

# ESF

MAGAZINE

SUMMER 2019

For Alumni and Friends  
of the SUNY College of  
Environmental Science  
and Forestry



## It's a Wild Life

**Prof's Team Examines  
Animals, Ecosystems**

Page 16



### ***LAunched!***

These 2019 landscape architecture graduates took a moment to jump for joy on Commencement day, May 11. They had just attended the department reception and were headed to the Commencement ceremony at SRC Arena. They are, from left, Liam Donaher, Remington Lynch, Josué Cruz, Savy Kep, Olivia Pinner and Joanne Melo.

Photo by Sam Tiso











## ESF Magazine

Summer 2019

ESF Magazine is published biannually by Office of Alumni Relations and the Office of Communications and Marketing at the SUNY College of Environmental Science and Forestry.

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#### Cover

Jerry Belant works with a brown bear in Afognak Island, Alaska, part of a study aimed at identifying habitat conditions and forest management practices that can enhance wildlife habitat and provide sustainable wildlife harvests.

*ESF Magazine is printed on recycled paper.*

## FROM THE PRESIDENT'S OFFICE



Interim President David Amberg

Dear ESF Family and Friends,

Welcome to the new ESF Magazine.

This is emblematic of the renewal the ESF campus has been undergoing for the last year with a fresh sense of purpose, spirit of respect, collaboration and shared purpose for a great future for the College of Environmental Science and Forestry.

As you thumb through this publication you will note some differences from the former version of the publication, which was called Inside ESF. I asked our marketing and communications team to produce a magazine that speaks to our many constituents: students, staff, faculty, funders, employers, alumni and anyone who shares our passion for science-grounded stewardship of our planet. Led by the retiring Claire Dunn, they have done an outstanding job. Most notably, there will no longer be a separate publication for alumni. All that content is accommodated in this new combined format. This way, the publication reflects the big, inclusive tent that is the ESF family. It is also fitting that our cover story is on the work of the Camp Fire Conservation Fund Professor Jerry Belant. He, as do so many of our faculty, inspires us with his critically important work in large animal conservation. As accomplished as he is, he is an incredibly humble and nice guy.

It has been a remarkable year at ESF and I am gratified that I have been able to be a part of it. I often quip that I have the best job in the world representing and advocating for our great faculty, students, staff and alumni. From day one last July,

when I began as the interim ESF president, we set an aggressive agenda to address a great many issues holding the College back from achieving its next level of greatness. Particularly important and impactful was the ESF Discovery Challenge, a process modeled after the Framework for the Future implemented by then-Johns Hopkins Provost Kristina Johnson, who is now our SUNY chancellor. Chancellor Johnson astutely recognized that this process would bring the faculty back together with a shared purpose to define the future areas of focus for our research and education mission. I look forward to sharing more news about the Discovery Challenge in the near future.

I am pleased to report we had a successful year garnering support from our state legislators, who clearly understand our mission. I am grateful to ESF Vice President for External Relations Maureen Fellows and Chief Operating Officer Joanie Mahoney, who worked tirelessly on our behalf to represent ESF on the state level.

We hear daily of the impacts of environmental degradation and climate change. As such, the world needs ESF and our well-trained graduates and world-class faculty more than ever. We have spent the last year trying to figure out how to be an even better ESF. Now, it's time to implement those changes so we can be optimally positioned to Improve Our World.

Sincerely,  
David Amberg  
Interim President





**16 | A Walk on the Wild Side**  
Four walls can't contain Dr. Jerry Belant's research.



**20 | Imran S. Khalid '07** took his ESF education home to Pakistan.



**22 | Serese Marotta '99** turns personal heartache into action.

## — IN THIS ISSUE —

**6**

### ACROSS THE QUAD

Excellence abounds at ESF with a new Center of Excellence, faculty and staff honors and a partnership that benefits Native American grad students.

**12**

### DEPARTMENT NEWS

Find out what's new from a number of ESF's academic departments.

**14**

### ESF RESEARCH

On land and on sea, ESF researchers are honored for their research on the environment.

**24**

### ADVANCING ESF

Financial support restores trees and builds careers.

**28**

### ESF STUDENTS

Their time at ESF was only the beginning for James Lee '19 and Erin Cuddihy '19.

**30**

### ALUMNI MEMORIAL SCHOLARSHIPS

Scholarships honor alumni while encouraging students to improve their world.

**34**

### CLASS NOTES

Find out what your friends and classmates are up to these days.

**40**

### ALUMNI ACCOLADES

Professional News and Awards

## — ON THE WEB —

We invite you to check out the new online ESF Magazine at [www.magazine.esf.edu](http://www.magazine.esf.edu)





Onondaga Lake in Syracuse, New York, is an urban body of water that has been the site of research and restoration efforts for decades.

### ESF, Clarkson Launch Center of Excellence Focused on Water

ESF and Clarkson University have been designated to launch New York state's new Center of Excellence (CoE) in Healthy Water Solutions. State funding for the new CoE was supported by state Senator Rachel May and Assemblyman Al Stirpe with signatures from representatives from around the state.

The partnership will position experts and students to deliver technology innovations and research-based solutions with local partners taking on complex challenges in their aquatic systems and water infrastructures.

The CoE combines Clarkson's world-class technical, innovation and engineering expertise in healthy water systems with ESF's renowned expertise in monitoring and watershed ecosystem management.

The center will work with state government agencies and affected municipalities to address problems related to emerging and traditional contaminants, and the aging water infrastructure. Focusing on water and the natural environment, the CoE will work with industry, government and regional university collaborators to develop early-warning systems to monitor, model, predict and avoid threats before they become issues. The center will also work on management practices and ecosystem design to improve the resilience of New York state's water assets.

### ESF's First Online Degree: Sustainability Management



ESF is launching its first online bachelor's degree — a program in sustainability management that prepares students for entry-level jobs or mid-career opportunities in the growing field of sustainability.

The program, which will enroll its first students this fall, is designed for transfer students. They will take courses typically offered during the third and fourth years of a four-year undergraduate program, and, upon completion, earn a Bachelor of Science degree.

Dr. Ernest Nkansah-Dwamena, a visiting assistant professor recently hired to help deliver the online program, said students who pursue the online degree will be part of preserving Earth for generations to come.

"It is easy to believe that someone else will save our planet," he said. "In reality, you are the one to save it for future generations. From climate change to sustainable urbanism, renewable energy to action planning, thinking differently will be what saves

our world. Leveraging the knowledge you acquire today will make a difference in tomorrow's society. It is your time to create a sustainable future."

Students who graduate from the program will be qualified for jobs such as sustainability coordinator, consultant or process manager. They could work in sustainable design or corporate social responsibility and sustainability. They could also be employed as industrial ecologists.

Sustainability management integrates knowledge, skills and perspectives based on the three pillars of sustainability: economics, society and the environment. The ESF program emphasizes environmental dimensions of sustainability and their interdependence with socially and economically viable policies and practices. Students who have received a broad and flexible foundation during their first two years of college study will delve into specialized sustainability coursework in the online program.





## Feinstone Award Honors Neil and Joanne Murphy, Joe Martens

ESF will honor community stewards by presenting the 2019 Sol Feinstone Environmental Award to Neil and Joanne Murphy, and Joe Martens ('81).

Neil Murphy has been a pillar of the ESF community since coming to the College as its third president in 2000. Murphy led the College through an unprecedented expansion of its physical facilities with the construction of the first ESF residence hall, Centennial Hall, a LEED Gold facility; renovation of the Ranger School; renovation of Baker Laboratory to a LEED Silver certification; and construction of the LEED Platinum-certified Gateway Center.

After stepping down as president in 2013, he became a member of the Department of Environmental Resources Engineering faculty and was named a SUNY Senior Fellow for Environmental and Sustainable Systems.

He joined ESF after a 30-year career with Syracuse-based O'Brien & Gere, an environmental engineering firm, where he rose to the position of president and chairman of the board.

Joanne Murphy is an avid reader whose involvement in the Syracuse community has often focused on encouraging reading.

She has served as a member of the Friends of Onondaga County Library board helping choose the authors for the annual Rosamond Gifford Lecture Series and was a volunteer reader at King Elementary. As a registered nurse, she worked many years in the Marcellus Central School District and at a private physician's office in Marcellus before retiring in 2004.

Most recently, Neil and Joanne Murphy were honored by the Juvenile Diabetes Research Foundation for their dedication and passion to finding a cure for the disease. The Murphys have four grown children and nine grandchildren.

Martens is the director of the New York Offshore Wind Alliance, a project of the Alliance for Clean Energy New York and former director of the N.Y. State Department of Environmental Conservation (DEC).

Martens joined the Alliance for Clean Energy New York in 2017. Prior to that he was a Senior Fellow at the Open Space Institute, a regional land conservation organization that has protected thousands of acres of land from Maine to Georgia. He served as Governor Andrew Cuomo's DEC commissioner from March 2011 to July 2015.

The annual Feinstone Awards dinner will take place at 6 p.m. Oct. 17 at the Gateway Center on the ESF campus. Information is available at [www.esf.edu/feinstone](http://www.esf.edu/feinstone).

## Sloan Foundation Partnership Supports New Native American Grad Students

A new relationship between ESF and the Alfred P. Sloan Foundation's Indigenous Graduate Partnership (SIGP) will provide funding to fully support four new Native American graduate students who are expected to enroll at ESF this fall.

The funding will also support ESF's efforts to improve the recruitment and retention of American Indian and Alaska Native graduate students who are pursuing studies in math, natural sciences and engineering. That support will allow ESF to apply in 2020 to become a full member of the SIGP, which would continue the funding for up to five new students every year for three years. Currently, only seven universities, all of them in the western United States, are designated as full SIGP members.

ESF expects to welcome three new M.S. students and one new Ph.D. student this fall.

"Native American communities have strong commitments, both traditional and contemporary in stewardship of land, water and biodiversity, yet continue to be under-represented in the STEM disciplines," said ESF Distinguished Teaching Professor Robin Kimmerer, who was instrumental in building the relationship with SIGP. "Our ESF programs which creatively integrate traditional and scientific knowledges for sustainability will support the academic and professional development of a new generation of indigenous scientists."



## Employees Receive SUNY Chancellor's Awards

Four ESF employees were honored this spring with SUNY Chancellor's Awards, the system-level honors that acknowledge consistently superior professional achievement and encourage the ongoing pursuit of excellence.

The ESF honorees were Laura Crandall '05, Chancellor's Award for Excellence in Professional Service; Dr. Melissa Fierke, Chancellor's Award for Excellence in Faculty Service; Dr. Robert Malmshiemer '86, Chancellor's Award for Excellence in Teaching; and Dr. William Powell, SUNY Chancellor's Award for Excellence in Scholarship and Creative Activities.

Crandall is the director of Student Involvement and Leadership. She advises 40 student organizations and special interest groups; organizes big-scale events, including orientation, convocation, and alumni/family weekend; works with the Undergraduate Student Association to help student leaders be advocates for themselves; organizes campus days of service; and created the Emerging Leaders program to help students develop their leadership skills.

Fierke is chair of the Department of Environmental and Forest Biology (EFB) and director of the Cranberry Lake Biological Station. She was a member of the President's Leadership Council and was elected to serve as the executive chair of ESF Academic Governance. She has brought ESF science to many public forums and manages an active research program in forest entomology, forest health and ecology. Her activism for safe bicycling in Syracuse paid off in new bike lanes.

Malmshiemer, a professor in the Department of Forest and Natural Resources Management, is characterized by colleagues and students as an exceptional teacher who demonstrates dedication, compassion and commitment to students in his classes and his advisees. He also finds time for influential contributions to forest carbon accounting and national forest system litigation, including science-based briefings to legislative and administrative policymakers in the U.S. and Europe.

Powell, a professor in EFB and director of the Council on Biotechnology in Forestry, leads a team that runs one of the most significant research programs in the history of ESF. They have developed blight-resistant American chestnut trees and are focused on getting federal approval to release disease-resistant trees so this species can return to its economic and ecological importance in the United States. Powell ranks among ESF's top faculty members in acquiring extramural funding and has a distinguished record of publishing in peer-reviewed journals.



Recipients of the SUNY Chancellor's Award for Excellence: from left, Laura Crandall, Dr. Melissa Fierke and Dr. Robert Malmshiemer. Dr. William Powell also received the award but was not available for the photo.



## Forest Properties Director Embraces Challenges of Complex Woodlands

Bob MacGregor, ESF's new director of forest properties was inspired by his father to pursue a career in forestry. MacGregor's father worked in an office but often said, "It must be great to work outdoors."

MacGregor holds a Bachelor of Science in forestry from the University of Vermont and post-graduate certification in GIS from Penn State. He is also a forest certification expert.

Prior to joining ESF, MacGregor served as the forest silviculturist for the Okanogan-Wenatchee National Forest in Washington state, including serving as climate change coordinator. He brings 30-plus years of forestry experience to the College.

MacGregor is no stranger to ESF. While working as regional forester for the State of New Hampshire Division of Forests and Lands, he took a number of professional advancement courses at the Newcomb campus.

He's looking forward to the opportunity to have an impact on the ESF properties. Being at ESF is "a little different than the forest service," he said. "The forest service is a huge bureaucracy. It's very difficult to change their course. This is a chance to have more of an impact and to work in northern hardwoods again."



### 3 ESF Faculty Members Appointed to Leadership Roles



Douglas J. Daley '82, associate professor in the Department of Environmental Resources Engineering and director of the SUNY Center for Brownfield Studies, received the 2019 ESF College Foundation Award for Exceptional Achievement in Teaching.

Dr. David Newman, former professor of forest resource economics and policy, and former chair of the Department of Forest and Natural Resources Management, has been appointed interim ESF provost.

Newman served as chair for nearly 11 years. Newman succeeds Dr. Nosa Egiebor, who served as provost and executive vice president. Egiebor will now serve as special assistant to the president for international education programs and professor in the Department of Environmental Resources Engineering.

Dr. Douglas Johnston '80 has been appointed interim director of the ESF Open Academy.

Johnston succeeds Dr. Charles Spuches, who recently retired. Johnston will also continue to serve as chair of the Department of Landscape Architecture, a position he has held since 2013.

Johnston was the academic lead in developing ESF's new online sustainability management program, which will launch this fall.

Dr. Melissa Fierke, associate professor, associate chair and director of the Cranberry Lake Biological Station, started a term as chair of the Department of Environmental and Forest Biology March 1. She has active research projects in emerald ash borer (EAB) and EAB parasitoids, density of blacklegged ticks and prevalence of Lyme disease, and pollinators (in willow biomass crops as well as along powerlines).



**Ron Giegerich '78, collection manager for the Roosevelt Wild Life Station (RWLS), shows off a pileated woodpecker mount in the station's new Roosevelt Wild Life Collections and Classroom facility in the Gateway Center. The new space will support vertebrate taxonomy instruction with space for students to work with nearly 1,000 mammal, bird, amphibian and reptile specimens. The RWLS celebrated its centennial this year.**





Recent ESF graduate Mikayla Call '19 shows off an ESF flag in the Horidol Saridag Strictly Protected Area in Mongolia. Behind her is the Darhad Valley. Call made the trip through ESF's new partner organization, Round River Conservation Studies.

## ESF Partners with Round River Conservation

ESF has a new partner in Round River Conservation Studies, an ecological research and education organization whose goal is the formulation and implementation of conservation strategies that “conserve and restore wildness.”

The organization focuses on developing long-term, sustainable partnerships with local communities to implement research and conservation efforts. Round River welcomes small groups of undergraduate students for semester and summer programs to learn from local people, gain experience in field research and immerse themselves in the environment.

ESF students have participated in Round River programs in the Darhad Valley in Mongolia, Patagonia in Chile and the Okavanga Delta in Botswana. The new partnership will open more doors for students to participate in these programs, including priority consideration for admission and financial aid allocation, and future scholarship opportunities.

## ESF Students Assist Relief Efforts in Puerto Rico

Relief and education projects filled the days of a team of ESF students, staff and faculty on a trip to Puerto Rico over winter break.

The group traveled to Vieques, an island off the eastern coast of Puerto Rico, to continue relief efforts related to 2017's Hurricane Maria. A number of the students on the trip are members of Acorns to Action, a student-led relief organization.

During their weeklong stay the team helped build three short recreational trails, cleared trees that fell because of the storm, cleaned litter from a public park, painted the inside of a school, cleared land for farming, documented a trail system in the national refuge and prepared the Boys & Girls Club for new students.

Chief of Staff Mark Lichtenstein '85, part of the ESF contingent, said the students' presence in Vieques didn't go unnoticed. After clearing land at an organic cooperative, one of the farmers prepared lunch for the group using only ingredients from the farm. The farm might also provide opportunities for soil analysis and citizen science down the road, Lichtenstein said.



ESF students paint the cement railing along El Malecon, the boardwalk and seawall in the coastal town of Esperanza, on the south side of Vieques.





Members of the ESF/SU decathlon team pose at the National Renewable Energy Laboratory in Golden, Colorado, where the U.S. Department of Energy Solar Decathlon Design Challenge was held.

## ESF Team Designs Its Way to Solar Decathlon Win

A team of 22 students — 18 from ESF and four from Syracuse University — won their competition in the U.S. Department of Energy Solar Decathlon Design Challenge this spring.

Members of the team traveled to the National Renewable Energy Laboratory (NREL) in Golden, Colorado, to compete in the competition's mixed-use/multifamily division. Along the way to the finals, they prevailed over 17 other teams; at the finals, they were judged the best of the seven finalists, including competitors from Germany and India.

The ESF project was a design for an energy-efficient building that could be part of the Syracuse Housing Authority's plan to remake the East Adams Street neighborhood in Syracuse. Team members presented the concept, called

Syracuse Energy Efficient Design, to Syracuse Mayor Ben Walsh and authority representatives about a month ago.

The students estimate the 36-unit building would cost \$9 million. It would include a day-care facility, community gardens and other outdoor spaces for residents. The net-zero energy building would feature geothermal energy for heating and cooling, and a solar array on the carport. Target residents would have low to moderate income levels.

Noah Townsend, a student lead and presenter, said the win is a testament to the tenacity, dedication and intelligence of everyone involved with the ESF/SU Solar Decathlon Team. "For me, leading this team of young professionals was extremely rewarding. To watch our project and team members grow every

week was extremely gratifying. Our hard work paid off after we beat 17 teams from around the globe from prestigious programs in this year's most competitive division of mixed-use/multifamily. Six of our team members got internships/jobs from this competition and I'm sure after this weekend that number will only grow. The biggest thing I learned from this project is how to work in a collaborative environment. This project was extremely deadline driven, just like in life, and to organize team members toward a common goal is a valuable lesson. The largest takeaway the NREL organizers drove home to every student in the room was that 'we are the future,' net-zero buildings are instrumental in helping solve the global climate crisis and it's our duty to design responsibly."



## Marissa Lathrop Cited for Student Excellence

Marissa Lathrop '19, who graduated from ESF in May, was selected as a 2019 recipient of the SUNY Chancellor's Award for Student Excellence.

Lathrop majored in environmental education and interpretation with a minor in writing and rhetoric. She was active on campus, including serving as the assistant coordinator of the Public Speaking Lab, a lab assistant, a Student Ambassador, a member of the Student Environmental Education Coalition and a member of the women's cross-country and track-and-field teams.

She served as women's cross-country team captain her junior and senior years and holds every ESF distance record. She was recognized for her excellence as both a student and a student-athlete when she was named a National All-American as a runner and a National All-Academic for having earned a 3.5 or higher cumulative grade point average.

This is the highest honor a student can receive from SUNY.

Marissa Lathrop



## Environmental Resources Engineering



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Throughout the past year, the Department of Environmental Resources Engineering (ERE) welcomed new faculty and staff members. **Dr. Bahram Salehi** joined the department in September as an assistant professor working in the geospatial area with a research focus that includes applications of optical and radar remote sensing data for environmental analysis. He recently was honored with a medal for Early-Career Achievements as a Young Scientist in the field of remote sensing from the Canadian Remote Sensing Society. **Karen Karker** joined the department in January as an instructional support specialist working to support the water and ecological engineering areas.

ERE faculty and students received recognition via a number of awards this year. **Dr. Tim Morin**, assistant professor, was recognized at ESF's Student Organization and Leadership Achievement Recognition (SOLAR) ceremony as Adviser of the Year for his support of the ESF Engineers Without Borders chapter. Students **Jourdyn-Evonne Lee**, **Lydia Loan**, **Molly Mulhare**, **Mike O'Connor**, **Justin Rosenberg**, **Colin Richardson**, **Ema Schwartz** and **Sarah Wohlfahrt** were also recognized for their contributions at the SOLAR awards. Seniors **Trevor Cornish** and

**Erin Cuddihy** were recognized at the Spring Awards Banquet with awards for academic excellence and ESF spirit, respectively. Senior **Elena Araya** received an Outstanding Student Service Award and junior **Briana Fitzgerald** received an Association Student Chapter Service Award at the New York Water Environment Association's annual meeting in February. **Dr. Lindi Quackenbush**, chair and professor, was recognized by the American Society of Photogrammetry and Remote Sensing (ASPRS) as a Fellow at the ASPRS Annual Conference in January.

In The Chronicle of Higher Education's ranking, "Which Colleges are Best and Worst at Enrolling and Graduating Women in Computer Science and Engineering," ESF was the top-ranked public institution. ERE represented nearly three quarters of the College's 2016-17 engineering graduates, of which 57.1 percent were women.

Taking on the role of chair has been a great experience so far, and I have enjoyed getting involved in our department in this new way. Our students and alumni are extraordinary, and I am grateful to be part of this program. Please keep in touch, and let us know where your adventures take you.

## Environmental Studies



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### General Education Division Launched

The Division of General Education, established in the fall of 2018, is responsible for overseeing ESF's general education program, including its assessment practices. The division has four program areas: the Writing, Rhetoric & Communications Program (**Christina Limpert**, director), the Social Science and Humanities Program (**Jill Weiss**, director), the Math Program (**Nasri Abdel-Aziz**, director) and the English as a Second Language (ESOL) Program (**Nino Jakhaia**, director). Each director reports to the department chair. These individuals, along with the assistant director of Assessment and Institutional Research and the undergraduate student adviser, make up a General Education Leadership Team responsible for program oversight and assessment activities. The leadership team is reviewing SUNY's Green Paper on General Education, which intends to better align its goals with those from the Middle States Commission on Higher Education. It is also developing a comprehensive assessment plan for our campus. The team recognized a lack of courses in the humanities/social science area; therefore, two new courses will be launched during the upcoming academic year.

### Direct-to-Student Support Services

Several critically important direct-to-student support services are associated with the Division of General Education: the Digital Storytelling Studio (**Tyler Dorholt**, coordinator), English for Speakers of Other Languages (ESOL) Center (**Nino Jakhaia**, coordinator), Math Center (**Nasri Abdel-Aziz**, coordinator), Public Speaking Lab (**Thomas McGrath**,

coordinator) and Writing Resource Center (**Karin Patzke**, coordinator). These services enhance the undergraduate and graduate experience at ESF and assist students in reaching their full potential.

### ES Students Earn Top Spots at Storyfest

We are excited to announce that five projects submitted by students in the Department of Environmental Studies were among the finalists in Planet Forward's annual Storyfest competition. Four of the projects were submitted by **Devon Camillieri**, **Lindsay Eberhart**, **Jennifer Meislin** and **Mackenzie Sadler**, who were enrolled in **Silje Kristiansen's** Public Communication of Science and Technology class. Everyone in the class submitted projects to Storyfest. The fifth finalist, **Marina Rullo**, was a student in the class last year when it was taught by **Dr. Benette Whitmore**, department chair of Environmental Studies. The Digital Storytelling Studio team, led by **Tyler Dorholt**, was instrumental in supporting students in creating their podcasts and videos.

ESF students achieved success among a competitive field. Some 200 projects were entered, more than any other year. Planet Forward reported that 32 projects were chosen as finalists in five categories. The students who submitted those projects joined other honorees from around the country in April for the annual Planet Forward Summit in Washington, D.C. Planet Forward is a project of the Center for Innovative Media at the George Washington University School of Media and Public Affairs. The project teaches, celebrates and rewards environmental storytelling by college students.

## Forest and Natural Resources Management



Dr. Chris Nowak '79 (RS), '85, '86, '93  
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I am pleased with this opportunity to provide a department update. As a fairly new department chair (I've been serving in this role since July 2018), it has been exciting and engaging to learn about FNRM. While I have been on the ESF faculty for more than 20 years, there was much going on in our department that I am now privy to, and I am glad to expose you all to that privy (bad joke).

I recently worked on an outside-ESF project with a group of directors, chairs and deans from other academic institutions. As I was telling them about some of our efforts and initiatives in FNRM, one dean stopped me and remarked: "Chris, it sounds like you are doing exactly what you are supposed to be doing as a new chair — you are working to 'make sure the train is running on time,' and also 'laying some new track.'" I like the analogy.

Keeping the train running on time — we have accomplished the following:

- maintained strong student enrollment in our department, with about 400 total students, including more than 50 graduate students and about 50 students at the Ranger School
- awarded nearly \$100,000 in scholarships to more than 75 students in FNRM thanks to the support of alumni and the ESF College Foundation
- revised our degree programs at the Ranger School and our natural resources management program on the Syracuse campus

- updated our bylaws to better guide operations in a department that has doubled in size and complexity over the past 10 years (as of today, we have a total of 33 faculty and staff, counting employees at both the main campus and the Ranger School, with some more on the way.)

Laying new track — we have taken these steps:

- advertised and searched for, then hired new faculty. While we lost or will lose four faculty to resignations or retirements this past year, we have four ongoing searches and have hired two professors: one in energy economics for the main campus and one in wildlife technology for the Ranger School
- added new graduate degree programs in natural resources management, sustainable construction management and sustainable energy
- begun to revise our department vision and mission, and to update our department name to encompass all areas of study

We have done more "track laying" and continued to add weight to our train so it stays on the track. Good things have been occurring this past year, with great things to come as we keep our FNRM train fully laden and moving down the track. It has been a good year.

## Landscape Architecture



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In the spring of 2018, we successfully completed searches for two new faculty. **Dr. Rachel Leibowitz** and Professor **Aidan Ackerman** joined us last August. Dr. Leibowitz was most recently with the Illinois State Historic Preservation Office and has teaching experience with the University of Texas. Her research and scholarly focus is in cultural landscape conservation, including Native American and other under-represented populations. Professor Ackerman was most recently director of digital media and a member of the landscape architecture faculty at the Boston Architectural College. He brings expertise in design and planning, digital modeling and representation, and digital workflows. Both of our new faculty members will bring their talents to studios and other classes. We were also joined this fall by **Dennis Carmichael '75**, this year's William Kennedy Chair Visiting Professor. He taught in the fourth-year studio and in planting design.

M.F.A. graduate student **Nicole Rivera-Ramos** received an Award of Excellence in the 2018 ASLA Student Awards Competition for her work on

agricultural and community redevelopment to make Puerto Rico become more resilient. M.L.A. graduate **Chris Anderson '17** was recognized with a 2017 ASLA Design Honor Award for his Capstone Project on the Gowanus Canal in Brooklyn, New York. Two teams of students in Assistant Professor **Anne Godfrey's** spring studio placed in the top 25 of the international Land Art Generative Initiative (LAGI) competition. Their work has been featured in a book, the LAGI website and blog.

The State University of New York has approved a complete renovation of Marshall Hall. As much as we love the charms of Marshall Hall, we are working with the design team and are excited about the potential to realize much-needed updating and improvements to our facilities. Related to facilities, the College allocated funding for the creation of a digital fabrication lab, initiated and led by the department. The facility gives students (and faculty!) access to high-end computing, 3D printing, laser cutting and CNC routers in support of their studio and capstone projects.



# ‘Water World’

ESF’s newest Distinguished Professor studies ocean-atmosphere links

By Claire B. Dunn

A tidal estuary that flows toward the Atlantic Ocean on the banks of his childhood home in New Jersey led Dr. David Kieber to ponder a really big question: How does the ocean work?

“Growing up in New Jersey, along the Jersey shore, I was down at the Navesink River all the time, turning rocks over and catching things in the water,” said Kieber, ESF’s newest member of the SUNY Distinguished Academy. “This is what I always wanted to do — I wanted to study the ocean. At the time I had no idea what that meant.”

The budding scientist took charge of his early education, writing letters to oceanographers whose names he found in the magazines at a nearby marine research institute. He asked them how he could become an oceanographer. They spoke with one voice: start by going to college and getting a basic science degree.

Kieber went to Cook College at Rutgers University, majoring in environmental science and taking all the chemistry, math and biology courses he could fit into his schedule. He moved on to the University of Delaware for a master’s degree in marine science, then followed his adviser to the University of Miami for his doctorate in chemical oceanography.

Over the next 30 years, Kieber became known as an international expert in the field of chemical oceanography. His career comprises nearly 25 years of academic excellence in scholarship, teaching and creative activities. He has made a number of seminal contributions to the understanding of oceanic carbon and sulfur cycles (in the Antarctic, the Black Sea, the Mediterranean Sea, the Atlantic and Pacific oceans), the role of photochemical and biological processes in these cycles and the effect of aerosols across the air-sea interface. He has made a number of advanced findings in the study of the effects of sunlight on seawater chemicals, reactive oxygen species generation and the production of volatile organic sulfur compounds by marine phytoplankton.

He has more than 7,100 citations in 78 peer-reviewed publications in leading journals within his field, including articles in *Nature*, *Nature Geoscience*, *Limnology and Oceanography*, *Environmental Science and Technology*, and *Environmental Chemistry*.

When Kieber was appointed SUNY Distinguished Professor this past spring, ESF Interim President David Amberg described him as “an exemplary scholar, scientist, teacher, mentor and colleague.”

“His pioneering work on sunlight-driven production of biological substrates in natural waters has led to research by scientists globally to try to

understand the interactions of sunlight, organic matter and aquatic food web dynamics in both freshwater and marine environments,” Amberg wrote in Kieber’s nomination. “Additionally, his groundbreaking work on the organosulfur compound dimethylsulfoniopropionate has opened up an entirely new area of research regarding bio-compatible solutes and their role as antioxidants in living cells.”

Kieber said he is motivated by curiosity about how the ocean and atmosphere interact, and by the way living organisms affect that cycle around the globe.

“I’m driven by fundamentally trying to understand how the Earth works,” he said. “I’m focused on the oceans because we’re a water world — 71 percent of the world is water in the oceans. And there’s so much in the oceans we don’t know.”

His chemical oceanography work is inextricably tied to marine biology.

“I’ve always said that, ‘microbes rule.’ In the average milliliter of lake or ocean water, there are 100,000 to 1 million bacteria. They are biochemical machines remineralizing organic matter produced by algae and other organisms, or produced by chemical transformations initiated by solar energy,” he said.

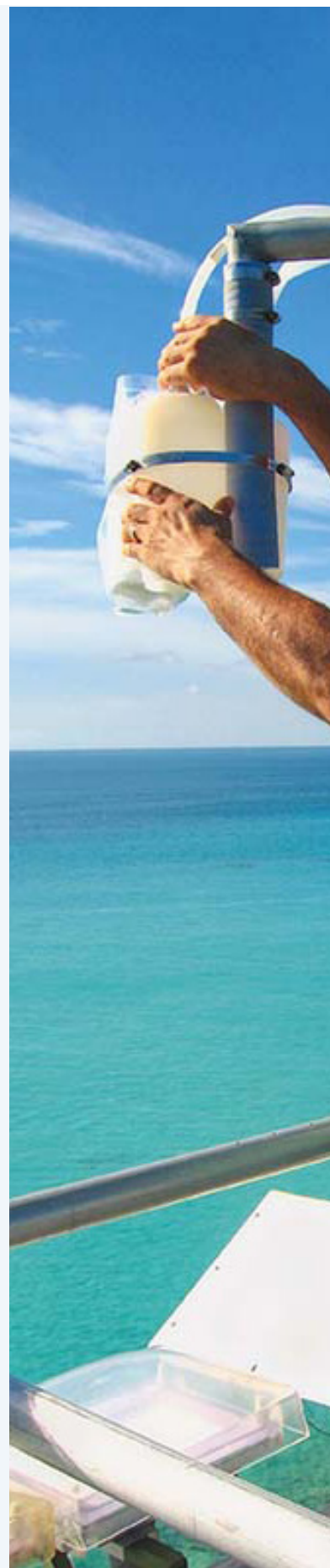
“When that organic matter absorbs ultraviolet radiation coming from the sun, lots of things happen — they can transmit that energy as heat or light, or undergo a chemical change.” Kieber’s work focuses on those chemical transformations — what they are, and how they impact the marine food web or volatile gases that get into and affect the atmosphere.

“There’s an assumption by the general public that being an environmental scientist means looking at pollution, looking at the effect we’ve had on nature,” he said. “But, in order to understand those impacts, you have to understand how the Earth’s systems work fundamentally. We know so little about these interactions.”

As an example, he pointed to El Nino, the complex oceanic-atmospheric changes that occur in the equatorial Pacific Ocean. Scientists are beginning to understand how the phenomenon will affect weather around the globe, but the cause is still a mystery.

“We are far from understanding all these interactions,” he said. “I tell my students, ‘Ask the interesting questions. Don’t be afraid to follow your dream and ask the *important* questions. Because you don’t have enough time to answer *all* the questions.”

*Claire B. Dunn was the editor of ESF Magazine. She recently retired from ESF.*





Dr. David Kieber works at the Bermuda Institute for Ocean Science Tudor Hill Marine Atmospheric Observatory collecting aerosols to determine their chemical composition and study how sunlight affects them.

## Dr. Jacqueline Frair

### Named the College's Exemplary Researcher for 2019-20

"It's trying to understand how we create friendly landscapes for these critters to survive and thrive in and be safe, and have us be safe, too, and not have our livelihoods impacted," said Dr. Jacqueline Frair, describing her wildlife research.

Frair, the College's 2019-20 Exemplary Researcher, is an associate professor in ESF's Department of Environmental and Forest Biology (EFB) and newly appointed director of the Roosevelt Wildlife Station.

She has spent countless hours building a nationally and internationally recognized wildlife program at ESF while conducting research on the same scale. She recently completed a five-year study in the Adirondacks on moose population and management.

While the moose are low in numbers, she said, they're in high conflict (with people) because they are concentrated where timber regeneration is in progress.

"Because moose are so big they need enormous mouthfuls (of food) and they can really destroy young forests," she said. "They strip trees, kill small regenerating trees and can be quite destructive." In other states, trees are cut to saturate the animals with habitat so their impacts are spread out. "We can't do that in the Adirondacks because we have restrictions on cutting."

"We've got to figure out how to manage them and their impact," she said. The state will be working on a management plan that takes Frair's research into consideration.

Frair is also studying fishers in the Tug Hill and Adirondacks. The northern



Jacqueline Frair and friend

populations have been declining while the species is thriving in the state's Southern Tier. "We're trying to look at their productivity. We're putting GPS collars on the females trying to find their dens and see how many kits they're producing," she said. Because their necks are tiny, the GPS collars are a challenge; they must be placed so they don't impede the animal's ability to get inside tree cavities where they nest. "They're getting in and out, but the collars are malfunctioning," she said. "This is our pilot year to work out the bugs."

Frair also does research on a multitude of North American mammals, including river otters, white-tailed deer, coyotes and wolves, as well as jaguars in South America, peccary in Paraguay, giant tortoises in the Galapagos, and Amur tigers and leopards in Russia. She also studies large cats and human conflict in Kenya and Tanzania.

Animal movement is the common thread that runs through the research, she said. "Because they're all large or wide-ranging animals they're in a lot of competition with people because they need the land we're occupying so it's all about that conflict and trying to balance their needs with ours."

Frair has served as a science adviser to the New York State Fish and Wildlife Management Advisory Board since 2006. She has worked with the New York Department of Environmental Conservation (DEC) Wildlife Partners and secured multiple umbrella omnibus DEC agreements of more than \$9 million that go toward supporting EFB's wildlife program.







# For Jerry Belant, The World is A Research Lab

By Alison Fromme

Photographs courtesy of Camp Fire Program in Wildlife Conservation

**O**n a cold snowy day last spring, Jerry Belant leaned over a big gray crate with his hand on the latch, his bright yellow flight suit contrasting sharply against the white snow and the stationary helicopter behind him. “OK, everybody ready?” he said calmly, looking up at his collaborators. “OK, three, two, one.” He opened the door and stepped back.

A wolf burst forth, bounding across the snow. The animal, with its shaggy grayish white coat, struggled a bit to find its footing. A long journey had brought it to this point — first captured in Canada’s Michipicoten Island Provincial Park, then transported by helicopter, weighed and analyzed by a team of researchers (including Belant, who had peered into its mouth to inspect its pearly teeth), and finally relocated to Michigan’s Isle Royale National Park.

The animal stumbled a bit in the crunchy snow before disappearing into the shadows of the woods. A video made by The National Parks of Lake Superior

Foundation documented this scene.

Belant is the inaugural Camp Fire Conservation Fund Professor of Wildlife Conservation at ESF and relocated himself to upstate New York in August 2018 to start the new job. Here he leads an interdisciplinary team of field staff, research associates, graduate students and postdoctoral scholars in studies encompassing diverse animals and ecosystems, from northern Michigan wolves to Serengeti lions, from Missouri black bears to wild boar in Argentina.

“I’m interested both in ecological questions and conservation or management applications,” he said matter-of-factly. “I also have the good fortune of working with the species I enjoy, so it’s really the best of both worlds.”

The Canadian wolf he set free on that day was one of seven recently relocated to the remote national park surrounded by Lake Superior’s waters. The move is part of a long-term effort to restore the island’s ecosystem.



Above: This immobilized brown bear was involved in research on Raspberry Island, Alaska.

Opposite page: Jerry Belant fits a GPS collar to a brown bear in Afognak Island, Alaska.





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## **“Moving to ESF in August 2018 was a ‘no-brainer.’ ”**

**— Jerry Belant**

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Belant will study the ecosystem effects of the reintroduction. Will the wolves keep the moose population in check? Without as many moose browsing for food, will balsam fir and aquatic vegetation rebound? What will happen to scavengers such as ravens? And how will nutrient cycling change? The work is just beginning.

The northern Midwest landscape is intimately familiar to Belant, and his barely-there Midwest accent still comes through on occasion. He grew up in northern Wisconsin, tramping through the forests of sugar maples, hemlock and white pine year-round, spotting animals such as deer, black bears, coyotes and foxes. He and his dad enjoyed hunting, fishing and trapping together.

“I fell in love with nature,” he said. And that love prompted him to pursue studies in natural resources and wildlife ecology as an undergraduate and master’s student at the University of Wisconsin-Stevens Point during the 1980s.

After working in various research positions at the National Park Service, the U.S. Department of Agriculture and the Fond du Lac Natural Resources Department in Wisconsin, Belant attended graduate school at University of Alaska Fairbanks and earned his Ph.D. in 2006. While there, he investigated the diet, reproduction and habitat use of overlapping populations of black and brown bears in south central Alaska.

This white-tailed deer fawn was part of a predator-prey study in Michigan’s Upper Peninsula.





Two adult male lions rest in Serengeti National Park, Tanzania. Jerry Belant and colleagues are monitoring lions to understand movement/spatial ecology, particularly in relation to developing accurate techniques to estimate lion abundance.

He then spent 10 years on the faculty at Mississippi State University, where he was named the Dale H. Arner Distinguished Professor of Wildlife Ecology and Management. There he built a significant research program: habitat restoration for black bears, bird deterrent methods at airports, deer fawn survival, vulture roost dynamics, elk distribution and resource use, marten and fisher behavior and much, much more. Although he declines to boast about his accomplishments, his stellar record is clear: He has co-written three books and produced nearly 300 peer-reviewed publications that have been cited more than 4,500 times. He has also secured more than \$14.5 million in grant funding since 2008.

In 2018, ESF hired him to become the inaugural Camp Fire Conservation Fund Professor of Wildlife Conservation.

Moving to ESF in August 2018 was a “no-brainer,” Belant said. He already admired ESF, with its great reputation and widely known and respected faculty members. He was happy to join the “cadre of outstanding scientists” here. Plus, the move was a great fit for his family. He and his wife, Mary-Kay Belant, enjoy the snow and the changing four seasons. The airport offered good travel options for visiting their grown kids.

Someone considering a big life decision like this might make a list of pros and cons, Belant explained. But in this case, the cons

list was blank. It was a win-win, personally and professionally — and he has now set the stage to continue his work here and around the world.

Just a few months before Belant wrangled wolves in the snow this past spring, he was seeking lions in the Serengeti, a few miles south of the equator. For the past four years, he and his collaborators have been working to reduce conflicts between lions and people — and better understand lion population ecology. Because of land use changes, lions are found in less than 10 percent of their historical range. And yet in the past, Belant said, accurately counting the populations has relied on less than optimal methods. His work aims to solve this problem and provide the conservation community and local governments with accurate and precise numbers.

Every trip to the Serengeti is different, he said. Once, he and his team got in their Land Rovers and drove several thousand kilometers, spotting just four lions and snapping two pictures. More recently, during the season of the “little rains,” he and his team drove across the endless plains and through the acacia tree woodlands. A spotter found a lion, then a vet darted it. The team moved in with its gear — stethoscope, pulse oximeter, needles, an umbrella, water — to take measurements, collect blood and hair samples, and fit the collar. Then they set up a huge tripod and

lifted the animal in a sling, with a block and tackle, to weigh it.

“When you go through the effort and expense and have the animal in that vulnerable state, we want to maximize potential research value while minimizing potential harm,” he said.

In total for this project, Belant’s team has captured and collared 20. The goal is three-fold: collect data to refine population estimates, help local governments establish appropriate hunting quotas, and identify potential human-lion conflict in real time — and intervene before a problem becomes catastrophic. So far, Belant has found that the lion population is larger than previously thought, at least in the area where they are working.

“That doesn’t mean lion conservation isn’t important or that there isn’t a decline compared with past levels,” he explained. “But in some areas where lions occur, it may not be as dire as currently thought. So with the work we and others are doing, we can now get accurate data, scientifically credible data, and better prioritize our efforts to benefit lion conservation.”

*Alison Fromme is a science writer based in Ithaca, New York.*



Imran S. Khalid '07

## His Goal: Avert Crisis at Home

By Judy Gelman Myers



Imran S. Khalid '07 posed for a photo in front of the famed Faisal Mosque in Islamabad. Faisal Mosque is shaped like a desert Bedouins' tent and functions as the national mosque of Pakistan. It is situated against the majestic Margalla Hills, dominating the landscape of Pakistan's capital.

Pakistan occupies the western edge of The Third Pole — a region in the Himalayas with more glaciers than anywhere else in the world except the North and South Poles. These glaciers provide water to millions of people throughout South Asia, but experts predict that by 2100, their volume will shrink by 49 percent if the temperature increases by 2 degrees Celsius. For the people of Pakistan, this can spell disaster.

Pakistan-born ESF graduate Imran Khalid returned to his home country to help guide policymakers, parliamentarians and civil society toward best practices in environmental policy and governance. He received an M.P.S. in environmental science-environmental policy and democratic process from ESF in May 2007 and a Ph.D. in environmental and natural resources policy in December 2014, along with a Certificate of Advanced Study in Conflict Resolution from the Maxwell School at Syracuse University. Immediately following Hurricane Sandy, he spent some time working with the ESF-based Great Lakes Research Consortium to address climate change-related issues.

Writer Judy Gelman Myers recently spoke with Khalid about his environmental concerns for Pakistan and how his education at ESF trained him for his prominent role among Pakistan's environmental leaders.

### ESF: To set the context, what environmental challenges does Pakistan face today?

**IK:** Pakistan faces varied environmental challenges, from massive deforestation to lack of proper waste management to air and water pollution. However, Pakistan's foremost concern is lack of clean drinking water, which impacts tens of millions in the country. The vast majority of people drink water that may not be safe. While the well-to-do have the resources to acquire clean drinking water, it is the poor and the vulnerable who suffer the most. Hence, not only is this an environmental challenge but also an equity, justice and, frankly speaking, a human rights challenge. We know for a fact that waterborne diseases result in illnesses and deaths of thousands of people in the country. Moreover, this causes stunted growth in children. We have no filtration plants for water coming to the cities, and there are no quality checks to ensure the water is up to standard. The situation in rural areas may be more dire, due to contamination of groundwater pollution from pesticides and naturally occurring arsenic.

We are also feeling the impacts of climate change in the country. In fact, Pakistan is regularly ranked as one of the countries most affected by climate change. Climate change is called a threat multiplier and as such will exacerbate environmental and social problems being faced by Pakistanis. In particular, climate change

will have a major impact on this area as the glaciers start to melt. Many communities in South Asia depend on these glaciers to meet their water needs, but when they melt, we'll have more and more floods. Similarly, we are already seeing droughts in other parts of the country that have the hallmarks of a changing climate. In addition, climate change will bring uncertainty and unpredictability when it comes to our monsoon season, for example, which can then have an impact on our food security.

Can we adapt to these changes in time? That is the key question, and the jury is still out on whether we can do it. On paper at least, we have a number of environmental-, water- and climate-related laws that address these concerns. But implementing them in a country of over 200 million people with a diverse set of stakeholders with linguistic, geographical and political differences is not an easy proposition.

The debate in Pakistan is about development vs. environment. People in power think that if you want to succeed like the West, you need to forget about environmental concerns. That means relaxing environmental laws when you build industrial estates or manage wastewater or air emissions—but that's considered OK, because, to them, you're contributing to the national economy. What that means for our collective environment, health and climate is a different story.

### ESF: How does your work change the situation?

**IK:** I joined Pakistan's Sustainable Development Policy Institute (SDPI) in 2015 as a Research Fellow. The SDPI is perhaps Pakistan's oldest think tank working to bridge the development and environment gap. It was formed in 1992 and works on various issues including environmental governance, social development, economic growth and education. Soon after joining SDPI, I became involved with a project called Pathways to Resilience in Semi-Arid Economies, or PRISE. It was a multifaceted project that was responsible for monitoring three different areas in Pakistan: how climate change impacts migration; how it impacts agricultural value chain [the cotton value chain is Pakistan's largest source of export

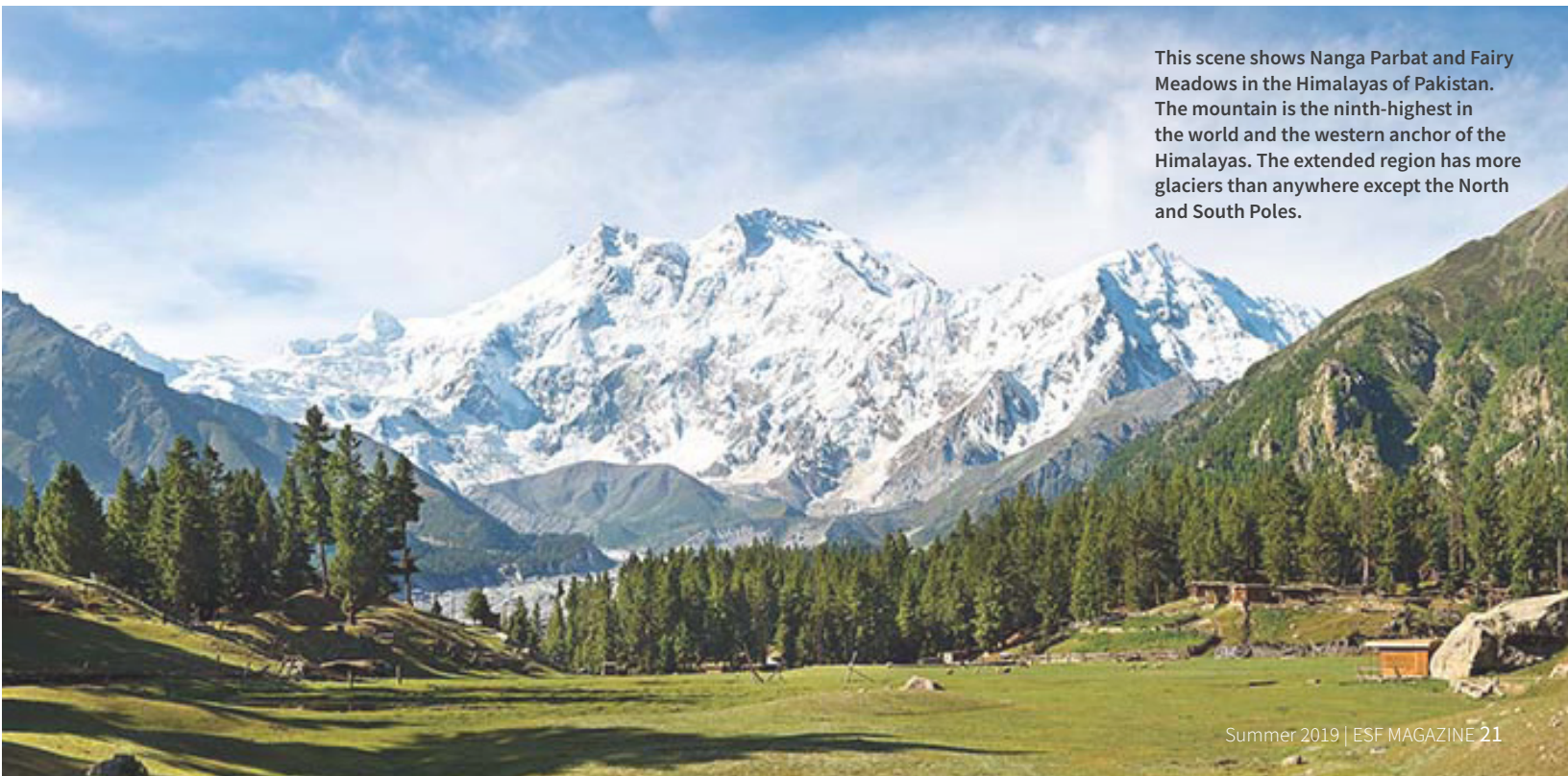
earnings, employing 42 percent of the labor force]; and the impact of climate change on the flood governance system. My research focused on analyzing our response to flood events, particularly as it pertains to small businesses and rural livelihoods. It also highlighted the institutional- and governance-related deficiencies that are exacerbating our situation.

I also do advocacy work, representing SDPI at conferences, talking with university students, elected officials and civil society organizations about Pakistan's environmental challenges. However, the advocacy work is informed by our on-ground research. What this means is that first we do climate change-related research for example, then we highlight the findings of that research to key decision-makers and the public at large. We hope this helps the government make headway on these issues.

### ESF: What drew you to ESF, and how did your studies there prepare you for the work you're doing in Pakistan?

**IK:** I came to ESF as a Fulbright student. ESF is one of very few schools totally focused on environmental matters. I was able to take courses related to environmental governance, capacity building and climate change, which prepared me for the latest research happening around the world.

I did my Ph.D. dissertation on wastewater-management decision making in New York state. I looked at communities along environmentally sensitive water bodies, such as in the Catskills and the Finger Lakes. These communities rely on septic tanks, many of which pollute the reservoirs supplying water to New York, for example. My research looked at how these communities address the problems of procuring the necessary cleanup funds, as well as what difficulties and governance issues they encounter. This experience prepared me well in terms of understanding the various dimensions of environmental governance and decision making. Many of them are just as applicable to Pakistan as they are to the United States. *Continued on page 33*



This scene shows Nanga Parbat and Fairy Meadows in the Himalayas of Pakistan. The mountain is the ninth-highest in the world and the western anchor of the Himalayas. The extended region has more glaciers than anywhere except the North and South Poles.



# She Uses Her Training – And Grief – to **Fight Flu**

*By Renée K. Gadoua*

The last time Serese Marotta '99 talked with her 5-year-old son, Joseph, they discussed Halloween plans. "He wanted a Star Wars costume, maybe a storm trooper," she said. Joseph had been hospitalized nine days earlier with flu symptoms: cough, lethargy, vomiting. As the two chatted, Joseph's blood pressure plummeted. Doctors and nurses scrambled to stabilize his heart rate, but minutes later, the cheerful little boy who loved Legos, Transformers and Spider-Man died. His was one of 288 flu-related U.S. pediatric deaths in the 2009-10 flu season.

Until the last frantic hours of Joseph's life, "there was no sense of urgency, no sense he was at death's door," Marotta said. "As an educated, attentive parent I had no idea how dangerous flu was."

Marotta, a 1999 ESF graduate in environmental and forest biology and a former environmental scientist, draws on her scientific training and personal grief to deliver public health messages about seasonal flu. It's not just a cold, she tells people. It can kill, and the annual vaccine is the best tool to fight it. Since May 2016, she has served as chief operating officer of Families Fighting Flu (FFF), a national education and advocacy organization based in Arlington, Virginia.

"I knew this was the platform to honor Joseph, to make something good out of tragedy," she said.

She began volunteering with FFF about six months after Joseph died Oct. 18, 2009. She now leads the group, working out of her Baldwinsville, New York, home, where she lives with her husband, Joe, and their 16-year-old daughter, Emma. Joe Marotta, an IT professional, serves on FFF's board.

Marotta grew up in Cicero, near Syracuse, and ESF was a natural fit for her. "I was always outside playing with snakes and frogs," she



Serese Marotta '99 holds a photograph of her son, Joseph.

**“I knew this was the platform to honor Joseph, to make something good out of tragedy.”**

**— Serese Marotta**

said. “There was a pond on one side of the house and a swamp on the other. I loved nature.”

After graduating, she worked 16 years for Arcadis (formerly Blasland, Bouck & Lee), an international consulting company with an office in Syracuse. She traveled frequently to work on projects including health risk assessments of big river systems, flora and fauna surveys, and wetlands delineations. As her career shifted to human health and ecological risk assessment, Marotta sharpened her data reporting and analyzing skills—tools that serve her well in explaining the science behind vaccines.

She learned to rely on data to assess a situation, such as determining if chemicals threatened the ecosystem of a site. “We were confident we were adhering to our scientific standards and being good stewards of the environment,” she said.

When explaining the flu, she said, “We talk about clinical trials and everything those vaccines have to go through before they come to market.” But many people want more than science. “Vaccination is an emotional issue for most people. I can talk about data all day long and it’s not going to comfort them,” she said. “I want them to know, emotionally, as a parent I understand.”

The Marotta family moved to Ohio in 2006. In fall 2009, Joseph was in kindergarten and Emma, 7, was in second grade. Marotta took them to their pediatrician for the flu mist vaccine at the end of September.

Earlier that year, U.S. health officials had declared a public health emergency, as cases of the so-called swine flu (H1N1 flu strain) emerged in Mexico, Canada and the United States. After the 2009 flu pandemic began, federal health officials recommended people receive a second shot that contained the H1N1 strain. That second vaccine was not yet available in Dayton, Ohio, in September. Two weeks after Joseph died, it became available.

An autopsy found that Joseph had developed a duodenal ulceration as a result of H1N1 influenza; that slowly eroded his intestinal tract until it ruptured. He died of complications of H1N1 and septic shock. “The flu virus had gotten into his intestinal tract,” she explained. “He also had pneumonia in the lower left lobe of his lung.”

Marotta has told the story dozens of times, appearing in media outlets including The Washington Post, Good Housekeeping and NBC’s “Today.”

In addition to media interviews, she writes grants to support educational programs and builds relationships with government agencies including the Center for Disease Control and Prevention and industry partners such as GlaxoSmithKline, Astra-Zeneca, Sanofi and Seqirus.

FFF provides educational resources, such as posters for doctors’ offices, schools and community organizations. The organization maintains active social media accounts, posting reminders to get the flu vaccine, weekly flu updates and family stories. About 3,000 people subscribe to FFF’s weekly alerts and quarterly newsletter.

She is one of three staff members, and she works with 12 board members and 12 medical advisers. She, her husband and other volunteers provide emotional support to grieving families. Sharing family stories is central to FFF’s strategy. “We’re just regular moms and dads and sisters and brothers and aunts and uncles,” she said. “It could happen to any one of us.”

Marotta energetically answered questions in a large, bright kitchen decorated with block letters that spell FAMILY, HOPE and FAITH. She mostly ignored her buzzing phone, grabbing it once to check if her daughter needed a ride home.

Emma, a high school junior, sometimes helps with FFF mailings or filing. “She’s busy with school and keeping her grades up and track and starting the college search,” Marotta said. “She just wants to be normal.”

A photo shows Joseph at 4 and Emma at 6, in a sunflower field in Ohio. “They were best friends,” she said. “He was her buddy.”

The Marottas returned to the Syracuse area in 2012. An upstairs bedroom houses her office. A floor-to-ceiling mural of trees decorates her meditation room, where some of Joseph’s ashes rest inside an urn.

“I won’t lie,” she said. “There are days that are difficult. I reach my capacity on the flu. I don’t want to hear one more tragic story or share my story. But I have to keep going. It’s the scientist in me and the grieving mother wanting to make sense of it and help prevent it from happening to another family.”

*Renée K. Gadoua is a freelance writer and editor in the Syracuse area.*



**For more information about Families Fighting Flu visit [www.familiesfightingflu.org](http://www.familiesfightingflu.org).**





## ESF Career Grant Funds 'Experience of a Lifetime'

*Olivia Pinner and Joanne Pereira-Melo, who spent last summer in Spain, are among nearly 100 students who have benefited from ESF's career development program.*

Joanne Pereira-Melo, left, and Olivia Pinner stand in front of the giant Vitoria-Gasteiz hedge in the center of the city of Vitoria-Gasteiz. The pair participated in a two-week design charrette in the city with a multidisciplinary group, which focused on sustainable agroforestry practices.

Olivia Pinner '19 describes her field research in Spain in the summer of 2018 as "the experience of a lifetime." Likewise, Joanne Pereira-Melo '19 calls it one of her "greatest academic accomplishments."

When landscape architecture Associate Professor Emanuel Carter invited the two students to travel to Spain and participate in the city of Vitoria-Gasteiz's international student design workshop, they saw an opportunity to expand their trip by researching the role that urban parks play in connecting culture and ecology in three Spanish cities: Vitoria-Gasteiz, Bilbao and Madrid.

Both students credit the ESF Career Fellowships — which supported their travel with a \$4,050 grant to help cover expenses — with making the experience possible. The ESF Career Fellowships promote the careers and professional development of ESF students and are made possible by the generous donations of alumni and supporters of the College, who are committed to solving environmental challenges and supporting students who strive to do the same.

"Without the fellowship, the trip probably would've been limited to the workshop, without the added research," said Pereira-Melo.

In each city, they delved into the area's history, architecture, infrastructure and how the creation of an urban park transformed an area and impacted the quality of life for residents and tourists.

In Bilbao, the duo studied the linear park system surrounding the Guggenheim contemporary art museum and a connected plaza called Plaza Euskadi.

"What we found was that although the site was a popular tourist location, it was still heavily used by locals for recreation, exercise and transportation purposes," stated Pinner in the report she submitted about the experience. The students concluded that the area showed how an "iconic museum and tourist destination can cooperate with permanent residential needs through the enhancement of existing park space as well as transportation routes."

In Madrid, Carter led them on a tour of their focus site, Madrid Rio Park, a 360-acre recreational and cultural area. Here they analyzed how Madrid Rio's architecture complemented its landscape and how the gardens and structures referenced significant cultural eras, such as the city's medieval period.

"With his [Carter's] guidance, I understood how every square foot of this enormous park was meticulously calculated and designed with intention," wrote Pereira-Melo.



## 2 Alumni Support Career Program with \$250,000 Gift

Pereira-Melo was impressed with Madrid Rio's "greatest success" — the transformation of a once-decrepit riverfront area. Designers and engineers submerged a congested expressway that previously ran through the site. "When walking up this linear park, I could not even imagine what this urban landscape would have looked like with a highway running through it," she wrote.

"I was amazed to see the results of the government backing up ecology and parks," said Pinner. "It was inspiring and motivating."

At the International Taller de Paisaje, Pinner and Pereira-Melo spent two weeks working closely with professionals, undergraduates and graduate students. The workshop focused on the expansion of Vitoria-Gasteiz's Green Belt, an impressive system of parks that encircle the entire city. Participants focused on developing future planning concepts to not only improve upon and expand the Green Belt, but also integrate more sustainable agricultural practices in the areas that lie just outside the city.

"The best part about this urban plan is that the local government truly celebrates their ecology and is dedicated to improving urban life through healthy ecological solutions," said Pinner.

During the workshop, the two learned about agroforestry, an agricultural management method that is ecologically sensitive and focuses on managing and integrating existing forest habitat.

Pinner welcomed the opportunity to work with professionals beyond landscape architecture. "This exposure was invaluable to me as ESF currently doesn't offer multidisciplinary design studios. It was eye-opening for me to work on a design project with people that have such different perspectives," Pinner wrote. She added that her Spanish "dramatically improved" and she also learned the importance of being able to communicate design concepts through sketches.

Along with widening her cultural perspective, Pinner said she was exposed to a variety of design solutions and techniques and strengthened her design skills, particularly through collaborations with people outside her field.

"I was challenged academically and placed in...unfamiliar social situations, which ultimately forced me to grow and become more confident with myself, both on a personal and professional level."

"Being exposed to cities that truly value sustainability and the local ecology was extremely inspiring," she said. "I now feel motivated to continue to be an advocate for urban ecology and ecological design in cities in America."

According to Pereira-Melo, the experience was both validating and life-changing. "There's so much to learn from other cultures and places beyond what is familiar," she said. "Go beyond your community – go to the other side of I-81 or the other side of the ocean. There's so much to learn."

ESF's career development program, which has supported nearly 100 students over the last seven years, has been buoyed by a \$250,000 gift from alumni Jesse Fink and Betsy Mitchell-Fink — the second such gift from the Finks since the program's inception.

The Finks' recent gift brings the total of their support for the program to a half-million dollars, and the program has been renamed the Betsy and Jesse Fink Career Development Program in their honor. The couple, who are members of the ESF Class of '79, are commemorating the 40th anniversary of their graduation with new support for the College.

"We were on campus for a visit last September and we had a chance to meet some of the students who had been through the program," Jesse Fink said in a telephone interview. "It's one thing to read their reports about what they've done. It's another to hear, in their own words, the passion they have for what they're doing. We saw their enthusiasm and how the experience really changed their lives. It's helping them form some clarity in their professional development and making them more marketable professionally."

In addition to the gift to the career development program, Betsy Fink made a \$25,000 gift to support the work of the ESF Center for Native Peoples and the Environment. The center, led by Distinguished Teaching Professor Robin Kimmerer '75, creates programs that draw on the wisdom of both Indigenous and scientific knowledge to support environmental sustainability.

Betsy Fink said she was inspired by reading "Braiding Sweetgrass," Kimmerer's award-winning book that is subtitled "Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants."

"I've always believed we have the knowledge we need to take care of the Earth," Betsy Fink said. "I know the work of the center will help restore the Earth through sustainable environmental and cultural systems, and will foster the next generation of environmental leaders."

Kimmerer said the gift will allow ESF to support the dreams of Indigenous students who choose to pursue graduate study at ESF.

"The result will be an increase in the number of Native American environmental scientists, who will infuse sustainability sciences with their unique cultural knowledge. Their success has profound ripple effects into their home communities, where our research focus on biocultural restoration contributes to revitalization of land and culture," Kimmerer said. "Their ideas are already shaping the science of restoration, with an expanded vision. Leadership of Indigenous students on campus also enriches the learning environment for all ESF students." *Continued on page 33*



*Jesse and Betsy Mitchell-Fink*  
Photo taken last year in Escalante National Monument, Utah





Dr. Allison Oakes, ESF's Orentreich Research Fellow, is searching for the most efficient ways to grow and develop transgenic American elms.

## Elm Tree Project

### Takes Root with Research Gift

By Claire B. Dunn



A growing American elm in a laboratory in Marshall Hall.

Dr. Allison Oakes' office and lab in Marshall Hall are filled with tiny American elm trees, busily growing on the nutrients that Oakes' 15 painstakingly records in the hopes of finding the exact combination that best suits the little plants.

Her work is part puzzle: "It's fun to try to tease out all the pieces. It's problem solving!" And part passion: "I love gigantic trees in cities. They are fantastic. There are so many benefits to urban trees — they help regulate the temperature, they improve the air quality, they provide habitat for wildlife. Plus, people need to see green. It's just good for them."

Oakes is the College's Orentreich Research Fellow, a new position supported by a gift from Dr. David Orentreich. Oakes is immersed in finding the most efficient ways to grow and develop transgenic American elms so researchers can get to work finding the gene(s) that could enable the tree to withstand attack by organisms that have killed an estimated 80 percent of the species.

The American elm tree was a common sight in American cityscapes. By the 1970s, however, more than 75 million of them had died from Dutch elm disease, caused

by a fungus called *Ophiostoma novo-ulmi*. The disease causes vascular wilt. The fungus blocks the vascular system, causing the branches to wilt and die from lack of water. But simply arming the trees against one fungus is not enough. American elms are also threatened by a disease called elm yellows, caused by a phytoplasma. These pathogens are bacteria-like organisms that have no cell wall and are too small to be seen with a compound microscope.

Oakes' work is based on techniques used and discoveries made during ESF's 30 years of research into developing a blight-resistant American chestnut tree. That project, currently undergoing the federal regulatory approval process, is led by Dr. William Powell, who is also overseeing Oakes' research. American elms were the subject of research at ESF until about 2010, when it was set aside as Powell and his now-retired research partner, Dr. Charles Maynard, pursued the chestnut project.

The elm work is still in its early stages.

"We are putting a system in place that will allow the American elm to resist pathogens," Oakes said. "At the moment, I'm a methods analyzer, looking at each step of



the process to see if we can improve the efficiency. It will help us determine the best way to use resources, including time and materials. It's not very flashy work, but someone needs to sit down and find out what works and what doesn't."

Oakes tracks the nutrients that help transgenic elms grow the fastest and survive at the highest rate. She tracks macro- and micronutrients, vitamins, plant growth regulators and carbohydrates. She also has transformation experiments underway, using green fluorescent protein as a test gene so she can easily see whether the transformation was successful.

She's confident that once ESF has an efficient method to produce healthy transgenic trees, funding sources will be available to support the next step: determining which gene(s) can provide the tree with disease resistance. Much like the chestnut project, which uses one gene from wheat to enable the tree to tolerate the once-fatal blight, Oakes will be looking for the least invasive way to arm the elm against the pathogens that cause Dutch elm disease and the less commonly known elm yellows.

"You can't just make them resistant to Dutch elm disease," she said. "If you do, and you plant them, they are going to be immediately murdered by elm yellows."

Among the helpful items in Oakes' intellectual toolkit are the knowledge she gained in her early college years as a classical civilization major and the skills she picked up in a long-ago job as a barback.

"The Latin and Greek I picked up studying classical civilization came in handy when I transferred to ESF," she said.

The barback work came in handy when, as an undergraduate biotechnology major at ESF, she picked up a job washing glassware in Maynard's lab. "I knew how to get the soap off the glassware so the plants didn't die instantly," she said.

## Maybe Someday Elm Streets Will Have Elms Again

The American elm tree was once such a fixture in the American landscape that there were more than 4,500 streets bearing its name. In addition to its beauty, the American elm is an especially hardy tree that can withstand severe winter temperatures and periodic droughts, and it is tolerant of pollution and the compacted, salty soil characteristic of urban life.

Today, Elm Streets are void of the stately trees because of Dutch elm disease, a virulent fungus from Asia that decimated the species between 1930 and 1970. Although not extinct, American elms rarely thrive in urban settings today, and while some trees still grow in more rural areas, they rarely live long enough to reach the forest canopy as mortality rates increase sharply with tree size.

ESF research on the American elm was temporarily suspended in 2009 as scientists turned their attention to focus on the rapidly advancing American chest-

nut research and restoration project. Applying the knowledge, techniques and protocols used to develop a blight-resistant American chestnut tree, ESF researchers hope to restore the American elm. With more than three decades of experience in plant transformation and micro-propagation, the team is uniquely situated to apply this technology to American elm restoration.

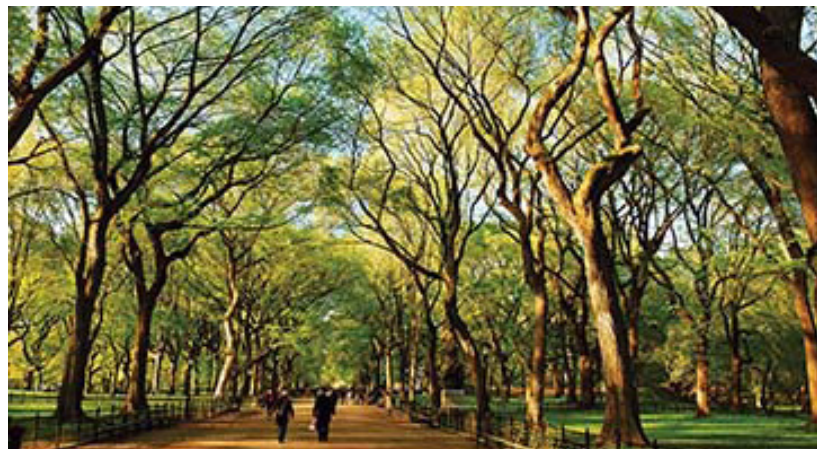
Now, research that could be critical to the elm's resurgence is getting a jump-start at ESF, thanks to a gift from Dr. David Orentreich and the Orentreich Family Foundation of New York City. His gift supports a postdoctoral researcher for two years to work under the direction of Dr. William Powell to resume research focused on developing disease-resistant American elm trees.

Orentreich was an early supporter of ESF's American chestnut research. His interest in the American elm is rooted in the success of that program and the role trees play in people's daily lives.

"Trees are amazing and majestic organisms. Not only do they sustain us and the planet by providing food, shelter, fuel, habitats and cleaner air, but they are remarkably diverse and aesthetically pleasing," Orentreich said. "With ESF's recent success in developing a blight-resistant American chestnut tree for restoration of that iconic species, I am hoping to help ESF now rescue the majestic American elm."



Dr. David Orentreich



In a photo from 2008, American elm trees line a walkway in New York's Central Park.

## Giving to ESF

To help support projects such as the effort to restore the American elm tree, please consider making a gift to the ESF College Foundation. Please visit [www.esf.edu/development](http://www.esf.edu/development), contact our office at 315-470-6683 to make your gift or learn more about how you can contribute to ESF's mission.



## After Four Full Years, New Grad Isn't Slowing Down

By Karen B. Moore

Asking James Lee '19 to pick a favorite ESF experience is akin to asking a parent to pick a favorite child — it's seemingly impossible.

Lee, who graduated in May with a degree in environmental biology, speaks quickly when talking about the last four years as if to slow down would mean leaving something out. Lee filled his time at ESF with classwork, internships, extracurriculars, field trips and international travel, each leaving a lasting impression.

He was engaged in research activities as a work-study student at the Cranberry Lake Biological Station and the Newcomb Adirondack Ecological Center under Stacy McNulty '97 and Natasha Karniski-Keglovits '14. He did small-mammal trapping, loon surveys and nest searching along the shore. He was an undergraduate teaching assistant for Dr. Shannon Farrell during his junior and senior years.

It was his involvement in the Wildlife Society, including serving as club president, that brought all his ESF experiences together. Leading the club was a transformative experience for the Long Island native. "It's probably the most difficult but also the most thorough leadership experience I've had thus far. It's almost a synthesis of what I have done in college and other activities," he said. His involvement with the Wildlife Society allowed him to pursue activities and experiences he enjoyed, such as a trip to Pennsylvania to view elk while they were running and a bird-banding workshop at Montezuma Wildlife Refuge in Seneca Falls, New York.

He didn't stop with one club or activity on campus. Lee was also trip coordinator for the Society of Conservation Biology, the secretary of the Herpetology Club and the secretary for the Society of Ecology and Restoration as well as a member of the Guy Baldassarre Birding Club.

"Birds and reptiles are my main interest. I have the most experience with birds so far," he said. But he is open to expanding his horizons.

"I did a brief internship with Long Island Aquarium as a marine mammal training intern, which was a lot of fun," he said. He trained harbor seals, grey seals and sea lions and worked with river otters and Japanese macaques.

The following summer, he went to Emporia State University in Kansas to work on grassland bird research, including nest searching and monitoring for a number of species.

Lee took a semester to study abroad in Madagascar at the Ranomafana National Park during his junior year. While there he did small mammal tracking as well as surveys of rainforest birds and behavioral monitoring of primates.

"That was probably the best experience of my life," he said. The lemurs, found only in Madagascar, made a lasting impression. "There are about 110 species of lemur, but I only saw about 19. If I can ever afford to go back I most certainly would like to."

One day, he and his classmates went hiking to find a species of lemur called indri. The outing left a big impression. "They have this incredibly haunting call that reverberates through the forest," Lee said. "They're also the largest living species of lemur. It's just burned into my memory. I think about it almost every day."

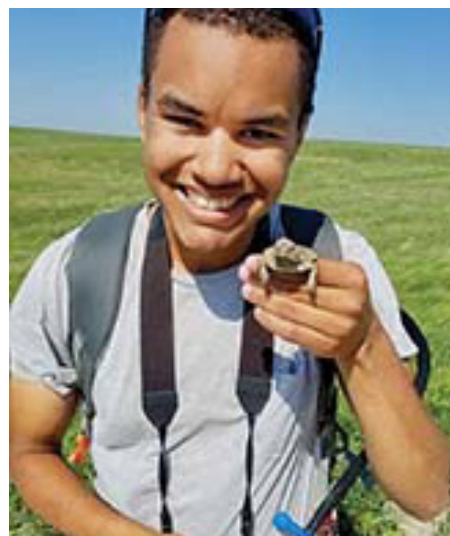
In the summer of 2018 Lee had "another great job — another of my favorites" at the University of Toledo in Ohio.

"I was doing work with redheaded woodpeckers, box turtles and spotted turtles, all of which are species I am very fond of. I did mainly nest searching for all those species and radio telemetry on them as well, which was a lot of fun .... It can be very rewarding getting to track species in the field, recording their behaviors, what they're eating, what their activities are."

As graduation approached, Lee's plans were fluid. He applied for a number of wildlife research positions, ranging from working with piping plovers to hellbenders, and had plans to travel in Europe with friends.

"I got interested in wildlife because it's thrilling, and I think it's incredibly rewarding to see," he said. "At times I feel like that kind of desire is selfish in some respects, but I think that it doesn't matter. Of course, I want to help others along the way — strongly so — but I think it's all right to be a little selfish."

*Karen B. Moore is the senior writer in the Office of Communications and Marketing.*



Top, A happy James Lee after ESF's Commencement ceremony this spring; middle, wild ring-tailed lemur in Anja Community Reserve in Madagascar; bottom, Lee holds a horned lizard on a trip to Tallgrass National Prairie near Wichita, Kansas.





# Where Does All The Garbage Go?

## Erin Cuddihy Wanted to Know

By Claire B. Dunn

### *Curiosity drew Erin Cuddihy '19 to ESF.*

It began when she was a child, hankering to spend time outside whenever she could. Most recently, it has taken the form of learning where garbage goes and teaching younger children how to reduce the amount of trash that ends up in landfills.

"I was always interested in the outdoors," she said. "When it rained I would collect the worms that were on the sidewalk and I wanted to know more about them. I was always curious about the environment."

Cuddihy was drawn to ESF because of its close-knit community. She arrived with a talent for math and science and a family rich with engineers, which made environmental resources engineering a logical choice for her major.

"I knew I wanted to do something environmental. I just didn't know what," she said.

So Cuddihy sampled what ESF had to offer. "I'm not the type of person to just sit around," she said, perhaps understating her penchant for getting involved.

She served as a physics teaching assistant at Syracuse University and co-captained the ESF track team and the cross-country team that won the U.S. Collegiate Athletic Association national championship during her senior year. She was a leader in the ESF chapter of Engineers Without Borders, a student ambassador, and a member of three clubs related to her major and an Orientation Leader.

She also did an internship at Nottingham High School in Syracuse, sharing what she knows about a subject that has emerged as an environmental passion: waste management.

Cuddihy worked with another senior, Nicole Leonard '19, doing waste audits. They sifted through garbage to see what could be diverted from the waste stream. They

determined that in some cases, more than half the trash could have been composted, recycled or reused.

"We want to show high school students that there are alternatives," she said during her final semester at ESF. "We're trying to motivate them to see that there's something they can do about it, to show them where this garbage actually goes."

Jaime Rodriguez, the Nottingham science teacher who worked with Cuddihy and Leonard, said the high school students learned a lot about the benefits of recycling and composting.

"There are many changes in the works for Nottingham's cafeteria, including compost bins, more recycling bins and buckets for liquid wastes like milk and water," Rodriguez said. "The students have had a very strong reaction to the information they have learned from this project, and Erin and Nicole. They recognized the problem we have with our waste disposal process at Nottingham and the importance of making changes to benefit both the environment and the school district's budget."

Cuddihy's curiosity about where garbage goes was sparked in her classes, especially solid and hazardous waste management, and the fate and transport of chemical contaminants.

"I didn't think that was something I was passionate about until I took these classes about all the chemicals and garbage that are everywhere, and the way you can reduce it," she said.

She sees the reality of it every day, walking to ESF from her home a mile off campus. "You see bottles and cans, and garbage everywhere," she said. "It really makes me want to do something about it."

*Claire B. Dunn was the editor of ESF Magazine. She recently retired from ESF.*

Erin Cuddihy enjoys a moment backpacking on the Cranberry Lake 50-mile trail in the Adirondacks. While the hike was "just for fun," it gave Cuddihy the opportunity to use some of the knowledge she gained at ESF to identify plants and animals along the way.



## Honoring Alumni Who Lost Their Lives Serving Our Country

Each year at the ESF Central New York Alumni Dinner, we recognize the outstanding accomplishments of the most recent Alumni Memorial Scholarship recipients. These scholarships are awarded in remembrance of those alumni who lost their lives while bravely serving their country during World War II, the Korean War and the Vietnam Conflict. Memorial plaques with the names of these honored alumni can be seen in the Rotunda of Bray Hall. Selection criteria for these awards is based not only on academic excellence but also on extracurricular activities and strength of character. Funds for these awards are made possible via the ESF Golf Tournament.

### Congratulations to the 2019 recipients!

#### INTERNATIONAL GRADUATE STUDENTS

##### **Lucía Pérez Volkow**

Environmental Science

Lucía Pérez Volkow, a Fulbright Scholar, is originally from Mexico and is working toward her M.S. through the Graduate Program in Environmental Science at ESF. She is contributing meaningfully to women's lives in rural Mexico through her master's research. As a member of an ethnobiology research group, she conducted interviews with women in rural Mexican communities to understand how nutritional patterns have changed over the past 20 years and how these changes are related to land-use changes and policies in Mexico. She will share this work with young people through a field guide to be used in local schools that will educate readers about the contributions that their mothers and grandmothers make to environmental sustainability. Her research will contribute significantly to the understanding of women's roles and how communities are changing because of socioeconomic and climate changes. It will also increase the potential for better land management by considering equitable gender roles in that management. Volkow's undergraduate thesis research was aimed at debunking the myth that traditional charcoal production in Mexico was a driving force of forest loss. She presented this research to the Association for Tropical Biology as well as two Mexican Ecology congresses. Last year, she worked on a national project that aimed at understanding the potential that Mexico has to substitute fossil fuels with bioenergy. As part of this project, she helped develop sustainability indicators to use in evaluating the production of bioenergy. Volkow served on the planning committee for the Remembrance Day for Lost Species last fall and on the Organizing Committee for the Carbon Tax Community Forum. She also participates in Syracuse University's Swimming Club.

##### **Ge (Jeff) Pu**

Environmental Resources Engineering

Ge (Jeff) Pu is originally from China and is pursuing a Ph.D. in environmental resources engineering (ERE) with plans to graduate next May. His thesis research concentrates on using remote sensing and spatial analysis to assess the trends in riparian buffers. He uses the Google Earth engine and QGIS for processing the remote-sensing images. Jeff has a great deal of research, teaching and conference experience. He has co-authored a number of publications, served as a teaching assistant for a variety of ERE courses and worked as

both a graduate assistant and research assistant. He has presented his research at several notable meetings, including the Google Earth Engine User Summit, the NYWEA Technical Conference and the American Society for Photogrammetry and Remote Sensing (ASPRS) annual conferences. He has served in a number of leadership positions. He is currently the communication councilor for the ASPRS Student Advisory Council, which he previously served as chair and deputy chair. He was vice president of communications and vice president of speakers and presentations for the ESF Graduate Student Association. Last summer, Pu worked as a geospatial analyst at GroundPoint Technologies in Marcellus, New York, where he assisted in analyzing river channel variations using digital elevation models.

#### U.S. GRADUATE STUDENTS

##### **Kristen Haynes**

Environmental and Forest Biology

Kristen Haynes is working toward her Ph.D. in environmental and forest biology — ecology. Her dissertation research in the lab of Dr. Donald Leopold involves using field and laboratory experiments plus cutting-edge genomic techniques to understand how rare alpine rattlesnake-root plant species will respond to climate change. During her time at ESF, Haynes has secured more than \$30,000 in competitive grants to support her research activities. Teaching is a passion of hers, and she has honed her instructional skills at ESF. She is pursuing a Certificate in University Teaching through Syracuse University's Future Professoriate Program. At ESF, she has served as a teaching assistant, a guest lecturer and an instructor. She advises undergraduate students in independent research studies. Haynes has authored a number of articles and reports and has presented her research at a variety of meetings, including the annual Northeast Alpine Stewardship Gathering. She has served in a variety of roles at Cranberry Lake Biological Station (CLBS), including administrative assistant and business manager. Her responsibilities at CLBS included registering students for summer sessions, acting as liaison to the ESF bursar and the financial aid and registrar's offices, drafting protocol, securing supplies, managing finances and supervising student workers. She also serves as the Ph.D. student representative on the EFB Graduate Program Advisory Committee, as a member of the EFB animal physiologist search committee, as a judge for the ESF-hosted high school/middle school science fairs, and as a member of the Vegan Cookbook Club.



## Anabel Roberts-McMichael

Environmental Science

Anabel Roberts-McMichael is pursuing her M.S. in environmental science and will graduate next May. Her research focuses on Indigenous Peoples' access to public lands for land-based practices such as hunting, fishing and gathering. She is working with both the ESF Center for Native Peoples and the Environment and the New York State Department of Environmental Conservation on this research. She is a member of the Botany Club and the Society for Economic Botany. She organized and hosted a workshop on Indigenous and Western Science to help students, faculty and researchers learn to work across differing cultures. Versions of this workshop have been shared at major events such as the EPA's Tribal Science Council Meeting. Roberts-McMichael has volunteered for a number of causes, including Camphill Village, where she lived and worked with adults with developmental disabilities for nine months. She also volunteered at the Wassaic Community Farm as a co-manager, at the Brighton Tree Planting Event as part of the Save the Rain program in Syracuse, at the Spring 2018 Salamander Crossing and with We Rise Above the Streets. She has held a number of positions during her graduate studies, including graduate teaching assistant for The Evolution of the Global Environment and Human Society and circulation desk assistant and student supervisor in Moon Library. Last summer, she worked as a senior research aide at the DEC, where she conducted research to assist the agency and Indigenous Nations on exploring processes to work together to meet environmental and usage concerns on public lands. As a part of this experience, she presented at the DEC and Indian Nations annual meeting about treaty rights and knowledge sharing. She is continuing this internship again this summer.

## SENIORS

### Nicholas Bentley

Biotechnology and Biochemistry

Nicholas Bentley is working toward a dual bachelor's degree in biotechnology and biochemistry. He is involved in Lyme disease research and, this summer, he is taking part in the Undergraduate Research Fellowship Program at Upstate Medical University. Since his first year at ESF, he has been an intern at the VA Medical Center's Spinal Cord Recovery Unit, where he works with VA staff members to incorporate horticulture into recreational and physical therapies. The program allows veterans with spinal cord injuries to benefit from activities that reinforce their treatment, such as scooping soil and planting seeds. Bentley also volunteers at Clearpath for Veterans, where he maintains the outdoor garden space. He has coordinated recreational activities involving horticulture at the Brookdale assisted living facility in Fayetteville, New York, which serves residents with dementia and Alzheimer's disease. Last summer, he received grant funding to further develop ESF's therapeutic horticulture program. Bentley is also involved in campus academics and clubs. He is a teaching assistant in General Chemistry and a member of the Alpha Xi Sigma Honor Society, and has participated in the Counsel of Student Affairs and Diversity, Stumpies Making Strides Against Breast Cancer and Oakie's Activity Counsel. He was recently certified as an EMT.

### Hanna Quigley

Landscape Architecture

Hanna Quigley is a landscape architecture major who has accepted a position as a full-time employee at Barton & Loguidice. This academic year, she worked as an intern in Barton & Loguidice's Sustainable Planning & Design Department. In recognition of her academic excellence, she was awarded the Presidential Scholars Award upon entrance into ESF. She has continued to meet the requirements for

this scholarship and has maintained the award throughout her entire academic career. She has been elected a member of the Nu Chapter of the Sigma Lambda Alpha International Honor Society for her character and outstanding leadership in the Department of Landscape Architecture. She was selected by Dr. Douglas Johnston '80, chair of the Department of Landscape Architecture, to serve on the Student Advisory Council, providing outreach to prospective and incoming LA students. She served as an ESF Admissions Ambassador and volunteered at Clearpath for Veterans. She was selected to facilitate a public meeting regarding environmental health and justice impacts involving the U.S. Environmental Protection Agency, the Port Authority of New York and New Jersey, and community members in Newark, New Jersey. In addition to her academic excellence, Quigley has distinguished herself as a key member of the ESF Woodsmen's Team. She has competed professionally and recently qualified as the first alternate for the national qualifiers at the Stihl Timbersports Series.

## JUNIORS

### Billie Holecek

Sustainable Energy Management

Billie Holecek is majoring in sustainable energy management. Last summer, she completed an internship at NYSEDA (New York State Energy Research and Development Authority) in Albany. She is a member of Alpha Xi Sigma and Campus Cursive, a club that writes encouraging letters to students who need extra support during the beginning of the semester and during finals. This past semester, Holecek studied abroad in Costa Rica, where she expanded her knowledge in international sustainability practices as well as her Spanish-speaking skills. While there, she taught English to students and professors at the university she attended. For the past two years, she served as an Orientation Leader, and this fall, she will act as one of two Head Orientation Leaders. In this role, she is responsible for ensuring that first-year students become acclimated to the ESF campus before classes start. She and her Co-Head OL, fellow scholarship recipient Justin Rosenberg, are responsible for planning Orientation activities for 600 incoming students, as well as interviewing, hiring and managing the other 50 Orientation Leaders.



The 2019 Alumni Memorial Scholars were honored at the Central New York Alumni Dinner April 25. Seated from left are, Abigail Schlecht, Kristen Haynes, Lucía Pérez Volkow and Billie Holecek. Standing from left are, Nicholas Bentley, Ethan Ballard, Ge (Jeff) Pu, Anabel Roberts-McMichael and Justin Rosenberg. Not pictured: Hanna Quigley



**Justin Rosenberg**

Environmental Resources Engineering

Justin Rosenberg is majoring in environmental resources engineering and has been on the President's List all five semesters that he has been at ESF. He is president of the Environmental Resources Engineering Club, where he is responsible for holding biweekly meetings, organizing trips to the ESF Newcomb Campus and implementing various networking events and activities, such as the Women in Science and Engineering (WiSE) panel. Rosenberg is a local project lead with Engineers Without Borders/Engineers for a Sustainable Society. He designed a structure to improve brook trout habitat in Nine Mile Creek and is the liaison to the Nine Mile Creek Conservation Council. He will serve as a Head Orientation Leader, along with fellow scholarship recipient Billie Holecek this fall. He also participates on the Syracuse University tennis team and has been a teaching assistant for General Chemistry courses. Rosenberg has completed two notable internships. At the Pennsylvania Department of Environmental Protection, he inspected and reported on low-hazard dams and assisted senior staff with inspecting high-hazard dams. At the Onondaga Environmental Institute, he sampled the Harbor Brook combined sewer overflows and maintained proper chain of custody with the Onondaga County Department of Water Environment Protection laboratory.

**SOPHOMORES****Ethan Ballard**

Bioprocess Engineering

Ethan Ballard is majoring in bioprocess engineering and is a member of various campus clubs, including the Paper and Bioprocess Engineering Club, the American Institute of Chemical Engineers Club and the Syracuse University Outing Club. He previously served as the Department of Paper and Bioprocess Engineering's senator for the Undergraduate Student Association. Ballard also participates in Syracuse University club swimming and in the fall he will serve as an Orientation Leader for the incoming first-year class. He was involved in the ESF Leadership Empowerment Retreat for emerging leaders. He is the chief financial officer of the Undergraduate Student Association and the treasurer of the National Society for Leadership and Success. He has also supported his fellow students in his role as a tutor and volunteers with the American Red Cross.

**Abigail Schlecht**

Conservation Biology

Abigail Schlecht is majoring in conservation biology. She is a member of the Wildlife Society, the Herpetology Club and the Society for Conservation Biology. She is also interning with Dr. Amanda Cheeseman, a post-doctoral research associate, on a project related to the New York Mammal Survey. Schlecht is active with Syracuse University Hillel, where she has led services and plans to pursue a leadership role. Prior to attending ESF, she was involved with United Synagogue Youth and was chapter president at the Pasadena Jewish Temple and Center. During high school, she was a cat and rabbit socialization volunteer with the Pasadena Humane Society, served as secretary of the Sexuality & Gender Equality Club and was a member of the National Honor Society. She is a National Merit Scholar. Abigail has held various positions working with youth, including a camp counselor at a day camp run by the Jewish Federation in California and is currently a Kadima (middle school) youth advisor at Temple Adath Yeshurun in Syracuse.

# Thank you

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2019 Annual ESF Golf Tournament!  
All proceeds benefit the ESF Alumni  
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**ESF: How did your work at the Great Lakes Research Consortium and the Maxwell School relate to your activity in Pakistan?**

I got a Certificate of Advanced Studies in Conflict Resolution at the Maxwell School. Conflict resolution is very important to managing environmental problems, especially in places like Pakistan, where our natural resources are mostly shared. We share our rivers, our forests, even our deserts. The political boundaries do not respect the natural boundaries, and vice versa, so conflict arises regularly. My coursework and education at ESF and Maxwell gave me interesting perspectives on some of those conflicts.

The Finks' career development gift came from their Fink Family Foundation. The foundation provides guidance, investment and strategic advice to social entrepreneurs. Jesse Fink is a co-founder and non-executive chairman of Mission Point Partners, an impact investment manager and adviser focused on solving large-scale environmental problems through the deployment of high-impact capital. He is also co-founder and chairman of the board of ReFED, a multi-stakeholder platform that created a road map for food waste reduction in the United States, and he was co-founder and chief operating officer at Priceline.com.

The recent gift builds on a \$300,000 endowment built for the program by the ESF College Foundation, Inc.

The fact that the students design their own projects is something the Finks want to support.

"We've been very impressed with the program's success, how it has been administered and the diversity of the projects," Betsy Fink said. "We wanted it to be student-driven; we didn't want to narrow it down."

Since 2013, 96 ESF students have received grants that enable them to pursue a professional experience.

“The career development program has provided students from every major at the College with opportunities for a one-of-a-kind experience,” said Dr. John Turbeville, assistant dean for student affairs and director of ESF Career Services. “In no small way, these opportunities have transformed individual students’ passions into a purpose. It is this resulting purpose which has had the most long-lasting impact on these students, both personally and professionally.”

**IK:** A new government took over in August 2018. One of their main agendas is improving environmental conditions. They've launched a project called the Ten Billion Tree Tsunami, with the aim of planting trees across Pakistan. Terrible deforestation occurred in Pakistan because of the timber mafia [which decimated 33.2 percent of Pakistan's forests between 1990 and 2010], but I want them to also talk about other aspects of our environment — clean drinking water, air pollution, better waste and industrial environmental management. Climate change adaptation remains key as well. Whether the government can address all of these issues is a question mark. I've worked in this arena for the past 20 years and find the situation to be quite depressing. However, I am hopeful that we can come together to address these concerns because the alternative of doing nothing will only result in more chaos.

[illegible]

**[www.esf.edu/alumni/member.htm](http://www.esf.edu/alumni/member.htm)**



At 80 years old, **John Swift '58** can still fall a huge heart-rotted maple then cut, split, haul and stack it seven feet high.



**Frederick Gerty '63** holds his ESF flag at the Continental Divide on Trail Ridge Road in Rocky Mountain National Park.

## 1950

**Arthur Lambert (PSE)** writes, “I have retired in Southern California. Left the papermaking profession years ago and worked as a machine designer 60+ years. Small machines not related to paper. It was a very rewarding career. Now relaxing and enjoying the leisure time.”

## 1954

**George Rosenfield (FRM)** writes, “As I approach my 94th birthday, I want to say hello to my friends and associates from ESF. I wish to congratulate ESF on the wonderful graduate M.S. education that they made me work for. I had a successful professional career: two years at ERDL, Fort Belvoir, Virginia, solving the future satellite mapping problem; nine years as photogrammetric scientist with RCA at the Atlantic Missile Range during the Military Program; three years with Raytheon Corp. to solve a satellite problem; and 18 years with the U. S. Geological Survey as a physical research scientist. I had a wonderful scientific working experience, with a world reputation, excess of 25 publications in scientific journals, and worldwide speaking tours. I am now advising on environmental problems with the Indian River Lagoon here in Brevard County and Central Florida East Coast. After all, forestry is the environment. I am also active in military and veterans affairs and give many talks about my time with the U. S. Army Ski Troops (10th Mountain Division) during WWII as well as my Army active duty tour (after my B.S. in forestry from the University of Massachusetts), including the Korean War as a combat engineer unit leader. I am also retired as a major, U. S. Army, Corps of Engineers.”

**Lloyd Swift (FRM)** writes, “At a Wednesday convocation in 1950, the speaker had a strong accent. I could not understand much of what he said. He emphasized his points by periodically raising his arms in the air and exclaiming ‘Excelsior!’ I went to lunch believing I had heard a talk on wood shavings. I later learned it was a motivational talk based on the motto on our state seal. Seven years later, in a seminar room at NCSU Forestry School, I recognized the face of that convocation speaker at Syracuse and was told it was Dr. Schenck who founded the first forestry school at the Biltmore Estate (near Asheville) and thus was considered the first dean of the NC State Forestry School. He was the ‘Excelsior’ man! I ‘met’ Dr. Schenck a third time as a director of the Cradle of Forestry Association. If I had known my future in 1950, I could have greeted the speaker and told him ‘Someday I will be honored to preserve your history.’”

## 1956

**Christopher Blaydon (WPE)** writes, “While at ESF and (SU), I was in AFROTC, which took me to the Air Force then on to Pan Am World Airways. Now, my uniform is hanging on display at the new air museum at Hancock Field. How about that! I can't use it anymore, won't fit!”

**Norman Murphy (FOR)** writes, “Still going strong. It will be another great year for our corporate consulting group. I can't begin to say enough about the great education I received at ESF and SU.”

## 1957

**David Noyes (WPE)** writes, “Doing fine, tune-ups more frequent. Still in contact with **Chuck Rohn (FRM)**, **Dick Schultz (FRM)**, **Orrin Steven (WPE)**. And get ‘grapevine updates’ on **Art Mittelstaedt '58 (LA)** and **Bruce Brownell '64 (WPE)**. (Their dads helped me to scale lumber stumpage.) I also had brief contact with **Dave White '59 (FOR)**. I continue to enjoy Colorado's outdoor offerings that are like those of the Adirondacks but without black flies, midges, gnats, no-see-ums or the high humidity. My family now totals 18 and we count our many blessings.”

## 1958

**Vincent Cerny (WPE)** writes, “Diane and I will be married 60 years in November 2019. Our home is in St. Petersburg, Florida, and we spend summers and fall in upstate New York (Pawling, in Dutchess County, within the Hudson Valley area). I sold lumber and building products for Gerrity Lumber in the 1960s and had several positions with Kaiser Aluminum for 20 years, ending as a national sales manager for a division. Before retirement I was also a national professional speaker.”

**John Swift (RS)** writes, “I have enjoyed the Alumni News even though I haven't seen enough references to my classmates or our old professors, Dan Castognozzi, Orin Latham or Lucian Plumley, whether they're dead or alive. They were wonderful men and a great source of inspiration to me then, and occasionally now. Just because I'm 80 years old doesn't mean I can't fall a huge heart-rotted maple at my summer home, cut, split, haul and stack it 7 feet high. I might have gone even higher but couldn't figure how to safely retrieve it when the fireplace sent out a call for more wood. All former classmates are welcome to come for a visit. Please bring your own axe and maul.”



## 1959

**Paul Luchsinger** (WPE) writes, “Happy in retirement and have lived in Williamsburg, Virginia, for the past 15 years. After six years in the U.S. Air Force and a M.B.A. from the Wharton School, I spent 36 years in consumer products marketing, sales and management. Now celebrating 60 years since graduation and also a 60th wedding anniversary with my dear wife, Anne. We plan to come to the 60th anniversary reunion in September and hope to see many classmates at that time. If ever visiting the Williamsburg, Virginia area, please come visit us.”

## 1963

**Curt Reese** (PSE) writes, “Brenda and I continue to keep busy volunteering, traveling and maintaining the home and yard. I’d urge my classmates to consider donating to our Class of 1963 alumni fund and the Pulp and Paper Foundation.”

## 1964

**Eugene LaMothe** (FRM) writes, “I first saw Cranberry Lake in 1961 on my 19th birthday when I arrived at the village dock 10 days early to open summer camp. I stayed on to close the camp and worked the next two summers as a clerk in the office. I graduated in 1964 and after two careers (with the United States Air Force and Lockheed) settled in Northern New York. Today we tend 1,100 sheep and 100 Angus cattle on 1,000 acres near Antwerp, New York. Cranberry still calls and my wife and I make it over every few weeks for a walk in the woods with our 8-year-old son. Life is good, Chip (315) 771-1752.”

**Theo Mercer** (LA) writes, “Only recently retired at 80. Downsized from 20 acres on the Chester River in Maryland to about one acre with wetlands of the Christiana River in Delaware. Reduced mowing time from 15 hours to 15 minutes a week. I still do delineations. I am active at Evolution Kickboxing & Karate in Middletown, Delaware. Would love to hear from classmates of the ‘64 landscape architecture class. Email itheojr@yahoo.com.”

## 1965

**William Bentley** (CHE) writes, “I have retired to South Florida Suncoast, Sarasota, and am enjoying every moment of the Gulf Coast beaches and healthful climate. Just completed a second coronary bypass procedure, with recovery well underway, preparing to enjoy a prolonged life in the semi-tropics.”

**Ron Bonar** (FOR) is now living in North Augusta, South Carolina. He and wife, Amalia, will celebrate 52 years of marital

bliss Aug. 10. After finding a niche, the retired Ron continues to attend art exhibitions and craft shows — and even tries to sell his 3-D wood art!

**Robert Fowler** (WPE) writes, “Have a second daughter, Faith Winter, who will be 3 years old this August. I am continuing to do research in genetics and teach part-time at San Jose State University where I have been a faculty member for the past 43 years.”

**Les Monostory** (EFB) writes, “Living in the Syracuse area (Fayetteville). Meeting with ESF alumni and former fraternity brothers from Kappa Phi Delta is an ongoing process and continued opportunity for meeting old (and younger) friends. I also keep in touch with ESF professors, both current and retired. I’m founder and vice president of the Central New York Chapter of the Izaak Walton League of America, a national conservation organization. Nearly half of our chapter members are ESF students and alumni. I’m pleased to see that the College has begun an ESF Athletic Hall of Fame. Not sure if this will include athletes who participated in SU sports before the current sports program in basketball, soccer, track and field, etc., but I’ve put in my application as a former varsity fencer and SU fencing coach.”

## 1967

**Thomas Catterson** (EFB) writes, “Still ‘almost retired’ and also spending the winters in Sarasota County, Florida. Also spending three weeks each year in Southeast Alaska where my two oldest sons are helping to manage the fishery resources, one with the U.S. Forest Service and the other with Alaska Fish and Game. Here at home, in Clinton, New York, third son is on the local school board and dropping the grandkids off with the grandparents to our great delight. Best to all.”

**Robert Kinstrey** (PSE) writes, “After 22 years with Jacobs, I retired in April two days before my 75th birthday. Retired but not finished consulting. Pauline and I are spending several months a year enjoying beach time in Florida. Life outside the office has been busy since I am chairing the National Corvette Restorers Society’s National Convention this summer in Greenville. Also this year I was honored with the Who’s Who Albert Nelson Marquis Lifetime Achievement Award.”

**David Stout** (FRM) writes, “Here in Western New York, I’ve been advocating the immediate move to a hydrogen economy (particularly for transportation) and electric heating and cooling of buildings to save a more livable planet. Associated requirements are dense foamed in place insulation, even into older fiberglass walls, before adding air-to-air heat pumps (likely in outer walls near ceilings) and additional renewable energy capture to



**John Hastings '70, Jim Beil '70, John Farrar '70** took a trip to admire a friend's fully functional Linn Tractor (circa 1900).

power electrolyzers that make H<sub>2</sub> from water for hydrogen refueling stations along the interstate highway system and in cities running transit buses (like Buffalo, New York). H<sub>2</sub> eliminates carbon pollution and is critical to saving a livable planet.”

**Robert Tillson** (WPE) writes, “Spent career in computer software and services. Now M&A of technology related companies through Pierce Capital Partners. Located in D.C. area.”

## 1969

**James Clay** (PSE) writes, “My wife, Barbara Battin, died on May 6, 2019, after a 3+ year journey with ovarian cancer. The button that you probably have seen reads, ‘Cancer Sucks’ It does.”

**Janet Levinson** (FRM) writes, “Still in Oregon! Hello everyone.”

## 1970

**Tom Catchpole** (FRM) writes, “I have been retired from the United States Forest Service since 2002 (17 years). California has had terrible wild fires that get worse each year. I am still active with SAF educational events for teachers and students around the state and continue to substitute teach and report for a newspaper in addition to some other miscellaneous jobs. My five grandkids keep growing.”

**John Hastings** (FRM) writes, “**Jim Beil** (FRM), **John Farrar** (FRM) and I visited Ernest Porter near Rome, New York to see his fully functional Linn tractor. These were used extensively for logging in the early 1900s.”

**Charles Sperry** (FEG) writes, “Considering the fond memories of ‘SUNY Forestry’ that I have each time an alumni mailing arrives, after 49 years I guess it's time for me to rejoin the Association. Having recently relocated to Northampton, Massachusetts, after spending

almost my entire adult life in the Rocky Mountain west makes it more likely that I will be able to participate in an occasional alumni event. Hi to **Pat Sweeney** (EFB), my only known class of 1970 friend, whom I first met 42 years later during a 'where-did-you-go-to-school?' chat as we drove home from one of our Western Montana Zone forest planning team meetings."

**Gary Will** (EFB) writes, "Still breathing in Madison County, New York, along with Bonnie, my bride of 50 years. Had to give up lamb farming but renting pasture. Enjoying the retired life and volunteering with many worthwhile causes. The birding is great in New York state. Son Tyler is doing well."

## 1971

**David Maass** (EFB) writes, "In retirement, I've picked up my interest in exotic larch again. The hybrid between the Japanese and European larch grows exceptionally well. Plantations can be thinned at age 15 with a final harvest at age 30. Please check out the Larch Virtual Experiment Station website [www.larchresearch.com](http://www.larchresearch.com). I'm collecting growth data and other valuable information across the Northeast and lake states. Alums can write to me at [dmaass@maine.rr.com](mailto:dmaass@maine.rr.com) with locations of plantations of which they are aware."

**Jack Snyder** (LA) writes, "Where has 50 years gone? As a landscape architecture class we spent the spring semester of 1970 in Guatemala. I'm still working and living in Boise, Idaho. Any interest in a trip next spring to Guatemala, classmates?"

## 1972

**Gregory Hoer** (LA) writes, "I retired in November 2018 after practicing landscape architecture for 45 years. The last 29 years were with Parsons Brinckerhoff (now WSP USA) working on transportation and infrastructure projects. This was challenging and very rewarding work. My wife, Barb, and I continue to reside in Towson, Maryland, and look forward to our 48th wedding anniversary in August. We have three children and six grandchildren, all of whom live in the Baltimore area."

## 1974

**Christine (Patterson) Barone** (FRM) and **David Barone** (FRM) write, "Hi to friends in the class of 1974. We met at Summer Camp (Warrensburg) in 1972 and were married in December of that year. We enjoyed our careers at the USDA Forest Service, working in Vermont, New Hampshire, West Virginia, Michigan, Colorado, Utah, Indiana and Ohio. We retired from the National Headquarters

Office in Washington, D.C., in 2006. Our son and daughter are both graduates of Virginia Tech, and we enjoy visiting their families and our three grandchildren in Virginia and North Carolina as often as we can. We also stay busy with various community volunteering efforts in and around York, Pennsylvania, where we've lived since 2007."

**James Cain** (PSE) writes, "After moving to Portland, Oregon, in 1977, we finally left and moved to Bend, Oregon. Bend is a high-desert ski town. It also has good fishing nearby as well as several golf courses and is growing rapidly. Carol and I are enjoying cross-country skiing and meeting new neighbors. It is very strange moving from a 1928 house to a 2018 house."

**Stanley Koenig** (FRM) writes, "My wife and I went to Iceland in April. We will also head to Cape Breton, Nova Scotia, Canada, in August and in early December we will take Cunard's Queen Mary 2 on an eastbound trans-Atlantic crossing from New York City to Southampton, England, and then back to New York City."

## 1975

**Spencer Jarrett** (FRM) writes, "I recently moved to Seattle where I'm performing regularly with my blues band."

**Peter Koval** (LA) writes, "In 2015, I retired after 40+ years with O'Brien and Gere. I now work part-time consulting to a California-based consulting engineering company, Mark Thomas."

**Paul Leuzzi** (PSE) writes, "I am happy to report that I just retired from Weyerhaeuser and am splitting my time between the Seattle and Boston areas. Looking forward to doing the many things I have put off until now!"

## 1976

**Michael Corey** (EFB) writes, "Well, it's been 43 years, but I still consider myself to be both a Stumpy and a forest biologist. That being said, I'm currently working full-time as a family specialist, working with kids and families in the middle of the Adirondacks in Hamilton County. I do keep in touch with other ESF alumni. My lovely wife, Sue, is the director of the Indian Lake Theater, also in Hamilton County. We have a cute and adorable granddaughter, courtesy of our son and daughter-in-law and our lovely daughter is engaged. Sue and I continue to live in downtown Minerva, New York, in southern Essex County."

**Donald Salvesen** (FRM) writes, "Greetings from New Mexico. I will be celebrating three years as a volunteer with the National Park Service at the Petroglyph National Monument in Albuquerque this July. I greet visitors from all over the world at the visitor center; it's very



**Lew Cutler '76** (FOR) with his ESF flag near Crescent Lake in Olympic National Park, Washington.

rewarding work in retirement. If you are ever in the Albuquerque, New Mexico, area stop in on a Wednesday afternoon for some Stumpy chat, would love to see fellow ESF'ers."

## 1978

**Jack Saltes** (EFB) retired from the Wisconsin Department of Natural Resources after 34 years of service. Jack is now enjoying his time fly fishing the many hundreds of miles of trout streams in Wisconsin and volunteering in prairie and oak savanna restorations. ESF laid the solid foundation for Jack's environmental education ethics and for a full and rewarding career and life. He writes, "ESF students, be sure to read Aldo Leopold's 'Sand County Almanac' in your ESF college life, and again, and again throughout your life. It serves as an epic environmental compass."

## 1979

**Ed Frankoski** (CHE) writes, "Moved to Maryland near Annapolis for work. I've started an email thread with fellow 79'ers **Miriam Franchini** (CHE), **Ron Kuracina** (PSE) and **Theresa Kuracina** (EFB) about our upcoming reunion in September. Email me at [ed.frankoski@gmail.com](mailto:ed.frankoski@gmail.com) to get in on the correspondence thread. I will be on campus for the festivities from the 12th through the 14th. See you there?"

**Kate Martin** (LA) writes, "It's been 40 years since we graduated. The ASLA meeting is in San Diego Nov. 15 - 18. **Robbi (Needham) Woodburn** (LA) and I are both planning to head to San Diego. It would be great to see more of our classmates and teachers there so we can make it an opportunity to catch up and have a reunion toast. Hope to see you. My number is (206) 579-3703 or [katemartinseattle@gmail.com](mailto:katemartinseattle@gmail.com)."



## 1980

**Gerald Hromowyk** (FEG) writes, “I am now fully retired from the U.S. Air Force. I retired from the military side in June 2015 as a colonel and retired from the civilian side Jan. 25, 2019. Next plan is to drive a school bus for a few years to keep busy.”

**David Killius** (ES) is retired from a corporate technology career. He now runs Killius Makery, creating and building custom projects.

**Gail Terzi** (EFB) writes, “After 27 years working for the Corps of Engineers and 10 years before that studying insect hormones and neurobiology at Cornell University and University of Washington, I retired! I feel so fortunate to be able to retire early after an incredible career mostly working in the field of wetlands and compensatory mitigation — a career that has been filled with success, challenge, and a heck of a lot of pot stirring. I never was your ‘typical’ Corps employee and was given a long leash and much independence. I am very proud to say that I was instrumental in establishing over 5,000 acres of successful wetland and stream mitigation in the state of Washington that is protected in perpetuity and have left a stellar legacy behind to be carried on by others. I look forward to more volunteering, travel, creating more art and hiking and backpacking to my heart’s content. Basically feeding my soul (and doing choice consultant work if and when I feel like it). ESF sparked my incredible love and curiosity for nature and science and I still can’t believe that was all some 40 years ago. What a great career ride this has been for me and can’t wait to see what retirement has in store for me.”

## 1985

**Jay Brown** (CHE) received his Ph.D. from the University of Vermont in 1994. He now teaches at Southwest Minnesota State University and lives in Marshall with his spouse, Judi, and son, Jack. His latest publication is J. Brown, “Journal of Electroanalytical Chemistry,” 2018, 809, 125-129. Jay values the friendships and education from ESF.

## 1986

**Preston Bruenn** (ES) writes, “I was back on campus in April 2019 for the dedication of the Gateway Conference Center and the lecture by the Camp Fire Conservation Fund professor, Dr. Jerry Belant. He gave an impressive presentation and the tour of the Roosevelt Wild Life Station facilities was spectacular. Kudos to ESF for making all of this happen. Outstanding work by the whole team. Looking forward to seeing ESF’s contributions to the next era in American wildlife conservation!”

**Randall Ross** (FRM) writes, “Laurie and I live on the east side of the Blue Ridge in Nellysford, Virginia, now. I am the production manager of a large commercial orchard. We have two children, David and Rene. David has graduated from college and Rene is a sophomore at Marshall University in Huntington, West Virginia I would like to hear from **Jeff Lewis** (’85, EFB) and **Kevin Maurice** (EFB) if they are out there.

## 1987

**Ronald Leonard** (EFB) writes, “I have transferred to the Washington (state) operations of The Nature Conservancy (TNC) after 18 years in the Oregon unit. I will be starting my 28th year with TNC based in Seattle, continuing my career in information technology management and support. In April 2018, I married my husband. This year we celebrated both our 25th and 1st anniversaries. After seven months apart, he secured his transfer to Seattle, where we have initially settled in the SW quadrant. Our goal is to finish our careers and settle into a cozy retirement amongst the Doug firs, cedars, spruces, big-leaf (maybe even the ponderosa pines), waters and mountains of the Pacific Northwest.”

## 1988

**John Harris** (FRM) writes, “Hello to my classmates and alumni from my office in the subtropics of South Florida. I continue to find more business and career opportunities where the forest surrounds the built environment — urban forestry and arboriculture. Leading and mentoring become more of my everyday activities as I reach retirement age. I am currently the president of the Florida Urban Forestry Council and have been recently elected as a representative to the national Sustainable Urban Forests Coalition from American Society of Consulting Arborists. There are so many different organizations and professions that are branches of urban forestry, we need to identify and publicize them to ESF students as potential career choices and to spread the positive impact that ESF alumni make for improving our shared environment. If you are involved with professional organizations that relate to the mission of ESF, let the College know about them so they can be shared with current students.”

## 1994

**Katherine Terry** (EFB) writes, “I was recently hired as a biologist with USDA-NRCS in western Kentucky. I work on wetland restoration through the Farm Bill conservation program. My oldest daughter, Samantha, just graduated from high school, which is hard to believe. Life is good!”



Jay Brown '85



**Preston Bruenn '86** visited the Gateway Center in April 2019 for the Pride of Serengeti Lecture by Dr. Jerrold L. Belant, Camp Fire Conservation Fund Professor of Wildlife Conservation.

### Share Your News

These Class Notes were received by the Alumni Office before June 12, 2019.

The next issue of *the ESF Magazine* will have a submission deadline of December 1, 2019.

**Please share your news with us.**

**Online:** [www.esf.edu/forms/alumni/classnote.asp](http://www.esf.edu/forms/alumni/classnote.asp)

**E-mail:** [alumni@esf.edu](mailto:alumni@esf.edu)

**Mail:** ESF Alumni Office, 219 Bray Hall, 1 Forestry Drive, Syracuse, NY 13210

Notes should be limited to 100 words and either typed or printed legibly.

Photos should be high-resolution or straight from the camera/iPhone jpgs.

# WEDDINGS

## 2009

**Christina Boser** (EFB) and **Michael Toblar** were married April 13, 2019, on Santa Cruz Island in California. Christina is an island ecologist for the Nature Conservancy.

## 2013



**Megan Reymore** (LA) and **Robert Miller '12**, (FCH) were engaged in Zion National Park, Utah in February 2019. They live in the Atlanta area.

## 2014



On May 4, **Tony Liberatore** (PBE) and **Alia Liberatore** were married. Alia graduated from the University of Vermont and is a family engagement specialist with the non-profit Easter Seals. Tony is a production supervisor with Cabot Cheese, making million of pounds of premium cheese a year.



Congratulations to **Andrew LaPolt '14** and **Juliann Schneider '16** on their September 2018 wedding! They had an amazing day shared with their family, friends, and ESF basketball teammates at their wedding in the Adirondacks.



In April, 2019 ESF Students visited the NYS DEC Office in Albany and connected with several ESF alumni including **Quinn Roesch '16**, **Amanda Chudow '16**, **Kristine Ellsworth '15**, **Ethan Sullivan '16**, **Ryan Hodgetts '16** and **Aaron Fischer '15**.

## 1999



**Stephen Brown** (ES) had a successful mountaineering expedition in the Himalayas this past summer. He and his team climbed 20,120-foot Stok Kangri mountain in the Kashmir region of Northern India. The photo is a picture of Stephen with the actual summit enshrouded with Buddhist prayer flags.

## 2000

**Lauchlin Groff** (FRM) writes, "Living the corporate dream on Long Island, working at ABB, a global technology leader. Gorgeous SU grad 18 years my bride, four beautiful children — worth every struggle. Look us up if you ever get to the island."

## 2001

**Peter Hall** (FRM) writes, "Currently working on the Modoc National Forest in northeastern California as a forester. Work on wild land fires in the summer. Two dogs, two kids and one wife keep me busy when not working."

## 2008

**Cherry Countryman** (FNRM) and **Dustin Smith** (LA) were married in July 2014 in Chaumont, New York. They currently

reside with their son, Joshua, in Lombard, Illinois, where they received the 2011 Sustainability Award for the building of their "green" home. Their garden has been featured on the annual Villa Park Garden Club Walk. Dustin is an account manager at Sebert Landscaping and Cherry has just recently accepted a position as an urban forestry technician at Graf Tree Care.

## 2012

**Christopher McCarthy** (LA) works as a real estate salesperson. He has moved to a new commercial real estate brokerage, Keller Williams Realty Greater Rochester.

## 2013

**Tiferet (Zimmern-Kahan) Rose** (EFB) recently moved to Providence, Rhode Island with her husband. In August, they welcomed their first daughter, Galit Evelyn Rose. Tiferet works part time as an educator at a small elementary school. She grows much of their own food in a large community plot.

## 2016

**Alaina Mallette** (ES) writes, "I just celebrated one very exciting year with my partner, Eliel Núñez, who I met while serving in Mexico as a Peace Corps volunteer. Since August 2018, we have been living in Ukraine thanks to my U.S. Fulbright Scholar grant. Eliel and I are looking forward to returning to the U.S. to work and continue to grow."

## 2019

**Remington Doty** (ERE) was accepted to the Peace Corps and is stationed in Panama, where she is training as an environmental and water resources engineer.





**Cherry Countryman '08** explores Watkins Glenn State Park with husband, **Dustin Smith '08** and son, Joshua.



**Lauchlin Groff '00** lives on Long Island with his wife and their four children.



**Alaina Mallett '16** has been living in the Ukraine thanks to her U.S. Fulbright Scholar Grant.

## IN MEMORIAM

The ESF Community sends its sincere condolences to the families of the following alumni.

**Samuel Newman '39\***  
**Robert Bangert '47**  
**Kenneth Borchgrevink '52**  
**Stephen Kirby '53\***  
**John Zerbe '53**  
**Edwin Drabek '55\***  
**Johannes Smid '57\***

**Michael Geiss '69\***  
**Thomas Kelley '71\***  
**Claire (Titcomb) Ders '72\***  
**William Wright '74\***  
**Bruce Ball '81\***  
**Christopher Scalzo '99\***  
**Kayla Hanczyk '15\***

\*Full obituaries are available online at [www.magazine.esf.edu](http://www.magazine.esf.edu).

To send us an obituary

**Email:** [alumni@esf.edu](mailto:alumni@esf.edu)

**Mail:** ESF Alumni Office, 219 Bray Hall, 1 Forestry Drive, Syracuse, NY 13210

## Stock Our Shelves

The new ESF Food Pantry provides free food for any student who is experiencing hunger and/or struggling to obtain food because of financial hardships. The Food Pantry accepts food items, toiletries and monetary gifts as donations. Funds support the daily operations of the facility and program. Your monetary donation will aid with the purchasing of non-perishable food and toiletries. The facility is run by Alpha Xi Sigma, ESF's honor society.

### How to Donate

*Checks can be sent to:*

ESF Undergraduate  
Student Association

Re: Food Pantry

Division of Student Affairs  
14 Bray Hall, 1 Forestry Drive  
Syracuse, NY 13210

[www.esf.edu/foodpantry](http://www.esf.edu/foodpantry)

*Checks can be made payable to:*

ESF Undergraduate Student Association

Gifts can also be made online through the ESF Office of Development at [www.esf.edu/development](http://www.esf.edu/development); select food pantry as your gift designation



**Even \$1 can help provide three meals for hunger relief.**

# ACCOLADES AND PROFESSIONAL NEWS

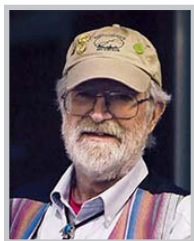
## 1953

**James Smith** (FRM) writes, "I published a short memoir available from Amazon. Some recollections of Cranberry Lake, the summer of 1949 on the Clearwater National Forest and a brief section on the Francis Marion National Forest in 1953. I would love to hear from friends and classmates."

## 1958

At its recent annual meeting, the New England Society of American Foresters presented a special chair to **Ralph D. Nyland** (FOR) in recognition of his contributions to silviculture. The group also presented the Ernest M. Gould Jr. Technology Transfer Award to **Laura S. Kenefic '95** (FRM) in recognition of her contributions to forest science and practice through her research and outreach efforts to forestry practitioners, students and landowners.

## 1963



In November, **Fred Gerty** (FRM) received the Volunteer of the Year award from the Mohonk Preserve at its annual Volunteer Appreciation Dinner. Fred provides gardening and photography services to the

Preserve, serves on the Stewardship Committee and helps with occasional forest management advice. He lives in Gardiner, New York, where he shares chores on their small horse farm with his spouse, Carol Ann.

## 1973



**Carl Eller** (FEG) was named a 2018 Engineer of Distinction by the Rochester Engineering Society. Over his 40-year career in environmental and geotechnical engineering, he has focused on projects that improve communities and the environment. Carl is a senior project manager at Cornerstone Environmental Group.



**Gerald A. Kostyk**, PLS, (RS) has retired from BCA Architects and Engineers where he served as a principal and vice president of land surveying. His long and productive career as a surveyor spanned projects ranging

from boundary surveys to housing developments to bridges and educational facilities throughout New York state. Gerry plans to maintain his land surveyor's registration in order to maintain his long-time membership in the New York State Association of Professional Land Surveyors, which is linked to the Black River Valley Association of Professional Land Surveyors of which he is a charter member and past president.

## 1975

**Kevin Kehoe** (FEG) is working as the president of the Alaska Wild Sheep Foundation, a 501c3 focused on providing funds for the management and enhancement of Dall sheep in Alaska.

## 1979

**Barry LeClair** (FRM), a high school science teacher for Pinellas County (Florida) Public Schools' Educational Alternative Services' Graduation Enhancement Program (aka Dropout Prevention) earned a scholarship from code.org to attend a weeklong program this summer to learn to teach computer science principles. The state of Florida passed legislation allowing a computer science course to substitute for one of two math courses required to graduate from high school, besides the mandatory Algebra 1 and Geometry courses. Barry has earned Best and Brightest Scholarship bonuses for being rated a "highly effective" teacher since becoming a Florida Certified Professional Educator in 2009. Barry has also been an International Society of Arboriculture Certified Arborist since 2005.

## 1982



**Daniel Robison** (FRM) has been named the dean of the College of Agriculture and Life Sciences at Iowa State University.

## 1983

**Kathleen A. Kelly** (LA) is alive, well and happy to announce an exhibit of her recent paintings at the Pennsylvania Horticulture Society through Oct. 17, 2019. The gallery at 100 N. 20th St., Philadelphia, Pennsylvania, is open 9 a.m. to 5 p.m. Monday through Friday. The exhibit is free and open to the public.

## 1984

**Kenneth Soeder** (ENSCI) has retired from his position as president of Jamestown



Technologies and as a member of Azure Water Services. He is looking forward to enjoying more free time with his fiancée, Anne, in their new home in Mystic, Connecticut, as well as traveling more. Ken will

serve as a senior technical advisor for Azure Water Services. He is happy to have the opportunity to continue to provide support to the company in his retirement.

## 1991

**Sheila Myers** (ENSCI), professor at Cayuga Community College, received the 2017 Best Book of Fiction Literary Award from the Adirondack Center for Writing for her novel, "The Night is Done." This is her third novel in a trilogy about the famous Durant family of New York. William West Durant is credited with pioneering the Great Camp Architecture in the Adirondacks. One of Durant's properties is now owned by ESF at the Adirondack Ecological Center at the Huntington Wildlife Forest. The Durant Family Saga trilogy follows the Durant family post-1873. Print versions of the novels can be found on Amazon and at regional bookstores in the Adirondacks. E-books are available on all online platforms. Myers is a regular speaker at museums, historical societies, libraries and bookstores and can be contacted at [www.sheilamyers.com](http://www.sheilamyers.com).

## 1992



**Jackie (Record) Ferrier** (ES) of the Willapa National Wildlife Refuge Complex in Washington has been named the 2019 Paul Kroegel National Wildlife Refuge System Refuge Manager of the Year. The award

is presented by the National Wildlife Refuge Association in honor of Paul Kroegel, the first manager of the first national wildlife refuge. Jackie is the only female to receive the award in its 25-year history. She has been the project leader for the Willapa National Wildlife Refuge Complex, which consists of three refuges: Willapa National Wildlife Refuge (NWR), Julia Butler Hansen Refuge for Columbian White-tailed Deer, and Lewis and Clark NWR, for almost eight years.

**Scott LeRoy** (ES) works as a health officer for Caroline County in Maryland where he has helped enact mobile treatment options for Eastern Shore residents giving them hope for recovery where they live.



## 1995



**Timothy DePriest** (EFB), a river habitat ecologist with DEC's Division of Fish and Wildlife Resources, was honored as the Erie County Federation of Sportsmen's Clubs' Environmentalist of The Year for his hab-

itat work in the Niagara River, including the restoration of Strawberry and Motor Islands, the Spicer Island habitat enhancement project, the recreation of Frog Island, a common tern project and construction of several fish attraction structures in the river.

## 1996

**Rachel Mazur** (EFB) is the author of a series of nature-based books for middle-grade readers called "The Nature Club." Each book features one of the five kids in the club and tells the story of a challenge they face growing up in parallel to a story about an animal and a challenge it faces. In the end, the kids take simple actions to make a difference in their own lives and the lives of the animals they love. Kids who read these books will learn about birds, monarchs, bears, frogs and bobcats, as well as how to protect them.

## 1997



**Jeffrey Rainforth** (WPE), vice president of Phelps Construction Group, celebrated the completion of the Statue of Liberty Museum project on Liberty Island May 16, 2019. Phelps Construction Group acted as the

construction manager for the 26-month project. The 26,000-square-foot building provides the estimated 4.3 million annual visitors the opportunity to learn about the Statue of Liberty's history, influence and legacy through three gallery spaces and artifacts, including the statue's original torch.

## 1998



**Dave Hanny** (ES) was promoted to an associate at Barton & Loguidice. He is a member of the firm's Environmental Practice Area.

## 2001



**Frank Moses** (ES) started a new position in Skaneateles, New York, as executive director of the Skaneateles Lake Association (SLA) in May. Frank will be supporting the protection and promotion of Skaneateles Lake

through continued relationships with the Central New York and Finger Lakes community as well as government, conservation groups, local businesses, academic researchers and other stakeholders. The SLA focuses on initiatives to address harmful algal blooms, aquatic invasive species, reduction of nutrient loading and overall sustainable watershed management based on sound science. Frank is looking forward to tapping into his ESF education and past experiences in community engagement and conservation to help propel SLA's mission.

## 2003



**Caroline (Romano) Wheadon** (FEG) received the Rochester Engineering Society's Young Engineer of the Year Finalist Award for outstanding achievement and contributions to the profession. She was also

profiled in the Rochester Business Journal November 2018 "Fast Start" feature for her leadership and successful project management as the hydropower business leader at LaBella Associates.

## 2006



**Breeanne (Neal) Agett** (EFB) works as the epidemiology manager for the Chautauqua Department of Health. She discovered her passion for epidemics and pandemics while taking a microbiology class at ESF and went

on to earn a graduate degree in public health from SUNY Albany. Her interest in public health is further fueled because it combines both social and hard sciences. Breeanne is one of the initiating members of the Purchase 21 county law that made the sale of tobacco and electronic cigarettes to persons under 21 illegal in Chautauqua County. A state version of the bill is included in the governor's 2019 budget. Breeanne says that governmental

change toward health is a difficult path but that the results are worth the effort.

## 2007



**Bruno Takahashi** (ES) was awarded tenure in the Department of Journalism at Michigan State University, where he works as an associate professor in environmental journalism and communication and

as research director. He was also awarded a multiyear grant from the National Science Foundation to study infrastructure collapse and news practices in Puerto Rico.

## 2013

**Dr. Daniel Clark** (FRM) started a position as an environmental services trainee at the New Jersey Department of Environmental Protection in May 2019.

## 2015

**Kathleen Martin** (ES) was accepted to the master's program for city and regional planning at Temple University.

## 2016

**Matt Bethurem** (ES) accepted a tenure-track faculty position in Environmental Science and Sustainability at Allegheny College in Meadville, Pennsylvania.

**Wiesye Pelupessy** (ES) has been admitted to the Ph.D. program in urban and regional planning at the University at Buffalo and will receive funding from the Government of Indonesia.

## 2017

**Matthew Purdy** (ENSCI) graduated from the University of Iowa College of Public Health in May 2019, earning an M.S. in occupational and environmental health. Matthew had a graduate fellowship and was trained through the Heartland Center for Occupational Safety and Health. He also received the Ralph Vernon Memorial Scholarship through the American Industrial Hygiene Foundation.

## 2018

**Katie Oran** (ES) will be attending Cornell University's Master of City and Regional Planning program this fall. She will have a concentration in international studies in planning.

# FORUM



Call, email, text, Instagram, Facebook, tweet at  
or Pony Express your friends and make plans  
to join us this September.

*Friends are better in person.*



## Little Shop of Horrors?

Student “saws some wood” in rather amusing place

A photo from the College archives dated 1972 shows a student taking a rest by a display of woodcutting equipment. There was no information attached to the photo about where it was taken or why the display was mounted, so it's anybody's guess about why the scene came together this way.

If you have additional information about this photo, please let us know.

Send your comments to [communications@esf.edu](mailto:communications@esf.edu) or mail to ESF Office of Communications and Marketing, 122 Bray Hall, 1 Forestry Drive, Syracuse, NY 13210



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## Make a World of Difference When You Give to The ESF Annual Fund

### **Mikayla Call '18**

**B.S. Environmental and Forest Biology  
ESF National Scholar**

Mikayla Call, a December 2018 alumna, received a National Scholarship as an undergraduate at ESF. She now works for the National Park Service as an avian monitor with Assateague Island National Seashore, where she monitors piping plover and American oyster catcher nesting. She also helps with other wildlife monitoring projects in the park involving feral horses, bald eagles and other bird species.

### **Why ESF?**

I chose ESF because I felt that it would provide me with the classroom and hands-on experiences I needed to succeed as an environmentalist. I knew I wanted to work in a conservation field with a federal agency, and that career aspiration never changed. ESF helped me achieve my goals. I learned important concepts in the classroom and crucial technical skills in labs.

The faculty and staff helped me find internships and study-abroad programs that helped me gain hands-on experience with field research and wildlife monitoring/conservation. I am grateful for everything that ESF offered me and how ESF prepared me for my career.

### **What impact did your National Scholarship have on your education?**

It made the financial burden of attending ESF more manageable for me as an out-of-state student. From my time at Cranberry Lake, to conducting new research in Mongolia, to attending the National Wildlife Society Conference, my experiences were unique, life-changing and vital for my future career. I cannot thank the donors enough for making those experiences possible and for helping shape me into the professional that I am now.

**Meet other scholars like Mikayla and learn how you can make a world of difference for so many at [www.esf.edu/scholars](http://www.esf.edu/scholars).**