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, and 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 (<u>https://www.bls.gov/ooh/life-physical-and-social-science/conservation-scientists.htm</u>). Below is a list of organizations that may provide additional information for particular interests:

International Union for Conservation of Nature (https://www.iucn.org/) Conservation International (https://www.conservation.org/) Student Conservation Association (https://www.thesca.org/) U.S. Fish and Wildlife Service (https://www.fws.gov/) The Wildlife Society (https://wildlife.org/) Wildlife Conservation Society (https://wcs.org) Society for Conservation Biology, North America Program (https://conbio.org/groups/sections/north-america/) Ocean Conservancy (https://oceanconservancy.org/) Society for Ecological Restoration (https://www.ser.org/page/about) Association of Zoos and Aquariums (https://www.aza.org/animals-and-conservation)

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/GEOL 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 327 (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. Participation in research (BIOL 370, 371, 450H, 470, 471, 472) with a faculty member whose focal area is of interest to you is another way to obtain field and lab experience. In addition to your course work, off-campus internships (BIOL 461 or 463) provide useful experiences and are greatly valued by potential employers.