

RANGELAND, WILDLIFE AND FISHERIES MANAGEMENT - BS, WILDLIFE MANAGEMENT TRACK

Texas rangeland, woodland, wetland, and aquatic ecosystems provide the citizens of Texas with a multitude of benefits. These benefits include income, water, recreation, wildlife habitat, and scenic beauty. The population of Texas grew over 15% from 2010 to 2020 to approximately 29 million. This population increase has impacted several key regions in the state, e.g., suburban areas and the Hill Country. However, this rapid population growth and environmental change threaten resilience and sustainability of these vital ecosystems. Educating ecosystem managers skilled in making decisions that promote sustainability and resilience is a primary goal of the faculty and staff of the Department of Rangeland, Wildlife, and Fisheries Management (RWFM). The RWFM curriculum provides graduates with the necessary skills and integrates knowledge from several science disciplines. The synergy that arises from the integration of biological, physical, and social sciences in RWFM gives rise to novel real-world solutions suitable for uncertainty and unprecedented change. The RWFM curriculum is not entrenched in any one discipline or any single ecosystem. It equips students with the breadth and depth of knowledge that is reflective of the diversity in the ecosystems in which we live and the issues we face.

Wildlife Management Track

Every year, more land transitions to wildlife management as its primary use. Wildlife conflict issues impact more of the world each day. The program track in Wildlife Management provides students the necessary background and experience to seek careers in the growing field of wildlife management, and to prepare them to lead in the wildlife profession through transformative teaching, diverse educational experiences, professional preparation with leading wildlife biologists, and hands-on skills learning. This program will prepare students to competitively engage in this profession upon graduation, or to pursue graduate education. Students will gain critical understanding of the basic sciences (e.g. chemistry, mathematics, biology) that will allow them to fully understand the management techniques and methods they will study in their advanced coursework. The Wildlife Management track student will have a strong foundation in the basics of wildlife management: population dynamics, anatomy and physiology, habitat management principles, and wildlife techniques. A summer field practicum will provide intense, hands-on experience to solidify these principles. Students will pursue advanced coursework in focal management areas, such as large mammal management, upland bird management, waterfowl/wetland management, or wildlife damage management, that can translate into lifelong careers. Upon graduation, students will qualify for The Wildlife Society's Associate Wildlife Biologist® certification to provide competitive credentials in today's job market. The graduate of the Wildlife Management track will be prepared to step into the modern wildlife management workforce with the requisite skills to be a leading member of the wildlife profession in technical skill, professional communication, and scientific acumen.

Program Requirements

First Year		Semester
Fall		Credit Hours
BIOL 111	Introductory Biology I	4
ENGL 104	Composition and Rhetoric	3
ESSM 201	Exploring Ecosystem Science and Management	1
MATH 150	Functions, Trigonometry and Linear Systems	4
RWFM 202	Concepts in Applied Plant Biology	3
Semester Credit Hours		15
Spring		
BIOL 112	Introductory Biology II	4
ENGL 210 or COMM 203	Technical and Professional Writing or Public Speaking	3
MATH 147	Calculus I for Biological Sciences	4
RENH 205	Fundamentals of Ecology	3
RENH 215	Fundamentals of Ecology-Laboratory	1
Semester Credit Hours		15
Second Year		
Fall		
POLS 206	American National Government ¹	3
STAT 302	Statistical Methods	3
Select one of the following:		3
ESSM 203	Forest Trees of North America	
ESSM 302	Wildland Plants of North America	
ESSM 303	Agrostology	
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) ¹		3
Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts) ¹		3
Semester Credit Hours		15
Spring		
AGEC 105	Introduction to Agricultural Economics	3
CHEM 119	Fundamentals of Chemistry I	4
POLS 207	State and Local Government	3
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) ¹		3
Language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture) ¹		3
Semester Credit Hours		16
Third Year		
Fall		
CHEM 222	Elements of Organic and Biological Chemistry	3
RWFM 321	Communicating Natural Resources	3
RWFM 350	Wildlife Population Dynamics	3
WFSC 302	Natural History of the Vertebrates	3

Select one of the following:	3
WFSC 315 Herpetology	
WFSC 401 General Mammalogy	
WFSC 402 General Ornithology	
Semester Credit Hours	15

Spring

ESSM 351/ RENr 405	Geographic Information Systems for Resource Management	3
RWFM 305	Principles and Practices of Wildlife and Fisheries Management	3
WFSC 303	Fish and Wildlife Laws and Administration	3

Select one of the following:	3
WFSC 315 Herpetology	
WFSC 401 General Mammalogy	
WFSC 402 General Ornithology	

Select one of the following:	3	
RWFM 421	Upland Bird Management	
RWFM 422	Large Mammal Management	
RWFM 423	Waterfowl and Wetland Management	
RWFM 424	Wildlife Damage Management	
RWFM 425	Carnivore Management	
WFSC 327/ VTPB 301	Wildlife Diseases	
WFSC 405	Urban Wildlife and Fisheries	
WFSC 419	Wildlife Restoration	
Semester Credit Hours		15

Summer

RENr 345	Park Ecology and Management	3
Semester Credit Hours		3

Fourth Year**Fall**

RENr 375	Conservation of Natural Resources	3
SCSC 301	Soil Science	4
WFSC 406	Wildlife Habitat Management	3
Select one of the following:	3	
RWFM 421	Upland Bird Management	
RWFM 422	Large Mammal Management	
RWFM 423	Waterfowl and Wetland Management	
RWFM 424	Wildlife Damage Management	
RWFM 425	Carnivore Management	
WFSC 327/ VTPB 301	Wildlife Diseases	
WFSC 405	Urban Wildlife and Fisheries	
WFSC 419	Wildlife Restoration	
Semester Credit Hours		13

Spring

AGEC 325	Principles of Farm and Ranch Management	3
ESSM 314	Principles of Rangeland Management Around the World	3
ESSM 481	Senior Seminar	1
WFSC 408	Techniques of Wildlife Management	3
Select one of the following:	3	
RWFM 349	Rangeland and Wildlife Animal Nutrition	

RWFM 354	Wildlife Anatomy and Physiology	
WFSC 335	Natural History of the Invertebrates	
Semester Credit Hours		13
Total Semester Credit Hours		120

¹ Graduation requirements include a requirement for 3 hours of International and Cultural Diversity (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/>) courses and 3 hours of Cultural Discourse (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/>) courses. A course satisfying a Core category, a college/department requirement, or a free elective can be used to satisfy this requirement. Select in consultation with an academic advisor.