WILDLIFE AND FISHERIES BIOLOGY PROGRAM

http://www.uvm.edu/rsenr/?Page=undergraduate/wildlife.html&SM=undergradmenu.html

The Wildlife and Fisheries Biology curriculum focuses on the biology, ecology, management, and conservation of animal populations that range from species common enough to be hunted/fished to species that are endangered. Management strategies include direct manipulation of populations or indirect manipulation through alteration of habitat. Courses emphasize applied ecology and techniques for bringing populations into balance, and provide hands-on experience in labs and field trips. As sophomores, students elect either the Wildlife Biology or the Fisheries Biology concentration.

MAJORS
WILDLIFE AND FISHERIES BIOLOGY MAJOR
Wildlife and Fisheries Biology B.S.

MINORS
WILDLIFE AND FISHERIES BIOLOGY MINOR
Wildlife Biology

Courses

WFB 013. Intro to Wildlife Tracking. 1 Credit.
This outdoor course is designed to introduce the student to wildlife track identification and analysis at the UVM Jericho Research Forest. Cross-listed with: FOR 013.

WFB 014. Wildlife Trail Analysis. 1 Credit.
This outdoor course is designed to introduce the student to analysis and interpretation of wildlife trails at the UVM Jericho Research Forest. Cross-listed with FOR 014.

WFB 015. Wildlife Track Analysis. 1 Credit.
This course introduces students to the details and clues left inside animal tracks including major body movements including speed, changes of direction and head position. Cross-listed with: FOR 015.

WFB 074. SU: Wildlife Conservation. 3 Credits.
Historical and contemporary values of wildlife; impacts on habitats and populations; strategies for conservation, allocation, and use. Nonmajors only.

WFB 091. Internship. 1-3 Credits.
On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

WFB 092. Independent Study. 1-18 Credits.
A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

WFB 095. Special Topics. 1-18 Credits.
See Schedule of Courses for specific title.

WFB 117. Scientific Writing and Interpr. 3 Credits.
Focus on effective communication within the genre of scientific research by focusing on technical writing, revising and editing, interpreting data, creating figures and tables, critically reading and data mining the literature, and producing an original scientific research manuscript. Prerequisites: BIOL 001 or BCOR 011; Wildlife and Fisheries Biology majors; Minimum Sophomore standing.

WFB 130. Ornithology. 3 Credits.
Taxonomy, classification, identification, morphology, physiology, behavior, and ecology of birds. Prerequisites: BIOL 001 or BCOR 011; BIOL 002 or BCOR 012.

WFB 131. Field Ornithology. 2 Credits.
Identification and field studies of birds, emphasizing resident species. Two weeks in summer. Prerequisite: WFB 130 Prerequisite: WFB 130.

WFB 141. Field Herpetology. 4 Credits.
Introduction to the identification, life histories, habitats, conservation, and field study of Vermont’s reptiles and amphibians.

WFB 150. Wldlf Habitat & Pop Measrmnt. 1 Credit.
Field methods for measuring habitat variables and estimating population parameters. One week in summer. Prerequisite: FOR 021.

WFB 161. Fisheries Biology & Techniques. 0 or 4 Credits.
Introduction to freshwater fish, habitats, and life histories. Overview of fishery techniques, including sampling and assessment methods, stocking, harvest regulations, population and habitat evaluation. Prerequisites: BIOL 001 or BCOR 011 and BIOL 002 or BCOR 012.

WFB 174. Prin of Wildlife Management. 3 Credits.
Application of ecology and sociology to the management of wildlife populations and habitat; integration of wildlife management with demands for other resources; consideration of game species, endangered species, and biological diversity. Prerequisite: NR 103 or BCOR 102.

WFB 175. Wildlife and Society. 3 Credits.
Investigates how people’s attitudes, institutions, policies, and behaviors have affected wildlife across the North American landscape. Alternate years.

WFB 176. Florida Ecology Field Trip. 2 Credits.
Major ecosystems and associated wildlife, ranging from north Florida flatwoods to south Florida Everglades. Field trip over spring recess. Prerequisite: WFB 130. Alternate years.

WFB 177. Texas Wildlife Field Trip. 2 Credits.
Major ecosystems and associated wildlife of south Texas, including Gulf coast, coastal prairies, lower Rio Grande Valley, and Chihuahuan desert. Field trip over spring recess. Prerequisite: WFB 130. Alternate years.
WFB 187. Undergraduate Research. 1-18 Credits.
Undergraduate student work on individual or small research projects under the supervision of a faculty member for which credit is awarded. Formal report required. Offered at department discretion.

WFB 191. Internship. 1-18 Credits.
On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

WFB 192. Independent Study. 1-18 Credits.
A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

WFB 195. Intermediate Special Topics. 1-18 Credits.
See Schedule of Courses for specific titles.

WFB 197. Teaching Assistantship. 1-3 Credits.
Undergraduate student service as a teaching assistant, usually in an introductory level course in the discipline, Offered at department discretion.

WFB 224. Conservation Biology. 0 or 4 Credits.
Conservation of biological diversity at genetic, species, ecosystem, and landscape levels. Emphasis on genetic diversity, population viability, endangered species, critical habitats, international implications. Discussion section covers basic genetic principles, population genetics, and population modeling. Prerequisites: NR 103 or BCOR 102; BIOL 001 and 002, or PBIO 004, or BCOR 011 and BCOR 012.

WFB 232. Ichthyology. 3 Credits.
Biology of fishes. Focus is on form and function, morphology, physiology, behavior, life history, and ecology of modern fishes. Prerequisites: BIOL 001 and BIOL 002, or BCOR 011 and BCOR 012; Junior standing. Alternate years.

WFB 261. Fisheries Management. 3 Credits.
Principles of fisheries management, including population assessment, analytical methods, harvest allocation models, human dimensions, policy and emerging issues. Prerequisites: BIOL 001 or BCOR 011; BIOL 002 or BCOR 012; WFB 161.

WFB 271. Wetlands Wildlife Ecology. 4 Credits.
Ecology, behavior, and population dynamics of wetland wildlife with emphasis on policy and management for waterfowl in North America. Prerequisites: WFB 174; NR 103 or BCOR 102.

WFB 275. Wildlife Behavior. 3 Credits.
Behavior and social organization of game and nongame species as they pertain to population management. Prerequisites: BIOL 001 or BCOR 011, BIOL 002 or BCOR 012, NR 103 or BCOR 102.

WFB 279. Marine Ecology & Conservation. 3 Credits.
The science of conservation biology and ecology in marine systems. Topics such as the components and processes of marine ecosystems, fisheries management, endangered species, and marine protected areas will be explored. Prerequisites: NR 103 or BCOR 102; Junior standing.

WFB 283. Terrestrial Wildlife Ecology. 4 Credits.
Wildlife ecology with an emphasis on the management and conservation of species, populations, and ecosystems. Prerequisite: WFB 174, and NR 103 or BCOR 012.

WFB 287. Undergraduate Research. 1-18 Credits.
Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

WFB 291. Internship. 1-18 Credits.
On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

WFB 292. Independent Study. 1-18 Credits.
A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

WFB 295. Advanced Special Topics. 1-18 Credits.
See Schedule of Courses for specific titles.

WFB 297. Teaching Assistantship. 1-3 Credits.
Undergraduate student service as a teaching assistant, usually in an introductory level course in the discipline, for which credit is awarded. Offered at department discretion.

WFB 299. Wildlife & Fisheries Honors. 1-6 Credits.
Honors project dealing with wildlife or fisheries biology.