



If you like being
outdoors exploring the world
around you,

are curious about how the
environment works,

enjoy using your mind to solve
problems,

and want to do work that is
important to society,

you should consider
the many



Careers in Ecology



ECOL·O·GY: from Greek oikos = house (place we live) logos = (study of)

- the branch of science studying interactions and relationships between organisms and their environment
- a discipline, a profession, a community of scientists, of which you can be part !



WHAT DO ECOLOGISTS DO?

The work of ecologists is extremely important. Anything that involves whole organisms and the living and non-living things around them involves ecology. Whether they investigate urban, suburban, rural, forest, desert, farm, fresh water, estuarine, or marine environments, ecologists help us understand the connections between organisms and their environment.

Ecologists are employed in many different places - universities, government agencies, consulting firms, research laboratories, museums, field stations, parks and recreation areas, and industry - and their salaries are similar to other employees with the same amount of experience and academic training.



WHAT KINDS OF JOBS ARE THERE?

There is something for everyone in the field of ecology - jobs exist for all experience levels and abilities. Despite the differences in their chosen specialties, all ecologists are scientists who share an intense curiosity about how life works on this planet.

Environmental Consultants - assess the ecological impacts of conservation, development, and industry projects and recommend solutions to environmental problems

Natural Resource Managers - manage ecological resources for public and private organizations

Park Naturalists- develop and deliver education programs to students of all ages

Research Assistants - collect and analyze data in the field and lab

Research Scientists - investigate and evaluate new ideas and problems through field or lab work, leading teams of scientists

Restoration Ecologists - plan, organize, and carry out programs to reestablish natural ecosystems

University/College Professors - conduct research and teach at the undergraduate and graduate levels

Program Managers - develop ways to disseminate and use ecological knowledge for policy makers and the general public

Ecologists...

- teach and advise students;



- give advice to local, state and federal policy makers;

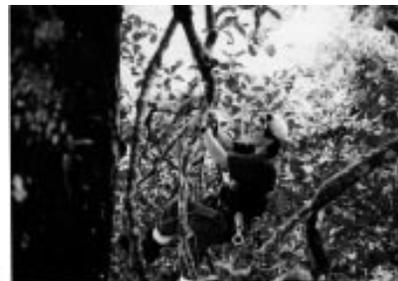
- communicate with co-workers, students, and the public;

- solve environmental problems;



- conduct research outdoors and in laboratories; and

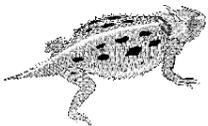
- help manage natural resources.



WHAT KIND OF BACKGROUND DO I NEED?

Ecologists specialize in the links between living things and their environment so you will need to have a strong background in the life sciences, such as zoology, microbiology, and botany, as well as a good understanding of physical, chemical, and earth sciences. Computers are essential tools, and the more experience you have with spreadsheets, word processing, graphics, and use of the web, the better. All ecologists rely upon mathematics to measure, describe, and make predictions about the natural world.

Ecologists need to communicate ideas with those around them, so it is extremely important to get a lot of experience writing and making oral presentations. Because environmental challenges require working with people and ideas from disciplines beyond the natural and physical sciences, it also is useful for ecologists to know something about economics and other social sciences and engineering.



WHAT IS THE JOB OUTLOOK LIKE?

Job opportunities in ecological and environmental fields are expected to grow enormously over the next several years. As environmental problems and the resolve to address them increase over time, more ecologists will be needed to better understand how ecosystems work, determine environmental impacts, develop management plans to avoid environmental problems and restore ecosystems, educate the general public, and develop and manage sustainable communities.

There are careers in ecology for people at every level - - students, high school graduates, college graduates, and people with advanced degrees. Generally, responsibilities, freedom and financial compensation increase with more education and experience.



WHAT CAN I DO RIGHT NOW?

There are many ways to explore the world of ecology to find out whether you are interested in pursuing it as a career. One way is to take advantage of activities and courses happening right at your own school.

q *Sign up for an environmental science class or join an after-school ecology club.* Many scouting, boys and girls clubs, and other youth organizations incorporate ecology into their programs. Also, many community colleges and universities offer summer and school-year programs for high school students.

q *Volunteer or get an internship locally where ecological research, teaching, or management is being done.* Opportunities exist at parks, nature centers, wildlife refuges, government research labs, museums, zoos, aquariums, conservation organizations, field stations, and consulting firms. All are great places to learn new skills, become involved with interesting issues, establish contacts for future jobs, and learn something not taught in class - what ecologists do on a day-to-day basis.

q *Contact a local ecologist!* Explain that you want to learn more about ecology - find out what he or she does and whether he or she knows of any opportunities for you to learn more about the field.

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HOW DO I LEARN ABOUT OTHER OPPORTUNITIES?

There are many organizations that produce newsletters and maintain web sites that advertise volunteer, intern, full time and seasonal ecology positions. Here are a few to explore:

- *Ecological Society of America* (1707 H Street, NW, Suite 400, Washington, DC 20006, 202-833-8773, <http://esa.sdsc.edu>) the country's primary professional organization of ecologists.
- *EJobs* (<http://www.ejobs.org/>) links to opportunities in the USA and Canada.
- *The Environmental Careers Organization* (179 South St., Boston, MA 02111, 617-426-4375, <http://www.eco.org/>) acts as a clearinghouse for a wide variety of internships.
- *The Job Seeker* (28672 County Highway EW, Warrens, WI 54666, 608-378-4290, <http://www.tomah.com/jobseeker/>) newsletter of natural resource and environmental vacancies.
- *National Environmental Employment Report* (100 Bridge St., Bldg. A, Hampton, VA 23669, <http://www.environmental-jobs.com/>) environmental and natural resources job information and career news.
- *The Student Conservation Association* (P.O. Box 550, Charlestown, NH 03603, 603-543-1828, <http://www.sca-inc.org/>) matches students and volunteer opportunities with government and private agencies.



I WANT TO BE AN ECOLOGIST!

Once you know you are interested in pursuing a career in ecology, find out about the academic programs offered at colleges and universities that match your specific interests. Ask a guidance counselor for help or contact individual schools directly to find out more about what they offer. Request an information packet or speak directly with an individual in a specific department. Visit colleges and universities to learn about their specific programs, to meet with professors and other students, and to get a feel for the community.

You will find ecology to be a fun, exciting, and rewarding career. You'll get to work in really interesting places, both nearby and afar. You will be a respected member of your community. The knowledge you help build and share will be valued by other scientists, teachers, citizens, policy makers, and managers - - for you will be helping society make sound decisions and contributing to our understanding of how nature works.



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