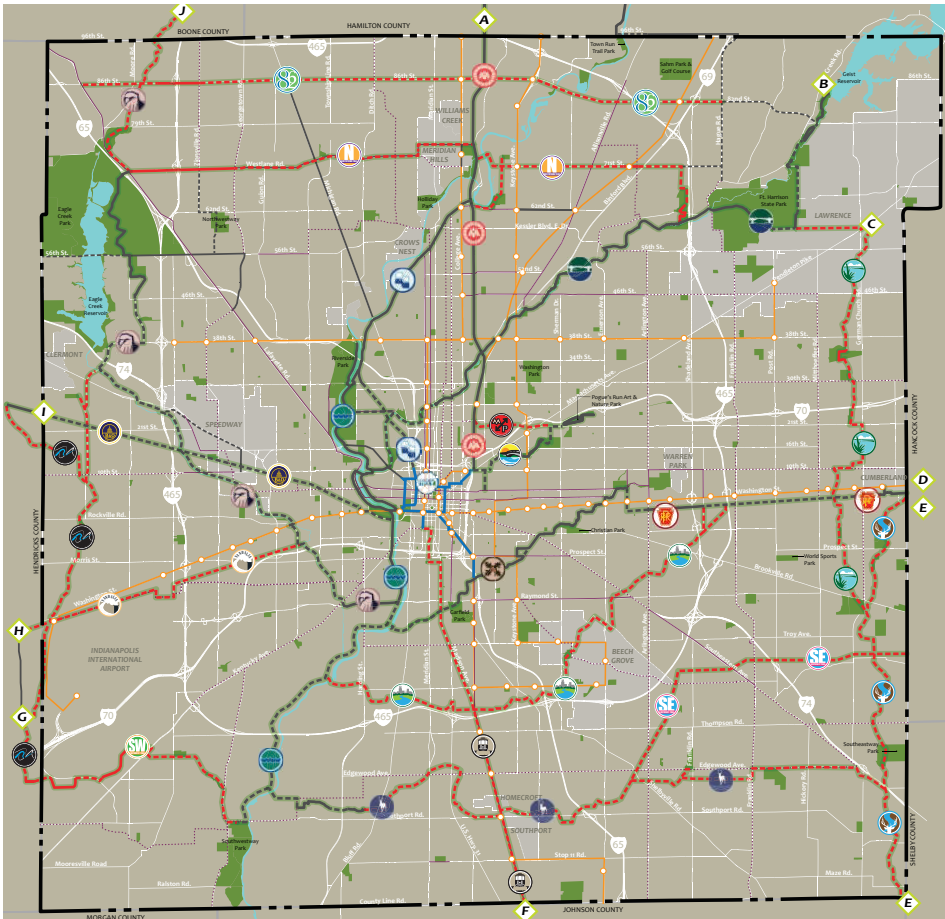
Funding Forest Protection

The Conservation Fund helped IFA identify a variety of potential funding mechanisms that have been used to finance forest conservation in other

cities. One of the most promising funding mechanisms for Indianapolis is the federal Land and Water Conservation Fund (LWCF) for enhancement and expansion of parks and trails. The landmark federal Greater American Outdoors Act passed in 2020 is more than doubling Indiana's annual share of LWCF allocations from past years. Traditionally, LWCF funding has been allocated for priorities identified in the Statewide Comprehensive Outdoor Recreation Plan (SCORP). Indiana's SCORP includes a visionary trail system that follows the White River. Indianapolis could capitalize on this by acquiring conservation lands to connect trails, which are already envisioned in local recreation plans. Indeed, most of the forests that produce the best overall benefits in FFI's inventory are located in riparian corridors proposed to become "Greenways" or identified for protection in "Conservation Corridors" in the city's Greenways Full Circle Master Plan of 2014-2024.

Another promising avenue for funding protection of forests as green infrastructure is the Citizens Energy Group's Raw Sewage Overflow Long Term Control Plan, scheduled for an update in November 2022. Currently, the plan prioritizes engineered structural solutions, but mentions forest preservation, wetland restoration, and habitat restoration as options. When the plan is updated, these green infrastructure options could be given more funding as they will achieve multiple objectives—reducing sewer overflows by absorbing stormwater while also creating forest preserves with trails

continued on page 12



Map from *Indy Greenways Full Circle 2014-2024 Master Plan*, pg.159. Dotted green and orange lines represent proposed greenways.

for public enjoyment. Similarly, acquiring forests as green infrastructure in planned wellfield areas, for example in the Fall Creek watershed, can protect future water supplies important to growth of the local economy while expanding public recreational areas.

Some cities are using tree planting and protection of urban forests facing development pressure to generate carbon offset revenues and fund conservation efforts. For example, CityForestCredits.org has helped city leaders in Cleveland, Austin, Chattanooga, Des Moines and Richmond, VA launch voluntary carbon credit markets. They can link purchasers of offset credits (households or corporations) to suppliers (e.g. the city and/or other forest owners in Marion County) to provide revenue streams to help preserve public and private forests in Indianapolis.

Other funding sources for acquiring forests could include bonds, local tax revenues, impact fees, matching funds from federal and state grants, and donations of land or dollars from private philanthropists and foundations.

Toward a Network of Forest Preserves

After assessing the state of urban forests in Indianapolis, IFA recommends these actions:

- 1. Educate** policymakers, regulators and the public about the crucial role of urban forests as green infrastructure.
- 2. Strengthen tree protection ordinances** for both residential and commercial land.
- 3. Engage neighborhood organizations** to develop and implement specific conservation strategies for priority forests with community partners.
- 4. Correct inequities** in access to green space.
- 5. Pilot a project** to use forest acquisition, tree preservation and planting to offset the city's carbon emissions and generate a revenue stream for the city.
- 6. Develop incentives** for private landowners to retain forests through carbon offset revenues and tax incentives.

- 7. Leverage existing plans** (Thrive Indy, White River Vision Plan, etc.) and funds earmarked for implementing them to achieve significant forest preservation.
- 8. Raise new funds and pool existing funds** for community development, greenways, parks and recreation, sewer/stormwater control, water supply, and wildlife conservation to establish a network of forest preserves in Indianapolis.

Right now, Indianapolis has a window of opportunity to act boldly to improve resilience and quality of life in neighborhoods throughout the city by finding ways to protect our existing urban forests and planting more trees and forests in areas without them. Indianapolis leaders need to think strategically about where development should and should not occur.

In 1909, George Kessler designed a system of parks and boulevards in Indianapolis that connected neighborhoods, waterways and parks with beautiful bridges, parkways and promenades. It is time to embrace a bold new vision to address today's pressures by creating a network of forest preserves– to ensure a verdant, healthy, resilient future for Indiana's capital city.

Contact rae@indianaforestalliance.org, 317-602-3692, to learn how you can help make this vision a reality. ♦

ACKNOWLEDGMENTS

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Ecoblitz Using Novel Survey Methods at Combs Creek

By Rae Schnapp, Ph.D. IFA Conservation Director

IFA's taxonomic inventory of 734 acres within the Combs Creek watershed continues to document biodiversity of the Nebo Ridge area in the Hoosier National Forest in southern Brown County.

In 2019, scientists found eight state endangered timber rattlesnakes including a den containing at least four individuals. They also found a maternity roost of nationally threatened Northern long-eared bats. And they found a rarely seen forcefly, named for its pincer-like appendages. No larvae or feeding habits have been discovered for this species, making it a biological mystery. These surveys are discussed in 2019 & 2020 Forest Defenders. In 2020, a timed point count by experts identified 45 summer nesting birds at Combs Creek — indicative of a healthy interior hardwood forest bird community uncommon in Indiana. In 2020, other surveys at Combs Creek were postponed due to the COVID 19 pandemic. Surveys this year at Combs Creek are pioneering new, more humane methods for identifying certain species:

Dr. Rob Jean, a top bee scientist in the midwest, is leading the second-ever survey of Indiana forest bees, the first being his survey in IFA's Yellowwood/Morgan-Monroe survey. Dr. Jean is trying a

never-before used method catching bees as they emerge from dens in the ground into tents. These "emergence traps" measure the raw density of bees in the forest, providing a more accurate characterization of the bee community while killing far fewer bees than traditional methods that attract bees by color or scent.

A survey by ecologist Phillip Arrant is identifying small mammals using other novel methods. These include camera traps in buckets and an analysis of owl pellets to find the bones of small mammals. An objective is to identify smoky and pygmy shrews, which are state "species of special concern," without causing harm or death that result from traditional survey methods. These two shrews were not discovered in Indiana until the 1980s and are found only in undisturbed forests.

The Nebo Ridge and Houston South areas form the largest block of wild forest left in the entire lower midwest. Our surveys will strengthen efforts to protect these areas when the HNF Management Plan is updated in 2021-22.

To help with these or other surveys or to join the Ecoblitz e-list to get notices of upcoming surveys, contact rae@indianaforestalliance.org. ♦

IFA's Ecoblitz is made possible by the Efroymson Family Fund, the Brabson Library & Education Foundation, and these generous individual donors: Kathy Klawitter, Charlie & Peggy Sutphin, Annette Alpert & Darrell Haile, Terry Marbach, Ellie Bookwalter, Mary Bookwalter, Dennis Tibbetts, Joseph Fitzgerald, Andrea & Carl Sartorius, Tom Bennett, Charles & Julie Bookwalter and Anonymous.



An Eastern box turtle and a green frog converge at Combs Creek. Photo by David Rupp.

Update: Carbon Neutral Indiana



IFA members Rock Emmert & Kris Lasher of Ferdinand, Indiana "went neutral" this spring.

Since April 2020, IFA has acted as the fiscal sponsor for Carbon Neutral Indiana (CNI). CNI is a social enterprise helping Hoosier households clean up their carbon footprints. First, CNI measures carbon footprints of Hoosiers over the phone for free. Then people can opt to clean up their "carbon trash" by investing in high quality, verified negative emissions—paying land owners in Indiana to preserve their forests and reforest more ground: actions that absorb carbon from the atmosphere.

Since it launched, CNI has:

- ♦ Helped 350+ people measure their carbon footprints, most for the first time
- ♦ Helped 200+ households and businesses become carbon neutral
- ♦ Cleaned up 6,200+ tons of CO₂e (annualized), like taking 1,250 cars off the road forever

- ♦ Prevented over \$1.3 million in social damages (annualized)

IFA was one of the first organizations to "go neutral" through Carbon Neutral Indiana. "CNI and IFA share an interest in advocating for carbon markets in Indiana," says Poynter. "CNI's work is creating a new demand for these markets, and IFA's mission benefits when more forests are left standing. I'm grateful to the board and staff of IFA for their partnership."

"Carbon Neutral Indiana is coming at the worst environmental problem we've ever faced as a state, a society, a nation, in a new way," says IFA Executive Director Jeff Stant. "CNI helps people who want to do something tangible about the climate crisis make a difference now." ♦



IFA Updates

25 Years of Defending Forests

By Morgan Whitacre, IFA Development Director

Did you know that this year IFA is celebrating its 25th anniversary? Founded in 1996, the Indiana Forest Alliance formed as a coalition of seven groups to coordinate efforts to protect the Hoosier National Forest and various state forests.

What progress the organization has made! We continue to work to decrease logging and protect wild nature in these public lands and have expanded our work to find and protect endangered species such as the Eastern hellbender and Northern long-eared bat that depend on these lands. And this year IFA is pro-

moting forest carbon programs at state and local levels, raising concerns about a proposed highway that will destroy forests and is focused on the Forests for Indy project, featured in this issue of the Forest Defender.

To celebrate the expansion of the Forests for Indy project, and to mark 25 years of defending forests, will you make a donation of \$25, \$100, \$250, \$500? Your support this year is critical. Our Forests for Indy project is one of the largest multi-year enterprises IFA has ever undertaken. With your continued – or better yet – increased support, you can ensure that IFA continues our courageous work to defend wild nature in

Indiana for another 25 years. We can't think of a better 25th birthday present than your show of support. ♦



**In Memoriam:
PAUL BRYAN
1957 - 2020**

By Jeff Stant, IFA Executive Director

Friends of IFA fondly remember Paul Bryan, who served as director of development at IFA from 2015 to 2018. During this time at IFA, Paul raised considerable resources,

organized many events, and helped lead efforts to save Crown Hill North Woods and advance forest-friendly legislation.

A native of northwest Indiana, Paul was an environmental leader who had a major impact on the state. Early in his career, he played a major role in the effort that led to establishment of the Deam Wilderness Area in the Hoosier National Forest in the 1980s. He lobbied at the State House for the Izaak Walton League and the Sierra Club Hoosier Chapter. Paul led efforts that prevented the clearing of natural habitat from the South Branch of the Elkhart River and created programs that benefitted wildlife. He created the Toxic Action Project at Citizens Action Coalition, represented the Indiana Department of Environmental Management at the legislature during the Bayh Administration, and consulted for city governments on brownfields planning. He later worked for non-profits that helped vulnerable animals and people.

Paul led an industrious life working on policies to defend the environment. He dearly loved canoeing, sailing and hiking. He always fought hard to protect what's wild. We will never forget Paul. ♦

Planning for a Forested Future

Have you ever thought about how you can give back to IFA in a greater way? Consider a planned gift. Planned gifts are among the most meaningful to make and to receive. Not only do they provide important support for IFA, but they can also offer considerable tax advantages to you and can be surprisingly easy to set up.

The most common form of a planned gift is a bequest left in a supporter's will for IFA. But there are multiple vehicles for making a planned gift, including:

- ❖ Living trusts
- ❖ Life insurance beneficiary designations
- ❖ Charitable gift annuities
- ❖ Charitable remainder trusts

If you would like to learn more about how to make such an impactful gift, or to receive pre-written bequest language for IFA, contact Morgan Whitacre, development director, at morgan@indianaforestalliance.org or give him a call at 317-645-7324.



IFA WELCOMES THREE NEW STAFF



Deidre M. Pettinga, Ph.D., Director of Operations & Communications

Deidre joined the IFA staff in March. She brings more than thirty years of marketing experience. She served as chief marketing officer for the American Camp Association, vice president of client services for a marketing software company, and research director for a CBS television affiliate. She has also consulted with a number of regional and national for-profit and non-profit organizations. She taught for ten years as an assistant professor of marketing at the University of Indianapolis, and for four years as an adjunct marketing faculty member at Butler University. Deidre holds a Ph.D. in media psychology from Fielding Graduate University in California.



Morgan Whitacre, Development Director

Morgan Whitacre joined the IFA staff in January. Morgan's background includes extensive political fundraising. He served as campaign finance director for Indiana State Senator JD Ford, and worked on U.S. Senate campaigns for Baron Hill and Evan Bayh. He also worked on U.S. Congressman Andre Carson's 2011 campaign. Before coming to IFA, Morgan served as a development officer for Earlham College. Whitacre has an undergraduate degree in parks and recreation management. He also has a law degree from the IU McKinney School of Law, with a concentration in environmental and natural resources law and has authored a law journal article outlining why the U.S. should ban hydraulic fracking.



Emma Steele, Outreach Coordinator

After a six-month internship in 2019, Emma joined the IFA staff in February. Emma received a B.S. in geology & earth science from Purdue University Fort Wayne. Emma is directing IFA's outreach to our membership and the public on State House issues such as the legislation gutting protection of Indiana's wetlands as well as management of our public forests and the Mid-states Corridor Highway. She manages IFA's social media and outreach at fairs and festivals while assisting with event planning and putting her design and writing skills to work on IFA's e-newsletter, The Forest Flash. Emma is also a climate activist with Sunrise Movement Fort Wayne.

VOLUNTEER SPOTLIGHT: CARTER HAYS



Carter and a fabulous fungi friend in the Charles Deam Wilderness Area

It's not everyday that a tree activist risks his life for the cause, but that's what Carter Hays did on March 13, 2017, when he was just 15. With the approval of his parents, Carter expertly scaled a 30-foot tree in protest of the plans to cut down a 15-acre old growth forest in Crown Hill North Woods. Days later, the destructive project was halted, due to the courage of Carter, his fellow activists, and the many IFA supporters who spoke out for the forest.

Four years later, Carter is a freshman studying philosophy at Indiana University Bloomington. His study of bushcraft, herbalism, field botany, and ancestral skills from a young age have informed his deep respect for the natural world, especially forests. "I see humans as only one member of a broader community of life," Carter says. "And I'm ever aware of the still-growing pressure our overconsumption is putting on that community. But I have hope that through social change, technology, and direct action, we may come to create a sustainable future."

Carter is the founder of the Indiana University chapter of Indiana Forest Alliance, where he leads fellow young activists in taking action for Indiana's environment. He continues to be an outstanding forest advocate and a leader in the next generation of environmentalists. Carter just joined the IFA Board.

Thank you, Carter!

WE'VE MOVED



After five years in a historic house at 2123 N. Meridian St., IFA has relocated (in response to a new landlord and higher rent). Our new digs are at the English Foundation Building, closer to the heart of downtown Indianapolis. This space has ample free parking, abuts the Cultural Trail, and is steps away from Massachusetts Ave. Come visit us!


IFA'S NEW OFFICE ADDRESS

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Indianapolis, Indiana 46204**



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ANNUAL IFA MEMBER MEETING

Saturday, November 6
@ Lazy Black Bear
Paoli, Indiana

- ◆ Celebrate 25 years of IFA in a rustic setting
- ◆ Learn about and help decide IFA's future direction
- ◆ Take Hike in the Hoosier National Forest led by IFA's Jeff Stant
- ◆ Enjoy good friends, food & drink around the campfire

WILD & SCENIC FILM FESTIVAL

Sunday, December 5
@ Ernest Williams Theatre
at Purdue University Fort Wayne
Fort Wayne, Indiana

Get inspired by a dozen short films
about advocates for nature and wildlife,
near and far ◆

