A U B U R N School of Forestry & Wildlife Sciences

FEATURE STORY A Hunt to Remember

Wildlife students get their first shot at waterfowl hunting

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Working with Nature for Society's Well Being



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A Message from the Dean

Dear alumni and friends,

On behalf of the faculty and staff of the School of Forestry and Wildlife Sciences, I extend our well wishes for your good health and continued safety amid the COVID-19 pandemic.

Despite these troubling and uncertain times, we have witnessed great strength and character within the Auburn community. Our faculty and staff have swiftly adapted to ensure our students were able to progress successfully, and that our academic, research and outreach missions continued forward. Though we are currently prevented from engaging

students through on-campus courses and enjoying our beloved traditions to recognize our graduates and welcome our new students, we have discovered new and innovative ways to celebrate and engage with them virtually. However, we are eager to welcome our students back to campus. To accomplish this safely, Auburn leadership is working diligently to formulate plans in accordance with state and federal guidelines to host its multi-day commencement ceremonies on Aug. 8 and 9.

COVID-19 has also demonstrated the relevancy of our research to study the factors that lead to the emergence and spread of novel viruses; the major threats to human and animal health; and how the spread could be rooted in the loss of natural, wildlife habitats. These discoveries will contribute to policymaking and shape our academic and extension programs as we strive to educate citizens and develop professionals who will serve to mitigate the spread of disease and improve the resiliency of our communities.

We thank you for your continued support and commitment to Auburn University and the School of Forestry and Wildlife Sciences. We hope you enjoy this issue and our review of 2019's accomplishments. Though we are physically distanced at this time, we remain strong and united as the Auburn Family!

Wishing you all continued good health and wellness!

Dean Janaki R.R. Alavalapati

Dean Alavalapati serves on panel to explore role of forests and markets in climate change mitigation

Dean Janaki Alavalapati recently joined a group of expert panelists to participate in the Resources for the Future live series event, Forests and Climate Change Mitigation: The Role of Markets, in Washington, D.C.

Hosted by Resources for the Future, or RFF, the event offered the opportunity for experts to engage in a discussion about the important role that forests-and the forest products sector—can play in climate change mitigation. There were 135 attendees and 186 others who joined the international discussion via livestream.

The in-depth conversation examined how a healthy forest products sector is critical in this regard, as it encourages the retention and management of forests.

Panelists included representatives from the forest industry and experts in forest science and policy. Serving with Alavapati were panelists Robert Bonnie, a research scholar at Duke University's Nicholas Institute for Environmental Policy Solutions; RFF nonresident senior fellow David Wear; and Kate Gatto of the National Alliance of Forest Owners. Ann Bartuska, an RFF senior advisor, moderated the discussion, followed by a questionand-answer session between panelists and attendees.

The event began with a short background presentation on forest management and forest products from Wear. To show how forest markets interact with the carbon sink in the U.S., he pointed out that in the southeastern United States alone, since 1952 to the present, forest biomass has grown by more than 100%—from roughly 2 million acres of planted forests in 1952 to about 48 million acres today.

Wear emphasized this enormous growth came in response to marketing incentives. In short, forest products markets build the forest carbon sink with incentives to retain and add forests and expand productivity, revenues for forest fuel reductions, and carbon storage and emission offsets.

Forests in the U.S. store the equivalent of 52 years' worth of carbon emissions, and, while this reservoir continues to expand by about 0.5% each year, it is predicted that net growth will decline in the next 30 years, mostly due to land use changes and aging forests.

Setting off the panel discussion, Bartuska pointed out that while experts, stakeholders and policymakers have known about the tremendous role of forests in climate change mitigation for more than 20 years, only recently have we seen a rapid acceleration in attention to forests as a mitigation strategy. Her question was, "Why now?"

In response, Alavalapati explained that science-based information about forests' role in climate mitigation is overwhelming and robust in numerous areas, including the carbon sequestration potential of forests, the carbon storage potential of wood products and displacing fossil fuels with sustainable, forest-based bioenergy. He also pointed to the overwhelming societal awareness of the benefits of carbon from forests—which is higher than ever before—and the growing number of people who are embracing the wise use of forest products and moving away from a pure preservation approach.

Alavalapati added that forest professionals have successfully moved the topic of the role of forests in climate mitigation to the front and center.

On this topic, Bonnie emphasized that this issue is "fundamentally a question of math."

"There's an increasing understanding that we need to dramatically reduce greenhouse gas emissions," he said, "[but] for the whole of the U.S. economy, it's very hard to make that math work...math is making a lot of folks think about not just the emissions side, but the sequestration side, as well."

Bonnie also emphasized the "political math" needed in a country where there is still skepticism around climate sciences, particularly in rural constituencies. He urged the importance of engaging rural America in the climate change conversation, as well as guestions about the ways that investment in forestry and agriculture can improve the economics of land usage while also maintaining the forest sink.

"If you think about the math of where the stakeholders and votes come from...rural matters, so these issues of markets are critically important."

Gatto agreed, adding, "I think constituents are demanding from their elected officials to do something about climate." Gatto said elected officials, in turn, see a lot of political opportunity in taking action regarding working forests in particular.

"There's a lot of potential that forests bring to the table, whether you're looking at the actual math, the political math or the constituent math," she said. "There's a lot of momentum that's coming together here at the same time."

The entire conversation can be viewed at rff.org/events/rfflive/forests-and-climate-change-mitigation-role-markets/.

Alavalapati said the participants, as well as the hundreds who were either present or tuned into the discussion, took away some eyeopening views on this crucial topic, which can only be examined and ideally implemented through more in-depth discussions.



Contact Us

The SFWS newsletter is distributed to alumni and friends of the school. Inquiries and suggestions concerning the newsletter should be directed to the school's Office of Communications and Marketing at the address below.

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Giving

Questions concerning the school's development program, including annual and corporate giving, planned gifts and estate planning should be directed to Heather Crozier, School of Forestry and Wildlife Sciences Building, 602 Duncan Drive, Auburn, AL 36849. Inquiries may also be made by email to vannhea@auburn.edu or by phone at 334-844-2791.



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Convention offers wildlife enterprise management students valuable networking opportunities

During the convention, the students learned more about the industry while networking with SCI members and leaders who may be resources for future career prospects.

Forestry students Jace McCauley and Robert Sitze recently represented the D.C. where they were able to witness

McCauley and Sitze were chosen to represent the school because of their exemplary leadership skills as members of the Forest Environment, and Wildlife Leadership, or FEWL, Academy, a personal development program that is co-instructed by Dean Janaki Alavalapati and Assistant Professor and Extension Specialist Adam Maggard.

Alavalapati was proud to have the students represent both the school and the FEWL Academy at the meeting.

"With this opportunity, Jace and Bobby were able to witness the development of real-world solutions and apply the policy knowledge they have gained as students of the School of Forestry and Wildlife Sciences to the process," Alavalapati said.

"Their presence at this meeting is significant to their future in the industry and their growth as leaders because of the connections they were able to make with a wide range of forestry and government professionals."

Attendees of the meeting included 37 members of Congress, namely Alabama Sen. Doug Jones and Richard Shelby and Alabama

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Long-time faculty, staff retire

The Auburn University School of Forestry and Wildlife Sciences has announced the retirement of Luce Professor Lisa Samuelson this spring. Several staff retired in fall 2019 as well, including employees, Lisa Hollans, student services coordinator; Sharon Tatum, development coordinator; and Solon Dixon Forestry Education Center long-time staff member, Teresa Cannon.

Samuelson was University Alumni Professor and the director of the Center for Longleaf Pine Ecosystems. She received her B.S. and M.S. in forestry from the School of Forest Resources at the University of Georgia and her Ph.D. in forestry from Virginia Tech. During her academic career, Samuelson's general research interests focused upon tree physiological responses to environmental and silvicultural influences.

Lisa Hollans served the school as coordinator of student services where she advised students and managed the distribution of the school's scholarships and awards. Sharon Tatum served as development coordinator where she supported Heather Crozier, development director, and managed annual giving programs as well as the Compass Circle, the school's young alumni giving society. Teresa Cannon, a beloved employee of the Dixon Center, served as administrative assistant and kitchen manager during her 39-year career.

Please join us in wishing them well in their retirement

Academics & Learning

Recently the Auburn University School of Forestry and Wildlife Sciences undergraduate students majoring in wildlife enterprise management attended and volunteered at the annual Safari Club International, or SCI, Hunters' Convention in Reno, Nevada.

The convention, which attracts thousands each year to tour the 650,000-square-foot exhibit space, is the premier hunting show where SCI members gather to socialize, book hunting excursions, and shop for the latest in hunting and outdoor equipment.

While on the week-long trip, Auburn students Chase Stuckey, Tripp Hodges, Megan Justice, Chloe Medlin and Ben Ingram were accompanied by Dean Janaki Alavalapati and several others, including faculty members and staff, as well as the school's advisory council member Michelle Isenberg.

"I believe the most valuable part of this entire trip was while we were there to promote wildlife enterprise management, the businesses [we connected with] were also able to give us opportunities and offer us internships," Medlin said.

While in Reno, the students volunteered extensively, assisting with various sporting activities coordinated for local youth and several fundraising events that support SCI education and outreach programs.

Franks, a professor of practice and the degree program coordinator in the School of Forestry and Wildlife Sciences said, "The show allowed the students to better understand the diversity of the industry and the breadth of career opportunities that await them after graduation."

Franks also expressed his appreciation to key individuals who made the trip possible. "We are very grateful to SCI leaders, Randall Bush, Dan Brooks, Kathy Butler and Todd Roggenkamp, who organized the convention activities for the students," Franks said.

Financial support for the trip and convention attendance was provided by the Alabama and Houston Chapters of SCI and Mr. and Mrs. Oscar Taylor of Houston, Texas.



Professor of Practice and Degree Coordinator Todd nks, students Ben Ingram and Tripp Hodges; Dean Jan valapati; students Chase Stuckey, Chloe Medlin, Mega valapati; students Chase Stuckey, Chloe Medlin, Megan tice; and Professor and Extension Specialist Mark Smith. wn in the back row from left to right are Development ctor Heather Crozier and advisory council member and per chair Michelle Isenberg.

FEWL-ing the fire: Forestry students gain new insights into policy making on Capitol Hill

Written by Avanelle Elmore

School of Forestry and Wildlife Sciences at the Forest Landowners Association Public Policy Institution meeting in Washington the legislative process first-hand.

Rep. Gary Palmer, as well as representatives from federal agencies, government organizations, NGOs and private industries. Significant issues such as casualty loss of timber, at-risk species, carbon and climate policy, and syndicated conservation easements were discussed. Both students have taken classes on environmental policy, but felt that this experience gave them a broader understanding of its influence

Sitze, a junior in forestry, was excited to see

"Policy affects everyone in the field, from land organizations to land owners to timber mills, and with this opportunity to see all of these entities working together, I was able to fully understand the significance of this process."

- Robert Sitze, junior, forestry

how the legislative process will affect his career.

"It's eye-opening to see how these policies are impacting what I, as a future land manager, might be doing in the woods for a landowner," Sitze said when addressing the Board of Directors.

"Policy affects everyone in the field, from land organizations to land owners to timber mills, and with this opportunity to see all of these entities working together, I was able to fully understand the significance of this process."

McCauley, a senior in forestry, was grateful to see the inner workings of policy and thanked the board for their continued efforts.

"The big takeaway I had is that we can manage the woods to the best of our abilities and create wonderful plantations and habitats for wildlife, and one thing in D.C. can discount that work so quickly. Thank you for all that you do in fighting for these policies that affect us."

He also spoke on the opportunities that lie within policy making.

"I plan to be a land manager with my own consulting business and network of clients With that experience and connection with constituents, I could potentially aid this process by starting conversations with the state government to address their concerns," McCauley said.



otos from the left are Robert Sitze and Jace McCauley

Fired up: New club helps students earn wildland fire certification

Written by Avanelle Elmore

A new student organization, the Wildland Fire Club, or WFC, has been created at Auburn University to assist students in earning the Wildland Fire Fighter Type 2, referred to as FFT2 certification. It is a nationally recognized certification administered by the National Wildland Fire Coordinating Group that allows individuals to participate in wildland fire activities on public lands.

Auburn joins institutions such as Clemson University, Alabama A&M, the University of Georgia, the University of Florida and Louisiana State University offering students opportunities to pursue the FFT2 certification.

Although there is a fire ecology course offered in the Auburn School of Forestry and Wildlife Sciences that allows students to fulfill the education and experience requirements for the state-regulated Alabama Prescribed Burn Manager certification, it is not recognized by federal or state agencies nor does it allow students to participate in prescribed burns on state or federal lands.

WFC was founded by James Elrod, a former forestry student and current graduate student in the School of Forestry and Wildlife Sciences, to provide this opportunity for students at Auburn.

As an undergraduate, Elrod saw a need for students to acquire skills in wildfire suppression and the use of prescribed fire.

Returning as a graduate student, he set out to address this gap. "This organization will be a great addition to our school as the WFC is dedicated to the education, certification and safety

of students passionate about wildland fire," Elrod said.

Through its partnership with state and federal agencies such as the U.S. Forest Service and the Alabama Forestry Commission, the club plans to provide students with the opportunity to participate in prescribed burns on state and federal lands. This will not only allow students to gain experience in a safe and professional wildland fire environment but will also assist state agencies, who are experiencing a shortage of certified personnel, in burn operations across the state.

"Safety will always be our top priority. The FFT2 certification training will teach students more about burning processes and how to remain safe throughout these procedures," Elrod said.

The club's faculty advisor, Professor and Extension Coordinator Becky Barlow, says the club is an important addition to the School of Forestry and Wildlife Sciences.

"Fire is a vital part of natural systems and land management here in the southeastern U.S., across the country and the world," Barlow said. "It is my hope that with this club we will be able to support students who already



have an interest in prescribed fire and help to educate other students and the public on the topic as well."

The club will also participate in outreach opportunities every semester to educate the general public on the benefits and need for wildland fire. For more information on the club and how to become a member, contact Elrod at jte0017@auburn.edu.

Research & Discovery

Klingbeil co-authors pioneering study on animals' sensitivity to forest fragmentation



An Auburn University scientist was part of a research team that uncovered dramatic worldwide variances in animal survival rates as humans increasingly infringe on what were once wild areas.

The study, published in the Journal Science, shows that animals having evolved in environments subject to major habitat-altering events—such as fires and storms—are better equipped to handle human-caused forest fragmentation than species in low-disturbance areas.

Brian Klingbeil, a postdoctoral scientist in the Auburn School of Forestry and Wildlife Sciences, was a co-author of the international collaborative study led by scientists at **Oregon State University. Their findings** show the closer a forest is to the equator, the more sensitive on average its wildlife species are to fragmentation. Tropical species have historically encountered much less disturbance than those in temperate zones.

Klingbeil and fellow researchers hope the work provides an important road map as conservation managers consider the effects of forest edges on wildlife.

"We already know that biodiversity greatly increases as we move toward the equator," Klingbeil said. "Our research identified that tropical species are six times more sensitive to forests being broken up for logging, road construction or farming than temperate species.

"I hope that by identifying this combination of high biodiversity—but also high sensitivity to forest disturbance—will help demonstrate why protecting tropical forests is so critically important and allow researchers to design more effective conservation systems."

The study was funded by the National Science Foundation and was spotlighted in a New York Times article

The researchers found that 70% of the Earth's remaining forest is within 1 kilometer of a forest edge, and fragmentation of the world's most intact forest landscapes the ones in the tropics—is predicted to

accelerate over the next 50 years.

"It's one thing to blow a whistle and another to figure out a way to deal with a problem," said Matt Betts, director of the Forest Biodiversity Research Network, who led the study with OSU postdoctoral scholar Christopher Wolf. "If we want to conserve the biodiversity needed for ecosystem services, and for its own sake, we must be particularly careful to minimize the creation of edges in the tropics, since fragmentation has a greater negative impact there."

"The findings of this study have worldwide implications on the effects of fragmentation on biodiversity and the future survival of ecosystems," said Janaki Alavalapati, dean of the School of Forestry and Wildlife Sciences.

These research findings include an important caveat.

"It's a matter of degree," Wolf said. "In comparison to the tropics, in temperate zones the focus should be on conserving habitat itself perhaps with less regard for the configuration patterns."

Professors seek to increase resiliency of Gulf species to environmental changes



burn University Professors Latif Kalin and Di Tian are rking on a \$2.8 million NOAA RESTORE study to build the nate and environmental resiliency of Gulf species.

Two Auburn University researchers are part of a team that has launched a study on the viability of several species that dwell in the estuaries of the Gulf of Mexico and have experienced a steep population decline in recent years. The work, which seeks to strengthen the creatures' resilience to damaging environmental factors, could play a large role in ensuring their future sustainability.

Latif Kalin, professor of hydrology in the School of Forestry and Wildlife Sciences, and Di Tian, assistant professor in the Department of Crop, Soil and Environmental Sciences in the College of Agriculture, are working on the \$2.8 million study, "Building Resilience for Oysters, Blue Crabs and Spotted Seatrout to Environmental Trends and Variability." The project is funded by the National Oceanic and Atmospheric Association, or NOAA, as part of its NOAA RESTORE program, which awarded approximately \$15.6 million to research teams that are studying trends in living coastal and marine resources and the processes driving them in the Gulf of Mexico region.

"Oysters, blue crabs and spotted seatrout populations in the Gulf of Mexico have suffered substantial declines," Kalin said. "Unfortunately, the relationship between their population trends and the environmental factors are not well understood."

"Through this project, we hope to have a better understanding of the various ecological dynamics impacting populations, and the resulting influence upon services and economics, to facilitate cooperative ecosystem management to build the resilience of oyster, blue crab and spotted seatrout to environmental change."

The results of the research, a partnership with the Alabama Department of Conservation and Natural Resources the Mobile Bay National Estuary Program and other stakeholders, will feed into resource management and restoration planning decisions as well as efforts toward holistic ecosystem management of Mobile Bay.

"More broadly, the project's research and outreach components will support widespread management efforts to increase coastal resource resilience to environmental trends and variability," Kalin said.

Tian said the importance of this work cannot be overstated.

"With respect to the solution, we will create a next-generation numerical model to assess and predict these impacts," he said. "This information will help resource managers in the Mobile Bay area and beyond to make evidence-based decisions and best management strategies for estuarine ecosystem restorations under the current and future climate."

In addition to Kalin and Tian, the team includes nine researchers representing the Dauphin Island Sea Lab, University of South Alabama, Mississippi State University and North Carolina State University.

Presidential Research Fellow at the forefront of promoting human-elephant coexistence in Kenya

Lynn Von Hagen, an Auburn University Presidential Research Fellow and doctoral student in the School of Forestry and Wildlife Sciences, spent her first semester in a faraway but familiar location—Kenya, where she has worked on the ground for two years researching African elephants, specifically studying cropraiding, a perilous issue that endangers the lives of both elephants and native populations.

In January, Von Hagen began her second semester at Auburn, working with forestry and wildlife sciences Professor Chris Lepczyk and Assistant Professor Sarah Zohdy, as well as University Distinguished Professor Bruce Schulte of Western Kentucky University, where she earned her master's degree.

Von Hagen plans to return to Kenya for a longer stint of elephant research, working in conjunction with major



risk and reward

measures worldwide Two Auburn researchers were part of a team that studied Hawaii's invasive species and uncovered significant findings that reach far beyond the island state.

Wildlife Biology and Conservation Professor Christopher Lepczyk and Assistant Research Professor Jean Fantle-Lepczyk, both from the School of Forestry and Wildlife Sciences, examined the non-native species of Hawaii, which has the nation's highest number of invasives, a dubious distinction that has earned the state the nickname "the invasive species capital of the world."

Lepczyk said the examination of invasive species is especially noteworthy as they are considered a leading driver of global change. Though the researchers focused their study on Hawaii, the information they gathered will have far-reaching consequences.

"One of the main benefits of this paper is to show that managing invasive species is not a hopeless task," Lepczyk said. "We used Hawaii as a model system to show that there are a variety of approaches that we have currently, or are in the pipeline, that can be employed to successfully slow down, or sometimes stop, invasive species.

Another scientist on the team, Aaron Shiels, a research biologist for the National Wildlife Research Center's Rodent Project, reiterated Hawaii's status as a hotspot for invasive species research and methods development.

"Invasive species, by definition, are non-native species that spread rapidly and cause ecological and economic harm," Shiels said, citing Hawaii's enormous annual economic losses, agricultural damage, and threats to the survival of native and endangered speciessome of which are the last to exist on the planet.

He added that these invaders can spread disease to people; some can even endanger the safety of travelers by causing airplane collisions.

conservation groups, including Wildlife Works, Save the Elephants, Earthwatch and the International Elephant Foundation.

Much of her research has taken place in the Kasigau Wildlife Corridor, home to the country's largest elephant population and an area of high human elephant conflict.

Von Hagen said crop-raiding is an oftenoverlooked threat to people and elephants in many parts of Africa and Asia, as elephants move from protected lands into small shareholder farms, where they consume or trample crops. This creates conflicts between elephants and people – elephants' lives are endangered when farmers retaliate, and the livelihoods of impoverished people are compromised.

"We successfully evaluated a new type of metal strip fence invented by Simon Kasaine, our colleague in Kenya," Von Hagen said, adding

the invention, known as the Kasaine fence, or metal strip fence, has been effective at deterring elephants. "This is big news for rural people, as the method is practical, affordable and prevents habituation by elephants, three key qualities rarely found in combination."

She and her fellow researchers also assessed indigenous trees for elephant foraging to determine biological indicators for crop raiding. She also performed wildlife and elephant surveys with an aim to create a catalog of known elephants in the area that will help in tracking individual, mostly male elephants and identify habitual crop raiders.

Her extensive research in Africa is far-reaching

"My work as a Ph.D. student and Presidential **Research Fellow at Auburn will involve** ongoing relationships with the project but will allow me to diverge and build off of the important knowledge we have gained in the region," Von Hagen said.

She said she plans to conduct community workshops that focus on a variety of cropraiding deterrents, educate stakeholders on the importance of elephants in the ecosystem, introduce climate smart agricultural techniques to improve crop yields and make crop raids less detrimental to farmers. She will also introduce sustainable livelihood initiatives and conduct an educational school program.

"Lynn Von Hagen's work in Kenya is leading to vital change in Kenya's embattled landscape to reduce human elephant conflict and improve livelihoods," said Janaki Alavalapati, dean of the School of Forestry and Wildlife Sciences.



Von Hagen will also assess how large-scale fencing initiatives can impact elephant movements and how community participatory modeling can impact conservation planning

Those interested in learning more about the Earthwatch project, or accompanying the expedition, can go to earthwatch.org/ expeditions/elephants-and-sustainable agriculture-kenya or follow the project at facebook.com/ElesKenya.



Hawaii species invasion brings

Auburn researchers publish study about invasive species in Hawaiian Islands to help scientists improve control

The paper, "Hawaii as a Microcosm: Advancing the Science and Practice of Managing Introduced and Invasive Species," was recently published in the journal BioScience.



A predator-proof fence on the island of Kauai was erected around a seabird colony to protect it from predators to allow for restoration of seabird populations.

"Our paper highlights some of the major research and management successes, as well as many of the failures," Shiels said. "Numerous tools, techniques, devices and methods have been tested in Hawaii, and many others are currently being tested or will be soon."

Some of these include ungulate- and predator-proof fencing, self-resetting traps, chemical pesticides applied by hand or from helicopter, biocontrol and hunting programs.

Jean Fantle-Lepczyk said the study aimed to highlight the measures that have proved effective in Hawaii, as well as those that have not, to provide insight to invasive species management in other areas.

"Since island ecosystems are often more severely impacted by invasives than other areas, it was our hope that what's been done in Hawaii can serve as a guide to others trying to manage invasive species both on islands and continents," she said.

School of Forestry and Wildlife Sciences Dean Janaki Alavalapati said this research is likely to have a significant widespread impact.

"The progress that Drs. Lepcyzk and Fantle-Lepczyk and their team have made in Hawaii, with its vast number of invasive species, could provide far-reaching solutions to a growing challenge that is found worldwide," Alavalapati said.

In addition to Lepczyk, Fantle-Lepczyk and Shiels, the team included scientists Liba Peichar—the lead researcher— Steven C. Hess, M. Tracy Johnson, Christina R. Leopold, Michael Marchetti and Katherine M. McClure.

All agreed that there is no single tool that will fix the region's problem with invasive species—and in turn, other regions facing this challenge—and that finding solutions will be an ongoing, trial-and-error process. But not a futile one.

"The management and policy approaches being used in Hawaii are at the leading edge of conservation in the U.S.," Lepczyk said. "Hence, our goal and hope is that the work can demonstrate how to manage invasive species throughout the rest of the nation, and world, before ecosystems are as degraded as they are in Hawaii."

A hunt to remember

Wildlife students get their first shot at waterfowl hunting by Teri Greene



-Mariah McInnis, graduate student, wildlife sciences

When seven Auburn University wildlife students set off to hunt waterfowl for the first time, they knew it would be more than an action-packed excursion. It was a chance to experience firsthand a concept they knew about only in the abstract: the vital bond between the sport of hunting, and the funding needs of wildlife management and conservation.

"As a student in the wildlife field, I understand the importance of hunting as my undergraduate classes at Auburn have stressed this point beginning freshman year," said wildlife student and hunt participant Arielle Fave. "But hearing and doing are very different things. Being able to actually go out in the field and hold and shoot a gun while observing wildlife is a skill that is unattainable in the classroom."

The waterfowl hunt was a collaborative effort among the Delta Waterfowl Foundation, or DWF, a North Dakota-based nongovernmental organization (NGO) that promotes hunting and conservation; the Alabama Department of Conservation and Natural Resources, or ADCNR, and the School of Forestry and Wildlife Sciences, or SFWS. The two-day event took place on the property of Auburn alumni Cindy and Jake Lockwood.

Justin Grider, regional hunter education coordinator with ADCNR, was one of the folks behind the effort. As an SFWS alum, he said the rush of excitement took him back to his days at Auburn, long before such a program was in place.

"It was extremely rewarding to be involved with the program because I knew the impact it would have had if it was in existence when I was a student," Grider said.

On the day before the hunt, Grider and fellow ADCNR staff members Daniel Musselwhite and Seth Maddox, who are also SFWS alumni, trained the students in firearm and wing shooting, including a sporting clay exercise.

The next day, students set off on the hunt along with Grider, Assistant Professor of Conservation Governance Kelly Dunning, Steve Sowell, DWF's R3 program coordinator and DWF guides Daniel Morris, Edward Aldag and Lamar Jester. The participants may have been fresh out of training, but this was no simulation the hunt was the real thing, including guns, ammunition, ATVs, dogs, decoys and guidance, all provided by the sponsors.

The student hunters—who all happened to be female—included Faye along with Kayleigh Chalkowski, Francesca Erickson, Monet Gomes, Natalie Harris, Hannah Leeper and Mariah McInnis. McInnis, who is pursuing her master's in wildlife science, remembers the exhilaration.

"The morning of the hunt before the sun was up, we were wading out into the flooded field to set up the decoys. We only had a few lights shining out over the water and were whispering to one another directions of where the decoys should go. It was such a cool moment because all of our excitement

about the hunt ahead was almost tangible," McInnis said. Throughout the day, Grider could sense a

change of perspective within the group.

"From the outside looking in, it seemed as though several students changed their perception of hunters or at least started to see them in a new light," he said. "There is a negative stigma surrounding hunters, and I think we were able to lift the veil on some of those beliefs and shed positive light on hunters."

Coordinating a mission

Sowell, DWF's R3 program coordinator—which refers to the movement to recruit, retain and reactivate hunters-initially reached out to the school to gauge interest in the program. Then, Auburn Wildlife Professor Mark Smith and Assistant Wildlife Professor Will Gulsby got the program off the ground with the Birmingham chapter of DWF. Conservation Governance Professor Kelly Dunning joined to help see it through.

Once Grider and his team at ADCNR came on board, the hunt was on.

"A lot of work and coordination went into putting it together," Smith said. "DWF was the lead in all of this, supplying all the gear and lining up the hunting clubs and hunters to take students, overnight lodging, firearms, ammo and meals."









Auburn University students are shown with instructors standing from left to right, Daniel Morris, Caleb Parker, Lamar Jester, Steve Sowell, Justin Grider, Kelly Dunning, Seth Maddox and Edward Aldag. Sitting are wildlife students Francesca Erickson, Kayleigh Chalkowski, Monet Gomes, Natalie Harris, Mariah McInnis, Arielle Fay and Hannah Leeper.

While the school was responsible for selecting and preparing the students, Grider and his team took on the role as trainers and mentors. Dunning said the adventure went off without a hitch.

"Our Delta and ADCNR mentors made this accessible, safeand fun for our students," Dunning said. "I think the wildlife faculty in the department, especially Dr. Smith, are visionary in setting up programs like this for our students, and it shows how our department is leading the way with opportunities outside of the classroom."

School of Forestry and Wildlife Sciences Dean Janaki Alavalapati said this experience offers a unique and valuable opportunity for wildlife students.

"Until now, it has been rare for students to have such a significant understanding of the connection between hunting and wildlife conservation," Alavalapati said. "The school, in conjunction with its partner organizations, is providing an immersive opportunity that is not only educational but also fun and memorable for the students participating."

Rekindling a significant tradition

Sowell said that since 1937, the Pittman Robertson Act has provided billions of dollars of wildlife management and conservation funding through excise taxes on archery equipment, firearms, ammunition and other products regularly purchased by hunters.

"Additionally, hunters provide wildlife managers with valuable data, act as advocates for healthy habitat, partner with agencies on a variety of projects, and volunteer for various projects that benefit habitat and wildlife," he said. "These are only a few of the notable links involved."

But the number of hunters in North America has significantly declined in the past 30 years, posing a problem for the future of wildlife management and conservation.

"Historically, over 70% of wildlife managers were also hunters," Sowell said. "Currently, we believe that only one out of three university students studying to become a wildlife manager or biologist has hunting experience. As such, they do not have a holistic view on the links involved."

He said that's why bringing more students to the sport is a big part of his mission.

Smith said the primary objective is to expose wildlife students to hunting in general.

"This is particularly important for all wildlife students that are non-hunters, especially given that probably 60 to 75% of our wildlife students are non-hunters," he said, adding that 80 to 90% of state wildlife agency budgets—the funds that will provide future jobs for these students—is derived from hunting dollars.

"We talk about the role of hunting in our wildlife classes, but it all remains academic until you actually experience it," he said. "That has been the benefit of this program."

"This innovative program underscores the value of offering wildlife students experiences outside the classroom that will deepen their knowledge in their field," Alavalapati said. "It is no surprise that our faculty, working handin-hand with partner organizations, has provided these students with such enriching possibilities."

The program is slated to last at least four more years, Grider said. He hopes it continues for many more.

"I foresee students broadening their perspectives about hunting and the management practices associated with game species," Grider said. "I believe it will allow them to relate with a wider range of the general public, making them a better asset as an employee."

The message was not lost on McInnis, who actually went on a waterfowl hunt with some friends the day after the trip.

"Hunters play a huge role in wildlife management and conservation, and a lot of people don't realize that a majority of the funding for wildlife comes from sportsmen and women," she said. "They offer a really unique point of view for wildlife managers because they're intimately familiar with specific areas or resources in ways that managers might not be."

It also resonated with Faye, who discovered her flair for skeet shooting on the first day.

"Having this opportunity opened my eyes to a way of life to so many," she said. "To be effective in my job of managing and conserving wildlife, I will be working closely with avid hunters, and having this experience gave me the opportunity to connect and work with them in my future career."



Academics & Research



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Development









11.4% of SFWS students on the **DEAN'S LIST**



Extension & Outreach





MORETHAN 30.000 people visit Kreher Preserve & Nature Center annually

OVER 1,000acres of prescribed fire completed at the Dixon Center

MORETHAN 000eople served by Extension forestry, wildli resources prog

NEARLY 7.500 children served by

KPNC environmental education programs

School of Forestry & Wildlife Sciences 2019 Annual Report



2019 SFWS Giving Breakdown

Alumni Faculty/Staff CorporationParent of Auburn Student Other Friend

Total Extramural Funding 2011-2017

\$4.7 M

2014 2015 2016 2017 2018 2019

\$3.7 M

\$6 M

\$5 M

\$4 M

\$3 M

\$2 M

\$1 M

53.2%

Extension & Outreach

YouTube to the rescue

Auburn forestry faculty team with major YouTube influencer to plant 20 million trees via #teamtrees

Two Auburn forestry professors lent a hand to a hugely popular YouTube scientist in an effort by internet content creators of all types to raise \$20 million for the Arbor Day Foundation, which has agreed to plant one tree for every dollar raised at teamtrees.org.

Professor Becky Barlow and Research Fellow John Kush of the School of Forestry and Wildlife Sciences joined up with Destin Sandlin, whose channel "Smarter Every Day" has more than 7 million followers, to share their insight and raise awareness about the growth cycles and conservation of trees.

Sandlin's video How to Plant 20 Million Trees, which features Barlow and Kush, has received more than 1.3 million views. It's part of the National Arbor Day Foundation's lofty goal to raise \$20 million to plant 20 million trees. The goal was met well before the deadline with more than \$22 million raised.

Kush said he had no idea how far a group of YouTube videos could go in terms of raising awareness and advancing education.

"I was amazed," Kush said of the million-plus views Sandlin's video received. "It's great exposure for the longleaf pine, the School of Forestry and Wildlife Sciences and Auburn University. I had no idea how many people subscribe to some of these YouTube channels.

The #TeamTrees campaign was started by internet content creators, sparked by a tweet from YouTube star Mr. Beast, who decided to commemorate reaching the 20-million subscriber mark by setting off a viral effort to plant 20 million trees. In May, fellow YouTuber Mark Rober teamed up with Mr. Beast and his crew to kick off the project by planting trees in a field in Oregon. On the project's launch day, Oct. 25, Rober posted a video of that tree-planting and, with Mr. Beast and others, including Sandlin, began to rally social media influencers to spread the word about the #TeamTrees project, which ran through Dec. 31, 2019.

Since the trees are scheduled to be planted in locations worldwide, this effort places an emphasis on planting trees that are native species, where local conditions and forest plans allow. The National Arbor Day Foundation's motto sums it up: "To plant the right trees, in the right place, at the right time, for the right reasons."

Which trees, where to plant and why

Sandlin made a pitch to the School of Forestry and Wildlife Sciences, including the lines, "I'd love to include Auburn University in the video (even though I'm a Bama grad). You're the authorities on forestry, and I'd like to highlight that to an international audience."

Sandlin, who's examined nature worldwide in his video adventures, has a keen interest in trees, and he's familiar with Auburn's forestry work—back in the 1960s, his grandfather worked with Auburn students to see whether a group of newly-planted longleaf pines would grow on his property, just north of the species' range. Only two of the many trees planted on his grandfather's land survived. One lived until the mid-1970s and the other lived until the late '80s.

YouTube Search

How to Plant 20 MILLION TREES - Smarter Every Day 227 #TeamTrees

which has agreed to plant one tree for every dollar raised at teamtrees.org.

1,360,149 views · Oct 25, 2019

1 80K ₩ 730 → SHARE =+ SAVE ...

Auburn University forestry professors helped YouTube influencer Dustin Sandlin raise \$20 million for the Arbor Day Foundation,

"It can be quite a challenge to help people understand that at times, fire can be like God for the ecosystem. believe our message got through."

> -Destin Sandlin, producer of YouTube series "Smarter Every Day"

"My hope was that if we are going to plant 20 million trees, we should gain some scientific knowledge about what species will perform best in certain soils and climates," Sandlin said of his contribution to the #teamtrees project.

"Dr. Barlow and Dr. Kush share my passion for education, but also were willing to lay out the facts in a clear, intelligent and respectful way," he said.

Barlow and Kush were enthusiastic to share their expertise with Sandlin and his viewers.

Barlow explained the importance of silvics—the study of the life history and character of forest trees. In the video, she explained the importance of the location in which trees occur, their growth levels, need for sunlight and tolerance of shade. She also emphasized that some species require higher levels of maintenance than others.

In the video, Kush's statement that certain trees need fire to survive seemed to take Sandlin—and probably his viewers—aback. But Kush said getting the word out about the health of the longleaf pine was one reason he was excited to work with Sandlin. He said the ecology of the longleaf particularly its need of fire—is often misunderstood.

"We need to be proactive and increase our use of prescribed fire. This will not only help in longleaf pine management but improve wildlife habitat for game species as well as numerous threatened and endangered species in the Southeast."

Sandlin was grateful that Kush shared this fact with viewers.

"It can be quite a challenge to help people understand that at times, fire can be like God for the ecosystem," Sandlin said. "I believe our message got through."

A crowd-driven effort

In the end, the widespread social media push to raise awareness and educate had the greatest impact on the effort, with #TeamTrees identifying more than 800,000 unique donors. A handful of billionaires, including Elon Musk and Tobias Lutke, did contribute to the cause, but for the most part this was a grass-roots success.

"I predicted a few more wealthy individuals or organizations would realize the PR potential and jump on board," Sandlin said. "The fact that the majority of funds for the Arbor Day Foundation were raised by individuals feels really good."

David Helm has been named the School of Paper's west region fiber supply, Helm

After graduating in 1984 with a degree in forest engineering, Helm began his career with Champion International Corporation. International Paper, or IP, acquired Champion in 2000. He held numerous positions, including wood procurement, land management and forest operations, chip mill and woodyard operations, resource planning and analysis and general management.

employees to join him in his involvement Helm has had operational responsibilities from in the spring procurement practicum. the Carolinas to Oregon and has actively served in state forestry association roles in Texas, "By being involved in and supporting these Louisiana, South Carolina and Alabama—where he is a past president and chairman of the to be successful participants in the forest Alabama Forestry Association. In the aftermath industry upon graduation," Shrantz said. of Hurricane Ivan in 2004, then-Alabama Gov. School of Forestry and Wildlife Sciences Dean Bob Riley appointed Helm as chairman of Janaki Alavalapati said Helm exemplifies the Alabama Forest Recovery Task Force. a leader who contributes his expansive

New scholarship Chuck and Deborah Hopkins geospatial and environmental informatics students



The Society of Municipal Arborists recently held its annual Municipal Forestry Institute at the Lodge at Gulf State Park in Gulf Shores, Alabama. Seventy-five urban forestry professionals from the U.S., Canada and Sweden joined the state of Alabama in celebrating Arbor Week and concluded with a tree planting ceremony at The Lodge at Gulf State Park on Friday, Feb. 28. A Sand Live Oak, donated by the City of Gulf Shores, was planted and a plaque was installed to recognize the important environmental contribution of professionals practicing urban forestry as well as the efforts by the Lodge and Gulf State Park. Representatives from Auburn University, Cooperative Extension, Alabama Forestry Commission, the International Society of



Alumni & Friends

Helm named SFWS **Alumnus of the Year**

Forestry and Wildlife Sciences Outstanding Alumnus for 2019. As manager of International leads the team that supplies wood to eight mills throughout the U.S., delivering more than 20 million tons of fiber each year.

Paul Schrantz, the Weaver Professor of Forest Management in the School of Forestry and Wildlife Sciences and a 1975 Auburn forestry management graduate, nominated Helm for the honor.

"I have been impressed by his commitment to the School of Forestry and Wildlife Sciences, his career achievements and his service to the forestry community in the state of Alabama," Shrantz said. "He not only supports the school and its programs, but he also makes himself accessible to give encouragement and advice to students on their career paths."

Helm keeps an ongoing commitment to the school, including serving on the advisory council—on which he has served as chairman—as well as presenting annually to the "forestry in the private sector" class and encouraging International Paper

courses, he is helping to prepare our students

background of knowledge and experience in whatever capacity it is needed.

"Through the years, David has taken on major leadership roles in the forest industry as well as state forestry associations across the nation," Alavalapati said. "He has shown an ongoing eagerness to contribute to the school through service on the advisory council, involvement in the 'forestry in the private sector' class and the spring procurement practicum, and guidance of students who seek careers in the forest industry. He is a role model not only to those students, but also to his colleagues."

Helm currently serves in an advisory capacity on the Texas Forestry Association Executive Committee, and is a member and past chair of the School of Forestry and Wildlife Sciences advisory council. He is a registered forester in Alabama and a member of several state forestry associations. David and his wife, Adena, live in Benton, Louisiana.

We spoke with Helm about his time at Auburn and the strong connections he retains with the School of Forestry and Wildlife Sciences.

To read the full interview, visit sfws. auburn.edu/helm-named-sfwsoutstanding-alumnus-of-the-year.





David Helm '84, forest engineer and nager of International Paper's west on fiber supply, has been selected as nal Paper's west the 2019 Outstanding Alumnus of the Year Here, Helm is shown next to a sign that designates his family's property in Chilton County as an Alabama Tree Farm, which is a source of pride for Helm, who has taken a lifelong interest in the program.

SFWS patio named in honor of the late Jeff Butler

Auburn University has approved the naming of the patio area of the forestry and wildlife sciences building as the Jeff Butler Patio. "The naming recognizes the late Jeff Butler and his family's commitment to provide support for and achieve the strategic initiatives of the Auburn School of Forestry and Wildlife Sciences," said Judy Butler, who established the gift with her husband, Eugene Britt Butler.

"There are a couple of reasons my husband and I are making this donation to the school," Judy Butler said. "Many years ago, Emory Cunningham and my husband's father, Eugene Butler, each donated \$250,000 to Auburn University for educational purposes. Emory was the president of Southern Living and Eugene was the CEO. Likewise, Britt worked at Southern Living and set up a trust when the company sold to Time Warner. The trust, Abahac, Inc., focuses on environmental issues. specifically forestry and water. Each year we give contributions to 18 different organizations that fulfill this purpose.

Jeff attended Auburn upon graduating from Mountain Brook High School. When Britt and I married in 2000, Jeff became Britt's biggest advocate in helping with his Abahac mission, from research to discovery. Jeff was more like Britt's real son than a stepson. Britt is a veteran of WWII, and Jeff honored him in so many ways. When Jeff suddenly passed away from an undiscovered heart condition, it was a great loss for Britt as well as me," she said.

"The only 'take away' from the loss is that I could have lost Jeff many times over the years with his adventurous lifestyle. After struggling with alcohol, he found the answers for himself and asked me in 2010 to help him open a drug and alcohol rehab center. We created Bayshore Retreat in Destin, Florida. Many times, I would tease Britt that he hugged trees and I hug people. Meanwhile, Jeff hugged both," Judy said



Auburn University will officially name the patio area of the forestry and wildlife sciences building as the Jeff Butler Patio with a gift to the School of Forestry and Wildlife Sciences from Eugene Britt Butler and Judy Butler in honor of the late Jeff Butler.



Carter have estab endowed scholarship in the School of Forestry and Wildlife Sciences to support students pursuing the geospatial and environmental informatics degree. Deborah's family has

been in the pine tree business for more than 100 years. They are especially enthusiastic to support the first geospatial and environmental informatics scholarships at Auburn.

"The school has created a unique curriculum preparing graduates for life-changing work in the fields of ecology, agriculture, geosciences, land use planning, civil engineering and more," the Carters said.

Scholarship promote diversity



Katherine Owen Sechrist and her of the School of Forestry and Wildlife Sciences, have establishe a scholarship to encouraae liversity within the school. Sechris vho graduated from Auburn wit an honors degree in secondary on, was born in Fort Payn and has been a lifelong Alabam

rn ties-her mother and two sisters graduated from the schoo and her son Kevin also graduated from Auburn and is currently employed by the university.

Recipients of the Katherine Ower Sechrist scholarships should be from underrepresented groups, first-generation college attende and demonstrate financial need, among other criteria.

Memorial honors outdoor sporting industry professional



John Burrell, owner of High Adventure Company, estab a scholarship, which will support students pursuing the wildlife enterprise management degree, in honor of Alexandria "Allie" Saker, who recently passed away due to an ATV accident. Saker, from Providence, Rhode Island, was a communications coordinator at Swarovski Optik, a provider of hunting equipment including binoculars and scopes.

"As a valued member of the Swarovski team, Allie ensured High Adventure Company was well equipped for its global expeditions. This scholarship recognizes Allie as an emerging leader in our industry and encourages others to follow the great example she set," Burrell, said.

Alumni & Friends

Tiger Giving Day projects benefit Alabama's people, wildlife

Written by Avanelle Elmore

The School of Forestry and Wildlife Sciences Deer Lab and Kreher Preserve and Nature Center projects went above and beyond with proceeds exceeding their goals at the completion of the 2020 Tiger Giving Day campaigns.

The Deer Lab, established by Auburn University in 2007, is a 430-acre outdoor classroom that focuses on undergraduate and graduate student research projects throughout Alabama and the Southeast.

The facility's main goal is to promote healthy, thriving white-tailed deer populations for this valuable environmental and economic natural resource. Data recorded at the lab helps researchers gain a better understanding of white-tailed deer genetics, health, reproduction and environment, as well as negative impacts, such as disease and feral hogs, all within their natural habitat. "It is important to gain a better understanding of our white-tailed deer population to properly manage this species," said project coordinator Monet Gomes, an Auburn graduate student in the School of Forestry and Wildlife Sciences.

The lab's original goal of \$10,500 was surpassed with a final total of \$11,805 from 84 donors.

"We are so grateful to be able to continually improve and innovate the conservation efforts of our wild white-tail deer population because of the gracious donors to our campaign," Gomes said.

The proceeds will provide supplies for genetic and immune system testing, hormone sampling, parasite analysis, supplements and feed to ensure the Deer Lab's herd of approximately 100 deer are well-cared for and researchers have the resources needed for continued data collection and analysis.

The results of Tiger Giving Day will help the Deer Lab's researchers continually improve and innovate the conservation efforts of their wild white-tailed deer population.

The Kreher Preserve and Nature Center, or KPNC, also had great success in their turtle pond restoration project that includes the installation of an immersion landing and outdoor classroom right on the edge of the water. This will bring even more visitors to the center's most popular spot and enhance the educational experience for students.

Jennifer Lolley, KPNC outreach administrator and Tiger Giving Day project coordinator, is grateful for the community's hand in reaching the center's goal.

"We are really excited to make some great changes to the pond area. We want to thank the community for their amazing support that made these improvements possible," Lolley said.

"As a nonprofit nature center, we wouldn't exist without private donations and dues revenue from memberships," Lolley said.

With a goal of community involvement and outdoor education, the KPNC will be more equipped to provide visitors with a connection to nature through recreation and a number of learning programs, including school field trips, science lectures, workshops and the center's new Woodlands Wonders Nature Preschool.

The KPNC will offer the Auburn community a new resource for water conservation education with their final fundraising total of \$7,795 contributed by 122 donors, surpassing the original goal of \$6,150.



Not only will visitors benefit from the new resources, but the pond will become a healthier habitat for native wildlife through the restoration effort that was made possible from Tiger Giving Day campaign donors.

In the Spotlight

Wildlife student receives multiple accolades for scholastic achievement

Written by Avanelle Elmore

Gabriella Ripa, a wildlife ecology and management student, has been selected as the 2019-2020 School of Forestry and Wildlife Sciences President's Award.

The President's Award was created to recognize one outstanding graduating student in each school or college who has completed at least three semesters at Auburn University with a minimum scholastic average of 3.40, including the transfer record, and who possess outstanding qualities of leadership, citizenship, character and promise of professional ability.

In recognition of her distinguished services within the School of Forestry and Wildlife Sciences, Ripa was also chosen to lead her peers as the graduation student marshal in the 2020 spring commencement ceremony to be held in August.



"At EcoVivarium I learned animal handling and educational presentation skills. This amazing experience led me to become interested in working with herpetofauna," Ripa said.

In the summer before her junior year, Ripa interned at Allegany State Park in New York as a naturalist.

"I led nature hikes and educational programs for children in kindergarten through 12th grade. Additionally, I learned species identification and helped with trail maintenance in the park."

At Allegany, Ripa became fascinated with salamanders and began to seek out professors at Auburn whose research aligned with her interests.

> "Gabrielle's selection for the President's award and position of student marshal is a reflection of her commitment to academic success and leadership within our school."

> > -Dean Janaki Alavalapati



"Once I finish school, it is my goal to either work as a research scientist or to be a state or federal wildlife biologist, focusing on non-game species. I am especially interested in

"Gabrielle's selection for the President's award and position of student marshal is a reflection of her commitment to academic success and leadership within our school," said School of Forestry and Wildlife Sciences Dean Janaki Alavalapati.

During her time at Auburn, Ripa undertook several internship experiences that grew her interest in wildlife conservation and research. In the summer between her freshman and sophomore year, she interned at EcoVivarium, a reptile and amphibian sanctuary and teaching facility in her hometown of Escondido, California. She found an opportunity with Jamie Oaks, assistant professor in the College of Sciences and Mathematics, when she began collaborating on a research project with a graduate student to measure salamander specimens to determine how body size might have changed over time.

"That fall, I also started as a research technician in the School of Forestry and Wildlife Sciences with Professor Christopher Anderson's lab assisting James Cash and Jimmy Stiles with their research on the efficacy of fire in controlling Chinese privet, an invasive species of the southeastern United States," Ripa said.

In the spring of her junior year, Ripa received an Undergraduate Research Fellowship through Auburn University and began her own research in conjunction with Jimmy Stiles, focusing on how the presence of Chinese privet impacts the understory microhabitat and ground-dwelling herpetofauna species.

After graduation, Ripa plans to attend graduate school and is currently in the process of applying for assistantships. She hopes to obtain a master's degree in wildlife science and possibly earn a doctorate as well. conservation necessitated by habitat loss or degradation, associated with climate change and increasing urbanization."

Ripa is thankful for the honor of being selected for the President's Award and the role of student marshal and to all those who assisted her during her time at Auburn.

"I am so honored to have been chosen for this prestigious role. I am grateful for all of the professors, peers and mentors who have helped me throughout my undergraduate career. Without them, I would not have been challenged or encouraged to seek out opportunities and broaden my horizons."