

# FOREST & WILDLIFE ECOLOGY *news*

A Publication for Students, Alumni, Faculty, Staff, and Friends of the University of Wisconsin-Madison  
Department of Forest and Wildlife Ecology

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C	Cover Story .....	1
O	Chair's Message .....	1
N	Alumni Updates .....	3
T	Department News .....	4
E	Stan Temple WCHF Induction .....	7
N	Student News.....	8
T	Club Updates .....	9
S	Support F&WE .....	11

## CHAIR'S MESSAGE

For those I have not yet had a chance to meet, my name is Eric Kruger. For nearly 30 years, my purview as a faculty member at UW-Madison has primarily been research and instruction in the realm of forest biology. In the spring of 2019, however, I was knocked out in a bike accident and, upon regaining consciousness, discovered that I was our newly appointed Department Chair! (Yes, one could point to several life lessons here.) I stepped into the (size 14) shoes left by Mark Rickenbach, who is now the Senior Associate Dean of CALS. Mark's adept leadership in FWE was greatly appreciated, and he left our Department in excellent shape.

Presently, I can offer a few reflections on my first 20 months as FWE Chair, during which I've been afforded an in-depth view of our talented, hard-working and dynamic community. Perhaps it will come as no surprise that my thoughts center around the last 12 months. I, for one, readily admit that the events and circumstances we faced in 2020—and continue to address today—lay beyond the boundaries of my imagination. I'm sure many of you would concur. Moreover, as 2020 progressed, I had no idea how the members of our community would fare, given the seemingly endless procession of challenges that emerged.

Thus far, I'm thrilled to report that our community has persevered and, in fact, generally excelled in its pursuit of FWE's principal missions during the pandemic. I'm very grateful to everyone who has contributed to this collective, multifaceted effort. While several of these contributions are on display in this newsletter, many others deserve accolades. For example, essentially on a

*Chair's message continues on page 2*



## COVER STORY

### *A Sound Forestry Research Project*

In light of COVID-19, Department scientists adapt efforts to launch research that uses bioacoustics to aid forest conservation

BY KARIE CHERWIN

Angela Waupochick, a PhD student in the UW Forestry program, is interested in understanding the best conservation strategies for Wisconsin forests. In particular, her dissertation research is focused on finding the most suitable management plans for protecting Black ash forests in Northern Wisconsin, ecosystems that are a widespread and culturally important tribal land resource. Working in partnership with two indigenous communities in Northeastern Wisconsin and researchers from the United States Forest Service, Waupochick is incorporating multiple research techniques to assess existing silvicultural practices and to predict future responses to various disturbances.

At the start of 2020, Waupochick was planning the launch of her first field

*Sound Forestry Research continues on page 10*

Cover photo: Professor Zuzana Burivalova (left) with PhD student, Angela Waupochick (right), install bioacoustic recorders at Waupochick's research site in a Black ash forest ecosystem on the Stockbridge-Munsee Community Tribal Land located in Shawano County, WI. Photo by Waupochick's son, Saswaen Shawanokasic.



**Forest and Wildlife Ecology**  
UNIVERSITY OF WISCONSIN-MADISON

## CHAIR'S MESSAGE (cont'd)

dime, our instructors successfully pivoted to online course delivery in response to the initial lockdown last spring. This pedagogical retooling, which has required considerable time, energy and creativity, continues today. In the same vein, I applaud our undergraduate and graduate students, not only for their tolerance of an abrupt and prolonged perturbation in their academic life, but also for their willingness to ensure the safety and comfort of their peers and instructors during in-person courses. I witnessed this respectful and disciplined behavior firsthand in the fall semester, and thoroughly enjoyed my face-to-face interaction with students in the classroom.

Equally impressive were our community's efforts to maintain critical research momentum and graduate training despite a plethora of seemingly insurmountable hurdles. Last spring and summer, for instance, our faculty and their lab groups quickly developed and deployed thoughtful strategies that allowed them to initiate, maintain and/or complete a wide array of lab and field studies while operating under the logistical constraints needed to ensure everyone's safety. I note that these projects often pose significant challenges even under the best of circumstances, and that F&WE researchers face similar hurdles in the next several months.

Finally, amidst all of this pandemic chaos, many of our F&WE community members have, with much passion and enthusiasm, stepped up and confronted, head on and with open minds, a suite of difficult and long-simmering social and cultural issues brought to the forefront by recent local, regional and national events. This collaborative effort ultimately aims to improve the climate of our F&WE work environment by enhancing diversity, equity and inclusion. The collaboration has already yielded significant progress on several initiatives, including the recruitment of diverse new faculty and graduate students. One of the exciting spinoffs is a plan to highlight (e.g., via our website and a digital display in Russell Labs) the wonderful origins and history of F&WE. On this and other fronts, I greatly appreciate the invaluable feedback, advice and other support we have received in recent months from emeritus faculty, alumni, donors and other stakeholders.

These are just a few of the notable accomplishments in our community of late, and I expect many more in the near future. As we approach the end of this formidable pandemic gauntlet, I echo the growing optimism among my colleagues that we may see some semblance of normalcy in our professional and personal lives by autumn. Meanwhile, I sincerely hope that you all stay safe, healthy and happy as we navigate 2021 together!

Cheers,



Eric Kruger  
Professor and Chair  
Dept. of Forest & Wildlife Ecology  
Univ. of Wisconsin-Madison



Eric Kruger, Department Chair



## Forest and Wildlife Ecology

### Mission

Provide basic and applied research, instruction, and outreach that advance conservation and management of ecosystems.

### Vision

We will excel in the creation and sharing of knowledge.

We will be diverse and inclusive.

### Core Values

We promote a culture in which we strive for excellence.

We support and promote each other in our collective mission.

Everyone is welcomed, respected, valued, and encouraged to participate.

## 50th Anniversary of UW Forestry



### HERE'S TO ANOTHER RING, CLASS OF '71!

Members of the 1971 graduating class of UW Forestry—the first class of UW-Madison foresters—are organizing a reunion. If you are a fellow alum of this class, please contact:

**Ken Rauscher**

home: 517-622-0597

cell: 517-455-3141

email: k.rauscher@comcast.net

— or —

**Dave Liska**

cell: 262-370-8103

email: druid600@wi.rr.com



## ALUMNI updates

### Tom Hittle (B.S. Forestry, '83)

was appointed by Governor Tony Evers in 2019 to be the new Chair of the WI Council on Forestry. Tom is the Senior Vice President of Project Coordination and Business Development at Steigerwaldt Land Services, Inc., in Tomahawk, WI, and he served as a member on the Council for six years prior to becoming Chair. He was also the State Chair for

the WI Society of American Foresters from 2014 to 2015 and the State Chair for the WI Chapter of the Association of Consulting Foresters from 2017 to 2018.



Tom Hittle, Chair of the WI Council on Forestry. Photo © Steigerwaldt Land Services.

### Jade Arneson (B.S.

**Wildlife Ecology, '15)**, now a graduate student at University of Wisconsin-Green Bay working on her master's degree in environmental science and policy, was awarded the Aldo Leopold Memorial Scholarship in 2020. This award from the Wisconsin Chapter of The Wildlife Society (TWS), recognizes Arneson's dedication to the discipline of wildlife biology and her commitment to professional development in the field of conservation.



Jade Arneson, recipient of the Aldo Leopold Memorial Scholarship for her work on the Wild Rice Restoration Project. Photo by Amy Carrozzino-Lyon.

### Travis Bartnick (M.S. Wildlife Ecology '10),

Wildlife Biologist with the Great Lakes Indian Fish & Wildlife Commission (GLIFWC), testified before the US House of Representatives Appropriations Subcommittee on Interior and Environment in Washington D.C. During his testimony, Bartnick emphasized that tribes must be included in work addressing chronic wasting disease (CWD) at all levels—from high-level policy and research actions to day-to-day management. CWD is a fatal neurological disease in deer, elk, and moose that continues to spread across states such as MN, WI, and MI, including portions of the Ojibwe Ceded Territory.

*This story was adapted from a story by GLIFWC.*



Travis Bartnick, Wildlife Biologist with the GLIFWC, at the U.S. House of Representatives in D.C.



### Katie Pionkowski, née Aldridge

**(B.S. Wildlife Ecology, '03)** is a Lead Keeper at Henry Vilas Zoo (HVZ) in Madison, WI. Katie has worked with a variety of species at the zoo over the last 10 years, but she currently focuses on the lions and tigers. Katie is passionate about enrichment, training, and providing exceptional care for the zoo animals. She enjoys educating zoo guests about conservation and how we can all do our part to help endangered species. To ensure zoo animals remain engaged and healthy, Katie invests much of her time training animals. Pictured here, she offers a treat during a training session with Kuza, a tiger that has lived at HVZ for the past year.

Katie Pionkowski, Lead Keeper at Henry Vilas Zoo in Madison, WI. Photo credit: HVZ staff.



## DEPARTMENT *news*

### LAURIE BALLENTINE RECEIVES STAFF EXCELLENCE AWARD FOR PARTNERS IN GIVING

Partners in Giving is the workplace fundraising campaign for state, University, and UW Health employees in Dane County. Last year it raised nearly \$2.5 million dollars for over 500 charities. Laurie Ballentine was recognized by CALS as being a dedicated and reliable grassroots-involved individual who did an outstanding job in making the campaign a success. In addition to her valuable contribution to the Partners in Giving campaign, Ballentine is an invaluable asset to FWE and Russell Labs.



Laurie Ballentine

### NEW STUDENT SERVICES COORDINATOR

Allison (Allee) Hochmuth joined Russell Labs as the new Student Services Coordinator in September, 2020. She will be serving the departments of FWE, Plant Pathology, and Entomology. Allee is a skilled professional, with a master's degree in Adult, Continuing, and Higher Education Administration and over six years of experience at UW-Milwaukee. She is particularly passionate about student mental health and conflict resolution. We are thrilled to welcome to our community.



Allee Hochmuth

### ANNA PIDGEON BECOMES FIRST FEMALE BEERS-BASCOM PROFESSOR IN CONSERVATION

Professor Anna Pidgeon was appointed the Beers-Bascom Professor in Conservation, making her the first woman to receive this esteemed distinction. This professorship was established in the early 1980s by the Kraft Company in honor of William O. Beers for his dedicated service to the company and UW. It is awarded to a faculty member in CALS who has established and maintained outstanding research, teaching, and service in natural and environmental resources conservation and management. The Beers-Bascom Professorship in Conservation provides an annual allocation of funds to support a variety of professional- and research-related activities. Pidgeon's areas of expertise includes bird-habitat relationships, human impacts on wildlife, WI terrestrial vertebrates, and



Professor Anna Pidgeon, Beers-Bascom Professor in Conservation

conservation biology. In addition to being a leader in her field, Pidgeon displays a degree of professional integrity that makes her a role model to both students and colleagues alike.

### BEN ZUCKERBERG RECEIVES POUND AWARD

Associate Professor Ben Zuckerberg received the Pound Research Award in 2020, acknowledging his continued excellence in research. Zuckerberg examines how climate change, combined with other human influences, like altered land use, drive biological dynamics at the level of individuals and populations, and how these combined responses form patterns in nature. A hallmark of Zuckerberg's research is his use of data generated through citizen science (e.g., eBird and Snapshot WI).



Professor Ben Zuckerberg

### INSTRUCTION DURING A PANDEMIC LOOKS A LITTLE DIFFERENT

Instructors and students have adapted to teaching and learning during the COVID-19 pandemic. Despite social distancing requirements and large group restrictions, enrollment numbers in FWE remained as high as ever. See pages 8 & 10 for more glimpses into what instruction looks like in FWE during the pandemic.



Dr. Jim Berkelman sports a face shield and mask, and students wear masks in FWE 306, Terrestrial Vertebrates: Life History and Ecology.

## PROFESSOR GLEN STANOSZ NAMED FELLOW OF THE AMERICAN PHYTOPATHOLOGICAL SOCIETY

Professor Glen Stanosz was named a Fellow of the American Phytopathological Society (APS) in recognition of the distinguished contributions he has made to the field of plant pathology. Professor Stanosz has been a productive researcher and an award-winning teacher throughout his career at UW-Madison. His research involves the biology and management of fungal pathogens of trees and his courses include plant and forest pathology, mycology, and silviculture. In addition



*Professor Glen Stanosz next to fungi on a hemlock tree.*

to research and instruction, Stanosz has found time to maintain an extensive, effective, and popular outreach program for forest managers, the tree care industry, and the public.

## PROFESSOR ADENA RISSMAN RECEIVES PROMOTION AND TWO PRESTIGIOUS HONORS

Professor Adena Rissman was promoted to Full Professor in 2020 by the Department of FWE in acknowledgement of her outstanding quality, productivity, and scholarly impact, as well as her commitments to teaching, outreach, and service. Rissman completed her PhD and postdoc in Environmental Science, Policy, and Management at UC-Berkeley and joined FWE in 2009 as an Assistant Professor. Her research seeks to understand relationships among people, institutions, and ecosystems with the intent of improving management and conservation of natural resources. As a testament to her dedication of advancing the fields of natural resources as a whole, and the community of FWE in particular, Rissman has initiated efforts to enhance diversity, equity, and inclusion in the Department, including organizing the Call for Art (see pg 10) with the aim of increasing representation of diversity—in terms of species, ecosystems, people, and cultures—within Russell Labs.

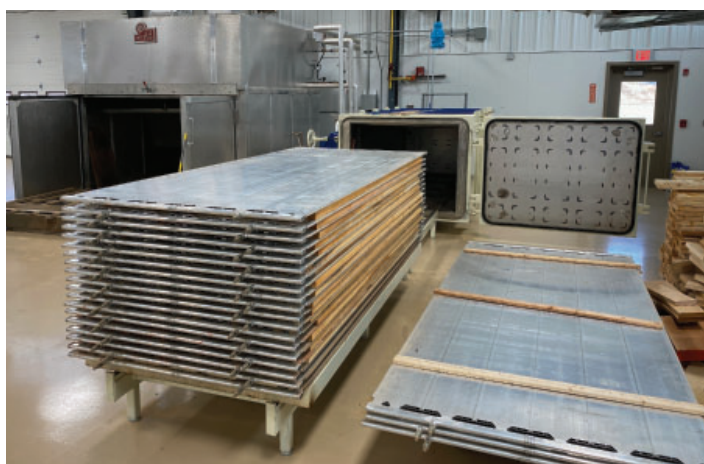
Rissman also recently received two prestigious honors, both in 2019, recognizing her extraordinary scholarship. She was named a Vilas Distinguished Achievement Professor, a highly competitive award granted to exceptional faculty members from across campus, which provides five years of flexible funding supported in part by the Office of the Provost through the generosity of the William F. Vilas trustees. In addition to this distinction, Governor Tony Evers appointed Rissman to the WI Council on Forestry, a diverse group of leaders in the forestry community who direct our state's efforts to achieve sustainable forestry. On the Council, Rissman represents the interests of schools of forestry within Wisconsin that are accredited by the Society of American Foresters.



*Professor Rissman*

## EXPERIMENTAL LUMBER DRYING CONDUCTED BY UW FORESTRY

In cooperation with Northcentral Technical College, UW Forestry has been experimenting with a research vacuum kiln. Unlike conventional lumber drying that is very energy intensive with temperatures reaching 180°F, vacuum drying literally boils water from the lumber at low temperatures by removing atmospheric pressure from the test chamber. Since heat convection does not function in a vacuum, warm water is circulated through aluminum platens sandwiched between the courses of lumber. Heat energy is transferred to the lumber by



*The vacuum chamber is loaded with the warm water connections platen connections in place. Photo by Scott Bowe.*

conduction. This heat energy helps break the hydrogen bonds between the water molecule and the wood, allowing the water to evaporate from the wood substrate. As this technology is commercialized, considerable time, energy, and expense will be saved drying lumber.



## DEPARTMENT *news (continued)*

### TWO NEW ASSISTANT PROFESSORS JOIN F&WE

The Department is pleased to announce the addition of two new Assistant Professors. Dr. Zuzana Burivalova joined the UW faculty in Fall 2019 with a dual appointment split between FWE and the Nelson Institute for Environmental Studies. After studying biology at Oxford University, Burivalova worked for the United Nations Environment Programme while getting her Master's degree at the University of Geneva in Switzerland. She then completed her PhD at ETH Zurich in Switzerland, focusing on tropical forest ecology and conservation. Following this, she was a NatureNet Science Fellow at Princeton University and The Nature Conservancy.



Professor Zuzana Burivalova

The primary focus of Burivalova's research is to advance biodiversity conservation in forest ecosystems by analyzing the efficacy of conservation strategies using cutting-edge technol-

ogy, including bioacoustics. In her spare time, Burivalova is an avid rock climber and enjoys camping—especially in tropical forests where she can be woken up by animal sounds in the morning.

Dr. Min Chen joined FWE in Fall 2020. Dr. Min Chen received his PhD in Earth and Atmospheric Sciences from Purdue University in 2013. After this, he became a postdoc fellow at Harvard University and later a Barbara McClintock fellow at the Carnegie Institution for Science at Stanford University. He joined the Joint Global Change Research Institute, Pacific Northwest National Lab as a staff scientist in 2016.

Dr. Chen's research interests are Earth system modeling, remote sensing of vegetation, and integrated analysis of human-Earth system dynamics. He currently leads a NASA-funded Arctic-Boreal Vulnerability Experiment and is thrilled to



Professor Min Chen

work closely with University-wide scientists hired by the polar science cluster as a terrestrial ecosystem modeler. In his spare time, he likes hiking and playing badminton. He is excited to meet new colleagues at UW and explore Madison and Wisconsin.

### WILDLIFE CO-OP HIRES NEW ASSISTANT UNIT LEADER

Dr. Wendy Turner is a USGS Research Biologist, Assistant Unit Leader at the Wisconsin Cooperative Wildlife Research Unit, and Senior Visiting Professor in FWE. She joined the coop/Dept in Fall 2020. Dr. Turner received her PhD from the University of California, Berkeley in 2009. Thereafter, she was a postdoctoral researcher at UC-Berkeley, an NSF international postdoctoral fellow at the University of Oslo, Norway, and then an Assistant Professor at the University of Albany, State University of New York.

Dr. Turner specializes in wildlife disease ecology, currently studying transmission dynamics in anthrax, white-nose syndrome and chronic wasting disease systems. In her spare time, Dr. Turner says that she enjoyed traveling, the outdoors and photography—though these days she mostly crochets with a cat on her lap and dreams of post-pandemic days when she can meet her new colleagues, gather in groups, and have her two young children in school.



Dr. Wendy Turner

### PROFESSOR TIM VAN DEELEN NAMED A FELLOW OF TWS

Professor Tim Van Deelen was one of 10 longtime members of The Wildlife Society (TWS) to be named a Fellow in 2020. This award is given each year to individuals displaying exceptional service to the profession, and who serve as "examples to be followed". Van Deelen is the faculty advisor to the student chapter of TWS at UW-Madison. He has also served on a variety of TWS committees and is a longtime reviewer for the *Journal of Wildlife Management* and *Wildlife Society Bulletin*.



Professor Tim Van Deelen

### FWE Webinar Series

For the 2021 Spring semester, join us on Fridays at 3pm (CST) for "live" webinar events. Registration is free and open to the public!

Learn more and register at:  
[fwe.wisc.edu/fwewebinar](https://fwe.wisc.edu/fwewebinar)



## Emeritus Professor Stan Temple Inducted into WCHF

Stanley A. Temple, Emeritus Professor in the Department of Forest & Wildlife Ecology (FWE), was inducted into the Wisconsin Conservation Hall of Fame (WCHF) in 2020. This honor is bestowed upon individuals who have made significant contributions to conservation, both in WI and in the Nation. Dr. Temple's induction ceremony was originally scheduled to occur in April 2020; however, last year's ceremony was cancelled due to the pandemic. Therefore, he will be honored in this year's ceremony, which will be held virtually on Saturday, April 24th, 2021. This is a free virtual event and all are welcome to attend! To receive a link for the event, please email: [wchfame@gmail.com](mailto:wchfame@gmail.com).

Dr. Temple turned a childhood love of birds into a lifetime of research, education, and conservation advocacy. After earning his PhD at Cornell University in 1972, he went to work for the World Wildlife Fund (WWF) to launch programs for critically endangered birds on several islands in the Indian Ocean.

In 1976, Stan became a faculty member in the UW-Madison Dept. of Wildlife Ecology, the nation's first wildlife management program. His research program focused on wildlife conservation, studying some of the most endangered species in the world. He also worked on the responses of wildlife to habitat fragmentation and other human-caused disturbances, and the ecology of avian predators.

Over 10,000 students have taken one or more of Stan's courses, and he advised 75 graduate students. He was a founder of the field of conservation biology and helped create an educational program focused on preserving biological diversity while meeting human needs. He built upon his research and education accomplishments, effectively influencing federal and state resource policies, legislation, and management activities.

Now that he's "retired," Stan helps spread Leopold's Land Ethic as a Senior Fellow for the Aldo Leopold Foundation. He continues to teach and mentor students through the Aldo Leopold Foundation and at UW. He regularly provides guest lectures for multiple courses in FWE.

As one of WI's leading conservation biologists and educators of both future professionals and the public, he has had significant impacts globally, nationally, and within WI.

Read more about Stan's induction at: <https://wchf.org/stanley-temple/>



Dr. Temple at the Leopold Shack  
© Aldo Leopold Foundation

## In Memoriam



John R. "Bob" Cary

**John Robert "Bob" Cary** (8/31/1946–7/26/2019) passed away after a lengthy and courageous battle with cancer. John's interests were many and diverse and often were self-taught. Because of his skills in statistical analysis, research methods, and computer use, he became the primary FWE resource in those areas. Few (if any) graduate students obtained their degrees without the benefit of John's skills. The fact that John was also a skilled field biologist was a tremendous help in

the planning, execution, and analysis of research. John was a good friend and colleague. In John's memory, his family has established an endowment to support the Wildlife Ecology Summer Field Practicum held at the Kemp Natural Resources Station. John was a member of the original team who established the class, and he enjoyed his long-time involvement in it. Your donation to the fund would help ensure the future of the class, and John would be thrilled with this legacy. To make a donation, visit [go.wisc.edu/supportfwecology](http://go.wisc.edu/supportfwecology). To read more about his life and read his full obituary, visit: <https://www.legacy.com/obituaries/name/john-cary-obituary?pid=193578379>



Marie McCabe

**Marie Stanfield McCabe** (11/10/1919–6/28/2019) passed away at the age of 99. Marie was the wife of Robert A. (Bob) McCabe, long-time Chair of the Dept. of Wildlife Ecology. Both Marie and Bob were close friends and colleagues of Aldo Leopold and many other legends in the wildlife profession. Marie was involved in many aspects of Bob's research and teaching as she was an accomplished editor and avid reader. Marie became a major

benefactor of FWE by creating the Robert A. McCabe fund after Bob's death in 1955. The fund provides general scholarships and support for student participation in the Wildlife Ecology summer field class at Kemp Natural Resources Station. For more information on Marie's life and family, read her full obituary at: <https://www.cressfuneralservice.com/obituary/318953/Marie-McCabe>



Lorraine Ranney

**Lorraine Ranney** (10/11/1919–9/17/2019) passed away a few weeks before her 100th birthday. Lorraine was the wife of Richard "Dick" Ranney, friend and benefactor of FWE. Lorraine and Dick, with the help of their five daughters, transformed a piece of property near Arena, WI from a sandy wasteland into a plantation of tall pine trees, then generously donated the land to FWE. Following years of use for teaching, the land was

sold, and the proceeds were used to construct the Ranney Family Computer Learning Center in Russell Labs. FWE is eternally grateful for the Ranney's generous gift and the lasting impact it has had to our community. Lorraine was open and generous with her love, continually expanding her circle of friends, and she was well loved by her large extended family. To read Lorraine's full obituary, visit: [https://madison.com/news/local/obituaries/ranney-lorraine-amanda/article\\_f3096ae1-22e5-5bdc-b4c1-3d905a2db349.html](https://madison.com/news/local/obituaries/ranney-lorraine-amanda/article_f3096ae1-22e5-5bdc-b4c1-3d905a2db349.html)



## STUDENT news

### GRADUATE STUDENT AWARDS AND SCHOLARSHIPS

**Michael Menon** was awarded the 2020 William C. Burns & Lemuel A. Fraser Teaching Enrichment Scholarship. He was also selected as a 2021 WISCIENCE Scientific Teaching Fellow. Michael's master's research with Professor Drake focuses on mitigating wildlife hazards to aviation at Wisconsin's general aviation airports.

**Anna Brose** was awarded the 2020 George Kress scholarship, recognizing her outstanding contributions to the Department and scholastic aptitude. Anna's master's research with Professor Van Deelen focuses on elk use of persistently-managed forest openings in northern Wisconsin.

**Connor Wood** won the Best Dissertation Award for his PhD dissertation titled, "Using bioacoustics for landscape-scale species conservation." Connor was advised by Professor Peery and is now a postdoc at Cornell.

**Ally Scott** won the McCabe-Keith Award. Ally is a master's student in Professor Pauli's lab assessing the population ecology of small mammals in northern WI to evaluate prey availability for martens.

**Jennifer Merems** received the Merrill & Emta Hastings Foundation Award for Outstanding Women Graduate Students. Jennifer is a PhD student in Professor Van Deelen's lab studying the effects of wolves on elk population dynamics in Wisconsin.

### KATE MCGINN RECEIVES NSF RESEARCH FELLOWSHIP

Kate McGinn, co-advised by Professors Zach Peery and Ben Zuckerberg, was selected from a highly competitive application pool to receive three years of financial support from the National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP). These awards are given to exceptional graduate students who have demonstrated their potential for significant achievements in research. For her PhD research, Kate is studying how California spotted owls respond to rising temperatures and the role forest structure plays in ameliorating negative effects to individual fitness and demographic rates. She will also use bioacoustics to study a community of forest owls in the Sierra Nevada, specifically the habitat and fine-scale climatic factors related to coexistence of similar species.



Kate McGinn, PhD Student, holding a California spotted owl in Sierra National Forest, CA. Photo by Vince Berigan, 2019.

### 2020-2021 UNDERGRADUATE FORESTRY SCHOLARSHIP RECIPIENTS

Congratulations to the undergraduate students who received Forestry Scholarships for the 2020-2021 academic year! Tory Armstrong, Autumn Bosma, Maegan David, Erin Green, and Ainsley Charlesworth received Stone Forestry Scholarships. Tory Armstrong and

Autumn Bosma received the Earle D. Lyon, Hardwood Manufacturers Association Scholarship. And, Maegan David was awarded the Helen-Miller Scholarship.

Forestry Scholarships for 2021-2022 will be awarded later this Spring.



Instruction during a pandemic looks a little different. Professor Jon Pauli with students in FWE 561, Wildlife Management Techniques, all donning face masks, head out to collect data for class at the UW-Madison Lakeshore Nature Preserve. From left: Lizzy Hucker, Emma Raach, Bridget Motiff, Professor Pauli. Photo credit: Lakeshore Nature Preserve



## UNDERGRADUATE STUDENT SPOTLIGHT: LIZZY HUCKER



Lizzy Hucker, Wildlife Ecology Undergrad

Lizzy Hucker, a senior majoring in Wildlife Ecology, joined Professor Zach Peery's lab her first semester at UW. Even before arriving on campus as a freshman, Hucker knew she wanted to get involved with research, especially research focusing on herpetology. When she interviewed to become a field assistant in the Peery Lab, her passion for herpetology, in addition to her academic aptitude, made it an obvious decision to hire her. Shortly after she started helping a graduate student named Nathan Byer conduct fieldwork for his dissertation research at the DNR-managed Sandhill Wildlife Area (SWA) in central WI, she decided to start an independent project on the reptilian species she loves most: Snakes. Hucker's study focused on a family of small-bodied snakes, colubrids, and how the use of panels known as artificial cover objects (ACOs), which are panels placed on the ground to attract snakes, influence thermoregulation and capture rates of these notoriously elusive animals. Hucker received two grants to fund her work, presented multiple scientific posters, and provided valuable information to SWA to aid in management. After she graduates, Hucker plans to pursue graduate school in herpetology and wildlife conservation.

## CLUB updates

### Forestry Club

BY AUTUMN BOSMA

Like everyone, the Forestry Club had an unusual couple semesters. The club had one in-person meeting during spring 2020. Dr. Daniel Preston, an associate professor in the department with an emphasis in freshwater ecology and conservation, spoke to the club about his research. In future semesters, the club will hopefully resume participation in events such as tree farm inspector training, the annual kickball tournament versus wildlife, the Christmas tree sale, and trips to the SAF convention.

Due to the circumstances, the prominent activity in 2020 was chainsaw safety training levels one and two with Nathan Stanford. Six club members participated in the weekend training. Club members learned about safety protocols for chainsaws, how to care for them, and even got to cut down a tree on their own. The club's recent meetings have been held over Zoom which will continue this semester. Be sure to contact an officer (by email) if you would like to attend upcoming meetings!

The club is proud to announce our Spring '21 Officers: Aidan Olson (Pres); Autumn Bosma (Vice-Pres); Jack Vandercar (Sec); Max Kubisiak (Treas); Nishan Mahdasian (Reporter); and Tien Kolodziej (Tech Coord). The club also extends a warm congratulations to the seniors who graduated under such strange circumstances (Ben Sellers, Travis Schmitt, Josie Mayhew, Haley Knight, Alex Rosenflanz, Emma Froelich, Abigail Walther, and Erin Green).

Forestry Club members at SAWW training in Barneveld, WI. Pictured (from left): Haley Knight, Jared Hanken, Autumn Bosma, Henry Feldman, and Nathan Stanford.



## TWS Student Chapter

BY BLAKE CWCYNAR AND SHELBY WEIDENKOPF

The Student chapter of The Wildlife Society (TWS) had impressive turnouts over the past year, even though things looked a lot different as result of the pandemic. In Fall 2019, we hosted birding and herping trips, a bat survey at Upham Woods, a bird wing specimen preparation workshop, a fire at picnic point, and our ever-popular Saw-whet owl banding workshop. We wrapped up 2019 with the Annual Wild Game dinner, which is always the largest event of the year and serves as the club's only fundraiser.

We had ambitious plans for events in 2020, but sadly we were unable to execute many of them. We did, however, host some incredible guest lecturers as well as a few other events before UW transitioned to virtual instruction. We attended a screening of Bird of Prey, a documentary about the Phillipine Eagle; after which, we were able to meet the filmmakers. We drove to Gov. Dodge State Park to do some snow-tracking, had club members read passages at the Arboretum's Annual "Madison Reads Leopold" event, and held officer elections online for the 2020-2021 school year.

We want to give a shout out to Ethan Plumier, one of our officers, who now holds a position on the board for the State Chapter of TWS.

Although the year didn't go the way we planned, it was still a fun and engaging span of time for TWS. We hope that everyone has been doing well in this hectic situation, and that you all have been able to take some time to get into nature and enjoy all the critters you see.

## New Book



Raymond A. Young

### A Sabbatical in Greece

Thessaloniki & Mt Athos

Professor Emeritus Ray Young recently published a memoir and travelogue of his sabbatical in Thessaloniki, Greece in 1989. *A Sabbatical in Greece: Thessaloniki & Mt Athos* encompasses Young's academic experience as a Senior Fulbright Scholar at Aristotle University in Thessaloniki, and is interspersed with the unique history of

Thessaloniki, Macedonia, and Mt Athos. Thessaloniki was a major home to the three great monotheistic religions of Orthodox Christianity, Turkish Muslim and Sephardic Judaism and Mt Athos is an important center of Eastern Orthodox monasticism where the monks have followed Byzantine rules for the past 1,000 years. The book would be of interest to academic scholars planning or having completed an international program, travelers to Northern Greece, and those interested in Greek History and Culture. You can find the book on Amazon at: <https://www.amazon.com/Sabbatical-Greece-Thessaloniki-Mt-Athos-ebook/dp/B08JHFCWC5>

## COVER STORY CONT'D

### SOUND FORESTRY RESEARCH

season, to begin in late-Spring. Then came the global COVID-19 pandemic.

Travel restrictions placed on all UW-related activities meant the team of assistants she assembled for her project would no longer be able to help her install and maintain her experiment, which is located in Shawano County, WI. Waupochick said, "I had no choice but to recruit my 16-year-old son to help tackle the field

work." While her son, named Saswaen, may not have planned to spend his summer plodding through wetlands with research equipment such as bioacoustic recorders, 12-volt batteries, solar panels, and other equipment strapped to his back, Waupochick realized just days in that they made a great team. Waupochick also recruited students in a trade class at the Menominee Indian High School to help build heat sensors for measuring characteristics of tree physiology. By demonstrating grit comparable

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Instruction during a pandemic looks a little different. **(Left)** Jamie Nack found creative ways to offer virtual presentations. Pictured here, Nack's daughter, Taylor, demonstrates how to make plaster casts of animal tracks during a virtual field trip facilitated by Nack, in partnership with the National Guard Child & Youth Program, for the Badger Youth Camp. **(Right)** Dr. Karie Cherwin, Lead Instructor for FWE 360, Extinction of Species, hosted TA meetings via Zoom for the 2020 Fall semester, when the course was delivered fully online. Clockwise from bottom left: Amy Shipley, Nick Kryshak, Taylor Peltier, Karie Cherwin, Paul Schilke, and Evan Wilson.



to the most seasoned experts, Waupochick persevered through numerous obstacles by successfully launching the first field season of her dissertation research.

Now, this might beg the question: What is Waupochick doing in these forested landscapes in Northern Wisconsin? And how does one integrate tree physiology with bioacoustics to evaluate existing management practices and provide conservation recommendations to address future disturbances?

The emerging use of bioacoustic studies to inform stakeholders about the most effective ways to protect their natural resources is so elegant, in part, because of its relative simplicity. For instance, when walking through a forest, it doesn't take long to notice that life can often be heard before it can be seen. And the signature of a forest's soundscape can often reveal the health of that forest before potentially large problems

can be observed. To this end, and under the guidance of her PhD committee members, Waupochick is recording the sounds of wildlife, such as birds and frogs, in the Black ash forests of the Stockbridge-Munsee Tribal Lands.

The bioacoustic data in Waupochick's study will be combined with measurements that characterize transpiration of the Black ash trees (via sap-flux density monitored with heat dissipation sensors). She will begin by determining the baseline hydrologic conditions of the area. Off the bat, she'll be able to compare relationships between the presence of biodiversity (as revealed by the bioacoustic measurements) and the movement of water through the trees (determined by the sap-flux measurements) at various sites that are exposed to differing silvicultural regimes.

For example, Waupochick's study aims to assess whether salvage cutting is the most effective way to protect these forest ecosystems, as opposed to allowing dieback to occur on its own, thereby alleviating potential stress on co-occurring species.

Waupochick's study can also provide insight into whether changes in biodiversity can be tied to alterations in the forest's water budget as a result of rising atmospheric CO<sub>2</sub> concentrations, warming temperatures, and more frequent and severe extreme climate events.

These are just two examples of how Waupochick plans to answer important conservation questions concerning the culturally significant Black ash forests on these Northern WI tribal lands. While it's been said that a bird sings because it has a song and not an answer, scientists like Waupochick are sure to find some answers in the songs. 🐾



Angela Waupochick's 16-year old son, Saswaen, helps install a solar panel at a research site on the Stockbridge-Munsee Community Tribal Land in Shawano, County, WI.

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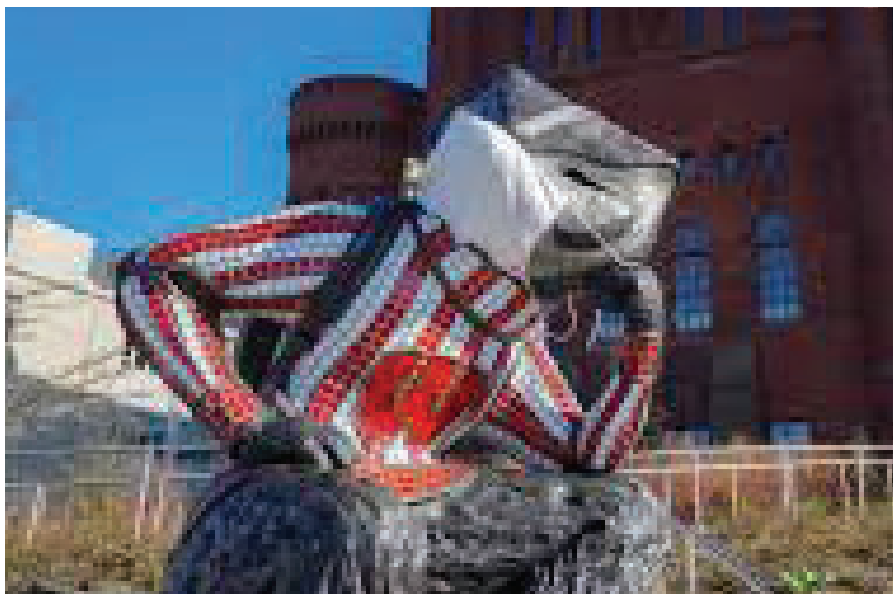
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