Conservation Biologist

Protecting endangered species, preserving habitat.
Conservation biology developed as a field in the 1980s, when people grew more and more concerned about species extinction and worldwide loss of natural habitats. Conservation biologists work to slow or reverse these trends. They study rare and endangered species, because they want those plants and animals to recover so that they no longer need special protection. Conservation biologists also help protect and manage whole ecosystems, since many native habitats in the world have shrunk to tiny fragments of their former range. Some of the most famous restoration projects in the United States, such as reintroducing gray wolves to Yellowstone National Park, were designed and conducted by conservation biologists. Many students are drawn to the field because they want to work outdoors with rare or charismatic species. However, almost all conservation biologists also work with the public, especially with people whose lives are affected by efforts to protect endangered species or habitats.

Conservation biologists work in federal and state government agencies, and in nonprofit organizations interested in protecting natural resources. Some work with captive animal populations in zoos and wild animal parks. More and more are working with environmental consulting firms: companies hired by agencies and businesses to help them meet government regulations or to do an environmental impact analysis and to write the grants necessary to get funding or permits. Successful conservation biologists have the expertise to analyze the field situation, design a conservation strategy that meets the needs of the business, and communicate the strategy.

To be a conservation biologist, you need a college education and practical experience in the field. You need courses in biology, chemistry, ecology, genetics, and resource management. Since most conservation problems involve the public, you also need courses in English, communication, statistics, economics, and public policy. Public speaking and writing skills are valuable assets. Many positions now require computer knowledge, especially with geographic information systems (GIS); some positions require people with advanced computer modeling skills.

In high school, take as much math, chemistry, physics, biology, and English as possible. Look for opportunities to work with parks, government agencies, or nonprofit groups in internships or volunteer positions to gain practical experience and network connections. Experience writing for high school publications, leading meetings, and working in teams are definite assets.