

A Guide to Natural Resources Career Pathways in Central Oregon

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Introduction

What is Natural Resource Management?

Natural resources are materials that occur naturally, such as timber, coal, oil, water, air, fish, animals, and land. Natural resource management is the responsible supervision or handling of these resources. This field considers the physical, biological, economic and social aspects of handling natural resources and involves putting resources to their best use for human purposes, in addition to preserving natural systems.

What are Careers in Natural Resources?

When you think of a natural resources job, what do you picture? Many people think of a park ranger or a fire lookout and have the image of working outdoors in a beautiful setting. However, there are

a huge variety of natural resources jobs from monitoring water to tracking wildlife, building fire line to entering data on a computer, speaking in front of a large crowd in a popular park to only seeing a few people over the course of a week. There is also a wide range of skill-levels required for natural resource jobs, from low-skill, entry-level jobs open to very young workers to high-skill jobs open only to those with advanced degrees and high levels of training and experience. In Oregon and across the United States, hundreds of thousands of professionals are working every day to manage and best utilize our natural resources to protect public health, preserve wildlife and habitat, mitigate disasters and meet the demands of growing populations for water, food, recreation, and energy supplies.

Overview of the Guide

This guide was developed to help young people who might be interested in careers in natural resources to learn more about entering this field. We begin by providing information about the range and variety of jobs in the natural resources field, including who potential employers are in Central Oregon. Next, we share examples of career pathways of natural resource professionals in our region, highlighting the steps they took along they way to make it to their current position. Finally, we provide some tips and insight for where to get started, opportunities for career exploration in your school and community, and options to pursue a degree in a natural resources-related field.

This guide was developed with input from multiple stakeholders including K-12 education, federal agencies, and non-profits.



















The Field of FORESTRY

What is a Forestry Professional?

Forestry professionals gather information about forest resources and make decisions to best manage them. A forestry professional may develop and evaluate forest, and fire management plans, provide technical advice, or design plans with interdisciplinary teams of employees to keep forests and grassland environments healthy. Forestry professionals include recreation specialists, professionals with expertise in fire and fuels management, environmental / land use

planners and conservation, watershed, and wildlife management professionals. Most use GIS/GPS and remote sensing skills.

What is the Fleld of Forestry?

The field of forestry combines physical, biological and engineering sciences to manage and improve our nation's forest lands in both rural and urban settings. These lands not only include the trees of a forest but other plants, the soil, water, wildlife and human use.



	Entry Level	Technician	Professional	Management
What are examples of careers in Forestry?	Entry level is supervised - Campground Maintenance - Internships - Trail Crew - Volunteer	Provide technical work in support of and supervised by staff - Fire Program Assistant - Forestry Aide - Forestry Technician - Plant Protection Technician - Soil Conservation Technician	Provide key decision-making on the design and implementation of projects and programs - Arborist - Botanist - Consulting - Fuels Forester - Forest Fire Management - Silviculturist Officer - Soil Scientist - Mood Scientist - Wood Scientist	Manage or administer programs and supervise staff - Forest Manager - Forest Supervisor - Professor - Fire Manager
Education and Training Needed	High School Diploma	Associate's or Bachelor's Degree in related field	Bachelor's or Master's Degree in related field	Master's or PhD in a related field and experience

Who Employs Forestry Professionals?

- Private firefighting contractors with the Forest Service, like GFP Emergency

Sunriver Nature Center

- U.S Forest Service
- National Park Service
- Trust for Public Land
- Oregon Department of Fish and Wildlife

How Can I Get Experience in the Forestry Community?

- Youth Programs & Employment: Junior Naturalist Program at Sunriver Nature Center, Youth Conservation Corps (YCC) with U.S Forest Service
- Volunteer: Sunriver Nature Center, The Nature Conservancy Restoration Workparties

The Field of WILDLIFE AND FISHERIES

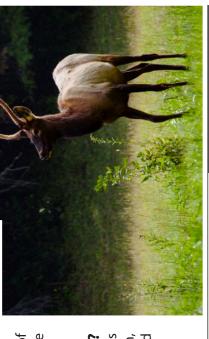
What is a Wildlife and Fisheries Professional?

A fish and wildlife professional may work in research to determine the status of animal populations, the interactions between animals, how animals react to different environmental conditions, and an animal's habitat requirements, behavior or distribution. Fish and wildlife managers put this information to use in the field by designing practices that improve fish and wildlife populations. Much of fish and wildlife management is actually people management. Skillful

communication, written and oral, is one of the most important tools a fish and wildlife professional uses.

What is the Field of Wildlife & Fisheries?

Fisheries and wildlife are scientific disciplines including research, management, education, and law enforcement to sustain fish and wildlife populations.



	Entry Level	Technician	Professional	Management
What are examples of careers in Wildlife and Fisheries?	Entry level is supervised - Internships	Provide technical work in support of and supervised by staff - Biological Science Technician - Fisheries Technician - Wildlife Technician	Provide key decision-making on the design and implementation of projects and programs - Animal Research Scientist - Biological Scientist - Ecologist - Entomologist - Entomologist - Entomologist - Fisheries Biologist	Manage or administer programs and supervise staff - District Wildlife Manager - Fish Hatchery Manager - Professor - Supervisory Biologist - Wildlife Refuge Manager
Education and Training Needed	High School Diploma	Associate's Degree and/ or some experience in a related field	Bachelor's or Master's Degree in biology, ecology, natural resources, zoology or related field	Master's or PhD in a related field and experience

Who Employs Wildlife and Fisheries Professionals?

- U.S Forest Service OSU Cascades
- National Park Service COCC
- Trout Unlimited
- Oregon Department of Fish and Wildlife (ODFW)

How Can I Get Experience in the Wildlife and Fisheries Community?

- Youth Programs & Employment: Youth Conservation Corps (YCC), Heart of Oregon Corps (HOC), 4H OSU Extension
 - Volunteer: Sunriver Nature Center, The Nature Conservancy Restoration Workparties, Kokanee Carnival, High Desert Museum, Wizard Falls Fish Hatchery, Oregon Department of Fish and Wildlife (ODFW)

The Field of WATER MANAGEMENT

What is a Water Management Professional?

it also links many environmental systems together, and water management is challenging. Water management Water is not only one of our most important resources, of growing water needs of humans, and because water professionals must not only be skilled in the sciences, is central to many environmental problems. Because spans multiple jurisdictional boundaries, the field of working with other natural resource professionals. but also in problem solving, communication, and

What is the Field of Water Management?

chemical, and biological sciences along with math, technology, engineering, economics, and law to making decisions about both Water management applies physical, water quality and water quantity.



	Entry Level	Technician	Professional	Management
What are examples of careers in Water Management?	Entry level is supervised - Internships	Provide technical work in support of and supervised by staff - Aquatic Biologist - Aquatic Restoration - Aquatic Toxicologist - Environmental Sampling & Monitoring Technician - Hydrology Technician - Lab Analysis Technician - Ground Water Remediation Technician	Provide key decision-making on the design and implementation of projects and programs - Hydrogeologist - Water Quality Analyst - Water Quality Educator - Surface Water - Surface Water - Water Supply - Water Law Expert - Water Treatment Expert - Watershed Planner - Watershed Planner	Manage or administer programs and supervise staff - Plant Operator - Water Treatment Operator
Education and Training Needed	High School Diploma	Associate's Degree and/or experience in related field	Associate's Degree and/or Bachelor's or Associate's Degree in related field experience in related field	Master's or PhD in related field and experience

Who Employs Water Management Professionals?

- U.S Forest Service
- National Park Service
- Oregon Department of Fish and Wildlife COCC
 - Upper Deschutes Watershed Council **Trout Unlimited**
- Deschutes, Crook or Jefferson County

OSU Cascades

Council Stewardship Projects, Youth Conservation Corps (YCC) Youth Programs & Employment: Upper Deschutes Watershed - Central Oregon Irrigation District (COID)

How Can I Get Experience in the Water Management Field?

Volunteer: Sunriver Nature Center, Environmental Center, The Nature Conservancy Restoration workparties

The Field of GEOSCIENCE

What is a Geoscience Professional?

The work and career path of a geoscience professional is often quite varied. Many geoscience professionals are hired for exploration, development, production and research. Some investigate the earth's physical environment including its soils, oceans and atmosphere while others measure global climate change, locate adequate supplies of natural resources to balance demand with long-term sustainability.

What is the Field of Geoscience?

Geoscience is a scientific field that involves the collection and interpretation of data about the Earth in order to improve the quality and human life. Major disciplines of geoscience include geology, geophysics, hydrology, oceanography, marine science, atmospheric science, planetary science, meteorology, environmental science, and soil science.



	Entry Level	Technician	Professional	Management
What are examples of careers in Geoscience	Entry level is supervised - Internships	Provide technical work in support of and supervised by staff - Geotechnician - Soil Conservation Technician	Provide key decision-making on the design and implementation of projects and programs - Atmospheric Scientist - Hydrologist - Economic Geologist - Marine Geologist - Engineering Geologist - Meteorologist - Environmental Consultant - Oceanographer - Environmental Geologist - Petroleum Engineer - Mining Geologist - Physical Scientist - Geochemist - Professor - Geologist - Sedimentologist - Geomorphologist - Sedimentologist - Hydrogeologist - Soil Scientist	Manage or administer programs and supervise staff - Supervisory Geologist Scientist
Education and Training Needed	High School Diploma	Associate's Degree and/ or some experience in related field	Bachelor's or Associate's Degree in related field	Master's or PhD in a related field and experience

Who Employs Land Management Professionals?

- Bureau of Land Management (BLM)
- National Park Service
- Mining Companies (e.g. Sunstone Mining Company)

How Can I Get Experience in the Land Management Community?

- Youth Programs & Employment: Youth Conservation Corps (YCC), Heart of Oregon Corps (HOC), 4H OSU Extension
- Volunteer: Geoscientists in the Parks Internships National Parks Service, Ancestral Lands Conservation Corps, Mosaics in Science Diversity Internships, Student Conservation Association, University classes

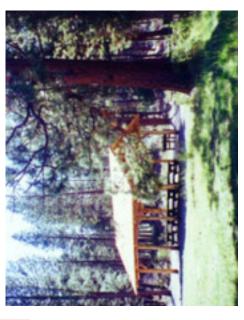
The Field of PARKS & RECREATION

What is a Parks and Recreation Professional?

A parks and recreation professional plans, organizes, and administers recreation programs, services and activities in a variety of settings and to diverse audiences. Parks and recreation professionals may work at national, state or local parks and open space, sports centers, resorts, and camps. Parks and recreation professionals must work well with others while exhibiting leadership, creativity and good decision-making.

What is the Field of Parks and Recreation?

Parks and Recreation focuses on the human use of natural resources for enjoyment, socialization, education, health and well-being. The field combines knowledge of the environment with skills in social sciences, economics, and business.



	Entry Level	Technician	Professional	Management
What are examples of careers in Parks and Recreation	Entry level is supervised - Internships	Provide technical work in support of and supervised by staff - Community Assistant - EducationTechnician - Environmental Technician - Parks Technician - Ranger Assistant - Recreation Technician - Visitor Services Administrative Assistant	Provide key decision-making on the design and implementation of projects and programs - Community Organizer - Education Specialist - Environmental Educator - Event Coordinator - Event Coordinator - Naturalist - Outreach Coordinator - Sports Coordinator - Sustainability - Outreach Coordinator - Park Ranger Interpretation - Parks Planner - Playground Safety Inspector	Manage or administer programs and supervise staff - Director of Activities - Director of Parks, Trails and Recreation - District Manager - Public Lands Director - Summer Camp Director
Education and Training Needed	High School Diploma	Associate's or Bachelor's in related field and/or experience	Bachelor's or Associate's Degree in related field	Bachelor's Degree in a related field and experience

Who Employs Parks & Recreation Professionals?

- National Park Service OSU Cascades
 - Deschutes Land Trust
- Oregon State Parks
- Bend, Redmond, Sisters, La Pine and Crook County Park and Recreation Districts

How Can I Get Experience in the Parks & Recreation Community?

- Youth Programs & Employment: Bend Park and Recreation
 District Programs Sports, Outdoor and Youth Programs; Youth
 Conservation Corps (YCC), Heart of Oregon Corps (HOC)
 - Volunteer: Volunteer with Park and Recreation events

The Field of OUTDOOR ADVENTURE

What is an Outdoor Adventure Professional?

An outdoor adventure professional has followed a passion for at least one outdoor adventure activity, and developed skill in that sport or activity. Outdoor Adventure professionals may work local oufitters, Outward Bound-type programs, sports centers, resorts, and camps. Outdoor adventure professionals must work well with others and also exhibit leadership, a zest for the outdoors, creativity and good decision-making.

What is the Field of Outdoor Adventure?

Outdoor Adventure focuses on the human use of natural resources for enjoyment, risk, challenge, and well-being. The field combines knowledge of the environment with skills in at least one adventure sport or activity plus necessary business knowledge.



	Entry Level	Technician	Professional	Management
What are examples of careers in Outdoor Adventure	Entry level is supervised - Camp Counselor - Day Camp Leader - Internships - Outdoor Adventure Apprentice - Operations Support Crew	Provide technical work in support of and supervised by staff - Operations Support Staff - Customer Relations Apprentice - Camp Support Crew - Bike, Ski Equipment Tech - Menu Planner/ Kitchen Manager - Ski Lift Operator	Provide key decision-making on the design and implementation of projects and programs - Operations Support Staff - Customer Relations - Customer Relations Associate - Apprentice - Retail/Sales Associate - Camp Support Crew - Program Logistics - Bike, Ski Equipment Tech Coordinator - Menu Planner/Kitchen - Biking Guide Manager - Ski Lift Operator	Manage or administer programs and supervise staff - Programs Manager - Sales Manager - Operations Manager - Lead Instructor & Director of Instruction - Office Manager
Education and Training Needed		Associate's or Bachelor's Degree in related field and/or some experience	Bachelor's Degree in related field and/or experience	Bachelor's in a related field, experience in administration / management, Master's Degree

Who Employs Outdoor Adventure Professionals?

- Bend, Redmond, Sisters, La Pine and Crook County Park and Recreation Districts
- Rafting and Paddling companies (Ouzel
 Outfitters, Riverstone Adventures, Sun
 Country Tours, Tumalo Creek Kayak & Canoe)
- k Ski Resorts (Mt. Bachelor and Hoodoo)
 - Climbing companies (Bend Rock Gym and Chockstone)
 Camp Tamarack, Campfire
- Youth Programs & Employment: Camp Counselor and Counselors in Training programs at Camp Tamarack, Camp Caldera, CampFire camps; Participate in Outdoor Adventure Programs to gain skills (backpacking,

How Can I Get Experience in the Outdoor Adventure Community?

climbing, kayaking, rafting, skiing, biking)
- Volunteer: ask an Outdoor program if you can volunteer/apprentice

The Field of LAND MANAGEMENT

What is a Land Management Professional?

of information about the physical environment and human factors such as recreation, livestock cultural resources and policy to determine how public lands can be managed for multiple uses The land management field combines a range with biological factors such as wildlife habitat, production, the preservation of historical or grazing, mineral development, energy

What is the Field of Land Management?

uses, land managers have knowledge of many related fields, as well as critical thinking, problem solving, and communication skills. The field of land management environments, and a variety of careers are available. determine what a particular area of land should be A land management professional works with other used for. Because land is managed for a variety of encompasses the physical, biological, and human natural resource professionals and the public to



	Entry Level	Technician	Professional	Management
What are examples of careers in Land Management?	Entry level is supervised - Internships	Provide technical work in support of and supervised by staff - GIS Technician - Range Technician - Soil Conservation Technician - Survey Aide	Provide key decision-making on the design and implementation of projects and programs - Archaeologist - Cartographer (maps) - Land Use Planner - Economist - Realty Specialist - Environmental Lawyer - Environmental Planner - Environmental Planner - Environmental Policy - Restoration Ecologist - Restoration Ecologist - GIS Specialist - GIS Specialist - Habitat Conservation - Land Acquisition Specialist - Land Acquisition Specialist - Land Acquisition Specialist	Manage or administer programs and supervise staff - Open Space Director - Park Manager - Professor - Public Lands Director - Rangeland Manager - Refuge Manager - Resource Manager
Education and Training Needed	High School Diploma	Associate's or Bachelor's Degree in related field	Bachelor's or Master's Degree in related field	Master's or PhD in related field and experience

Who Employs Land Management Professionals?

- U.S Forest Service
- Oregon State Parks
 - National Park Ser vice
- Bend Park and Recreation District
- Redmond Area Park and Recreation District

OSU Cascades

- The Environmental Center

Deschutes Land Trust Trust for Public Land

How Can I Get Experience in the Land Management Field?

- Youth Programs and Employment: Youth Conservation Corps (YCC) Heart of Oregon Corps (HOC), 4H OSU Extension
 - Volunteer: Sunriver Nature Center, The Environmental Center

Forestry Technician

(Research)

I am currently researching the effects of increased carbon dioxide on aspen stands in the National Forests. Smaller experiments were conducted to determine effects of climate change on the growth of trees. My job is to gather data on a wider scale to help land owners better manage their land.

"There are enough people in this world doing things they don't love. Do what you love and you never work a day in your life."

Senior Researcher-Northern Research Station-USFS

> Forestry Technician-Timber Cruiser- USFS

AAS in Forest Resources Technology- COCC

Trails crew-Parks and Recreation Department

Joined Society of American Foresters

> Volunteered on a trails crew- Pacific Coast Trails Association

Advice:

"Follow your passion.
Don't take the path of least resistance by doing something that you have knowledge or experience, but instead follow the path that gives you the most satisfaction and that you are genuinely interested in."

Joined the US Army



Sean Ackles

Senior Researcher, Northern Research Station, United States Forest Service

"It all started with a love for nature."

Fuels Technician

I develop project plans in forested and rangeland areas for a variety of fuels/fire management objectives. My job is to Treat hazardous fuel strata to minimize the potential of a catastrophic wildfire event. Also, I produce prescribed fire burn plans to restore fire regime condition class intervals, and ecosystem restoration. I have to pass an annual arduous pack test (45 lbs. for 3 miles under 45 minutes) for wildland firefighting.

we don't care who gets

the credit."

Pursuing AAS Degree, Wildland Fire/Fuels Management at COCC

"Remember, there is nothing we can't accomplish as long as

Fuels Technician, Fire Management Associates of Applied Science Degree, Forest Resource Technology from COCC

Student Body President, COCC

Senior Firefighter Engine Crew

Internship, Columbia River Inter-Tribal Fish Commission Advice:

"Explore the many
Natural Resources
disciplines in your career
path,the experience will
help in the long run.
Always collaborate
between stakeholders,
and take any training
opportunity you can."

Resource Technician, Water and Soils Environmental Department

Crew Boss, Forest Restoration Crew

"Started Here: Grew up on the Warm Springs Reservation."



Held three different positions as a firefighter

Truman Merrifield
BIA/Confederated Tribes of Warm Springs

Fire Management

Wildlife Biology

I am responsible for the management of wildlife habitat for Threatened and Endangered Species, Sensitive Species, and Management Indicator Species. Habitat management includes surveying and inventorying the wildlife, conducting habitat analysis, and making recommendations to maintain and improve habitat now and into the future. In addition, we partner with the Oregon Department of Fish and Wildlife to determine habitat management objectives that assist them in meeting population goals for specific wildlife species. Lastly, we develop partnerships with special interest groups to support wildlife monitoring and habitat management.

"I grew up doing everything from hunting to horseback riding in Central Oregon's National Forest. These experiences gave me a tie to the land that made me want to pursue a career in Wildlife Sciences. A career that would allow me to provide those same experiences to future generations."

The two things that have been the most important to get me where I am today 1) Networking with professionals from various agencies 2) Identify a mentor early on this individual can help you make calculated career goals that can better allow you to map out your career path.

District Wildlife Biologist for the US Forest Service in Deschutes National Forest

Worked for the Forest Service for 5 years as a wildlife biologist

Advice:

"The importance of being an effective communicator. The need to have great skills at both written and oral communication. Much of the work I do is associated with working effectively through collaboration with various special interest groups."

Bachelor's of Science in Wildlife Sciences from Oregon State University



Monte Gregg
District Wildlife Biologist,
U.S. Forest Service

Natural Resources

I help manage the land and watersheds for Oregon State Parks in the Central and Eastern regions. This work includes restoring and conserving the park landscapes to make sure that the natural, native habitat is thriving and not overwhelmed by invasive weeds or human and animal impacts.

"There are opportunities even in the

most difficult moments."

- Wangari Maathai, a Kenyan environmentalist and feminist Natural Resource Specialist, Oregon State Parks and Recreation

> Land Manager and Conservation Specialist for the Potomac Valley Audubon Society

Received a Master of Natural Resource Conservation from University of Montana

Received a Bachelor of Science in Biology, minor in Spanish from Washington State University

> Elementary school Spanish teacher, often went to Latin America to expolore different ecosystems

Served as a Peace Corps volunteer in Ethiopia for 2 years to help with reforestation work and habitat conservation projects

Advice:

"Good communication and working well with other people is the most important skill you can have, regardless of your career. Technical skills and expertise can be acquired with experience and through studying."



Field Technician helping to collect forestry and botanical data outdoors

Bridget Tinsley
Natural Resource Specialist, Oregon
State Parks and Recreation

Natural Resources Management

I ensure our crews have the right equipment and line out projects that need to be done. My job as the Natural Resources Manager is to provide the means for the crew to be successful. The Natural Resources department at Bend Park and Recreation District is responsible for trails, wildlife programs and vegetation management.

Natural Resources Manager with Bend Park and Recreation

Wildlife Biologist job with USDA Wildlife Services & three other Wildlife Services Jobs

"Every volunteer project, internship or job contributed to my resume and helped me get my next job."

Seasonal jobs (Biological Technician on the Sequoia National Forest, CA Dept. of Fish and Wildlife) University with a degree in biology

Graduated Sonoma State

Held summer jobs working with the US Forest Service and then the National Park Service

Unpaid internship monitoring a tule elk herd at Point Reyes National Seashore.

Part time jobs in the Biology Department-Research assistant Advice:
"Build relationships
with mentors in your

desired field. They can provide practical advice and help you navigate your career path."

Started studying biology at Sonoma State University

Job shadowed with the California Department of Fish and Wildlife during high school "My career path into natural resources started at a young age. I was always interested in wildlife and the outdoors."



Jeff Amaral
Natural Resources Manager,
Bend Park and Recreation District

Forest Restoration

I manage the Bend Seed Extractory. We are a processing facility that serves all governmental entities across the US. We extract the seed from plant material that is collected on public land then process, test, and package the seed. The end product is very similar to the flower or vegetable seed for your garden, except the seed we work with is native species and it is used for various types of restoration on public land. We work with more than 3,000 different species of grasses, forbs, shrubs, and conifers. We also help land managers with gene conservation and seed storage so that there is appropriate seed, locally adapted, in the event of a natural disaster like a large wildfire.

Manager for the Bend Seed Extractory

Assistant Manager for the Bend Seed Extractory

Graduated with a Bachelor of Science in Natural Resources at OSU-Cascades Campus while working in silviculture

Received a Master of Science in Forest Resources from University of Idaho

"Once I was able to plant trees at a large scale I found I really liked being able to play a role in helping manage our landscapes."

Received an associates degree from COCC while working in silviculture operations on the Sisters

Ranger District

"Don't hesitate to deviate a little from what you are interested in. it is just as important to figure out what you don't like doing and you won't know unless you try it."

Advice:

Had a great summer job in fire so changed my major to forestry

> Started studying chemistry at COCC

Summer job in silviculture

doing forest research

management plans for the

Forest Service

Recreation job with BLM in Portland

"It all started with my high school chemistry teacher, Mrs. Gibb, when she recommended that I attend a natural resource camp."



Kayla Herriman

Seed Extractory Manager, USDA Forest Service Region 6 Bend Seed Extractory

Outdoor Education

I manage Camp Tamarack's Outdoor School and Summer programing. The position includes a mix of responsibilities such as 1) program design (what do we teach students when they come up to camp? What is the right mix of fun and educational activities?), 2) evaluation (was it taught well? Did students/campers enjoy the experience?), 3) teaching skills (for both instructors and high school counselors), and 4) community outreach (to tell people about all the wonderful opportunities we offer!)

Assistant Director in the majestic Central Oregon pines of Camp Tamarack



"I am happiest when I can spend my days helping to create and shape field studies, one macroinvertabrate at a time!"

Served as a Peace Corps volunteer in the villages of Malawi, Africa

Advice:

"Get involved!!! Start volunteering, looking for internships, and meeting people doing things you would love to be doing someday."

Worked in the tide pools of Newport at Hatfield Marine Science Center

> Graduated with a Degree in Fisheries & Wildlife Science and Environmental Education at Oregon State University

"The week I spent as a Student Leader at Twin Oaks Outdoor School - teaching students about stream ecology - began my life as an environmental educator."



Lauren "Otter" Rodgers
Assistant Director, Camp Tamarack

You Don't Have to Work In the Outdoors to Work For the Outdoors

You may have a passion for our natural world, but prefer an office job or have skills that are computer-based. That's perfectly okay! Federal agencies, like the U.S. Forest Service, could not accomplish their work of managing natural resources without the thousands of employees who work indoors. There are lots of opportunities for you to contribute to the field of natural resources. Here are some examples of real jobs in natural resource agencies and organizations:

- Accounting & Budget
- Administrative Officer
- Administrative Assistant
- Clerk
- Communications Director (Public Information Officer)
- Community Engagement Specialist
- Contract Specialist
- Facilities Manager
- Geographic Information Systems (GIS)
- Grants Management Specialist
- Human Resources Specialist
- Visitor Services
- Management
- Program Manager
- Public Relations Specialist
- Realty Specialist
- Support Services Specialist
- Technical Information Specialist
- Technical Writer
- Visitor Services







Getting Your Foot in the Door

Job skills and experience matter. Fortunately, a variety of opportunities exist to prepare you for a career in the field of natural resources. Some types of these opportunities are unpaid, while others provide some sort of compensation. These positions vary by the level of time commitment required, as well as the skill and education level required. Generally speaking, these positions correspond with your level of experience in the field.

A volunteer or internship experience is a great place to start, followed by a seasonal position to build relevant skills and experience. While landing your first



permanent position in the field of natural resources may be your final goal, you will have numerous opportunities to gain additional knowledge and skills throughout your career should you wish to take advantage of them. This will allow you to continue to grow and progress along your career path.

Examples of career-development opportunities:

Volunteer: These positions are typically unpaid. You may volunteer for an organization that needs help answering phones or providing a public service. While there are opportunities to develop skills, these positions are designed to support the organization or effort.

Job Shadowing: This is also an unpaid opportunity. Some organizations allow individuals (including youth and young adults) follow a professional on a short-term basis. A job shadow experience could last a few hours or several weeks and is a great way to see first-hand what the job entails.

Internships and AmeriCorps Service: AmeriCorps Service and internships generally require more of a time commitment that volunteer opportunities, but they also provide greater opportunity for job skill development and professional growth through mentorship and training. Internships can be paid or unpaid, while AmeriCorps service members are reimbursed a living stipend. Some AmeriCorps opportunities also provide college credit and/or scholarships.



Seasonal and/or Temporary Employment:

If you're interested in working for the federal government, maybe the best way to get your foot in the door is through seasonal employment. Seasonal positions are jobs that are only needed during certain months of the year. Typically, these opportunities take place during the agency's "field season". In the Pacific Northwest, the field season typically lasts from May through August, but is sometime extended. These positions are often advertised in late summer/early fall of the previous year – so you'll need to plan ahead!

Natural Resoures Career Exploration Programs and Opportunities

Opportunity Outdoor/Natural Resources Field Trips	Organization Camp Tamarack (Outdoor School) Children's Forest of Central Oregon Discover Your Forest High Desert Museum Middle Deschutes Watershed Council Sunriver Nature Center The Environmental Center Trout Unlimited	X X X Elementary/Middle	X X High School	Post-High School	X X X X X X X X X X X X X X X X X X X	x x x Deschutes	x x x x befferson
	U.S. Forest Service	Х	Χ		Χ	Χ	Χ
	Upper Deschutes Watershed Council	Х	Х			Х	Х
After-school and Summer Programs		Х	Х		Х	Х	Х
	Boy Scouts/Girl Scouts	Х	Х		Х	Х	Х
	Boys and Girls Club/Kids Club	Х	Х		Х	Х	Χ
	Caldera	Х	Х		Х	Х	Χ
	Camp Fire Central Oregon	Х	Χ		Χ	Χ	
	Camp Tamarack	Х	Χ		Χ	Χ	Χ
	High Desert Museum	Х				Х	
	Park and Recreation Disctricts	Х	Χ		Χ	Х	Χ
	School Clubs	Х	Х	Х	Χ	Χ	Χ
Natural Resource Career and	Crook County High School		Х		Χ		
Technical Education Programs	Jefferson County Middle School	Х					Χ
	La Pine High School		Х			Χ	
	Madras High School		Χ				Χ
Agricultural Science Program	Redmond High School		Χ			Χ	
Interdisciplinary Environmental							
Expedition Course	Sisters High School		Х			Χ	
Volunteer Opportunities	Camp Tamarack (Student Leader)		Χ		Χ	Χ	Χ
	Discover Your Forest		Χ	Χ	Χ	Χ	Χ
	High Desert Museum		Χ	Χ		Χ	
	Crook County HS (Outdoor School Leader)		Χ		Χ		
	Sunriver Nature Center		Χ	Χ		Χ	
Internships	Bureau of Land Management			Χ	Χ		
	Children's Forest of Central Oregon		Χ	Χ	Χ	Χ	Χ
	Discover Your Forest		Χ	Χ	Χ	Χ	
	U.S. Forest Service		Χ	Χ	Χ	Χ	
Central Oregon Youth Conservation	Heart of Oregon Corps/Central Oregon						
Corps	Intergovernmental Council		Χ		Χ	Χ	Χ
AmeriCorps/Stewardship Crews	Heart of Oregon Corps			Χ	Χ	Χ	Χ

Looking for a Federal Job? Tips for Success

- 1. Tailor your Search, Resume, and Application to the Federal Process: Applying for federal jobs may seem overwhelming. As we teach in the USAjobs workshop, it is important that you tailor your resume and search to the federal process. We recommend attending a workshop before you apply for a federal job, but if you are unable to do so, USA jobs has resources available.
 - https://www.usajobs.gov/Help/how-to/
 - Video: https://www.youtube.com/user/usajob-sapp



2. Experience matters! Federal service is competitive.

If you have less than one year of experience in the field where you plan to work, look into paid and unpaid opportunities such as Internships (Pathways, Resource Assistance Program, & others), Service (AmeriCorps & YCC), Seasonal work.

- Pathways: This is a federal government internship program. Opportunities are listed in USAjobs. Most positions require some college. Information can be found at: https://www.usajobs.gov/Help/working-in-government/unique-hiring-paths/students/
- Resource Assistance Program: This is a Forest Service internship program that is administered by RA designated non-profit partners. Information can be found at: https://www.fs.fed.us/working-with-us/volunteers/resource-assistants-program
- AmeriCorps: This is a national program with local opportunities. Information can be found at: https://www.nationalservice.gov/programs/americorps
- Youth Conservation Corps (YCC): This is a national program for young adults age 15-18. Information about this program can be found at: https://www.nps.gov/subjects/youthprograms/ycc.htm
- 3. Be realistic. You will evolve and grow throughout your career. As important as it is to know where you are going you must also understand where you are today. Most of you are at the beginning of your career, so you will start at a GS-03, GS-04, or GS-05. Before you apply, research your desired position. What is the starting salary (both in the private sector and federal sector) and what is the mid and late career average salary. Will this work for you? What education might it take to move to the next level?
- 4. Be flexible. Most federal employees don't start their careers in their ideal job. Examples of more typical first jobs in the Forest Service are include maintaining facilities, working the front desk, and marking trees. If you can, try to see the potential in your first job rather than the pay and glory.
- 5. Opportunities for Veterans and Individuals with Disabilities: The federal government hires the greatest percentage of veterans and individuals with disabilities. If you fall into either of these categories, look into the special hiring authorities and seek out advice. A good place to start is:
 - Veterans: https://www.usajobs.gov/Help/work-ing-in-government/unique-hiring-paths/veterans/
 - Individuals with Disabilities: https://www.usajobs.gov/Help/working-in-government/unique-hiring-paths/individuals-with-disabilities/



Pacific Northwest Colleges with Degrees Related to Natural Resources

Oregon		
Central Oregon Community College	Forest Resources Technology	AAS
, ,	Forestry	AS
	Natural Resources	AS
	Wildland Fire/Fuels	AAS
Mt. Hood Community College	Fisheries Technology	AAS
, ,	Natural Resources Technology: Forest Resources	AAS
	Natural Resources Technology: Wildlife Resources	AAS
Oregon State University (Corvallis)	Fisheries and Wildlife Administration	PSM
,	Fisheries and Wildlife Sciences	BS
	Fisheries Science	MAg, MS, PhD
	Forest Ecosystems and Society	MF, MS, PhD
	Forestry	BS
	Forest Engineering	BS
	Forest Engineering/Civil Engineering	BS
	Natural Resources	BS
	Rangeland Sciences	BS
	Rangeland Ecology and Management	MAg, MS, PhD
	Recreation Resource Management	BS
	Soil Science	MAG, MS, PhD
	Sustainable Forest Management	MF, MS, PhD
	Wildlife Science	MAg, MS, PhD
	Wood Science and Engineering	MS, PhD
Oregon State University, Cacades	Natural Resources	BS
	Tourism and Outdoor Leadership	BS
Rogue Community College	Environmental Sciences/Forestry Interest	AAOT
Southwest Oregon Community	Forestry	AS
College	Natural Resources	AS
Tillamook Bay Community College	Agriculture and Natural Resources	AAS
Treasure Valley Community College	Natural Resources	AS
	Wildland Fire Management	AAS
	Wildlife Resources	AS
California		
California Polytechnic State	Forestry and Natural Resources	BS
University, San Luis Obispo		
Humboldt State University	Fisheries Biology	BS
	Forestry	BS
	Natural Resources	BS

Pacific Northwest Colleges with Degrees Related to Natural Resources (cont'd)

		1
University of California, Berkeley	Environmental Science, Policy, and Management	PhD
	Forestry	BS, MF
	Range Management	MS
Idaho		
University of Idaho	Conservation Biology	BS
	Ecology	BS
	Fire Ecology and Management	BS
	Fisheries Resources	BS
	Forestry	BS
	Natural Resources	PhD
	Natural Resources Conservation	BS
	Rangeland Conservation	BS
	Renewable Materials	BS
Nevada		
University of Nevada, Reno	Forest Management and Ecology	BS
	Natural Resource and Environmental Science	MS
	Rangeland Ecology and Management	BS
	Wildlife Ecology and Conservation	BS
Washington		
Washington State University	Environmental and Forest Sciences	PhD
	Forestry	BS
	Natural Resource Science	MS
	Wildlife Ecology and Conservation Sciences	BS
University of Washington	Aquatic Fisheries Sciences	BS
	Environmental Science and Terrestrial Resource	BS
	Management	
	Environmental and Forest Sciences	MFR, MS, PhD

AS - Associate of Science

AAS - Associate of Applied Science

BS - Bachelor of Science

MS - Master of Science

MF - Master of Forestry

PhD - Doctorate Degree