



## SCHOOL OF FORESTRY NORTHERN ARIZONA UNIVERSITY

### Degree & Course Requirements for Wildlife Jobs with Various State & Federal Agencies

#### US FISH & WILDLIFE SERVICE / US GEOLOGICAL SURVEY

##### USFWS Fish & Wildlife Biologist (486)

Positions that involve professional work in biology, agriculture, or related natural resource management.

##### QUALIFICATION REQUIREMENTS:

- Successful completion of a full four-year course of study in an accredited college or university leading to a bachelor's or higher degree;
- Includes a major field (24 semester hours) or study in biological sciences, agriculture, natural resource management, chemistry or related disciplines appropriate to this position or an appropriate combination in education and experience.

##### USFWS Wildlife Refuge Management (485)

Positions that require professional knowledge and competence in the management, administration, and scientific operation of public lands and waters designated as national wildlife refuges. The work involves a variety of land and water based activities including: water and habitat management; land planning; resources identification and allocation; administration; public relations; supervision; and other activities involving wildlife resource utilization, protection, inventory, and evaluation, and maintenance of grasslands, marshes and soils.

##### QUALIFICATION REQUIREMENTS:

- Successful completion of a full four-year course of study in an accredited college or university leading to a bachelor's degree or higher in zoology, wildlife management or an appropriate field of biology;
- Includes at least:
  - 9 semester hours in zoology;
  - 6 semester hours in wildlife courses such as mammalogy, ornithology, animal ecology, or wildlife management and;
  - 9 semester hours in botany or;
  - Appropriate combination of education and experiences

##### USFWS/USGS Wildlife Biologist (401)

Positions that require professional knowledge and competence in the science of wildlife biology to perform work involving: the conservation, propagation, management, protection, USGS/USFWS Biologist and administration of wildlife species; or the determination, establishment, and application of biological facts, principles, methods, techniques, and procedures necessary for the conservation and management of wildlife resources and habitats.

##### QUALIFICATION REQUIREMENTS:

- Successful completion of a full four-year course of study in an accredited college or university leading to a bachelor's or higher degree in biological science;
- Includes at least 12 semester hours in subjects such as general zoology, invertebrate or vertebrate zoology, comparative anatomy, physiology, genetics, ecology, cellular biology, parasitology, entomology or research courses in such subjects. Excess coursework in wildlife biology may be used to meet the zoology requirements where appropriate. Additionally, the position requires:
  - 9 semester hours in wildlife courses such as mammalogy, ornithology, animal ecology, and wildlife management or research courses in the field of wildlife biology and;
  - 9 semester hours in botany or the related plant disciplines or;
  - An appropriate combination of education and experience

ARIZONA GAME & FISH DEPARTMENT

Wildlife Manager (W/M)

MINIMUM QUALIFICATIONS:

- Must be 21 years of age
- Must be a U.S. citizen
- Must have a bachelor’s degree in wildlife science\* or closely related field from an accredited college or university
- Must possess or obtain an Arizona drivers license
- Must be able to pass AZ POST medical exam including full physical, drug screening, hearing and vision tests
- Must pass physical fitness testing

(\*Special consideration will be given to applications with coursework and/or work experience in wildlife management related fields)

<b>LIST A</b>	
<i>Degrees in List A meet the requirements for Wildlife Management. A transcript review is required.</i>	
<b>Degree</b>	<b>Concentration</b>
Biological Science	Conservation Biology & Ecology Sustainability
Biology	Fish and Wildlife Management
Biology	Zoology

<b>Degree</b>	
The following degrees require a minimum of four upper divisions (300-400) wildlife management courses to be accepted. All Wildlife Manager I applicants must have two of the four upper division course work in Wildlife Management and/or Wildlife Biology. A transcript review is required.	
<b>Degree</b>	<b>Concentration</b>
Biology	Botany
Biology	Cellular and Molecular
Biology	Ecology
Biology	Physiology
Biology	Marine Biology
Biological Science	Animal Physiology & Behavior
Environmental Science	Biology
Natural Resources Science	Conservation Biology
<b>Degree</b>	<b>Concentration</b>
Agricultural Science	Forest Technology
Applied Biological Science	Land Use Management
Animal Science	Life Science
Biological Science	Microbiology
Biology	Molecular Biology
Environmental Science	Natural Resources
Environmental Management	Natural Science
Farm and Ranch Management	Parks Management
Forestry	Soil conservation

Wildlife Manager (WM) *cont...*

CERTIFICATION CATEGORIES FOR UPPER DIVISION WILDLIFE MANAGEMENT COURSES

- a. **Wildlife Management:** Courses emphasizing the principles and practices of wildlife management. Course descriptions are required and should demonstrate training in understanding and manipulating habitat relationships and population dynamics in the context of objectives and influences established by human concerns and activities. (*Conservation biology courses count if they contain a specific focus on management and decision making.*)
- b. **Wildlife Biology:** Courses in biology and behavior of birds, mammals, reptiles, or amphibians. Course descriptions are required. Courses should demonstrate training in understanding the biology of wildlife species and their habitation relationships as the basis for management and must include at least one course dealing solely with the science of mammalogy, ornithology, or herpetology. (*Ichthyology, marine biology-except courses focusing on marine mammals or reptiles, microbiology, entomology, or related courses will not count in this category, but will qualify in the Zoology category.*)
- c. **Ecology:** Courses in general plant or animal ecology (*excludes human ecology*). Course descriptions are required.
- d. **Zoology:** Courses in taxonomy, biology, behavior, physiology, anatomy, and natural history of vertebrates and invertebrates. Course descriptions are required. Courses in genetics, nutrition, physiology, disease, and other biology or general zoology courses are accepted. Ichthyology or fisheries biology courses are accepted.
- e. **Botany:** Courses in general botany, plant genetics, plant morphology, plant physiology, or plant taxonomy. Course descriptions are required. At least one course must deal with plant taxonomy or identification.

US FOREST SERVICE

**Wildlife Biologists** are hired at many different grade levels.

Recent college graduates may be hired at the GS-5 or GS-7 grade level. They spend up to 2 years in training and development positions, and then may be noncompetitively promoted to the GS-9 grade level. You may also be hired initially for a higher grade level position if you meet higher education and/or experience requirements. Promotion opportunities at GS-11 and above are competitive, and opportunities for advancement to higher grade levels are excellent.

MINIMUM QUALIFICATIONS:

- Must have a bachelor's degree with a major in biological science or natural resource management with an emphasis in biology or ecology. A master's degree will help you be more competitive for some positions.
- The following minimum course work must also be completed for all positions:
  - 9 semester hours in wildlife subjects such as mammalogy, ornithology, animal ecology, wildlife management, or research courses in the field of wildlife biology;
  - 12 semester hours in zoology subjects such as general zoology, invertebrate and vertebrate zoology, zoology, comparative anatomy, physiology, parasitology, ecology, cellular biology, entomology, genetics, or research in these fields (*Extra or additional course work in aquatic subjects may be used to meet the zoology requirements where appropriate*);
- 9 semester hours in botany or related plant sciences