Working in the Woods: Forestry as a Career

If you love working with the environment, have a passion for helping others, and want a career that makes you proud to go to work — forestry is the perfect path to explore!

What is forestry?

Forestry is the science of developing, caring for, or cultivating forests. It blends natural and social sciences, weaving together diverse careers in forest landscapes spanning from backcountry Alaska wilderness to vibrant urban centers like Washington D.C.

What is the field of forestry?

Forestry professionals oversee every facet of forested landscapes, managing vital elements like trees, wildfires, and water. Their crucial role ensures these resources remain healthy and accessible for everyone to benefit from!

The following jobs are just a few of the many career paths you can explore in forestry.

Field Operations

Forester:

Do you love being surrounded by trees, and have a passion for conservation and sustainable land management? A career as a forester could be your calling! Foresters manage the intricate balance of ecosystems and human needs within forests, working with private landowners or on public lands. As a forester, you may create and implement forest plans, work on forest legislation, research issues that affect your forest, and develop projects that benefit the forest's health and resilience.

*Education: Foresters usually receive an associate's, bachelor's, or master's degree in Forestry, Biology, Natural Resource Management, Environmental Science, or other related fields.

Wildland Firefighter:

Are you an adventure-seeking hard worker, who wants to be at the front line of protecting forests and communities? A **Wildland Firefighter** could be a great option for you! You can find your path in many different areas of wildland firefighting. Handcrews work on the ground to create firebreaks and introduce prescribed burns to contain out-of-control wildfires. As you advance in firefighting, you may have the opportunity to work on a Hotshot crew - a specialized group that works in the most rugged terrain. **Smokejumpers** parachute out of planes into the heart of wildland fires and are prepared to stay on-site for days at a time. They are highly trained and work to put out already burning fires and prevent their spread. **Air Attack** teams utilize planes and helicopters to fly to remote locations, transport ground crews, and administer fire retardant in-air to aid ground crews. These pilots have specialty training in aviation.

Education: Wildland Firefighters can be fresh out of high school or hold a master's degree depending on specific career goals.

Photo: Joel Prince

Community Engagement

Urban Forester (Urban & Community Forestry):

Forestry isn't just limited to remote areas. Urban foresters work in small towns to big cities. They collaborate with arborists to manage the trees in public spaces, maintain urban forest health, work with city officials to include green spaces in construction projects, and more! Green urban spaces improve the quality of life for both humans and our environment; they provide habitats, clean pollutants from the air, and help keep cities cool by providing shade. Urban foresters work to create resilient cities that give everyone an opportunity to connect with nature.

*Education: Urban Foresters usually receive a bachelor's degree. Degrees may include Forestry, Urban Forestry, Landscape Architecture, or Arboriculture.



If your dream is to pair your knowledge of the forest with inspiring the next generation, conservation education jobs might be the fit for you! This career choice means working with K-12 students and teaching them the importance of forest management and health. One day, you might be in a classroom sharing a science-based forestry curriculum, and the next may be spent on a hike exploring local ecosystems and engaging students in hands-on activities that promote stewardship and conservation. **Education:** Conservation Educators usually receive a bachelor's degree. Degree options include Education, Environmental Studies, or Natural Resource Management. Some colleges offer specialized environmental education programs/certifications.



Photo: Sam Solaita



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STEM

Forest Scientists:

Forests are highly complex ecosystems with thousands of species interacting. Whether it's understanding the smallest of insects to the largest of trees, forest scientists' research is essential for understanding these intricate relationships and ensuring the health and sustainability of forest ecosystems. Forest Ecologists are scientists who study the interactions occurring in forests. This can include animals, trees, water, and more! With the thousands of species living in forests, ecologists have their work cut out for them. Becoming a forest ecologist means focusing on something important to you, researching, and educating people on why it is important. Wildlife Biologists focus their research on the animals in forest ecosystems. They may be tracking migratory patterns of birds, or researching an illness that affects small mammal species. Wildlife biologists work to protect forest species and their habitats and use science to understand the historical changes in their populations. Forest Entomologists study the relationship between insects and trees. These kinds of scientists are essential and teach us why an insect may be helping or hurting our forest ecosystems. When an insect has a change in population or an invasive species finds its way to a new forest, entomologists may research how this will affect trees and other species living in the forest ecosystem.

Education: Forest Scientists have specific knowledge in a particular field of study, and normally receive a master's or doctoral degree in their area of specialization.



Photo: Josh Birnbaum

Geographic Information System (GIS) Specialist:

If you're someone who loves the outdoors but also has an interest in computer science, a GIS Specialist could be the perfect mix of both! Geographic Information Systems (GIS) is the technology that allows us to use data received by satellites and make layered maps containing important information. GIS specialists map and visualize issues that affect forests. Specialists take collected data to create maps that can be used to find patterns, natural hazards, and solutions for forest problems. **Education:** GIS Specialists are normally expected to have an associate's or bachelor's degree. Options for degrees could include Geography, Computer Science, Earth Science, or Engineering.

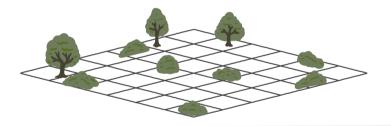




Photo: Joel Prince

Resources for Future Forestry Professionals:

Useful Links:



Careers in Natural Resources Initiative



Sustainable Forestry Initiative: Supporting the Next Generation



Sustainable Forestry Initiative: Green Jobs

Consider the Following:

- Forestry-centered Eagle Scout Service Project
- Extracurriculars
 - Volunteering for local forests, arboretums, or conservation organizations
 - Youth Conservation Corps (National Park Service)
 - State & Regional Youth
 Corps
- Peace Corps
- AmeriCorps
- USDA Forest Service Pathways Program

Additional Careers:

- Forest Ranger
- Tree Planter
- Policy Advisor
- Natural Resource Lawyer
- Arborist
- Forestry Technician
- Forestry Botanist
- Rangeland Management Specialist
- Forest Engineer
- Hydrologist
- Wood Utilization

