



Educational Topic

Ecologist

Related Job Titles:

Environmental Biologist, Biologist, Environmental Scientist

Job Description:

An ecologist studies the interactions between living things and their past, present and future environments. They often solve environmental problems, such as habitat damage, global climate change, or species extinction. Ecologists are often responsible for addressing social issues such as the spread of disease and the effect of natural disturbances (fire, drought, flooding) on the surrounding environment. Ecologists often work in desolate and remote areas where field work can be strenuous and the extreme weather conditions demand a hardy and healthy individual. While in the field they collect plant, animal, soil, air, and/or water samples to further analyze in the laboratory. Others work in more traditional environments such as laboratories, offices, work stations or universities where they conduct research, write and publish papers, advise government and environmental agencies, or teach.

Interests / Abilities:

- Do you have a love of nature and being outdoors?
- Are you good at observing and then reporting what you see?
- Can you clearly communicate your ideas to others?
- Do you believe in trying to preserve the environment?
- Are you interested in how plants and animals interact with each other?

Suggested School Subjects / Courses:

- Biology
- Chemistry
- Physics
- Mathematics (algebra, trigonometry and calculus)
- Statistics
- Environmental studies
- Geography
- Laboratory research and fieldwork
- Writing and speech

Education / Training Needed:

The minimum education required for this position is a bachelor's degree in Biology, Environmental Science, or related field from an accredited college or university. This level generally does not involve research and generally involves assisting others in testing and observation. A master's degree is required for applied research and managerial positions. A Ph.D. degree is usually necessary for independent research.

Areas of expertise:

- *Theoretical/Statistical*: mathematical modeling of the size, density, and distribution of a species
- *Conservation*: advocating preservation of ecosystems and natural resources through management and planning
- *Plant*: study of plants in their environment
- *Animal*: study of animals and the impact they have on their environment
- *Freshwater/Marine*: study of aquatic plants and animals and their unique environment

