

Wildlife Biology



College of Science, Engineering and Mathematics
Department of Biology and Wildlife
(907) 474-7671
<http://mercury.bio.uaf.edu/biolwild/>
Degrees: B.S., M.S.

Minimum Requirements for Degrees: B.S.: 130 credits; M.S.: 30 credits

The undergraduate wildlife program provides basic education and training. This degree is designed for students whose objective is to do the research needed to provide additional information on wild animal populations, their habitat and habitat-animal relationships. This degree is also for students whose primary interests involve interpreting, applying or disseminating research findings, rather than their acquisition. A wildlife B.S. degree is appropriate for students contemplating careers in wildlife agency administration, in developing and implementing wildlife management plans and in public information and education. The curriculum provides a solid foundation for graduate study and meets requirement for certification by The Wildlife Society.

The geographic location of the university is particularly advantageous for the study of wildlife biology. Spruce forest, aspen-birch forest, alpine tundra, bogs and several types of aquatic habitats are within easy reach. Studies can be made in many other habitats ranging from the dense forests of southeastern Alaska to arctic tundra.

Adequate study collections of plants and animals are available, and a 2,000-acre study area is near the campus. Wildlife biology students have ample opportunity for close association with the personnel of the Alaska Cooperative Fish and Wildlife Research Unit, Institute of Arctic Biology and several local offices of the federal and state conservation agencies. These agencies often provide support for graduate student projects, and program faculty usually hire a number of students for summer field work. Thus, an unusually good opportunity is available for students to gain experience and to make job connections.

The Department of Biology and Wildlife, the Institute of Arctic Biology, and the Alaska Cooperative Fish and Wildlife Research Unit cooperate in offering graduate work leading to the M.S. and Ph.D. degrees. Persons desiring detailed information on the graduate program in wildlife biology and management may obtain this from the chair, Wildlife Program.

The Alaska Cooperative Fish and Wildlife Research Unit and Institute of Arctic Biology offer a limited number of research assistantships. Teaching assistantships are available from the Department of Biology and Wildlife.

UNDERGRADUATE PROGRAM

MAJOR

Wildlife Biology—B.S. Degree

1. Complete the general university requirements (page 28). (As part of the core curriculum requirements, complete: COMM 141X.)
2. Complete the B.S. degree requirements (page 34).
3. Complete the following program (major) requirements:

a. Complete the following:*

BIOL 105X—Fundamentals of Biology I***	4
BIOL 106X—Fundamentals of Biology II***	4
BIOL 239—Introduction to Plant Biology	4
BIOL 271—Principles of Ecology	4
BIOL 310—Animal Physiology	4
BIOL 317—Comparative Anatomy of Vertebrates	4
BIOL 331—Systematic Botany	4
BIOL 362—Principles of Genetics	4
BIOL 425—Mammalogy	3
BIOL 426W,O/2—Ornithology	3
BIOL 471—Population Ecology	3
ENGL 314W,O/2—Technical Writing (3)	
or ENGL 414W—Research Writing (3)	3
NRM 101—Natural Resources Conservation and Policy	3
NRM/WLF 431—Wildlife Law and Policy (3)	
or NRM 407—Environmental Law (3)	3
WLF 101—Survey of Wildlife Science	1
WLF 201—Wildlife Management Principles	3
WLF 303W—Wildlife Management Techniques	3
WLF 410—Wildlife Populations and Their Management	3
WLF 460—Nutrition and Physiological Ecology of Wildlife	3

b. Complete the following:

CHEM 105X—General Chemistry**	4
CHEM 106X—General Chemistry**	4
MATH 200X—Calculus (4)**	
or MATH 272X—Calculus for Life Sciences (3)**	3-4
PHYS 103X—College Physics	4
STAT 200—Elementary Probability and Statistics (3)***	
or STAT 300—Statistics (3)***	3
STAT 401—Regression and Analysis of Variance***	4

c. Complete 3 of the following:*

BIOL 303—Principles of Metabolism and Biochemistry	4
BIOL 406—Entomology	4
BIOL 407—Aquatic Entomology	3
BIOL 427W,O—Ichthyology	3
BIOL 441W,O/2—Animal Behavior	3
BIOL 444—Reproductive Biology	3
BIOL 472—Community Ecology	3
BIOL 473W—Limnology	4
BIOL 474—Plant Ecology	4
BIOL 480—Water Pollution Biology	3
BIOL 481—Principles of Evolution	3
NRM 312—Introduction to Range Management	3
NRM 338—Introduction to Geographic Information Systems	3
NRM 341—GIS Analysis	4
NRM 370—Introduction to Watershed Management	3
NRM 380W—Soils and the Environment	3
NRM 450—Forest Management	3
WLF 305—Wildlife Diseases	3
WLF 419O/2—Waterfowl and Wetlands Ecology and Management	4



University of Alaska Fairbanks

Admissions • P.O. Box 757480 • Fairbanks, AK 99775-7480 • admissions@uaf.edu • www.uaf.edu

The University of Alaska Fairbanks is accredited by the Commission on Colleges and Universities of the Northwest Association of Schools and Colleges. UAF is an affirmative action/equal opportunity employer and educational institution. 4/03

4. Complete electives
5. Minimum credits required 130

* Student must earn a C grade or better in each course.

** Satisfies a core requirement.

*** Satisfies a B.S. degree requirement.

Note: B.S. degree candidates are strongly urged to obtain work experience in wildlife-related positions with public resource agencies or private firms. Faculty members can help students contact potential employers.

MINOR

1. Complete the following:
 - WLF 303W—Wildlife Management Techniques 3
 - WLF 410—Wildlife Populations and Their Management 3
 - WLF 460—Nutrition and Physiological Ecology of Wildlife 3
 - Approved BIOL and WLF electives* 6
2. Minimum credits required 15

* Only biology or wildlife electives that are not required for the student's major.

Note: Prerequisites for required courses include BIOL 105X-106X, BIOL 271, BIOL 310, STAT 200 or STAT 300, and WLF 201. Depending upon a student's major, some of these prerequisites may satisfy the 6 elective credits in biology and wildlife required for this minor.

GRADUATE PROGRAM

Wildlife Biology—M.S. Degree

1. Complete the following admission requirement:
 - a. Submit GRE scores.
 2. Complete the general university requirements (page 43).
 3. Complete the master's degree requirements (page 46).*
 4. Complete a thesis.
5. Minimum credits required 30

* Students working in subject areas involving significant non-English literature will be expected to read the appropriate foreign language.

See Biological Sciences for Ph.D. program.

See Biology.

See Botany.

See Wildlife Biology.

