

Conservation Scientists and Foresters

SOC: 19-1030 • Career Profile Report

■ Key Facts

\$69,060

Median Salary

42,400

Employment

+3.0%

Growth Rate

■ Requirements & Salary Range

Education: Bachelor's degree

■ Automation Risk Assessment

Low Risk - 8.0% probability of being automated in the next 10-20 years.

This job is relatively safe from automation due to its creative, social, or complex problem-solving requirements.

■■ Work-Life Balance

7.5/10 - Good work-life balance

■ Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

Realistic	6.2/10	Investigative	9.4/10
Artistic	5.6/10	Social	6.4/10
Enterprising	4.8/10	Conventional	6.4/10

■ Top Skills Required

Analytical skills, Communication skills, Critical-thinking skills, Management skills, Physical stamina

✓ Strengths

- High Demand
- Flexible Work
- Continuous Learning

■ Challenges

- Burnout Risk
- Rapid Technological Change

■ What They Do

Conservation Scientists and Foresters are environmental professionals who manage and protect **forests, rangelands, wetlands, and other natural resources** to ensure their sustainable use for future generations. They balance ecological health with human needs by applying science-based practices to conserve soil, water, wildlife habitat, and forest ecosystems. Their work supports environmental resilience, climate adaptation, and responsible land management across public and private lands.

This career is well suited for individuals who enjoy outdoor work, environmental problem-solving, and applying science to real-world conservation challenges.

What Do Conservation Scientists and Foresters Do?

Conservation scientists and foresters develop plans and oversee activities that maintain healthy ecosystems while supporting agriculture, recreation, and resource use. Their duties vary by specialty and land type but emphasize sustainability and stewardship.

Common responsibilities include:

- Assessing land conditions, soil health, and vegetation
- Developing conservation or forest management plans
- Monitoring wildlife habitat and ecosystem health
- Advising landowners and agencies on sustainable practices
- Managing forests for timber, recreation, and conservation goals
- Preventing and responding to threats such as wildfires, pests, and erosion
- Ensuring compliance with environmental regulations and policies

Types of Conservation Scientists and Foresters

This occupation includes several specialized roles:

- Conservation Scientists: Work with farmers, ranchers, and landowners to improve soil, water, and land use practices.
- Foresters: Manage forest lands for timber production, recreation, and ecosystem health.
- Wildlife Habitat Specialists: Focus on preserving and improving habitats for native species.
- Urban Foresters: Manage trees and green spaces in cities and communities.
- Fire Management Specialists: Plan and oversee wildfire prevention and response strategies.
- Environmental Compliance Officers: Ensure land-use activities meet conservation standards.

Skills and Abilities Needed

Conservation scientists and foresters combine scientific knowledge with practical field skills.

Core Professional Skills

Personal Qualities That Matter

Education and Training Pathway

Most professionals in this field follow a structured education and experience pathway:

- Bachelor's Degree: Typically in forestry, environmental science, natural resources, ecology, or a related field
- Field Experience: Internships or seasonal work in conservation or forestry settings
- Advanced Education (optional): Master's degree for research, leadership, or specialized roles
- Professional Certification or Licensure: Required or preferred in some states and roles
- Continuing Education: Ongoing training in environmental regulations and management techniques

Where Do Conservation Scientists and Foresters Work?

These professionals work across public, private, and nonprofit sectors:

- Federal and State Government Agencies

- Environmental and Conservation Organizations
- Private Forestry and Timber Companies
- Agricultural and Ranching Operations
- Universities and Research Institutions
- Consulting and Land Management Firms

Work often involves a mix of fieldwork and office-based planning.

How Much Do Conservation Scientists and Foresters Earn?

Earnings vary based on education, employer, and experience:

- Entry-Level Roles: Typically earn professional salaries while gaining field experience
- Experienced Scientists and Foresters: Often earn higher pay with specialization or supervisory duties
- Senior or Management Positions: May earn more when overseeing large land areas or programs

Is This Career Difficult?

This career can be physically and technically demanding. Professionals must work outdoors in challenging conditions and make decisions that affect ecosystems over long time horizons. The difficulty lies in balancing environmental protection with economic and human needs while adapting to climate and land-use changes.

Who Should Consider This Career?

This occupation may be a strong fit if you:

- Care deeply about environmental conservation
- Enjoy outdoor and field-based work
- Like applying science to practical problems
- Value long-term impact over short-term results
- Are comfortable working with landowners and agencies

How to Prepare Early

- Take courses in biology, environmental science, and geography
- Spend time outdoors developing field skills
- Volunteer with conservation or environmental groups
- Learn basic mapping or data collection tools
- Explore internships or summer programs in forestry or conservation

Conservation scientists and foresters protect natural resources while guiding sustainable land use, ensuring healthy ecosystems and resilient landscapes for generations to come.