# WILDLIFE AND FISHERIES

# What can I do with this major?

### **AREAS**

# **EMPLOYERS**

## **STRATEGIES**

#### **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

Nongame and Endangered Species

Biodiversity

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, Wild Turkey Federation, Quality Deer Management Association, Nature Conservancy) 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

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.

### **EDUCATION**

Consulting

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.

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#### **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.