

FNR CONNECT *SPECIAL EDITION*

2026



PURDUE
UNIVERSITY®

Forestry and Natural Resources



WELCOME TO THIS FNR CONNECT SPECIAL EDITION



I am writing this from Michigan's Upper Peninsula, where I am teaching a week of FNR Summer Practicum. FNR Summer Practicum has been a core part of our undergraduate training for many years. It provides students with critical hands-on field experiential training, engagement with natural resource professionals, a sense of living and working in a more remote location and first-person experience with a diversity of natural systems.

The first Purdue forestry camp was held in 1929 at Clark State Forest in Henryville, Indiana. Over the years, practicum has grown to include training for our three majors: forestry, wildlife and aquatic sciences. The location has shifted multiple times. We have been at our current location, Covenant Point on Hagerman Lake, since 1991. Practicum is quite the undertaking, and other university programs around the country have discontinued similar programs due to logistical and financial constraints. That said, we frequently hear from alumni how this experience was pivotal for their professional and personal development. Thus, we feel it is imperative to maintain this program and are committed to keep summer practicum going for current and future students.

◀ From the Cover:

Aquatic sciences students – Amara Brenton, Ethan Enochian, Nichole Heusmann, Trace Farris and Nathan Schoenherr – got hands-on experience doing macroinvertebrate sampling using kick nets at Summer Practicum in 2026.

Speaking of our history, 2026 is an important milestone year. In 1913/1914, forestry courses were first separately listed in the Purdue catalog under the heading "Forestry." We have viewed this date as the start of a forestry program at Purdue, and thus we celebrated our centennial in 2013. However, it was in 1926 that the forestry program moved from the School of Science and became an actual department in Purdue's School of Agriculture. So, 2026 is our centennial of being a department in the College of Agriculture.

In addition to reflecting on our past, we are of course looking forward in all three of our mission areas: teaching, Extension and research. Our forestry major was recently reviewed and reaccredited by the Society of American Foresters. We are launching a new minor in conservation science and a new professional master's in digital ecology and natural resources. Our Extension team is engaged in translating natural resource understanding to K-12 students, the public, specific interest groups and decision makers. From Illinois-Indiana Sea Grant's outreach on Great Lakes issues to FNR Extension programs for Indiana forest owners, we are working to get understandable information to the people who need it. Finally, across our many research specializations, outputs and impact have grown impressively over the last several years. Going forward, we are working on highlighting and integrating activities across three cross-cutting themes: Conservation Science, Ecological Sensing and Analytics, and Environmental One Health. I hope you enjoy reading about some of this work.

Please stay in touch and feel free to reach out if you have questions or comments.

Take care,

Tomas Höök

*Department Head,
Forestry and Natural Resources*

STUDENT PROFILE - COLLIN MORRIS



For Collin Morris, choosing Purdue Agriculture meant choosing a place close to home that offered big opportunities to learn, explore and grow. Now majoring in forestry with a minor in wildlife science, the Bloomington, Indiana, native plans to graduate in May 2027 and is already deeply involved

in fieldwork, research and student leadership within the Department of Forestry and Natural Resources (FNR).

A SUMMER THAT CHANGES EVERYTHING

Summer Practicum, a five-week field program, has taken Purdue students to study in a distinctive setting, now in the Upper Peninsula of Michigan, for nearly 100 years.

The experience is immersive, with daily modules in land measurement and surveying, forest inventory, wildlife and aquatic resources, fisheries, forestry and integrated resource management.

Spending weeks in the woods helped him form friendships that carried into the school year and made the department feel even more like home.

"Practicum gave me real hands-on learning and helped me bond with my classmates in a way you just cannot get in a regular classroom," he said. "I now know almost everyone in my classes."

FIELDWORK THAT BUILDS CONFIDENCE

Several internships strengthened his interest in forest management. The past two summers, he worked for the Hardwood Ecosystem Experiment as a vegetation survey field technician.

"I conducted forest inventory surveys and collected data in real forest environments," he said. "It taught me so much about field research."

He also is a teaching assistant for FNR 225 Dendrology, helping students identify tree species and understand their ecological importance.

His forestry experience extends beyond Indiana. Last spring break, Morris traveled to Costa Rica on a study abroad trip.

"I loved the experience," he said. "It allowed me to explore cultures and ecosystems I never would have seen otherwise."

DRIVEN THROUGH INVOLVEMENT

Morris is an FNR Ambassador, president of the FNR Student Council, treasurer for the Society of American Foresters and liaison for the Student Chapter of Environmental Education.

"Being involved keeps me engaged," he said. "It helps me stay connected to the department and everything happening in FNR."

LOOKING AHEAD

Morris is considering graduate school or a career in outreach and education within natural resources.



CONSERVATION SCIENCE

Work in this theme area integrates conservation science and natural resource management to advance biodiversity protection and the sustainable use of working lands and waters.

Our faculty, staff and students conduct applied and basic research in forests, wetlands, lakes, rivers, agricultural landscapes and urban systems — working directly in nature and alongside farmers, landowners, residents, agencies, Tribal partners, non-government agencies and industry — to translate science into practice.

Using the best available evidence — from field experiments and long-term monitoring to genomic tools, geospatial modeling and community-engaged participatory methods — we develop and deploy scientific approaches that strengthen ecological resilience, support sustainability and promote responsible stewardship of natural and human systems.

HELP THE HELLBENDER - A MINECRAFT CONSERVATION QUEST



The endangered eastern hellbender salamander is coming to a video game screen near you with the launch of Help the Hellbender: A Minecraft Conservation Quest, a new edition of Minecraft.

Through game-based learning, players will learn about the current ecological threats to the eastern

hellbender, the species' habitat needs and distinct biology through quests, challenges and exploration. All of the tasks in the game, from gathering hellbender eggs to releasing them in the wild and working with agriculture producers and industry to protect habitat, mirror real-world activities and conservation initiatives, including the current Farmers Helping Hellbenders Initiative.

Of Minecraft's 700 million users, 43% fall in the 15- to 21-year-old age range, while an additional 21% are 22 to 30 and 20.6% are under 15. This is the perfect audience to reach because they are the next generation of wildlife managers, farmers and environmental activists that will protect the endangered hellbender for years to come.

CERULEAN WARBLERS IN INDIANA



Purdue FNR is involved in a multidisciplinary collaboration dedicated to conserving the breeding population of cerulean warblers in southern Indiana. This initiative, the Southern Indiana Cerulean Warbler Birdscape (SICWB), leverages the shared knowledge and conservation expertise of more than two dozen partnering agencies and organizations, bringing together a team of nearly 50 leading conservation professionals in a coordinated, landscape-scale effort on the breeding grounds in North America, as well as the migratory and stationary non-breeding grounds in Central and South America. Patrick Ruhl's lab in FNR is working to address critical knowledge gaps related to the breeding habitat requirements and migratory ecology of cerulean warblers that breed in southern Indiana. This small migratory bird spends only a portion of the year in Indiana, so, in addition to detailed breeding habitat assessments, researchers in the Ruhl

lab also will use geolocators to track the migration routes of cerulean warblers from Indiana to Columbia to help SICWB make strategic and informed conservation decisions.

BUTTERNUT CONSERVATION AND RESTORATION RESEARCH



A project led by Doug Jacobs and research scientist Aziz Ebrahimi focuses on conserving and restoring butternut (*Juglans cinerea*), a native North American tree threatened by butternut canker disease. The goal is to identify and propagate disease-tolerant trees while maintaining the species' genetic integrity. Researchers combine genomic tools, field disease assessments and advanced phenotyping to distinguish pure butternut from hybrids and to identify individuals with improved tolerance.

To date, they have genotyped thousands of trees across multiple states, identified highly tolerant families and advanced backcrosses with high butternut genomic content, and established grafted orchards to test long-term durability. These efforts provide landowners and state agencies with science-based tools to guide restoration and improve forest health.

The project is supported by Purdue University's Hardwood Tree Improvement and Regeneration Center (HTIRC) in partnership with the USDA Forest Service, state departments of natural resources, The Morton Arboretum, the University of Connecticut, UC Davis and the Canadian Forest Service.

UNDERSTANDING BOWFISHING



Bowfishing has the potential to expand fishing participation and help control invasive species, but it also may have unintended consequences on native species. Through a project funded by the Indiana Department of Natural Resources (DNR), graduate students Erin DrieHaus and Juan Carlos Martinez are assessing bowfishing tournaments in Indiana and their impacts on harvested fish assemblages and populations, while also exploring how Indiana residents view the sport of bowfishing.

DrieHaus' project component will provide some of the first biotic data about bowfishing in Indiana and could be used to make decisions about implementing or relaxing regulations on bowfishing. It also will provide more information for stakeholders who may be unsure about the impact bowfishing has on native and invasive populations. After collecting data at bowfishing tournaments, researchers are exploring overall trends and patterns. They also are implementing potential harvest and management scenarios in a model to forecast how bowfishing could impact native and invasive species. This will provide information for stakeholders who may be unsure about the impact on these populations.

Martinez' project component aims to understand the perspectives of stakeholders, from bowfishers and anglers to the general public, to determine public opinion, identify conflicts and, in turn, sustainably

manage bowfishing in the state. By conducting surveys and interviews, researchers want to learn what motivates bowfishers. This will allow them to better inform bowfishers about how they can become active stewards for the environment and help the Indiana DNR lessen the impact of invasive fish.

PRESCRIBED FIRE EDUCATION AND OUTREACH



From teaching and training students, landowners and professionals to testifying in legislative committees, FNR faculty and staff are working to expand prescribed fire across Indiana. Mike Saunders and Extension wildlife specialist Jarred Brooke co-teach FNR-333 Applied Fire Ecology, where students get hands-on experience implementing fire and working with landowners to write burn plans. They can become "red card" certified through a partnership with the Indiana DNR.

Since 2017, Brooke and Extension forestry specialist Ron Rathfon have led 14 Learn-N-Burn Workshops. In 2025, FNR Extension led three prescribed fire webinars and five workshops reaching more than 100 professionals, thanks to a partnership with the Natural Resources Conservation Service.

Thanks to funding from the Sam Shine Foundation, FNR expanded its outreach capacity by hiring an Extension prescribed fire specialist, Danielle Howard, in May 2026.

ADDRESSING CHALLENGES THROUGH *ONE HEALTH*



Purdue University's One Health initiative brings together researchers from different disciplines to tackle problems that sit at the intersection of environmental quality, animal health and human well-being. In FNR, faculty are conducting research that links ecosystem processes directly to public health outcomes in Indiana and beyond. FNR's research illustrates how integrated ecological science, disease modeling and human dimensions research can inform practical solutions that promote environmental resilience and protect both animal and human health.

BIOPHILIA IN THE CLASSROOM



Within the One Health framework, human well-being and environmental sustainability are closely interconnected. Research by

Eva Haviarova and doctoral scholar Ting-Ho Tsai aims to link the integration of underutilized local hardwood resources to improving students' well-being and mental health through the development of a biophilic classroom model. Biophilic design reconnects humans with nature by integrating natural forms and materials into artificial environments. This connection is believed to contribute to stress reduction, improved cognitive performance and enhanced mental well-being. After enhancing the learning environment by installing hardwood furniture and other interior elements in classrooms, researchers will evaluate the feasibility of using the material, student feedback and economic scalability. If successful, the concept could be applied to schools of all levels, while also adding value to underutilized hardwoods, plantation wood, lesser-used wood species and urban wood.

AGENT-BASED MODELING OF PATHOGENIC AVIAN INFLUENZA



Pat Zollner is collaborating with Darrin Karcher and Sara Cloft in the Department of Animal Sciences on a project funded by the U.S. Poultry and Egg

Association. The poultry industry is increasingly challenged by Highly Pathogenic Avian Influenza (HPAI) transmission, which arises from the complex interactions between domestic poultry and wild bird populations, which act as reservoirs for the virus. This research seeks to investigate HPAI transmission dynamics within poultry facilities, emphasizing the influence of environmental factors, wildlife density and biosecurity measures. The primary goal is to develop an agent-based model to simulate HPAI transmission in a hypothetical laying hen facility, enabling the evaluation of various scenarios and mitigation strategies. Computational modeling and empirical data collection will be employed to meet these objectives.

The model will be developed with clear documentation and reproducibility. Wildlife density, proximity to attractive habitats and biosecurity practices will be incorporated to simulate parameters for outbreak scenarios. Data from commercial laying hen facilities and from turkey and dairy facilities, collected using aerial surveillance and sound recordings, will assess wildlife activity patterns and their correlation with known transmission risks. This study will help update biosecurity protocols and best management practices to respond to the ever-changing nature of HPAI and other wild animal-transmitted diseases.

FROM FOREST TO TABLE



Mo Zhou, Extension forester Lenny Farlee and PhD student Jean Fritz Saint Preux are working on a USDA Agricultural Marketing Service project

regarding cooperative innovation for sustainable maple syrup. Maple syrup is more than a sweetener; it connects people to healthy food, healthy forests and healthy rural economies. However, U.S. producers face steep challenges, including aging producers, high entry costs and poor forest management. This research explores a dual innovation: cooperative models paired with a digital app. Cooperatives allow producers to pool resources and share costs, while the app provides financial tools and a platform to connect new producers. Together, they lower barriers to entry, cut energy use and strengthen economic resilience. This approach sustains healthy food by keeping maple syrup local, promotes healthy forests through active stewardship and supports healthy rural economies by creating opportunities for the next generation of producers.

PROMOTING AQUAPONICS, SUSTAINABLE FOOD SYSTEMS



Kwamena Quagranie and Amy Shambach are working to provide resources and technical assistance to the aquaculture industry for

sustainable production of seafood to supplement supply from commercial fisheries. By providing science-based market information on seafood products and consumer preferences, they help make the supply chain for farmed fish products more efficient. They also provide consumers with resources about farmed seafood products as a healthy protein alternative. Continued engagement with the aquaculture industry addresses issues related to water quality, feed, fish health, farm management and marketing. Meanwhile, aquaculture outreach efforts have strengthened rural employment and expanded economic opportunities, while helping stabilize local communities. Promoting environmentally responsible aquaculture production practices has ensured efficient use of land and water resources, making aquaculture a sustainable seafood option. Outreach activities are supporting a dependable national seafood supply, increasing domestic seafood output and creating consumer awareness of nutritional benefits of farmed fish.

SOIL CONTAMINATION



Zhao Ma and urban agriculture specialist Nathan Shoaf are investigating the human dimensions of soil contamination in urban agriculture

through a collaborative project with Purdue Extension. This research uses social science theories and methods to investigate how urban farmers perceive the risk of soil contamination from legacy pollution, industrial activities and other potential exposure pathways, as well as the perceived impact of soil contamination on human health at the household and community levels. It also examines and assesses how urban farmers adopt various sustainable practices to mitigate soil contamination, enhance soil health and, more broadly, environmental health in metropolitan areas.

One of the key findings is that urban farmers are reluctant to conduct soil testing.

EMPOWERING YOUTH WITH ENVIRONMENTAL KNOWLEDGE



Empowering the next generation with knowledge about the environment, stewardship and the physical and mental well-being that comes from

being in nature is an important aspect of One Health.

These efforts collectively work to build the next generation's understanding of how our health is connected to environmental and wildlife health.

Extension specialists Brian MacGowan and Jarred Brooke help deliver the Wildlife Habitat Education Program, a 4-H and FFA career development event, to more than 100 Indiana youth each year.

Extension specialist Lenny Farlee teaches Indiana educators about forest stewardship through the Natural Resources Teachers Institute.

Brooke and Extension educator Veronica Bullock co-lead the Nature of Teaching, a K-12 curriculum that from 2023 to 2025 was delivered to more than 1,600 Indiana youth and downloaded more than 300,000 times.

Megan Gunn, Illinois-Indiana Sea Grant public engagement specialist, engages with youth through summer camps, the 4-H Academy, Grandparents University and other events.

ECOLOGICAL SENSING AND ANALYTICS

The ecological sensing and analytics theme encompasses the integration of digital methods – such as sensors, data science, artificial intelligence and digital infrastructure – with ecological and natural resource science. Research focuses on aquatic, terrestrial and broader ecosystem studies and integrates across diverse topics, such as resilience and connectivity, conservation, One Health, phenology and vegetation change.



LIGHT POLLUTION AND BIRD MIGRATION

Bird migration is an awe-inspiring spectacle of mass animal movement, involving billions of individuals undertaking journeys that span hemispheres. However, human development has drastically altered the landscape through which birds migrate, exposing birds to many threats and stressors along their routes, and contributing to precipitous population declines. Nocturnal migrants — representing 80% of migratory species in North America — are vulnerable to light pollution, as it can alter important aspects of their navigation and lead to fatal collisions with anthropogenic structures. In its work, the Aeroecology Lab, led by Kyle Horton, uses many approaches, including weather radar and nocturnal flight call monitoring, to examine how migrants interact with light and buildings at local and continental scales. Their work is guided by the goal of advancing the understanding of these interactions so that strategies that mitigate the effects of light pollution and better protect migratory species can be developed. See their work in action at aeroecolab.com.

MONITORING THE GREAT LAKES

Illinois-Indiana Sea Grant (IISG) has three buoys deployed in Lake Michigan near Michigan City, Indiana, and Chicago and Wilmette, Illinois. These buoys are not just to inform scientists and weather forecasters but also are highly utilized by anglers, boaters, paddlers, surfers, swimmers and educational programs about current lake conditions. These buoys collect real-time data on wind speed, wave height and water temperatures to provide valuable insights for scientists and the public. The buoys are part of IISG's commitment to expanding sensing capabilities in southern Lake Michigan and educating the public on the Great Lakes. Over the past 13 years, the program has gradually grown with the addition of the Chicago buoy in 2021 and continuous upgrades to the existing buoys. Keeping the buoys afloat takes a wide range of partnerships that include the Purdue School of Civil Engineering, the Great Lakes Observing System and Freeboard Technology.



ADVANCES IN DIGITAL FORESTRY

PERSEUS (Promoting Economic Resilience and Sustainability of the Eastern U.S. Forests) is a USDA-funded initiative led by the Institute for Digital Forestry that is reshaping how forests are measured, modeled and managed. The project brings together faculty, students and partners from across the country to combine advanced remote sensing, artificial intelligence and geospatial technologies to better understand forest conditions and predict future ecosystem trends. By producing more accurate, timely and spatially detailed forest information, PERSEUS supports landowners, managers and policymakers in making informed, data-driven decisions that balance economic viability with long-term sustainability. A key focus of the project is education and workforce development, providing hands-on training and digital forestry experiences for students and professionals. Through research, collaboration and education, PERSEUS is helping ensure healthier, more resilient forests while preparing the next generation of leaders in natural resource science.



TEACHING THE WORLD TO ANALYZE SOUND

The Center for Global Soundscapes, directed by Bryan Pijanowski, led workshops in South Africa and Peru over the past year, providing hands-on experience to students and researchers interested in analyzing passive acoustic remote sensing data for use in biodiversity assessments. Participants from seven African countries gathered in Stellenbosch, South Africa, for training in August 2025. The Amazonian Rainforest biodiversity workshop at the University of Technology and Engineering (UTEC) in Lima, Peru, in February 2026 reached students and faculty from several Peruvian universities along with natural resources managers from not-for-profit organizations and staff from Peru's National Forestry and Wildlife Service.

These workshops focused on training in soundscape analytics – a workflow-based approach for discovering ecological patterns and meaning in large soundscape datasets. Participants were educated about combining acoustic signal processing, acoustic indices, machine learning, visual analytics, data integration and ecological interpretation. The workshops involved computer-based instruction, field deployment and sensor network designs as well as individual- and group-based listening exercise techniques conducted in the field.



ACCREDITATION AND FORESTRY MAJOR HISTORY

Over the last year, FNR completed a 10-year accreditation review through the Society of American Foresters (SAF). This process helps ensure that FNR students are receiving a high-quality forestry education and that the program meets the standards of educational excellence established by SAF. The department was successfully reaccredited and is in the process of updating its curricula in response to recommendations and to meet the needs of an evolving industry and student interests.

Maintaining an accredited program is important to FNR for several reasons. Many state and federal agencies require or prefer SAF certification, which requires graduating from an SAF-accredited program. Additionally, the forestry program began more than 100 years ago and is the only accredited program in Indiana, where the forest products industry contributes \$17 billion annually to the state's economy and employs more than 100,000 people directly or indirectly. (Source: Indiana Department of Natural Resources.)

Most forests in Indiana are privately owned, and most of the wood used by the U.S. manufacturing industry comes from privately owned forests. Few privately owned forests — less than 10% in Indiana — are actively managed by professional foresters. Use of wood products is expected to grow, given that it is an essential renewable, recyclable, biodegradable and carbon capturing material. To meet industry demand, more professional foresters and forest product professionals will be needed to manage privately owned resources. Globally, forests cover 30% of land surface, with an estimated value of up to \$150 trillion (Boston Consulting Group 2020). Therefore, there are many job opportunities locally and globally for FNR forestry graduates, and through our students we hope to continue to serve an important role in conserving and managing Indiana forests.

In addition to completing the accreditation process, FNR is working on other efforts to attract and graduate more forestry students. The department has made it easier for undergraduate students to double major in forestry and wildlife, which increases job opportunities and makes graduates eligible for certification through SAF as well as The Wildlife Society. There also is a pathway for students to complete one to two years at a community college and then transfer into FNR to complete the forestry degree in four years total.

FNR is dedicated to long-term support of the forestry major, given its long history in the department, the availability of jobs for our graduates in this field, and to support the economy of Indiana and the world.

FNR ADDS CONSERVATION SCIENCE MINOR

The conservation science minor provides students with a strong foundation in ecological principles, management practices and social considerations that underpin biodiversity conservation. Through coursework and experiential learning opportunities, students explore how abiotic, biological, physical and human systems interact to shape the sustainability of wildlife populations, habitats and ecosystems. Students will learn to apply ecological and conservation principles to inform management, evaluate and communicate science-based conservation strategies and integrate ecological, social and policy perspectives with digital technology in conservation decision-making. The minor complements a wide range of majors by preparing students to engage thoughtfully and effectively in conservation-related research, management and policy careers.



VALUE OF FORESTS

Forests account for 4.14 billion hectares globally, 0.50 hectares for every person on earth. Collectively, forests have an estimated value of roughly double the value of global stock markets and more than 10 times the value of the world's gold, including reserves. (Boston Consulting Group 2020.)

However, only 55% of forests have long-term management plans. (FAO Global Forest Resources Assessment, 2025.)

Forests are under worldwide assault, with the equivalent of 30 soccer fields disappearing every minute due to a number of threats, including deforestation and degradation. (BCG 2020.) Without decisive action, BCG projects that rising temperatures, land-use changes, unsustainable logging, abiotic (such as wind-throw, floods and wildfires) and biotic (pests, diseases and invasive species) disturbances could cause deforestation that reduces forest value by 30% by 2050 (PR Newswire).

In Indiana, forest cover 4.8 million acres, roughly 21% of the state (Indiana DNR), and 83% of Indiana's forests are privately owned (IDNR). The forest products industry constitutes Indiana's sixth largest manufacturing industry, with \$8 billion in manufacturing, \$1 billion in tourism and recreation, and \$147 million paid to landowners annually for timber (Indiana State Department of Agriculture).

Indiana is a national leader in the production of wood office furniture, kitchen cabinets and hardwood veneer (Indiana DNR). Indiana forests are growing 2.3 times as fast as they are being harvested (Indiana DNR, Indiana State Department of Agriculture). In addition, urban forests are valued for flood mitigation, air quality improvement and increasing property values.

FNR OFFERS PROFESSIONAL MASTER'S DEGREE IN FORESTRY

Different from a traditional master's degree, the Professional Master of Forestry in Digital Ecology and Natural Resources combines advanced technical training and hands-on experience. Participants will gain experience working with state-of-the-art tools and methodologies and gain expertise in geographic information systems (GIS), earning either a Spatial Data Sciences Certificate or a Graduate Certificate in GIS.

The program also includes mentorship and training on policy, governance and ethics. The program culminates with a capstone project, which allows students to apply the knowledge and skills gained in the program to a real-world project or problem. Email DENR@purdue.edu for more information.



FNR AWARDS 2025-26

PIJANOWSKI CELEBRATED FOR SOUNDSCAPES WORK, INTERNATIONAL IMPACT



Bryan Pijanowski, FNR professor and director of the Center for Global Soundscapes, is a leading voice in

soundscape ecology — a field he helped define. His scholarship in soundscape ecology, landscape ecology and geographic information science has opened new ways of understanding biodiversity and the relationship between people and nature through sound.

In recognition of his contributions, Pijanowski was awarded both the 2026 Distinguished Landscape Ecologist Award from the International Association for Landscape Ecology – North America and Purdue College of Agriculture's 2026 Lowell S. Hardin Award for Excellence in International Agriculture.

Pijanowski joined the FNR faculty in 2003 and was named director of the Purdue Center for Global Soundscapes in 2013. He was selected as a University Faculty Scholar in 2013.

GAZO HONORED FOR WORK IN FOREST PRODUCTS INDUSTRY



Rado Gazo, professor of wood processing and industrial engineering who has been a part of the FNR faculty since

1997, was named as the 2025 recipient of the Wood Engineering Achievement Award — Lifetime Achievement by the Forest Products Society. The award recognizes accomplishments and innovations in the discipline of wood engineering, including structures, structural elements, building codes, consensus standards, design procedures and education.

"Gazo has educated students, industry professionals and the public about the applications of industrial engineering and operation research techniques to problems in primary and secondary wood products manufacturing industries," the society said. "His research and development activities have focused on evaluating tree, log and lumber quality using CT, laser and image scanning techniques. His efforts led to the first commercially available industrial-grade CT scanner and related optimization software, as well as the first successful automated hardwood lumber grading system.

Gazo also created Hardwood University for the continued education of hardwood industry professionals and landowners in the Central Hardwood Region."

SALAZAR HONORED FOR PART IN WIND ENERGY WORK

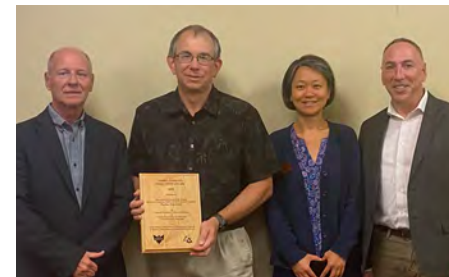


Kara Salazar, assistant program leader for community development and sustainable communities Extension specialist,

was part of the Purdue Extension team recognized by the National Association of Community Development Extension Professionals as the 2025 national runner-up for the Innovation and Creativity: Team Award for its work on Wind Energy End-of-Service Listening Sessions. The team — Tamara Ogle, Jon Charlesworth, Marty Huseman and Salazar — partnered with the National Renewable Energy Laboratory to host community listening sessions in Indiana focused on wind turbine decommissioning. These sessions provided education, gathered local perspectives and captured community and landowner insights on end-of-service activities, roles and responsibilities. The feedback collected will help guide NREL's future research and development of resources to support communities as they navigate wind energy transitions.

Salazar, who completed her PhD from Purdue FNR in 2023, was named NACDEP president in the summer of 2025.

NATIONAL ASSOCIATIONS HONOR FNR EXTENSION TEAM



The **Purdue FNR Extension team** was a recipient of the Family Forests Comprehensive Education Program Award presented by the National Woodland Owners Association and National Association of University Forest Resources Programs.

The award, which is the nation's top honor for forestry Extension programming, recognizes superior performance across nine criteria. "Purdue's program was honored for its massive scale, its deep connection to a long-term research asset, and its commitment to building future workforce capacity," the announcement stated.

Zhao Ma and Mike Saunders received the award on the team's behalf at the NAUFRP annual meeting at the 2025 Society of American Foresters (SAF) national convention in Hartford, Connecticut, in October.

FEI RECEIVES HERBERT NEWBY MCCOY AWARD



Songlin Fei was selected as the 2025 recipient of the Herbert Newby McCoy Award, given to a Purdue faculty member

who made the greatest contributions to the field of natural sciences in

the past year. Fei was selected for his breakthroughs in digital forestry and computational biology.

Fei is an FNR professor, the Dean's Chair in Remote Sensing and director of the Institute for Digital Forestry. He is recognized as one of the principal architects of digital forestry, a rapidly emerging field that combines forest science and technological innovation to understand and sustain ecosystems in the age of big data. Fei joined the FNR faculty in 2011. He was named as a University Faculty Scholar in 2018 and was selected as a fellow of the American Association for the Advancement of Science in 2023.

HARDIMAN SELECTED AS UNIVERSITY FACULTY SCHOLAR



Brady Hardiman, an associate professor of forest and urban ecology, was named as a University Faculty

Scholar in 2026.

Hardiman, who joined the FNR faculty in 2016 as an assistant professor and has a joint appointment in the Department of Environmental and Ecological Engineering, was previously honored with the Purdue College of Agriculture's Richard L. Kohls Outstanding Early Career Teaching Award in 2021.

Hardiman's research combines field observations and large-scale ecosystem experiments with remote sensing and ecosystem modeling to investigate relationships between ecosystem structure and function across a gradient of natural to highly engineered environments within a global change context. Specifically, his interest lies in ecosystem

responses to anthropogenic modification, including disturbance, management and land-use change associated with urbanization.

DEWOODY NAMED CONSERVATION SCHOLAR



Andrew DeWoody has been named as FNR's inaugural conservation scholar, a title that recognizes his

award-winning research in conservation genomics, molecular ecology, population biology, wildlife and fisheries management and natural history.

Since joining Purdue University in 2001, DeWoody has advanced the scientific foundations that guide how managers and conservationists make informed decisions about the use, management and conservation of natural resources and the environment, particularly through the lens of evolutionary principles. He received the Purdue Ag Research Award in 2011, was selected as a University Faculty Scholar in 2012 and elected as a Fellow for the American Association for the Advancement of Science in 2016.

DeWoody's interdisciplinary research combines both basic and applied research related to wildlife and fisheries management, the conservation of threatened and endangered species, and the use of genomic diversity metrics in conservation threat assessments performed by organizations like the International Union for Conservation of Nature and the U.S. Fisheries and Wildlife Service.

OUTSTANDING STUDENTS



Tam Tran – *Transfer*

Tran, a December 2025 graduate with a major in wildlife and minor in aquatic sciences, was part of the student chapter of The Wildlife Society, the American Fisheries Society student chapter and the Vietnamese Student Association. Since summer 2024, the South Bend, Indiana, native has worked as a hellbender husbandry technician at the Purdue Aquaculture Research Lab, helping care for eastern hellbender salamanders at all life stages. She also worked on two projects in Pat Zollner’s lab — a turkey vulture project analyzing vision and light detection, and as a flight crew technician, conducting nocturnal infrared and RGB video surveys of white-tailed deer, coyote and turkey.

Last summer, Tran was a wildlife and habitat management intern at the Carlos Avery Wildlife Management Area in Minnesota. Since graduation, she’s been assisting with white-throated sparrow research and the bird banding lab under Patrick Ruhl. The Saint Mary’s College transfer begins a job in wetland habitat restoration at Indiana Dunes National Park this summer.



Liam Doski – *Senior*

A May 2026 graduate with a major in wildlife and minor in aquatic sciences, Doski was vice president of the student chapter of The Wildlife Society, secretary and vice president of the American Fisheries Society, and secretary and vice president of the FNR Student Council. He spent two years as an FNR Ambassador and was the undergraduate representative for the College of Agriculture’s curriculum and student relations committee as a senior. The Bloomington, Indiana, native was a teaching assistant for dendrology for two years.

Doski received the L. David Mech Distinguished Undergraduate Research Award for his work studying the influence of weather patterns on North American river otter harvest in Indiana and on three additional graduate student research projects in the Zollner lab. He also has worked as a technician in Jason Hoverman’s lab. After graduation, he will be the teaching assistant crew lead at Summer Practicum before taking a position as a hellbender technician with Extension wildlife specialist Nick Burgmeier.



Max Clark – *Junior*

A wildlife major from Indianapolis, Clark has been involved with the student chapter of The Wildlife Society (TWS), acting as the mammals working group leader and treasurer, and the FNR Student Council, serving as a class representative for two years and as its current secretary. Since January, he’s been the undergraduate representative for the north central section of TWS. On the dean’s list and semester honor roll since his arrival on campus, Clark gained field experience as a biological science technician for USDA APHIS Wildlife Services. He’s had seasonal roles as a nature education intern with the Wild Bear Nature Center, as Extension wildlife specialist Jarred Brooke’s research assistant and as a vegetation technician on the Hardwood Ecosystem Experiment. Clark was a teaching assistant for the ecology and systematics of fish and herpetofauna in fall 2025.



George Emerson – *Sophomore*

Emerson, a wildlife major, has received semester honors and dean’s list honors from the College of Agriculture. He has been involved in the student chapter of The Wildlife Society, the FNR Student Council and COA Council and will be the TWS birds working group leader and secretary of the Purdue Student Society of Arboriculture this fall. In the research realm, the Carmel, Indiana, native has been a part of the Purdue Bird Banding Lab, the Northern Saw-whet Owl Banding Station and the sparrow tracking project. He also works as an undergraduate technician in the Zollner lab and was a summer camp counselor for Hamilton County Parks and Recreation.



Sophie Low – *Freshman*

A wildlife major with a minor in forensic science, Low is a member of the student chapter of The Wildlife Society and a dean’s list and semester honors recipient. The East Brunswick, New Jersey, native is an Indiana Department of Natural Resources technician and scoring assistant on PhD student Tina Jackson’s deer density project in Pat Zollner’s lab. She also is involved with research as a volunteer with the Northern Saw-whet Owl Banding Station and the sparrow roosting radio telemetry survey.

ANNOUNCING

PURDUE FORESTRY AND NATURAL RESOURCES

2025 CAREER AWARD RECIPIENTS



Ted Cable - *Lifetime Achievement Award*

Ted Cable, who earned his master's degree in wildlife ecology from Purdue in 1980 and PhD in forest recreation management in 1984, made his impact on the field of natural resources through his work as an educator, advisor and researcher in the parks and recreation interpretation community throughout the world. The Lansing, Illinois, native, a professor and administrator at Kansas State University for nearly 35 years, has written 15 books and published more than 250 articles on topics from nature interpretation to birding to travel. He has contributed to the design and development of many interpretive trails at local, state and national parks, while also training travel and tour guides across the world in heritage interpretation. He has served the broader natural resources community as a journal editor, board member, consultant and advisor. In 2020, Cable received the Legend Award from the American Academy of Park and Recreation Administrators.



Kristin Floress - *Distinguished Alumni Award*

Kristin Floress, who earned her PhD in natural resources social science from FNR in 2008, started her career as a faculty member and Extension specialist at the University of Wisconsin-Stevens Point. The Long Grove, Illinois, native moved on to a career with the U.S. Forest Service, where she has spent the last 11 years as a research social scientist at the Northern Research Station. Floress has worked on projects related to landowner engagement strategies for oak conservation, cross-boundary adaptive management strategies for forest restoration, wildfire crisis strategies, agricultural diversification in the Midwest and more. She was an editor in chief for Society and Natural Resources journal for four years. In 2024, Floress received the William R. Freudenburg Award of Merit from the Rural Sociological Society of Natural Resources.



Zachary Feiner - *Outstanding Young Alumni Award*

Zachary Feiner, who earned his PhD from FNR in 2015 and spent two additional years in West Lafayette as a postdoctoral scholar, began his career as a research scientist with the Wisconsin Department of Natural Resources. Since 2020, the Spring Green, Wisconsin, native has been an assistant scientist in the Center for Limnology at the University of Wisconsin-Madison, a dual position that allows him to advise students and work as a fisheries research scientist with the Wisconsin DNR. His work has involved panfish, walleye, yellow perch and bluegill, angler behavior and values, and general climate effects and ice phenology in lakes. In 2022, Feiner received the Excellence in Research Award from the Wisconsin DNR's Office of Applied Science.



Dean Zimmerman - *Chase S. Osborn Award for Wildlife Conservation*

Dean Zimmerman, who earned his bachelor's degree in wildlife science in 1971, spent 44 years working with the Indiana Division of Fish and Wildlife, including 42 as a district wildlife biologist, before his retirement in 2015. His work involved the development of wildlife habitat on private lands and annually conducting pheasant, quail, wild turkey, mourning dove, woodcock and deer surveys. The Albion, Indiana, native was a key part of the reintroduction of wild turkeys to the state and the implementation of deer management and regulation policies. Zimmerman also made a lasting impact through the development of the 4-H and FFA Wildlife Habitat Education Program in Indiana. He has been honored by the Indiana Chapter of the National Wild Turkey Federation, The Wildlife Society and with the Indiana Governor's Long-Term Service Award.



Geriann Albers - *Chase S. Osborn Early Career Award*

Geriann Albers, who earned her bachelor's degree at the University of Illinois and her master's degree from West Virginia University, has made her impact on Indiana through her work as the furbearer and turkey program leader with the Indiana Department of Natural Resources. Over the last eight years, Albers has helped manage Indiana's populations of furbearers and wild turkeys, conducting surveys and research, developing data collection and outreach materials, and drafting and reviewing regulations. Specifically, she has improved research on species like bobcat and fox and contributed to Indiana's Technical Assistance Committee for mammals. She has mentored several Purdue undergraduate and graduate student projects on species ranging from gray fox to river otters to fishers. She has been honored for her work by the Wisconsin Trappers Association, West Virginia Trappers Association and North Carolina Trappers Association.

A BRIEF HISTORY

OF

FNR'S FORESTRY MAJOR



In 1905, Stanley Coulter, a biology professor in the College of Science, was the first to teach forestry-related courses at Purdue University and to publish forestry research. His first forestry courses in the biology program included topics of dendrology, silviculture and mensuration. Within 10 years, these topics grew to include courses on forest zoology, history, pathology, utilization and protection.

Notably, two women graduated with their bachelor of science degrees in biology in 1905 with thesis titles related to microscopic characters of wood, suggesting other faculty were involved in forestry-related research even before 1905.

In 1914, Charles C. Deam, the first state forester of Indiana and for whom the only federally recognized wilderness area in Indiana is named, and Dean Stanley Coulter hired Burr N. Prentice to be

the first forestry professor and then the first forestry department head in 1926. The first courses under "Forestry" in the catalog appeared in 1914. Forestry was moved to the College of Agriculture in 1926.

The first Forestry Camp was taught in 1929 as an eight-week experience. The first students earned a bachelor of science in forestry in 1930. Additional courses in timber preservation, seeding and planting, logging, wood technology, forest economics and forest administration were added in the 1930s with the hiring of new faculty members and growth of the program. The program was first accredited by the Society of American Foresters in 1942, a status which has been maintained through the present.

Instruction in wildlife began in the Department of Biology in 1926 and remained there until 1934, when it was transferred to the Department of Forestry.

Authorization was received from the Graduate School in 1944 to offer a master's degree in forest production, forest economics, forest management, forest mensuration, silviculture, wildlife and wood technology. That same year the Wood Research Laboratory was established and 800 square feet was assigned to the laboratory in Agricultural Hall Annex, now known as the Forest Products Building.

Authorization for offering a PhD program was received in 1960. Russell E. Mumford, later a departmental faculty member, received the first PhD in wildlife awarded at Purdue University.

Fisheries and aquaculture instruction and research was authorized and initiated in 1969.



Students use binoculars while birding on the Natural History in Costa Rica spring break trip.



FNR 34800 Wildlife Investigational Techniques students learned how to use a compass for orientation and navigation in the snow thanks to Purdue Extension forester Lenny Farlee.

Students celebrate after completing the pack test to earn their red card certification, or basic wildland firefighter type 2 training, through the Indiana Department of Natural Resources.



Students from the Society of American Foresters compete in the two-person bucksaw competition at the 69th Annual Midwest Forestry Conclave in April at the Touch of Nature Outdoor Education Center in Makanda, Illinois.

Students from the FNR 53600/53601 Ecology of Natural Disturbances course pose on a snowy bridge during their spring break trip to Great Smoky Mountains National Park.



Aquatic sciences students went whitewater rafting during Summer Practicum in the Upper Peninsula of Michigan.



SUMMER 2026

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GIVING TO *PURDUE FNR*



▲ Professor Mike Jenkins teaches forestry students during Week 2 of Summer Practicum.



▲ Aquatic sciences students Matt Berger, Liam Doski, Ella Gray Partin, Abby Tapp and Mikaila Andre get hands-on with electrofishing equipment during Summer Practicum in Iron River, Michigan.

The *College of Agriculture* is excited to offer a unique opportunity for donors to double their impact through the **Ro & Shorty Whittington Student Experience Matching Program** to create new Student Experience Endowments. These endowments, which begin at \$50,000, provide life-enriching support that allows undergraduates to grow beyond the classroom. Every new student experience endowment will be matched dollar for dollar up to \$200,000, making now an especially powerful moment to invest.



▲ Professor Patrick Ruhl (right) and Nyx Jennings band a bird during Week 4 of Summer Practicum.

In FNR, we are planning to utilize any student experience dollars to help fund our Summer Practicum experience. If you are interested in creating a new endowment that will be matched 1:1, please reach out to **Marissa Mikel** at mrmikel@purdueforlife.org or 765-494-4785. If you would like to give to the already established **Forestry and Natural Resources Experiential Learning Fund** or to other FNR funds, see the QR code below.

GIVE TO *PURDUE FNR*

