

Branching Out

Orono, Maine • Summer 2017

Director's Welcome



A hearty welcome to all from summertime in Maine. The students, faculty, and staff in the School of Forest Resources have finished another successful year. Undergraduate enrollment has continued its four-year climb with total enrollments increasing from 125 in fall 2012 to 227 in the fall 2016 semester. This growth occurred in the Forestry degree program, which

increased from 59 to 98 students, and the interdisciplinary Ecology and Environmental Sciences degree, where the number of students advised by SFR faculty rocketed from 0 to 63. Speaking of flying, our students have been doing quite a bit this past year. An undergraduate team participated in the Quiz Bowl at the Society of American Forester's national convention in Madison, WI, last November. Look for another team at this year's convention in Albuquerque, NM. Read (page 4) about the students who were able to visit Costa Rica, Italy, Mozambique, Peru, Poland, Serbia, South Africa, and Swaziland (not the same trip!).

Closer to home: In June, 39 first-year students finished either a two-week forestry camp held at the Camp Roosevelt Boy Scout Camp in Orrington, or a one-week Parks, Recreation, and Tourism camp held at Schoodic. The next camp is for 38 entering first-year students this August at the 4-H Tanglewood facility near Belfast.

Space is short and so is the summer. I know you'll enjoy reading the newsletter and learning about SWIFT, a program that is positively impacting lives locally and gaining attention nationally. Also learn about the rapid changes in geospatial data and tools that are increasingly key to the education and land management tool kits. The School of Forest Resources teaches the only introductory GIS course at the Orono campus and our Barbara Wheatland Geospatial Analysis Laboratory is a real strength for our faculty and program. Finally, check out our Facebook page (University of Maine School of Forest Resources) as it is often updated with photo's and news items. Please visit us often and stay in touch!



Dr. Stephen Shaler
Director & Professor
School of Forest Resources



p.s. Have some memories or photos of your days at camp you'd like to share? Please email them to sfr@maine.edu and we'll post them on our website and Facebook page!



Supporting Women in Forestry Today

SWIFT was established organically by six people within the School of Forest Resources in the fall of 2015 who formed a planning team to try and address issues in recruitment and retention of women in forestry at all levels, from undergraduate to professional. Led by a planning team of faculty, research scientists, and graduate and undergraduate students, the group meets regularly to support, mentor, and share strategies for success in a male-dominated field.

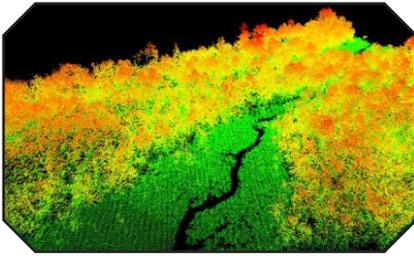
"I have learned that the experiences that I have as a female in a male-dominated space are real. Also, that those experiences are shared among other female students, faculty, staff. As a result, I've gained a confidence in sharing those experiences with others, especially my peer group. I realize, more so now, that when I speak up, I don't just speak for myself."
~survey respondent

Open to all women in the School of Forest Resources, topics thus far have included career preparation and communication styles, strategies for entering the workforce, how to be an advocate/ally, bias basics, career advice, the confidence gap and imposter syndrome, and discrimination. For a vast majority of participants, attending SWIFT meetings has resulted in better awareness of bias, increased confidence to participate in class and field settings, and improved connections with other women in the school.

Although the group takes a break over the summer, plans for the fall include one larger hands-on event, a meeting for discussing strategies related to a topic of interest, and social events to continue to build a supportive community. Ultimately, the group is focused on fostering a community atmosphere that can serve to encourage and empower women in forestry to succeed.



GEOSPATIAL EDUCATION AND RESEARCH



Barbara Wheatland
Geospatial Analysis
Laboratory

Geospatial analysis has progressed well beyond two- and three-dimensional mapping operations and spatial statistics to encompass surface analysis (such as gradient, aspect, and visibility), network and locational analysis, and geovisualization (for example, the creation and manipulation of maps and datasets). To ensure that students have access to the latest facilities and training, the Barbara Wheatland Geospatial Analysis Laboratory in Nutting Hall provides a center of excellence for geospatial analysis for undergraduate education, and for graduate student and faculty research, as well as training for other students in the natural sciences across the campus.

Lab efforts extend well beyond the classroom. In collaboration with Maine forestland managers, the Wheatland Lab is able to showcase new technology, such as unmanned drones that can help inform management decisions. Recently, David Sandilands, a graduate research assistant who is pursuing a master's degree in forest resources, led the lab's aerial monitoring team in an effort to produce a high-resolution orthophoto — an aerial photograph that has been geometrically corrected to have a uniform scale — and Light Detection and Ranging (LiDAR) analysis for Orland's town office. Post-processing of the photos was done using the remote sensing workstation in the lab, and state-provided LiDAR data was used to create a detailed elevation model. By draping the digitized layers over the elevation model, the team was able to produce a 3-D representation that can be used to determine the effects of slope on proposed clearing and construction, as well as water runoff. And Walker Day, who graduated in May, used his skills in the lab to demonstrate that the use of drones and orthophotos rather than traditional aerial reconnaissance can potentially save forestland managers time and money.

The Wheatland Lab is the bedrock of the School of Forest Resource's ability to provide scientific natural resources education using cutting-edge technology and analytical power to address today's complex and multidimensional forestry concerns.

FACULTY TRANSITIONS



We are pleased to announce the promotion of **Dr. Jessica Leahy** to Professor, Human Dimensions of Natural Resources.

Dr. Leahy joined UMaine in 2005 and has taught courses on environmental communication, human dimensions of natural resources, and rural development. Over the past year, Dr. Leahy has juggled her appointment as Interim Associate Dean for Research in the College of Natural Science, Forestry, and Agriculture with research interests focused on family forest landowners, rural prosperity, and public acceptability of forest management.

NEW FACES



Dr. Amber Roth is in the unique position of having a joint appointment in the School of Forest Resources and the Department of Wildlife, Fisheries, and Conservation Biology. As Assistant Professor

of Forest Wildlife Management, Dr. Roth's research focuses on forest management practices to improve declining wildlife species, wildlife habitat best management practices, and conservation planning.



Dr. Adam Daigneault joined the school as an Assistant Professor of Forest, Recreation, and Conservation Policy. Although he is a native Mainer, Dr. Daigneault comes to us most recently from New Zealand where he served as a senior economist at Landcare

Research. His research interests include land use and cover change, climate change and freshwater policy analysis, and timber market analysis.

DEPARTURES

This year we will experience the retirement of a number of our long-term faculty. **Robert S. Seymour** and **Michael E. Day** will be retiring August 31, and **Robert Rice** on December 31. All were valuable researchers, teachers, and mentors to this school, and we wish them well!

What topics are you interested in hearing about in future issues of Branching Out?

Let us know!
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Graduation News and Student Awards

Faculty, family and friends gathered on May 17 for the school's commencement. The school was proud to confer two dozen undergraduate degrees to students with majors in Forestry, Forest Operations, Bioproducts & Bioenergy, or Parks, Recreation and Tourism, along with three double majors (Forestry and



Wildlife, Forestry and BST). Three master's level students also completed their courses in May. At the 2017 Scholarship and Awards Luncheon held in April, almost \$400,000 in scholarship funds were awarded to nearly 100 students.

Donors in attendance: Bud and Helen Blumenstock, Beth Dehaas, Terri Coolong, Michael Griffin, Holly and Dennis Violette, Don Phillips, and Sarah "Sally" Medina.

School of Forest Resources Awards

- Helen Belyea Blumenstock Scholarship: Jack Kilbride
- Ralph H. Griffin Memorial Scholarship: Karin Bothwell
- Dr. Mirosław M. Czapowski '58 Scholarship: Xue Bai Motion
- Charles E. Schomaker Memorial Scholarship: Todd Douglass
- SWOAM Duncan Howlett Graduate Student Award: Ian Anderson

Graduate School Awards

- George F. Dow Graduate Scholarship: Kara Costanza
- Chase Distinguished Research Assistantship: Emily Wilkins

Undergraduate Awards

- Involvement Award: James Zuhlke
- Dwight B. Demeritt Forestry Award: Hunter Manley
- Zi Sigma Pi High Ranking Award, Xi Sigma Pi Field Session Award, Ashman Summer Camp Award, and Fred & Helen Holt Scholarship: Zach Meuse
- Mike & Maine Scholarship, Jan Gilbert Stearns & Roger Smith Jr. Scholarship, and Arthur Randall Scholarship: Ethan Hill

NEWS SNIPPETS

"Forestry and Environmental Science in Maine" (bit.ly/ForestryMaineVideo) is a brand new video about the research, education, and overall impact forestry and environmental science at the University of Maine have on the state and beyond.

There have been significant changes at the administrative level of the College of Natural Sciences, Forestry, and Agriculture. **Dean Ed Ashworth** retired in the fall of 2016, and **Dr. Fred Servello** has now accepted the permanent position after serving as Interim Dean since Dr. Ashworth's retirement.

We extend our best wishes to **Shannon Field**, administrative assistant here at the school since 2013, as she pursues her master's in education, and welcome **Peggy Johnson**, who will take her spot working with our faculty and students.

The School of Forest Resources was honored to recognize **Donna Cassese** as its 2017 Distinguished Alumna at the annual Scholarship and Awards luncheon in the Wells Conference Center. Cassese graduated from UMaine with a B.S. in Forest Management and has been with Sappi for 40 years.

Dr. Jessica Leahy and **Dr. Mindy Crandall** have received USDA National Institute of Food and Agriculture awards. Crandall was awarded \$458,275 for a three-year study to look at economic restructuring, community characteristics, and young people's perceptions of local labor markets in traditionally forest-dependent rural communities in Maine and Oregon. Leahy was awarded \$498,462 for a project which aims to increase knowledge of the production and marketing challenges and opportunities for small- and medium-sized beekeeping and maple syrup producers in the state.

Dr. Doug Gardner and **Dr. Mehdi Tajvidi** won the 2017 First Place George Marra Award for Excellence in Writing for "Hydrogen bonding in wood-based materials: An Update."

Dr. Julia McGuire and others recently published, "What's Next for Maine's Forests? Mill Town and Statewide Community Perspectives on the Value, Management, and Future of Maine Forests" in *Spire: The Maine Journal of Conservation and Sustainability* (umaine.edu/spire), an online, student-produced journal that seeks to promote awareness-raising dialogue to unite Maine communities to effect positive environmental change.

Dr. Stephen Shaler and colleagues are testing Norway spruce planted in the northeast by the Civilian Conservation Corps during the Great Depression to determine if it meets industry standards for construction-grade dimensional lumber.

forest.umaine.edu



“Right now is a great time to be a college student in forestry. There are so many new innovations that are coming out right now, and there is no better place to learn these things than at the University of Maine.”
Walker Day, 2017 Graduate



ALLEN INTERNATIONAL TRAVEL PROGRAM

The Lee & Sunny Allen International Experience Travel Scholarship awards up to \$1,500 for undergraduate and graduate students who plan to study abroad or participate in volunteer experiences, internships, workshops, conferences, or research projects abroad. Students must be enrolled in a School of Forest Resources program, or be a graduate student with an SFR advisor. Last year, six students received support to travel to Costa Rica, Italy, Mozambique, Peru, Poland, Serbia, South Africa, and Swaziland. The award travel support allowed them to learn new skills in the field of forest resources, present their research results to an international audience, apply concepts and skills they have learned at UMaine, explore new research ideas, try new technology used in their field of study, and help build international connections and professional networks. In addition to their educational experiences, awardees report incredible personal growth during their international travels. Highlights of their international travels include greater understanding of, respect for, and admiration of other cultures; boosting confidence to travel internationally; and sampling new foods. **Recipients of the 2017 Awards are: Hope Kohtala, Ashley Cooper, Kara Costanza, Brooke MacDonald, Andrew Morgan, and Lu Wang.**

LAUNCHING THEIR CAREERS

M.S. (Forest Resources) graduate **Aaron Teets** wrapped up his thesis in May and moved west to join Colorado State University's Center for Environmental Management as a staff ecologist working on vegetation mapping projects. **Matthew Scaccia** (M.S. Forest Resources) is now Downeast Coastal Conservancy's land steward. Matt's career path included stints as a park ranger for the Maine Bureau of Parks and Lands and stewardship duties for The Nature Conservancy in the Debsconeg Lakes Wilderness Area. During the course of achieving her master's degree in forest resources, **Lydia Horne** studied how perceptions of risk can influence and determine behavior (such as travel plans), especially in areas that rely on winter nature-based tourism. She is now a science technician at the USGS Science Center in Fort Collins, CO. **Emily Silver Huff** (Ph.D. Forestry) has joined the faculty at Michigan State University as an assistant professor in the Department of Forestry where she is pursuing her interest in the effect of humans on natural resources availability and quality. **CJ Langley** (M.S. Ecology & Environmental Science) has joined the Schoodic Institute as executive assistant. She will be working to advance the Institute's mission to advance ecosystem sciences and learning for all ages through a unique partnership with Acadia National Park.