

Conservation Concentration in the Biology Department at Winthrop University

INTRODUCTION

Students interested in conservation have a wide variety of career options, including work with government agencies (e.g., South Carolina Department of Natural Resources, US Forest Service), nonprofit organizations (non-governmental organizations (NGOs)), zoos, and aquariums, as well as ecological consulting, a faculty or research position at a college/university or field station, or policy work.

Work in conservation spans a wide variety of focus areas, ranging from specific (e.g., captive breeding of endangered species in zoos and aquariums) to very broad (e.g., managing a protected area for overall biodiversity conservation). The US Department of Labor provides additional information on types of work, qualifications, and job outlook (<https://www.bls.gov/ooh/life-physical-and-social-science/conservation-scientists.htm>). Below is a list of organizations that may provide additional information for particular interests:

Association of Zoos and Aquariums (<https://www.aza.org/>)
Conservation International (<https://www.conservation.org/>)
International Union for Conservation of Nature (<https://www.iucn.org/>)
Ocean Conservancy (<https://oceanconservancy.org/>)
Society for Conservation Biology (<https://conbio.org/>)
Society for Ecological Restoration (<https://www.ser.org/page/about>)
Student Conservation Association (<https://www.thesca.org/>)
The Wildlife Society (<https://wildlife.org/>)
U.S. Fish and Wildlife Service (<https://www.fws.gov/>)
Wildlife Conservation Society (<https://www.wcs.org/>)

COURSEWORK

If you are interested in a conservation-related career, you may want to consider the following minors or take the following courses:

- Minors: Geology, Sustainability, Environmental Studies, Geography, or a foreign language if you are interested in international work.
- One or more courses in geospatial technologies: GEOG 305/GEOG 305 (Introduction to Geographic Information Systems), GEOG 308 (Introduction to Geospatial Technologies), or GEOG 320 (Remote Sensing of the Environment).
- One or more geology courses: GEOL 110/113 (Physical Geology with Laboratory), GEOL 220 (Oceanography), GEOL 225 (Soils and Land Use), GEOL 335 (Fundamentals of Geochemistry), or GEOL 340 (Hydrogeology).
- GEOG 315 (Global Sustainable Development).

Courses with a significant field component, such as BIOL 303, 508, 510, 511, 552A, 552B, and GEOL 340, provide valuable field experiences and often provide skills in identification of various taxonomic groups.

WHAT ELSE YOU CAN DO TO PREPARE FOR A CAREER IN CONSERVATION

Winthrop offers several opportunities for you to gain experiences that are greatly valued by potential employers. You should speak to an advisor about identifying opportunities that best align with your career goals. Opportunities available within the Biology Department and at Winthrop are listed below:

- Undergraduate research (BIOL 370, 371, 450H, 470, 471, 472) with a faculty member whose focal area is of interest to you is a great way to obtain field and lab experience.
- Internships (BIOL 461 or 463) provide off-campus experiences.
- Tri-Beta Biological Honor Society
- Student Environmental Action Coalition
- Conservation and Environmental Professions Connection (provides information about career preparation, conservation organizations, and specific opportunities)