The **BIOLOGY, BOTANY and ZOOLOGY** majors at Humboldt State University are broadly based in order to allow latitude for student choice in developing a program suitable to individual needs. Favorable opportunities can be expected for biological scientists with advanced degrees and for bachelor’s candidates with outstanding educational and experiential backgrounds. Employment in the life sciences is expected to grow due to recent advances in genetic research, advances in biological technology and efforts to conserve the environment.

The employment outlook will vary by specialty. Those who have the ability to do research in areas related to the genetic, cellular and biochemical areas of biology should experience better employment opportunities than those in other specialties. However, many persons with a bachelor’s degree find jobs in occupations such as sciences or engineering technicians or medical laboratory technologists. There is a continuing demand for secondary and private school life science teachers.

### Related Job Titles

The following list is not meant to be all inclusive; many other job alternatives and titles may exist. Many of the job titles listed require further education.

- Biologist
- Biological Technician
- Life Scientist
- Laboratory Asst./Tech.
- Research Assistant
- Technical Writer
- Naturalist
- Park Ranger
- Environmental Educator
- Museum Curator
- Science Teacher/Professor
- Conservation Officer
- Environmental Scientist
- Environmental Planner
- Environ. Protection Specialist
- Ecotourism Specialist
- Agriculture Inspector
- Botanist
- Horticulturist
- Plant Geneticist
- Plant Ecologist
- Plant Physiologist
- Zoologist
- Water Quality Biologist
- Marine Biologist
- Aquatic Biologist
- Marine Educator
- Environmental Health Sanitarian
- Industrial Hygienist
- Microbiologist (Public Health Micro.)
- Biotechnologist
- Pharmaceutical Sales Rep.

### Possible Employers

#### Private & Non-Profit:

- Environmental Ed./Nature Centers
- Resorts
- Outdoor Recreation
- Sportsman’s Clubs & Orgs.
- Zoos & Aquariums
- Environmental Research & Consulting Firms
- Plant Genetics Companies
- Biotechnology Companies
- Pharmaceutical Companies
- Independent Labs
- Biological Supply & Equip. Houses

#### Federal Agencies:

- U.S. Army Corps of Engineers
- National Park Service
- Environmental Protection Agency
- Bureau of Land Management
- Bureau of Reclamation
- Natural Resources Conservation Service
- Animal & Plant Health Inspection Service
- Plant Protection & Quarantine Service
- Agricultural Research Service
- Bureau of Indian Affairs
- Smithsonian Institution
- Dept. of Health & Human Services
- Food & Drug Administration
- Centers for Disease Control
- Public Health Service
- Veteran’s Administration
- Dept. of Energy – National Labs
- Consumer Protection Agency

#### State, County & Local Agencies:

- Farm & Home Advisor
- Food & Agriculture
- Public Health Department
- Medical Centers/Hospitals
- Health Services Department
- Family Planning
- Agricultural Extension Service
- Environmental Health
- Environmental Quality
- Solid Waste Management
- Water Resources Department
- Air Resources Board
- Parks & Recreation Dept.
- Fish & Game
- Conservation
A 4-year College Degree is designed to give you the Top Skills employers are looking for. According to the National Association of Colleges and Employers, those skills and abilities are:

- Effective Communication
- Working in a team structure
- Making decisions/solving problems
- Planning/organizing and prioritizing work
- Obtaining and processing information
- Analyzing quantitative data
- Proficiency with computers and software
- Creating and editing written reports
- Selling and influencing others

** Marketable Skills In Your Major**

**Communication**
- Writing precise technical reports
- Working as part of a team
- Media, public relations, and public speaking

**Technical Skills**
- Knowledge of plant and animal ecology
- Operating and maintaining specialized scientific equipment
- Conducting chemical analyses
- Culturing body fluids or tissue samples

**Recording & Interpreting Data**
- Categorizing specimens & experiments
- Studying & describing normal plant and animal physiological functions
- Observing and recording animal behavior or habits
- Analyzing microscopic samples

**Computer Skills**
- Developing spreadsheets
- Working with statistical packages
- GIS—ArcView, ArcInfo

**Resources**

**PROFESSIONAL ASSOCIATIONS**
- American Society for Cell Biology
  www.ascb.org/
- American Society of Mammalogists
  www.mammalsociety.org/
- Society for Conservation Biology
  www.conbio.org/
- American Society for Biochemistry and Molecular Biology
  www.asbmb.org/
- American Association of Zoos & Aquariums
  www.aza.org/JobListings/
- Botanical Society of America
  www.botany.org/

**Graduate School**
- Getting In: An Applicant's Guide to Graduate School Admissions
  www.gettingintogradschool.com/
- GradSchools.com
  www.gradschools.com
- US News & World Report
  grad-schools.usnews.rankingsandreviews.com/best-graduate-schools
- Video: Getting into Highly Competitive Graduate School (Donald Asher)

**JOB SEARCH BOARDS**
- Texas A & M Wildlife & Fisheries Science Job Board
  wfscjobs.tamu.edu/job-board/
- Biotech CareerCenter
  www.biotechcareercenter.com/index.html
- ECOLOG-Listserve
  listserv.umd.edu/archives/ecolog-l.html
- CyberSierra Natural Resources Job Search
  www.cyber-sierra.com/nrjobs/wildlife.html
- American Zoological Association
  www.aza.org/JobListings/
- USA Jobs
  www.usajobs.opm.gov/
- State of California Fish & Game
  www.dfg.ca.gov/jobs/
- The Science Jobs.com
  www.thesciencejobs.com/

**INTERNSHIPS**
- HSU Career Center's Springboard
  www.humboldt.edu/career
- National Science Foundation (REU’s)
  www.nsf.gov/crssprgm/reu/index.jsp
- Internship Series Online
  (user name=Humboldt; password=GoJacks)
  www.internships-usa.com/
- Association of American Medical Colleges Summer Undergraduate Research
  www.aamc.org/members/great/61052/great_summerlinks.html