Make a Difference with a Career in Forestry and Natural Resources

Your Guide to Accredited Forestry and Natural Resources Programs
Why We Chose a Career in Forestry and Natural Resources

Terry Baker, CEO of the Society of American Foresters

Welcome to the 2019-2020 SAF College Guide. Our investment in this document holds a special place for me. Forestry and natural resource management found me late in high school. Once I had my first few experiences learning what it truly meant to steward forested landscapes, I knew it was what I wanted to dedicate my professional career too. It has taken me all over the country to places I never thought I would visit and put me in contact with lifelong friends who have dedicated themselves to working in the crossroads between people and nature. Through showcasing technical and professional programs, this guide creates the opportunity for others to find forestry and natural resource management. They will be able to make their love of the outdoors and environment a professional understanding of meeting the needs of society and nature. There is no greater calling and I look forward to welcoming you.

John McNulty, President of the Society of American Foresters

My life’s journey in forestry began in my youth, roaming the woods and waters of the northeast US and southern Ontario, Canada. The idea that the forest could be my office, captivated me and became my focus beginning my search for the right university that could support that quest. I focused on programs accredited by the Society of American Foresters and selected the University of Maine. I achieved my goal of becoming a forester in 1978 with a BS in forest management.

Looking back on these past forty-one years, I couldn’t have selected a more rewarding and remarkable profession. Descriptors such as innovative, creative, energizing, rewarding and self-actualizing come to mind. Forestry is a profession that will challenge and excite at the same time. You’ll experience long days in the field, exploring the natural world and experiencing unique moments when you encounter an animal or a spectacular view for the first time.

Above all, the best part of the profession is those who have adopted this career path as well. Foresters and other natural resource professionals are a community of conservationists that believes with proper management, forests can provide a sustainable stream of goods and services for society. As a professional forester you will play a key role in ensuring the sustainability of our nation’s forest resources.

Tamara Cushing, Vice President of the Society of American Foresters

I grew up on the beaches of central Florida with a real desire to teach others about the environment. That desire was fueled by stories written in my local paper about all the ways people were damaging our planet. Those stories were well-written but not always founded in good science as I quickly found out. I began college as a wildlife major but changed to natural resources and eventually to forestry after taking silviculture. I was truly impressed that foresters were not just managing the trees for money but rather to help the landowner meet their personal objectives. Prior to forestry school, I had no idea that those objectives were more than just cutting down trees. Landowners were managing for the full suite of wildlife, recreation, and timber!

While silviculture was my first eye-opening class, forest economics showed me my future. I really enjoy using economics as a tool to inform decision-making. After getting my master’s degree, I worked in consulting forestry on land valuation for investors. That was a great experience, but I was certain that I wanted to teach. Now I spend my time teaching forest landowners and college students. My career path has taken me from the south to the Pacific Northwest. The most rewarding part of my job is being able to help landowners meet their objectives and teaching the next generation of foresters!

Cover: L-R
Jasmine Brown is a master’s student at Oregon State University. She earned an undergraduate degree from the University of Connecticut and attended Alabama A&M University for one year in the National Student Exchange. As a Forest Service Pathways Intern, she worked on the Umatilla National Forest in Walla Walla, Washington. Max Schrimpf is a student at The Ohio State University and an intern with the Ohio Division of Forestry. His internship work includes tree measuring, invasive pest surveying, and boundary painting in state forests. Sara Shaw is a forestry student at Green River College and worked as a forestry technician in her own backyard with the US Forest Service. Sarah will graduate in Fall 2019 with five associates of applied science degrees. Photographs courtesy of Jasmine Brown, Max Schrimpf, and Sara Shaw.
A career in forestry and natural resources is anything but ordinary.

If you think a career in forestry and natural resources means you can work outdoors measuring trees or tracking a cougar, you’re not wrong. You can also work in a research lab extracting DNA from fungi, create computer models that map forest coverage, or design communication materials for the public. The jobs available in forestry and natural resources are diverse, which means you can have career that fulfills your passion.

When you choose to study forestry and natural resources, you will make a direct impact upon society in important ways. Park rangers manage our nation’s national parks; researchers develop new technologies to make biofuels; and science educators develop educational lesson plans for children or write articles to inform the public.

Because forestry and natural resource careers encompass a wide range of options, you can choose from a diversity of employers and locations. Although the US Forest Service is the agency most often associated with managing forests, other federal agencies also employ natural resources professionals, including the Bureau of Land Management, National Park Service, Bureau of Indian Affairs, and branches of the military. Even state and city governments need the expertise of graduates with a natural resource background to manage city forests or city watersheds.

There are employment opportunities at colleges or universities as a faculty member, researcher, or manager of school forests. Business organizations, such as accounting firms, banks, and law firms specializing in land investment or estate planning, need employees with a background in natural resources. Manufacturers of paper and wood products hire foresters and scientists to develop more environmentally friendly methods of harvesting trees and making forest products. Nonprofits employ land managers to manage their landscapes and conserve or restore ecological functions. Family forest owners hire forestry consultants to manage their land for diverse objectives.

In short, the list of opportunities in forestry and natural resources is nearly endless.
Why a Career in Forestry and Natural Resources?

There has never been a better time to consider a career in forestry or a natural resource field. According to the US Bureau of Labor Statistics, foresters and conservation scientists make on average $60,000 a year, and the industry is expecting to grow by seven percent.

Whether you choose to attend a university or community college, there will be a career and job waiting for you after graduation. Many programs help connect you to internships or seasonal jobs that will provide you with the experience that employers are looking for. Here is a sampling of job titles and the starting salaries for forestry and natural resources positions.

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Required Education</th>
<th>Minimum Experience</th>
<th>Starting Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Management Specialist</td>
<td>BS in forestry</td>
<td>3 years</td>
<td>$38,000</td>
</tr>
<tr>
<td>Wetland Restoration Specialist</td>
<td>BA/BS in science-related field</td>
<td>None</td>
<td>$40,000</td>
</tr>
<tr>
<td>Forester I</td>
<td>BS in forestry</td>
<td>1 year</td>
<td>$35,700</td>
</tr>
<tr>
<td>Staff Ecologist</td>
<td>BS/MS in natural resource field</td>
<td>1-2 years</td>
<td>$38,000</td>
</tr>
<tr>
<td>Wildlife Specialist</td>
<td>BS in wildlife science</td>
<td>2 years</td>
<td>$39,900</td>
</tr>
<tr>
<td>Forester I</td>
<td>BS in forestry or natural resources</td>
<td>2 years</td>
<td>$47,000</td>
</tr>
</tbody>
</table>

Curious to see what other jobs are available in forestry and natural resources? Visit SAF’s Career Center at https://careercenter.eforester.org/.

“I can’t think of a more exciting and advantageous time to be entering the forestry and natural resources field. We are on the edge of huge advances in technology and silviculture, and with the baby boomer generation reaching retirement age, the opportunities for job placement and personal growth will be great. Not only that, the natural resources field needs to attract the ‘best and brightest’ young people to reach its full potential.”

—Dave Lewis, CF, ACF
Vice President, Southern Forestry Consultants
Former President Society of American Foresters
How to Get a Head Start on Your Career in Natural Resources

Choosing the right school with the right program is a daunting task, but to get the most out of your education and access the best career opportunities following graduation, choose a Society of American Foresters-accredited forestry, urban forestry, natural resource, or forest technology program. Many of the people featured in this guide graduated from one of these accredited programs.

As the largest national scientific and educational organization serving the forestry profession, SAF has been a valued source of information, networking, and education for more than a century. We help students, young professionals, and seasoned veterans of the industry learn about, prepare for, and take on the challenges and changes in natural resource management.

Over 80 years ago, SAF established an accreditation program to ensure that postsecondary forestry programs across the country provide the highest standard of education possible. Accreditation focuses on the specific curriculum taught to students and the faculty and learning environment—not on specific colleges or institutions—and uses strict criteria to rate coursework and other factors.

To be accredited by SAF, academic programs must prepare a self-evaluation report, host an onsite review by a visiting team, and undergo review by the SAF Committee on Accreditation or Committee on Forest Technology School Accreditation, which determines that a degree program option meets SAF accreditation standards for mission, goals and objectives, program organization and administration, students, parent-institution support, curriculum, and faculty.

Academic programs that are candidates for SAF accreditation have prepared a Report on Candidate Eligibility for the degree program options specified, which has been reviewed by the SAF Committee on Accreditation or Committee on Forest Technology School Accreditation and been found to meet the prerequisite criteria and to have the promise of meeting SAF accreditation standards. Candidacy does not guarantee eventual accreditation.

If you want to learn more about the forestry and natural resources profession, visit www.eforester.org.

Faces of Forestry

Name: Rocco Saracina

Current Position: Manager, Conservation Partnerships, Sustainable Forestry Initiative

College(s) attended, and degree(s) earned: I attended Humboldt State University and earned a BS in Environmental Science: Ecological Restoration from, and at Virginia Polytechnic Institute and State University, I earned a MS in Natural Resources: Sustainability Leadership.

Growing up in the urban DC metropolitan region, I always found peace in the forest. As I entered college, my goals were easy to state but harder to achieve: saving the planet. I presumed I would find a career in restoring degraded landscapes. After bouncing between internships, I landed at the Sustainable Forestry Initiative (SFI), a nonprofit dedicated to advancing sustainability through forest-focused collaborations. SFI's scope includes supply chain sustainability through our forest certification system, leadership in conservation, community building, and environmental education initiatives. SFI works with the forest sector, brand owners, conservation groups, educators, local communities, Indigenous peoples, governments, and many more.

For my part, I serve as a chief of staff for SFI's conservation team; juggling priorities and managing relationships across an ever-growing network of partners. SFI's certification footprint of 360 million acres across the US and Canada provides the chance to influence good management at extraordinary scale. I also lead our university engagement efforts, including work to increase inclusivity of underrepresented people across natural resource professions. I see sustainability evolving from discrete environmental and social shifts; to demands for transparency and transformative change as a baseline; to finally, society reimagined as global stewards within a shared ecosystem. Forests are at the intersection of that progression, and working to shepherd partnerships, enhance connections between markets and conservation, and foster diversity is the privilege of a lifetime. I have to pinch myself at work sometimes to make sure it is not just a dream.

William Lyons is a graduate student at Kentucky State University and he is researching how drones can be used to quantify invasive plant species along roadsides adjacent to forests. Photograph courtesy of William Lyons.
How to Choose an SAF-Accredited Program

If you graduate from an SAF-accredited program of study, you will be well-grounded in the professional and technical skill sets that employers are looking for, whether you decide to become a forest manager or park ranger, outreach specialist or researcher.

SAF offers four areas of study under which a degree program may become accredited.

**Forest Technology:** These two-year forest technology programs focus on applied skills and lead to an associate of applied science or associate of science degree. In the workplace, forest technology graduates implement forest management plans by laying out timber sales, supervising planting and thinning crews, conducting prescribed burns, and building recreational trails, among other responsibilities. Forestry technicians often have the opportunity to work closely with other technicians specializing in wildlife, fisheries, arboriculture, or recreation.

**Forestry:** These four-year forestry programs focus on the philosophy and practice of management of forest resources for multiple objectives, including wood, water, wildlife, and recreation. Forestry undergraduate programs combine a strong science- and math-based liberal arts education in the first two years with a series of professional and field courses in the junior and senior years. Forestry graduates often work in forest resource planning and development, management and supervision, and policy and program administration, although some specialize. They often work as part of an interdisciplinary team with other professionals such as wildlife biologists, planners, or wilderness recreation specialists. Some US state boards of forestry licensure will allow only graduates of SAF-accredited forestry programs to become credentialed.

**Urban Forestry:** Like four-year forestry programs, urban forestry programs combine a science- and math-based liberal arts education with a series of professional courses designed to prepare graduates to work in an urban or suburban environment. Urban foresters use forestry skills and tools to manage the health and ecological functioning of urban green spaces to provide multiple amenities, including reducing heat effects, protecting water quality, providing recreational opportunities, and improving air quality. They often work as part of an interdisciplinary team with landscape architects, arborists, city planners, and recreation specialists.

**Natural Resources and Ecosystem Management (NREM):** These four-year programs focus on the stewardship and purposeful management of any natural landscape to achieve desired objectives through the informed application of professional knowledge and skills. The programs are comprised of science- and math-based interdisciplinary courses, with an emphasis on human components and their interaction with ecosystems. NREM graduates use many tools and skills of forestry, wildlife, fisheries, range, watershed, and recreation disciplines to manage landscapes intended to be kept in a natural condition and managed for a multitude of reasons. In the workplace, they often work in resource planning and development, management and supervision, or policy and program administration.
Faces of Forestry

Name: Serra J. Hoagland, Certified Wildlife Biologist, PhD

Current Position: Biologist/Liaison Officer for the US Forest Service

College(s) attended and degree(s) earned: I attended Cal Poly and earned a BS in Ecology and Systematic Biology at UC Santa Barbara, I earned a MS in Environmental Science & Management, and at Northern Arizona University, I received a PhD in Forestry.

The first time I translated what basal area and TPA meant was during my master’s degree where I was defending my thesis on oak woodland ecology and management for Tejon Ranch, which is California’s largest piece of privately owned property. Prior to that experience, I had primarily studied ecology and was interested in wildlife management. The experience at UC Santa Barbara lead me to present my findings at the Intertribal Timber Council’s (ITC) annual timber symposium, which is the largest gathering of tribal forestry professionals. Once I attended ITC, I was hooked on forestry and more specifically, tribal forestry.

Native American tribes manage over 18 million acres of forests and have been found to balance the triple bottom line of meeting social, Ecologic, and economic needs of their forested communities. For instance, the research I began while at Northern Arizona University during my PhD focused on assessing Mexican spotted owl habitat on tribal and non-tribal lands. I collected stand level and remotely sensed data to compare owl habitat across multiple jurisdictions. Interestingly, I found that that owl habitat on tribal lands was different from what was recommended in the USFWS Recovery Plan guidelines for nesting and roosting habitat for the species. In short, tribal lands provided us a new lens for describing habitat conditions that owls will occupy. We often find tribes in the west, in particular, are balancing multiple objectives, such as the example with the spotted owl habitat and reducing fire risk by conducting fuel reduction and timber harvests, even in areas close to threatened and endangered species habitat.

For me, bridging these gaps between models of forest stewardship is the only way we’re going to continue to solve the complex ecological problems our society is facing today. There’s so much we can learn from our partners, especially tribes who have been stewarding the landscape since time immemorial. Not only can we cross boundaries in terms of improving our understanding of different types of forest management but we can also cross disciplines. Being someone who cares deeply about wildlife, I also have a strong and deep appreciation for the forest and the trees, recognizing that they are intimately linked together. As a Native American (Laguna Pueblo) it’s hard for me to separate the two because in my mind I’m always thinking about the relationship of one to the other and how they are connected rather than separated from each other. Holistic, long-term perspectives that are often found in indigenous communities can inform our science and improve our understanding about human’s role in the environment.
Anastasia Lopez is a junior at Northern Arizona University and is pursuing a BS in Forestry with a Certificate in Wildlife Ecology and Management. During her entomology/pathology class, Anastasia and her classmates spent the day outside studying insects and fungi. This summer, she worked for the 4 Forest Restoration Initiative measuring plots. Photograph courtesy of Anastasia Lopez.

SAF-Accredited and Candidate Degree Programs

Every community college or university program is different, even among accredited programs. Geography, primary employment sectors of the region, and faculty all make each school unique. To make an informed decision, you should review all of the factors that make a school and its natural resource programs distinct. Many academic programs offer a diversity of options within a program, not all of which are accredited. The following listings categorize accredited degree program options according to the standard under which they are accredited and candidate degree program options under the standard under which they have candidacy status.

Alabama

Alabama A&M University, College of Agricultural, Life and Natural Sciences, Department of Biological & Environmental Sciences [See page 29] Website: https://www.aamu.edu/academics/undergraduate-studies/bachelor-science-forestry.html Degree awarded: BS in Forestry Options accredited Forestry: All curricular options leading to the BS in Forestry

Auburn University, School of Forestry & Wildlife Science; Samuel Ginn College of Engineering Website: https://sfw.s.auburn.edu Degree awarded: BS in Forestry, BS in Forest Engineering, Master of Natural Resources Options accredited Forestry: Forestry major; Forest Engineering option of the Biosystems Engineering program with a Forest Resources Minor; Master of Natural Resources Professional Forester

Arizona

Northern Arizona University, School of Forestry Website: https://nau.edu/forestry/ Degree awarded: BS Options accredited Forestry: Forestry [extended major]

Arkansas

University of Arkansas at Monticello, College of Forestry, Agriculture and Natural Resources Website: http://www.uammont.edu/pages/department/college-forest-agri-natural-resources/ Degree awarded: BS in Natural Resources Management Options accredited Forestry: Forestry

British Columbia - Canada

University of British Columbia, Faculty of Forestry Website: http://www.forestry.ubc.ca/ Degree awarded: Master of Sustainable Forest Management Options accredited Forestry: Master of Sustainable Forest Management

California

California Polytechnic State University, College of Agriculture, Food and Environmental Sciences, Natural Resources Management and Environmental Sciences Department Website: https://nres.calpoly.edu/ Degree awarded: BS in Forestry and Natural Resources Options accredited Forestry: Environmental Planning and Assessment, Forest and Environmental Practices, Urban Forestry, Watershed Management and Hydrology, Wildland Fire and Fuels Management, Wildlife Biology, and Individualized Course of Study

College of the Redwoods, Career and Technical Education Website: http://www.redwoods.edu/forestry Degree awarded: Associate of Science Candidate Options Forest Technology: Forest and Natural Resources Technology

Humboldt State University, College of Natural Resources and Sciences, Department of Forestry and Wildland Resources Website: http://www.humboldt.edu/fwr Degree awarded: BS in Forestry Options accredited Forestry: All curricular options leading to the BS in Forestry

Reedley College, Department of Agriculture and Natural Resources Website: http://www.reedleycollege.edu Degree awarded: Associate of Science Options accredited Forest Technology: Forestry/ Natural Resources Technology

University of California-Berkeley, College of Natural Resources, Environmental Science, Policy and Management Website: https://nature.berkeley.edu/advising/majors/forestry-and-natural-resources Degree awarded: BS in Ecosystem Management and Forestry Options accredited Forestry: Forestry Options accredited NREM: Natural Resource Management

Colorado

Colorado State University, Warner College of Natural Resources, Department of Forest and Rangeland Stewardship [See page 21] Website: http://warnercnr.colostate.edu/departments/frs Degree awarded: BS in Forest and Rangeland Stewardship Options accredited Forestry: Forest Biology; Forest Fire Science; Forest Management

Front Range Community College, Natural, Applied, and Environmental Sciences Department Website: http://www.frontrange.edu Degree awarded: Associate of Applied Science Options Accredited Forest Technology: Forest Technology

Connecticut

Yale University, School of Forestry and Environmental Studies [See page 27] Website: https://environment.yale.edu Degree awarded: Master of Forestry Options accredited Forestry: Two-year option

There is an incredible diversity of research within forestry and natural resources, so you will not lack for finding a research project and mentor when enrolling in an SAF-accredited program. At the University of Florida is the Forest Entomology Lab headed by Jiri Hulcr, an associate professor. Jiri and his students study the ambrosia symbiotic complex or the relationship of beetles, fungi, and bacteria. Jiri received one PhD from the University of South Bohemia and one from Michigan State. Photograph courtesy of Jiri Hulcr.
Florida

University of Florida, School of Forest Resources and Conservation
Website: http://www.ssrc.ufl.edu
Degree awarded: BS in Forest Resources and Conservation
Options accredited Forestry: Business Management; Environmental Pre-Law; Forest Resources Management; Protected Areas Management; Recreation Resources Management; Urban Forestry

Georgia

Abraham Baldwin Agricultural College, School of Agriculture and Natural Resources, Department of Forest Resources
Website: https://www.abad.edu/school-of-agriculture-and-natural-resources/
Degree awarded: BS in Natural Resource Management
Candidate Options Forestry: Forestry track

University of Georgia, Warnell School of Forestry and Natural Resources
Website: http://www.warnell.uga.edu
Degree awarded: BS in Forest Resources; Master of Forest Resources
Options accredited Forestry: Forestry major leading to the BS; Forestry and Forest Business options leading to the MFR

Idaho

University of Idaho, College of Natural Resources, Department of Forest, Rangeland, and Fire Sciences (See page 19)
Website: https://www.uidaho.edu/cnr/departments/forestry/7
Degree awarded: BS in Forestry
Options accredited Forestry: Forestry

Illinois

Southern Illinois University, College of Agricultural Sciences, Department of Forestry (See pages 16–17)
Website: https://coas.siue.edu/academics/departments/forestry/
Degree awarded: BS in Forestry
Options accredited Forestry: Forest Hydrology; Forest Recreation and Park Management; Forest Resources Management; Urban Forest Management; Wildlife Habitat Management and Conservation

Indiana

Purdue University, College of Agriculture, Department of Forestry and Natural Resources (See page 26)
Website: https://ag.purdue.edu/fnr/
Degree awarded: BS in Forestry
Options accredited Forestry: Forestry

Iowa

Iowa State University, College of Agriculture and Life Sciences, Department of Natural Resource Ecology and Management
Website: https://www.nrem.iastate.edu
Degree awarded: BS in Forestry
Options accredited Forestry: Forest Ecosystem Management; Natural Resource Conservation and Restoration; Urban and Community Forestry

Kentucky

University of Kentucky, College of Agriculture, Food and Environment, Department of Forestry and Natural Resources (See page 18)
Website: https://forestry.ca.uky.edu
Degree awarded: BS in Forestry
Options accredited Forestry: Forestry

Louisiana

Louisiana State University, School of Renewable Natural Resources
Website: http://www.rnr.lsu.edu
Degree awarded: BS in Natural Resource Ecology and Management
Options accredited Forestry: Forest Resource Management (FRM); Forest Enterprise (FENT); Wildlife Habitat Conservation and Management (WHCM)
Options accredited NREM: Conservation Biology (CB); Ecological Restoration (ER); Wetland Science (WS)

Louisiana Tech University, School of Agricultural Sciences and Forestry
Website: https://ans.latech.edu/agricultural-sciences-forestry/forestry/
Degree awarded: BS in Forestry
Options accredited Forestry: Forest Management; Wildlife Habitat Management

Southern Illinois University and A&M College, College of Agricultural, Family, and Consumer Sciences, Department of Urban Forestry and Natural Resources (See page 30)
Website: http://www.subr.edu/subhome/urban-forestry-and-natural-resources
Degree awarded: BS
Candidate Options Urban Forestry: Urban Forestry Major

Maine

University of Maine, School of Forest Resources (See page 22)
Website: http://www.forestry.umaine.edu
Degree awarded: BS in Forestry; BS in Forest Operations, Bioproducts, & Bioenergy; BS in Parks, Recreation, & Tourism; Master of Forestry
Options accredited Forestry: Forestry; Forest Operations, Bioproducts & Bioenergy; Parks and Recreation Management; Master of Forestry

University of Maine Fort Kent, University of Maine Fort Kent
Website: http://www.umfk.edu/forestry
Degree awarded: Associate of Science
Options accredited Forest Technology: Forest Management

Maryland

Allegany College of Maryland, Division of Forestry, Math and Science
Website: http://www.allegany.edu/forestry
Degree awarded: BS in Natural Resources
Options accredited Forest Technology: Forest Technology

Massachusetts

University of Massachusetts — Amherst, College of Natural Sciences, Department of Environmental Conservation
Website: https://eco.umass.edu/
Degree awarded: BS in Natural Resources Conservation
Options accredited Forestry: Forest Ecology & Conservation

Michigan

Michigan State University, College of Agriculture and Natural Resources, Department of Forestry (See page 19)
Website: http://www.for.msu.edu
Degree awarded: BS in Forestry
Options accredited Forestry: Degree program leading to the BS in Forestry

Michigan Technological University, School of Forest Resources & Environmental Science
Website: http://www.mtu.edu/forest/
Degree awarded: BS in Forestry, Master of Forestry
Options accredited Forestry: Degree program leading to the BS in Forestry
Options accredited Forestry: Degree program leading to the MF

Halley Hemingway is a graduate student at the University of Idaho and a forester for Bennet Lumber Products Inc. For her graduate research, she is working on a forest productivity model project, and her study area is in Northern Idaho. She earned a BS in Geography; GIS Option from the University of Idaho. Photograph courtesy of Halley Hemingway.
Forestry and natural resources encompass a breadth of disciplines. Ram Adhikari is a PhD student at Mississippi State University studying forest economics, specifically landowner satisfaction with conservation programs and valuation of non-market ecosystem services. In April 2019, he received the outstanding PhD student award. Ram earned a BS in Forestry from Nepal’s Institute of Forestry, Tribhuvan University and an MS in Sustainable Resource Management from Germany’s Technische Universität München. Photograph courtesy of Ram Adhikari.

Missouri

University of Missouri, School of Natural Resources (See page 23)
Website: http://www.snr.missouri.edu
Degree awarded: BS in Natural Resource Science and Management
Options accredited: Forestry; Forest Resources
Options accredited: NREM; Terrestrial Ecosystems

Montana

Salish Kootenai College, Department of Forestry
Website: http://naturalresources.skc.edu/forestry/
Degree awarded: BS in Forestry
Candidate Options: Forestry; Forest Management; Wildland Fire

University of Montana, W. A. Franke College of Forestry and Conservation, Department of Forest Management (See page 28)
Website: www.cfc.umont.edu
Degree awarded: BS in Forestry
Options accredited: Forestry; Forest Resources Management

New Brunswick - Canada

Maritime College of Forest Technology, Maritime College of Forest Technology
Website: http://www.mcft.ca
Degree awarded: Diploma
Candidate Options: Forest Technology; Forest Technology

New Hampshire

University of New Hampshire, Thompson School of Applied Science
Website: https://colsa.unh.edu/thompson-school-applied-science
Degree awarded: Associate of Applied Science
Options accredited: Forest Technology; Forest Technology

New Jersey

Rutgers University – New Brunswick, College of Natural Resources, Department of Forest, Rangeland, and Fire Sciences (See page 19)
Website: https://sebs.rutgers.edu
Degree awarded: BS
Candidate Options: Urban Forestry; Urban Forestry Track in the Environmental Planning Major
Candidate Options: NREM; Forest Ecology and Management Track in the Ecology, Evolution and Natural Resources Major

New Mexico

New Mexico Highlands University, College of Arts and Sciences, Department of Natural Resources Management
Website: http://www.nmhu.edu
Degree awarded: BS
Options accredited: Forestry; Forestry; Wildland Fire Management

New York

Paul Smith’s College of Arts and Sciences, Department of Forestry (See page 20)
Website: http://www.paulsmiths.edu
Degree awarded: Associate of Applied Science
Options Accredited: Forest Technology; Forest Technology
Degree Awarded: BS in Forestry
Options Accredited: Forestry; All curricular options leading to the BS in Forestry

Faces of Forestry

Name: Justin Waskiewicz
Current Position: Assistant Professor of Forestry, Paul Smith’s College
College[s] attended and degree[s] earned: I attended Northern Arizona University and earned a BS and MS in Forestry and Graduate Certificate in Applied Statistics, and from the University of Maine, I earned a PhD in Forest Resources.

Like many people in this field, I became interested in forestry through a love of the outdoors. Trees in particular have always held a special fascination. I have enjoyed looking at them, reading about them, measuring them, growing and tending them since before high school and was delighted to continue to do so through college. That something so personally enjoyable and interesting as trees would also happen be so useful to the world, in so many ways, is a wonderful coincidence that makes possible a tremendous variety of careers, including mine.

I teach forestry at a small college in the Adirondack Mountains of New York — Forest Ecology, Measurements, and Silviculture are among the courses I have the pleasure of teaching. I spend a quarter to a third of my work week outdoors with field labs, and much of my time working directly with students eager to learn about the same things that I’ve also been eager to learn about, for years. Actually, the best thing about my job is that it keeps me actively learning about this subject, whenever I update a lecture, design a lab activity, engage a new field trip host or guest speaker, tackle a new course at the margins of my previous experience, and every time I meet a new student that brings their own unique experience and perspective to the classroom.
SUNY College of Environmental Science and Forestry, Department of Forest and Natural Resources Management
Website: http://www.esf.edu/for/
Degree awarded: BS in Forest Resources Management
Options accredited Forestry: Forest Ecosystem Science; Forest Resource Management
Degree awarded: Master of Forestry
Options accredited Forestry: Master of Forestry
Degree awarded: BS in Natural Resources Management
Options accredited NREM: Natural Resources Management

SUNY College of Environmental Science and Forestry, Ranger School
Website: http://www.esf.edu/rangerschool
Degree awarded: Associate of Applied Science
Options accredited Forest Technology: Forest Technology

SUNY Morrisville, Department of Environmental Sciences
Website: http://www.morrisville.edu
Degree awarded: Associate of Applied Science
Concentrations accredited Forest Technology: Forestry

North Carolina State University, College of Natural Resources, Department of Forestry and Environmental Resources
Website: https://cnr.ncsu.edu/
Degree awarded: BS in Forestry Management
Options accredited Forestry: Degree program leading to the BS in Forestry Management
Degree awarded: Master of Forestry
Options accredited Forestry: Degree program leading to the MF
Degree awarded: BS in Natural Resources
Options accredited NREM: Ecosystem Assessment; Policy & Administration

Wayne Community College, Department of Agriculture and Natural Resources
Website: https://www.wagncce.edu/programs/forest-management-technology/
Degree awarded: Associate of Applied Science
Candidate Options Forest Technology: Forest Management Technology

Ohio
Hocking College, Natural Resources
Website: http://www.hocking.edu
Degree awarded: Associate of Applied Science
Candidate Options Forest Technology: Forest Management

Ohio State University, School of Environment and Natural Resources
Website: http://senr.osu.edu
Degree awarded: BS in Environment and Natural Resources
Options accredited Forestry: Forest Ecosystem Science & Management; Forestry & Wildlife Management

Oklahoma
Oklahoma State University, Division of Agricultural Sciences and Natural Resources, Department of Natural Resource Ecology & Management (See page 25)
Website: http://nrem.okstate.edu
Degree awarded: BS in Agricultural Sciences and Natural Resources
Options accredited Forestry: Forest Ecology & Management

Oregon
Central Oregon Community College, Central Oregon Community College
Website: http://www.cocc.edu
Degree awarded: Associate of Applied Science
Options accredited Forest Technology: Forest Technology

Mt. Hood Community College, Natural Resources Technology
Website: http://www.mhcc.edu
Degree awarded: Associate of Applied Science
Options Accredited Forest Technology: Forest Resources

Oregon State University, College of Forestry, Department of Forest Engineering, Resources and Management
Website: http://www.forestry.oregonstate.edu
Degree awarded: BS in Forestry
Options accredited Forestry: Forest Management; Forest Operations; Landscape Processes and Management
Degree awarded: BS in Forest Engineering
Options accredited Forestry: Forest Engineering
Degree awarded: BS in Forest Engineering/BS in Civil Engineering (dual degree)
Options accredited Forestry: Forest Engineering/Civil Engineering

Pennsylvania
Pennsylvania College of Technology, School of Natural Resources Management
Website: http://www.pct.edu
Degree awarded: Associate of Applied Science
Options accredited Forest Technology: Forest Technology

Pennsylvania State University, College of Agricultural Sciences, Department of Ecosystem Science and Management
Website: http://www.ecosystems.psu.edu
Degree awarded: BS in Forest Ecosystem Management
Options accredited Forestry: Community and Urban Forest Management; Forest Biology; Forest Management;

Pennsylvania State University-Mont Alto, Forest Technology Program
Website: https://montalto.psu.edu/academics/associate/forestry-technology-degrees
Degree awarded: Associate of Science
Options accredited Forest Technology: Forest Technology

Faces of Forestry

Name: Travis Bowden

Current Position: Regeneration Testing Forester, Meridian Seed Orchard, Washington Department of Natural Resources

College[s] attended and degree[s] earned:
I attended the University of Kentucky and earned a BS in Forestry.

After leaving the military, I knew I wanted to pursue and education in a career that allowed me to be outside, and forestry seemed to be a great fit. Studying and working in forestry has been one of my greatest decisions, what’s better than getting paid to walk around in the woods?

My role as a regeneration forester changes throughout the year keeping things interesting. I work on the testing site of our program at the orchard and establishing and managing progeny sites throughout western Washington. About 50 percent of my work is in the field, the other time is spent in the office or in the orchard. What I love the most about my job is knowing my work is helping insure that genetically selected seed is available for reforestation across the state, insuring healthy and productive forests.
South Carolina

Clemson University, Department of Forestry & Environmental Conservation
Website: https://www.clemson.edu/cafls/departments/fec
Degree awarded: BS
Options accredited Forestry: Forest Resource Management

Horry-Georgetown Technical College, Natural Resources Technology
Website: http://www.hgtc.edu
Degree awarded: Associate of Applied Science
Options accredited Forest Technology: Forestry Management Technology Path

Tennessee

University of Tennessee, Herbert College of Agriculture, Department of Forestry, Wildlife and Fisheries (See page 24)
Website: https://ag.tennessee.edu/fwf/Pages/default.aspx
Degree awarded: BS in Forestry
Options accredited Forestry: Forest Resources Management; Restoration and Conservation Science; Urban Forestry
Degree awarded: BS in Wildlife and Fisheries Science
Options accredited NREM: Wildlife and Fisheries Management

Texas

Stephen F. Austin State University, Arthur Temple College of Forestry and Agriculture
Website: http://atcofa.sfasu.edu
Degree awarded: BS in Forestry
Options accredited Forestry: Forestry (tailored option); Forest Management; Forest Wildlife Management; Forest Recreation

Texas A&M University, College of Agriculture and Life Sciences, Department of Ecosystem Science and Management
Website: http://essm.tamu.edu
Degree awarded: BS in Forestry
Options accredited Forestry: Forest Resource Management

Utah

Utah State University, Quinney College of Natural Resources, Department of Wildland Resources
Website: http://www.cnr.usu.edu/wild
Degree awarded: BS
Options accredited Forestry: Forest Ecology and Management major

Vermont

University of Vermont, Rubenstein School of Environment and Natural Resources
Website: http://www.uvm.edu/rсент/
Degree awarded: BS in Forestry
Options Accredited Forestry: Degree program leading to the BS. in Forestry

Virginia

Dabney S. Lancaster Community College, Forest Technology Department
Website: www.dslcc.edu
Degree awarded: Associate of Applied Science
Options accredited Forest Technology: Forest Technology

Virginia Polytechnic Institute and State University, College of Natural Resources and Environment, Department of Forest Resources and Environmental Conservation
Website: http://frec.vt.edu
Degree awarded: BS in Forest Resources and Environmental Conservation
Options accredited Forestry: Forest Operations and Business; Forest Resource Management
Options accredited Urban Forestry: Urban Forestry

Washington

Green River College, Technology Division
Website: http://www.greenriver.edu
Degree awarded: Associate of Applied Science
Options accredited Forest Technology: Forestry

Spokane Community College, Natural Resource Management Department
Website: http://www.scc.spokane.edu
Degree awarded: Associate of Applied Science
Options accredited Forest Technology: Forestry

University of Washington, School of Environmental and Forest Sciences [See page 23]
Website: http://www.sefs.uw.edu
Degree awarded: BS in Environmental Science and Terrestrial Resource Management
Options accredited Forestry: Sustainable Forest Management
Degree awarded: Master of Forest Resources – Forest Management [MFR]
Options accredited Forestry: Forest Management Degree awarded: BS in Environmental Science and Terrestrial Resource Management
Options accredited NREM: Natural Resource and Environmental Management

Washington State University, College of Agricultural, Human, and Natural Resource Sciences, School of the Environment
Website: http://cahnrs.wsu.edu/soe/
Degree awarded: BS in Earth and Environmental Science
Candidate Options Forestry: Forestry major curriculum

West Virginia

Glennie State College, Department of Land Resources
Website: http://www.glennie.edu
Degree awarded: Associate of Science
Options Accredited: Forest Technology: Forest Technology

West Virginia University, Davis College of Agriculture, Natural Resources & Design
Website: http://forestry.wvu.edu
Degree awarded: BS in Forestry
Options accredited Forestry: Forest Resources Management; Recreation, Parks, and Tourism Resources

Wisconsin

University of Wisconsin-Madison, College of Agricultural and Life Sciences, Department of Forest and Wildlife Ecology
Website: http://www.fwe.wisc.edu
Degree awarded: BS in Forest Science
Options accredited Forestry: Forest Conservation; Forest & Environment; Forest Management

University of Wisconsin-Stevens Point, College of Natural Resources
Website: http://www.uwsp.edu/cnr/
Degree awarded: BS in Forestry
Options accredited Forestry: Forest Administration and Utilization; Forest Ecosystem Restoration and Management; Forest Management; Forest Recreation; Urban Forestry
Options accredited Urban Forestry: Urban Forestry

Dr. David Coyle is an assistant professor of forest health and invasive species at Clemson University. He works with individuals from the South Carolina Forestry Commission and Thompson Forestry Consultants to look for better ways to manage invasive plants, specifically Callery pear. Photograph courtesy of David Coyle.
Each year at National Convention, schools compete in the annual Quiz Bowl, a competition that tests natural resources knowledge from agroforestry to wildlife. Last year the team from Stephen F. Austin State University won. Left to right: Reid Viegut, Christopher Longman, Rachel Murray, and Justin Blakely. Photograph by Wasim Muklashy.

While a student at Green River College, Mari Knutson was an intern with Seattle Public Utilities inside the Cedar River Watershed. One of her job duties was locating piles of felled hazard trees or thinned trees that are given to the Muckleshoot tribe for firewood. After obtaining the GPS data points, Mari created a map to give to the tribe and calculated total wood volume. She graduated in June of 2019 with a BAS in Natural Resources Park & Land Management. Mari is interested in promoting conservation, conducting restoration, and researching best management practices for our parks and natural lands, taking into account global climate change stressors. “I tell my kids that I am here because I am supposed to help save the planet,” she says. “I am only half joking, and they half believe me! Photograph courtesy of Mari Knutson.

When you enroll in a SAF-accredited program, not only will you learn how to manage the United States’ natural resources, but study abroad programs will take you around the world to see how other countries manage their natural resources. In 2018, Dr. Eric North, an assistant professor at the University of Nebraska, took his students to Botswana to learn about the conservation challenges between plants and animals. One of the highlights was seeing the baobab trees in the Mashatu Game Reserve; baobabs are known as the tree of life. Dr. North earned a BS in Forest Resources, a MS and PhD in Natural Resources Science and Management all from the University of Minnesota-Twin Cities. Photograph courtesy of Dr. North.
Another Perk of SAF-Accredited Programs: Social and Networking Opportunities

Most colleges and universities that offer SAF-accredited degree programs have an active SAF student chapter to join. Student chapters go on field trips, have social hours, and collaborate with other SAF chapters to provide networking, internships, and learning opportunities.

Becoming a SAF student member gives you access to:

Scholarships
Need a little extra financial help? Many forestry programs offer scholarships, and financial assistance is available for undergraduate and graduate students to attend the SAF National Convention.

Most colleges and universities that offer SAF-accredited degree programs have an active SAF student chapter to join. Student chapters go on field trips, have social hours, and collaborate with other SAF chapters to provide networking, internships, and learning opportunities.

Because we know that money can be tight while going to school, as a student member, you don’t have to pay local membership dues. Take advantage of this opportunity and network with seasoned professionals in your community!

Build Your Professional Network
• Interact professionally with people from diverse specialties
• Gain additional knowledge and experience in local field and management projects
• Meet potential employers at local chapter meetings
• Attend SAF’s local annual conferences and the National Convention, where you meet professionals shaping the science and practice of forestry

Take Your Knowledge with You
SAF publications are some of the most widely used scientific and technical resources in forestry. The Journal of Forestry is a peer reviewed, bi-monthly periodical that publishes the latest in research and practice—and it’s free with membership.

You also receive The Forestry Source, the monthly digest covering the latest critical issues affecting natural resources and what’s happening inside SAF. Columns such as Field Tech and GIS for Foresters review the newest technologies and how to take full advantage of them. There are also thousands of articles and resources online at www.eforester.org.

Get Involved and Develop Your Leadership Skills
• Get hands-on experience and build collaborative skills by working on chapter projects
• Build your leadership skill set by serving as an officer or through opportunities to interpret forestry to others
• Engage in the National Student MeetUp!, which meets annually to discuss interests and activities from around the country

SAF offers a number of programs and internships for students who are interested in policy and advancing the forestry and natural resources profession. One popular program is the Student Diversity Scholar Program that promotes leadership and creates community within SAF by encouraging the involvement in the profession of a variety of people.

• Learn new forestry skills and show off your Quiz Bowl knowledge at local and regional Forestry Conclaves, where you can compete and meet other students and forestry professionals from across the United States.

Get Special Rates for National Convention
Get the ultimate experience in forestry and natural resources management at the SAF National Convention. Immerse yourself in the community’s premier annual event for forestry-related training and networking. Attend the Career Fair, participate in poster sessions, learn as professionals present the latest in forestry research and practice, and connect with peers and the leaders in the profession. Visit www.safconvention.org for details.

For many students attending National Convention is a highlight of the academic year. At the National Convention, students have opportunities to network, talk to potential employers, and make friendships that will span their careers. These students belong to the SAF student chapter at Southern University. Photograph courtesy of Asija Rice.
What About After Graduation? SAF Has You Covered

SAF provides a number of resources to help you begin an incredible career. Our comprehensive employment resource is created specifically for natural resource professionals.

- Build your résumé in our searchable online database for forestry and natural resource employers
- Find jobs and internships with the SAF Online Career Center
- Attend the annual Career Fair at the SAF National Convention

Because we know our younger members are just beginning their careers, we offer a Transitional Membership option at a reduced-fee membership price.

Become a Candidate Certified Forester®

Becoming a Candidate Certified Forester helps you gain the experience and knowledge necessary to earn the Certified Forester credential and build upon what you learned during your college studies.

Continuing Education – Because There’s Always Something New to Learn

When it comes to forestry and natural resources management, you are never finished learning. SAF provides opportunities through educational workshops, seminars, field trips, or even self-study for you to stay abreast of the latest research and management policy.

A career in forestry and natural resources often means you’ll have a variety of job titles and learn new skills throughout your life. And even after you retire, your skills will be needed by agencies and organizations.

Larry Amos Stone retired from the US Forest Service as a silviculturist and planner. Now he is the steward of The American Chestnut Foundation Regional Chestnut Orchard at Eastern Kentucky University. Stone graduated with a BS in Forestry from Purdue and earned a MS from Michigan State University. Photograph credit Ken Darnell.

Face of Forestry

Name: Kristian Pickering

Current Position: Chief Forester, Kentucky Energy Environment Cabinet

College(s) attended and degree(s) earned: I attended Bluegrass Community and Technical College and earned a AA, and from the University of Kentucky, I earned a BS in Forestry.

I grew up in a small town in North East Kentucky. As a child, I played in the creeks and hills with my siblings. As a young adult, I spent time a lot of time hiking with my dog. My love for the outdoors changed into a career after a backpacking trip to Alaska. My appreciation for our forests grew deeper and stronger, and I then enrolled in the Forestry program at the University of Kentucky.

I am still early in my career and I have enjoyed so many opportunities that I am so thankful for every day. After graduating, I worked for the US Forest Service in the Idaho panhandle. I worked with the silviculturists performing a wide range of forestry practices and assisting in wildland fire suppression.

Fast forward a few years, now I work for Division of Forestry in South East Kentucky. Kentucky has the second most diverse hardwood species composition in the nation and totals 12.4 million acres of forestland. With 88% of forestland owned by private landowners, we have such a powerful impact on our state resources. My favorite part of my job is getting to work with our private landowners. I have always been inspired to help others. With my position, I get to educate landowners on proper sustainable forest management, connect, inspire, protect woodlands from wildland fire, and implement a variety of forestland practices!
Kyle Yorke surveyed deer population and forest regeneration. Before that, he studied bear in the Appalachians. And before that, wolves in Idaho. Not a bad way to make the Dean’s List.

THAT’S A SALUKI.
Southern Illinois University Carbondale Forestry

It's Your Nature to Explore

Welcome to Saluki Country, a part of Illinois distinguished by natural beauty, forests and wildlife refuges. Let’s go over some basics.

Where?
Forestry students at Southern Illinois University (SIU) Carbondale have access to 3,000 acres of SIU forest stands and experimental plots, 1,000 acres of auxiliary forest and research plots, and partnerships with the Shawnee National Forest, Crab Orchard National Wildlife Refuge, and Trail of Tears State Forest. You won’t find ecological diversity like this just anywhere. Cypress swamps, old-growth forest, reclaimed forest, multiple-use forest and farmland, flood plains, bluffs, lakes and the proximity of two major rivers put SIU students in a unique position to study a variety of distinct ecosystems right on campus, or within a short drive from it. In fact, Thompson Woods, right outside the Agriculture Building with walkways to the Student Center, Morris Library and other parts of campus, is an outdoor lab for forestry students and an auxiliary classroom for our innovative tree-identification course. Nature abounds and surrounds SIU, providing extensive and diverse publicly accessible outdoor educational and recreational opportunities.

What?
We’ll help you refine your focus with our degree specializations—whether you want to put people among trees or trees among people, responsibly manage forest harvest, protect and study waterways, or study habitat and wildlife, you’ve come to the right place. Our Bachelor of Science degree in forestry [accredited by the Society of American Foresters] enables students to specialize in forest resources management; forest recreation and park management; forest hydrology; urban forest management; and wildlife habitat management and conservation.

Sometimes you’ll be in a classroom, but we emphasize hands-on learning and field-intensive courses. Field trips are an essential part of our program—not only for the ecosystems, but also to learn from the people who manage them. Our “summer camp” is a guided tour of national and state parks, forests, and wilderness and recreation areas to examine individual forestry topics. And our study abroad opportunities include natural resource management in Ireland, tropical forest and wildlife conservation in Panama, and sustainable practices in Costa Rica.

Modern forestry isn’t just about forest ecosystems. It’s also about social environments. Our program provides the science base you need to understand forest ecosystems, the social science skills to understand how people affect forest conditions and conservation efforts, and the management skills to match the need for renewable forest resources with sustainability.

Who?
Our focus on teaching and mentorship pairs well with our cutting-edge research. At SIU, our faculty members are respected experts in their fields, sharing their experiences and offering opportunities for student involvement with important on-going or independent research.

For our students, forestry isn’t just a major—it’s who they are. That’s one reason there are so many career and social student organizations affiliated with our department and across SIU. Join the Forestry Club, FireDawgs, Saluki Bassers, SIUC Quality Deer Management Association, Society of American Foresters, Xi Sigma Pi forestry honors society, Wildlife Society or the American Water Resources Association, among others. We’ll also encourage you to get involved with general agriculture organizations, such as the Agassadors and the Ag Council. Ask about the Living Learning Community, available to students in the College of Agricultural Sciences.

After college, then what?
We want you to follow your passions—but we want you to earn a paycheck, too. We emphasize career building right from the start. We keep track of our Saluki pack, and we’ve got graduates working across the nation in diverse organizations, including: the Bureau of Land Management; National Park Service; US Forest Service; US Army Corps of Engineers; U.S. Fish and Wildlife Service; state departments of natural resources; park and conservation districts; environmental consultants; forest management companies; and nongovernmental conservation and preservation organizations.

Come for a visit! Get a taste of what it’s like to be part of our SIU forestry family. Meanwhile, we’ll show you our Tree Improvement Center; historical ecology and fire, GIS and water quality labs; research greenhouse; and more. And remember—it’s a Saluki nation! We’ve eliminated out-of-state tuition!

Undergraduates:
High school students: Your visit can be a general visit—an open house where you’ll have information about the entire university available. Or you can schedule a daily visit and meet with forestry faculty.

Transfer students: Our academic advisors can help you make the most of the credit hours you’ve already earned, or help you plan credits for maximum benefit. Contact our college to find out what you need to do to make the transition to SIU easier.

Ask about the Living Learning Communities reserved for Forestry and other College of Agricultural Sciences students. Transfer students are welcome in residence halls and the LLC too!

Graduate students: Contact the department or check the faculty pages to find out who shares your research interests—and then introduce yourself! Phone numbers and email addresses are on faculty pages.

SIU Forestry Faculty
Kofi Akamani – human dimensions of natural resource management; social influences in forestry, land use management and planning; forest recreation summer camp
John Groninger – oak ecosystem management; reforestation; urban forestry; sustainable management; international agriculture and watershed development; hardwood plantations; forest resource summer camp
Eric Holzmueller – forest management and ecology; forest health; mapping and GIS; Appalachian and Smoky Mountains forestry; invasive species; forest resource summer camp
Clay Nielsen – Cooperative Wildlife Research Laboratory; Cougar Network studying cougar range and habitat; ecology; urban wildlife; wildlife biology; natural resources inventory; wildlife conservation
Logan Park – natural areas recreation ecology; sustainable trail design for multiple-use trails; river use planning; visitor behavior management; trail and campsites use and erosion; forest recreation summer camp
Charles Ruffner – forest measurements, dendrochronology (tree rings); historical ecology; fire management and ecology; disturbance ecology; forest resources summer camp
Jon Schoonover – tree identification; urban ecosystem management; forest soils; watershed management; agricultural sustainability; giant cane restoration; forest hydrology; impact of land use on water chemistry
Karl Willard – forest hydrology and watershed management; wildland hydrology; water quality; runoff and soil issues; groundwater; the water cycle
Jim Zaczeke [department chair] – ecology and forest ecosystems; old-growth hardwood forests; hardwood regeneration; restoration of canebrakes (native American bamboo); tree physiology

Contact
Department of Forestry
618/453-3341
zaczek@siu.edu

Chair
Jim Zaczeke
618/453-7465
zaczek@siu.edu

Recruiter
Peyton Gehrs
618/453-3014
peyton.gehrs@siu.edu
siu.edu/admissions
Forestry at the University of Kentucky

The University of Kentucky (UK) is growing faster than ever before in its 150-year history. The campus infrastructure is being transformed with new, modern residence halls and science research buildings. Our College of Agriculture, Food and Environment is preparing the country’s next generation of environmental and land management leaders. With more than 22,000 acres in land holdings, including a 15,000-acre research and teaching forest, our college provides students the opportunity to take part in innovative solutions to real-world environmental issues.

Forests in Kentucky
• Kentucky boasts the second most diverse hardwood forest in North America.
• Kentucky has more miles of running water than any other state in the US except Alaska.
• Forestry is a $13 billion industry in the state of Kentucky.
• Kentucky is one of the top three hardwood lumber producing states in the US.
• UK’s Department of Forestry and Natural Resources is the only forestry degree-granting institution in the state and is accredited by the Society of American Foresters.

Learn by Doing
Our forestry classes are designed to give students hands-on field experiences using the latest technology when learning about land-management principles and practices. During their junior year, all forestry students enroll in the Spring Field Semester, which consists of 16 weeks of hands-on, mostly outdoor field work. The first half of the Spring Field Semester is spent traveling throughout the region to learn about different ecosystems, land uses, management techniques, landownership types, and wood industry facilities.

During the second half of the Spring Field Semester, students live at UK’s Robinson Forest with a 15,000-acre classroom at their cabin doorstep. By focusing on experiences outside of the classroom, our forestry program empowers students to succeed in a dynamic and growing workforce. In addition to our professionally accredited curriculum, we offer many other opportunities that provide our students with very high job and graduate school placement rates including:
• Research - Forestry undergraduate students often get involved and gain experience in research. Many students continue their forest science education by attending graduate school.
• Professional Development - We offer travel scholarships for professional development, mentoring by professionals in the field, and opportunities to attend regional, national, and international professional meetings.
• UK Fire Cats - Many students earn money and experience in the UK Fire Cats, a student wildland firefighting crew employed by the Kentucky Division of Forestry.
• Wildlife Forester - The Wildlife Forester option provides forestry students with an interest in wildlife science the opportunity to combine these exciting outdoor career paths. For most students, adding one or two semesters to our forestry program provides the courses necessary to meet the minimum requirements for the Associate Wildlife Biologist Certification by The Wildlife Society.

Learn More
For more information, visit our website (https://forestry.ca.uky.edu/students) or Facebook page (UK Forestry). Also see our companion major—the Natural Resources and Environmental Science program.

small classes.
BIG classrooms.

Earn a Bachelor of Science in Forestry at the University of Kentucky.

https://forestry.ca.uky.edu/students
Who will sustain forests for the future? **SPARTANS WILL!**

Forestry students at Michigan State University are part of a 117-year legacy that has shaped vibrant forest ecosystems all over the world.

Undergraduates receive a Bachelor of Science in Forestry and can minor in Urban & Community Forestry or Sustainable Bioproducts Science & Technology. We also offer Masters and PhD programs.

**Professional forestry coursework and activities.** You will develop the knowledge and skills to manage diverse forest resources in both urban and rural environments; gain industry-leading training in forest health, ecology, management, and silviculture; receive one-on-one faculty instruction as you conduct fieldwork in habitat restoration, fire management, and more.

**Unique and innovative learning environments.** You will investigate some of the world's current issues: climate change, exotic invasive species, and sustainable management through field studies, independent research, and study abroad. You will benefit from a department with a low student-faculty ratio, while utilizing the advantages of a large research university; explore green urban environments through our Urban and Community Forestry minor; and prepare yourself for a career in renewable wood-based bioproducts through our new Sustainable Bioproducts Science and Technology minor.

**Career opportunities.** You will connect with our professional internship network, access forestry leaders, gain skills that enhance your career, and graduate with a degree that has an extraordinary job placement rate. Since 2008, more than 95 percent of graduates found forestry-related positions.

**Financial support.** We have the capacity to award more than $330,000 in student scholarships each year. Learn how a four-year scholarship could apply to you!

Contact | Undergraduate Academic Advisor Justin Kunkle
[517] 355-0091 or ForAdvis@msu.edu | for.msu.edu

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**Breakthrough with University of Idaho's Forest, Rangeland and Fire Sciences**

Start your dream career at University of Idaho at one of the best natural resources programs in the country for quality and affordability. Study with leading experts in the amazing landscapes of Idaho's forests, rangelands, and wilderness. In our Department of Forest, Rangeland and Fire Sciences, you will learn cutting-edge science while gaining hands-on, practical experience:

- Use state-of-the-art modeling and remote sensing technology in the Thomas Reveley Geospatial Lab
- Conduct research and work on more than 10,000 acres of working Experimental Forests
- Research and work at the Pitkin Forest Nursery, the only operational research nursery based at a university in the West
- Examine fire and fuel behavior in a controlled environment at our one-of-a-kind Fire Combustion Lab
- Take a Semester in the Wild at the Taylor Wilderness Research Station in the middle of the largest wilderness area in the lower 48 states

**Check out our degree programs in:**

- **Forestry** — Study forest science and practice operational skills in real-world situations to start your career as a forester, silviculturist or nursery manager
- **Fire Ecology and Management** — Understand fire ecology and how to use fire as a management tool, map and model wildfires, and help communities become more fire resilient
- **Renewable Materials** — Create materials for the future from wood and other renewable or recycled materials
- **Rangeland Conservation** — Manage and restore rangelands while working with livestock and wildlife. Help find solutions to keep rangelands healthy and productive.

To find out more, contact: Dr. Charles Goebel, Professor and Department Head, 208-885-7311, cgoebel@uidaho.edu

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**YOUR NEXT BREAKTHROUGH**

Learn cutting-edge forest science and operational forestry

IN THE FOREST, IN THE LAB AND ONLINE

uidaho.edu/cnr/frfs

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Department of Forestry, Rangeland and Fire Sciences

University of Idaho
A Forestry Program Rooted in History

More than 100 years ago, the wilderness of upstate New York became home to Paul Smith whose rustic resort hotel was renowned worldwide. Managing timber on the massive acreage was a major operation and thriving success. Today those lands are occupied by Paul Smith's College (PSC) where forestry education has been practiced continuously since the college began. PSC students, faculty, and alumni are part of a rich tradition that drives the industries depending on healthy and productive woodlands.

Meaningful Education for Real Careers

When students arrive at the 14,000-acre campus they're walking onto more than just an amazing wilderness landscape. PSC students actively manage our commercial timber properties and gain real-world experience by working with professionals in the field. Our forestry microenterprise enables students to become practicing foresters before they even graduate — earning advanced credentials and a competitive wage along the way. Students also learn the business of timber operations, the importance of an optimal yield, and the need to respect our natural resources by avoiding waste. Our state-of-the-art mechanized equipment gives students first-hand practical training with the tools and techniques they'll need to be successful in their careers.

Often students will pair Forestry majors with a related minor, such as Sustainability, Maple Production & Products, or Wildland Firefighting. Students in this program become proficient in wildland fire science, learning from professional wildland firefighters, and earning federally-recognized wildland firefighter credentials.

Two-Year, Four-Year, and Master's Degree Programs

Forestry education at Paul Smith's College equips students with a foundation of technical, field-based, and applied education that combines theory and practice.

Bachelor's degrees are offered in three concentrations:

- Ecological Forest Management prepares students for positions with government forestry agencies, forestry consulting firms, and non-governmental organizations.
- Forest Operations is a fit for students interested in working for forest-products companies or running their own forest-products firms.
- Forest Biology is ideal for students who want a career in research related to forest ecology and biology.

New in 2019, Paul Smith's now offers a Master of Science in Natural Resource Conservation. Students in the program will develop an advanced skillset focused on balancing the essential health of soil and water with the demands of a rapidly-growing global human population. Students will have the opportunity to target their work by choosing among three concentrations: Forest Resource Management, Aquatic Resource Management, or Sustainable Communities.

Paul Smith's College has resources devoted to supporting our students’ forestry education: 14,000 acres of certified and actively managed forestland; a sawmill and other equipment; a forest manager; faculty resources and expertise; a 2,500-tap sugarbush; team of draft horses; and a rich alumni network who are dedicated to seeing the next generation of Smitties join their professional ranks.

Undeniable Outcomes

Simply put, our grads succeed. Nearly 100 percent of our forestry graduates are employed or pursuing further education within 18 months of graduation, based on recent alumni surveys.
Become a Land Steward at Colorado State University
Driven by our land-grant mission, the Warner College of Natural Resources at Colorado State University (CSU) nurtures the lands and students entrusted to our care.

Opportunity
A mosaic of green and gold surrounds CSU's campus. Stunning landscapes offer some of the most diverse forest and natural resource areas of any state in the nation. Our outdoor classrooms encompass public and private lands, the CSU Mountain Campus and Rocky Mountain National Park. These lands help you gain a larger perspective of how to steward resources that support life on earth.

Community
Start building your career connections and a life-long network of friends and peers through CSU student organizations including:

- The award-winning Alpha Student Chapter of the Society of American Foresters
- Logging Sports Team
- Society for Ecological Restoration Student Association
- Rangeland Ecology Club
- Student Association for Fire Ecology
- Society of Women Environmental Professionals
- Minorities in Agriculture, Natural Resources, and Related Sciences

Skills
Undergraduate Degrees
Since 1904, our community of stewards in the Forest and Rangeland Stewardship Department have carried CSU's ongoing legacy of natural resource leadership to the world. Gain the versatility to study and manage lands that cover much of the earth's land surface.

Forest and Rangeland Stewardship
Customize this accredited degree by choosing from five concentrations:
- Forest Biology
- Forest Fire Science
- Forest Management
- Rangeland and Forest Management
- Rangeland Conservation and Management

Natural Resources Management
Gain a broad understanding of just how interdisciplinary and interconnected our social, political, and ecological systems are. Become empowered to design sustainable solutions that address modern natural resource conservation and management challenges.

Graduate Degrees
World-renowned faculty help you take your science and stewardship to the next level. Become a forest and natural resource leader at the forefront of advancing natural resource fields.

MS and PhD in Forest Sciences or Rangeland Ecosystem Science
Advance your research interest as it relates to management, ecology, restoration, fire, economics or policy within forests and other natural resource areas.

Master of Natural Resource Stewardship
This coursework-based program is offered on campus and online. By building on previous education and experience, you'll gain competitive advantages in today's job market.

Restoration Ecology
Address this century's challenge of restoring lands damaged by intensive human use and resource extraction. Learn how to restore ecological processes, functions and aesthetics of damaged ecosystems.

970.491.6911
warnercnr.colostate.edu/frs

SAF Alpha Student Chapter
50th Anniversary | 1969-2019

FOREST AND RANGELAND STEWARDSHIP
COLORADO STATE UNIVERSITY

Cultivating a legacy of forest, rangeland and restoration leaders since 1904.
Learn. Our faculty take an integrated approach to teaching forest resources to equip you with professional and technical knowledge, reasoning ability, and communication skills essential for career success and are transferrable to careers outside forest resources.

Access. The on-site Barbara Wheatland Geospatial Analysis Laboratory, as well as the nearby Dwight B. Demeritt, Howland Research, and Penobscot Experimental forests provide ideal settings for research, education, and demonstration activities.

Explore. Maine has more forests than the rest of New England combined. Our experiential learning process includes courses ranging from biology, geospatial analysis, ecology, silviculture, bioproducts, recreation, and management. Study abroad experiences and internships, as well as student engagement in research and conferences, are encouraged and supported.

Faculty, Facilities, Scholarships Our faculty have expertise in a wide range of forest resources fields. Outstanding programming, teaching and outdoor learning opportunities are supplemented with access to regionally and nationally recognized research centers on or near the UMaine campus. $400,000+ in scholarships awarded annually to support student education in forest resources.

Bachelor of Science Programs Forestry. Accredited by the Society of American Foresters, our four-year bachelor of forestry program prepares our graduates for a wide range of careers in sustainably managing and conserving working forests.

Parks, Recreation and Tourism. The PRT program is designed to qualify students to work in a variety of settings such as parks and protected natural areas, the public and private business sectors, and non-profit environmental organizations, as well as state and federal natural resource agencies.

Forest Operations, Bioproducts and Bioenergy. Accredited by the SAF and the Society of Wood Science and Technology, this interdisciplinary program is designed to address major challenges to the industry, such as efficient and environmentally acceptable growth, and the management, extraction and transportation of timber for the manufacture of forest products. It combines coursework, fieldwork, and faculty expertise in forest ecology, forest management, and wood science with an emphasis in business administration.

Ecology and Environmental Sciences. The Forest Ecosystems concentration provides students with the breadth and depth of understanding required to become active participants in promoting forest sustainability. The Forest Ecology track will make students highly competitive for graduate studies in areas such as forest ecology, silviculture, forest health, or tree physiology.

Graduate Programs The School of Forest Resources offers academic and professional graduate programs that allow students to work in state-of-the-art facilities with renowned faculty. Nearly all graduate students receive some form of financial support ranging from full assistantships (MS, PhD) to partial scholarships (MF, MS, PhD).

Master of Forestry This non-thesis, SAF-accredited professional degree is designed for students from any major to elevate their bachelor’s degree via land management and forest ecosystem courses. Students gain skills necessary to start a career or continue advancing in the forestry profession; the program provides an excellent foundation to become a professionally licensed forester.

Master of Science in Forest Resources Doctor of Philosophy in Forest Resources Research-based graduate students will gain practical and theoretical knowledge in collaboration with leading experts in forest ecology and management, forest-based bioproducts, wood science and technology, natural resources economics and policy, tree biology and physiology, and nature-based recreation and tourism.

Contact us today to schedule a visit sfr@maine.edu 207.581.2887 • forest.umaine.edu

The University of Maine Orono is an equal opportunity/affirmative action institution.
THE UNIVERSITY OF MISSOURI
SCHOOL OF NATURAL RESOURCES

The School of Natural Resources at the University of Missouri is the Midwest’s only school with a comprehensive natural resources program. We offer three majors with focused emphasis areas:

BS in Natural Resources
Science and Management
• Forest Resources
• Fisheries and Wildlife Sciences
• Terrestrial Ecosystems
• Human Dimensions

BS in Environmental Sciences
• Atmosphere
• Land and Soil
• Water
• Outreach and Education

BS in Parks, Recreation and Sport
• Natural Resource Recreation Management
• Tourism Development
• Sport Management
• Recreation Administration

HANDS-ON LEARNING
All students apply classroom learning in the field, through internship or research experience. Partnerships with government agencies and private enterprises help students to become career-ready while making professional connections.

STUDENT RESOURCES
Students excel because of our small classes, hands-on research opportunities, active student organizations, high-tech classrooms, personalized advising, and strong professional orientation. Our faculty are recognized as leading teachers and researchers in their fields.

STUDY ABROAD
The School encourages students to develop cultural competencies through our tailored study abroad opportunities, where students can learn more about sustainable forestry practices in Costa Rica, environmental management in France, sport management in Spain, and park management in Canada.

YOUR FUTURE
Over 90 percent of Mizzou graduates have a successful career outcome six months after graduation and begin their careers with 25 percent less college debt than the national average.

University of Washington: Tradition, Innovation, and Leadership

Since 1907, the University of Washington has been the standard-bearer of forest resource management, conservation, and education throughout our region and the country. The research conducted by our faculty and students has been at the leading edge of environmental and forest sciences for more than a century. Our name—the School of Environmental and Forest Sciences—reflects recognition of the breadth of issues and contexts within which we study forests and their management.

The Pacific Northwest is home to a wealth of renewable resources, and our work is critical in establishing a sustainable balance among timber production, forest conservation, habitat preservation, recreation, and other societal demands. Given the regional importance of forestry, the UW and its myriad partners in the Pacific Northwest are uniquely positioned to address complex issues of sustainable forestry and natural resource management.

In particular, the UW offers an extremely well-equipped urban campus in Seattle, along with outdoor laboratories at field sites across the state. These include the 250-acre Washington Park Arboretum and Center for Urban Horticulture; the 4,300-acre Charles L. Pack Experimental Forest near Mount Rainier National Park; and the Olympic Natural Resources Center on the Olympic Peninsula. Our collaborative and interdisciplinary program options pair practical knowledge and skills from technical disciplines with policy and management. Students gain grounding in ecological and social sciences, forestry practices with a focus on sustainability, innovative utilization of forest products, field and remotely sensed measurements, wildlife conservation, and biofuel and bioproduct development. Our rigorous curriculum prepares graduates for professional leadership in the private, public, and non-governmental sectors, and for graduate study.

Join us and prepare yourself for a career in forest science, management, and conservation in Seattle and the heart of Pacific Northwest forest lands!
Department of Forestry, Wildlife and Fisheries
Department of Forestry, Wildlife and Fisheries at the University of Tennessee Institute of Agriculture

Our programs focus on a mastery learning approach that give students practical, hands-on experiences. In our department, outdoor classrooms are the norm, and learning is a way of life. Whether we are improving timber harvest methods or restoring native mussel populations, our research and extension work make our world a better, more enjoyable place to live.

The department offers two undergraduate degrees with SAF-accredited concentrations: Bachelor of Science in Forestry and Bachelor of Science in Wildlife and Fisheries Science. MS and PhD programs are also available.

**Forestry major concentrations**

**Forest Resources Management**: provides an education related to the management of the broad spectrum of natural resources. Examples of specialization include forest biology, forest economics and management, silviculture, and forest inventory.

**Restoration and Conservation Science**: prepares students for a career maintaining and restoring the health of natural landscapes. The program draws from many disciplines and emphasizes forestry, ecology, soil and waters, and wildlife. Students may specialize in wildlife habitats, watersheds, ecosystem construction, ecology, or biodiversity.

**Urban Forestry**: an interdisciplinary program emphasizing forestry, arboriculture, horticulture, urban forest management, and urban wildlife. This concentration prepares graduates who can evaluate, plan, and resolve problems in urban and traditional forests.

**Wildland Recreation**: prepares students to work in natural resource-based recreation settings. Students can specialize in complementary areas such as education, cultural and natural history interpretation, communications and public relations, landscape design and ornamental horticulture, or business and public administration.

**Wildlife and Fisheries major concentrations**

**Wildlife and Fisheries Management**: the science and art of maintaining populations of wild animals at levels consistent with the best interests of both wild species and people. Success depends on field work and the scholarly application of scientific information.

**Wildlife Health**: provides training for biologists interested in ensuring the health of wildlife and fisheries populations, conserving wild species, and protecting domestic animals and humans from diseases spread by wildlife [pre-vet track].
We want you to be part of the Forestry Program at Oklahoma State University!

Oklahoma State University in Stillwater provides an SAF accredited Forest Ecology and Management undergraduate degree option within the Department of Natural Resource Ecology and Management (NREM).

We provide a variety of campus-based and field-based courses related to forestry. We also conduct forestry camps in southeastern Oklahoma and the Rocky Mountains of New Mexico to provide hands-on experience with forestry field measurements, timber cruising, harvesting, ecology, and sustainable forest management practices.

Oklahoma is 28% forested with forest types that include cypress swamps, southern pine, oak-hickory, and even pinon-juniper. Our department has 20 faculty and 270 undergraduate students in disciplines of forestry, fisheries, rangeland, and wildlife. Our degree programs prepare graduates with the career options in federal and state forestry agencies, forest industry, consulting and non-governmental organizations.

More information about our forestry programs can be found at http://nrem.okstate.edu
Or call 405-744-5438.

We also offer department-led study abroad trips to Peru and the Galapagos Islands.

Come Learn Forestry at Oklahoma State University

Oklahoma State University in Stillwater provides an SAF-accredited Forest Ecology and Management undergraduate degree option within the Department of Natural Resource Ecology and Management (NREM). Oklahoma is 28 percent forested, with forests types that include cypress swamps, southern pine, oak-hickory, and even pinon-juniper, which means our students have a chance to study a diversity of forest types.

Our Academic Programs

The NREM department has 20 faculty, 260–270 undergraduate students, 50–60 graduate students, and 8–10 post-doctoral associates. We offer five undergraduate options, including:

- Forestry Ecology and Management
- Fisheries and Aquatic Ecology
- Rangeland Ecology and Management
- Wildlife Ecology and Management
- Wildlife Biology/Pre-veterinary science.

Each option has a separate degree plan that includes more discipline-specific courses as students reach their junior and senior years. We provide a variety of campus-based and field-based courses related to forestry. We conduct forestry camps in southeastern Oklahoma and in the Rocky Mountains of New Mexico to provide hands-on experience with forestry field measurements, timber cruising, harvesting, and other sustainable forest management practices. In addition, the forestry and rangeland options offer capstone courses in the senior year that link ecological, biological, and economic factors in a real-world management scenario.

The NREM department also offers department-led study abroad trips to Ecuador, the Galapagos Islands, Peru, and Bolivia. These programs focus on the ecological and cultural aspects of these regions.

Our graduate program covers all five main topic areas, and most NREM graduate students and post-doctorates are funded by external research grants.

We Prepare Our Students for Their Careers

Our undergraduate degree programs prepare graduates with career options in federal and state forestry agencies, the forest industry, consulting, and non-governmental organizations. Because of the diverse nature of our department, our forestry students are exposed to faculty with expertise in the ecology and management of many different ecosystems, plant and wildlife species characteristics, wildlife habitat management, and aquatic ecology and watershed hydrology, in addition to the traditional forestry curriculum. They also have many opportunities to interact with students in other natural resource disciplines that help cultivate graduates with a broader understanding of ecology and management of a variety of ecosystems.

There are opportunities for undergraduate students to participate in research projects in all of these disciplines. The NREM faculty research program offers a balanced mix of expertise in basic and applied research related to ecosystems and applied management research, and undergraduates are encouraged to work with graduate students and post-doctorates. This is aided with an excellent Extension staff in wildlife and rangeland ecology. We also have a robust summer internship program that provides opportunities for undergraduates to work with agencies and the private sector. This has resulted in many undergraduates being offered positions well before they graduate.

More information about our forestry programs can be found at http://nrem.okstate.edu/academics or call 405-744-5438.
Experience Forestry at Purdue!

Forestry students experience:
- Meaningful, one-on-one faculty-student interaction. Student-faculty ratio is 8:1.
- Unique undergraduate opportunities, including:
  - Participation in current research programs, such as long-term ecological/silvicultural projects or restoration of rare tree species (American chestnut, Hawaiian koa). Independent undergraduate research projects are readily available.
  - Special short-term courses, developed by forestry and natural resource faculty, to Costa Rica, Galapagos, and Europe, as well as semester abroad.
  - Leadership and entrepreneurship certificate programs.
- A newly revised Bachelor of Science in Forestry curriculum, with concentrations in Forest Management, Forest Science, Urban Forestry and Sustainable Biomaterials.
- Field skills training. In addition to many field laboratories during regular semesters, a five-week summer practicum is required. Conducted in Michigan's Upper Peninsula, students experience both the expansive northern forest ecological zone and a natural resource-based socioeconomic environment.
- Cross training in wildlife, aquatic sciences, and other natural resources areas.
- A small school/family atmosphere within the diversity of opportunities available at a large university. Academic and career advisors know you personally, and provide a one-stop shop for academic, career, and personal advice. Merit- and need-based scholarships are available.
- A feeling of community through organizations such as the Student Chapter of the Society of American Foresters, the Purdue Student Society of Arboriculture, student chapters of The Wildlife Society and American Fisheries Society, FNR Student Council and hundreds of other organizations across campus.

Department of Forestry and Natural Resources (FNR)
With 100 years of forestry education, the Department of Forestry and Natural Resources (FNR) offers three undergraduate majors, including Bachelor of Science in forestry (BSF) accredited by the Society of American Foresters, as well as Bachelor of Science in Agriculture and majors in aquatic sciences and wildlife. The department’s research programs include sustainable forest management, invasive species ecology and management, forest ecosystem resilience, socioeconomic sustainable biofuels, and many others.

These areas and others provide opportunities for undergraduates to hone skills and earn money by being directly involved in data collection and analysis.

FNR manages more than 24 forested properties across the state of Indiana. Two properties close to Purdue are used extensively to support field exercises. Others are available for special educational exercises and research. A significant private endowment, supplementing federal, state, and university sources, provides excellent support for faculty, graduate and undergraduate teaching, research, and engagement. FNR was rated one of the top doctoral programs in forestry and forest science in the country by the National Research Council (2010). In addition, Purdue is ranked #11 on College Factual's list of the 2020 Best Forestry Colleges in the U.S. [2019]. Go to www.ag.purdue.edu/fnr for more information.

Purdue University
Purdue is recognized for academic excellence, cutting-edge research, and the achievement of its graduates. Students and graduates join a global network of leaders in business, health care, science, technology, education, the arts, agriculture, communication, politics, and much more. As a Big Ten University with approximately 30,000 undergraduate students, Purdue offers a dynamic community of goal-oriented individuals who recognize potential in themselves and each other. Purdue currently ranks as the tenth best forestry program in the country by CollegeFactual.com and is recognized by the Princeton Review and Smart Money as a top value for the educational investment. The student-faculty ratio is a low 14:1. And early in 2019 Purdue announced it was freezing tuition for the upcoming year – the eighth consecutive year of stable tuition prices. Hail Purdue!
Knowledge and leadership for a sustainable future.

Established in 1900, the Yale School of Forestry & Environmental Studies (F&ES) is the oldest natural resource program in the US. From its earliest days, the school has had a profound impact on American forestry; it was founded by Gifford Pinchot and Henry Graves, the first two leaders of the USDA Forest Service. They were followed by F&ES alums who occupied the next three chief positions. The school has also firmly established itself internationally, continuously producing graduates who have been leading the way across the globe in the fields of forestry and environmental studies for more than a century.

Students can pursue a doctoral degree or one of five master’s degrees, including Master of Forestry (MF), a two-year SAF-accredited option or the MF mid-career one-year option; Master of Forest Science (MFS); Master of Environmental Management, or Master of Environmental Science. The MF and MFS degrees are small and select. The school graduates 10–20 students a year in each of these tracks and alumni are highly trained to take on leadership roles identifying and guiding paradigm shifts in forest management.

Distinct Programs
The MF is one of only two of its kind at the graduate professional level. Students learn to “think like a forest”—letting stand dynamics and native forests guide the management of the forest as a resource for people—this idea was first presented by renowned F&ES alum Aldo Leopold (MF, 1910). Mediation, sensitivity, and understanding are also emphasized when working with landscapes. F&ES students think about how policy issues, ecosystem services, and forest management are intertwined and grapple with topics like watershed management, carbon and climate amelioration, biodiversity and open space conservation, community development, and reforestation investments.

The MFS degree is research based, with a curriculum designed to allow students to create a program around their disciplinary area of interest that culminates in a final thesis. A required component of this degree is summer research, and our students receive funding to travel around the world for their projects. Students begin with foundation courses [e.g., soils, forest ecology, social ecology, and policy science] and then acquire skills and tools in gathering information [e.g., statistics, geographic information systems (GIS), and remote sensing]. Techniques for assessing, maintaining, and managing human values are studied in silviculture, economics, and law. These studies are followed by courses that help students synthesize and analyze resource management in their area of interest, such as watershed management, timber and nontimber products, carbon, agroforestry, urban forestry, and protected areas.

The program culminates in a capstone research project or seminar that allows students to develop leadership and management skills. Between their first and second years, MF students spend a summer completing a funded internship working on a resource area of their choice to help further their career interests and goals.

Many Career Paths
Our graduates pursue careers in many areas, including forest finance; extension and education; the management of public lands; entrepreneurial business [carbon, ecosystem services, reforestation]; climate and forest conservation [e.g., World Wildlife Fund, The Nature Conservancy]; certification [e.g., The Nature Conservancy, Forest Stewardship Council, SFI]; land trusts and open space conservation; management of urban and community forests; agroforestry; rural/community development; and tropical forest restoration.

Learn more about the Yale School of Forestry & Environmental Studies at http://environment.yale.edu.
Connect with the Natural World Around You

The University of Montana’s [UM] W.A. Franke College of Forestry and Conservation offers a range of degrees for students who care about forests, climate change, wildlife and its habitat, environmental sustainability, water conservation, recreation and tourism management, wilderness and more. Our college was founded in 1913 and was one of the first programs accredited by the Society of American Foresters. With an unwavering commitment to whole-person education, UM provides a learning experience uniquely shaped by our special place in the world. You’ll study in the heart of the Rocky Mountains in Montana, surrounded by millions of acres of federal, state and tribal land. Our classrooms include a 28,000-acre school forest and a 3,500-acre working cattle ranch nearby.

Our faculty are world-renowned teachers, mentors and scientists. You’ll connect with them through courses and one-on-one mentoring. We also encourage students to engage in undergraduate research and offer funding to support research experiences designed in coordination with a faculty mentor. We have professional academic advisors who will help you plan your coursework. Our Native American Natural Resource Program provides students with support including academic services and facilitating searches for internships, scholarships and job placement, with a focus on cohort building with other Native students, college faculty and staff and the Montana Native community. We also provide opportunities for students to work with federal agencies like the US Forest Service and the National Park Service, with tribal and state agencies, private landowners, and with nonprofit groups, so you’ll experience resource management in action in diverse settings. Our graduates go on to work with federal and state agencies, nonprofits and in the private sector. About 97 percent of our graduates are employed or attending graduate school and 85 percent of those are employed in their degree field. All of our degree programs provide you with the professional training, knowledge and skills you need for a successful career.

Undergraduate Bachelor of Science Degrees:

- **Ecosystem Science and Restoration**: Learn how ecosystems work. Apply that knowledge to help solve environmental problems and restore degraded ecosystems.
- **Forestry**: Learn how to promote, sustain and conserve forest resources, from water and wildlife to wood products.
- **Geography**: Study places, peoples, environments and the dynamic relationships between them. We specialize in mountain landscapes, community and environmental planning, and geospatial science and technologies.
- **Parks, Tourism and Recreation Management**: Connect people to natural places by gaining skills to help provide meaningful recreation and tourism experiences.
- **Resource Conservation**: Gain the knowledge and skills to tackle sustainable resource management and conservation challenges.
- **Wildlife Biology**: Study wild animals and their habitats and learn how to conserve them for the future benefit of wildlife and people.

Graduate Degrees:

- **MS Forestry**
- **MS Geography**
- **MS Parks, Tourism and Recreation Management**
- **MS Resource Conservation**
- **MS and PhD Systems Ecology**
- **MS Wildlife Biology**
- **PhD Fish and Wildlife Biology**
- **PhD Forest and Conservation Sciences**

Contact:
Learn more about the W.A. Franke College of Forestry and Conservation at [www.cfc.umt.edu](http://www.cfc.umt.edu).
Students who join Alabama A&M University’s Forestry, Ecology, and Wildlife Program (FEWP) will discover a family of professors, staff, and students who are willing to spend time in and outside of the classroom helping them train for an exciting career contributing to the conservation and management of our forests and natural resources.

A Comprehensive Natural-Resources Education
We offer an SAF-accredited Bachelor of Science degree in Forestry with concentrations in Ecology, Forest Business, Forest Management, Forest Science, and Fish and Wildlife Science. Additionally, we offer training in geographic information systems (GIS) technology through our Department of Biological and Environmental Sciences. Our program is academically strong, with high job placement rates in a variety of natural resources fields.

Our class size averages 17 students, which means students get to know their classmates and instructors well. This creates a learning environment in which students receive the personalized help and guidance they need to be successful. We have rigorous standards and are dedicated to helping students reach their potential and realize their career goals.

Together with graduate and undergraduate students, faculty members conduct forest research in ecology, management, economics and policy, fish and wildlife, upland hardwood silviculture, outdoor recreation, and more. Students often receive paid internships during the academic year and/or summer that provide hands-on training in scientific and management disciplines that enhance their career opportunities. Forestry students at Alabama A&M University also successfully compete for international internships.

A Robust Offering of Extracurricular Activities and Work Experience
Students have the opportunity to choose from a variety of extracurricular activities to enhance their academic coursework. These organization include the student chapter of the Society of American Foresters, SEEDS (Ecological Society of America), Wildlife Society, and the Association of Southern Forestry Clubs, through which students compete in the Southern Forestry Conclave, a timbersports event. Our unique organization, the FireDawgs, is a student-led fire crew that receives training in wildfire and prescribed burning management, which provides opportunities for application to real-life situations.

We strongly believe the educational process is strengthened by quality work experiences, and we offer these opportunities in a variety of ways, such as work-study with faculty and internships within industry, nonprofit, and federal and state agencies. Such experiential learning opportunities prepare our students for today’s job market, where a premium is placed on teamwork, leadership, and communication skills. Federal agencies that manage forests throughout the country are represented on campus to assist students in finding summer employment and permanent career opportunities. In fact, almost all of our students work for a forestry agency or company during the summer or are employed by faculty members to conduct undergraduate and graduate research on campus.

College in Scenic Alabama
With our location in Huntsville, students find a number of quality entertainment and cultural attractions near campus. Northern Alabama offers a wide variety of forest and other scenic natural areas that lend themselves to work, study, and play, including the Bankhead National Forest, Wheeler National Wildlife Refuge, Little River Canyon, and the Tennessee River, whose reservoirs are famous for their bass fishing. Our students enjoy the combination of high-tech opportunities and home-town feeling that Huntsville offers.

For additional information, visit our website at https://www.aamu.edu/academics/undergraduate-studies/bachelor-science-forestry.html or contact our program coordinator at William.Stone@aamu.edu or 256-372-4248.
Study Urban Forestry at Southern University and A&M College

Degree Programs - The Department of Urban Forestry and Natural Resources at Southern University and A&M College in Baton Rouge, Louisiana, offers three major degree programs: Bachelor of Science in Urban Forestry, Master’s in Urban Forestry with Thesis or Capstone option, and PhD in Urban Forestry. In addition, the Department offers minors in Urban Forestry and GIS Applications in Natural Resources.

Curricula - The Urban Forestry curricula provide students with knowledge and techniques to manage the nation’s urban and community forests and opportunities to pursue advanced degree studies in many areas including urban forest management, forest ecology, ecosystem assessment, arboriculture, urban hydrology, tree physiology and anatomy, urban tree entomology and pathology, GIS applications, urban soil and wetland, and many other related areas.

Internship-Training Opportunities - The Department offers career training and internship opportunities through grants, contracts and partnerships with federal and state agencies, municipalities, professional organizations, private industries, and university linkages nationally and internationally.

Career Opportunities - Undergraduate and graduate studies in urban forestry and natural resources prepare students for careers in various federal agencies [e.g., the USDA Forest Service, Natural Resources Conservation Service, Agricultural Research Service, Army Corp of Engineers], state departments of agriculture and forestry, city governments, private industries, environmental consulting firms, professional organizations, and universities.

Student Organization - The Department has an active student SAF chapter, please visit at www.facebook.com/saf.su.14.

Research Areas - Urban forestry, arboriculture, tree anatomy and morphology, tree physiology, urban forest ecology, ecosystem management, applied GIS/remote sensing and hydrology, urban soil and wetland, urban park and recreation, urban forest insects and diseases, invasive species, global change and sustainability, urban gardening and community development, and urban forest and human interaction.

Funding Opportunities - The Department offers undergraduate training stipend/scholarships and graduate assistantships through grants and contracts to qualified students.

Path to Success - Urban Forestry Program at SU was established in 1992 as the first BS degree program in urban forestry in the nation with support from USDA-FS and Louisiana Board of Regents. The MS degree in urban forestry was approved in 1998, and PhD degree in urban forestry in 2004. Today, the Department of Urban Forestry and Natural Resources offers the most comprehensive urban forestry higher education program in the nation and is a leader in building the diverse, talented next generation of urban forestry and natural resources professionals in the country. The Department is equipped with excellent faculty and the state-of-the-art research facility.

Come Joining Us! For more information, visit us at www.subr.edu/subhome/urban-forestry-and-natural-resources, apply for undergraduate program at http://www.subr.edu/page/1707 or graduate programs at www.subr.edu/page/1567, call the Department at 225-771-3535, or contact Dr. Yadong Qi at yadong_qi@subr.edu or Ms. Joyce Peralta at joyce.peralta@subr.edu.
Want to Learn More About the Careers Available in Forestry and Natural Resources?

There’s a number of resources available that can provide a day-in-the-life of professionals working in forestry and natural resource careers.

**Leadership Nature Podcasts:** This free podcast series, now in its 8th season, features episodes on Professionals of Color in Forestry, Young Professionals in Forestry, and Wildland Firefighting Community. [http://leadershipnature.com/category/podcasts/](http://leadershipnature.com/category/podcasts/)

**Forestry Friendly Communities:** Women in Forestry
[https://forestryfriendly.ca/women-in-forestry/](https://forestryfriendly.ca/women-in-forestry/)

SAF members are also great resources you can connect with, and chances there is a member in your community. To find out if there is a local SAF chapter in your area, visit [https://tinyurl.com/y3lroeko](https://tinyurl.com/y3lroeko).

Also check out our Facebook page that features daily posts of forestry-related articles and our members out in the field.
[https://www.facebook.com/SAForesters/](https://www.facebook.com/SAForesters/)

SAF-accredited programs connect students to internships and seasonal work opportunities to gain hands-on experience outside of the classroom. Kelley Harkins is a student at the University of Wisconsin-Stevens Point. She is pursuing a degree in forestry while working seasonally as a forest technician at Superior National Forest. On this day, she is responding to a smoke report on an island on the edge of the Boundary Waters Canoe Area Wilderness. Photograph courtesy of Kelley Harkins.

**Need another reason for choosing a career in forestry and natural resource?**

New job opportunities and businesses are cropping up all the time that need college graduates with a background in forestry and natural resources. For example, Drone Seed is exploring the use of drones to carry out forest management activities and they need pilots. A number of state and federal agencies are also using drones to conduct vegetation or landscape surveys.

At West Virginia University, through their Bachelor of Science in Recreation, Parks and Tourism Resources programs, students are trained to work in outdoor recreation and public land management fields. According to Steve Selin, a professor at West Virginia University (WVU), the career outlook for the recreation industry is very robust and more diversified than it used to be. (Photographs courtesy of Wasim Muklashy and Steve Selin, West Virginia University.)
Pathways to Forest Service Careers

Careers with the Forest Service means working for nature, managing and caring for more than 193 million acres of our nation’s most magnificent lands. Work for the Forest Service and leave your legacy on nature for future generations!

Pathways Programs offer developmental opportunities for students and recent graduates in the federal workforce. Forest Service Pathways participants gain valuable experience in natural resources management, with the prospect of full-time employment upon successful completion of the program.

Learn more about the Pathways Programs at www.USAJOBS.gov/StudentsAndGrads. Find Forest Service Pathways opportunities at www.fs.fed.us/FSJobs-Events.
How the Pathways Program Launched My Forestry Career

By Tevin Hamilton

I was introduced to the Pathways program at the 2016 National Convention in Jacksonville, Florida. The US Forest Service (USFS) was conducting an on-site hiring event for Pathway Program positions. After an amazing interview, I was offered a summer position that I excitedly accepted.

As an urban forestry major, I’ve always wanted the opportunity to work for the agency to gain elite job training and mentorship. My first internship location was Knoxville, Tennessee, with the USFS Field Inventory and Analysis (FIA) duty station. My report date was scheduled for the end of May, so I had ample time to prepare myself for my first federal position.

Working at the field station in Knoxville was my first opportunity to gain field experience in traditional forestry. My duties consisted of doing a forest inventory across the state of Tennessee to determine a census of how much wood was in the forest. While working I learned useful forester skill sets, such as gathering data, navigating maps, and using tools for the inventory. I was able to learn and speak with professionals who have been working the job for significant amounts of time. Developing these skills and receiving one-on-one mentorship helped me become knowledgeable and experienced working in a traditional forestry setting. This experience molded me into a forester with talents that can be used in furthering my career within natural resources.

Being a Pathways student meant I was assured an internship every summer term. The following term, I had the opportunity to broaden my perspectives on urban and community forestry. I had the good fortune of being stationed at Southern University A&M College in Baton Rouge, Louisiana, for this internship. The primary objective of this internship was to learn more about trees in an urban setting; how they affect the people and ensure they were not public hazards. The trees were inventoried to investigate their condition and to determine whether they were of any danger to the surrounding communities. The project that I was assigned to was designed with the intention of furthering my skills of conducting a forest inventory but also to mark the trees on a Geographic Information Systems (GIS) map. Studying GIS proved to be very challenging, but I learned a great deal on the process of making maps. GIS was essential to the project because a visual map of the hazardous trees around campus was an important step to removing the trees at risk of falling.

After another successful summer internship, I was permitted to continue working during the academic year to assist Baton Rouge Green, local nonprofit whose mission is to restore Baton Rouge’s urban canopy. While partnering with the nonprofit, I inventoried street trees around residential neighborhoods to determine the ecological benefit of each tree. This experience allowed me to interact with several residents of the neighborhood and learn more about its history. Being able to effectively communicate with homeowners is pivotal to being a successful urban forester and I’m very grateful of all the experiences afforded to me while in the Pathways position.

Here’s a few lessons I learned while in the Pathways Program. For students wanting to apply for Pathways positions, they should be in good academic standing, update their resumes, and create an USA Jobs account. To be a Pathways intern, a student must maintain at least a 2.0 GPA. Most Pathways positions are typically applied for on USAJobs.gov, which is the federal government hiring website. The most important factor when being considered for a federal position is a resume, so I highly recommend continually refining and updating your resume.

Once selected as a Pathways student, you will be appointed to a government agency that most closely aligns with your interest and subject of study. The internships are typically held during the summer time, and the agency assists the students in their housing and travel to and from your duty location. The internships are all paid, and the wages vary depending on your location. To be converted into a full-time government employee, you must complete 640 hours of service with the agency, maintain academic good standing, and graduate from an accredited university.

Concluding my Pathways term, I ultimately decided I wanted to continue my education in graduate school at Yale University to study environmental management. I was very appreciative of the opportunities I was awarded to gain a career-enhancing experience. The skills I learned as a Pathways student will help me to further matriculate in my career and become an excellent professional in the natural resource and forestry discipline.

Tevin Hamilton is a graduate of Southern University and A&M College, where he earned a bachelor’s degree in urban forestry. Since joining SAF in 2017, Hamilton has participated in several community-service projects that involve the rehabilitation of greenspaces within underdeveloped communities and instructing the youth about the benefit of the environmental services. He was selected as an SAF Diversity Scholar in 2018. Prior to attending Yale University, Hamilton worked on the San Bernardino National Forest.
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Cover: L-R Morgan Smith is an undergraduate at Iowa State University. Through the service-learning program of Iowa State University-Uganda Program, she is planting a live fence to protect the fruit orchard at the at the Namasagl Primary School in Kamuli District. Phillip Dye is a prescribed fire consultant with Prometheus Fire Consulting LLC. He works with private landowners to develop burn plans and implement prescribed fire projects. Phillip earned a BS in Psychology from the University of Wyoming and a MS in Biochemistry from the University of Hawaii at Manoa. Robert Reed is an undergraduate at The Ohio State University. Over the summer he worked as a forestry technician for the US Forest Service on the Shasta-Trinity National Forest in Redding, California. Photographs courtesy of Morgan Smith, Phillip Dye, and Robert Reed.
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