

### DEPARTMENT OF **Fish** and **Wildlife** CONSERVATION









### Research Spotlight

# Dr. Sarah Karpanty



How can we help policy makers to best manage our coasts to benefit wildlife populations and allow human use in the face of rising seas and altered storm frequency and intensity? How can we incorporate case-based and project-based learning into our introductory through capstone wildlife courses to best prepare our students for dynamic and impactful careers?

What is limiting the recovery of threatened and endangered wildlife populations on our coasts and how will alleviating barriers to recovery interact with long-term coastal management options? How do novel and native predators interact with each other and their prey, and how can we incorporate knowledge of these behavioral and population-level interactions into our conservation planning?

These research, teaching, and outreach questions motivate Sarah Karpanty, an Associate Professor of Fish and Wildlife Conservation. Sarah has been a member of the FWC faculty since 2006. She received her B.S. in zoology from Miami University and her Ph.D. in ecology and evolution from SUNY Stony Brook.

Sarah's research program is predominantly focused on the U.S. Atlantic Coast; however, she continues to also work in the rainforests of Madagascar where she began her research career on issues related to predator-prey ecology and recovery of imperiled lemur populations. Two examples of ongoing projects capture how Sarah engages graduate and undergraduate students in understanding the threats to wildlife here in the U.S. and abroad.



Recently, in collaboration with Professor Jim Fraser and Research Assistant Professor Dan Catlin ('09 Ph.D. fisheries and wildlife sciences) of the VT Shorebird Program, Sarah along with new Ph.D. student Kat Miles began a 5-year study exploring the impacts of red fox populations on federallythreatened piping plover populations on Fire Island, NY. The questions and study site are driven by funding from the U.S. Fish and Wildlife Service in response to the U.S. Army Corps of Engineers' activities to alter dune and island structure in response to the effects of Superstorm Sandy and perceived future risks of storm impacts. The project team is using GPS collars, camera traps, and habitat assessments to quantify how red foxes impact the recovery and persistence of piping plover populations, and how management of red foxes can best be implemented to protect piping plovers in the face of human- and natural- changes in their habitat. The results of this work will be applied not only on Fire Island, but also other coastal sites, where managing predators to benefit shorebirds and terns is a high priority in the face of climate- and development-driven habitat change.

On the other side of the planet, Sarah is currently working with a new Ph.D. student, **Brandon Semel**, to explore if and how the last remaining population of critically endangered goldencrowned sifakas in northern Madagascar is persisting in the face of short (e.g. bushmeat, gold-mining-related habitat destruction) and long-term (climate change) threats. Brandon will use novel and tested field and lab techniques, including drones, diet analyses, climate model downscaling and genetic analyses, to explore if and how this imperiled lemur population can cope with these threats and persist. The ultimate goal of this project is to work with local people and Malagasy governmental and non-governmental organizations to manage the local forests to encourage movement of lemurs between now-isolated forest patches, perhaps through reforestation efforts. While conducting research and translating results to conservation actions drives Sarah, as all of our faculty, she also is highly committed to mentoring the next generation of wildlife conservationists. Sarah serves as our Graduate Program Coordinator and teaches a graduate-level course in Vertebrate Population Ecology and Management, where she works to engage our graduate students in the importance of understanding what mechanisms drive population limitation and regulation, and how understanding those mechanisms results in the best conservation practices. Sarah also teaches our introductory Principles of Fish and Wildlife Management course, for which she has received several university- and state-level fellowships to develop and implement a small group. case-based approach to learning, even in a large class setting (~150 students each fall). Most recently, Sarah redeveloped our Conservation Biology course into a capstone experience for graduating seniors. Each spring, she works with our 30-45 graduating seniors to implement a semester-long, studentdeveloped and implemented project in partnership with local agencies and non-profits. Since 2014, our students have partnered with the Virginia Department of Game and Inland Fisheries, the Virginia Natural Heritage Program, U.S. Forest Service, USDA Natural Resource Conservation Service, The Nature Conservancy, Ducks Unlimited, and the Mill Mountain Zoo to implement projects that are then used by the sponsoring agencies or organizations. Projects have varied, but have included a variety of products such as wildlife area management plans, wildlife surveys and habitat management plans, trail and educational material development and implementation, and habitat and invasive species management plans. All of our partners have returned annually and value these close interactions with our students.



### Departmental Message

### With new faces on campus often comes change and change brings opportunity.

One of the areas of change identified by Virginia Tech's new President, Timothy D. Sands, is undergraduate enrollment growth. Although graduate enrollment has increased by over 23% in the past five years, undergraduate enrollment in the Department of Fish and Wildlife Conservation has remained relatively steady at just over 200 students in any given semester. Therefore, undergraduate enrollment growth does represent a change for our program.

Enrollment growth brings challenges at the departmental level, but also provides new resources and opportunities. If we are to grow enrollment we will face the challenge of maintaining the quality of education that earned the college a #1 ranking as the best place to study natural resources in the U.S. (www. college.usatoday.com/2015/11/20/colleges-conservation-naturalresources/). At the same time, we are provided the opportunity to examine our pedagogy and teaching approaches. How can we engage our students more completely in active learning? How do point, if you know of high school students out there who are we incorporate more completely soft skills and communication ability into our undergraduate curriculum? How do we develop the networks, advising structures, and research opportunities that can provide a greater number of our undergraduates with meaningful experiential learning opportunities? We will also need to assess the influence of our efforts on student learning and success. All of these opportunities should allow us to continually refine and improve our undergraduate experience with growth in undergraduate enrollment.

To continue to admit the highest quality students, we will be challenged to increase our recruiting efforts in collaboration with the college's new recruiter, John Gray Williams. Increasing our recruiting efforts will offer the opportunity to actively increase the diversity of the student body and continue to refine our efforts to provide an inclusive learning, research, and working environment. How do we develop recruiting pipelines that directly tap into under-represented groups in Virginia and beyond?

Can we develop a plan for learning and communication activities that continually raise our awareness while reinforcing an inclusive environment? How do we retain students from diverse backgrounds once they arrive at Virginia Tech as undergraduates? By increasing the diversity of our undergraduate student body, we will have the opportunity to influence diversity at the graduate level, as well as in the workforce in general, and provide a deeper and richer undergraduate experience for our students.

Increases in class size will bring the challenge of greater involvement of graduate students in teaching. However, this too is an opportunity. With more assistance from well-trained graduate students, can we increase the number and quality of writing assignments in the undergraduate curriculum? By developing training programs and providing graduate students more opportunities to gain classroom experience, can we increase the competitiveness of our graduate students for faculty positions? Can we incorporate graduate students into the undergraduate advising process in ways that more effectively communicate post-undergraduate opportunities to students? Thoughtful incorporation of graduate students into the classroom provides opportunities for enhancing the undergraduate and graduate experience for our students.

We will look to our stakeholders, alumni, friends, and current students for advice and help as we move forward. As a starting passionate about fish and wildlife and the environment, please let us know and encourage them to investigate Virginia Tech as a next step on their road to making a difference. Students interested in visiting the campus can contact John Gray Williams (ighokie@vt.edu) or the college information page (www.cnre.vt.edu/college/about/visiting/index.html). We are also interested in developing contacts at institutions that serve highschool-aged kids (teachers, counselors, scout leaders, outdoor educators, etc.) who might help in our recruiting efforts.

### As always, thank you for all you do in support of our students and faculty!

**Joel Snodgrass** Department Head

### The summer 2015 field season was a busy one for the Virginia Cooperative Fish and Wildlife Research Unit's 13 graduate students and two postdoctoral research associates.

The Unit conducted fieldwork not only throughout Virginia, but also Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Tennessee and West Virginia. The Cooperator's meeting was held at Cheatham Hall on August 13 with representatives from the department, the college, the Virginia Department of Game and Inland Fisheries, the U.S. Fish and Wildlife Service and the U.S. Geological Survey. With the field season for many projects largely over, efforts have turned to data analyses and planning for next year - as for new work, the "wet" side of the unit will begin new aquatic invasives work in 2016 on the Obed Wild and Scenic River, one of the most remote landscapes in Tennessee. The "dry" side of the unit will be riding the Metro every day to help document the bat fauna in the District of Columbia.

One Unit project that is generating a great deal of interest is Distribution and

Habitat Use of Eastern Spotted Skunks in western Virginia. Supported by the Virginia Department of Game and Inland Fisheries with cooperation from the U.S. Forest Service, the West Virginia Division of Natural Resources, Clemson University, and The Nature Conservancy, master's student Emily Thorne ('17 M.S., fisheries and wildlife sciences) spent the past year operating baited trail cameras and checking live-traps for spotted skunks. Believed very rare for the last few decades in Virginia, with very few trapped or roadkill records, spotted skunks started appearing on camera sites baited with white-tailed deer carcasses in the Appalachians during the winter months, particularly on the Virginia-West Virginia line (www. easternspottedskunk.blogspot.com/p/theteam.html). Armed with two winters' worth of camera data (thousands of pictures), Emily has recorded spotted skunks from Mt. Rogers National Recreation Area north along the mountains to Highland Wildlife Management Area – still relatively rare



compared to other furbearers. Although spotted skunks in Virginia appear to be more widespread and more generalized in habitat association than previously thought, they seem to prefer young forest stands at lower elevations and mature forest stands at higher elevations. Emily has also been helping the Virginia Department of Game and Inland Fisheries verify, maintain and plot new records provided to the public in hopes that the data can be combined with camera data to create Virginia-specific distribution models. After a trapping and radio-tracking trial run last year in West Virginia involving four spotted skunks and the help of Chuck "the skunk whisperer" Waggy, a retired wildlife biologist, Emily will be live-trapping and radio-collaring spotted skunks in Virginia. The pilot run in West Virginia showed that male spotted skunks have larger home ranges than females and both are highly variable in their use of den sites, frequently switching between underground burrows, rock crevices, and tree cavities.



### **Science Talk**

## As biologists, we communicate

our work to other scientists through peer-reviewed papers and to granting or government agencies through project reports. These types of writing tend to be dry and informative at best, and dull and impenetrable at worst.

It can be hard for a biologist to get information about their research to the public in a widely accessible, engaging way that is also scientifically accurate. Due to the origins of social media, most biologists (myself included) are initially suspicious of using it professionally, thinking it frivolous and a waste of time. However, many of us eventually discover

and ridiculous things they had done in the field. By emphasizing sciences' failures with humor, #fieldworkfail served to show the wider public the more human side of science. Next came #Junkoff, where biologists shared pictures and information about the reproductive strategies and organs of various organisms. I think we all learned



platforms such as Twitter can be a great tool for educating and engaging a large audience about our work. With Twitter I can talk about my work on cheetahs and fieldwork in Africa and directly answer questions and have it seen by thousands of people. The impact is increased with the strategic use of hashtags, which allows us to spread information about biology to a wide general audience. Chris Rowe and I started #fieldworkfail as a way to share pictures of vehicles stuck in the mud during fieldwork. Soon there were thousands of tweets by scientists about the stupid, dangerous,

cutest. Reproductive biology may be fascinating, but cuteness is one of the strongest currencies on the internet, and pictures of adorable lizards, frogs, insects, fish, and even corals went viral and were featured in the Washington Post, the Guardian, National Geographic as well as on TV and radio. The hashtag helped bring awareness to obscure organisms and highlighted the wondrous biodiversity that surrounds us.

Social media is a great way for biologists to do outreach while staying in direct control



Anne Hilborn ('17, Ph.D. fisheries and wildlife sciences)

of how it is presented. Using pictures and humor will get people interested in your research, and can be much more enjoyable and creative than writing a scientific paper.

The research done in our department is applied and directly affects people's lives. As scientists we are often frustrated about the misinformation we see of biological topics in the press, or the fundamental misunderstanding of important issues such as climate change or wildlife management. We need to better communicate our results and how we get them to policymakers, politicians, and the public in a way they understand and can use. Social media is a way to step out of the ivory tower and make scientists and the work we do more approachable and relevant to people's lives. CORTANCE STREET

### Virginia Tech Shorebird Program hosts 6th Western Hemisphere Shorebird Group

The 6th Western Hemisphere Shorebird Group (WHSG) Meeting was held at the Chincoteague Bay Field Station in Wallops Island, Virginia, September 12-16, 2015. The WHSG meets biennially with the specific goal to foster interchange and collaboration among shorebird scientists and conservationists in North, Central, and South America — regions that share the same migrating shorebirds across wintering, migrating, and breeding seasons. The meeting included biologists from virtually every country within the Western Hemisphere and, as such, many

# Stream fish take to the streets

A giant bluehead chub was created by the New River Valley Chapter of Virginia Master Naturalists (NRV-VMN) for a parade float titled **"In A Stream Near You."** The float was built to highlight the amazing but hidden diversity of freshwater stream fish in the New River Valley. In one day a male chub can carry enough pebbles to build a 2-3 foot diameter mound rising above the stream bed. This mound creates a well-

oxygenated,

partnerships were initiated and fostered during this international opportunity for collaboration. Over the course of four days, the meeting included over 100 oral presentations, 23 posters, symposia, workshops, meetings and field trips. Simultaneous translations into English and Spanish were provided on all presentations and discussions.

The Award for the Best Oral Presentation went to **Kelsi Hunt** ('15 M.S. fisheries and wildlife sciences) for her presentation titled "Let the good times roll: piping plover demographic response to historic flooding on the Missouri River". Back by popular demand was the Cutest Shorebird Chick Photo contest, won by **Katie Walker** (FWC research technician) for a staggeringly cute photo of a killdeer chick.



Katie Walker's (FWC research technician) winning photo submission of a killdeer chick

www.whsrn.org

sediment-free habitat ideal for incubating fish eggs. Other stream fish also find this to be an ideal place for laying their eggs so a chub mound is often swarming with dozens of other "nest associates." By taking the fish to the streets, the NRV-VMN hopes to increase the public's awareness and appreciation of healthy streams. The float won first place in Blacksburg's 2015 4th of July Parade and 2015 Holiday Parade. When not on tour, Chub and a few of his cohorts hang in the entryway of Cheatham Hall.





### Congressman Griffith visits mussel center

Congressman Morgan Griffith of Virginia's 9th District toured the department's Freshwater Mollusk Conservation Center in the spring of 2015 to see firsthand the research going on and to learn about the long-term project of cultivating endangered mussels and planting them in their native rivers. Griffith was briefed on the success of the conservation efforts, the life cycle of mussels, and how the project is restoring mussel populations and their habitats in the coalfields. Every year, staff at the Center grow thousands of mussels to 1-2 years of age, typically 20-30 mm long, tag them with a unique number identification marker, and then release them at stream sites to build up populations. To date, more than a dozen new populations have been established. The Center's hands-on approach provides training opportunities for undergraduate and graduate students in the department.

In attendance were Restoration Biologist Jess Jones ('96 B.S. fisheries science, '04 M.S. fisheries and wildlife sciences, '09 Ph.D. fisheries and wildlife sciences), who co-directs the center, and his U.S. Fish and Wildlife Service partners, Supervisory Biologist Susan Lingenfelser and Field Supervisor Cindy Schulz, as well as Dean Paul Winistorfer and Professor Eric Hallerman. Several other faculty and graduate students provided background on the restoration programs and how they are conserving the Upper Tennessee River Basin biodiversity, especially in the Clinch and Powell rivers of southwestern Virginia.



# On September 21, 2015 the department celebrated the grand opening of its new Research Aviary located on

campus in a research complex known as Center Woods.

"Virginia Tech has incredible strengths in avian biology, ecology, and conservation," said Professor **Bill Hopkins**, who heads up the facility. "In the past, we have relied on fieldwork and lab experiments, but some critical questions require intermediate conditions, where captive birds are able to fly and behave in social groups. This facility, where we have some control but also seminatural conditions, bridges the gap between field and lab studies." The state-of-the-art facility has 16 identical aviary rooms. "We can conduct experiments and replicate them in statistically robust designs," Hopkins said. "Each room can house a small flock of songbirds, such as finches, sparrows, and starlings, or family groups of species like wood ducks so we can observe adults raising their young, for instance."

Hopkins, a Fralin Life Science Institute affiliate and director of the Global Change Center, leads both an undergraduate research program and an interdisciplinary graduate program that are among those that will utilize this new facility. "I am thrilled that the college has invested in infrastructure that can simultaneously advance our research and educational missions," he said.

"Facilities like this help us attract and retain the best scientists, who in turn recruit and retain the best graduate students," said Dean Paul Winistorfer. "The close proximity to campus, yet relative isolation, is a benefit for our researchers and students. This is the first of more new developments to come."

One of the biggest perks of the new facility is the educational benefits for graduate and undergraduate students. "Birds are high-maintenance study subjects, so we need a lot of hands to help care for the animals," Hopkins said. "This animal husbandry provides entry-level training for undergraduates, which sometimes leads to independent study or even a senior thesis in my lab."



### **TWS & AFS**

# Students and faculty engaged in leading professional societies

Professional societies provide a collective voice for the shared interests of the society members, facilitate the establishment of relationships among young professionals, and provide avenues for communicating and learning about the latest science and management practices. The students and faculty of the Department of Fish and Wildlife Conservation are committed to maintaining and providing leadership in professional societies. Most closely related to the activities and interests of our students and faculty are the American Fisheries Society (AFS) and The Wildlife Society (TWS). The Virginia Tech student chapters of both AFS and TWS are very active and their activities are often recognized. Most recently, the Southeastern Section of TWS recognized the Virginia Tech Student Chapter of TWS as the Student Chapter of the Year. The award was presented at the annual meeting of the Southeastern Association of Fish and Wildlife Agencies in November 2015. Members of the Student Chapter of TWS also took third place in the Quiz Bowl at the TWS National Meeting in Winnipeg, Manitoba, in October 2015.

The participation and leadership of the department's faculty has also been recognized recently by AFS. Professors **Eric Hallerman** and **Brian Murphy** were inducted into the inaugural class of Fellows of the American Fisheries Society. AFS recognizing as Fellows of the Society individuals who have made "outstanding or meritorious contributions" in the areas of "leadership, research, teaching and mentoring, resource management and/or conservation, and outreach/interaction with the public." Larry Nielsen, former professor and department head and currently at North Carolina State University, was also included in the inaugural class of AFS fellows.



From The Wildlife Society, Southeastern Section Newsletter, January 2016 vol. 58, no. 1; Katherine Edwards, Editor.

Eric Pelren presents the Virginia Tech Student Chapter of the Wildlife Society with the Student Chapter of the Year Award at the Annual Meeting of the Southeastern Association of Fish and Wildlife Agencies in Asheville, North Carolina, in November 2015.

Winter/Spring 2016 | fishwild.vt.edu

### Dan Gibson joins the Virginia Tech Shorebird Program as a postdoctoral associate working with Research Assistant Professor Dan Catlin and Professor Jim Fraser.

Dan is a quantitative ecologist interested in understanding the factors influencing patterns in demography, life history, and behavior observed in populations and communities. He earned his Ph.D. in Ecology, Evolution, and Conservation Biology under the direction of Professor Jim Sedinger at the University of Nevada, Reno, where he worked on Greater sagegrouse in the American West.

Dan's dissertation work focused on the interactions among weather, habitat selection, and reproductive success, as well as the indirect effects of anthropogenic disturbances on Greater sage-grouse behavior and demographic processes. As part of an ongoing Virginia Tech shorebird project, Dan will be using data collected along the Atlantic and Gulf Coasts to assess the influence of environmental disturbance on Piping Plover wintering populations. In particular, Dan will be developing full life-cycle population models to:

Better understand the importance of seasonal habitat on population trajectories.

Provide estimates of demographic rates that were previously difficult to quantify.

Dan's background in population ecology and Bayesian inference will provide new perspectives, enhance the quantitative

# New Faces

strengths of the Shorebird Program, and aid in understanding the factors influencing populations of conservation concern.



Postdoctoral Associate Dan Gibson

www.vtshorebirds.fishwild.vt.edu

Associate Professors Steve McMullin and Jim Parkhurst, along with Research Associate Faren Wolter, are collaborating with the Virginia Department of Game and Inland Fisheries on a 3-year boating access study

The study will assess and characterize current and potential future use of access sites, users' satisfaction with facilities, and opinions and attitudes about issues related to access to the state's waters. The project will include face-to-face interviews, mail and web-based surveys, and focus groups to gather information that will inform development of a statewide management plan for boating access facilities that will help managers prioritize maintenance activities and resource allocations for existing sites and guide potential acquisition of new access sites.

Virginia is rich with aquatic resources that span from mountain streams and rivers to the Chesapeake Bay and Atlantic Ocean. Virginia's Department of Game and Inland Fisheries (VDGIF) owns, or shares maintenance responsibilities with selected municipalities, over 200+ boating access facilities on state waters. The challenge of providing regular maintenance to these widely dispersed facilities also is constrained by limited resources.

Currently, boating access is supported through motorboat registrations and titling fees, excise taxes on marine fuels and boating equipment, fishing licenses, and special use permits. The rapidly increasing popularity of non-motorized recreational boating, such as kayaks, canoes and rafts, brings additional, but different access challenges. As a result, the agency is having difficulty fulfilling maintenance needs of existing facilities, while trying to accommodate the changing demands and expectations of users.

Faren will serve as manager of the project, which is the latest in a long line of collaborative planning projects involving McMullin, Parkhurst, and VDGIF.



Research Associate Faren Wolter

## Alumni News



# **Gerald H. Cross** Alumni Award

Robert J. "Bob" Warren ('76 M.S., '79 Ph.D. fisheries and wildlife sciences) received the Gerald H. Cross Alumni Leadership Award from the Department of Fish and Wildlife Conservation and the college's Leadership Institute.

Associate Professor Steve McMullin with Gerald H. Cross Alumni Award Recipient Robert J. "Bob" Warren

Warren, a career-long educator, has served on the faculty of the University of Georgia's Warnell School of Forestry and Natural Resources since 1983 and was named a Josiah Meigs Distinguished Teaching Professor in 1999.

Warren's research interests include the ecology and management of wildlife populations, especially in parks and urban/suburban areas; predator ecology and management; wildlife damage management; and wildlife physiology, nutrition, and genetics. "Receiving the Cross Leadership Award is especially meaningful to me," Warren said. "I was very fortunate to attend graduate school at Virginia Tech because it provided the foundation for my successful career in academia and the wildlife profession. Not only did I receive an exceptional education in wildlife science, but the faculty and my fellow graduate students served as role models and mentors who inspired me to achieve my fullest potential as a wildlife biologist." Professor Emeritus Gerald H. Cross. head of what was then called the Department of Fisheries and Wildlife Sciences from 1976 to 1989. created a continuing education program focusing on leadership development for Forest Service professionals. Approximately 1,000 natural resource professionals have participated in the program since 1988. The leadership that Cross demonstrated inspired the creation of his namesake award, whose recipients are recognized for their dedication and outstanding achievements in leading others.



### The New River Conservancy recognized the extraordinary efforts of John Copeland with the Wallace and Peggy Carroll Vigilance Award in July 2015.

The award honors the spirit, dedication, and perseverance that former Winston-Salem Journal publisher and editor Wallace Carroll, and his wife Peggy, brought to the battle to save the New River from a massive dam project in the 1970s. The Wallace and Peggy Carroll Vigilance Award recognize the efforts of individuals and citizen groups whose outstanding dedication and work protects and preserves the New River.

John Copeland ('84, B.S. fisheries science) is an aquatic biologist with the Virginia Department of Game and Inland Fisheries. He is committed to education outreach activities and has provided extensive support to many groups, including the Friends of Claytor Lake in creating and enhancing habitat. He spearheaded the development of the Hydrilla Management Plan, An Angler's Guide to the Lower New River, Native Plant Restoration, and the transformation of the New River smallmouth bass fishery. In 2004, he taught Fisheries Management at Virginia Tech. Among his many honors is the Team Performance Award for Extraordinary Contribution to the Mission of the Agency during the Claytor Lake Dam Relicensing Process. In 2014, he was awarded the Eugene Surber Professional Biologist Award by the Virginia Chapter of the American Fisheries Society.

**Ryan McManamay** ('11 Ph.D. fisheries and wildlife sciences), Aquatic Ecologist at Oak Ridge National Lab, writes:

"John goes above and beyond what is required in any job. His diligence in conducting sound science, management, and educational outreach has not only benefited natural resource management in Virginia, but the public at large. Because of his passion for public outreach, he has instructed master naturalists, fellow biologists, and students (including myself) in fisheries management, conservation, and field techniques."

The New River Conservancy believes that clean water, healthy land, and empowered people benefit our communities by creating a watershed where people want to live, work and play. New River Conservancy envisions a completely healthy and fully protected New River, which includes all the streams and brooks that feed it and all of the forests, fields and communities that surround it, throughout NC, VA, and WV. Follow them on twitter **@NewRiverConserv.** 



James Thorson honored as recipient of the Presidential Early Career Award for Scientists and Engineers

Fish and Wildlife Conservation Alumnus **James L. Thorson** ('09 M.S. fisheries and wildlife sciences), an Operations Research Analyst at the NOAA Fisheries Northwest Fisheries Science Center, was named as one of President Obama's 105 recipients of the Presidential Early Career Awards for Scientists and Engineers, the highest honor bestowed by the United States Government on science and engineering professionals in the early stages of their independent research careers. The winners will receive their awards at a Washington, D.C. ceremony this spring (https://www.whitehouse.gov/the-pressoffice/2016/02/18/president-obama-honors-extraordinary-earlycareer-scientists).

The awards, established by President Clinton in 1996, are coordinated by the Office of Science and Technology Policy within the Executive Office of the President. Awardees are selected for their pursuit of innovative research at the frontiers of science and technology and their commitment to community service as demonstrated through scientific leadership, public education, or community outreach.

"I am incredibly flattered by the award, and happy to work at a governmental lab (the Northwest Fisheries Science Center, NMFS, NOAA) with talented and varied colleagues," Thorson said. "We early career ecologists are confronted with so many pressing questions-the impact of climate change, the status of marine ecosystems globally-indicators and mechanisms for community stability) that it can be overwhelming. However, we also have unprecedented access to data globally from individual to landscapescales. So perhaps my greatest pleasure in the award is that NOAA and the federal government recognizes the value of broad, question-driven science that synthesizes information at different scales."

**Donald Orth**, Thomas H. Jones Professor, served on Thorson's master's committee.

"James Thorson was a Philosophy major as an undergraduate and later developed a strong interest in fisheries," said Orth. "He became an outstanding graduate student at Virginia Tech and pursued many interests in fisheries and aquatic science. In addition to his thesis research on catchability trends in reef fisheries, he collaborated with others on habitat selection in Northern Snakehead, and economics of marine fisheries. He has developed and tested a number of innovative approaches to forecasting fish populations trends."

Thorson received his Ph.D. in fisheries and aquatic sciences from the University of Washington in 2011, his master's degree in fisheries and wildlife sciences from Virginia Tech in 2009, and his bachelor's degree in environmental studies from Emory University in 2006.

#### William "Bill" Kelso awarded Excellence in Fisheries Education Award



William "Bill" Kelso ('83 Ph.D. fisheries and wildlife sciences), the F.O. Bateman Professor of Renewable Natural Resources at Louisiana State University, received the

American Fisheries Society (AFS) Excellence in Fisheries Education Award at the society's annual conference in Portland, Oregon, in August. The award is administered by the Education Section of AFS and is presented to an individual to recognize excellence in organized teaching and advising in some aspect of fisheries education. Kelso received his Ph.D. in fisheries and wildlife sciences from Virginia Tech, his master's degree in fisheries from the University of Massachusetts, and his bachelor's degree in biology from Florida State University.

After completing his doctorate

accepted a position in the School of Forestry, Wildlife and Fisheries at Louisiana State University in Baton Rouge. Kelso took over the Fisheries Management course when he arrived at LSU, and over the years developed and taught several courses in what is now the School of Renewable Natural Resources, including **Issues in Natural Resource** Management, Biology of Fishes, Ecology of Fishes, Marine Fisheries Resources, Introduction to Fisheries and Aquaculture, Natural Resource Conservation, Honors Natural Resource Conservation, and, most recently, Introduction to Renewable Natural Resources.

at Virginia Tech, Kelso

Enrollment in the school has grown from about 125 undergraduates in 2009 to over 300 as of fall 2015, with Kelso also serving as the undergraduate adviser to students in the Pre-vet Wildlife area of concentration. In addition to his role as associate director of the school, he also serves as the graduate coordinator for the program.

John Ney, Professor Emeritus of Fisheries Ecology, served as Kelso's advisor. He said of Kelso, "I had no doubt that he would develop into an excellent teacher, and I am delighted by the recognition he has earned. Congratulations to the Wizard of Baton Rouge!"

#### Mallory Martin named the new South Atlantic LCC Coordinator



Mallory Martin ('83 M.S. fisheries and wildlife sciences) accepted the position of

Coordinator at the South Atlantic Landscaping **Conservation Cooperative** effective Nov. 15, 2015. Mallory retired from the N.C. Wildlife Resources Commission as the agency's Chief Deputy Director on November 1, 2015. Martin holds degrees in biology and fisheries and wildlife sciences from N.C. State University and Virginia Tech. He began his career in conservation as an entry-level fish culturist at Armstrong State Fish Hatchery in Marion, N.C., in 1984. In the ensuing years, Martin served in multiple

capacities, rising through the ranks of the agency to become the Chief Deputy Director in 2008. He represented North Carolina in the formation of the South Atlantic LCC and became the Cooperative's first steering committee chair in 2011. He served on the scoping committee to establish the LCC Council, and in 2013, he was appointed as a charter member of the LCC Council, representing the Southeastern Association of Fish and Wildlife Agencies.

"I'm thrilled to have this opportunity to advance conservation in the Southeast," Martin said. "This is my home region and I care deeply about the landscape, wildlife and habitats that we will leave to our children. The South Atlantic LCC is poised to make significant and lasting contributions to our conservation legacy and I am proud to have the opportunity to participate in this important work."

We want to reconnect with our alumni! Share your story with us at lyhayes@vt.edu. We look forward to hearing from you!

# Alumnus central to bear management in Florida



**David Telesco** ('10 B.S. wildlife science) is the bear management program

**Student** 

**News** 

coordinator for the Florida Fish and Wildlife Conservation Commission's (FWC) Division of Habitat and Species Conservation. As such, David is part of a team responsible for overseeing management of Florida's bear population. Through the 1990s Florida's bear population recovered from lows of approximately 200 bears to greater than 2,500 bears statewide. With this recovery came increases in human-bear conflicts, including a bear attack on a human in 2013 and three more in 2014. David was at the

center of the state's response to the bear attacks, helping communicate with the public and implementing education programs to reduce humanbear interactions, while also drafting legislation and policies designed to protect humans as well as the long-term health of the Florida bear population. In recognition of David's work, he received the 2015 Chairman Rodney Barreto Employee of the Year Award. Pictures and the press release can be found at myfwc.com/news/newsreleases/2015/june/25/telescoaward/. After completing

his undergraduate work at Virginia Tech, David went on to complete his Master's in 2003 at the University of Tennessee where he studied bears at Camp Lejeune, North Carolina. The Florida award was not the first for David. While working as a private lands biologist for the Black Bear Conservation Committee of Louisiana's Department of Wildlife and Fisheries, David received the prestigious Touchstone Award from The Wildlife Management Institute.

# Wildlife students take home top prizes in Steger Poetry Contest



First-place winner Gretchen Goeke Dee (right) with Nikki Giovanni.



Third-place winner Michelle Wright (middle) with Nikki Giovanni and President Emeritus Charles W. Steger

Nikki Giovanni, world-renowned poet and University Distinguished Professor of English at Virginia Tech, recently announced the winners of the 2015 Steger Poetry Prize for undergraduates. The competition was administered by Giovanni and judged by a committee of faculty members. More than 85 entries were received for the competition.

Sophomore wildlife conservation major Gretchen Goeke Dee of Manassas, Virginia, won first place in Virginia Tech's 10th annual Steger Poetry Prize. She was awarded \$1,100 for her poem titled, "Whole." Freshman wildlife conservation major Michelle Wright of Norfolk, Virginia, won the \$300 third-place prize in the competition with her poem titled, "Spoken Word: To Be Woman."

The competition was established in 2005 by Charles W. Steger, Virginia Tech's president at the time. Now president emeritus, Steger funds the prizes and participates in the event where the top 10 poems are read.

### **Endowed scholarship** established to honor Kathryn Fabrycky



Wolter J. Fabrycky, the John L. Lawrence Professor Emeritus of Industrial and Systems Engineering in the College of Engineering at Virginia Tech and principal and chairman of Academic Applications International, recently established an endowed scholarship in the College of Natural Resources and Environment to honor his late daughter, Kathryn M. Fabrycky.

The Kathryn M. Fabrycky Memorial Scholarship honors the memory of Kathryn M. Fabrycky, the beloved daughter of Wolter and Luba Fabrycky. The scholarship will benefit juniors or seniors majoring in fish conservation or wildlife conservation who have demonstrated significant financial need and are in good academic standing.

"Dr. Fabrycky's gift will support students in need and help us train the next generation of conservation leaders," said Department Head Joel Snodgrass. "The gift will also help us share our department's rich history of dedicated employees with our current students."

Kathryn served as an administrative assistant in the Department of Fish and Wildlife Conservation from 1989 until 2002. During her career, she provided valuable assistance and support to the department for many important wildlife research projects, including a number of studies on black bears.



Gwing from our friends and alumni make a tremendous impact on our students. Your gift, no matter the size, makes it possible to provide scholarships to students and helps to enhance our teaching, research, and outreach initiatives.

For information about making a donation to the Department of Fish and Wildlife Conservation, contact Emily Hutchins, director of development, at (540) 231-8859 or ehutch@vt.edu.

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