

# WILDLIFE AND FISHERIES

## What can I do with this major?

### AREAS

#### WILDLIFE SCIENCES

Conservation  
Species survival  
Global health  
Sustainability  
Renewable energy  
Wildlife management  
Resource/Range/Property management  
Hunting and game management  
Permitting and compliance  
Law enforcement and policy  
Advocacy  
Parks and recreation  
Land use planning/Environmental planning  
Wildlife biology and ecology  
Research  
Animal control  
Zoology  
Non-game and endangered species  
Biodiversity

### EMPLOYERS

State, city, and county government agencies dealing with natural resources  
Federal government:  
Fish and Wildlife Service  
Park Service  
Forest Service  
Bureau of Land Management  
Natural Resources Conservation Service  
Environmental Protection Agency  
Department of Justice  
Department of Defense  
Army Corps of Engineer  
National and international environmental and conservation organizations  
Environmental consulting firms  
Zoos, aquariums, and other collections of animals  
Universities and colleges  
Non-governmental organizations (e.g., Trout Unlimited, National Wild Turkey Federation, National Deer Association, Nature Conservancy)

### STRATEGIES

Develop physical stamina, outdoor skills, and comfort being in close proximity with large and small animals.  
Advanced degrees are often required in these positions, especially for research and biology.  
Supplement curriculum with additional science courses in relevant areas (e.g., forestry, soil science, ecology, animal science).  
Gain extensive laboratory and research experience.  
Research requirements for certifications available through the Wildlife Society (e.g., Certified Wildlife Biologist).  
Seek internships, summer jobs, or volunteer positions to gain experience. Some professionals in the field will begin their careers in temporary jobs.  
Join related campus organizations such as the Student Chapter of the Wildlife and Fisheries Society.  
Develop public speaking and conflict management skills through coursework or experience.  
For law enforcement jobs, be prepared to complete additional officer training and to go through a background check as part of the hiring process.  
Attain experience with firearms, boat safety, and first aid training.  
Become familiar with government job application procedures and use your college career center for assistance.  
Be prepared to relocate to areas with abundant natural resources.

## AREAS

## EMPLOYERS

## STRATEGIES

### AQUATIC SCIENCES

Aquaculture  
Hatchery operations management  
Aquarium operations management  
Fisheries management  
Conservation  
Research  
Biology and ecology  
Limnology and oceanography  
Quality control  
Consulting

State, city, and county government agencies dealing with natural resources  
Federal government:  
Bureau of Land Management  
Fish and Wildlife Service  
Forest Service  
National Oceanic and Atmospheric Administration  
Government hatcheries  
Private commercial fish farms  
Shellfish operations  
Public and private aquariums  
Non-profit research facilities  
Inspection organizations  
Colleges and universities  
Public and private high schools

Gain work experience through internships, summer jobs, or volunteer positions.  
Develop physical stamina, outdoor skills, and comfort being in water.  
Pursue extensive laboratory and research experience by working in faculty laboratories through independent research classes, as a student employee, or through other departmental programs.  
Apply acquired technical, analytical, and writing skills to meet management and conservation goals for aquatic ecosystems.  
Earn a graduate degree to work in research/biology positions or to qualify for more and advanced opportunities in other areas.  
Research requirements for certification available through the American Fisheries Society.  
With a bachelor's degree, look for entry-level technician positions to begin a career.  
Practice good communication and problem solving skills. Exercise close attention to detail.  
Join related campus organizations such as the Student Chapter of the Wildlife and Fisheries Society.  
Pursue a minor in business if interested in management or self-employment.

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### EDUCATION

Teaching  
Research  
Natural resource education  
Extension  
Ecotourism  
Interpretation

Nature centers  
Resource management agencies  
Parks and recreation departments  
Camps  
Youth education organizations  
Zoos  
Museums  
Private organizations  
Extension services  
Government agencies  
Universities and colleges  
Public and private high schools

Gain experience working with youth through tutoring, interning, or volunteering.  
Learn to work well with all types of people.  
Seek leadership roles in student organizations.  
Develop excellent interpersonal and public speaking skills.  
Earn a Ph.D. to teach in universities and colleges.  
Consider earning a master's degree to be more competitive for resource education positions.  
Maintain a high GPA and secure strong faculty recommendations.  
Be prepared to live in rural communities for extension positions.

## AREAS

### VETERINARY MEDICINE

Areas of specialization:

- Small animal care
- Large animal care
- Public health
- Laboratory animal medicine
- Exotic animal care
- Research

## EMPLOYERS

- Group or private practice
- Federal government:
  - Department of Agriculture:
    - Animal and Plant Health Inspection Service
    - Food Safety and Inspection Service
  - Department of Interior:
    - Fish and Wildlife Service
  - Department of Health and Human Services:
    - Centers for Disease Control and Prevention
    - National Institutes of Health
    - Food and Drug Administration's Center for Veterinary Medicine
- State and local government
- Colleges of veterinarian medicine
- Medical schools
- Research laboratories
- Animal food companies
- Inspection services
- Pharmaceutical companies
- Zoos
- Wildlife sanctuaries

## STRATEGIES

- Wildlife and fisheries can serve as a pre-vet bachelor's degree. Research veterinary programs, take prerequisite courses to meet veterinary school requirements, and prepare for the application process.
- Maintain an excellent GPA, particularly in the sciences, and build relationships with faculty. Strong recommendations from professors are needed for professional school.
- Pursue extensive laboratory and research experience for research positions.
- Gain experience in animal health settings, zoos, wildlife sanctuaries, etc., through volunteer positions, part-time jobs or summer work. Consider working as a veterinary technician.
- Develop physical stamina, confidence working with both small and large animals and in various weather conditions.
- Plan to work evenings, weekends or on-call for some positions.
- Exercise close attention to detail and the ability to respond effectively in emergency situations.
- Practice strong interpersonal skills for dealing with animal owners who may be upset.
- Consider taking courses in business and communications or pursuing joint MBA/DVM programs, as self-employed veterinarians must effectively promote and manage their own businesses.
- Seek active roles in pre-vet and other related clubs.

## **GENERAL INFORMATION**

- As an undergraduate, seek laboratory experiences such as research projects, volunteering with professors, summer jobs, or internships.
- Participate in research programs sponsored by environmental and government organizations. Explore internships with the Student Conservation Association.
- Consider various certification options available through professional associations.
- Earn master's degree for greater variety and autonomy on the job. Earn a Ph.D. to work on high-level research projects, to direct research programs, to enter high levels of administration, and to teach at four-year post-secondary institutions. Postdoctoral fellowships may also be required.
- The wildlife and fisheries degree can be good preparation for a career in healthcare such as medicine, dentistry, and veterinary science, but professional degrees and licenses are also necessary to practice in these fields.
- Combine an undergraduate degree with a degree in law, business, education, information science, or other discipline to expand career opportunities. Become familiar with the specific entrance exam for graduate or professional schools in your area of interest.
- Learn to work independently and as part of a team.
- Get involved with hobbies that will help you develop relevant skills and expose you to the outdoors, such as hunting, fishing, or bird watching.
- Join professional associations and community organizations, and and to develop networking contacts. Actively participate in related campus groups.
- Read related journals to stay abreast of current issues in the field.
- Secure strong relationships and personal recommendations from professors and/or employers.
- Learn federal, state, and local government job application process. The federal government is the largest employer of scientists.
- Gain experience with grant writing and fundraising techniques. Often research must be funded in this manner.
- Be prepared to gain experience by volunteering or accepting non-paid or entry-level positions. This field is competitive, and experience is necessary to advance.