ESF graduates get jobs all over the world, in all kinds of locations and all kinds of environments. Some work in their hometowns. Others work in exotic locales in Africa, Europe or Asia. Some work in a forested wilderness area. Others work in high-tech manufacturing environments or state-of-the-art laboratory facilities. Many work in the nation’s urban centers; others in suburban and rural towns.

ESF graduates have a wealth of opportunities to pursue because the College emphasizes problem-solving and communications skills as much as it focuses on science and professional training.

In the following pages, you will find examples of many careers that ESF alumni have pursued successfully, as well as some of the graduate degree programs they have entered.

ESF’s academic program areas are affiliated with some of the largest industries in the United States. The U.S. Department of Labor predicts that job opportunities for our graduates will continue to grow. You can prepare for a career that will change the world by choosing ESF.

**U.S. Department of Labor Projections for Employment Growth 2010-2020**

<table>
<thead>
<tr>
<th>Biochemists</th>
<th>Biologists*</th>
<th>Chemical Engineers**</th>
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</thead>
<tbody>
<tr>
<td>Chemists</td>
<td>Conservation Scientists</td>
<td>Construction Managers</td>
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<td>Environmental Engineers</td>
<td>Sustainable Construction Management and Engineering</td>
<td>Environmental Scientists***</td>
</tr>
<tr>
<td>Forest Resources Managers</td>
<td>Landscape Architects</td>
<td>Surveyors</td>
</tr>
</tbody>
</table>

Legend: [ ] up to 5%  [ ] 6 to 14%  [ ] 15 to 20%  [ ] 21% or more

*Includes Animal/Plant/Wildlife Scientists
**Includes Paper/Bioprocess Engineers
***Includes Environmental Health Scientists

On the cover: NASA Earth Observatory image by Robert Simmon, using Suomi NPP VIIRS data provided courtesy of Chris Elvidge (NOAA National Geophysical Data Center).
Success Stories

Joe Martens
Resources Management, M.S. ’81

“ESF is what brought me to New York state in the first place,” said Joe Martens, “and it had a profound influence on my career and life path.”

A native of Connecticut, Martens has called New York home ever since he came to ESF for graduate school and then went to Albany for an internship with the state assembly to complement the work in his master’s degree program.

His ESF experience led him to positions in government and nonprofit agencies and to an appointment by Governor Andrew Cuomo as commissioner of the New York State Department of Environmental Conservation (DEC) in 2011.

With a career dedicated to protecting and improving the environment, and with substantial responsibility for shaping government policies, Martens worked to help the state solve some serious environmental issues in areas such as hydraulic fracturing, invasive species, water quality and flood control.

Regarding hydraulic fracturing, Martens feels New York is “in a good spot” in the national debate on the method of extracting natural gas through deep, horizontal wells. A recent three-year study recommended stringent requirements for hydraulic fracturing, and public input was sought to formulate New York’s regulations.

It’s issues such as hydraulic fracturing (commonly known as hydrofracking) that ESF graduates are well prepared to help New York — and the world — face in the future, according to Martens. As the leader of the DEC, Martens brought a solid understanding of both environmental issues and the way state government works.

“ESF is poised like no other College to put people in positions of critical importance around the world. ESF students are trained in issues that will be important in our time,” he said.

While the environmental challenges for the state are immense, Martens said he enjoyed the fact that his work put him in contact with many colleagues at the state and federal levels who are also ESF alumni. “I experience this wherever I go. People are proud to tell me they went to ESF when I see them,” he said.

Prior to leading the DEC, Martens was president of the Open Space Institute (OSI), a non-profit organization dedicated to protecting scenic, natural, and historic landscapes to ensure public enjoyment, conserve habitats, and sustain community character. More than 100,000 acres in New York have been protected through OSI’s direct acquisition and conservation easements.

Plant Physiologist
Public Health Researcher
Public Health Specialist
Research Geneticist
Research Horticulturist
Restoration Ecologist
Sanctuary Manager
Science Teacher
Sea Lion Trainer
Seed Orchard Researcher
Silviculturist
Soil Conservationist
Soil Scientist
Surgical Technician
Toxicologist
Tree Propagation Scientist
Urban Park Ranger
Vertebrate Physiologist
Veterinary Assistant
Water Quality Planner
Waterfowl Biologist
Wetlands Ecologist
Wildlife Biologist
Wildlife Conservation Specialist
Wildlife Manager
Wildlife Researcher
Zoo Curator
Zoologist

Environmental Resources Engineering
Aerial Photograph Interpreter
Analytical Engineer
Bridge Construction Engineer
Cartographer
Civil Engineer
Construction Engineer
Construction Grants Specialist
Design Engineer
Energy Auditor
Energy Efficiency Specialist
Energy Planning Supervisor
Energy Supply Engineer
Engineering Materials Specialist
Environmental Engineer
Environmental Field Geologist
Environmental Land-use Specialist
Environmental Research Analyst
Flood Control Specialist
Forest Engineer
Forest Products Engineer
Geodesist
Geotechnical Engineer
Ground Water Investigator
Hazardous Waste Specialist
Highway Engineer
Hydrogeologist
Hydrologist
Natural Resource Engineer
Packaging Engineer
Parks and Recreation Supervisor
Photogrammetric Engineer
Photogrammetrist
Pollution Control Engineer
Public Service Engineer
Public Utility Manager
Public Works Engineer
Reservoir Engineer
Solar Energy Specialist
Structural Engineer
Transportation Analyst
Transportation Environmental Specialist
Waste Management Specialist
Wastewater Environmental Engineer
Water Resources Engineer
Water Rights Engineer
Water Source Protection Manager
Howard “Bud” Ris  
*Landscape Architecture, M.L.A., ’75*

In the early ’70s, the environmental movement was gaining momentum, and Howard “Bud” Ris was eager to be a part of the promised changes. “A new consciousness about man’s role as a steward of the planet was taking hold. Landscape architects had a huge role to play, and we all left ESF eager to take on this new responsibility,” Ris said.

After leaving ESF and attaining senior positions in a consulting firm and various government agencies, Ris joined the Union of Concerned Scientists (UCS), headquartered in Cambridge, Mass., a nonprofit partnership of scientists and citizens combining scientific analysis, innovative policy development and effective citizen advocacy to achieve practical environmental solutions.

By the time he retired 22 years later as president, Ris had helped the organization expand from a handful of scientists focused on nuclear arms control and national energy policy to a multi-issue environmental organization tackling a range of public policy issues from climate change to biotechnology and invasive species. Ris’ UCS successes include enacting legislation that resulted in the introduction of hybrid cars; improving safety standards for nuclear facilities around the nation; enacting tax incentives for renewable energy which have allowed alternate technologies to gain solid footing; and mobilizing the scientific community to demonstrate consensus on the need for action on climate change.

After leaving UCS, Ris became a senior fellow at the World Economic Forum in Geneva, Switzerland where he was a key figure in debates on such issues as global warming.

He returned to the States in 2005 to take the helm of the New England Aquarium in Boston, Mass., as president and CEO. He spent the last nine years revitalizing Boston’s popular aquarium and marine conservation organization before retiring from that post in 2014.

It is to ESF’s George Curry that Ris attributes his ability to break complex issues into smaller components and arrive at a solution. “Professor Curry was a very instrumental figure in my life. He taught me that no problem was too big to solve, and he gave me the skills — and the confidence — to do it.”

“In those early days of the graduate program in the School of Landscape Architecture, there was a great sense of idealism - a lot of it inspired by our principal mentor, Professor Curry. He helped us understand where the profession of landscape architecture fit into the larger scheme of things — especially how the natural world and human society intersect — and how we could make the world a better place.”

**Environmental Science and Environmental Studies**

- Capital Project Coordinator
- Cartographer
- Community Resource Development
- Cultural Impact Analyst
- Energy Auditor
- Energy Planner
- Environmental Affairs Director
- Environmental Analyst
- Environmental Communications
- Environmental Economist
- Environmental Lobbyist
- Environmental Marketing Representative
- Environmental Planner
- Environmental Protection Assistant
- Environmental Scientist
- GIS Specialist
- Hydrogeological Consultant
- Interpretive Naturalist
- Land Use Planner
- Legislative Fellow
- Legislative Science Assistant
- Natural Resources Economist
- Natural Resource Legal Assistant
- Nature Education Specialist
- Park Historian
- Park Manager
- Public Lands Coordinator
- Recycled Paper Promoter
- Recycling Coordinator
- Regulatory Specialist
- Research Associate
- Resource Planner
- Resources Policy Analyst
- Science Education Specialist
- Science Educator
- Science Teacher
- Wilderness Survival Instructor
- Watershed Conservation Specialist

**Forest and Natural Resources Management**

- Adirondack Park Project Assistant
- Arborist
- Assistant Professor
- Biometrician
- Chief Naturalist
- Coastal Analyst Forester
- Coastal Zone Management Specialist
- Community Forestry Specialist
- Conservation Educator
- Conservation Scientist
- Consulting Forester
- Cooperative Forest Manager
- Environmental Conservation Officer
- Environmental Consultant
- Environmental Editor
- Environmental Impact Analyst
- Environmental Protection Specialist
- Environmental Researcher
- Forest Ecologist
- Forest Economist
- Forest Examiner
- Forest Pathologist
- Forest Property Appraiser
- Forest Recreationist
- Forest Resource Planner
- Forestry Research Associate
- Forest Wildlife Manager
- GIS Program Manager
- Horticultural Program Coordinator
- Horticultural Specialist
- Hydrologist
- Interpretive Naturalist
- Land Acquisition Specialist
- Land Claims Adjuster
- Land Use Economist
- Land Preservation Coordinator
- Legislative Science Advisor
- Logging Safety Representative
- Natural Resource Coordinator
- Natural Resource Scientist
- Nursery Manager
- Outdoor Recreation Planner
- Park and Recreation Supervisor
- Park Interpretive Specialist
- Park Manager
- Park Naturalist
- Park Planner
- Park Ranger
- Public Recreation Specialist
- Range Conservationist
- Range Manager
- Range Scientist
- Refuge Forester
- Research Forester
- Science Writer
- Seed Orchard Manager
- Silviculturist
- Soil Conservationist
- Soil Scientist
- Surveyor
Ana Maria Menezes
Environmental and Natural Resources, Ph.D., ’08

Growing up in Mozambique, Ana Maria Menezes decided she would find a career that allowed her to speak — and seek justice — for those whose voices are not heard by people in positions of power.

A Fulbright Scholarship brought her to ESF, where she earned her Ph.D. in environmental and natural resources in 2008. She focused on artisanal fisheries. At the same time, she studied public administration at the nationally ranked Maxwell School of Citizenship and Public Affairs at Syracuse University.

After graduation from ESF, Menezes headed to Washington, D.C., and a position with the United Nations’ Food and Agricultural Organization, where she and her colleagues researched solutions to a potential global fish crisis.

Menezes is a full-time consultant for the U.N. Environmental Programme, working on environmental mainstreaming and adaption to climate change. She describes her job as strengthening the environmental knowledge of decision-makers and supporting the integration of environmental considerations in the development of governmental policy, and supporting local environmental plans through the participatory processes.

“The best thing I got from ESF was improving my analytical skills and the exposure to different ways of looking at the same thing,” Menezes said. “The interaction with other people and their experiences around the world is priceless if one wants not only to be a good researcher but to excel in his/her profession and as a human being.”

Don Moore
Environmental and Forest Biology, B.S. ’76, Ph.D. ’01

Don Moore thought he knew a major conservation problem when he saw one. Then he started working with Polar Bears International, an organization dedicated to stewardship of the world’s largest land predator.

“I’ve worked on conservation problems that I thought were big and compared to this, they were small,” said Moore, expressing his concern about global climate change and the effect it’s having on the habitat of polar bears.

Moore is the director of animal care at the Smithsonian National Zoo in Washington, D.C., where he is responsible for creating conservation and animal management plans for the zoo. Animal care scientists are “the front line for getting information out to the public,” he said. They design complex zoo habitats and provide interpretation and conservation education.

Moore also serves as a scientific advisor to Polar Bears International, a non-profit organization that works toward the worldwide conservation of the polar bear and its habitat. He said focusing on polar bears helps highlight the need for conservation. He offers simple ways for people to help save the Arctic ecosystem and in turn the polar bear. “Turn off lights and televisions. Reduce garbage and consumption, recycle, reduce your carbon footprint. Save energy and save polar bears.”
Holly Andersen  
Construction Management, B.S., '01  

Being a woman in the construction field can be challenging, but 2001 ESF graduate Holly Andersen has a construction management position that she not only loves but that puts her professional know-how to the test.  

As the sole construction project manager in Bennington College’s lively planning office, Andersen has spent the last several years helping reshape the college’s Vermont campus. In her role, she plans and oversees all projects involving capital construction, from blueprint, through the actual building process, to project completion and close out.  

Recently Andersen helped Bennington College take a big step toward its long-range goal of carbon neutrality. Through a partnership with Efficiency Vermont, a nonprofit state energy organization, the college reduced its energy usage by 12.4 percent in two years.  

Communicating face-to-face whenever possible and making sure that faculty and staff members are informed not only of a project’s design intent but also when to expect disruptions to their normal routines — such as noisy construction activities — we are some of strategies she likes to use, she said.  

“The skills I gained at ESF have been critical,” she said. “My professors taught me the fundamentals of working with teams and the ability to communicate throughout a project.”  

Her advisors at ESF also helped her get an internship with Northeast Construction Company during the summer of 2000 that played a huge role in helping Andersen realize she wanted to dedicate her career to construction and planning. The internship experience gave Andersen a sense of what it would be like to work in construction full-time, she said - everything from wearing work boots to interacting with other professional construction workers, designers, and owners.  

“I can’t imagine having a more fun job,” Andersen said. “I get to work with amazing people and help make Bennington better every day. On any given day I can go from a priority-setting meeting with the president, to uncovering a steam leak in a ditch, to a planning session with faculty and staff members, to inspecting work needed in a mechanical room or up on a roof. I love it.”

Examples of Employers Hiring ESF Graduates

Abbott Labs  
Adirondack Park Agency  
Albany Molecular Research  
AmGen  
American Museum of Natural History  
Appleton Papers, Inc.  
ARCADIS  
AT&T  
Atlantic Testing Labs Inc.  
Bank of America  
Bisland, Bouch & Lee, Inc.  
Boise Cascade Corp.  
Bristol-Myers Squibb Company  
Calgon Corp.  
Camp, Dresser & McKee  
Carborundum Corp.  
Centex Homes  
Champion International Corp.  
City of Syracuse  
Clough, Harbor & Associates  
Continental Can Corp.  
Corning Inc.  
C&S Engineers  
CH2M Hill  
CS Environmental Labs  
Cummings Nature Center  
Defense Mapping Agency  
Diamond Shamrock  
Domtar Paper  
Doris Duke Charitable Foundation  
Dow Chemical  
e2e Materials LLC.  
Eastman Kodak Co.  
Eastern Mountain Sports  
edr Companies  
Energy Answers Corp.  
Environmental Defense Fund  
Finch Pruyn Inc.  
Fairfax County School District  
Federal Paper Board Co.  
Fisher Landscape Associates  
Fleetwood Homes Inc.  
Florida Department of Forestry  
Forecon Inc.  
General Electric Corp.  
Genesee Land Trust  
Georgia Pacific Corp.  
Goulds Pumps Inc.  
Greenpeace  
IBM  
Idaho Department of Fish and Game  
Haden Stanziale  
Hanford Pharmaceuticals  
Hayner Hoyt Corporation  
Hercules Inc.  
Hueber-Breuer Construction  
International Paper Co.  
International Telephone & Telegraph Co.  
James River Corp.  
John Deere Corp.  
Kimberly-Clark Corp.  
Land Design North  
LeChase Construction Services  
Marcal Paper Co.  
Marine Science Consortium  
Mead Westvaco  
Mobile Chemical Co.  
Monsanto Company  
Mt. State Surveying Co.  
National Grid  
National Park Service  
National Science Foundation  
New York Botanical Gardens  
New York City Planning Department  
New York City Parks Department  
New York State Assembly  
New York State Department of Environmental Conservation  
New York State Department of Health  
New York State Parks & Recreation  
New York State Department of Transportation  
New York State Power Authority  
Oak Ridge National Laboratory  
O’Brien & Gere Engineering  
Oneida County Planning Department  
Oneida Research Corp.  
Osmose Wood Preserving  
Owens Corning Fiberglass  
Packaging Corp. of America  
Potomac Electric & Power Co.  
Pratt Industries  
Proctor & Gamble Corp.  
Purcell Construction Corp.  
RockTenn/Solvay Paperboard  
Saratoga Associates Inc.  
Savannah River Ecology Lab  
Schenectady Chemicals Inc.  
Schlumbergen Inc.  
SeaWorld  
Seatuck Environmental Association  
Stearns & Wheler Engineers  
Stickley Furniture  
St. Joseph’s Hospital
Landscape Architect, B.S. ’04

Wendy Andringa, a landscape architect, works at the forefront of public and residential projects in New York City and beyond, but it was her interest in designing plantscapes in challenging growing conditions that led her to create Greenlab Studio in 2011 while working in Colorado. Because green walls are vertical structures, they present different challenges than those of traditional horizontal green roofs.

Greenlab Studio is an experimental laboratory that designs, builds and tests green walls, which are basically vertical versions of the more widely used green roof concept. “I wanted to make things and test ideas that I had,” Andringa said.

Conducting research on green walls has also helped keep her creative process fresh and active.

“When you’re spending as much time as landscape architects do in the office doing drawings, it’s good to get out of the office environment to keep your creativity active,” she said.

“Green walls are tricky,” she said. “The technology is still kind of young and there is a high failure rate that I was curious about.” Andringa began building modules and testing them, looking at issues such as drainage and how to get water to the plants. “There are a number of practical concerns,” she noted.

When Andringa returned to New York City in 2012 to work at Starr Whitehouse, she brought her research lab with her and expanded it to include more general design research.

“I think the (plantscape) research applies better in New York — there’s more practical use,” she said. “Colorado is so abundantly green, the beautiful landscape is all around you. What I’m doing applies more to urban environments.”

At Starr Whitehouse, she is an associate landscape architect leading a team of designers in creative landscape projects. She is involved in design and development of modular green infrastructure strategies to help mitigate urban stormwater issues in New York City. She also teaches public workshops that create awareness of the need for stormwater mitigation through green walls and green roofs.

During her time at ESF, Andringa had no idea she would branch off in the direction she eventually followed. “I knew I was going to work in New York City and I never thought I’d leave, but I’m so glad I did. I’m so glad I took that opportunity (to move to Colorado),” she said.

“Going out of your comfort zone puts you in a different mindset where you’re willing to try different things,” she said. “I was in a new environment with what seemed like unlimited space and resources so I just did it.”
For Admissions information, contact:
Office of Undergraduate Admissions
SUNY College of Environmental Science and Forestry
Gateway Center
1 Forestry Drive
Syracuse, New York 13210
315-470-6600 ■ Fax: 315-470-6933

For more information on ESF Careers, contact:
Office of Career and Counseling Services
SUNY College of Environmental Science and Forestry
110 Bray Hall
1 Forestry Drive
Syracuse, New York 13210
315-470-6660 ■ Fax: 315-470-4728